

# AAC Tags

Tags extracted from Advanced Audio Coding (AAC) files.

Tag ID	Tag Name	Writable	Values / Notes
'Bit016-017'	ProfileType	no	0 = Main 1 = Low Complexity 2 = Scalable Sampling Rate
'Bit018-021'	SampleRate	no	
'Bit023-025'	Channels	no	0 = ? 4 = 4 1 = 1 5 = 5 2 = 2 6 = 5+1 3 = 3 7 = 7+1
'Encoder'	Encoder	no	(taken from filler payload of first frame)

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# AFCP Tags

AFCP stands for AXS File Concatenation Protocol, and is a poorly designed protocol for appending information to the end of files. This can be used as an auxiliary technique to store IPTC information in images, but is incompatible with some file formats.

ExifTool will read and write (but not create) AFCP IPTC information in JPEG and TIFF images.

See [http://web.archive.org/web/20080828211305/http://www.tocarte.com/media/axs\\_afcp\\_spec.pdf](http://web.archive.org/web/20080828211305/http://www.tocarte.com/media/axs_afcp_spec.pdf) for the AFCP specification.

Tag ID	Tag Name	Writable	Values / Notes
'IPTC'	IPTC	-	--> <a href="#">IPTC Tags</a>
'Nail'	ThumbnailImage	no	
'PrVw'	PreviewImage	no	
'TEXT'	Text	no	

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# AIFF Tags

Tags extracted from Audio Interchange File Format (AIFF) files. See <http://www-mmsp.ece.mcgill.ca/Documents/AudioFormats/AIFF/AIFF.html> for the AIFF specification.

Tag ID	Tag Name	Writable	Values / Notes
'(c)'	Copyright	no	
'ANNO'	Annotation	no	
'APPL'	ApplicationData	no	
'AUTH'	Author	no	
'COMM'	Common	-	--> <a href="#">AIFF Common Tags</a>
'COMT'	Comment	-	--> <a href="#">AIFF Comment Tags</a>
'FVER'	FormatVersion	-	--> <a href="#">AIFF FormatVers Tags</a>
'ID3 '	ID3	-	--> <a href="#">ID3 Tags</a>
'NAME'	Name	no	

## AIFF Common Tags

Index2	Tag Name	Writable	Values / Notes
0	NumChannels	no	
1	NumSampleFrames	no	
3	SampleSize	no	
4	SampleRate	no	
9	CompressionType	no	'ACE2' = ACE 2-to-1 'ACE8' = ACE 8-to-3 'ALAW' = A-law 'G722' = G722 'G726' = G726 'G728' = G728 'GSM' = GSM 'MAC3' = MAC 3-to-1 'MAC6' = MAC 6-to-1 'NONE' = None 'ULAW' = Mu-law 'alaw' = a-law 'sowt' = Little-endian, no compression 'ulaw' = mu-law
11	CompressorName	no	

## AIFF Comment Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	CommentTime	no	
0x0001	MarkerID	no	
0x0002	Comment	no	

## AIFF FormatVers Tags

Index4	Tag Name	Writable	Values / Notes
0	FormatVersionTime	no	

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# APE Tags

Tags found in Monkey's Audio (APE) information. Only a few common tags are listed below, but ExifTool will extract any tag found. ExifTool supports APEv1 and APEv2 tags, as well as ID3 information in APE files, and will also read APE metadata from MP3 and MPC files.

Tag ID	Tag Name	Writable	Values / Notes
'Album'	Album	no	
'Artist'	Artist	no	
'DURATION'	Duration	no	
'Genre'	Genre	no	
'Title'	Title	no	
'Tool Name'	ToolName	no	
'Tool Version'	ToolVersion	no	
'Track'	Track	no	
'Year'	Year	no	

## APE NewHeader Tags

APE MAC audio header for version 3.98 or later.

Index2	Tag Name	Writable	Values / Notes
0	CompressionLevel	no	
2	BlocksPerFrame	no	
4	FinalFrameBlocks	no	
6	TotalFrames	no	
8	BitsPerSample	no	
9	Channels	no	
10	SampleRate	no	

## APE OldHeader Tags

APE MAC audio header for version 3.97 or earlier.

Index2	Tag Name	Writable	Values / Notes
0	APEVersion	no	
1	CompressionLevel	no	
3	Channels	no	
4	SampleRate	no	
10	TotalFrames	no	
12	FinalFrameBlocks	no	

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## APP12 PictureInfo Tags

The JPEG APP12 "Picture Info" segment was used by some older cameras, and contains ASCII-based meta information. Below are some tags which have been observed Agfa and Polaroid images, however ExifTool will extract information from any tags found in this segment.

Tag ID	Tag Name	Writable	Values / Notes
'Aperture'	Aperture	no	
'ColorMode'	ColorMode	no	
'ContTake'	ContTake	no	
'ExpBias'	ExposureCompensation	no	
'FNumber'	FNumber	no	
'FWare'	FirmwareVersion	no	
'Flash'	Flash	no	0 = Off 1 = On
'FocusMode'	FocusMode	no	
'FocusPos'	FocusPos	no	
'ID'	ID	no	
'ImageSize'	ImageSize	no	
'LightS'	LightS	no	
'Macro'	Macro	no	0 = Off 1 = On
'Protect'	Protect	no	
'Quality'	Quality	no	
'Resolution'	Resolution	no	
'Serial#'	SerialNumber	no	
'Shutter'	ExposureTime	no	
'StrobeTime'	StrobeTime	no	
'TimeDate'	DateTimeOriginal	no	
'Type'	CameraType	no	
'Version'	Version	no	
'Ytarget'	YTarget	no	
'Zoom'	Zoom	no	
'ZoomPos'	ZoomPos	no	
'shtr'	ExposureTime	no	
'ylevel'	YLevel	no	

## APP12 Ducky Tags

Photoshop uses the JPEG APP12 "Ducky" segment to store some information in "Save for Web" images.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Quality	int32u/	
0x0002	Comment	string/	
0x0003	Copyright	string/	

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# ASF Tags

The ASF format is used by Windows WMA and WMV files, and DIVX videos. Tag ID's aren't listed because they are huge 128-bit GUID's that would ruin the formatting of this table.

Tag Name	Writable	Values / Notes
SimpleIndex	no	
TimecodeIndex	no	
Header	-	--> <a href="#">ASF Header Tags</a>
Data	no	
XMP	-	--> <a href="#">XMP Tags</a>
Index	no	
MediaIndex	no	

## ASF Header Tags

Tag Name	Writable	Values / Notes
Padding	no	
ScriptCommand	no	
ContentBranding	-	--> <a href="#">ASF ContentBranding Tags</a>
ContentEncryption	no	
DigitalSignature	no	
ExtendedContentEncryption	no	
HeaderExtension	-	--> <a href="#">ASF HeaderExtension Tags</a>
ContentDescription	-	--> <a href="#">ASF ContentDescr Tags</a>
ErrorCorrection	no	
StreamBitrateProps	no	
CodecList	-	--> <a href="#">ASF CodecList Tags</a>
FileProperties	-	--> <a href="#">ASF FileProperties Tags</a>
StreamProperties	-	--> <a href="#">ASF StreamProperties Tags</a>
ExtendedContentDescr	-	--> <a href="#">ASF ExtendedDescr Tags</a>
BitrateMutualExclusion	no	
Marker	no	

## ASF ContentBranding Tags

Tag Name	Writable	Values / Notes
BannerImageType	no	0 = None 1 = Bitmap 2 = JPEG 3 = GIF
BannerImage	no	
BannerImageURL	no	
CopyrightURL	no	

## ASF HeaderExtension Tags

Tag Name	Writable	Values / Notes
ExtendedStreamProps	no	
AdvancedContentEncryption	no	
MetadataLibrary	-	--> <a href="#">ASF ExtendedDescr Tags</a>
TimecodeIndexParms	no	
Compatibility	no	
LanguageList	no	
AdvancedMutualExcl	no	

BandwidthSharing	no	
Reserved1	no	
Metadata	-	--> <a href="#">ASF ExtendedDescr Tags</a>
GroupMutualExclusion	no	
StreamPrioritization	no	
IndexParameters	no	

## ASF ExtendedDescr Tags

Tag Name	Writable	Values / Notes
ASFLeakyBucketPairs	no	
ASFPacketCount	no	
ASFSecurityObjectsSize	no	
AlbumArtist	no	
AlbumCoverURL	no	
AlbumTitle	no	
AspectRatioX	no	
AspectRatioY	no	
AudioFileURL	no	
AudioSourceURL	no	
Author	no	
AuthorURL	no	
AverageLevel	no	
BannerImageData	no	
BannerImageType	no	
BannerImageURL	no	
BeatsPerMinute	no	
Bitrate	no	
Broadcast	no	
BufferAverage	no	
Can_Skip_Backward	no	
Can_Skip_Forward	no	
Category	no	
Codec	no	
Composer	no	
Conductor	no	
ContainerFormat	no	
ContentDistributor	no	
ContentGroupDescription	no	
Copyright	no	
CopyrightURL	no	
CurrentBitrate	no	
DRM	no	
DRM_ContentID	no	
DRM_DRMHeader	no	
DRM_DRMHeader_ContentDistributor	no	
DRM_DRMHeader_ContentID	no	
DRM_DRMHeader_IndividualizedVersion	no	
DRM_DRMHeader_KeyID	no	
DRM_DRMHeader_LicenseAcqURL	no	
DRM_DRMHeader_SubscriptionContentID	no	
DRM_IndividualizedVersion	no	
DRM_KeyID	no	

DRM_LASignatureCert	no
DRM_LASignatureLicSrvCert	no
DRM_LASignaturePrivKey	no
DRM_LASignatureRootCert	no
DRM_LicenseAcqURL	no
DRM_V1LicenseAcqURL	no
DVDID	no
Description	no
Director	no
Duration	no
EncodedBy	no
EncodingSettings	no
EncodingTime	no
FileSize	no
Genre	no
GenreID	no
HasArbitraryDataStream	no
HasAttachedImages	no
HasAudio	no
HasFileTransferStream	no
HasImage	no
HasScript	no
HasVideo	no
ISRC	no
InitialKey	no
IsVBR	no
Is_Protected	no
Is_Trusted	no
Language	no
Lyrics	no
Lyrics_Synchronised	no
MCDI	no
MediaClassPrimaryID	no
MediaClassSecondaryID	no
MediaCredits	no
MedialsDelay	no
MedialsFinale	no
MedialsLive	no
MedialsPremiere	no
MedialsRepeat	no
MedialsSAP	no
MedialsStereo	no
MedialsSubtitled	no
MedialsTape	no
MediaNetworkAffiliation	no
MediaOriginalBroadcastDateTime	no
MediaOriginalChannel	no
MediaStationCallSign	no
MediaStationName	no
ModifiedBy	no
Mood	no
NSC_Address	no
NSC_Description	no

NSC_Email	no
NSC_Name	no
NSC_Phone	no
NumberOfFrames	no
OptimalBitrate	no
OriginalAlbumTitle	no
OriginalArtist	no
OriginalFileName	no
OriginalLyricist	no
OriginalReleaseTime	no
OriginalReleaseYear	no
ParentalRating	no
ParentalRatingReason	no
PartOfSet	no
PeakBitrate	no
PeakValue	no
Period	no
Picture	- --> <a href="#">ASF Picture Tags</a>
PlaylistDelay	no
Producer	no
PromotionURL	no
ProtectionType	no
Provider	no
ProviderCopyright	no
ProviderRating	no
ProviderStyle	no
Publisher	no
RadioStationName	no
RadioStationOwner	no
Rating	no
Seekable	no
SharedUserRating	no
Signature_Name	no
StreamTypeInfo	no
Stridable	no
Subtitle	no
SubtitleDescription	no
SubscriptionContentID	no
Text	no
Title	no
ToolName	no
ToolVersion	no
Track	no
TrackNumber	no
UniqueFileIdentifier	no
UserWebURL	no
VBRPeak	no
VideoClosedCaptioning	no
VideoFrameRate	no
VideoHeight	no
VideoWidth	no
WMADRCAverageReference	no
WMADRCAverageTarget	no

WMADRCPeakReference	no
WMADRCPeakTarget	no
WMCollectionGroupID	no
WMCollectionID	no
WMContentID	no
Writer	no
Year	no

## ASF Picture Tags

Tag Name	Writable	Values / Notes
PictureType	no	0 = Other 1 = 32x32 PNG Icon 2 = Other Icon 3 = Front Cover 4 = Back Cover 5 = Leaflet 6 = Media 7 = Lead Artist 8 = Artist 9 = Conductor 10 = Band 11 = Composer 12 = Lyricist 13 = Recording Studio or Location 14 = Recording Session 15 = Performance 16 = Capture from Movie or Video 17 = Bright(ly) Colored Fish 18 = Illustration 19 = Band Logo 20 = Publisher Logo
PictureMIMEType	no	
PictureDescription	no	
Picture	no	

## ASF ContentDescr Tags

Tag Name	Writable	Values / Notes
Title	no	
Author	no	
Copyright	no	
Description	no	
Rating	no	

## ASF CodecList Tags

Tag Name	Writable	Values / Notes
AudioCodecDescription	no	
AudioCodecName	no	
OtherCodecDescription	no	
OtherCodecName	no	
VideoCodecDescription	no	
VideoCodecName	no	

## ASF FileProperties Tags

Index1	Tag Name	Writable	Values / Notes
0	FileID	no	
16	FileLength	no	

24	CreationDate	no	
32	DataPackets	no	
40	Duration	no	(called PlayDuration by the ASF spec)
48	SendDuration	no	
56	Preroll	no	
64	Flags	no	
68	MinPacketSize	no	
72	MaxPacketSize	no	
76	MaxBitrate	no	

## ASF StreamProperties Tags

Tags with index 54 and greater are conditional based on the StreamType.

Index1	Tag Name	Writable	Values / Notes
0	StreamType	no	'35907DE0-E415-11CF-A917-00805F5C442B' = Degradable JPEG '3AFB65E2-47EF-40F2-AC2C-70A90D71D343' = Binary '59DACFC0-59E6-11D0-A3AC-00A0C90348F6' = Command '91BD222C-F21C-497A-8B6D-5AA86BFC0185' = File Transfer 'B61BE100-5B4E-11CF-A8FD-00805F5C442B' = JFIF 'BC19EFC0-5B4D-11CF-A8FD-00805F5C442B' = Video 'F8699E40-5B4D-11CF-A8FD-00805F5C442B' = Audio
16	ErrorCorrectionType	no	'20FB5700-5B55-11CF-A8FD-00805F5C442B' = No Error Correction 'BFC3CD50-618F-11CF-8BB2-00AA00B4E220' = Audio Spread
32	TimeOffset	no	
48	StreamNumber	no	
54	AudioCodecID	no	--> <a href="#">RIFF AudioEncoding Values</a>
	ImageWidth	no	
56	AudioChannels	no	
58	AudioSampleRate	no	
	ImageHeight	no	

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# Apple Tags

Tags extracted from the maker notes of iPhone images.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	MakerNoteVersion	int32s	
0x0002	AEMatrix?	no	
0x0003	RunTime	-	--> <a href="#">Apple RunTime Tags</a>
0x0004	AEStable	int32s	0 = No 1 = Yes
0x0005	AETarget	int32s	
0x0006	AEAverage	int32s	
0x0007	AFStable	int32s	0 = No 1 = Yes
0x0008	AccelerationVector	rational64s[3]	(XYZ coordinates of the acceleration vector in units of g. As viewed from the front of the phone, positive X is toward the left side, positive Y is toward the bottom, and positive Z points into the face of the phone)
0x000a	HDRImageType	int32s	3 = HDR Image 4 = Original Image
0x000b	BurstUUID	string	(unique ID for all images in a burst)
0x000c	FocusDistanceRange	rational64s[2]	
0x000f	OISMode	int32s	
0x0011	ContentIdentifier	string	(called MediaGroupUUID when it appears as an XAttr)
0x0014	ImageCaptureType	int32s	1 = ProRAW 2 = Portrait 10 = Photo 11 = Manual Focus 12 = Scene
0x0015	ImageUniqueId	string	
0x0017	LivePhotoVideoIndex	yes	(divide by RunTimeScale to get time in seconds)
0x0019	ImageProcessingFlags?	int32s	
0x001a	QualityHint?	string	
0x001d	LuminanceNoiseAmplitude	rational64s	
0x001f	PhotosAppFeatureFlags	int32s	(set if person or pet detected in image)
0x0020	ImageCaptureRequestID?	string	
0x0021	HDRHeadroom	rational64s	
0x0023	AFPerformance	int32s[2]	(first number maybe related to focus distance, last number maybe related to focus accuracy)
0x0025	SceneFlags?	int32s	
0x0026	SignalToNoiseRatioType?	int32s	
0x0027	SignalToNoiseRatio	rational64s	
0x002b	Photoidentifier	string	
0x002d	ColorTemperature	int32s	
0x002e	CameraType	int32s	0 = Back Wide Angle 1 = Back Normal 6 = Front
0x002f	FocusPosition	int32s	
0x0030	HDRGain	rational64s	
0x0038	AFMeasuredDepth	int32s	(from the time-of-flight-assisted auto-focus estimator)
0x003d	AFConfidence	int32s	
0x003e	ColorCorrectionMatrix?	no	
0x003f	GreenGhostMitigationStatus?	int32s	
0x0040	SemanticStyle	no	(_1=Tone, _2=Warm, _3=1.Std,2.Vibrant,3.Rich Contrast,4.Warm,5.Cool)
0x0041	SemanticStyleRenderingVer	no	
0x0042	SemanticStylePreset	no	
0x004e	Apple_0x004e?	no	
0x004f	Apple_0x004f?	no	

0x0054 Apple_0x0054?	no
0x005a Apple_0x005a?	no

## Apple RunTime Tags

This PLIST-format information contains the elements of a CMTime structure representing the amount of time the phone has been running since the last boot, not including standby time.

Tag ID	Tag Name	Writable	Values / Notes
'epoch'	RunTimeEpoch	no	
'flags'	RunTimeFlags	no	Bit 0 = Valid Bit 1 = Has been rounded Bit 2 = Positive infinity Bit 3 = Negative infinity Bit 4 = Indefinite
'timescale'	RunTimeScale	no	
'value'	RunTimeValue	no	

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# Audible Tags

ExifTool will extract any information found in the metadata dictionary of Audible .AA files, even if not listed in the table below.

Tag ID	Tag Name	Writable	Values / Notes
'_chapter_count'	ChapterCount	no	
'_cover_art'	CoverArt	no	
'author'	Author	no	
'copyright'	Copyright	no	
'pub_date_start'	PublishDateStart	no	
'pubdate'	PublishDate	no	

## Audible tags Tags

Information found in "tags" atom of Audible M4B audio books.

Tag ID	Tag Name	Writable	Values / Notes
'cvrx'	Audible_cvrx	-	--> <a href="#">Audible cvrx Tags</a>
'meta'	Audible_meta	-	--> <a href="#">Audible meta Tags</a>
'tseg'	Audible_tseg	-	--> <a href="#">Audible tseg Tags</a>

## Audible cvrx Tags

Audible cover art information in M4B audio books.

Tag Name	Writable	Values / Notes
CoverArt	no	
CoverArtType	no	

## Audible meta Tags

Information found in Audible M4B "meta" atom.

Tag ID	Tag Name	Writable	Values / Notes
'ALBUMARTIST'	AlbumArtist	no	
'Album'	Album	no	
'Artist'	Artist	no	
'Comment'	Comment	no	
'Genre'	Genre	no	
'SUBTITLE'	Subtitle	no	
'TOOL'	CreatorTool	no	
'Title'	Title	no	
'Year'	Year	no	
'itunesmediatype'	iTunesMediaType	no	
'track'	ChapterName	no	

## Audible tseg Tags

Tag ID	Tag Name	Writable	Values / Notes
'meta'	Audible_meta2	-	--> <a href="#">Audible meta Tags</a>
'tshd'	ChapterNumber	no	

# BMP Tags

There really isn't much meta information in a BMP file as such, just a bit of image related information.

Index1	Tag Name	Writable	Values / Notes
0	BMPVersion	no	(this is actually the size of the BMP header, but used to determine the BMP version) 40 = Windows V3 68 = AVI BMP structure? 108 = Windows V4 124 = Windows V5
4	ImageWidth	no	
8	ImageHeight	no	
12	Planes	no	
14	BitDepth	no	
16	Compression	no	0 = None      3 = Bitfields 1 = 8-Bit RLE    4 = JPEG 2 = 4-Bit RLE    5 = PNG
20	ImageLength	no	
24	PixelsPerMeterX	no	
28	PixelsPerMeterY	no	
32	NumColors	no	
36	NumImportantColors	no	
40	RedMask	no	
44	GreenMask	no	
48	BlueMask	no	
52	AlphaMask	no	
56	ColorSpace	no	0 = Calibrated RGB 1 = Device RGB 2 = Device CMYK 'LINK' = Linked Color Profile 'MBED' = Embedded Color Profile 'Win' = Windows Color Space 'sRGB' = sRGB
60	RedEndpoint	no	
72	GreenEndpoint	no	
84	BlueEndpoint	no	
96	GammaRed	no	
100	GammaGreen	no	
104	GammaBlue	no	
108	RenderingIntent	no	1 = Graphic (LCS_GM_BUSINESS) 2 = Proof (LCS_GM_GRAPHICS) 4 = Picture (LCS_GM_IMAGES) 8 = Absolute Colorimetric (LCS_GM_ABS_COLORIMETRIC)
112	ProfileDataOffset	no	
116	ProfileSize	no	

# BMP OS2 Tags

Information extracted from OS/2-format BMP images.

Index1	Tag Name	Writable	Values / Notes
0	BMPVersion	no	(again, the header size is used to determine the BMP version) 12 = OS/2 V1 64 = OS/2 V2
4	ImageWidth	no	
6	ImageHeight	no	
8	Planes	no	
10	BitDepth	no	

# BMP Extra Tags

Extra information extracted from some BMP images.

Tag Name	Writable	Values / Notes
EmbeddedJPG	no	
EmbeddedPNG	no	
ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>
LinkedProfileName	no	

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# BPG Tags

The information listed below is extracted from BPG (Better Portable Graphics) images. See <http://bellard.org/bpg/> for the specification.

Index1	Tag Name	Writable	Values / Notes
4	PixelFormat	no	[val >> 13 & 0x7] 0 = Grayscale 1 = 4:2:0 (chroma at 0.5, 0.5) 2 = 4:2:2 (chroma at 0.5, 0) 3 = 4:4:4 4 = 4:2:0 (chroma at 0, 0.5) 5 = 4:2:2 (chroma at 0, 0)
4.1	Alpha	no	[val & 0x1004] 0x0 = No Alpha Plane 0x4 = Alpha Exists (W color component) 0x1000 = Alpha Exists (color not premultiplied) 0x1004 = Alpha Exists (color premultiplied)
4.2	BitDepth	no	[val >> 8 & 0xf]
4.3	ColorSpace	no	[val >> 4 & 0xf] 0 = YCbCr (BT 601) 1 = RGB 2 = YCgCo 3 = YCbCr (BT 709) 4 = YCbCr (BT 2020) 5 = BT 2020 Constant Luminance
4.4	Flags	no	[val & 0xb] Bit 0 = Animation Bit 1 = Limited Range Bit 3 = Extension Present
6	ImageWidth	no	
7	ImageHeight	no	
8	ImageLength	no	

## BPG Extensions Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	EXIF	-	--> <a href="#">EXIF Tags</a>
0x0002	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>
0x0003	XMP	-	--> <a href="#">XMP Tags</a>
0x0004	ThumbnailBPG	no	
0x0005	AnimationControl?	no	

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# CBOR Tags

The tags below are extracted from CBOR (Concise Binary Object Representation) metadata. The C2PA specification uses this format for some metadata. As well as these tags, ExifTool will read any existing tags.

Tag Name	Writable	Values / Notes
AuthorIdentifier	no	
AuthorName	no	
DocumentID	no	
Format	no	
InstanceID	no	
Relationship	no	
ThumbnailHash	no+	
ThumbnailURL	no	
Title	no	

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# Canon Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	CanonCameraSettings	-	--> <a href="#">Canon CameraSettings Tags</a>
0x0002	CanonFocalLength	-	--> <a href="#">Canon FocalLength Tags</a>
0x0003	CanonFlashInfo?	no	
0x0004	CanonShotInfo	-	--> <a href="#">Canon ShotInfo Tags</a>
0x0005	CanonPanorama	-	--> <a href="#">Canon Panorama Tags</a>
0x0006	CanonImageType	string	
0x0007	CanonFirmwareVersion	string	
0x0008	FileNumber	int32u	
0x0009	OwnerName	string	
0x000a	UnknownD30	-	--> <a href="#">Canon UnknownD30 Tags</a>
0x000c	SerialNumber	int32u	
0x000d	CanonCameraInfo1D CanonCameraInfo1DmkII CanonCameraInfo1DmkIIN CanonCameraInfo1DmkIII CanonCameraInfo1DmkIV CanonCameraInfo1DX CanonCameraInfo5D CanonCameraInfo5DmkII CanonCameraInfo5DmkIII CanonCameraInfo6D CanonCameraInfo7D CanonCameraInfo40D CanonCameraInfo50D CanonCameraInfo60D CanonCameraInfo70D CanonCameraInfo80D CanonCameraInfo450D CanonCameraInfo500D CanonCameraInfo550D CanonCameraInfo600D CanonCameraInfo650D CanonCameraInfo700D CanonCameraInfo750D CanonCameraInfo760D CanonCameraInfo1000D CanonCameraInfo1100D CanonCameraInfo1200D CanonCameraInfoR6 CanonCameraInfoR6m2 CanonCameraInfoG5XII CanonCameraInfoPowerShot CanonCameraInfoPowerShot2 CanonCameraInfoUnknown32 CanonCameraInfoUnknown16 CanonCameraInfoUnknown	-	--> <a href="#">Canon CameraInfo1D Tags</a> --> <a href="#">Canon CameraInfo1DmkII Tags</a> --> <a href="#">Canon CameraInfo1DmkIIN Tags</a> --> <a href="#">Canon CameraInfo1DmkIII Tags</a> --> <a href="#">Canon CameraInfo1DmkIV Tags</a> --> <a href="#">Canon CameraInfo1DX Tags</a> --> <a href="#">Canon CameraInfo5D Tags</a> --> <a href="#">Canon CameraInfo5DmkII Tags</a> --> <a href="#">Canon CameraInfo5DmkIII Tags</a> --> <a href="#">Canon CameraInfo6D Tags</a> --> <a href="#">Canon CameraInfo7D Tags</a> --> <a href="#">Canon CameraInfo40D Tags</a> --> <a href="#">Canon CameraInfo50D Tags</a> --> <a href="#">Canon CameraInfo60D Tags</a> --> <a href="#">Canon CameraInfo70D Tags</a> --> <a href="#">Canon CameraInfo80D Tags</a> --> <a href="#">Canon CameraInfo450D Tags</a> --> <a href="#">Canon CameraInfo500D Tags</a> --> <a href="#">Canon CameraInfo550D Tags</a> --> <a href="#">Canon CameraInfo600D Tags</a> --> <a href="#">Canon CameraInfo650D Tags</a> --> <a href="#">Canon CameraInfo700D Tags</a> --> <a href="#">Canon CameraInfo750D Tags</a> --> <a href="#">Canon CameraInfo760D Tags</a> --> <a href="#">Canon CameraInfo1000D Tags</a> --> <a href="#">Canon CameraInfo1100D Tags</a> --> <a href="#">Canon CameraInfo1200D Tags</a> --> <a href="#">Canon CameraInfoR6 Tags</a> --> <a href="#">Canon CameraInfoR6m2 Tags</a> --> <a href="#">Canon CameraInfoG5XII Tags</a> --> <a href="#">Canon CameraInfoPowerShot Tags</a> --> <a href="#">Canon CameraInfoPowerShot2 Tags</a> --> <a href="#">Canon CameraInfoUnknown32 Tags</a> --> <a href="#">Canon CameraInfoUnknown16 Tags</a> --> <a href="#">Canon CameraInfoUnknown Tags</a>
0x000e	CanonFileLength	int32u	
0x000f	CustomFunctions1D CustomFunctions5D CustomFunctions10D CustomFunctions20D CustomFunctions30D CustomFunctions350D CustomFunctions400D CustomFunctionsD30 CustomFunctionsD60 CustomFunctionsUnknown	-	--> <a href="#">CanonCustom Functions1D Tags</a> --> <a href="#">CanonCustom Functions5D Tags</a> --> <a href="#">CanonCustom Functions10D Tags</a> --> <a href="#">CanonCustom Functions20D Tags</a> --> <a href="#">CanonCustom Functions30D Tags</a> --> <a href="#">CanonCustom Functions350D Tags</a> --> <a href="#">CanonCustom Functions400D Tags</a> --> <a href="#">CanonCustom FunctionsD30 Tags</a> --> <a href="#">CanonCustom FunctionsD60 Tags</a> --> <a href="#">CanonCustom FuncsUnknown Tags</a>
0x0010	CanonModelID	int32u	--> <a href="#">Canon CanonModelID Values</a>
0x0011	MovieInfo	-	--> <a href="#">Canon MovieInfo Tags</a>
0x0012	CanonAFInfo	-	--> <a href="#">Canon AFInfo Tags</a>

0x0013	ThumbnailImageValidArea	int16u[4]	(all zeros for full frame)
0x0015	SerialNumberFormat	int32u	0x90000000 = Format 1 0xa0000000 = Format 2
0x001a	SuperMacro	int16u	0 = Off 1 = On (1) 2 = On (2)
0x001c	TimeStampMode	int16u	(used only in postcard mode) 0 = Off 1 = Date 2 = Date & Time
0x001d	MyColors	-	--> <a href="#">Canon MyColors Tags</a>
0x001e	FirmwareRevision	int32u	
0x0023	Categories	int32u[2]	(2 values: 1. always 8, 2. Categories) 0x0 = (none) Bit 3 = User 1 Bit 0 = People Bit 4 = User 2 Bit 1 = Scenery Bit 5 = User 3 Bit 2 = Events Bit 6 = To Do
0x0024	FaceDetect1	-	--> <a href="#">Canon FaceDetect1 Tags</a>
0x0025	FaceDetect2	-	--> <a href="#">Canon FaceDetect2 Tags</a>
0x0026	CanonAFInfo2	-	--> <a href="#">Canon AFInfo2 Tags</a>
0x0027	ContrastInfo	-	--> <a href="#">Canon ContrastInfo Tags</a>
0x0028	ImageUniqueID	int8u	
0x0029	WBInfo	-	--> <a href="#">Canon WBInfo Tags</a>
0x002f	FaceDetect3	-	--> <a href="#">Canon FaceDetect3 Tags</a>
0x0035	TimeInfo	-	--> <a href="#">Canon TimeInfo Tags</a>
0x0038	BatteryType	undef	
0x003c	AFInfo3	-	--> <a href="#">Canon AFInfo2 Tags</a>
0x0081	RawDataOffset	no	
0x0082	RawDataLength	no	
0x0083	OriginalDecisionDataOffset	int32u*	
0x0090	CustomFunctions1D	-	--> <a href="#">Canon Custom Functions1D Tags</a>
0x0091	PersonalFunctions	-	--> <a href="#">Canon Custom PersonalFuncs Tags</a>
0x0092	PersonalFunctionValues	-	--> <a href="#">Canon Custom PersonalFuncValues Tags</a>
0x0093	CanonFileInfo	-	--> <a href="#">Canon FileInfo Tags</a>
0x0094	AFPointsInFocus1D	no	(EOS 1D -- 5 rows: A1-7, B1-10, C1-11, D1-10, E1-7, center point is C6)
0x0095	LensModel	string	
0x0096	SerialInfo	-	--> <a href="#">Canon SerialInfo Tags</a>
	InternalSerialNumber	string	
0x0097	DustRemovalData	undef!	
0x0098	CropInfo	-	--> <a href="#">Canon CropInfo Tags</a>
0x0099	CustomFunctions2	-	--> <a href="#">Canon Custom Functions2 Tags</a>
0x009a	AspectInfo	-	--> <a href="#">Canon AspectInfo Tags</a>
0x00a0	ProcessingInfo	-	--> <a href="#">Canon Processing Tags</a>
0x00a1	ToneCurveTable	no	
0x00a2	SharpnessTable	no	
0x00a3	SharpnessFreqTable	no	
0x00a4	WhiteBalanceTable	no	
0x00a9	ColorBalance	-	--> <a href="#">Canon ColorBalance Tags</a>
0x00aa	MeasuredColor	-	--> <a href="#">Canon MeasuredColor Tags</a>
0x00ae	ColorTemperature	int16u	
0x00b0	CanonFlags	-	--> <a href="#">Canon Flags Tags</a>
0x00b1	ModifiedInfo	-	--> <a href="#">Canon ModifiedInfo Tags</a>
0x00b2	ToneCurveMatching	no	
0x00b3	WhiteBalanceMatching	no	
0x00b4	ColorSpace	int16u	1 = sRGB 2 = Adobe RGB 65535 = n/a

0x00b6	PreviewImageInfo	-	--> <a href="#">Canon PreviewImageInfo Tags</a>
0x00d0	VRDOffset	int32u*	(offset of VRD "recipe data" if it exists)
0x00e0	SensorInfo	-	--> <a href="#">Canon SensorInfo Tags</a>
0x4001	ColorData1	-	--> <a href="#">Canon ColorData1 Tags</a>
	ColorData2	-	--> <a href="#">Canon ColorData2 Tags</a>
	ColorData3	-	--> <a href="#">Canon ColorData3 Tags</a>
	ColorData4	-	--> <a href="#">Canon ColorData4 Tags</a>
	ColorData5	-	--> <a href="#">Canon ColorData5 Tags</a>
	ColorData6	-	--> <a href="#">Canon ColorData6 Tags</a>
	ColorData7	-	--> <a href="#">Canon ColorData7 Tags</a>
	ColorData8	-	--> <a href="#">Canon ColorData8 Tags</a>
	ColorData9	-	--> <a href="#">Canon ColorData9 Tags</a>
	ColorData10	-	--> <a href="#">Canon ColorData10 Tags</a>
	ColorData11	-	--> <a href="#">Canon ColorData11 Tags</a>
	ColorData12	-	--> <a href="#">Canon ColorData12 Tags</a>
	ColorDataUnknown	-	--> <a href="#">Canon ColorDataUnknown Tags</a>
0x4002	CRWParam?	no	
0x4003	ColorInfo	-	--> <a href="#">Canon ColorInfo Tags</a>
0x4005	Flavor?	no	(unknown 49kB block, not copied to JPEG images)
0x4008	PictureStyleUserDef	int16u[3]	[Values 0-2] --> <a href="#">Canon PictureStyle Values</a>
0x4009	PictureStylePC	int16u[3]	[Values 0-2] --> <a href="#">Canon PictureStyle Values</a>
0x4010	CustomPictureStyleFileName	string	
0x4013	AFMicroAdj	-	--> <a href="#">Canon AFMicroAdj Tags</a>
0x4015	VignettingCorr	-	--> <a href="#">Canon VignettingCorr Tags</a>
	VignettingCorrUnknown1	-	--> <a href="#">Canon VignettingCorrUnknown Tags</a>
	VignettingCorrUnknown2	-	--> <a href="#">Canon VignettingCorrUnknown Tags</a>
0x4016	VignettingCorr2	-	--> <a href="#">Canon VignettingCorr2 Tags</a>
0x4018	LightingOpt	-	--> <a href="#">Canon LightingOpt Tags</a>
0x4019	LensInfo	-	--> <a href="#">Canon LensInfo Tags</a>
0x4020	AmbienceInfo	-	--> <a href="#">Canon Ambience Tags</a>
0x4021	MultiExp	-	--> <a href="#">Canon MultiExp Tags</a>
0x4024	FilterInfo	-	--> <a href="#">Canon FilterInfo Tags</a>
0x4025	HDRInfo	-	--> <a href="#">Canon HDRInfo Tags</a>
0x4026	LogInfo	-	--> <a href="#">Canon LogInfo Tags</a>
0x4028	AFConfig	-	--> <a href="#">Canon AFConfig Tags</a>
0x403f	RawBurstModeRoll	-	--> <a href="#">Canon RawBurstInfo Tags</a>
0x4059	LevellInfo	-	--> <a href="#">Canon LevellInfo Tags</a>

## Canon CanonModelID Values

Value	CanonModelID
0x412	= EOS M50 / Kiss M
0x801	= PowerShot SX740 HS
0x804	= PowerShot G5 X Mark II
0x805	= PowerShot SX70 HS
0x808	= PowerShot G7 X Mark III
0x811	= EOS M6 Mark II
0x812	= EOS M200
0x1010000	= PowerShot A30
0x1040000	= PowerShot S300 / Digital IXUS 300 / IXY Digital 300
0x1060000	= PowerShot A20
0x1080000	= PowerShot A10
0x1090000	= PowerShot S110 / Digital IXUS v / IXY Digital 200
0x1100000	= PowerShot G2
0x1110000	= PowerShot S40
0x1120000	= PowerShot S30
0x1130000	= PowerShot A40
0x1140000	= EOS D30
0x1150000	= PowerShot A100
0x1160000	= PowerShot S200 / Digital IXUS v2 / IXY Digital 200a
0x1170000	= PowerShot A200

0x1180000 = PowerShot S330 / Digital IXUS 330 / IXY Digital 300a  
0x1190000 = PowerShot G3  
0x1210000 = PowerShot S45  
0x1230000 = PowerShot SD100 / Digital IXUS II / IXY Digital 30  
0x1240000 = PowerShot S230 / Digital IXUS v3 / IXY Digital 320  
0x1250000 = PowerShot A70  
0x1260000 = PowerShot A60  
0x1270000 = PowerShot S400 / Digital IXUS 400 / IXY Digital 400  
0x1290000 = PowerShot G5  
0x1300000 = PowerShot A300  
0x1310000 = PowerShot S50  
0x1340000 = PowerShot A80  
0x1350000 = PowerShot SD10 / Digital IXUS i / IXY Digital L  
0x1360000 = PowerShot S1 IS  
0x1370000 = PowerShot Pro1  
0x1380000 = PowerShot S70  
0x1390000 = PowerShot S60  
0x1400000 = PowerShot G6  
0x1410000 = PowerShot S500 / Digital IXUS 500 / IXY Digital 500  
0x1420000 = PowerShot A75  
0x1440000 = PowerShot SD110 / Digital IXUS IIs / IXY Digital 30a  
0x1450000 = PowerShot A400  
0x1470000 = PowerShot A310  
0x1490000 = PowerShot A85  
0x1520000 = PowerShot S410 / Digital IXUS 430 / IXY Digital 450  
0x1530000 = PowerShot A95  
0x1540000 = PowerShot SD300 / Digital IXUS 40 / IXY Digital 50  
0x1550000 = PowerShot SD200 / Digital IXUS 30 / IXY Digital 40  
0x1560000 = PowerShot A520  
0x1570000 = PowerShot A510  
0x1590000 = PowerShot SD20 / Digital IXUS i5 / IXY Digital L2  
0x1640000 = PowerShot S2 IS  
0x1650000 = PowerShot SD430 / Digital IXUS Wireless / IXY Digital Wireless  
0x1660000 = PowerShot SD500 / Digital IXUS 700 / IXY Digital 600  
0x1668000 = EOS D60  
0x1700000 = PowerShot SD30 / Digital IXUS i Zoom / IXY Digital L3  
0x1740000 = PowerShot A430  
0x1750000 = PowerShot A410  
0x1760000 = PowerShot S80  
0x1780000 = PowerShot A620  
0x1790000 = PowerShot A610  
0x1800000 = PowerShot SD630 / Digital IXUS 65 / IXY Digital 80  
0x1810000 = PowerShot SD450 / Digital IXUS 55 / IXY Digital 60  
0x1820000 = PowerShot TX1  
0x1870000 = PowerShot SD400 / Digital IXUS 50 / IXY Digital 55  
0x1880000 = PowerShot A420  
0x1890000 = PowerShot SD900 / Digital IXUS 900 Ti / IXY Digital 1000  
0x1900000 = PowerShot SD550 / Digital IXUS 750 / IXY Digital 700  
0x1920000 = PowerShot A700  
0x1940000 = PowerShot SD700 IS / Digital IXUS 800 IS / IXY Digital 800 IS  
0x1950000 = PowerShot S3 IS  
0x1960000 = PowerShot A540  
0x1970000 = PowerShot SD600 / Digital IXUS 60 / IXY Digital 70  
0x1980000 = PowerShot G7  
0x1990000 = PowerShot A530  
0x2000000 = PowerShot SD800 IS / Digital IXUS 850 IS / IXY Digital 900 IS  
0x2010000 = PowerShot SD40 / Digital IXUS i7 / IXY Digital L4  
0x2020000 = PowerShot A710 IS  
0x2030000 = PowerShot A640  
0x2040000 = PowerShot A630  
0x2090000 = PowerShot S5 IS  
0x2100000 = PowerShot A460  
0x2120000 = PowerShot SD850 IS / Digital IXUS 950 IS / IXY Digital 810 IS  
0x2130000 = PowerShot A570 IS  
0x2140000 = PowerShot A560  
0x2150000 = PowerShot SD750 / Digital IXUS 75 / IXY Digital 90  
0x2160000 = PowerShot SD1000 / Digital IXUS 70 / IXY Digital 10  
0x2180000 = PowerShot A550  
0x2190000 = PowerShot A450  
0x2230000 = PowerShot G9  
0x2240000 = PowerShot A650 IS  
0x2260000 = PowerShot A720 IS  
0x2290000 = PowerShot SX100 IS  
0x2300000 = PowerShot SD950 IS / Digital IXUS 960 IS / IXY Digital 2000 IS  
0x2310000 = PowerShot SD870 IS / Digital IXUS 860 IS / IXY Digital 910 IS

0x2320000 = PowerShot SD890 IS / Digital IXUS 970 IS / IXY Digital 820 IS  
0x2360000 = PowerShot SD790 IS / Digital IXUS 90 IS / IXY Digital 95 IS  
0x2370000 = PowerShot SD770 IS / Digital IXUS 85 IS / IXY Digital 25 IS  
0x2380000 = PowerShot A590 IS  
0x2390000 = PowerShot A580  
0x2420000 = PowerShot A470  
0x2430000 = PowerShot SD1100 IS / Digital IXUS 80 IS / IXY Digital 20 IS  
0x2460000 = PowerShot SX1 IS  
0x2470000 = PowerShot SX10 IS  
0x2480000 = PowerShot A1000 IS  
0x2490000 = PowerShot G10  
0x2510000 = PowerShot A2000 IS  
0x2520000 = PowerShot SX110 IS  
0x2530000 = PowerShot SD990 IS / Digital IXUS 980 IS / IXY Digital 3000 IS  
0x2540000 = PowerShot SD880 IS / Digital IXUS 870 IS / IXY Digital 920 IS  
0x2550000 = PowerShot E1  
0x2560000 = PowerShot D10  
0x2570000 = PowerShot SD960 IS / Digital IXUS 110 IS / IXY Digital 510 IS  
0x2580000 = PowerShot A2100 IS  
0x2590000 = PowerShot A480  
0x2600000 = PowerShot SX200 IS  
0x2610000 = PowerShot SD970 IS / Digital IXUS 990 IS / IXY Digital 830 IS  
0x2620000 = PowerShot SD780 IS / Digital IXUS 100 IS / IXY Digital 210 IS  
0x2630000 = PowerShot A1100 IS  
0x2640000 = PowerShot SD1200 IS / Digital IXUS 95 IS / IXY Digital 110 IS  
0x2700000 = PowerShot G11  
0x2710000 = PowerShot SX120 IS  
0x2720000 = PowerShot S90  
0x2750000 = PowerShot SX20 IS  
0x2760000 = PowerShot SD980 IS / Digital IXUS 200 IS / IXY Digital 930 IS  
0x2770000 = PowerShot SD940 IS / Digital IXUS 120 IS / IXY Digital 220 IS  
0x2800000 = PowerShot A495  
0x2810000 = PowerShot A490  
0x2820000 = PowerShot A3100/A3150 IS  
0x2830000 = PowerShot A3000 IS  
0x2840000 = PowerShot SD1400 IS / IXUS 130 / IXY 400F  
0x2850000 = PowerShot SD1300 IS / IXUS 105 / IXY 200F  
0x2860000 = PowerShot SD3500 IS / IXUS 210 / IXY 10S  
0x2870000 = PowerShot SX210 IS  
0x2880000 = PowerShot SD4000 IS / IXUS 300 HS / IXY 30S  
0x2890000 = PowerShot SD4500 IS / IXUS 1000 HS / IXY 50S  
0x2920000 = PowerShot G12  
0x2930000 = PowerShot SX30 IS  
0x2940000 = PowerShot SX130 IS  
0x2950000 = PowerShot S95  
0x2980000 = PowerShot A3300 IS  
0x2990000 = PowerShot A3200 IS  
0x3000000 = PowerShot ELPH 500 HS / IXUS 310 HS / IXY 31S  
0x3010000 = PowerShot Pro90 IS  
0x3010001 = PowerShot A800  
0x3020000 = PowerShot ELPH 100 HS / IXUS 115 HS / IXY 210F  
0x3030000 = PowerShot SX230 HS  
0x3040000 = PowerShot ELPH 300 HS / IXUS 220 HS / IXY 410F  
0x3050000 = PowerShot A2200  
0x3060000 = PowerShot A1200  
0x3070000 = PowerShot SX220 HS  
0x3080000 = PowerShot G1 X  
0x3090000 = PowerShot SX150 IS  
0x3100000 = PowerShot ELPH 510 HS / IXUS 1100 HS / IXY 51S  
0x3110000 = PowerShot S100 (new)  
0x3120000 = PowerShot ELPH 310 HS / IXUS 230 HS / IXY 600F  
0x3130000 = PowerShot SX40 HS  
0x3140000 = IXY 32S  
0x3160000 = PowerShot A1300  
0x3170000 = PowerShot A810  
0x3180000 = PowerShot ELPH 320 HS / IXUS 240 HS / IXY 420F  
0x3190000 = PowerShot ELPH 110 HS / IXUS 125 HS / IXY 220F  
0x3200000 = PowerShot D20  
0x3210000 = PowerShot A4000 IS  
0x3220000 = PowerShot SX260 HS  
0x3230000 = PowerShot SX240 HS  
0x3240000 = PowerShot ELPH 530 HS / IXUS 510 HS / IXY 1  
0x3250000 = PowerShot ELPH 520 HS / IXUS 500 HS / IXY 3  
0x3260000 = PowerShot A3400 IS  
0x3270000 = PowerShot A2400 IS

0x3280000 = PowerShot A2300  
0x3320000 = PowerShot S100V  
0x3330000 = PowerShot G15  
0x3340000 = PowerShot SX50 HS  
0x3350000 = PowerShot SX160 IS  
0x3360000 = PowerShot S110 (new)  
0x3370000 = PowerShot SX500 IS  
0x3380000 = PowerShot N  
0x3390000 = IXUS 245 HS / IXY 430F  
0x3400000 = PowerShot SX280 HS  
0x3410000 = PowerShot SX270 HS  
0x3420000 = PowerShot A3500 IS  
0x3430000 = PowerShot A2600  
0x3440000 = PowerShot SX275 HS  
0x3450000 = PowerShot A1400  
0x3460000 = PowerShot ELPH 130 IS / IXUS 140 / IXY 110F  
0x3470000 = PowerShot ELPH 115/120 IS / IXUS 132/135 / IXY 90F/100F  
0x3490000 = PowerShot ELPH 330 HS / IXUS 255 HS / IXY 610F  
0x3510000 = PowerShot A2500  
0x3540000 = PowerShot G16  
0x3550000 = PowerShot S120  
0x3560000 = PowerShot SX170 IS  
0x3580000 = PowerShot SX510 HS  
0x3590000 = PowerShot S200 (new)  
0x3600000 = IXY 620F  
0x3610000 = PowerShot N100  
0x3640000 = PowerShot G1 X Mark II  
0x3650000 = PowerShot D30  
0x3660000 = PowerShot SX700 HS  
0x3670000 = PowerShot SX600 HS  
0x3680000 = PowerShot ELPH 140 IS / IXUS 150 / IXY 130  
0x3690000 = PowerShot ELPH 135 / IXUS 145 / IXY 120  
0x3700000 = PowerShot ELPH 340 HS / IXUS 265 HS / IXY 630  
0x3710000 = PowerShot ELPH 150 IS / IXUS 155 / IXY 140  
0x3740000 = EOS M3  
0x3750000 = PowerShot SX60 HS  
0x3760000 = PowerShot SX520 HS  
0x3770000 = PowerShot SX400 IS  
0x3780000 = PowerShot G7 X  
0x3790000 = PowerShot N2  
0x3800000 = PowerShot SX530 HS  
0x3820000 = PowerShot SX710 HS  
0x3830000 = PowerShot SX610 HS  
0x3840000 = EOS M10  
0x3850000 = PowerShot G3 X  
0x3860000 = PowerShot ELPH 165 HS / IXUS 165 / IXY 160  
0x3870000 = PowerShot ELPH 160 / IXUS 160  
0x3880000 = PowerShot ELPH 350 HS / IXUS 275 HS / IXY 640  
0x3890000 = PowerShot ELPH 170 IS / IXUS 170  
0x3910000 = PowerShot SX410 IS  
0x3930000 = PowerShot G9 X  
0x3940000 = EOS M5  
0x3950000 = PowerShot G5 X  
0x3970000 = PowerShot G7 X Mark II  
0x3980000 = EOS M100  
0x3990000 = PowerShot ELPH 360 HS / IXUS 285 HS / IXY 650  
0x4010000 = PowerShot SX540 HS  
0x4020000 = PowerShot SX420 IS  
0x4030000 = PowerShot ELPH 190 IS / IXUS 180 / IXY 190  
0x4040000 = PowerShot G1  
0x4040001 = PowerShot ELPH 180 IS / IXUS 175 / IXY 180  
0x4050000 = PowerShot SX720 HS  
0x4060000 = PowerShot SX620 HS  
0x4070000 = EOS M6  
0x4100000 = PowerShot G9 X Mark II  
0x4150000 = PowerShot ELPH 185 / IXUS 185 / IXY 200  
0x4160000 = PowerShot SX430 IS  
0x4170000 = PowerShot SX730 HS  
0x4180000 = PowerShot G1 X Mark III  
0x6040000 = PowerShot S100 / Digital IXUS / IXY Digital  
0x40000227 = EOS C50  
0x4007d673 = DC19/DC21/DC22  
0x4007d674 = XH A1  
0x4007d675 = HV10  
0x4007d676 = MD130/MD140/MD150/MD160/ZR850

0x4007d777 = DC50  
0x4007d778 = HV20  
0x4007d779 = DC211  
0x4007d77a = HG10  
0x4007d77b = HR10  
0x4007d77d = MD255/ZR950  
0x4007d81c = HF11  
0x4007d878 = HV30  
0x4007d87c = XH A1S  
0x4007d87e = DC301/DC310/DC311/DC320/DC330  
0x4007d87f = FS100  
0x4007d880 = HF10  
0x4007d882 = HG20/HG21  
0x4007d925 = HF21  
0x4007d926 = HF S11  
0x4007d978 = HV40  
0x4007d987 = DC410/DC411/DC420  
0x4007d988 = FS19/FS20/FS21/FS22/FS200  
0x4007d989 = HF20/HF200  
0x4007d98a = HF S10/S100  
0x4007da8e = HF R10/R16/R17/R18/R100/R106  
0x4007da8f = HF M30/M31/M36/M300/M306  
0x4007da90 = HF S20/S21/S200  
0x4007da92 = FS31/FS36/FS37/FS300/FS305/FS306/FS307  
0x4007dca0 = EOS C300  
0x4007ddaa9 = HF G25  
0x4007dfb4 = XC10  
0x4007e1c3 = EOS C200  
0x80000001 = EOS-1D  
0x80000167 = EOS-1DS  
0x80000168 = EOS 10D  
0x80000169 = EOS-1D Mark III  
0x80000170 = EOS Digital Rebel / 300D / Kiss Digital  
0x80000174 = EOS-1D Mark II  
0x80000175 = EOS 20D  
0x80000176 = EOS Digital Rebel XSi / 450D / Kiss X2  
0x80000188 = EOS-1Ds Mark II  
0x80000189 = EOS Digital Rebel XT / 350D / Kiss Digital N  
0x80000190 = EOS 40D  
0x80000213 = EOS 5D  
0x80000215 = EOS-1Ds Mark III  
0x80000218 = EOS 5D Mark II  
0x80000219 = WFT-E1  
0x80000232 = EOS-1D Mark II N  
0x80000234 = EOS 30D  
0x80000236 = EOS Digital Rebel XTi / 400D / Kiss Digital X  
0x80000241 = WFT-E2  
0x80000246 = WFT-E3  
0x80000250 = EOS 7D  
0x80000252 = EOS Rebel T1i / 500D / Kiss X3  
0x80000254 = EOS Rebel XS / 1000D / Kiss F  
0x80000261 = EOS 50D  
0x80000269 = EOS-1D X  
0x80000270 = EOS Rebel T2i / 550D / Kiss X4  
0x80000271 = WFT-E4  
0x80000273 = WFT-E5  
0x80000281 = EOS-1D Mark IV  
0x80000285 = EOS 5D Mark III  
0x80000286 = EOS Rebel T3i / 600D / Kiss X5  
0x80000287 = EOS 60D  
0x80000288 = EOS Rebel T3 / 1100D / Kiss X50  
0x80000289 = EOS 7D Mark II  
0x80000297 = WFT-E2 II  
0x80000298 = WFT-E4 II  
0x80000301 = EOS Rebel T4i / 650D / Kiss X6i  
0x80000302 = EOS 6D  
0x80000324 = EOS-1D C  
0x80000325 = EOS 70D  
0x80000326 = EOS Rebel T5i / 700D / Kiss X7i  
0x80000327 = EOS Rebel T5 / 1200D / Kiss X70 / Hi  
0x80000328 = EOS-1D X Mark II  
0x80000331 = EOS M  
0x80000346 = EOS Rebel SL1 / 100D / Kiss X7  
0x80000347 = EOS Rebel T6s / 760D / 8000D  
0x80000349 = EOS 5D Mark IV

0x80000350 = EOS 80D  
 0x80000355 = EOS M2  
 0x80000382 = EOS 5DS  
 0x80000393 = EOS Rebel T6i / 750D / Kiss X8i  
 0x80000401 = EOS 5DS R  
 0x80000404 = EOS Rebel T6 / 1300D / Kiss X80  
 0x80000405 = EOS Rebel T7i / 800D / Kiss X9i  
 0x80000406 = EOS 6D Mark II  
 0x80000408 = EOS 77D / 9000D  
 0x80000417 = EOS Rebel SL2 / 200D / Kiss X9  
 0x80000421 = EOS R5  
 0x80000422 = EOS Rebel T100 / 4000D / 3000D  
 0x80000424 = EOS R  
 0x80000428 = EOS-1D X Mark III  
 0x80000432 = EOS Rebel T7 / 2000D / 1500D / Kiss X90  
 0x80000433 = EOS RP  
 0x80000435 = EOS Rebel T8i / 850D / X10i  
 0x80000436 = EOS SL3 / 250D / Kiss X10  
 0x80000437 = EOS 90D  
 0x80000450 = EOS R3  
 0x80000453 = EOS R6  
 0x80000464 = EOS R7  
 0x80000465 = EOS R10  
 0x80000467 = PowerShot ZOOM  
 0x80000468 = EOS M50 Mark II / Kiss M2  
 0x80000480 = EOS R50  
 0x80000481 = EOS R6 Mark II  
 0x80000487 = EOS R8  
 0x80000491 = PowerShot V10  
 0x80000495 = EOS R1  
 0x80000496 = R5 Mark II  
 0x80000497 = PowerShot V1  
 0x80000498 = EOS R100  
 0x80000516 = EOS R50 V  
 0x80000520 = EOS D2000C  
 0x80000560 = EOS D6000C

## Canon PictureStyle Values

Value	PictureStyle	Value	PictureStyle	Value	PictureStyle
0x0	= None	0x21	= User Def. 1	0x83	= Landscape
0x1	= Standard	0x22	= User Def. 2	0x84	= Neutral
0x2	= Portrait	0x23	= User Def. 3	0x85	= Faithful
0x3	= High Saturation	0x41	= PC 1	0x86	= Monochrome
0x4	= Adobe RGB	0x42	= PC 2	0x87	= Auto
0x5	= Low Saturation	0x43	= PC 3	0x88	= Fine Detail
0x6	= CM Set 1	0x81	= Standard	0xff	= n/a
0x7	= CM Set 2	0x82	= Portrait	0xffff	= n/a

## Canon CameraSettings Tags

Index2	Tag Name	Writable	Values / Notes			
1	MacroMode	int16s	1 = Macro 2 = Normal			
2	SelfTimer	int16s				
3	Quality	int16s	-1	n/a	5	= Superfine
			1	= Economy	7	= CRAW
			2	= Normal	130	= Light (RAW)
			3	= Fine	131	= Standard (RAW)
			4	= RAW		
4	CanonFlashMode	int16s	-1	n/a		
			0	= Off		
			1	= Auto		
			2	= On		
			3	= Red-eye reduction		
			4	= Slow-sync		
			5	= Red-eye reduction (Auto)		
			6	= Red-eye reduction (On)		
			16	= External flash		
5	ContinuousDrive	int16s	0	= Single		
			1	= Continuous		

2 = Movie  
 3 = Continuous, Speed Priority  
 4 = Continuous, Low  
 5 = Continuous, High  
 6 = Silent Single  
 8 = Continuous, High+  
 9 = Single, Silent  
 10 = Continuous, Silent

7	FocusMode	int16s	0 = One-shot AF 1 = AI Servo AF 2 = AI Focus AF 3 = Manual Focus (3) 4 = Single 5 = Continuous 6 = Manual Focus (6) 16 = Pan Focus 256 = One-shot AF (Live View) 257 = AI Servo AF (Live View) 258 = AI Focus AF (Live View) 512 = Movie Snap Focus 519 = Movie Servo AF
9	RecordMode	int16s	1 = JPEG            6 = CR2            12 = CR3 2 = CRW+THM    7 = CR2+JPEG    13 = CR3+JPEG 3 = AVI+THM      9 = MOV            14 = HIF 4 = TIF            10 = MP4          15 = CR3+HIF 5 = TIF+JPEG     11 = CRM
10	CanonImageSize	int16s	-1 = n/a                14 = Small 1 0 = Large                15 = Small 2 1 = Medium              16 = Small 3 2 = Small                128 = 640x480 Movie 5 = Medium 1            129 = Medium Movie 6 = Medium 2            130 = Small Movie 7 = Medium 3            137 = 1280x720 Movie 8 = Postcard            142 = 1920x1080 Movie 9 = Widescreen          143 = 4096x2160 Movie 10 = Medium Widescreen
11	EasyMode	int16s	0 = Full auto            25 = Night Snapshot            50 = Best Image Selection 1 = Manual                26 = Digital Macro            51 = High Dynamic Range 2 = Landscape            27 = My Colors                52 = Handheld Night Scene 3 = Fast shutter        28 = Movie Snap              53 = Movie Digest 4 = Slow shutter        29 = Super Macro 2            54 = Live View Control 5 = Night                30 = Color Accent            55 = Discreet 6 = Gray Scale          31 = Color Swap              56 = Blur Reduction 7 = Sepia                32 = Aquarium                57 = Monochrome 8 = Portrait            33 = ISO 3200                58 = Toy Camera Effect 9 = Sports              34 = ISO 6400                59 = Scene Intelligent Auto 10 = Macro              35 = Creative Light Effect    60 = High-speed Burst HQ 11 = Black & White    36 = Easy                    61 = Smooth Skin 12 = Pan focus          37 = Quick Shot              62 = Soft Focus 13 = Vivid              38 = Creative Auto            68 = Food 14 = Neutral            39 = Zoom Blur              84 = HDR Art Standard 15 = Flash Off          40 = Low Light              85 = HDR Art Vivid 16 = Long Shutter      41 = Nostalgic              93 = HDR Art Bold 17 = Super Macro        42 = Super Vivid            257 = Spotlight 18 = Foliage            43 = Poster Effect          258 = Night 2 19 = Indoor            44 = Face Self-timer        259 = Night+ 20 = Fireworks          45 = Smile                    260 = Super Night 21 = Beach              46 = Wink Self-timer        261 = Sunset 22 = Underwater        47 = Fisheye Effect        263 = Night Scene 23 = Snow                48 = Miniature Effect      264 = Surface 24 = Kids & Pets      49 = High-speed Burst    265 = Low Light 2
12	DigitalZoom	int16s	0 = None 1 = 2x 2 = 4x 3 = Other
13	Contrast	int16s	0 = Normal
14	Saturation	int16s	0 = Normal
15	Sharpness	int16s	(some models use a range of -2 to +2 where 0 is normal sharpening, and others use a range of 0 to 7 where 0 is no sharpening)
16	CameralISO	int16s	
17	MeteringMode	int16s	0 = Default 1 = Spot 2 = Average 3 = Evaluative

4 = Partial  
5 = Center-weighted average

18	FocusRange	int16s	0 = Manual 1 = Auto 2 = Not Known 3 = Macro 4 = Very Close 5 = Close 6 = Middle Range 7 = Far Range 8 = Pan Focus 9 = Super Macro 10 = Infinity
19	AFPoint	int16s	0x2005 = Manual AF point selection 0x3000 = None (MF) 0x3001 = Auto AF point selection 0x3002 = Right 0x3003 = Center 0x3004 = Left 0x4001 = Auto AF point selection 0x4006 = Face Detect
20	CanonExposureMode	int16s	0 = Easy 1 = Program AE 2 = Shutter speed priority AE 3 = Aperture-priority AE 4 = Manual 5 = Depth-of-field AE 6 = M-Dep 7 = Bulb 8 = Flexible-priority AE
22	LensType	int16u	--> <a href="#">Canon LensType Values</a> (this value is incorrect for EOS 7D images with lenses of type 256 or greater)
23	MaxFocalLength	int16u	
24	MinFocalLength	int16u	
25	FocalUnits	int16s	
26	MaxAperture	int16s	
27	MinAperture	int16s	
28	FlashActivity	int16s	
29	FlashBits	int16s	0x0 = (none) Bit 0 = Manual Bit 1 = TTL Bit 2 = A-TTL Bit 3 = E-TTL Bit 4 = FP sync enabled Bit 7 = 2nd-curtain sync used Bit 11 = FP sync used Bit 13 = Built-in Bit 14 = External
32	FocusContinuous	int16s	0 = Single 1 = Continuous 8 = Manual
33	AESetting	int16s	0 = Normal AE 1 = Exposure Compensation 2 = AE Lock 3 = AE Lock + Exposure Comp. 4 = No AE
34	ImageStabilization	int16s	0 = Off 1 = On 2 = Shoot Only 3 = Panning 4 = Dynamic 256 = Off (2) 257 = On (2) 258 = Shoot Only (2) 259 = Panning (2) 260 = Dynamic (2)
35	DisplayAperture	int16s	
36	ZoomSourceWidth	int16s	
37	ZoomTargetWidth	int16s	
39	SpotMeteringMode	int16s	0 = Center 1 = AF Point
40	PhotoEffect	int16s	0 = Off 1 = Vivid 2 = Neutral 3 = Smooth 4 = Sepia 5 = B&W 6 = Custom 100 = My Color Data
41	ManualFlashOutput	int16s	0x0 = n/a 0x500 = Full 0x502 = Medium 0x504 = Low 0x7fff = n/a
42	ColorTone	int16s	0 = Normal

46	SRAWQuality	int16s	0 = n/a 1 = sRAW1 (mRAW) 2 = sRAW2 (sRAW)
50	FocusBracketing	int16s	0 = Disable 1 = Enable
51	Clarity	int16s	32767 = n/a
52	HDR-PQ	int16s	-1 = n/a 0 = Off 1 = On

## Canon LensType Values

Value	LensType
-1	= n/a
1	= Canon EF 50mm f/1.8
2	= Canon EF 28mm f/2.8 or Sigma Lens
2	= Sigma 24mm f/2.8 Super Wide II
3	= Canon EF 135mm f/2.8 Soft
4	= Canon EF 35-105mm f/3.5-4.5 or Sigma Lens
4	= Sigma UC Zoom 35-135mm f/4-5.6
5	= Canon EF 35-70mm f/3.5-4.5
6	= Canon EF 28-70mm f/3.5-4.5 or Sigma or Tokina Lens
6	= Sigma 18-50mm f/3.5-5.6 DC
6	= Sigma 18-125mm f/3.5-5.6 DC IF ASP
6	= Tokina AF 193-2 19-35mm f/3.5-4.5
6	= Sigma 28-80mm f/3.5-5.6 II Macro
6	= Sigma 28-300mm f/3.5-6.3 DG Macro
7	= Canon EF 100-300mm f/5.6L
8	= Canon EF 100-300mm f/5.6 or Sigma or Tokina Lens
8	= Sigma 70-300mm f/4-5.6 [APO] DG Macro
8	= Tokina AT-X 242 AF 24-200mm f/3.5-5.6
9	= Canon EF 70-210mm f/4
9	= Sigma 55-200mm f/4-5.6 DC
10	= Canon EF 50mm f/2.5 Macro or Sigma Lens
10	= Sigma 50mm f/2.8 EX
10	= Sigma 28mm f/1.8
10	= Sigma 105mm f/2.8 Macro EX
10	= Sigma 70mm f/2.8 EX DG Macro EF
11	= Canon EF 35mm f/2
13	= Canon EF 15mm f/2.8 Fisheye
14	= Canon EF 50-200mm f/3.5-4.5L
15	= Canon EF 50-200mm f/3.5-4.5
16	= Canon EF 35-135mm f/3.5-4.5
17	= Canon EF 35-70mm f/3.5-4.5A
18	= Canon EF 28-70mm f/3.5-4.5
20	= Canon EF 100-200mm f/4.5A
21	= Canon EF 80-200mm f/2.8L
22	= Canon EF 20-35mm f/2.8L or Tokina Lens
22	= Tokina AT-X 280 AF Pro 28-80mm f/2.8 Aspherical
23	= Canon EF 35-105mm f/3.5-4.5
24	= Canon EF 35-80mm f/4-5.6 Power Zoom
25	= Canon EF 35-80mm f/4-5.6 Power Zoom
26	= Canon EF 100mm f/2.8 Macro or Other Lens
26	= Cosina 100mm f/3.5 Macro AF
26	= Tamron SP AF 90mm f/2.8 Di Macro
26	= Tamron SP AF 180mm f/3.5 Di Macro
26	= Carl Zeiss Planar T* 50mm f/1.4
26	= Voigtlander APO Lanthar 125mm F2.5 SL Macro
26	= Carl Zeiss Planar T 85mm f/1.4 ZE
27	= Canon EF 35-80mm f/4-5.6
28	= Canon EF 80-200mm f/4.5-5.6 or Tamron Lens
28	= Tamron SP AF 28-105mm f/2.8 LD Aspherical IF
28	= Tamron SP AF 28-75mm f/2.8 XR Di LD Aspherical [IF] Macro
28	= Tamron AF 70-300mm f/4-5.6 Di LD 1:2 Macro
28	= Tamron AF Aspherical 28-200mm f/3.8-5.6
29	= Canon EF 50mm f/1.8 II
30	= Canon EF 35-105mm f/4.5-5.6
31	= Canon EF 75-300mm f/4-5.6 or Tamron Lens
31	= Tamron SP AF 300mm f/2.8 LD IF
32	= Canon EF 24mm f/2.8 or Sigma Lens
32	= Sigma 15mm f/2.8 EX Fisheye
33	= Voigtlander or Carl Zeiss Lens

33 = Voigtlander Ultron 40mm f/2 SLII Aspherical  
33 = Voigtlander Color Skopar 20mm f/3.5 SLII Aspherical  
33 = Voigtlander APO-Lanthar 90mm f/3.5 SLII Close Focus  
33 = Carl Zeiss Distagon T\* 15mm f/2.8 ZE  
33 = Carl Zeiss Distagon T\* 18mm f/3.5 ZE  
33 = Carl Zeiss Distagon T\* 21mm f/2.8 ZE  
33 = Carl Zeiss Distagon T\* 25mm f/2 ZE  
33 = Carl Zeiss Distagon T\* 28mm f/2 ZE  
33 = Carl Zeiss Distagon T\* 35mm f/2 ZE  
33 = Carl Zeiss Distagon T\* 35mm f/1.4 ZE  
33 = Carl Zeiss Planar T\* 50mm f/1.4 ZE  
33 = Carl Zeiss Makro-Planar T\* 50mm f/2 ZE  
33 = Carl Zeiss Makro-Planar T\* 100mm f/2 ZE  
33 = Carl Zeiss Apo-Sonnar T\* 135mm f/2 ZE  
35 = Canon EF 35-80mm f/4-5.6  
36 = Canon EF 38-76mm f/4.5-5.6  
37 = Canon EF 35-80mm f/4-5.6 or Tamron Lens  
37 = Tamron 70-200mm f/2.8 Di LD Macro  
37 = Tamron AF 28-300mm f/3.5-6.3 XR Di VC LD Aspherical [IF] Macro (A20)  
37 = Tamron SP AF 17-50mm f/2.8 XR Di II VC LD Aspherical [IF]  
37 = Tamron AF 18-270mm f/3.5-6.3 Di II VC LD Aspherical [IF] Macro  
38 = Canon EF 80-200mm f/4.5-5.6 II  
39 = Canon EF 75-300mm f/4-5.6  
40 = Canon EF 28-80mm f/3.5-5.6  
41 = Canon EF 28-90mm f/4-5.6  
42 = Canon EF 28-200mm f/3.5-5.6 or Tamron Lens  
42 = Tamron AF 28-300mm f/3.5-6.3 XR Di VC LD Aspherical [IF] Macro (A20)  
43 = Canon EF 28-105mm f/4-5.6  
44 = Canon EF 90-300mm f/4.5-5.6  
45 = Canon EF-S 18-55mm f/3.5-5.6 [II]  
46 = Canon EF 28-90mm f/4-5.6  
47 = Zeiss Milvus 35mm f/2 or 50mm f/2  
47 = Zeiss Milvus 50mm f/2 Makro  
47 = Zeiss Milvus 135mm f/2 ZE  
48 = Canon EF-S 18-55mm f/3.5-5.6 IS  
49 = Canon EF-S 55-250mm f/4-5.6 IS  
50 = Canon EF-S 18-200mm f/3.5-5.6 IS  
51 = Canon EF-S 18-135mm f/3.5-5.6 IS  
52 = Canon EF-S 18-55mm f/3.5-5.6 IS II  
53 = Canon EF-S 18-55mm f/3.5-5.6 III  
54 = Canon EF-S 55-250mm f/4-5.6 IS II  
60 = Irix 11mm f/4 or 15mm f/2.4  
60 = Irix 15mm f/2.4  
63 = Irix 30mm F1.4 Dragonfly  
80 = Canon TS-E 50mm f/2.8L Macro  
81 = Canon TS-E 90mm f/2.8L Macro  
82 = Canon TS-E 135mm f/4L Macro  
94 = Canon TS-E 17mm f/4L  
95 = Canon TS-E 24mm f/3.5L II  
103 = Samyang AF 14mm f/2.8 EF or Rokinon Lens  
103 = Rokinon SP 14mm f/2.4  
103 = Rokinon AF 14mm f/2.8 EF  
106 = Rokinon SP / Samyang XP 35mm f/1.2  
112 = Sigma 28mm f/1.5 FF High-speed Prime or other Sigma Lens  
112 = Sigma 40mm f/1.5 FF High-speed Prime  
112 = Sigma 105mm f/1.5 FF High-speed Prime  
117 = Tamron 35-150mm f/2.8-4.0 Di VC OSD (A043) or other Tamron Lens  
117 = Tamron SP 35mm f/1.4 Di USD (F045)  
124 = Canon MP-E 65mm f/2.8 1-5x Macro Photo  
125 = Canon TS-E 24mm f/3.5L  
126 = Canon TS-E 45mm f/2.8  
127 = Canon TS-E 90mm f/2.8 or Tamron Lens  
127 = Tamron 18-200mm f/3.5-6.3 Di II VC (B018)  
129 = Canon EF 300mm f/2.8L USM  
130 = Canon EF 50mm f/1.0L USM  
131 = Canon EF 28-80mm f/2.8-4L USM or Sigma Lens  
131 = Sigma 8mm f/3.5 EX DG Circular Fisheye  
131 = Sigma 17-35mm f/2.8-4 EX DG Aspherical HSM  
131 = Sigma 17-70mm f/2.8-4.5 DC Macro  
131 = Sigma APO 50-150mm f/2.8 [II] EX DC HSM  
131 = Sigma APO 120-300mm f/2.8 EX DG HSM  
131 = Sigma 4.5mm f/2.8 EX DC HSM Circular Fisheye  
131 = Sigma 70-200mm f/2.8 APO EX HSM  
131 = Sigma 28-70mm f/2.8-4 DG  
132 = Canon EF 1200mm f/5.6L USM

134 = Canon EF 600mm f/4L IS USM  
135 = Canon EF 200mm f/1.8L USM  
136 = Canon EF 300mm f/2.8L USM  
136 = Tamron SP 15-30mm f/2.8 Di VC USD (A012)  
137 = Canon EF 85mm f/1.2L USM or Sigma or Tamron Lens  
137 = Sigma 18-50mm f/2.8-4.5 DC OS HSM  
137 = Sigma 50-200mm f/4-5.6 DC OS HSM  
137 = Sigma 18-250mm f/3.5-6.3 DC OS HSM  
137 = Sigma 24-70mm f/2.8 IF EX DG HSM  
137 = Sigma 18-125mm f/3.8-5.6 DC OS HSM  
137 = Sigma 17-70mm f/2.8-4 DC Macro OS HSM | C  
137 = Sigma 17-50mm f/2.8 OS HSM  
137 = Sigma 18-200mm f/3.5-6.3 DC OS HSM [II]  
137 = Tamron AF 18-270mm f/3.5-6.3 Di II VC PZD (B008)  
137 = Sigma 8-16mm f/4.5-5.6 DC HSM  
137 = Tamron SP 17-50mm f/2.8 XR Di II VC (B005)  
137 = Tamron SP 60mm f/2 Macro Di II (G005)  
137 = Sigma 10-20mm f/3.5 EX DC HSM  
137 = Tamron SP 24-70mm f/2.8 Di VC USD  
137 = Sigma 18-35mm f/1.8 DC HSM  
137 = Sigma 12-24mm f/4.5-5.6 DG HSM II  
137 = Sigma 70-300mm f/4-5.6 DG OS  
138 = Canon EF 28-80mm f/2.8-4L  
139 = Canon EF 400mm f/2.8L USM  
140 = Canon EF 500mm f/4.5L USM  
141 = Canon EF 500mm f/4.5L USM  
142 = Canon EF 300mm f/2.8L IS USM  
143 = Canon EF 500mm f/4L IS USM or Sigma Lens  
143 = Sigma 17-70mm f/2.8-4 DC Macro OS HSM  
144 = Canon EF 35-135mm f/4-5.6 USM  
145 = Canon EF 100-300mm f/4.5-5.6 USM  
146 = Canon EF 70-210mm f/3.5-4.5 USM  
147 = Canon EF 35-135mm f/4-5.6 USM  
148 = Canon EF 28-80mm f/3.5-5.6 USM  
149 = Canon EF 100mm f/2 USM  
150 = Canon EF 14mm f/2.8L USM or Sigma Lens  
150 = Sigma 20mm EX f/1.8  
150 = Sigma 30mm f/1.4 DC HSM  
150 = Sigma 24mm f/1.8 DG Macro EX  
150 = Sigma 28mm f/1.8 DG Macro EX  
150 = Sigma 18-35mm f/1.8 DC HSM | A  
151 = Canon EF 200mm f/2.8L USM  
152 = Canon EF 300mm f/4L IS USM or Sigma Lens  
152 = Sigma 12-24mm f/4.5-5.6 EX DG ASPHERICAL HSM  
152 = Sigma 14mm f/2.8 EX Aspherical HSM  
152 = Sigma 10-20mm f/4-5.6  
152 = Sigma 100-300mm f/4  
152 = Sigma 300-800mm f/5.6 APO EX DG HSM  
153 = Canon EF 35-350mm f/3.5-5.6L USM or Sigma or Tamron Lens  
153 = Sigma 50-500mm f/4-6.3 APO HSM EX  
153 = Tamron AF 28-300mm f/3.5-6.3 XR LD Aspherical [IF] Macro  
153 = Tamron AF 18-200mm f/3.5-6.3 XR Di II LD Aspherical [IF] Macro (A14)  
153 = Tamron 18-250mm f/3.5-6.3 Di II LD Aspherical [IF] Macro  
154 = Canon EF 20mm f/2.8 USM or Zeiss Lens  
154 = Zeiss Milvus 21mm f/2.8  
154 = Zeiss Milvus 15mm f/2.8 ZE  
154 = Zeiss Milvus 18mm f/2.8 ZE  
155 = Canon EF 85mm f/1.8 USM or Sigma Lens  
155 = Sigma 14mm f/1.8 DG HSM | A  
156 = Canon EF 28-105mm f/3.5-4.5 USM or Tamron Lens  
156 = Tamron SP 70-300mm f/4-5.6 Di VC USD (A005)  
156 = Tamron SP AF 28-105mm f/2.8 LD Aspherical IF (176D)  
160 = Canon EF 20-35mm f/3.5-4.5 USM or Tamron or Tokina Lens  
160 = Tamron AF 19-35mm f/3.5-4.5  
160 = Tokina AT-X 124 AF Pro DX 12-24mm f/4  
160 = Tokina AT-X 107 AF DX 10-17mm f/3.5-4.5 Fisheye  
160 = Tokina AT-X 116 AF Pro DX 11-16mm f/2.8  
160 = Tokina AT-X 11-20 F2.8 PRO DX Aspherical 11-20mm f/2.8  
161 = Canon EF 28-70mm f/2.8L USM or Other Lens  
161 = Sigma 24-70mm f/2.8 EX  
161 = Sigma 28-70mm f/2.8 EX  
161 = Sigma 24-60mm f/2.8 EX DG  
161 = Tamron AF 17-50mm f/2.8 Di-II LD Aspherical  
161 = Tamron 90mm f/2.8  
161 = Tamron SP AF 17-35mm f/2.8-4 Di LD Aspherical IF (A05)

161 = Tamron SP AF 28-75mm f/2.8 XR Di LD Aspherical [IF] Macro  
161 = Tokina AT-X 24-70mm f/2.8 PRO FX (IF)  
162 = Canon EF 200mm f/2.8L USM  
163 = Canon EF 300mm f/4L  
164 = Canon EF 400mm f/5.6L  
165 = Canon EF 70-200mm f/2.8L USM  
166 = Canon EF 70-200mm f/2.8L USM + 1.4x  
167 = Canon EF 70-200mm f/2.8L USM + 2x  
168 = Canon EF 28mm f/1.8 USM or Sigma Lens  
168 = Sigma 50-100mm f/1.8 DC HSM | A  
169 = Canon EF 17-35mm f/2.8L USM or Sigma Lens  
169 = Sigma 18-200mm f/3.5-6.3 DC OS  
169 = Sigma 15-30mm f/3.5-4.5 EX DG Aspherical  
169 = Sigma 18-50mm f/2.8 Macro  
169 = Sigma 50mm f/1.4 EX DG HSM  
169 = Sigma 85mm f/1.4 EX DG HSM  
169 = Sigma 30mm f/1.4 EX DC HSM  
169 = Sigma 35mm f/1.4 DG HSM  
169 = Sigma 35mm f/1.5 FF High-Speed Prime | 017  
169 = Sigma 70mm f/2.8 Macro EX DG  
170 = Canon EF 200mm f/2.8L II USM or Sigma Lens  
170 = Sigma 300mm f/2.8 APO EX DG HSM  
170 = Sigma 800mm f/5.6 APO EX DG HSM  
171 = Canon EF 300mm f/4L USM  
172 = Canon EF 400mm f/5.6L USM or Sigma Lens  
172 = Sigma 150-600mm f/5-6.3 DG OS HSM | S  
172 = Sigma 500mm f/4.5 APO EX DG HSM  
173 = Canon EF 180mm Macro f/3.5L USM or Sigma Lens  
173 = Sigma 180mm EX HSM Macro f/3.5  
173 = Sigma APO Macro 150mm f/2.8 EX DG HSM  
173 = Sigma 10mm f/2.8 EX DC Fisheye  
173 = Sigma 15mm f/2.8 EX DG Diagonal Fisheye  
173 = Venus Laowa 100mm F2.8 2X Ultra Macro APO  
174 = Canon EF 135mm f/2L USM or Other Lens  
174 = Sigma 70-200mm f/2.8 EX DG APO OS HSM  
174 = Sigma 50-500mm f/4.5-6.3 APO DG OS HSM  
174 = Sigma 150-500mm f/5-6.3 APO DG OS HSM  
174 = Zeiss Milvus 100mm f/2 Makro  
174 = Sigma APO 50-150mm f/2.8 EX DC OS HSM  
174 = Sigma APO 120-300mm f/2.8 EX DG OS HSM  
174 = Sigma 120-300mm f/2.8 DG OS HSM S013  
174 = Sigma 120-400mm f/4.5-5.6 APO DG OS HSM  
174 = Sigma 200-500mm f/2.8 APO EX DG  
175 = Canon EF 400mm f/2.8L USM  
176 = Canon EF 24-85mm f/3.5-4.5 USM  
177 = Canon EF 300mm f/4L IS USM  
178 = Canon EF 28-135mm f/3.5-5.6 IS  
179 = Canon EF 24mm f/1.4L USM  
180 = Canon EF 35mm f/1.4L USM or Other Lens  
180 = Sigma 50mm f/1.4 DG HSM | A  
180 = Sigma 24mm f/1.4 DG HSM | A  
180 = Zeiss Milvus 50mm f/1.4  
180 = Zeiss Milvus 85mm f/1.4  
180 = Zeiss Otus 28mm f/1.4 ZE  
180 = Sigma 24mm f/1.5 FF High-Speed Prime | 017  
180 = Sigma 50mm f/1.5 FF High-Speed Prime | 017  
180 = Sigma 85mm f/1.5 FF High-Speed Prime | 017  
180 = Tokina Opera 50mm f/1.4 FF  
180 = Sigma 20mm f/1.4 DG HSM | A  
181 = Canon EF 100-400mm f/4.5-5.6L IS USM + 1.4x or Sigma Lens  
181 = Sigma 150-600mm f/5-6.3 DG OS HSM | S + 1.4x  
182 = Canon EF 100-400mm f/4.5-5.6L IS USM + 2x or Sigma Lens  
182 = Sigma 150-600mm f/5-6.3 DG OS HSM | S + 2x  
183 = Canon EF 100-400mm f/4.5-5.6L IS USM or Sigma Lens  
183 = Sigma 150mm f/2.8 EX DG OS HSM APO Macro  
183 = Sigma 105mm f/2.8 EX DG OS HSM Macro  
183 = Sigma 180mm f/2.8 EX DG OS HSM APO Macro  
183 = Sigma 150-600mm f/5-6.3 DG OS HSM | C  
183 = Sigma 150-600mm f/5-6.3 DG OS HSM | S  
183 = Sigma 100-400mm f/5-6.3 DG OS HSM  
183 = Sigma 180mm f/3.5 APO Macro EX DG IF HSM  
184 = Canon EF 400mm f/2.8L USM + 2x  
185 = Canon EF 600mm f/4L IS USM  
186 = Canon EF 70-200mm f/4L USM  
187 = Canon EF 70-200mm f/4L USM + 1.4x

188 = Canon EF 70-200mm f/4L USM + 2x  
189 = Canon EF 70-200mm f/4L USM + 2.8x  
190 = Canon EF 100mm f/2.8 Macro USM  
191 = Canon EF 400mm f/4 DO IS or Sigma Lens  
191 = Sigma 500mm f/4 DG OS HSM  
193 = Canon EF 35-80mm f/4-5.6 USM  
194 = Canon EF 80-200mm f/4.5-5.6 USM  
195 = Canon EF 35-105mm f/4.5-5.6 USM  
196 = Canon EF 75-300mm f/4-5.6 USM  
197 = Canon EF 75-300mm f/4-5.6 IS USM or Sigma Lens  
197 = Sigma 18-300mm f/3.5-6.3 DC Macro OS HSM  
198 = Canon EF 50mm f/1.4 USM or Other Lens  
198 = Zeiss Otus 55mm f/1.4 ZE  
198 = Zeiss Otus 85mm f/1.4 ZE  
198 = Zeiss Milvus 25mm f/1.4  
198 = Zeiss Otus 100mm f/1.4  
198 = Zeiss Milvus 35mm f/1.4 ZE  
198 = Yongnuo YN 35mm f/2  
199 = Canon EF 28-80mm f/3.5-5.6 USM  
200 = Canon EF 75-300mm f/4-5.6 USM  
201 = Canon EF 28-80mm f/3.5-5.6 USM  
202 = Canon EF 28-80mm f/3.5-5.6 USM IV  
208 = Canon EF 22-55mm f/4-5.6 USM  
209 = Canon EF 55-200mm f/4.5-5.6  
210 = Canon EF 28-90mm f/4-5.6 USM  
211 = Canon EF 28-200mm f/3.5-5.6 USM  
212 = Canon EF 28-105mm f/4-5.6 USM  
213 = Canon EF 90-300mm f/4.5-5.6 USM or Tamron Lens  
213 = Tamron SP 150-600mm f/5-6.3 Di VC USD (A011)  
213 = Tamron 16-300mm f/3.5-6.3 Di II VC PZD Macro (B016)  
213 = Tamron SP 35mm f/1.8 Di VC USD (F012)  
213 = Tamron SP 45mm f/1.8 Di VC USD (F013)  
214 = Canon EF-S 18-55mm f/3.5-5.6 USM  
215 = Canon EF 55-200mm f/4.5-5.6 II USM  
217 = Tamron AF 18-270mm f/3.5-6.3 Di II VC PZD  
220 = Yongnuo YN 50mm f/1.8  
224 = Canon EF 70-200mm f/2.8L IS USM  
225 = Canon EF 70-200mm f/2.8L IS USM + 1.4x  
226 = Canon EF 70-200mm f/2.8L IS USM + 2x  
227 = Canon EF 70-200mm f/2.8L IS USM + 2.8x  
228 = Canon EF 28-105mm f/3.5-4.5 USM  
229 = Canon EF 16-35mm f/2.8L USM  
230 = Canon EF 24-70mm f/2.8L USM  
231 = Canon EF 17-40mm f/4L USM or Sigma Lens  
231 = Sigma 12-24mm f/4 DG HSM A016  
232 = Canon EF 70-300mm f/4.5-5.6 DO IS USM  
233 = Canon EF 28-300mm f/3.5-5.6L IS USM  
234 = Canon EF-S 17-85mm f/4-5.6 IS USM or Tokina Lens  
234 = Tokina AT-X 12-28 PRO DX 12-28mm f/4  
235 = Canon EF-S 10-22mm f/3.5-4.5 USM  
236 = Canon EF-S 60mm f/2.8 Macro USM  
237 = Canon EF 24-105mm f/4L IS USM  
238 = Canon EF 70-300mm f/4-5.6 IS USM  
239 = Canon EF 85mm f/1.2L II USM or Rokinon Lens  
239 = Rokinon SP 85mm f/1.2  
240 = Canon EF-S 17-55mm f/2.8 IS USM or Sigma Lens  
240 = Sigma 17-50mm f/2.8 EX DC OS HSM  
241 = Canon EF 50mm f/1.2L USM  
242 = Canon EF 70-200mm f/4L IS USM  
243 = Canon EF 70-200mm f/4L IS USM + 1.4x  
244 = Canon EF 70-200mm f/4L IS USM + 2x  
245 = Canon EF 70-200mm f/4L IS USM + 2.8x  
246 = Canon EF 16-35mm f/2.8L II USM  
247 = Canon EF 14mm f/2.8L II USM  
248 = Canon EF 200mm f/2L IS USM or Sigma Lens  
248 = Sigma 24-35mm f/2 DG HSM | A  
248 = Sigma 135mm f/2 FF High-Speed Prime | 017  
248 = Sigma 24-35mm f/2.2 FF Zoom | 017  
248 = Sigma 135mm f/1.8 DG HSM A017  
249 = Canon EF 800mm f/5.6L IS USM  
250 = Canon EF 24mm f/1.4L II USM or Sigma Lens  
250 = Sigma 20mm f/1.4 DG HSM | A  
250 = Sigma 20mm f/1.5 FF High-Speed Prime | 017  
250 = Tokina Opera 16-28mm f/2.8 FF  
250 = Sigma 85mm f/1.4 DG HSM A016

251 = Canon EF 70-200mm f/2.8L IS II USM  
251 = Canon EF 70-200mm f/2.8L IS III USM  
252 = Canon EF 70-200mm f/2.8L IS II USM + 1.4x  
252 = Canon EF 70-200mm f/2.8L IS III USM + 1.4x  
253 = Canon EF 70-200mm f/2.8L IS II USM + 2x  
253 = Canon EF 70-200mm f/2.8L IS III USM + 2x  
254 = Canon EF 100mm f/2.8L Macro IS USM or Tamron Lens  
254 = Tamron SP 90mm f/2.8 Di VC USD 1:1 Macro (F017)  
255 = Sigma 24-105mm f/4 DG OS HSM | A or Other Lens  
255 = Sigma 180mm f/2.8 EX DG OS HSM APO Macro  
255 = Tamron SP 70-200mm f/2.8 Di VC USD  
255 = Yongnuo YN 50mm f/1.8  
368 = Sigma 14-24mm f/2.8 DG HSM | A or other Sigma Lens  
368 = Sigma 20mm f/1.4 DG HSM | A  
368 = Sigma 50mm f/1.4 DG HSM | A  
368 = Sigma 40mm f/1.4 DG HSM | A  
368 = Sigma 60-600mm f/4.5-6.3 DG OS HSM | S  
368 = Sigma 28mm f/1.4 DG HSM | A  
368 = Sigma 150-600mm f/5-6.3 DG OS HSM | S  
368 = Sigma 85mm f/1.4 DG HSM | A  
368 = Sigma 105mm f/1.4 DG HSM  
368 = Sigma 14-24mm f/2.8 DG HSM  
368 = Sigma 35mm f/1.4 DG HSM | A  
368 = Sigma 70mm f/2.8 DG Macro  
368 = Sigma 18-35mm f/1.8 DC HSM | A  
368 = Sigma 24-105mm f/4 DG OS HSM | A  
368 = Sigma 18-300mm f/3.5-6.3 DC Macro OS HSM | C  
488 = Canon EF-S 15-85mm f/3.5-5.6 IS USM  
489 = Canon EF 70-300mm f/4-5.6L IS USM  
490 = Canon EF 8-15mm f/4L Fisheye USM  
491 = Canon EF 300mm f/2.8L IS II USM or Tamron Lens  
491 = Tamron SP 70-200mm f/2.8 Di VC USD G2 (A025)  
491 = Tamron 18-400mm f/3.5-6.3 Di II VC HLD (B028)  
491 = Tamron 100-400mm f/4.5-6.3 Di VC USD (A035)  
491 = Tamron 70-210mm f/4 Di VC USD (A034)  
491 = Tamron 70-210mm f/4 Di VC USD (A034) + 1.4x  
491 = Tamron SP 24-70mm f/2.8 Di VC USD G2 (A032)  
492 = Canon EF 400mm f/2.8L IS II USM  
493 = Canon EF 500mm f/4L IS II USM or EF 24-105mm f/4L IS USM  
493 = Canon EF 24-105mm f/4L IS USM  
494 = Canon EF 600mm f/4L IS II USM  
495 = Canon EF 24-70mm f/2.8L II USM or Sigma Lens  
495 = Sigma 24-70mm f/2.8 DG OS HSM | A  
496 = Canon EF 200-400mm f/4L IS USM  
499 = Canon EF 200-400mm f/4L IS USM + 1.4x  
502 = Canon EF 28mm f/2.8 IS USM or Tamron Lens  
502 = Tamron 35mm f/1.8 Di VC USD (F012)  
503 = Canon EF 24mm f/2.8 IS USM  
504 = Canon EF 24-70mm f/4L IS USM  
505 = Canon EF 35mm f/2 IS USM  
506 = Canon EF 400mm f/4 DO IS II USM  
507 = Canon EF 16-35mm f/4L IS USM  
508 = Canon EF 11-24mm f/4L USM or Tamron Lens  
508 = Tamron 10-24mm f/3.5-4.5 Di II VC HLD (B023)  
624 = Sigma 70-200mm f/2.8 DG OS HSM | S or other Sigma Lens  
624 = Sigma 150-600mm f/5-6.3 | C  
747 = Canon EF 100-400mm f/4.5-5.6L IS II USM or Tamron Lens  
747 = Tamron SP 150-600mm f/5-6.3 Di VC USD G2  
748 = Canon EF 100-400mm f/4.5-5.6L IS II USM + 1.4x or Tamron Lens  
748 = Tamron 100-400mm f/4.5-6.3 Di VC USD A035E + 1.4x  
748 = Tamron 70-210mm f/4 Di VC USD (A034) + 2x  
749 = Canon EF 100-400mm f/4.5-5.6L IS II USM + 2x or Tamron Lens  
749 = Tamron 100-400mm f/4.5-6.3 Di VC USD A035E + 2x  
750 = Canon EF 35mm f/1.4L II USM or Tamron Lens  
750 = Tamron SP 85mm f/1.8 Di VC USD (F016)  
750 = Tamron SP 45mm f/1.8 Di VC USD (F013)  
751 = Canon EF 16-35mm f/2.8L III USM  
752 = Canon EF 24-105mm f/4L IS II USM  
753 = Canon EF 85mm f/1.4L IS USM  
754 = Canon EF 70-200mm f/4L IS II USM  
757 = Canon EF 400mm f/2.8L IS III USM  
758 = Canon EF 600mm f/4L IS III USM  
1136 = Sigma 24-70mm f/2.8 DG OS HSM | A  
4142 = Canon EF-S 18-135mm f/3.5-5.6 IS STM  
4143 = Canon EF-M 18-55mm f/3.5-5.6 IS STM or Tamron Lens

4143 = Tamron 18-200mm f/3.5-6.3 Di III VC  
4144 = Canon EF 40mm f/2.8 STM  
4145 = Canon EF-M 22mm f/2 STM  
4146 = Canon EF-S 18-55mm f/3.5-5.6 IS STM  
4147 = Canon EF-M 11-22mm f/4-5.6 IS STM  
4148 = Canon EF-S 55-250mm f/4-5.6 IS STM  
4149 = Canon EF-M 55-200mm f/4.5-6.3 IS STM  
4150 = Canon EF-S 10-18mm f/4.5-5.6 IS STM  
4152 = Canon EF 24-105mm f/3.5-5.6 IS STM  
4153 = Canon EF-M 15-45mm f/3.5-6.3 IS STM  
4154 = Canon EF-S 24mm f/2.8 STM  
4155 = Canon EF-M 28mm f/3.5 Macro IS STM  
4156 = Canon EF 50mm f/1.8 STM  
4157 = Canon EF-M 18-150mm f/3.5-6.3 IS STM  
4158 = Canon EF-S 18-55mm f/4-5.6 IS STM  
4159 = Canon EF-M 32mm f/1.4 STM  
4160 = Canon EF-S 35mm f/2.8 Macro IS STM  
4208 = Sigma 56mm f/1.4 DC DN | C or other Sigma Lens  
4208 = Sigma 30mm F1.4 DC DN | C  
6512 = Sigma 12mm F1.4 DC | C  
36910 = Canon EF 70-300mm f/4-5.6 IS II USM  
36912 = Canon EF-S 18-135mm f/3.5-5.6 IS USM  
61182 = Canon RF 50mm F1.2L USM or other Canon RF Lens  
61182 = Canon RF 24-105mm F4L IS USM  
61182 = Canon RF 28-70mm F2L USM  
61182 = Canon RF 35mm F1.8 MACRO IS STM  
61182 = Canon RF 85mm F1.2L USM  
61182 = Canon RF 85mm F1.2L USM DS  
61182 = Canon RF 24-70mm F2.8L IS USM  
61182 = Canon RF 15-35mm F2.8L IS USM  
61182 = Canon RF 24-240mm F4-6.3 IS USM  
61182 = Canon RF 70-200mm F2.8L IS USM  
61182 = Canon RF 85mm F2 MACRO IS STM  
61182 = Canon RF 600mm F11 IS STM  
61182 = Canon RF 600mm F11 IS STM + RF1.4x  
61182 = Canon RF 600mm F11 IS STM + RF2x  
61182 = Canon RF 800mm F11 IS STM  
61182 = Canon RF 800mm F11 IS STM + RF1.4x  
61182 = Canon RF 800mm F11 IS STM + RF2x  
61182 = Canon RF 24-105mm F4-7.1 IS STM  
61182 = Canon RF 100-500mm F4.5-7.1L IS USM  
61182 = Canon RF 100-500mm F4.5-7.1L IS USM + RF1.4x  
61182 = Canon RF 100-500mm F4.5-7.1L IS USM + RF2x  
61182 = Canon RF 70-200mm F4L IS USM  
61182 = Canon RF 100mm F2.8L MACRO IS USM  
61182 = Canon RF 50mm F1.8 STM  
61182 = Canon RF 14-35mm F4L IS USM  
61182 = Canon RF-S 18-45mm F4.5-6.3 IS STM  
61182 = Canon RF 100-400mm F5.6-8 IS USM  
61182 = Canon RF 100-400mm F5.6-8 IS USM + RF1.4x  
61182 = Canon RF 100-400mm F5.6-8 IS USM + RF2x  
61182 = Canon RF-S 18-150mm F3.5-6.3 IS STM  
61182 = Canon RF 24mm F1.8 MACRO IS STM  
61182 = Canon RF 16mm F2.8 STM  
61182 = Canon RF 400mm F2.8L IS USM  
61182 = Canon RF 400mm F2.8L IS USM + RF1.4x  
61182 = Canon RF 400mm F2.8L IS USM + RF2x  
61182 = Canon RF 600mm F4L IS USM  
61182 = Canon RF 600mm F4L IS USM + RF1.4x  
61182 = Canon RF 600mm F4L IS USM + RF2x  
61182 = Canon RF 800mm F5.6L IS USM  
61182 = Canon RF 800mm F5.6L IS USM + RF1.4x  
61182 = Canon RF 800mm F5.6L IS USM + RF2x  
61182 = Canon RF 1200mm F8L IS USM  
61182 = Canon RF 1200mm F8L IS USM + RF1.4x  
61182 = Canon RF 1200mm F8L IS USM + RF2x  
61182 = Canon RF 5.2mm F2.8L Dual Fisheye 3D VR  
61182 = Canon RF 15-30mm F4.5-6.3 IS STM  
61182 = Canon RF 135mm F1.8 L IS USM  
61182 = Canon RF 24-50mm F4.5-6.3 IS STM  
61182 = Canon RF-S 55-210mm F5-7.1 IS STM  
61182 = Canon RF 100-300mm F2.8L IS USM  
61182 = Canon RF 100-300mm F2.8L IS USM + RF1.4x  
61182 = Canon RF 100-300mm F2.8L IS USM + RF2x  
61182 = Canon RF 10-20mm F4 L IS STM

61182 = Canon RF 28mm F2.8 STM  
 61182 = Canon RF 24-105mm F2.8 L IS USM Z  
 61182 = Canon RF-S 10-18mm F4.5-6.3 IS STM  
 61182 = Canon RF 35mm F1.4 L VCM  
 61182 = Canon RF 70-200mm F2.8 L IS USM Z  
 61182 = Canon RF 70-200mm F2.8 L IS USM Z + RF1.4x  
 61182 = Canon RF 70-200mm F2.8 L IS USM Z + RF2x  
 61182 = Canon RF 16-28mm F2.8 IS STM  
 61182 = Canon RF-S 14-30mm F4-6.3 IS STM PZ  
 61182 = Canon RF 50mm F1.4 L VCM  
 61182 = Canon RF 24mm F1.4 L VCM  
 61182 = Canon RF 20mm F1.4 L VCM  
 61182 = Canon RF 85mm F1.4 L VCM  
 61491 = Canon CN-E 14mm T3.1 L F  
 61492 = Canon CN-E 24mm T1.5 L F  
 61494 = Canon CN-E 85mm T1.3 L F  
 61495 = Canon CN-E 135mm T2.2 L F  
 61496 = Canon CN-E 35mm T1.5 L F  
 65535 = n/a

## Canon FocalLength Tags

Index2	Tag Name	Writable	Values / Notes
0	FocalType	int16u	1 = Fixed 2 = Zoom
1	FocalLength	int16u	
2	FocalPlaneXSize	int16u	(these focal plane sizes are only valid for some models, and are affected by digital zoom if applied)
	FocalPlaneXUnknown?	int16u	
3	FocalPlaneYSize	int16u	
	FocalPlaneYUnknown?	int16u	

## Canon ShotInfo Tags

Index2	Tag Name	Writable	Values / Notes
1	AutoISO	int16s	(actual ISO used = BaselISO * AutoISO / 100)
2	BaselISO	int16s	
3	MeasuredEV	int16s	(this is the Canon name for what could better be called MeasuredLV, and should be close to the calculated LightValue for a proper exposure with most models)
4	TargetAperture	int16s	
5	TargetExposureTime	int16s	
6	ExposureCompensation	int16s	
7	WhiteBalance	int16s	--> <a href="#">Canon WhiteBalance Values</a>
8	SlowShutter	int16s	-1 = n/a 0 = Off 1 = Night Scene 2 = On 3 = None
9	SequenceNumber	int16s	(valid only for some models)
10	OpticalZoomCode	int16s	(for many PowerShot models, a this is 0-6 for wide-tele zoom)
12	CameraTemperature	int16s	(newer EOS models only)
13	FlashGuideNumber	int16s	
14	AFPointsInFocus	int16s	(used by D30, D60 and some PowerShot/Ixus models) 0x3000 = None (MF)      0x3004 = Left 0x3001 = Right      0x3005 = Left+Right 0x3002 = Center      0x3006 = Left+Center 0x3003 = Center+Right      0x3007 = All
15	FlashExposureComp	int16s	
16	AutoExposureBracketing	int16s	-1 = On 0 = Off 1 = On (shot 1) 2 = On (shot 2) 3 = On (shot 3)
17	AEBBracketValue	int16s	

18	ControlMode	int16s	0 = n/a 1 = Camera Local Control 3 = Computer Remote Control
19	FocusDistanceUpper	int16u	(FocusDistance tags are only extracted if FocusDistanceUpper is non-zero)
20	FocusDistanceLower	int16u	
21	FNumber	int16s	
22	ExposureTime	int16s	
23	MeasuredEV2	int16s	
24	BulbDuration	int16s	
26	CameraType	int16s	0 = n/a 248 = EOS High-end 250 = Compact 252 = EOS Mid-range 255 = DV Camera
27	AutoRotate	int16s	-1 = n/a 0 = None 1 = Rotate 90 CW 2 = Rotate 180 3 = Rotate 270 CW
28	NDFilter	int16s	-1 = n/a 0 = Off 1 = On
29	SelfTimer2	int16s	
33	FlashOutput	int16s	(used only for PowerShot models, this has a maximum value of 500 for models like the A570IS)

## Canon WhiteBalance Values

Value	WhiteBalance	Value	WhiteBalance	Value	WhiteBalance
0	= Auto	8	= Shade	17	= Underwater
1	= Daylight	9	= Manual Temperature (Kelvin)	18	= Custom 3
2	= Cloudy	10	= PC Set1	19	= Custom 4
3	= Tungsten	11	= PC Set2	20	= PC Set4
4	= Fluorescent	12	= PC Set3	21	= PC Set5
5	= Flash	14	= Daylight Fluorescent	23	= Auto (ambience priority)
6	= Custom	15	= Custom 1		
7	= Black & White	16	= Custom 2		

## Canon Panorama Tags

Index2	Tag Name	Writable	Values / Notes
2	PanoramaFrameNumber	int16s	
5	PanoramaDirection	int16s	0 = Left to Right 1 = Right to Left 2 = Bottom to Top 3 = Top to Bottom 4 = 2x2 Matrix (Clockwise)

## Canon UnknownD30 Tags

Index2	Tag Name	Writable	Values / Notes
[no tags known]			

## Canon CameraInfo1D Tags

Information in the "CameraInfo" records is tricky to decode because the encodings are very different than in other Canon records (even sometimes switching endianness between values within a single camera), plus there is considerable variation in format from model to model. The first table below lists CameraInfo tags for the 1D and 1DS.

Index1	Tag Name	Writable	Values / Notes
4	ExposureTime	int8u	
10	FocalLength	int16u	
13	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>

14	MinFocalLength	int16u	
16	MaxFocalLength	int16u	
65	SharpnessFrequency	int8u	(1D only) 0 = n/a      3 = Standard 1 = Lowest    4 = High 2 = Low       5 = Highest
66	Sharpness	int8s	(1D only)
68	WhiteBalance	int8u	--> <a href="#">Canon WhiteBalance Values</a> (1D only)
71	SharpnessFrequency	int8u	(1DS only) 0 = n/a      3 = Standard 1 = Lowest    4 = High 2 = Low       5 = Highest
72	ColorTemperature Sharpness	int16u int8s	(1D only) (1DS only)
74	WhiteBalance	int8u	--> <a href="#">Canon WhiteBalance Values</a> (1DS only)
75	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a> (1D only, called 'Color Matrix' in owner's manual)
78	ColorTemperature	int16u	(1DS only)
81	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a> (1DS only)

## Canon CameraInfo1DmkII Tags

CameraInfo tags for the 1DmkII and 1DSmkII.

Index1	Tag Name	Writable	Values / Notes	
4	ExposureTime	int8u		
9	FocalLength	int16uRev		
12	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>	
17	MinFocalLength	int16uRev		
19	MaxFocalLength	int16uRev		
45	FocalType	int8u	0 = Fixed 2 = Zoom	
54	WhiteBalance	int8u	--> <a href="#">Canon WhiteBalance Values</a>	
55	ColorTemperature	int16uRev		
57	CanonImageSize	int16u	-1 = n/a 0 = Large 1 = Medium 2 = Small 5 = Medium 1 6 = Medium 2 7 = Medium 3 8 = Postcard 9 = Widescreen 10 = Medium Widescreen	14 = Small 1 15 = Small 2 16 = Small 3 128 = 640x480 Movie 129 = Medium Movie 130 = Small Movie 137 = 1280x720 Movie 142 = 1920x1080 Movie 143 = 4096x2160 Movie
102	JPEGQuality	int8u	(a number from 1 to 10)	
108	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>	
110	Saturation	int8s	0 = Normal	
111	ColorTone	int8s	0 = Normal	
114	Sharpness	int8s		
115	Contrast	int8s	0 = Normal	
117	ISO	string[5]		

## Canon CameraInfo1DmkIIN Tags

CameraInfo tags for the 1DmkIIN.

Index1	Tag Name	Writable	Values / Notes
4	ExposureTime	int8u	

9	FocalLength	int16uRev	
12	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
17	MinFocalLength	int16uRev	
19	MaxFocalLength	int16uRev	
54	WhiteBalance	int8u	--> <a href="#">Canon WhiteBalance Values</a>
55	ColorTemperature	int16uRev	
115	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
116	Sharpness	int8s	
117	Contrast	int8s	0 = Normal
118	Saturation	int8s	0 = Normal
119	ColorTone	int8s	0 = Normal
121	ISO	string[5]	

## Canon CameraInfo1DmkIII Tags

CameraInfo tags for the 1DmkIII and 1DSmkIII.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
24	CameraTemperature	int8u	
27	MacroMagnification	int8u	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo)
29	FocalLength	int16uRev	
48	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
67	FocusDistanceUpper	int16uRev	
69	FocusDistanceLower	int16uRev	
94	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
98	ColorTemperature	int16u	
134	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
273	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
275	MinFocalLength	int16uRev	
277	MaxFocalLength	int16uRev	
310	FirmwareVersion	string[6]	
370	FileIndex	int32u	
374	ShutterCount	int32u	(may be valid only for some 1DmkIII copies, even running the same firmware)
382	DirectoryIndex	int32u	
682	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>
1114	TimeStamp1	int32u	(only valid for some versions of the 1DmkIII firmware)
1118	TimeStamp	int32u	(valid for the 1DSmkIII and some versions of the 1DmkIII firmware)

## Canon PSInfo Tags

Custom picture style information for various models.

Index1	Tag Name	Writable	Values / Notes
0	ContrastStandard	int32s	0xdeadbeef = n/a
4	SharpnessStandard	int32s	0xdeadbeef = n/a
8	SaturationStandard	int32s	0xdeadbeef = n/a
12	ColorToneStandard	int32s	0xdeadbeef = n/a
16	FilterEffectStandard?	int32s	0xdeadbeef = n/a
20	ToningEffectStandard?	int32s	0xdeadbeef = n/a
24	ContrastPortrait	int32s	0xdeadbeef = n/a

28	SharpnessPortrait	int32s	0xdeadbeef = n/a	
32	SaturationPortrait	int32s	0xdeadbeef = n/a	
36	ColorTonePortrait	int32s	0xdeadbeef = n/a	
40	FilterEffectPortrait?	int32s	0xdeadbeef = n/a	
44	ToningEffectPortrait?	int32s	0xdeadbeef = n/a	
48	ContrastLandscape	int32s	0xdeadbeef = n/a	
52	SharpnessLandscape	int32s	0xdeadbeef = n/a	
56	SaturationLandscape	int32s	0xdeadbeef = n/a	
60	ColorToneLandscape	int32s	0xdeadbeef = n/a	
64	FilterEffectLandscape?	int32s	0xdeadbeef = n/a	
68	ToningEffectLandscape?	int32s	0xdeadbeef = n/a	
72	ContrastNeutral	int32s	0xdeadbeef = n/a	
76	SharpnessNeutral	int32s	0xdeadbeef = n/a	
80	SaturationNeutral	int32s	0xdeadbeef = n/a	
84	ColorToneNeutral	int32s	0xdeadbeef = n/a	
88	FilterEffectNeutral?	int32s	0xdeadbeef = n/a	
92	ToningEffectNeutral?	int32s	0xdeadbeef = n/a	
96	ContrastFaithful	int32s	0xdeadbeef = n/a	
100	SharpnessFaithful	int32s	0xdeadbeef = n/a	
104	SaturationFaithful	int32s	0xdeadbeef = n/a	
108	ColorToneFaithful	int32s	0xdeadbeef = n/a	
112	FilterEffectFaithful?	int32s	0xdeadbeef = n/a	
116	ToningEffectFaithful?	int32s	0xdeadbeef = n/a	
120	ContrastMonochrome	int32s	0xdeadbeef = n/a	
124	SharpnessMonochrome	int32s	0xdeadbeef = n/a	
128	SaturationMonochrome?	int32s	0xdeadbeef = n/a	
132	ColorToneMonochrome?	int32s	0xdeadbeef = n/a	
136	FilterEffectMonochrome	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
140	ToningEffectMonochrome	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
144	ContrastUserDef1	int32s	0xdeadbeef = n/a	
148	SharpnessUserDef1	int32s	0xdeadbeef = n/a	
152	SaturationUserDef1	int32s	0xdeadbeef = n/a	
156	ColorToneUserDef1	int32s	0xdeadbeef = n/a	
160	FilterEffectUserDef1	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
164	ToningEffectUserDef1	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
168	ContrastUserDef2	int32s	0xdeadbeef = n/a	
172	SharpnessUserDef2	int32s	0xdeadbeef = n/a	
176	SaturationUserDef2	int32s	0xdeadbeef = n/a	
180	ColorToneUserDef2	int32s	0xdeadbeef = n/a	
184	FilterEffectUserDef2	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
188	ToningEffectUserDef2	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
192	ContrastUserDef3	int32s	0xdeadbeef = n/a	
196	SharpnessUserDef3	int32s	0xdeadbeef = n/a	
200	SaturationUserDef3	int32s	0xdeadbeef = n/a	
204	ColorToneUserDef3	int32s	0xdeadbeef = n/a	

208	FilterEffectUserDef3	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
212	ToningEffectUserDef3	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
216	UserDef1PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>	
218	UserDef2PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>	
220	UserDef3PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>	

## Canon UserDefStyle Values

Base style for user-defined picture styles. PC values represent external picture styles which may be downloaded from Canon and installed in the camera.

Value	UserDefStyle	Value	UserDefStyle	Value	UserDefStyle
0x41	= PC 1	0x82	= Portrait	0x86	= Monochrome
0x42	= PC 2	0x83	= Landscape	0x87	= Auto
0x43	= PC 3	0x84	= Neutral		
0x81	= Standard	0x85	= Faithful		

## Canon CameraInfo1DmkIV Tags

CameraInfo tags for the EOS 1D Mark IV. Indices shown are for firmware versions 1.0.x, but they may be different for other firmware versions.

Index1	Tag Name	Writable	Values / Notes	
3	FNumber	int8u		
4	ExposureTime	int8u		
6	ISO	int8u		
7	HighlightTonePriority	int8u	0 = Off 1 = On	
8	MeasuredEV2	int8u		
9	MeasuredEV3	int8u		
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off	
25	CameraTemperature	int8u		
30	FocalLength	int16uRev		
53	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW	
84	FocusDistanceUpper	int16uRev		
86	FocusDistanceLower	int16uRev		
120	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>	
124	ColorTemperature	int16u		
335	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>	
337	MinFocalLength	int16uRev		
339	MaxFocalLength	int16uRev		
493	FirmwareVersion	no		
556	FileIndex	int32u		
568	DirectoryIndex	int32u		
872	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>	

## Canon CameraInfo1DX Tags

CameraInfo tags for the EOS 1D X. Indices shown are for firmware version 1.0.2, but they may be different for other firmware versions.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
125	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
140	FocusDistanceUpper	int16uRev	
142	FocusDistanceLower	int16uRev	
188	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
192	ColorTemperature	int16u	
244	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
423	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
425	MinFocalLength	int16uRev	
427	MaxFocalLength	int16uRev	
640	FirmwareVersion	no	
720	FileIndex	int32u	
732	DirectoryIndex	int32u	
1012	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a>

## Canon PSInfo2 Tags

Custom picture style information for the EOS 5DmkIII, 60D, 600D and 1100D.

Index1	Tag Name	Writable	Values / Notes
0	ContrastStandard	int32s	0xdeadbeef = n/a
4	SharpnessStandard	int32s	0xdeadbeef = n/a
8	SaturationStandard	int32s	0xdeadbeef = n/a
12	ColorToneStandard	int32s	0xdeadbeef = n/a
16	FilterEffectStandard?	int32s	0xdeadbeef = n/a
20	ToningEffectStandard?	int32s	0xdeadbeef = n/a
24	ContrastPortrait	int32s	0xdeadbeef = n/a
28	SharpnessPortrait	int32s	0xdeadbeef = n/a
32	SaturationPortrait	int32s	0xdeadbeef = n/a
36	ColorTonePortrait	int32s	0xdeadbeef = n/a
40	FilterEffectPortrait?	int32s	0xdeadbeef = n/a
44	ToningEffectPortrait?	int32s	0xdeadbeef = n/a
48	ContrastLandscape	int32s	0xdeadbeef = n/a
52	SharpnessLandscape	int32s	0xdeadbeef = n/a
56	SaturationLandscape	int32s	0xdeadbeef = n/a
60	ColorToneLandscape	int32s	0xdeadbeef = n/a
64	FilterEffectLandscape?	int32s	0xdeadbeef = n/a
68	ToningEffectLandscape?	int32s	0xdeadbeef = n/a
72	ContrastNeutral	int32s	0xdeadbeef = n/a
76	SharpnessNeutral	int32s	0xdeadbeef = n/a
80	SaturationNeutral	int32s	0xdeadbeef = n/a
84	ColorToneNeutral	int32s	0xdeadbeef = n/a
88	FilterEffectNeutral?	int32s	0xdeadbeef = n/a
92	ToningEffectNeutral?	int32s	0xdeadbeef = n/a
96	ContrastFaithful	int32s	0xdeadbeef = n/a
100	SharpnessFaithful	int32s	0xdeadbeef = n/a
104	SaturationFaithful	int32s	0xdeadbeef = n/a

108	ColorToneFaithful	int32s	0xdeadbeef = n/a	
112	FilterEffectFaithful?	int32s	0xdeadbeef = n/a	
116	ToningEffectFaithful?	int32s	0xdeadbeef = n/a	
120	ContrastMonochrome	int32s	0xdeadbeef = n/a	
124	SharpnessMonochrome	int32s	0xdeadbeef = n/a	
128	SaturationMonochrome?	int32s	0xdeadbeef = n/a	
132	ColorToneMonochrome?	int32s	0xdeadbeef = n/a	
136	FilterEffectMonochrome	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
140	ToningEffectMonochrome	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
144	ContrastAuto	int32s	0xdeadbeef = n/a	
148	SharpnessAuto	int32s	0xdeadbeef = n/a	
152	SaturationAuto	int32s	0xdeadbeef = n/a	
156	ColorToneAuto	int32s	0xdeadbeef = n/a	
160	FilterEffectAuto	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
164	ToningEffectAuto	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
168	ContrastUserDef1	int32s	0xdeadbeef = n/a	
172	SharpnessUserDef1	int32s	0xdeadbeef = n/a	
176	SaturationUserDef1	int32s	0xdeadbeef = n/a	
180	ColorToneUserDef1	int32s	0xdeadbeef = n/a	
184	FilterEffectUserDef1	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
188	ToningEffectUserDef1	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
192	ContrastUserDef2	int32s	0xdeadbeef = n/a	
196	SharpnessUserDef2	int32s	0xdeadbeef = n/a	
200	SaturationUserDef2	int32s	0xdeadbeef = n/a	
204	ColorToneUserDef2	int32s	0xdeadbeef = n/a	
208	FilterEffectUserDef2	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
212	ToningEffectUserDef2	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
216	ContrastUserDef3	int32s	0xdeadbeef = n/a	
220	SharpnessUserDef3	int32s	0xdeadbeef = n/a	
224	SaturationUserDef3	int32s	0xdeadbeef = n/a	
228	ColorToneUserDef3	int32s	0xdeadbeef = n/a	
232	FilterEffectUserDef3	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Yellow	0x2 = Orange 0x3 = Red 0x4 = Green
236	ToningEffectUserDef3	int32s	0xdeadbeef = n/a 0x0 = None 0x1 = Sepia	0x2 = Blue 0x3 = Purple 0x4 = Green
240	UserDef1PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>	
242	UserDef2PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>	
244	UserDef3PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>	

## Canon CameraInfo5D Tags

## Cameralinfo tags for the EOS 5D.

Index	Tag Name	Writable	Values / Notes	
3	FNumber	int8u		
4	ExposureTime	int8u		
6	ISO	int8u		
12	LensType	int16uRev	<a href="#">--&gt; Canon LensType Values</a>	
23	CameraTemperature	int8u		
27	MacroMagnification	int8s	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo)	
39	CameraOrientation	int8s	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW	
40	FocalLength	int16uRev		
56	AFPointsInFocus5D	int16uRev	0x0 = (none) Bit 0 = Center Bit 1 = Top Bit 2 = Bottom Bit 3 = Upper-left Bit 4 = Upper-right Bit 5 = Lower-left Bit 6 = Lower-right	Bit 7 = Left Bit 8 = Right Bit 9 = AI Servo1 Bit 10 = AI Servo2 Bit 11 = AI Servo3 Bit 12 = AI Servo4 Bit 13 = AI Servo5 Bit 14 = AI Servo6
84	WhiteBalance	int16u	<a href="#">--&gt; Canon WhiteBalance Values</a>	
88	ColorTemperature	int16u		
108	PictureStyle	int8u	<a href="#">--&gt; Canon PictureStyle Values</a>	
147	MinFocalLength	int16uRev		
149	MaxFocalLength	int16uRev		
151	LensType	int16uRev	<a href="#">--&gt; Canon LensType Values</a>	
164	FirmwareRevision	string[8]		
172	ShortOwnerName	string[16]		
204	DirectoryIndex	int32u		
208	FileIndex	int16u		
232	ContrastStandard	int8s		
233	ContrastPortrait	int8s		
234	ContrastLandscape	int8s		
235	ContrastNeutral	int8s		
236	ContrastFaithful	int8s		
237	ContrastMonochrome	int8s		
238	ContrastUserDef1	int8s		
239	ContrastUserDef2	int8s		
240	ContrastUserDef3	int8s		
241	SharpnessStandard	int8s		
242	SharpnessPortrait	int8s		
243	SharpnessLandscape	int8s		
244	SharpnessNeutral	int8s		
245	SharpnessFaithful	int8s		
246	SharpnessMonochrome	int8s		
247	SharpnessUserDef1	int8s		
248	SharpnessUserDef2	int8s		
249	SharpnessUserDef3	int8s		
250	SaturationStandard	int8s		
251	SaturationPortrait	int8s		
252	SaturationLandscape	int8s		
253	SaturationNeutral	int8s		
254	SaturationFaithful	int8s		
255	FilterEffectMonochrome	int8s	-559038737 = n/a 0 = None 1 = Yellow	2 = Orange 3 = Red 4 = Green

256	SaturationUserDef1	int8s	
257	SaturationUserDef2	int8s	
258	SaturationUserDef3	int8s	
259	ColorToneStandard	int8s	
260	ColorTonePortrait	int8s	
261	ColorToneLandscape	int8s	
262	ColorToneNeutral	int8s	
263	ColorToneFaithful	int8s	
264	ToningEffectMonochrome	int8s	-559038737 = n/a 0 = None 1 = Sepia 2 = Blue 3 = Purple 4 = Green
265	ColorToneUserDef1	int8s	
266	ColorToneUserDef2	int8s	
267	ColorToneUserDef3	int8s	
268	UserDef1PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>
270	UserDef2PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>
272	UserDef3PictureStyle	int16u	--> <a href="#">Canon UserDefStyle Values</a>
284	TimeStamp	int32u	

## Canon CameraInfo5DmkII Tags

CameraInfo tags for the EOS 5D Mark II. Indices shown are for firmware version 1.0.6, but they may be different for other firmware versions.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
7	HighlightTonePriority	int8u	0 = Off 1 = On
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
25	CameraTemperature	int8u	
27	MacroMagnification	int8u	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo)
30	FocalLength	int16uRev	
49	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
80	FocusDistanceUpper	int16uRev	
82	FocusDistanceLower	int16uRev	
111	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
115	ColorTemperature	int16u	
167	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
189	HighISONoiseReduction	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
191	AutoLightingOptimizer	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
230	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
232	MinFocalLength	int16uRev	
234	MaxFocalLength	int16uRev	
382	FirmwareVersion	no	
443	FileIndex	int32u	

455	DirectoryIndex	int32u	
759	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>

## Canon CameraInfo5DmkIII Tags

CameraInfo tags for the EOS 5D Mark III. Indices shown are for firmware versions 1.0.x, but they may be different for other firmware versions.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
125	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
140	FocusDistanceUpper	int16uRev	
142	FocusDistanceLower	int16uRev	
188	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
192	ColorTemperature	int16u	
244	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
339	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
341	MinFocalLength	int16uRev	
343	MaxFocalLength	int16uRev	
356	LensSerialNumber	undef[5]	
572	FirmwareVersion	no	
652	FileIndex	int32u	
656	FileIndex2	int32u	
664	DirectoryIndex	int32u	
668	DirectoryIndex2	int32u	
944	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a>

## Canon CameraInfo6D Tags

CameraInfo tags for the EOS 6D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
131	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
146	FocusDistanceUpper	int16uRev	
148	FocusDistanceLower	int16uRev	
194	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
198	ColorTemperature	int16u	
250	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
353	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
355	MinFocalLength	int16uRev	
357	MaxFocalLength	int16uRev	
598	FirmwareVersion	no	
682	FileIndex	int32u	

694 DirectoryIndex int32u

966 PictureStyleInfo - --> [Canon PSInfo2 Tags](#)

## Canon CameraInfo7D Tags

CameraInfo tags for the EOS 7D. Indices shown are for firmware versions 1.0.x, but they may be different for other firmware versions.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
7	HighlightTonePriority	int8u	0 = Off 1 = On
8	MeasuredEV2	int8u	
9	MeasuredEV	int8u	
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
25	CameraTemperature	int8u	
30	FocalLength	int16uRev	
53	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
84	FocusDistanceUpper	int16uRev	
86	FocusDistanceLower	int16uRev	
119	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
123	ColorTemperature	int16u	
175	CameraPictureStyle	int8u	0x21 = User Defined 1 0x83 = Landscape 0x22 = User Defined 2 0x84 = Neutral 0x23 = User Defined 3 0x85 = Faithful 0x81 = Standard 0x86 = Monochrome 0x82 = Portrait
201	HighISONoiseReduction	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
274	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
276	MinFocalLength	int16uRev	
278	MaxFocalLength	int16uRev	
428	FirmwareVersion	no	
491	FileIndex	int32u	
503	DirectoryIndex	int32u	
807	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>

## Canon CameraInfo40D Tags

CameraInfo tags for the EOS 40D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
24	CameraTemperature	int8u	

27	MacroMagnification	int8u	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo)
29	FocalLength	int16uRev	
48	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
67	FocusDistanceUpper	int16uRev	
69	FocusDistanceLower	int16uRev	
111	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
115	ColorTemperature	int16u	
214	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
216	MinFocalLength	int16uRev	
218	MaxFocalLength	int16uRev	
255	FirmwareVersion	string[6]	
307	FileIndex	int32u	(combined with DirectoryIndex to give the Composite FileNumber tag)
319	DirectoryIndex	int32u	
603	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>
2347	LensModel	string[64]	

## Canon CameraInfo50D Tags

CameraInfo tags for the EOS 50D. Indices shown are for firmware versions 1.0.x, but they may be different for other firmware versions.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
7	HighlightTonePriority	int8u	0 = Off 1 = On
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
25	CameraTemperature	int8u	
30	FocalLength	int16uRev	
49	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
80	FocusDistanceUpper	int16uRev	
82	FocusDistanceLower	int16uRev	
111	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
115	ColorTemperature	int16u	
167	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
189	HighISONoiseReduction	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
191	AutoLightingOptimizer	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
234	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
236	MinFocalLength	int16uRev	
238	MaxFocalLength	int16uRev	
350	FirmwareVersion	no	
411	FileIndex	int32u	
423	DirectoryIndex	int32u	
727	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>

# Canon CameraInfo60D Tags

CameraInfo tags for the EOS 60D and 1200D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
25	CameraTemperature	int8u	
30	FocalLength	int16uRev	
54	CameraOrientation	int8u	(60D only) 0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
58	CameraOrientation	int8u	(1200D only) 0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
85	FocusDistanceUpper	int16uRev	(60D only)
87	FocusDistanceLower	int16uRev	(60D only)
125	ColorTemperature	int16u	(60D only)
232	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
234	MinFocalLength	int16uRev	
236	MaxFocalLength	int16uRev	
409	FirmwareVersion	no	
473	FileIndex	int32u	(60D only)
485	DirectoryIndex	int32u	(60D only)
761	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a> (1200D)
801	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a> (60D)

# Canon CameraInfo70D Tags

CameraInfo tags for the EOS 70D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
132	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
147	FocusDistanceUpper	int16uRev	
149	FocusDistanceLower	int16uRev	
199	ColorTemperature	int16u	
358	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
360	MinFocalLength	int16uRev	
362	MaxFocalLength	int16uRev	
606	FirmwareVersion	no	
691	FileIndex	int32u	
703	DirectoryIndex	int32u	
975	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a>

# Canon CameraInfo80D Tags

Cameralinfo tags for the EOS 80D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
150	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
165	FocusDistanceUpper	int16uRev	
167	FocusDistanceLower	int16uRev	
314	ColorTemperature	int16u	
393	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
395	MinFocalLength	int16uRev	
397	MaxFocalLength	int16uRev	
1114	FirmwareVersion	no	
1198	FileIndex	int32u	
1210	DirectoryIndex	int32u	

## Canon Cameralinfo450D Tags

Cameralinfo tags for the EOS 450D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
24	CameraTemperature	int8u	
27	MacroMagnification	int8u	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo)
29	FocalLength	int16uRev	
48	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
67	FocusDistanceUpper	int16uRev	
69	FocusDistanceLower	int16uRev	
111	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
115	ColorTemperature	int16u	
222	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
263	FirmwareVersion	string[6]	
271	OwnerName	string[32]	
307	DirectoryIndex	int32u	
319	FileIndex	int32u	
611	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>
2355	LensModel	string[64]	

## Canon Cameralinfo500D Tags

Cameralinfo tags for the EOS 500D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	

4	ExposureTime	int8u	
6	ISO	int8u	
7	HighlightTonePriority	int8u	0 = Off 1 = On
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
25	CameraTemperature	int8u	
30	FocalLength	int16uRev	
49	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
80	FocusDistanceUpper	int16uRev	
82	FocusDistanceLower	int16uRev	
115	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
119	ColorTemperature	int16u	
171	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
188	HighISONoiseReduction	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
190	AutoLightingOptimizer	int8u	0 = Standard 1 = Low 2 = Strong 3 = Off
246	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
248	MinFocalLength	int16uRev	
250	MaxFocalLength	int16uRev	
400	FirmwareVersion	no	
467	FileIndex	int32u	
479	DirectoryIndex	int32u	
779	PictureStyleInfo	-	--> <a href="#">Canon PSInfo Tags</a>

## Canon CameraInfo550D Tags

CameraInfo tags for the EOS 550D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
7	HighlightTonePriority	int8u	0 = Off 1 = On
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
25	CameraTemperature	int8u	
30	FocalLength	int16uRev	
53	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
84	FocusDistanceUpper	int16uRev	
86	FocusDistanceLower	int16uRev	
120	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
124	ColorTemperature	int16u	
176	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
255	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>

257	MinFocalLength	int16uRev
259	MaxFocalLength	int16uRev
420	FirmwareVersion	no
484	FileIndex	int32u
496	DirectoryIndex	int32u
796	PictureStyleInfo	-

## Canon CameraInfo600D Tags

CameraInfo tags for the EOS 600D and 1100D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
7	HighlightTonePriority	int8u	0 = Off 1 = On
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
25	CameraTemperature	int8u	
30	FocalLength	int16uRev	
56	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
87	FocusDistanceUpper	int16uRev	
89	FocusDistanceLower	int16uRev	
123	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
127	ColorTemperature	int16u	
179	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
234	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
236	MinFocalLength	int16uRev	
238	MaxFocalLength	int16uRev	
411	FirmwareVersion	no	
475	FileIndex	int32u	
487	DirectoryIndex	int32u	
763	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a>

## Canon CameraInfo650D Tags

CameraInfo tags for the EOS 650D and 700D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
125	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
140	FocusDistanceUpper	int16uRev	
142	FocusDistanceLower	int16uRev	
188	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
192	ColorTemperature	int16u	
244	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>

295	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
297	MinFocalLength	int16uRev	
299	MaxFocalLength	int16uRev	
539	FirmwareVersion	no	(650D)
544	FirmwareVersion	no	(700D)
624	FileIndex	int32u	(650D)
628	FileIndex	int32u	(700D)
636	DirectoryIndex	int32u	(650D)
640	DirectoryIndex	int32u	(700D)
912	PictureStyleInfo	-	--> <a href="#">Canon PSInfo2 Tags</a>

## Canon CameraInfo750D Tags

CameraInfo tags for the EOS 750D and 760D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
27	CameraTemperature	int8u	
35	FocalLength	int16uRev	
150	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
165	FocusDistanceUpper	int16uRev	
167	FocusDistanceLower	int16uRev	
305	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>
309	ColorTemperature	int16u	
361	PictureStyle	int8u	--> <a href="#">Canon PictureStyle Values</a>
388	LensType	int16uRev	--> <a href="#">Canon LensType Values</a>
390	MinFocalLength	int16uRev	
392	MaxFocalLength	int16uRev	
1085	FirmwareVersion	no	
1097	FirmwareVersion	no	

## Canon CameraInfo1000D Tags

CameraInfo tags for the EOS 1000D.

Index1	Tag Name	Writable	Values / Notes
3	FNumber	int8u	
4	ExposureTime	int8u	
6	ISO	int8u	
21	FlashMeteringMode	int8u	0 = E-TTL 3 = TTL 4 = External Auto 5 = External Manual 6 = Off
24	CameraTemperature	int8u	
27	MacroMagnification	int8u	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo)
29	FocalLength	int16uRev	
48	CameraOrientation	int8u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
67	FocusDistanceUpper	int16uRev	
69	FocusDistanceLower	int16uRev	
111	WhiteBalance	int16u	--> <a href="#">Canon WhiteBalance Values</a>

115	ColorTemperature	int16u
226	LensType	int16uRev --> <a href="#">Canon LensType Values</a>
228	MinFocalLength	int16uRev
230	MaxFocalLength	int16uRev
267	FirmwareVersion	string[6]
311	DirectoryIndex	int32u
323	FileIndex	int32u
615	PictureStyleInfo	- --> <a href="#">Canon PSInfo Tags</a>
2359	LensModel	string[64]

## Canon CameraInfoR6 Tags

CameraInfo tags for the EOS R5 and R6.

Index1	Tag Name	Writable	Values / Notes
2801	ShutterCount	int32u	(includes electronic + mechanical shutter)

## Canon CameraInfoR6m2 Tags

CameraInfo tags for the EOS R6 Mark II.

Index1	Tag Name	Writable	Values / Notes
3369	ShutterCount	int32u	(includes electronic + mechanical shutter)

## Canon CameraInfoG5XII Tags

CameraInfo tags for the PowerShot G5 X Mark II.

Index1	Tag Name	Writable	Values / Notes
659	ShutterCount	int32u	(includes electronic + mechanical shutter)
2709	ShutterCount	int32u	(includes electronic + mechanical shutter)
2849	DirectoryIndex	int32u	
2861	FileIndex	int32u	

## Canon CameraInfoPowerShot Tags

CameraInfo tags for PowerShot models such as the A450, A460, A550, A560, A570, A630, A640, A650, A710, A720, G7, G9, S5, SD40, SD750, SD800, SD850, SD870, SD900, SD950, SD1000, SX100 and TX1.

Index4	Tag Name	Writable	Values / Notes
0	ISO	int32s	
5	FNumber	int32s	
6	ExposureTime	int32s	
23	Rotation	int32s	
135	CameraTemperature	int32s	(A450, A460, A550, A630, A640 and A710)
145	CameraTemperature	int32s	(A560, A570, A650, A720, G7, G9, S5, SD40, SD750, SD800, SD850, SD870, SD900, SD950, SD1000, SX100 and TX1)

## Canon CameraInfoPowerShot2 Tags

CameraInfo tags for PowerShot models such as the A470, A480, A490, A495, A580, A590, A1000, A1100, A2000, A2100, A3000, A3100, D10, E1, G10, G11, S90, S95, SD770, SD780, SD790, SD880, SD890, SD940, SD960, SD970, SD980, SD990, SD1100, SD1200, SD1300, SD1400, SD3500, SD4000, SD4500, SX1, SX10, SX20, SX110, SX120, SX130, SX200 and SX210.

Index4	Tag Name	Writable	Values / Notes
1	ISO	int32s	
6	FNumber	int32s	

7	ExposureTime	int32s	
24	Rotation	int32s	
153	CameraTemperature	int32s	(A470, A580, A590, SD770, SD790, SD890 and SD1100)
159	CameraTemperature	int32s	(A1000, A2000, E1, G10, SD880, SD990, SX1, SX10 and SX110)
164	CameraTemperature	int32s	(A480, A1100, A2100, D10, SD780, SD960, SD970, SD1200 and SX200)
168	CameraTemperature	int32s	(A490, A495, A3000, A3100, G11, S90, SD940, SD980, SD1300, SD1400, SD3500, SD4000, SX20, SX120 and SX210)
261	CameraTemperature	int32s	(S95, SD4500 and SX130)

## Canon CameraInfoUnknown32 Tags

Unknown CameraInfo tags are divided into 3 tables based on format size.

Index4	Tag Name	Writable	Values / Notes
71	CameraTemperature	int32s	(S1)
83	CameraTemperature	int32s	(S2)
91	CameraTemperature	int32s	(A410, A610, A620, S80, SD30, SD400, SD430, SD450, SD500 and SD550)
92	CameraTemperature	int32s	(S3)
100	CameraTemperature	int32s	(A420, A430, A530, A540, A700, SD600, SD630 and SD700)
-3	CameraTemperature	int32s	(3 entries from end of record for most newer camera models)

## Canon CameraInfoUnknown16 Tags

Index2	Tag Name	Writable	Values / Notes
[no tags known]			

## Canon CameraInfoUnknown Tags

Index1	Tag Name	Writable	Values / Notes
363	LensSerialNumber	undef[5]	
1473	FirmwareVersion	no	(M50)

## Canon MovieInfo Tags

Tags written by some Canon cameras when recording video.

Index2	Tag Name	Writable	Values / Notes
1	FrameRate	int16u	
2	FrameCount	int16u	
4	FrameCount	int32u	
6	FrameRate	rational32u	
106	Duration	int32u	
108	AudioBitrate	int32u	
110	AudioSampleRate	int32u	
112	AudioChannels	int32u	
116	VideoCodec	undef[4]	

## Canon AFInfo Tags

Auto-focus information used by many older Canon models. The values in this record are sequential, and some have variable sizes based on the value of NumAFPoints (which may be 1,5,7,9,15,45 or 53). The AFArea coordinates are given in a system where the image has dimensions given by AFImageWidth and AFImageHeight, and 0,0 is the image center. The direction of the Y axis depends on the camera model, with positive Y upwards for EOS models, but apparently downwards for PowerShot models.

Sequence	Tag Name	Writable	Values / Notes
0	NumAFPoints	no	

1	ValidAFPoints	no	(number of AF points valid in the following information)
2	CanonImageWidth	no	
3	CanonImageHeight	no	
4	AFImageWidth	no	(size of image in AF coordinates)
5	AFImageHeight	no	
6	AFAreaWidth	no	
7	AFAreaHeight	no	
8	AFAreaXPositions	no	
9	AFAreaYPositions	no	
10	AFPointsInFocus	no	
11	PrimaryAFPoint Canon_AFInfo_0x000b?	no	
12	PrimaryAFPoint	no	

## Canon MyColors Tags

Index2	Tag Name	Writable	Values / Notes
2	MyColorMode	int16u	0 = Off 1 = Positive Film 2 = Light Skin Tone 3 = Dark Skin Tone 4 = Vivid Blue 5 = Vivid Green 6 = Vivid Red 7 = Color Accent 8 = Color Swap 9 = Custom 12 = Vivid 13 = Neutral 14 = Sepia 15 = B&W

## Canon FaceDetect1 Tags

Index2	Tag Name	Writable	Values / Notes
2	FacesDetected	int16u	
3	FaceDetectFrameSize	int16u[2]	
8	Face1Position	int16s[2]	(X-Y coordinates for the center of each face in the Face Detect frame at the time of focus lock. "0 0" is the center, and positive X and Y are to the right and downwards respectively)
10	Face2Position	int16s[2]	
12	Face3Position	int16s[2]	
14	Face4Position	int16s[2]	
16	Face5Position	int16s[2]	
18	Face6Position	int16s[2]	
20	Face7Position	int16s[2]	
22	Face8Position	int16s[2]	
24	Face9Position	int16s[2]	

## Canon FaceDetect2 Tags

Index1	Tag Name	Writable	Values / Notes
1	FaceWidth	int8u	
2	FacesDetected	int8u	

## Canon AFInfo2 Tags

Newer version of the AFInfo record containing much of the same information (and coordinate confusion) as the older version. In this record, NumAFPoints may be 7, 9, 11, 19, 31, 45 or 61, depending on the camera model.

Sequence	Tag Name	Writable	Values / Notes
0	AFInfoSize?	no	
1	AFAreaMode	no	0 = Off (Manual Focus) 1 = AF Point Expansion (surround) 2 = Single-point AF

			4 = Auto 5 = Face Detect AF 6 = Face + Tracking 7 = Zone AF 8 = AF Point Expansion (4 point) 9 = Spot AF 10 = AF Point Expansion (8 point) 11 = Flexizone Multi (49 point) 12 = Flexizone Multi (9 point) 13 = Flexizone Single 14 = Large Zone AF 16 = Large Zone AF (vertical) 17 = Large Zone AF (horizontal) 19 = Flexible Zone AF 1 20 = Flexible Zone AF 2 21 = Flexible Zone AF 3 22 = Whole Area AF
2	NumAFPoints	no	
3	ValidAFPoints	no	(number of AF points valid in the following information)
4	CanonImageWidth	no	
5	CanonImageHeight	no	
6	AFlmageWidth	no	(size of image in AF coordinates)
7	AFlmageHeight	no	
8	AFAreaWidths	no	
9	AFAreaHeights	no	
10	AFAreaXPositions	no	
11	AFAreaYPositions	no	
12	AFPointsInFocus	no	
13	AFPointsSelected Canon_AFInfo2_0x000d?	no no	
14	PrimaryAFPoint	no	

## Canon ContrastInfo Tags

Index2	Tag Name	Writable	Values / Notes
4	IntelligentContrast	int16u	0x0 = Off 0x8 = On 0xffff = n/a

## Canon WBInfo Tags

WB tags for the Canon G9.

Index4	Tag Name	Writable	Values / Notes
2	WB_GRBGLevelsAuto	int32s[4]	
10	WB_GRBGLevelsDaylight	int32s[4]	
18	WB_GRBGLevelsCloudy	int32s[4]	
26	WB_GRBGLevelsTungsten	int32s[4]	
34	WB_GRBGLevelsFluorescent	int32s[4]	
42	WB_GRBGLevelsFluorHigh	int32s[4]	
50	WB_GRBGLevelsFlash	int32s[4]	
58	WB_GRBGLevelsUnderwater	int32s[4]	
66	WB_GRBGLevelsCustom1	int32s[4]	
74	WB_GRBGLevelsCustom2	int32s[4]	

## Canon FaceDetect3 Tags

Index2	Tag Name	Writable	Values / Notes
3	FacesDetected	int16u	

# Canon TimeInfo Tags

Index4	Tag Name	Writable	Values / Notes			
1	TimeZone	int32s				
2	TimeZoneCity	int32s	0 = n/a 1 = Chatham Islands 2 = Wellington 3 = Solomon Islands 4 = Sydney 5 = Adelaide 6 = Tokyo 7 = Hong Kong 8 = Bangkok 9 = Yangon 10 = Dhaka 11 = Kathmandu	12 = Delhi 13 = Karachi 14 = Kabul 15 = Dubai 16 = Tehran 17 = Moscow 18 = Cairo 19 = Paris 20 = London 21 = Azores 22 = Fernando de Noronha 23 = Sao Paulo	24 = Newfoundland 25 = Santiago 26 = Caracas 27 = New York 28 = Chicago 29 = Denver 30 = Los Angeles 31 = Anchorage 32 = Honolulu 33 = Samoa	32766 = (not set)
3	DaylightSavings	int32s	0 = Off 60 = On			

# Canon FileInfo Tags

Index2	Tag Name	Writable	Values / Notes			
1	FileNumber	int32u				
	ShutterCount	int32u	(the location of the upper 4 bits of the directory number is a mystery for the EOS 30D, so the reported directory number will be incorrect for original images with a directory number of 164 or greater) (there are reports that the ShutterCount changed when loading a settings file on the 1DSmkII)			
3	BracketMode	int16s	0 = Off 1 = AEB 2 = FEB 3 = ISO 4 = WB			
4	BracketValue	int16s				
5	BracketShotNumber	int16s				
6	RawJpgQuality	int16s	-1 = n/a 1 = Economy 2 = Normal 3 = Fine 4 = RAW	5 = Superfine 7 = CRAW 130 = Light (RAW) 131 = Standard (RAW)		
7	RawJpgSize	int16s	-1 = n/a 0 = Large 1 = Medium 2 = Small 5 = Medium 1 6 = Medium 2 7 = Medium 3 8 = Postcard 9 = Widescreen 10 = Medium Widescreen	14 = Small 1 15 = Small 2 16 = Small 3 128 = 640x480 Movie 129 = Medium Movie 130 = Small Movie 137 = 1280x720 Movie 142 = 1920x1080 Movie 143 = 4096x2160 Movie		
8	LongExposureNoiseReduction2	int16s	(for some modules this gives the long exposure noise reduction applied to the image, but for other models this just reflects the setting independent of whether or not it was applied) 0 = Off 1 = On (1D) 3 = On 4 = Auto			
9	WBBracketMode	int16s	0 = Off 1 = On (shift AB) 2 = On (shift GM)			
12	WBBracketValueAB	int16s				
13	WBBracketValueGM	int16s				
14	FilterEffect	int16s	0 = None 1 = Yellow 2 = Orange 3 = Red 4 = Green			
15	ToningEffect	int16s	0 = None 1 = Sepia 2 = Blue			

			3 = Purple 4 = Green
16	MacroMagnification	int16s	(currently decoded only for the MP-E 65mm f/2.8 1-5x Macro Photo, and not valid for all camera models)
19	LiveViewShooting	int16s	0 = Off 1 = On
20	FocusDistanceUpper	int16u	
21	FocusDistanceLower	int16u	
23	ShutterMode	int16s	0 = Mechanical 1 = Electronic First Curtain 2 = Electronic
25	FlashExposureLock	int16s	0 = Off 1 = On
32	AntiFlicker	int16s	0 = Off 1 = On
61	RFLensType	int16u	0 = n/a 257 = Canon RF 50mm F1.2L USM 258 = Canon RF 24-105mm F4L IS USM 259 = Canon RF 28-70mm F2L USM 260 = Canon RF 35mm F1.8 MACRO IS STM 261 = Canon RF 85mm F1.2L USM 262 = Canon RF 85mm F1.2L USM DS 263 = Canon RF 24-70mm F2.8L IS USM 264 = Canon RF 15-35mm F2.8L IS USM 265 = Canon RF 24-240mm F4-6.3 IS USM 266 = Canon RF 70-200mm F2.8L IS USM 267 = Canon RF 85mm F2 MACRO IS STM 268 = Canon RF 600mm F11 IS STM 269 = Canon RF 600mm F11 IS STM + RF1.4x 270 = Canon RF 600mm F11 IS STM + RF2x 271 = Canon RF 800mm F11 IS STM 272 = Canon RF 800mm F11 IS STM + RF1.4x 273 = Canon RF 800mm F11 IS STM + RF2x 274 = Canon RF 24-105mm F4-7.1 IS STM 275 = Canon RF 100-500mm F4.5-7.1L IS USM 276 = Canon RF 100-500mm F4.5-7.1L IS USM + RF1.4x 277 = Canon RF 100-500mm F4.5-7.1L IS USM + RF2x 278 = Canon RF 70-200mm F4L IS USM 279 = Canon RF 100mm F2.8L MACRO IS USM 280 = Canon RF 50mm F1.8 STM 281 = Canon RF 14-35mm F4L IS USM 282 = Canon RF-S 18-45mm F4.5-6.3 IS STM 283 = Canon RF 100-400mm F5.6-8 IS USM 284 = Canon RF 100-400mm F5.6-8 IS USM + RF1.4x 285 = Canon RF 100-400mm F5.6-8 IS USM + RF2x 286 = Canon RF-S 18-150mm F3.5-6.3 IS STM 287 = Canon RF 24mm F1.8 MACRO IS STM 288 = Canon RF 16mm F2.8 STM 289 = Canon RF 400mm F2.8L IS USM 290 = Canon RF 400mm F2.8L IS USM + RF1.4x 291 = Canon RF 400mm F2.8L IS USM + RF2x 292 = Canon RF 600mm F4L IS USM 293 = Canon RF 600mm F4L IS USM + RF1.4x 294 = Canon RF 600mm F4L IS USM + RF2x 295 = Canon RF 800mm F5.6L IS USM 296 = Canon RF 800mm F5.6L IS USM + RF1.4x 297 = Canon RF 800mm F5.6L IS USM + RF2x 298 = Canon RF 1200mm F8L IS USM 299 = Canon RF 1200mm F8L IS USM + RF1.4x 300 = Canon RF 1200mm F8L IS USM + RF2x 301 = Canon RF 5.2mm F2.8L Dual Fisheye 3D VR 302 = Canon RF 15-30mm F4.5-6.3 IS STM 303 = Canon RF 135mm F1.8 L IS USM 304 = Canon RF 24-50mm F4.5-6.3 IS STM 305 = Canon RF-S 55-210mm F5-7.1 IS STM 306 = Canon RF 100-300mm F2.8L IS USM 307 = Canon RF 100-300mm F2.8L IS USM + RF1.4x 308 = Canon RF 100-300mm F2.8L IS USM + RF2x 309 = Canon RF 200-800mm F6.3-9 IS USM 310 = Canon RF 200-800mm F6.3-9 IS USM + RF1.4x 311 = Canon RF 200-800mm F6.3-9 IS USM + RF2x 312 = Canon RF 10-20mm F4 L IS STM 313 = Canon RF 28mm F2.8 STM 314 = Canon RF 24-105mm F2.8 L IS USM Z 315 = Canon RF-S 10-18mm F4.5-6.3 IS STM 316 = Canon RF 35mm F1.4 L VCM 317 = Canon RF-S 3.9mm F3.5 STM DUAL FISHEYE

		318 = Canon RF 28-70mm F2.8 IS STM
		319 = Canon RF 70-200mm F2.8 L IS USM Z
		320 = Canon RF 70-200mm F2.8 L IS USM Z + RF1.4x
		321 = Canon RF 70-200mm F2.8 L IS USM Z + RF2x
		323 = Canon RF 16-28mm F2.8 IS STM
		324 = Canon RF-S 14-30mm F4-6.3 IS STM PZ
		325 = Canon RF 50mm F1.4 L VCM
		326 = Canon RF 24mm F1.4 L VCM
		327 = Canon RF 20mm F1.4 L VCM
		328 = Canon RF 85mm F1.4 L VCM

## Canon SerialInfo Tags

Index1	Tag Name	Writable	Values / Notes
9	InternalSerialNumber	string	

## Canon CropInfo Tags

Index2	Tag Name	Writable	Values / Notes
0	CropLeftMargin	int16u	
1	CropRightMargin	int16u	
2	CropTopMargin	int16u	
3	CropBottomMargin	int16u	

## Canon AspectInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	AspectRatio	int32u	0 = 3:2    8 = 4:5 1 = 1:1    12 = 3:2 (APS-H crop) 2 = 4:3    13 = 3:2 (APS-C crop) 7 = 16:9    258 = 4:3 crop
1	CroppedImageWidth	int32u	
2	CroppedImageHeight	int32u	
3	CroppedImageLeft	int32u	
4	CroppedImageTop	int32u	

## Canon Processing Tags

Index2	Tag Name	Writable	Values / Notes
1	ToneCurve	int16s	0 = Standard 1 = Manual 2 = Custom
2	Sharpness	int16s	(all models except the 20D and 350D)
3	SharpnessFrequency	int16s	0 = n/a    3 = Standard 1 = Lowest    4 = High 2 = Low    5 = Highest
4	SensorRedLevel	int16s	
5	SensorBlueLevel	int16s	
6	WhiteBalanceRed	int16s	
7	WhiteBalanceBlue	int16s	
8	WhiteBalance	int16s	--> <a href="#">Canon WhiteBalance Values</a>
9	ColorTemperature	int16s	
10	PictureStyle	int16s	--> <a href="#">Canon PictureStyle Values</a>
11	DigitalGain	int16s	
12	WBShiftAB	int16s	(positive is a shift toward amber)
13	WBShiftGM	int16s	(positive is a shift toward green)
14	UnsharpMaskFineness	int16s	
15	UnsharpMaskThreshold	int16s	

# Canon ColorBalance Tags

These tags are used by the 10D and 300D.

Index2	Tag Name	Writable	Values / Notes
1	WB_RGGBLevelsAuto	int16s[4]	
5	WB_RGGBLevelsDaylight	int16s[4]	
9	WB_RGGBLevelsShade	int16s[4]	
13	WB_RGGBLevelsCloudy	int16s[4]	
17	WB_RGGBLevelsTungsten	int16s[4]	
21	WB_RGGBLevelsFluorescent	int16s[4]	
25	WB_RGGBLevelsFlash	int16s[4]	
29	WB_RGGBLevelsCustom	int16s[4]	(black levels for the D60)
	BlackLevels	int16s[4]	
33	WB_RGGBLevelsKelvin	int16s[4]	
37	WB_RGGBBlackLevels	int16s[4]	

# Canon MeasuredColor Tags

Index2	Tag Name	Writable	Values / Notes
1	MeasuredRGGB	int16u[4]	

# Canon Flags Tags

Index2	Tag Name	Writable	Values / Notes
1	ModifiedParamFlag	int16s	

# Canon ModifiedInfo Tags

Index2	Tag Name	Writable	Values / Notes
1	ModifiedToneCurve	int16s	0 = Standard 1 = Manual 2 = Custom
2	ModifiedSharpness	int16s	(1D and 5D only)
3	ModifiedSharpnessFreq	int16s	0 = n/a      3 = Standard 1 = Lowest    4 = High 2 = Low       5 = Highest
4	ModifiedSensorRedLevel	int16s	
5	ModifiedSensorBlueLevel	int16s	
6	ModifiedWhiteBalanceRed	int16s	
7	ModifiedWhiteBalanceBlue	int16s	
8	ModifiedWhiteBalance	int16s	--> <a href="#">Canon WhiteBalance Values</a>
9	ModifiedColorTemp	int16s	
10	ModifiedPictureStyle	int16s	--> <a href="#">Canon PictureStyle Values</a>
11	ModifiedDigitalGain	int16s	

# Canon PreviewImageInfo Tags

Index4	Tag Name	Writable	Values / Notes
1	PreviewQuality	int32u	-1 = n/a      5 = Superfine 1 = Economy    7 = CRAW 2 = Normal     130 = Light (RAW) 3 = Fine       131 = Standard (RAW) 4 = RAW
2	PreviewImageLength	int32u*	
3	PreviewImageWidth	int32u	
4	PreviewImageHeight	int32u	

## Canon SensorInfo Tags

Index2	Tag Name	Writable	Values / Notes
1	SensorWidth	no	
2	SensorHeight	no	
5	SensorLeftBorder	no	
6	SensorTopBorder	no	
7	SensorRightBorder	no	
8	SensorBottomBorder	no	
9	BlackMaskLeftBorder	no	(coordinates for the area to the left or right of the image used to calculate the average black level)
10	BlackMaskTopBorder	no	
11	BlackMaskRightBorder	no	
12	BlackMaskBottomBorder	no	

## Canon ColorData1 Tags

These tags are used by the 20D and 350D.

Index2	Tag Name	Writable	Values / Notes
25	WB_RGGBLevelsAsShot	int16s[4]	
29	ColorTempAsShot	int16s	
30	WB_RGGBLevelsAuto	int16s[4]	
34	ColorTempAuto	int16s	
35	WB_RGGBLevelsDaylight	int16s[4]	
39	ColorTempDaylight	int16s	
40	WB_RGGBLevelsShade	int16s[4]	
44	ColorTempShade	int16s	
45	WB_RGGBLevelsCloudy	int16s[4]	
49	ColorTempCloudy	int16s	
50	WB_RGGBLevelsTungsten	int16s[4]	
54	ColorTempTungsten	int16s	
55	WB_RGGBLevelsFluorescent	int16s[4]	
59	ColorTempFluorescent	int16s	
60	WB_RGGBLevelsFlash	int16s[4]	
64	ColorTempFlash	int16s	
65	WB_RGGBLevelsCustom1	int16s[4]	
69	ColorTempCustom1	int16s	
70	WB_RGGBLevelsCustom2	int16s[4]	
74	ColorTempCustom2	int16s	
75	ColorCalib?	-	--> <a href="#">Canon ColorCalib Tags</a> (A, B, C, Temperature)

## Canon ColorCalib Tags

Camera color calibration data. For the 20D, 350D, 1DmkII and 1DSmkII the order of the coefficients is A, B, C, Temperature, but for newer models it is B, C, A, Temperature. These tags are extracted only when the [Unknown](#) option is used.

Index2	Tag Name	Writable	Values / Notes
0	CameraColorCalibration01?	int16s[4]	
4	CameraColorCalibration02?	int16s[4]	
8	CameraColorCalibration03?	int16s[4]	
12	CameraColorCalibration04?	int16s[4]	

16	CameraColorCalibration05?	int16s[4]
20	CameraColorCalibration06?	int16s[4]
24	CameraColorCalibration07?	int16s[4]
28	CameraColorCalibration08?	int16s[4]
32	CameraColorCalibration09?	int16s[4]
36	CameraColorCalibration10?	int16s[4]
40	CameraColorCalibration11?	int16s[4]
44	CameraColorCalibration12?	int16s[4]
48	CameraColorCalibration13?	int16s[4]
52	CameraColorCalibration14?	int16s[4]
56	CameraColorCalibration15?	int16s[4]

## Canon ColorData2 Tags

These tags are used by the 1DmkII and 1DSmkII.

Index2	Tag Name	Writable	Values / Notes
24	WB_RGGBLevelsAuto	int16s[4]	
28	ColorTempAuto	int16s	
29	WB_RGGBLevelsUnknown?	int16s[4]	
33	ColorTempUnknown?	int16s	
34	WB_RGGBLevelsAsShot	int16s[4]	
38	ColorTempAsShot	int16s	
39	WB_RGGBLevelsDaylight	int16s[4]	
43	ColorTempDaylight	int16s	
44	WB_RGGBLevelsShade	int16s[4]	
48	ColorTempShade	int16s	
49	WB_RGGBLevelsCloudy	int16s[4]	
53	ColorTempCloudy	int16s	
54	WB_RGGBLevelsTungsten	int16s[4]	
58	ColorTempTungsten	int16s	
59	WB_RGGBLevelsFluorescent	int16s[4]	
63	ColorTempFluorescent	int16s	
64	WB_RGGBLevelsKelvin	int16s[4]	
68	ColorTempKelvin	int16s	
69	WB_RGGBLevelsFlash	int16s[4]	
73	ColorTempFlash	int16s	
74	WB_RGGBLevelsUnknown2?	int16s[4]	
78	ColorTempUnknown2?	int16s	
79	WB_RGGBLevelsUnknown3?	int16s[4]	
83	ColorTempUnknown3?	int16s	
84	WB_RGGBLevelsUnknown4?	int16s[4]	
88	ColorTempUnknown4?	int16s	
89	WB_RGGBLevelsUnknown5?	int16s[4]	
93	ColorTempUnknown5?	int16s	
94	WB_RGGBLevelsUnknown6?	int16s[4]	
98	ColorTempUnknown6?	int16s	
99	WB_RGGBLevelsUnknown7?	int16s[4]	
103	ColorTempUnknown7?	int16s	
104	WB_RGGBLevelsUnknown8?	int16s[4]	
108	ColorTempUnknown8?	int16s	
109	WB_RGGBLevelsUnknown9?	int16s[4]	
113	ColorTempUnknown9?	int16s	
114	WB_RGGBLevelsUnknown10?	int16s[4]	

118	ColorTempUnknown10?	int16s
119	WB_RGGBLevelsUnknown11?	int16s[4]
123	ColorTempUnknown11?	int16s
124	WB_RGGBLevelsUnknown12?	int16s[4]
128	ColorTempUnknown12?	int16s
129	WB_RGGBLevelsUnknown13?	int16s[4]
133	ColorTempUnknown13?	int16s
134	WB_RGGBLevelsUnknown14?	int16s[4]
138	ColorTempUnknown14?	int16s
139	WB_RGGBLevelsUnknown15?	int16s[4]
143	ColorTempUnknown15?	int16s
144	WB_RGGBLevelsPC1	int16s[4]
148	ColorTempPC1	int16s
149	WB_RGGBLevelsPC2	int16s[4]
153	ColorTempPC2	int16s
154	WB_RGGBLevelsPC3	int16s[4]
158	ColorTempPC3	int16s
159	WB_RGGBLevelsUnknown16?	int16s[4]
163	ColorTempUnknown16?	int16s
164	ColorCalib?	- --> <a href="#">Canon ColorCalib Tags</a> (A, B, C, Temperature)
618	RawMeasuredRGGB	int32u[4] (raw MeasuredRGGB values, before normalization)

## Canon ColorData3 Tags

These tags are used by the 1DmkIIIN, 5D, 30D and 400D.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	1 = 1 (1DmkIIIN/5D/30D/400D)
63	WB_RGGBLevelsAsShot	int16s[4]	
67	ColorTempAsShot	int16s	
68	WB_RGGBLevelsAuto	int16s[4]	
72	ColorTempAuto	int16s	
73	WB_RGGBLevelsMeasured	int16s[4]	
77	ColorTempMeasured	int16s	
78	WB_RGGBLevelsDaylight	int16s[4]	
82	ColorTempDaylight	int16s	
83	WB_RGGBLevelsShade	int16s[4]	
87	ColorTempShade	int16s	
88	WB_RGGBLevelsCloudy	int16s[4]	
92	ColorTempCloudy	int16s	
93	WB_RGGBLevelsTungsten	int16s[4]	
97	ColorTempTungsten	int16s	
98	WB_RGGBLevelsFluorescent	int16s[4]	
102	ColorTempFluorescent	int16s	
103	WB_RGGBLevelsKelvin	int16s[4]	
107	ColorTempKelvin	int16s	
108	WB_RGGBLevelsFlash	int16s[4]	
112	ColorTempFlash	int16s	
113	WB_RGGBLevelsPC1	int16s[4]	
117	ColorTempPC1	int16s	
118	WB_RGGBLevelsPC2	int16s[4]	
122	ColorTempPC2	int16s	
123	WB_RGGBLevelsPC3	int16s[4]	

127	ColorTempPC3	int16s
128	WB_RGGBLevelsCustom	int16s[4]
132	ColorTempCustom	int16s
133	ColorCalib?	-
		--> <a href="#">Canon ColorCalib Tags</a> (B, C, A, Temperature)
196	PerChannelBlackLevel	int16u[4]
584	FlashOutput	int16s
585	FlashBatteryLevel	int16s
586	ColorTempFlashData	int16s
647	MeasuredRGGBData	int32u[4] (MeasuredRGGB may be derived from these data values)

## Canon ColorData4 Tags

These tags are used by the 1DmkIII, 1DSmkIII, 1DmkIV, 5DmkII, 7D, 40D, 50D, 60D, 450D, 500D, 550D, 1000D and 1100D.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	2 = 2 (1DmkIII) 3 = 3 (40D) 4 = 4 (1DSmkIII) 5 = 5 (450D/1000D) 6 = 6 (50D/5DmkII) 7 = 7 (500D/550D/7D/1DmkIV) 9 = 9 (60D/1100D)
63	ColorCoefs	-	--> <a href="#">Canon ColorCoefs Tags</a>
168	ColorCalib?	-	--> <a href="#">Canon ColorCalib Tags</a> (B, C, A, Temperature)
231	AverageBlackLevel	int16u[4]	
640	RawMeasuredRGGB	int32u[4]	(raw MeasuredRGGB values, before normalization)
692	PerChannelBlackLevel	int16u[4]	
696	NormalWhiteLevel	int16u	
697	SpecularWhiteLevel	int16u	
698	LinearityUpperMargin	int16u	
715	PerChannelBlackLevel	int16u[4]	
719	NormalWhiteLevel	int16u	
	PerChannelBlackLevel	int16u[4]	
720	SpecularWhiteLevel	int16u	
721	LinearityUpperMargin	int16u	
723	NormalWhiteLevel	int16u	
724	SpecularWhiteLevel	int16u	
725	LinearityUpperMargin	int16u	

## Canon ColorCoefs Tags

Index2	Tag Name	Writable	Values / Notes
0	WB_RGGBLevelsAsShot	int16s[4]	
4	ColorTempAsShot	int16s	
5	WB_RGGBLevelsAuto	int16s[4]	
9	ColorTempAuto	int16s	
10	WB_RGGBLevelsMeasured	int16s[4]	
14	ColorTempMeasured	int16s	
15	WB_RGGBLevelsUnknown?	int16s[4]	
19	ColorTempUnknown?	int16s	
20	WB_RGGBLevelsDaylight	int16s[4]	
24	ColorTempDaylight	int16s	
25	WB_RGGBLevelsShade	int16s[4]	
29	ColorTempShade	int16s	

30	WB_RGGBLevelsCloudy	int16s[4]
34	ColorTempCloudy	int16s
35	WB_RGGBLevelsTungsten	int16s[4]
39	ColorTempTungsten	int16s
40	WB_RGGBLevelsFluorescent	int16s[4]
44	ColorTempFluorescent	int16s
45	WB_RGGBLevelsKelvin	int16s[4]
49	ColorTempKelvin	int16s
50	WB_RGGBLevelsFlash	int16s[4]
54	ColorTempFlash	int16s
55	WB_RGGBLevelsUnknown2?	int16s[4]
59	ColorTempUnknown2?	int16s
60	WB_RGGBLevelsUnknown3?	int16s[4]
64	ColorTempUnknown3?	int16s
65	WB_RGGBLevelsUnknown4?	int16s[4]
69	ColorTempUnknown4?	int16s
70	WB_RGGBLevelsUnknown5?	int16s[4]
74	ColorTempUnknown5?	int16s
75	WB_RGGBLevelsUnknown6?	int16s[4]
79	ColorTempUnknown6?	int16s
80	WB_RGGBLevelsUnknown7?	int16s[4]
84	ColorTempUnknown7?	int16s
85	WB_RGGBLevelsUnknown8?	int16s[4]
89	ColorTempUnknown8?	int16s
90	WB_RGGBLevelsUnknown9?	int16s[4]
94	ColorTempUnknown9?	int16s
95	WB_RGGBLevelsUnknown10?	int16s[4]
99	ColorTempUnknown10?	int16s
100	WB_RGGBLevelsUnknown11?	int16s[4]
104	ColorTempUnknown11?	int16s
105	WB_RGGBLevelsUnknown12?	int16s[4]
109	ColorTempUnknown12?	int16s
110	WB_RGGBLevelsUnknown13?	int16s[4]
114	ColorTempUnknown13?	int16s

## Canon ColorData5 Tags

These tags are used by many EOS M and PowerShot models.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	-4 = -4 (M100/M5/M6) -3 = -3 (M10/M3)
71	ColorCoefs	-	--> <a href="#">Canon ColorCoefs Tags</a>
	ColorCoefs2	-	--> <a href="#">Canon ColorCoefs2 Tags</a>
186	ColorCalib2?	-	--> <a href="#">Canon ColorCalib2 Tags</a>
255	ColorCalib2?	-	--> <a href="#">Canon ColorCalib2 Tags</a>
264	PerChannelBlackLevel	int16s[4]	
333	PerChannelBlackLevel	int16s[4]	
662	SpecularWhiteLevel	int16u	
1385	NormalWhiteLevel	int16u	
1386	SpecularWhiteLevel	int16u	

## Canon ColorCoefs2 Tags

Index2	Tag Name	Writable	Values / Notes
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0	WB_RGGBLevelsAsShot	int16s[4]
7	ColorTempAsShot	int16s
8	WB_RGGBLevelsAuto	int16s[4]
15	ColorTempAuto	int16s
16	WB_RGGBLevelsMeasured	int16s[4]
23	ColorTempMeasured	int16s
24	WB_RGGBLevelsUnknown?	int16s[4]
31	ColorTempUnknown?	int16s
32	WB_RGGBLevelsDaylight	int16s[4]
39	ColorTempDaylight	int16s
40	WB_RGGBLevelsShade	int16s[4]
47	ColorTempShade	int16s
48	WB_RGGBLevelsCloudy	int16s[4]
55	ColorTempCloudy	int16s
56	WB_RGGBLevelsTungsten	int16s[4]
63	ColorTempTungsten	int16s
64	WB_RGGBLevelsFluorescent	int16s[4]
71	ColorTempFluorescent	int16s
72	WB_RGGBLevelsKelvin	int16s[4]
79	ColorTempKelvin	int16s
80	WB_RGGBLevelsFlash	int16s[4]
87	ColorTempFlash	int16s
88	WB_RGGBLevelsUnknown2?	int16s[4]
95	ColorTempUnknown2?	int16s
96	WB_RGGBLevelsUnknown3?	int16s[4]
103	ColorTempUnknown3?	int16s
104	WB_RGGBLevelsUnknown4?	int16s[4]
111	ColorTempUnknown4?	int16s
112	WB_RGGBLevelsUnknown5?	int16s[4]
119	ColorTempUnknown5?	int16s
120	WB_RGGBLevelsUnknown6?	int16s[4]
127	ColorTempUnknown6?	int16s
128	WB_RGGBLevelsUnknown7?	int16s[4]
135	ColorTempUnknown7?	int16s
136	WB_RGGBLevelsUnknown8?	int16s[4]
143	ColorTempUnknown8?	int16s
144	WB_RGGBLevelsUnknown9?	int16s[4]
151	ColorTempUnknown9?	int16s
152	WB_RGGBLevelsUnknown10?	int16s[4]
159	ColorTempUnknown10?	int16s
160	WB_RGGBLevelsUnknown11?	int16s[4]
167	ColorTempUnknown11?	int16s
168	WB_RGGBLevelsUnknown12?	int16s[4]
175	ColorTempUnknown12?	int16s
176	WB_RGGBLevelsUnknown13?	int16s[4]
183	ColorTempUnknown13?	int16s

## Canon ColorCalib2 Tags

B, C, A, D, Temperature.

Index2	Tag Name	Writable	Values / Notes
0	CameraColorCalibration01?	int16s[5]	
5	CameraColorCalibration02?	int16s[5]	

10	CameraColorCalibration03?	int16s[5]
15	CameraColorCalibration04?	int16s[5]
20	CameraColorCalibration05?	int16s[5]
25	CameraColorCalibration06?	int16s[5]
30	CameraColorCalibration07?	int16s[5]
35	CameraColorCalibration08?	int16s[5]
40	CameraColorCalibration09?	int16s[5]
45	CameraColorCalibration10?	int16s[5]
50	CameraColorCalibration11?	int16s[5]
55	CameraColorCalibration12?	int16s[5]
60	CameraColorCalibration13?	int16s[5]
65	CameraColorCalibration14?	int16s[5]
70	CameraColorCalibration15?	int16s[5]

## Canon ColorData6 Tags

These tags are used by the EOS 600D and 1200D.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	10 = 10 (600D/1200D)
63	WB_RGGBLevelsAsShot	int16s[4]	
67	ColorTempAsShot	int16s	
68	WB_RGGBLevelsAuto	int16s[4]	
72	ColorTempAuto	int16s	
73	WB_RGGBLevelsMeasured	int16s[4]	
77	ColorTempMeasured	int16s	
78	WB_RGGBLevelsUnknown?	int16s[4]	
82	ColorTempUnknown?	int16s	
83	WB_RGGBLevelsUnknown2?	int16s[4]	
87	ColorTempUnknown2?	int16s	
88	WB_RGGBLevelsUnknown3?	int16s[4]	
92	ColorTempUnknown3?	int16s	
93	WB_RGGBLevelsUnknown4?	int16s[4]	
97	ColorTempUnknown4?	int16s	
98	WB_RGGBLevelsUnknown5?	int16s[4]	
102	ColorTempUnknown5?	int16s	
103	WB_RGGBLevelsDaylight	int16s[4]	
107	ColorTempDaylight	int16s	
108	WB_RGGBLevelsShade	int16s[4]	
112	ColorTempShade	int16s	
113	WB_RGGBLevelsCloudy	int16s[4]	
117	ColorTempCloudy	int16s	
118	WB_RGGBLevelsTungsten	int16s[4]	
122	ColorTempTungsten	int16s	
123	WB_RGGBLevelsFluorescent	int16s[4]	
127	ColorTempFluorescent	int16s	
128	WB_RGGBLevelsKelvin	int16s[4]	
132	ColorTempKelvin	int16s	
133	WB_RGGBLevelsFlash	int16s[4]	
137	ColorTempFlash	int16s	
138	WB_RGGBLevelsUnknown6?	int16s[4]	
142	ColorTempUnknown6?	int16s	
143	WB_RGGBLevelsUnknown7?	int16s[4]	
147	ColorTempUnknown7?	int16s	

148	WB_RGGBLevelsUnknown8?	int16s[4]
152	ColorTempUnknown8?	int16s
153	WB_RGGBLevelsUnknown9?	int16s[4]
157	ColorTempUnknown9?	int16s
158	WB_RGGBLevelsUnknown10?	int16s[4]
162	ColorTempUnknown10?	int16s
163	WB_RGGBLevelsUnknown11?	int16s[4]
167	ColorTempUnknown11?	int16s
168	WB_RGGBLevelsUnknown12?	int16s[4]
172	ColorTempUnknown12?	int16s
173	WB_RGGBLevelsUnknown13?	int16s[4]
177	ColorTempUnknown13?	int16s
178	WB_RGGBLevelsUnknown14?	int16s[4]
182	ColorTempUnknown14?	int16s
183	WB_RGGBLevelsUnknown15?	int16s[4]
187	ColorTempUnknown15?	int16s
188	ColorCalib?	- --> <a href="#">Canon ColorCalib Tags</a> (B, C, A, Temperature)
251	AverageBlackLevel	int16u[4]
404	RawMeasuredRGGB	int32u[4] (raw MeasuredRGGB values, before normalization)
479	PerChannelBlackLevel	int16u[4]
483	NormalWhiteLevel	int16u
484	SpecularWhiteLevel	int16u
485	LinearityUpperMargin	int16u

## Canon ColorData7 Tags

These tags are used by the EOS 1DX, 5DmkIII, 6D, 7DmkII, 100D, 650D, 700D, 8000D, M and M2.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	10 = 10 (1DX/5DmkIII/6D/70D/100D/650D/700D/M/M2) 11 = 11 (7DmkII/750D/760D/8000D)
63	WB_RGGBLevelsAsShot	int16s[4]	
67	ColorTempAsShot	int16s	
68	WB_RGGBLevelsAuto	int16s[4]	
72	ColorTempAuto	int16s	
73	WB_RGGBLevelsMeasured	int16s[4]	
77	ColorTempMeasured	int16s	
78	WB_RGGBLevelsUnknown?	int16s[4]	
82	ColorTempUnknown?	int16s	
83	WB_RGGBLevelsUnknown2?	int16s[4]	
87	ColorTempUnknown2?	int16s	
88	WB_RGGBLevelsUnknown3?	int16s[4]	
92	ColorTempUnknown3?	int16s	
93	WB_RGGBLevelsUnknown4?	int16s[4]	
97	ColorTempUnknown4?	int16s	
98	WB_RGGBLevelsUnknown5?	int16s[4]	
102	ColorTempUnknown5?	int16s	
103	WB_RGGBLevelsUnknown6?	int16s[4]	
107	ColorTempUnknown6?	int16s	
108	WB_RGGBLevelsUnknown7?	int16s[4]	
112	ColorTempUnknown7?	int16s	
113	WB_RGGBLevelsUnknown8?	int16s[4]	
117	ColorTempUnknown8?	int16s	
118	WB_RGGBLevelsUnknown9?	int16s[4]	

122	ColorTempUnknown9?	int16s
123	WB_RGGBLevelsUnknown10?	int16s[4]
127	ColorTempUnknown10?	int16s
128	WB_RGGBLevelsDaylight	int16s[4]
132	ColorTempDaylight	int16s
133	WB_RGGBLevelsShade	int16s[4]
137	ColorTempShade	int16s
138	WB_RGGBLevelsCloudy	int16s[4]
142	ColorTempCloudy	int16s
143	WB_RGGBLevelsTungsten	int16s[4]
147	ColorTempTungsten	int16s
148	WB_RGGBLevelsFluorescent	int16s[4]
152	ColorTempFluorescent	int16s
153	WB_RGGBLevelsKelvin	int16s[4]
157	ColorTempKelvin	int16s
158	WB_RGGBLevelsFlash	int16s[4]
162	ColorTempFlash	int16s
163	WB_RGGBLevelsUnknown11?	int16s[4]
167	ColorTempUnknown11?	int16s
168	WB_RGGBLevelsUnknown12?	int16s[4]
172	ColorTempUnknown12?	int16s
173	WB_RGGBLevelsUnknown13?	int16s[4]
177	ColorTempUnknown13?	int16s
178	WB_RGGBLevelsUnknown14?	int16s[4]
182	ColorTempUnknown14?	int16s
183	WB_RGGBLevelsUnknown15?	int16s[4]
187	ColorTempUnknown15?	int16s
188	WB_RGGBLevelsUnknown16?	int16s[4]
192	ColorTempUnknown16?	int16s
193	WB_RGGBLevelsUnknown17?	int16s[4]
197	ColorTempUnknown17?	int16s
198	WB_RGGBLevelsUnknown18?	int16s[4]
202	ColorTempUnknown18?	int16s
203	WB_RGGBLevelsUnknown19?	int16s[4]
207	ColorTempUnknown19?	int16s
208	WB_RGGBLevelsUnknown20?	int16s[4]
212	ColorTempUnknown20?	int16s
213	ColorCalib?	-
		--> <a href="#">Canon ColorCalib Tags</a> (B, C, A, Temperature)
276	AverageBlackLevel	int16u[4]
429	RawMeasuredRGGB	int32u[4] (raw MeasuredRGGB values, before normalization)
504	PerChannelBlackLevel	int16u[4]
508	NormalWhiteLevel	int16u
509	SpecularWhiteLevel	int16u
510	LinearityUpperMargin	int16u
619	RawMeasuredRGGB	int32u[4]
728	PerChannelBlackLevel	int16u[4]
732	NormalWhiteLevel	int16u
733	SpecularWhiteLevel	int16u
734	LinearityUpperMargin	int16u

## Canon ColorData8 Tags

These tags are used by the EOS 1DXmkII, 5DS, 5DSR, 5DmkIV, 6DmkII, 77D, 80D, 200D, 800D, 1300D, 2000D, 4000D and 9000D.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	12 = 12 (1DXmkII/5DS/5DSR) 13 = 13 (80D/5DmkIV) 14 = 14 (1300D/2000D/4000D) 15 = 15 (6DmkII/77D/200D/800D,9000D)
63	WB_RGGBLevelsAsShot	int16s[4]	
67	ColorTempAsShot	int16s	
68	WB_RGGBLevelsAuto	int16s[4]	
72	ColorTempAuto	int16s	
73	WB_RGGBLevelsMeasured	int16s[4]	
77	ColorTempMeasured	int16s	
78	WB_RGGBLevelsUnknown?	int16s[4]	
82	ColorTempUnknown?	int16s	
83	WB_RGGBLevelsUnknown2?	int16s[4]	
87	ColorTempUnknown2?	int16s	
88	WB_RGGBLevelsUnknown3?	int16s[4]	
92	ColorTempUnknown3?	int16s	
93	WB_RGGBLevelsUnknown4?	int16s[4]	
97	ColorTempUnknown4?	int16s	
98	WB_RGGBLevelsUnknown5?	int16s[4]	
102	ColorTempUnknown5?	int16s	
103	WB_RGGBLevelsUnknown6?	int16s[4]	
107	ColorTempUnknown6?	int16s	
108	WB_RGGBLevelsUnknown7?	int16s[4]	
112	ColorTempUnknown7?	int16s	
113	WB_RGGBLevelsUnknown8?	int16s[4]	
117	ColorTempUnknown8?	int16s	
118	WB_RGGBLevelsUnknown9?	int16s[4]	
122	ColorTempUnknown9?	int16s	
123	WB_RGGBLevelsUnknown10?	int16s[4]	
127	ColorTempUnknown10?	int16s	
128	WB_RGGBLevelsUnknown11?	int16s[4]	
132	ColorTempUnknown11?	int16s	
133	WB_RGGBLevelsDaylight	int16s[4]	
137	ColorTempDaylight	int16s	
138	WB_RGGBLevelsShade	int16s[4]	
142	ColorTempShade	int16s	
143	WB_RGGBLevelsCloudy	int16s[4]	
147	ColorTempCloudy	int16s	
148	WB_RGGBLevelsTungsten	int16s[4]	
152	ColorTempTungsten	int16s	
153	WB_RGGBLevelsFluorescent	int16s[4]	
157	ColorTempFluorescent	int16s	
158	WB_RGGBLevelsKelvin	int16s[4]	
162	ColorTempKelvin	int16s	
163	WB_RGGBLevelsFlash	int16s[4]	
167	ColorTempFlash	int16s	
168	WB_RGGBLevelsUnknown12?	int16s[4]	
172	ColorTempUnknown12?	int16s	
173	WB_RGGBLevelsUnknown13?	int16s[4]	
177	ColorTempUnknown13?	int16s	
178	WB_RGGBLevelsUnknown14?	int16s[4]	

182	ColorTempUnknown14?	int16s
183	WB_RGGBLevelsUnknown15?	int16s[4]
187	ColorTempUnknown15?	int16s
188	WB_RGGBLevelsUnknown16?	int16s[4]
192	ColorTempUnknown16?	int16s
193	WB_RGGBLevelsUnknown17?	int16s[4]
197	ColorTempUnknown17?	int16s
198	WB_RGGBLevelsUnknown18?	int16s[4]
202	ColorTempUnknown18?	int16s
203	WB_RGGBLevelsUnknown19?	int16s[4]
207	ColorTempUnknown19?	int16s
208	WB_RGGBLevelsUnknown20?	int16s[4]
212	ColorTempUnknown20?	int16s
213	WB_RGGBLevelsUnknown21?	int16s[4]
217	ColorTempUnknown21?	int16s
218	WB_RGGBLevelsUnknown22?	int16s[4]
222	ColorTempUnknown22?	int16s
223	WB_RGGBLevelsUnknown23?	int16s[4]
227	ColorTempUnknown23?	int16s
228	WB_RGGBLevelsUnknown24?	int16s[4]
232	ColorTempUnknown24?	int16s
233	WB_RGGBLevelsUnknown25?	int16s[4]
237	ColorTempUnknown25?	int16s
238	WB_RGGBLevelsUnknown26?	int16s[4]
242	ColorTempUnknown26?	int16s
243	WB_RGGBLevelsUnknown27?	int16s[4]
247	ColorTempUnknown27?	int16s
248	WB_RGGBLevelsUnknown28?	int16s[4]
252	ColorTempUnknown28?	int16s
253	WB_RGGBLevelsUnknown29?	int16s[4]
257	ColorTempUnknown29?	int16s
258	WB_RGGBLevelsUnknown30?	int16s[4]
262	ColorTempUnknown30?	int16s
263	ColorCalib?	- --> <a href="#">Canon ColorCalib Tags</a> (B, C, A, Temperature)
326	AverageBlackLevel	int16u[4]
556	PerChannelBlackLevel	int16u[4] (1300D)
560	NormalWhiteLevel	int16u (1300D)
561	SpecularWhiteLevel	int16u (1300D)
562	LinearityUpperMargin	int16u (1300D)
778	PerChannelBlackLevel	int16u[4] (5DS, 5DS R, 77D, 80D and 800D)
782	NormalWhiteLevel	int16u (5DS, 5DS R, 77D, 80D and 800D)
783	SpecularWhiteLevel	int16u (5DS, 5DS R, 77D, 80D and 800D)
784	LinearityUpperMargin	int16u (5DS, 5DS R, 77D, 80D and 800D)

## Canon ColorData9 Tags

These tags are used by the M6mkII, M50, M200, EOS R, RP, 90D, 250D and 850D

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	16 = 16 (M50) 17 = 17 (EOS R) 18 = 18 (EOS RP/250D) 19 = 19 (90D/850D/M6mkII/M200)
71	WB_RGGBLevelsAsShot	int16s[4]	

75	ColorTempAsShot	int16s
76	WB_RGGBLevelsAuto	int16s[4]
80	ColorTempAuto	int16s
81	WB_RGGBLevelsMeasured	int16s[4]
85	ColorTempMeasured	int16s
86	WB_RGGBLevelsUnknown?	int16s[4]
90	ColorTempUnknown?	int16s
91	WB_RGGBLevelsUnknown2?	int16s[4]
95	ColorTempUnknown2?	int16s
96	WB_RGGBLevelsUnknown3?	int16s[4]
100	ColorTempUnknown3?	int16s
101	WB_RGGBLevelsUnknown4?	int16s[4]
105	ColorTempUnknown4?	int16s
106	WB_RGGBLevelsUnknown5?	int16s[4]
110	ColorTempUnknown5?	int16s
111	WB_RGGBLevelsUnknown6?	int16s[4]
115	ColorTempUnknown6?	int16s
116	WB_RGGBLevelsUnknown7?	int16s[4]
120	ColorTempUnknown7?	int16s
121	WB_RGGBLevelsUnknown8?	int16s[4]
125	ColorTempUnknown8?	int16s
126	WB_RGGBLevelsUnknown9?	int16s[4]
130	ColorTempUnknown9?	int16s
131	WB_RGGBLevelsUnknown10?	int16s[4]
135	ColorTempUnknown10?	int16s
136	WB_RGGBLevelsDaylight	int16s[4]
140	ColorTempDaylight	int16s
141	WB_RGGBLevelsShade	int16s[4]
145	ColorTempShade	int16s
146	WB_RGGBLevelsCloudy	int16s[4]
150	ColorTempCloudy	int16s
151	WB_RGGBLevelsTungsten	int16s[4]
155	ColorTempTungsten	int16s
156	WB_RGGBLevelsFluorescent	int16s[4]
160	ColorTempFluorescent	int16s
161	WB_RGGBLevelsKelvin	int16s[4]
165	ColorTempKelvin	int16s
166	WB_RGGBLevelsFlash	int16s[4]
170	ColorTempFlash	int16s
171	WB_RGGBLevelsUnknown11?	int16s[4]
175	ColorTempUnknown11?	int16s
176	WB_RGGBLevelsUnknown12?	int16s[4]
180	ColorTempUnknown12?	int16s
181	WB_RGGBLevelsUnknown13?	int16s[4]
185	ColorTempUnknown13?	int16s
186	WB_RGGBLevelsUnknown14?	int16s[4]
190	ColorTempUnknown14?	int16s
191	WB_RGGBLevelsUnknown15?	int16s[4]
195	ColorTempUnknown15?	int16s
196	WB_RGGBLevelsUnknown16?	int16s[4]
200	ColorTempUnknown16?	int16s
201	WB_RGGBLevelsUnknown17?	int16s[4]
205	ColorTempUnknown17?	int16s

206	WB_RGGBLevelsUnknown18?	int16s[4]
210	ColorTempUnknown18?	int16s
211	WB_RGGBLevelsUnknown19?	int16s[4]
215	ColorTempUnknown19?	int16s
216	WB_RGGBLevelsUnknown20?	int16s[4]
220	ColorTempUnknown20?	int16s
221	WB_RGGBLevelsUnknown21?	int16s[4]
225	ColorTempUnknown21?	int16s
226	WB_RGGBLevelsUnknown22?	int16s[4]
230	ColorTempUnknown22?	int16s
231	WB_RGGBLevelsUnknown23?	int16s[4]
235	ColorTempUnknown23?	int16s
236	WB_RGGBLevelsUnknown24?	int16s[4]
240	ColorTempUnknown24?	int16s
241	WB_RGGBLevelsUnknown25?	int16s[4]
245	ColorTempUnknown25?	int16s
246	WB_RGGBLevelsUnknown26?	int16s[4]
250	ColorTempUnknown26?	int16s
251	WB_RGGBLevelsUnknown27?	int16s[4]
255	ColorTempUnknown27?	int16s
256	WB_RGGBLevelsUnknown28?	int16s[4]
260	ColorTempUnknown28?	int16s
261	WB_RGGBLevelsUnknown29?	int16s[4]
265	ColorTempUnknown29?	int16s
266	ColorCalib?	- --> <a href="#">Canon ColorCalib Tags</a>
329	PerChannelBlackLevel	int16u[4]
796	NormalWhiteLevel	int16u
797	SpecularWhiteLevel	int16u
798	LinearityUpperMargin	int16u

## Canon ColorData10 Tags

These tags are used by the R5, R5 and EOS 1DXmkIII.

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	32 = 32 (1DXmkIII) 33 = 33 (R5/R6)
85	WB_RGGBLevelsAsShot	int16s[4]	
89	ColorTempAsShot	int16s	
90	WB_RGGBLevelsAuto	int16s[4]	
94	ColorTempAuto	int16s	
95	WB_RGGBLevelsMeasured	int16s[4]	
99	ColorTempMeasured	int16s	
100	WB_RGGBLevelsUnknown?	int16s[4]	
104	ColorTempUnknown?	int16s	
105	WB_RGGBLevelsUnknown2?	int16s[4]	
109	ColorTempUnknown2?	int16s	
110	WB_RGGBLevelsUnknown3?	int16s[4]	
114	ColorTempUnknown3?	int16s	
115	WB_RGGBLevelsUnknown4?	int16s[4]	
119	ColorTempUnknown4?	int16s	
120	WB_RGGBLevelsUnknown5?	int16s[4]	
124	ColorTempUnknown5?	int16s	
125	WB_RGGBLevelsUnknown6?	int16s[4]	

129	ColorTempUnknown6?	int16s
130	WB_RGGBLevelsUnknown7?	int16s[4]
134	ColorTempUnknown7?	int16s
135	WB_RGGBLevelsUnknown8?	int16s[4]
139	ColorTempUnknown8?	int16s
140	WB_RGGBLevelsUnknown9?	int16s[4]
144	ColorTempUnknown9?	int16s
145	WB_RGGBLevelsUnknown10?	int16s[4]
149	ColorTempUnknown10?	int16s
150	WB_RGGBLevelsDaylight	int16s[4]
154	ColorTempDaylight	int16s
155	WB_RGGBLevelsShade	int16s[4]
159	ColorTempShade	int16s
160	WB_RGGBLevelsCloudy	int16s[4]
164	ColorTempCloudy	int16s
165	WB_RGGBLevelsTungsten	int16s[4]
169	ColorTempTungsten	int16s
170	WB_RGGBLevelsFluorescent	int16s[4]
174	ColorTempFluorescent	int16s
175	WB_RGGBLevelsKelvin	int16s[4]
179	ColorTempKelvin	int16s
180	WB_RGGBLevelsFlash	int16s[4]
184	ColorTempFlash	int16s
185	WB_RGGBLevelsUnknown11?	int16s[4]
189	ColorTempUnknown11?	int16s
190	WB_RGGBLevelsUnknown12?	int16s[4]
194	ColorTempUnknown12?	int16s
195	WB_RGGBLevelsUnknown13?	int16s[4]
199	ColorTempUnknown13?	int16s
200	WB_RGGBLevelsUnknown14?	int16s[4]
204	ColorTempUnknown14?	int16s
205	WB_RGGBLevelsUnknown15?	int16s[4]
209	ColorTempUnknown15?	int16s
210	WB_RGGBLevelsUnknown16?	int16s[4]
214	ColorTempUnknown16?	int16s
215	WB_RGGBLevelsUnknown17?	int16s[4]
219	ColorTempUnknown17?	int16s
220	WB_RGGBLevelsUnknown18?	int16s[4]
224	ColorTempUnknown18?	int16s
225	WB_RGGBLevelsUnknown19?	int16s[4]
229	ColorTempUnknown19?	int16s
230	WB_RGGBLevelsUnknown20?	int16s[4]
234	ColorTempUnknown20?	int16s
235	WB_RGGBLevelsUnknown21?	int16s[4]
239	ColorTempUnknown21?	int16s
240	WB_RGGBLevelsUnknown22?	int16s[4]
244	ColorTempUnknown22?	int16s
245	WB_RGGBLevelsUnknown23?	int16s[4]
249	ColorTempUnknown23?	int16s
250	WB_RGGBLevelsUnknown24?	int16s[4]
254	ColorTempUnknown24?	int16s
255	WB_RGGBLevelsUnknown25?	int16s[4]
259	ColorTempUnknown25?	int16s

260	WB_RGGBLevelsUnknown26?	int16s[4]
264	ColorTempUnknown26?	int16s
265	WB_RGGBLevelsUnknown27?	int16s[4]
269	ColorTempUnknown27?	int16s
270	WB_RGGBLevelsUnknown28?	int16s[4]
274	ColorTempUnknown28?	int16s
275	WB_RGGBLevelsUnknown29?	int16s[4]
279	ColorTempUnknown29?	int16s
280	ColorCalib?	- --> <a href="#">Canon ColorCalib Tags</a>
343	PerChannelBlackLevel	int16u[4]
810	NormalWhiteLevel	int16u
811	SpecularWhiteLevel	int16u
812	LinearityUpperMargin	int16u

## Canon ColorData11 Tags

These tags are used by the EOS R3, R7 and R6mkII

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	int16s	34 = 34 (R3) 48 = 48 (R7, R10, R6 Mark II)
105	WB_RGGBLevelsAsShot	int16s[4]	
109	ColorTempAsShot	int16s	
110	WB_RGGBLevelsAuto	int16s[4]	
114	ColorTempAuto	int16s	
115	WB_RGGBLevelsMeasured	int16s[4]	
119	ColorTempMeasured	int16s	
120	WB_RGGBLevelsUnknown?	int16s[4]	
124	ColorTempUnknown?	int16s	
125	WB_RGGBLevelsUnknown2?	int16s[4]	
129	ColorTempUnknown2?	int16s	
130	WB_RGGBLevelsUnknown3?	int16s[4]	
134	ColorTempUnknown3?	int16s	
135	WB_RGGBLevelsUnknown4?	int16s[4]	
139	ColorTempUnknown4?	int16s	
140	WB_RGGBLevelsUnknown5?	int16s[4]	
144	ColorTempUnknown5?	int16s	
145	WB_RGGBLevelsUnknown6?	int16s[4]	
149	ColorTempUnknown6?	int16s	
150	WB_RGGBLevelsUnknown7?	int16s[4]	
154	ColorTempUnknown7?	int16s	
155	WB_RGGBLevelsUnknown8?	int16s[4]	
159	ColorTempUnknown8?	int16s	
160	WB_RGGBLevelsUnknown9?	int16s[4]	
164	ColorTempUnknown9?	int16s	
165	WB_RGGBLevelsUnknown10?	int16s[4]	
169	ColorTempUnknown10?	int16s	
170	WB_RGGBLevelsUnknown11?	int16s[4]	
174	ColorTempUnknown11?	int16s	
175	WB_RGGBLevelsUnknown11?	int16s[4]	
179	ColorTempUnknown11?	int16s	
180	WB_RGGBLevelsUnknown12?	int16s[4]	
184	ColorTempUnknown12?	int16s	
185	WB_RGGBLevelsUnknown13?	int16s[4]	

189	ColorTempUnknown13?	int16s
190	WB_RGGBLevelsUnknown14?	int16s[4]
194	ColorTempUnknown14?	int16s
195	WB_RGGBLevelsUnknown15?	int16s[4]
199	ColorTempUnknown15?	int16s
200	WB_RGGBLevelsUnknown16?	int16s[4]
204	ColorTempUnknown16?	int16s
205	WB_RGGBLevelsDaylight	int16s[4]
209	ColorTempDaylight	int16s
210	WB_RGGBLevelsShade	int16s[4]
214	ColorTempShade	int16s
215	WB_RGGBLevelsCloudy	int16s[4]
219	ColorTempCloudy	int16s
220	WB_RGGBLevelsTungsten	int16s[4]
224	ColorTempTungsten	int16s
225	WB_RGGBLevelsFluorescent	int16s[4]
229	ColorTempFluorescent	int16s
230	WB_RGGBLevelsKelvin	int16s[4]
234	ColorTempKelvin	int16s
235	WB_RGGBLevelsFlash	int16s[4]
239	ColorTempFlash	int16s
240	WB_RGGBLevelsUnknown17?	int16s[4]
244	ColorTempUnknown17?	int16s
245	WB_RGGBLevelsUnknown18?	int16s[4]
249	ColorTempUnknown18?	int16s
250	WB_RGGBLevelsUnknown19?	int16s[4]
254	ColorTempUnknown19?	int16s
255	WB_RGGBLevelsUnknown20?	int16s[4]
259	ColorTempUnknown20?	int16s
260	WB_RGGBLevelsUnknown21?	int16s[4]
264	ColorTempUnknown21?	int16s
265	WB_RGGBLevelsUnknown22?	int16s[4]
269	ColorTempUnknown22?	int16s
270	WB_RGGBLevelsUnknown23?	int16s[4]
274	ColorTempUnknown23?	int16s
275	WB_RGGBLevelsUnknown24?	int16s[4]
279	ColorTempUnknown24?	int16s
280	WB_RGGBLevelsUnknown25?	int16s[4]
284	ColorTempUnknown25?	int16s
285	WB_RGGBLevelsUnknown26?	int16s[4]
289	ColorTempUnknown26?	int16s
290	WB_RGGBLevelsUnknown27?	int16s[4]
294	ColorTempUnknown27?	int16s
300	ColorCalib?	-

--> [Canon ColorCalib Tags](#)

363	PerChannelBlackLevel	int16u[4]
640	NormalWhiteLevel	int16u
641	SpecularWhiteLevel	int16u
642	LinearityUpperMargin	int16u

## Canon ColorData12 Tags

These tags are used by the EOS R1 and R5mkII

Index2	Tag Name	Writable	Values / Notes
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0	ColorDataVersion	int16s	64 = 64 (R1, R5 Mark II)
105	WB_RGGBLevelsAsShot	int16s[4]	
109	ColorTempAsShot	int16s	
110	WB_RGGBLevelsDaylight	int16s[4]	
114	ColorTempDaylight	int16s	
115	WB_RGGBLevelsShade	int16s[4]	
119	ColorTempShade	int16s	
120	WB_RGGBLevelsCloudy	int16s[4]	
124	ColorTempCloudy	int16s	
125	WB_RGGBLevelsTungsten	int16s[4]	
129	ColorTempTungsten	int16s	
130	WB_RGGBLevelsFluorescent	int16s[4]	
134	ColorTempFluorescent	int16s	
135	WB_RGGBLevelsFlash	int16s[4]	
139	ColorTempFlash	int16s	
140	WB_RGGBLevelsUnknown2?	int16s[4]	
144	ColorTempUnknown2?	int16s	
145	WB_RGGBLevelsUnknown3?	int16s[4]	
149	ColorTempUnknown3?	int16s	
150	WB_RGGBLevelsUnknown4?	int16s[4]	
154	ColorTempUnknown4?	int16s	
155	WB_RGGBLevelsUnknown5?	int16s[4]	
159	ColorTempUnknown5?	int16s	
160	WB_RGGBLevelsUnknown6?	int16s[4]	
164	ColorTempUnknown6?	int16s	
165	WB_RGGBLevelsUnknown7?	int16s[4]	
169	ColorTempUnknown7?	int16s	
170	WB_RGGBLevelsUnknown8?	int16s[4]	
174	ColorTempUnknown8?	int16s	
175	WB_RGGBLevelsUnknown9?	int16s[4]	
179	ColorTempUnknown9?	int16s	
180	WB_RGGBLevelsUnknown10?	int16s[4]	
184	ColorTempUnknown10?	int16s	
185	WB_RGGBLevelsUnknown11?	int16s[4]	
189	ColorTempUnknown11?	int16s	
190	WB_RGGBLevelsUnknown12?	int16s[4]	
194	ColorTempUnknown12?	int16s	
195	WB_RGGBLevelsUnknown13?	int16s[4]	
199	ColorTempUnknown13?	int16s	
200	WB_RGGBLevelsUnknown14?	int16s[4]	
204	ColorTempUnknown14?	int16s	
205	WB_RGGBLevelsUnknown15?	int16s[4]	
209	ColorTempUnknown15?	int16s	
210	WB_RGGBLevelsUnknown16?	int16s[4]	
214	ColorTempUnknown16?	int16s	
215	WB_RGGBLevelsUnknown17?	int16s[4]	
219	ColorTempUnknown17?	int16s	
220	WB_RGGBLevelsUnknown18?	int16s[4]	
224	ColorTempUnknown18?	int16s	
225	WB_RGGBLevelsUnknown19?	int16s[4]	
229	ColorTempUnknown19?	int16s	
230	WB_RGGBLevelsUnknown20?	int16s[4]	
234	ColorTempUnknown20?	int16s	

235	WB_RGGBLevelsUnknown21?	int16s[4]
239	ColorTempUnknown21?	int16s
240	WB_RGGBLevelsUnknown22?	int16s[4]
244	ColorTempUnknown22?	int16s
245	WB_RGGBLevelsUnknown23?	int16s[4]
249	ColorTempUnknown23?	int16s
250	WB_RGGBLevelsUnknown24?	int16s[4]
254	ColorTempUnknown24?	int16s
255	WB_RGGBLevelsUnknown25?	int16s[4]
259	ColorTempUnknown25?	int16s
260	WB_RGGBLevelsUnknown26?	int16s[4]
264	ColorTempUnknown26?	int16s
265	WB_RGGBLevelsUnknown27?	int16s[4]
269	ColorTempUnknown27?	int16s
270	WB_RGGBLevelsUnknown28?	int16s[4]
274	ColorTempUnknown28?	int16s
275	WB_RGGBLevelsUnknown29?	int16s[4]
279	ColorTempUnknown29?	int16s
280	WB_RGGBLevelsUnknown30?	int16s[4]
284	ColorTempUnknown30?	int16s
285	WB_RGGBLevelsUnknown31?	int16s[4]
289	ColorTempUnknown31?	int16s
290	WB_RGGBLevelsUnknown32?	int16s[4]
294	ColorTempUnknown32?	int16s
295	WB_RGGBLevelsUnknown33?	int16s[4]
299	ColorTempUnknown33?	int16s
320	ColorCalib?	- --> <a href="#">Canon ColorCalib Tags</a>
383	PerChannelBlackLevel	int16u[4]
660	NormalWhiteLevel	int16u
661	SpecularWhiteLevel	int16u
662	LinearityUpperMargin	int16u

## Canon ColorDataUnknown Tags

Index2	Tag Name	Writable	Values / Notes
0	ColorDataVersion	no	

## Canon ColorInfo Tags

Index2	Tag Name	Writable	Values / Notes
1	Saturation	int16s	0 = Normal
2	ColorTone	int16s	0 = Normal
3	ColorSpace	int16s	1 = sRGB 2 = Adobe RGB

## Canon AFMicroAdj Tags

Index4	Tag Name	Writable	Values / Notes
1	AFMicroAdjMode	int32s	0 = Disable 1 = Adjust all by the same amount 2 = Adjust by lens
2	AFMicroAdjValue	rational64s	

## Canon VignettingCorr Tags

This information is found in images from newer EOS models.

Index2	Tag Name	Writable	Values / Notes	
0	VignettingCorrVersion	no		
2	PeripheralLighting	int16s	0 = Off 1 = On	
3	DistortionCorrection	int16s	0 = Off 1 = On	
4	ChromaticAberrationCorr	int16s	0 = Off 1 = On	
5	ChromaticAberrationCorr	int16s	0 = Off 1 = On	
6	PeripheralLightingValue	int16s		
9	DistortionCorrectionValue	int16s		
11	OriginalImageWidth	int16s	(full size of original image before being rotated or scaled in camera)	
12	OriginalImageHeight	int16s		

## Canon VignettingCorrUnknown Tags

Vignetting correction from PowerShot models.

Index2	Tag Name	Writable	Values / Notes
0	VignettingCorrVersion	no	

## Canon VignettingCorr2 Tags

Index4	Tag Name	Writable	Values / Notes
5	PeripheralLightingSetting	int32s	0 = Off 1 = On
6	ChromaticAberrationSetting	int32s	0 = Off 1 = On
7	DistortionCorrectionSetting	int32s	0 = Off 1 = On
9	DigitalLensOptimizerSetting	int32s	0 = Off 1 = On

## Canon LightingOpt Tags

This information is new in images from the EOS 7D.

Index4	Tag Name	Writable	Values / Notes
1	PeripheralIlluminationCorr	int32s	0 = Off 1 = On
2	AutoLightingOptimizer	int32s	0 = Standard 1 = Low 2 = Strong 3 = Off
3	HighlightTonePriority	int32s	0 = Off 1 = On 2 = Enhanced
4	LongExposureNoiseReduction	int32s	0 = Off 1 = Auto 2 = On
5	HighISONoiseReduction	int32s	0 = Standard 1 = Low 2 = Strong 3 = Off
10	DigitalLensOptimizer	int32s	0 = Off 1 = Standard 2 = High
11	DualPixelRaw	int32s	0 = Off 1 = On

## Canon LensInfo Tags

Index	Tag Name	Writable	Values / Notes			
0	LensSerialNumber	undef[5]	(apparently this is an internal serial number because it doesn't correspond to the one printed on the lens)			

## Canon Ambience Tags

Index	Tag Name	Writable	Values / Notes			
1	AmbienceSelection	int32s	0 = Standard	3 = Soft	6 = Brighter	
			1 = Vivid	4 = Cool	7 = Darker	
			2 = Warm	5 = Intense	8 = Monochrome	

## Canon MultiExp Tags

Index	Tag Name	Writable	Values / Notes			
1	MultiExposure	int32s	0 = Off			
			1 = On			
			2 = On (RAW)			
2	MultiExposureControl	int32s	0 = Additive			
			1 = Average			
			2 = Bright (comparative)			
			3 = Dark (comparative)			
3	MultiExposureShots	int32s				

## Canon FilterInfo Tags

Information about creative filter settings.

Tag ID	Tag Name	Writable	Values / Notes	
0x0101	GrainyBWFilter	no	-1 = Off	
0x0201	SoftFocusFilter	no	-1 = Off	
0x0301	ToyCameraFilter	no	-1 = Off	
0x0401	MiniatureFilter	no	-1 = Off	
0x0402	MiniatureFilterOrientation	no	0 = Horizontal	
			1 = Vertical	
0x0403	MiniatureFilterPosition	no		
0x0404	MiniatureFilterParameter	no		
0x0501	FisheyeFilter	no	-1 = Off	
0x0601	PaintingFilter	no	-1 = Off	
0x0701	WatercolorFilter	no	-1 = Off	

## Canon HDRInfo Tags

Index	Tag Name	Writable	Values / Notes			
1	HDR	int32s	0 = Off			
			1 = Auto			
			2 = On			
2	HDREffect	int32s	0 = Natural			
			1 = Art (standard)			
			2 = Art (vivid)			
			3 = Art (bold)			
			4 = Art (embossed)			

## Canon LogInfo Tags

Index	Tag Name	Writable	Values / Notes			
4	CompressionFormat	int32s	0 = Editing (ALL-I)			
			1 = Standard (IPB)			
			2 = Light (IPB)			
			3 = Motion JPEG			
			4 = RAW			
6	Sharpness	int32s				

7	Saturation	int32s	0 = Normal
8	ColorTone	int32s	0 = Normal
9	ColorSpace2	int32s	0 = BT.709 1 = BT.2020 2 = CinemaGamut
10	ColorMatrix	int32s	0 = EOS Original 1 = Neutral
11	CanonLogVersion	int32s	0 = OFF 1 = CLogV1 2 = CLogV2 3 = CLogV3

## Canon AFConfig Tags

Index	Tag Name	Writable	Values / Notes
1	AFConfigTool	int32s	0xb = Case A 0x80000000 = n/a
2	AFTackingSensitivity	int32s	0x7f = Auto 0x7fffffff = n/a
3	AAccelDecelTracking	int32s	0x7f = Auto 0x7fffffff = n/a
4	APointSwitching	int32s	2147483647 = n/a
5	AI servoFirstImage	int32s	0 = Equal Priority 1 = Release Priority 2 = Focus Priority
6	AI servoSecondImage	int32s	0 = Equal Priority 1 = Release Priority 2 = Focus Priority 3 = Release High Priority 4 = Focus High Priority
7	USMLensElectronicMF	int32s	(EOS R models) 0 = Disable After One-Shot 1 = One-Shot -> Enabled 2 = One-Shot -> Enabled (magnify) 3 = Disable in AF Mode (Other models) 0 = Enable After AF 1 = Disable After AF 2 = Disable in AF Mode
8	AFAssistBeam	int32s	0 = Enable 1 = Disable 2 = IR AF Assist Beam Only 3 = LED AF Assist Beam Only
9	OneShotAFRelease	int32s	0 = Focus Priority 1 = Release Priority
10	AutoAFPointSelEOSiTraf	int32s	(only valid for some models) 0 = Enable 1 = Disable
11	LensDriveWhenAFImpossible	int32s	0 = Continue Focus Search 1 = Stop Focus Search
12	SelectAFAreaSelectionMode	int32s	Bit 0 = Single-point AF Bit 1 = Auto Bit 2 = Zone AF Bit 3 = AF Point Expansion (4 point) Bit 4 = Spot AF Bit 5 = AF Point Expansion (8 point)
13	AFAreaSelectionMethod	int32s	0 = M-Fn Button 1 = Main Dial
14	OrientationLinkedAF	int32s	0 = Same for Vert/Horiz Points 1 = Separate Vert/Horiz Points 2 = Separate Area+Points
15	ManualAFPointSelPattern	int32s	0 = Stops at AF Area Edges 1 = Continuous
16	AFPointDisplayDuringFocus	int32s	0 = Selected (constant) 1 = All (constant) 2 = Selected (pre-AF, focused) 3 = Selected (focused) 4 = Disabled
17	VFDisplayIllumination	int32s	0 = Auto 1 = Enable

				2 = Disable
18	AFStatusViewfinder	int32s	(1D X and R models) 0 = Show in Field of View 1 = Show Outside View	
19	InitialAFPointInServo	int32s	(1D X and R models) 0 = Initial AF Point Selected 1 = Manual AF Point 2 = Auto	
20	SubjectToDetect	int32s	0 = None 1 = People 2 = Animals 3 = Vehicles 4 = Auto	
21	SubjectSwitching	int32s	0 = Initial Priority 1 = On Subject 2 = Switch Subject	
24	EyeDetection	int32s	0 = Off 1 = Auto 2 = Left Eye 3 = Right Eye	
26	WholeAreaTracking	int32s	0 = Off 1 = On	
27	ServoAFCharacteristics	int32s	0 = Case Auto 1 = Case Manual	
28	CaseAutoSetting	int32s	-1 = Locked On 0 = Standard 1 = Responsive 2147483647 = n/a	
29	ActionPriority	int32s	0 = Off 1 = On	
30	SportEvents	int32s	0 = Soccer 1 = Basketball 2 = Volleyball	

## Canon RawBurstInfo Tags

Index4	Tag Name	Writable	Values / Notes
1	RawBurstImageNum	int32u	
2	RawBurstImageCount	int32u	

## Canon LevelInfo Tags

Index4	Tag Name	Writable	Values / Notes
4	RollAngle	int32s	(converted to degrees of clockwise camera rotation)
5	PitchAngle	int32s	(converted to degrees of upward camera tilt)
7	FocalLength	int32s	
8	MinFocalLength2	int32s	(these seem to be min/max focal length without teleconverter, as opposed to MinFocalLength and MaxFocalLength which include the effect of a teleconverter)
9	MaxFocalLength2	int32s	

## Canon CTMD Tags

Canon Timed MetaData tags found in CR3 images. The [ExtractEmbedded](#) option is automatically applied when reading CR3 files to be able to extract this information.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	TimeStamp	no	
0x0004	FocallInfo	-	--> <a href="#">Canon FocallInfo Tags</a>
0x0005	ExposureInfo	-	--> <a href="#">Canon ExposureInfo Tags</a>
0x0007	ExifInfo7	-	--> <a href="#">Canon ExifInfo Tags</a>
0x0008	ExifInfo8	-	--> <a href="#">Canon ExifInfo Tags</a>
0x0009	ExifInfo9	-	--> <a href="#">Canon ExifInfo Tags</a>

# Canon FocallInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	FocalLength	no	

# Canon ExposureInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	FNumber	no	
1	ExposureTime	no	
2	ISO	no	

# Canon ExifInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
0x8769	ExifIFD	-	--> <a href="#">EXIF Tags</a>
0x927c	MakerNoteCanon	-	--> <a href="#">Canon Tags</a>

# Canon CDI1 Tags

Tag ID	Tag Name	Writable	Values / Notes
'IAD1'	IAD1	-	--> <a href="#">Canon IAD1 Tags</a>

# Canon IAD1 Tags

Index2	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

# Canon CMP1 Tags

Index2	Tag Name	Writable	Values / Notes
8	ImageWidth	no	
10	ImageHeight	no	

# Canon CNOP Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

# Canon CNTH Tags

Canon-specific QuickTime tags found in the CNTH atom of MOV/MP4 videos from some cameras.

Tag ID	Tag Name	Writable	Values / Notes
'CNDA'	ThumbnailImage	undef	(the full THM image, embedded metadata is extracted as the first sub-document)

# Canon uuid Tags

Tags extracted from the uuid atom of MP4 videos from cameras such as the SX280, and CR3 images from cameras such as the EOS M50.

Tag ID	Tag Name	Writable	Values / Notes
'CCTP'	CanonCCTP	-	--> <a href="#">Canon CCTP Tags</a>
'CMT1'	IFD0	-	--> <a href="#">EXIF Tags</a>
'CMT2'	ExifIFD	-	--> <a href="#">EXIF Tags</a>
'CMT3'	MakerNoteCanon	undef	--> <a href="#">Canon Tags</a>

'CMT4'	GPSInfo	-	--> <a href="#">GPS Tags</a>
'CNCV'	CompressorVersion	no	
'CNOP'	CanonCNOP	-	--> <a href="#">Canon CNOP Tags</a>
'CNTH'	CanonCNTH	-	--> <a href="#">Canon CNTH Tags</a>
'THMB'	ThumbnailImage	no	

## Canon CCTP Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## Canon Skip Tags

Information found in the "skip" atom of Canon MOV videos.

Tag ID	Tag Name	Writable	Values / Notes
'CNDB'	Unknown_CNDB?	no	

## Canon uuid2 Tags

Tag ID	Tag Name	Writable	Values / Notes
'CNOP'	CanonVRD	-	--> <a href="#">CanonVRD Tags</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Sep 19, 2025*

[<- ExifTool Tag Names](#)

# CanonCustom Functions 1D Tags

These custom functions are used by all 1D models up to but not including the Mark III.

Tag ID	Tag Name	Writable	Values / Notes
0	FocusingScreen	int8u	0 = Ec-N, R 1 = Ec-A,B,C,CII,CIII,D,H,I,L
1	FinderDisplayDuringExposure	int8u	0 = Off 1 = On
2	ShutterReleaseNoCFCard	int8u	0 = Yes 1 = No
3	ISOSpeedExpansion	int8u	0 = No 1 = Yes
4	ShutterAELButton	int8u	0 = AF/AE lock stop 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
5	ManualTv	int8u	0 = Tv=Main/Av=Control 1 = Tv=Control/Av=Main 2 = Tv=Main/Av=Main w/o lens 3 = Tv=Control/Av=Main w/o lens
6	ExposureLevelIncrements	int8u	0 = 1/3-stop set, 1/3-stop comp. 1 = 1-stop set, 1/3-stop comp. 2 = 1/2-stop set, 1/2-stop comp.
7	USMLensElectronicMF	int8u	0 = Turns on after one-shot AF 1 = Turns off after one-shot AF 2 = Always turned off
8	LCDPanels	int8u	0 = Remain. shots/File no. 1 = ISO/Remain. shots 2 = ISO/File no. 3 = Shots in folder/Remain. shots
9	AEBSequenceAutoCancel	int8u	0 = 0,-,+/Enabled 1 = 0,-,+/Disabled 2 = -,0,+/Enabled 3 = -,0,+/Disabled
10	AFPointIllumination	int8u	0 = On 1 = Off 2 = On without dimming 3 = Brighter
11	AFPointSelection	int8u	0 = H=AF+Main/V=AF+Command 1 = H=Comp+Main/V=Comp+Command 2 = H=Command only/V=Assist+Main 3 = H=FEL+Main/V=FEL+Command
12	MirrorLockup	int8u	0 = Disable 1 = Enable
13	AFPointSpotMetering	int8u	0 = 45/Center AF point 1 = 11/Active AF point 2 = 11/Center AF point 3 = 9/Active AF point
14	FillFlashAutoReduction	int8u	0 = Enable 1 = Disable
15	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
16	SafetyShiftInAvOrTv	int8u	0 = Disable 1 = Enable
17	AFPointActivationArea	int8u	0 = Single AF point 1 = Expanded (TTL. of 7 AF points) 2 = Automatic expanded (max. 13)
18	SwitchToRegisteredAFPoint	int8u	0 = Assist + AF 1 = Assist 2 = Only while pressing assist
19	LensAFStopButton	int8u	0 = AF stop 1 = AF start 2 = AE lock while metering 3 = AF point: M -> Auto / Auto -> Ctr. 4 = AF mode: ONE SHOT <-> AI SERVO 5 = IS start
20	AISServoTrackingSensitivity	int8u	0 = Standard 1 = Slow 2 = Moderately slow

			3 = Moderately fast
			4 = Fast
21	AIServoContinuousShooting	int8u	0 = Shooting not possible without focus 1 = Shooting possible without focus

## CanonCustom Functions5D Tags

Tag ID	Tag Name	Writable	Values / Notes
0	FocusingScreen	int8u	0 = Ee-A 1 = Ee-D 2 = Ee-S
1	SetFunctionWhenShooting	int8u	0 = Default (no function) 1 = Change quality 2 = Change Parameters 3 = Menu display 4 = Image replay
2	LongExposureNoiseReduction	int8u	0 = Off 1 = Auto 2 = On
3	FlashSyncSpeedAv	int8u	0 = Auto 1 = 1/200 Fixed
4	Shutter-AELock	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
5	AFAssistBeam	int8u	0 = Emits 1 = Does not emit
6	ExposureLevelIncrements	int8u	0 = 1/3 Stop 1 = 1/2 Stop
7	FlashFiring	int8u	0 = Fires 1 = Does not fire
8	ISOExpansion	int8u	0 = Off 1 = On
9	AEBSequenceAutoCancel	int8u	0 = 0,-,+/Enabled 1 = 0,-,+/Disabled 2 = -,0,+/Enabled 3 = -,0,+/Disabled
10	SuperimposedDisplay	int8u	0 = On 1 = Off
11	MenuButtonDisplayPosition	int8u	0 = Previous (top if power off) 1 = Previous 2 = Top
12	MirrorLockup	int8u	0 = Disable 1 = Enable
13	AFPointSelectionMethod	int8u	0 = Normal 1 = Multi-controller direct 2 = Quick Control Dial direct
14	ETTLII	int8u	0 = Evaluative 1 = Average
15	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
16	SafetyShiftInAvOrTv	int8u	0 = Disable 1 = Enable
17	AFPointActivationArea	int8u	0 = Standard 1 = Expanded
18	LCDDisplayReturnToShoot	int8u	0 = With Shutter Button only 1 = Also with * etc.
19	LensAFStopButton	int8u	0 = AF stop 1 = AF start 2 = AE lock while metering 3 = AF point: M -> Auto / Auto -> Ctr. 4 = ONE SHOT <-> AI SERVO 5 = IS start
20	AddOriginalDecisionData	int8u	0 = Off 1 = On

## CanonCustom Functions10D Tags

Tag ID	Tag Name	Writable	Values / Notes
1	SetButtonWhenShooting	int8u	0 = Normal (disabled) 1 = Image quality 2 = Change parameters 3 = Menu display 4 = Image playback
2	ShutterReleaseNoCFCard	int8u	0 = Yes 1 = No
3	FlashSyncSpeedAv	int8u	0 = Auto 1 = 1/200 Fixed
4	Shutter-AE Lock	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
5	AF Assist	int8u	0 = Emits/Fires 1 = Does not emit/Fires 2 = Only ext. flash emits/Fires 3 = Emits/Does not fire
6	ExposureLevelIncrements	int8u	0 = 1/2 Stop 1 = 1/3 Stop
7	AF Point Registration	int8u	0 = Center                  4 = Automatic 1 = Bottom                  5 = Extreme Left 2 = Right                    6 = Left 3 = Extreme Right         7 = Top
8	RawAndJpgRecording	int8u	0 = RAW+Small/Normal    3 = RAW+Medium/Fine 1 = RAW+Small/Fine        4 = RAW+Large/Normal 2 = RAW+Medium/Normal   5 = RAW+Large/Fine
9	AEBSequenceAutoCancel	int8u	0 = 0,-,+/Enabled 1 = 0,-,+/Disabled 2 = -0,+/Enabled 3 = -0,+/Disabled
10	SuperimposedDisplay	int8u	0 = On 1 = Off
11	Menu Button Display Position	int8u	0 = Previous (top if power off) 1 = Previous 2 = Top
12	Mirror Lockup	int8u	0 = Disable 1 = Enable
13	Assist Button Function	int8u	0 = Normal 1 = Select Home Position 2 = Select HP (while pressing) 3 = Av+/- (AF point by QCD) 4 = FE lock
14	Fill Flash Auto Reduction	int8u	0 = Enable 1 = Disable
15	Shutter Curtain Sync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
16	Safety Shift In Av Or Tv	int8u	0 = Disable 1 = Enable
17	Lens AF Stop Button	int8u	0 = AF stop 1 = AF start 2 = AE lock while metering 3 = AF point: M->Auto/Auto->ctr 4 = One Shot <-> AI servo 5 = IS start

## Canon Custom Functions 20D Tags

Tag ID	Tag Name	Writable	Values / Notes
0	SetFunctionWhenShooting	int8u	0 = Default (no function) 1 = Change quality 2 = Change Parameters 3 = Menu display 4 = Image replay
1	Long Exposure Noise Reduction	int8u	0 = Off 1 = On
2	Flash Sync Speed Av	int8u	0 = Auto 1 = 1/250 Fixed

3	Shutter-AELOCK	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
4	AFAssistBeam	int8u	0 = Emits 1 = Does not emit 2 = Only ext. flash emits
5	ExposureLevelIncrements	int8u	0 = 1/3 Stop 1 = 1/2 Stop
6	FlashFiring	int8u	0 = Fires 1 = Does not fire
7	ISOExpansion	int8u	0 = Off 1 = On
8	AEBSequenceAutoCancel	int8u	0 = 0,-,+/Enabled 1 = 0,-,+/Disabled 2 = -,0,+/Enabled 3 = -,0,+/Disabled
9	SuperimposedDisplay	int8u	0 = On 1 = Off
10	MenuButtonDisplayPosition	int8u	0 = Previous (top if power off) 1 = Previous 2 = Top
11	MirrorLockup	int8u	0 = Disable 1 = Enable
12	AFPointSelectionMethod	int8u	0 = Normal 1 = Multi-controller direct 2 = Quick Control Dial direct
13	ETTLII	int8u	0 = Evaluative 1 = Average
14	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
15	SafetyShiftInAvOrTv	int8u	0 = Disable 1 = Enable
16	LensAFStopButton	int8u	0 = AF stop 1 = AF start 2 = AE lock while metering 3 = AF point: M -> Auto / Auto -> Ctr. 4 = ONE SHOT <-> AI SERVO 5 = IS start
17	AddOriginalDecisionData	int8u	0 = Off 1 = On

## CanonCustom Functions30D Tags

Tag ID	Tag Name	Writable	Values / Notes
1	SetFunctionWhenShooting	int8u	0 = Default (no function) 1 = Change quality 2 = Change Picture Style 3 = Menu display 4 = Image replay
2	LongExposureNoiseReduction	int8u	0 = Off 1 = Auto 2 = On
3	FlashSyncSpeedAv	int8u	0 = Auto 1 = 1/250 Fixed
4	Shutter-AELOCK	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
5	AFAssistBeam	int8u	0 = Emits 1 = Does not emit 2 = Only ext. flash emits
6	ExposureLevelIncrements	int8u	0 = 1/3 Stop 1 = 1/2 Stop
7	FlashFiring	int8u	0 = Fires 1 = Does not fire
8	ISOExpansion	int8u	0 = Off 1 = On

9	AEBSequenceAutoCancel	int8u	0 = 0,-,+/Enabled 1 = 0,-,+/Disabled 2 = -0,+/Enabled 3 = -0,+/Disabled
10	SuperimposedDisplay	int8u	0 = On 1 = Off
11	MenuButtonDisplayPosition	int8u	0 = Previous (top if power off) 1 = Previous 2 = Top
12	MirrorLockup	int8u	0 = Disable 1 = Enable
13	AFPointSelectionMethod	int8u	0 = Normal 1 = Multi-controller direct 2 = Quick Control Dial direct
14	ETTLII	int8u	0 = Evaluative 1 = Average
15	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
16	SafetyShiftInAvOrTv	int8u	0 = Disable 1 = Enable
17	MagnifiedView	int8u	0 = Image playback only 1 = Image review and playback
18	LensAFStopButton	int8u	0 = AF stop 1 = AF start 2 = AE lock while metering 3 = AF point: M -> Auto / Auto -> Ctr. 4 = ONE SHOT <-> AI SERVO 5 = IS start
19	AddOriginalDecisionData	int8u	0 = Off 1 = On

## CanonCustom Functions350D Tags

Tag ID	Tag Name	Writable	Values / Notes
0	SetButtonCrossKeysFunc	int8u	0 = Normal 1 = Set: Quality 2 = Set: Parameter 3 = Set: Playback 4 = Cross keys: AF point select
1	LongExposureNoiseReduction	int8u	0 = Off 1 = On
2	FlashSyncSpeedAv	int8u	0 = Auto 1 = 1/200 Fixed
3	Shutter-AELOCK	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
4	AFAssistBeam	int8u	0 = Emits 1 = Does not emit 2 = Only ext. flash emits
5	ExposureLevelIncrements	int8u	0 = 1/3 Stop 1 = 1/2 Stop
6	MirrorLockup	int8u	0 = Disable 1 = Enable
7	ETTLII	int8u	0 = Evaluative 1 = Average
8	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync

## CanonCustom Functions400D Tags

Tag ID	Tag Name	Writable	Values / Notes
0	SetButtonCrossKeysFunc	int8u	0 = Set: Picture Style 1 = Set: Quality 2 = Set: Flash Exposure Comp 3 = Set: Playback 4 = Cross keys: AF point select

1	LongExposureNoiseReduction	int8u	0 = Off 1 = Auto 2 = On
2	FlashSyncSpeedAv	int8u	0 = Auto 1 = 1/200 Fixed
3	Shutter-AE Lock	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock
4	AF Assist Beam	int8u	0 = Emits 1 = Does not emit 2 = Only ext. flash emits
5	ExposureLevelIncrements	int8u	0 = 1/3 Stop 1 = 1/2 Stop
6	MirrorLockup	int8u	0 = Disable 1 = Enable
7	ETTLII	int8u	0 = Evaluative 1 = Average
8	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
9	MagnifiedView	int8u	0 = Image playback only 1 = Image review and playback
10	LCD Display At Power On	int8u	0 = Display 1 = Retain power off status

## CanonCustom FunctionsD30 Tags

Custom functions for the EOS D30 and D60.

Tag ID	Tag Name	Writable	Values / Notes
1	LongExposureNoiseReduction	int8u	0 = Off 1 = On
2	Shutter-AE Lock	int8u	0 = AF/AE lock 1 = AE lock/AF 2 = AF/AF lock 3 = AE+release/AE+AF
3	MirrorLockup	int8u	0 = Disable 1 = Enable
4	ExposureLevelIncrements	int8u	0 = 1/2 Stop 1 = 1/3 Stop
5	AF Assist	int8u	0 = Emits/Fires 1 = Does not emit/Fires 2 = Only ext. flash emits/Fires 3 = Emits/Does not fire
6	FlashSyncSpeedAv	int8u	0 = Auto 1 = 1/200 Fixed
7	AEBSequenceAutoCancel	int8u	0 = 0,-,+/Enabled 1 = 0,-,+/Disabled 2 = -,0,+/Enabled 3 = -,0,+/Disabled
8	ShutterCurtainSync	int8u	0 = 1st-curtain sync 1 = 2nd-curtain sync
9	LensAFStopButton	int8u	0 = AF Stop 1 = Operate AF 2 = Lock AE and start timer
10	FillFlashAutoReduction	int8u	0 = Enable 1 = Disable
11	MenuButtonReturn	int8u	0 = Top 1 = Previous (volatile) 2 = Previous
12	SetButtonWhenShooting	int8u	0 = Default (no function) 1 = Image quality 2 = Change ISO speed 3 = Change parameters
13	SensorCleaning	int8u	0 = Disable 1 = Enable
14	SuperimposedDisplay	int8u	0 = On 1 = Off

## CanonCustom FuncsUnknown Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## CanonCustom PersonalFuncs Tags

Personal function settings for the EOS-1D.

Index2	Tag Name	Writable	Values / Notes
1	PF0CustomFuncRegistration	int16u	
2	PF1DisableShootingModes	int16u	
3	PF2DisableMeteringModes	int16u	
4	PF3ManualExposureMetering	int16u	
5	PF4ExposureTimeLimits	int16u	
6	PF5ApertureLimits	int16u	
7	PF6PresetShootingModes	int16u	
8	PF7BracketContinuousShoot	int16u	
9	PF8SetBracketShots	int16u	
10	PF9ChangeBracketSequence	int16u	
11	PF10RetainProgramShift	int16u	
14	PF13DrivePriority	int16u	
15	PF14DisableFocusSearch	int16u	
16	PF15DisableAFAssistBeam	int16u	
17	PF16AutoFocusPointShoot	int16u	
18	PF17DisableAFPointSel	int16u	
19	PF18EnableAutoAFPointSel	int16u	
20	PF19ContinuousShootSpeed	int16u	
21	PF20LimitContinousShots	int16u	
22	PF21EnableQuietOperation	int16u	
24	PF23SetTimerLengths	int16u	
25	PF24LightLCDDuringBulb	int16u	
26	PF25DefaultClearSettings	int16u	
27	PF26ShortenReleaseLag	int16u	
28	PF27ReverseDialRotation	int16u	
29	PF28NoQuickDialExpComp	int16u	
30	PF29QuickDialSwitchOff	int16u	
31	PF30EnlargementMode	int16u	
32	PF31OriginalDecisionData	int16u	

## CanonCustom PersonalFuncValues Tags

Index2	Tag Name	Writable	Values / Notes
1	PF1Value	int16u	
2	PF2Value	int16u	
3	PF3Value	int16u	
4	PF4ExposureTimeMin	int16u	
5	PF4ExposureTimeMax	int16u	
6	PF5ApertureMin	int16u	
7	PF5ApertureMax	int16u	
8	PF8BracketShots	int16u	
9	PF19ShootingSpeedLow	int16u	

10	PF19ShootingSpeedHigh	int16u
11	PF20MaxContinousShots	int16u
12	PF23ShutterButtonTime	int16u
13	PF23FELockTime	int16u
14	PF23PostReleaseTime	int16u
15	PF25AEMode	int16u
16	PF25MeteringMode	int16u
17	PF25DriveMode	int16u
18	PF25AFMode	int16u
19	PF25AFPointSel	int16u
20	PF25ImageSize	int16u
21	PF25WBMode	int16u
22	PF25Parameters	int16u
23	PF25ColorMatrix	int16u
24	PF27Value	int16u

## CanonCustom Functions2 Tags

Beginning with the EOS 1D Mark III, Canon finally created a set of custom function tags which are (reasonably) consistent across models. The EOS 1D Mark III has 57 custom function tags divided into four main groups: 1. Exposure (0x0101-0x010f), 2. Image (0x0201-0x0203), Flash Exposure (0x0304-0x0306) and Display (0x0407-0x0409), 3. Auto Focus (0x0501-0x050e) and Drive (0x060f-0x0611), and 4. Operation (0x0701-0x070a) and Others (0x080b-0x0810). The table below lists tags used by the EOS 1D Mark III, as well as newer tags and values added by later models.

Tag ID	Tag Name	Writable	Values / Notes
0x0101	ExposureLevelIncrements	int32s	(1DmkIII and 1DmkIV) 0 = 1/3-stop set, 1/3-stop comp. 1 = 1-stop set, 1/3-stop comp. 2 = 1/2-stop set, 1/2-stop comp. (other models) 0 = 1/3 Stop 1 = 1/2 Stop
0x0102	ISOSpeedIncrements	int32s	0 = 1/3 Stop 1 = 1 Stop
0x0103	ISOSpeedRange ISOExpansion	int32s[3] int32s	(1DmkIII and 1DmkIV) [Value 0] 0 = Disable 1 = Enable (other models) 0 = Off 1 = On
0x0104	AEBAutoCancel	int32s	0 = On 1 = Off
0x0105	AEBSequence	int32s	(value of 2 not used by 40D, 50D, 60D, 5DmkII and 7D) 0 = 0,-,+ 1 = -,0,+ 2 = +,0,-
0x0106	AEBShotCount AEBShotCount	int32s int32s[2]	(EOS 90D) 2 = 2 shots 3 = 3 shots 5 = 5 shots 7 = 7 shots (other models storing a single value) 0 = 3 shots 1 = 2 shots 2 = 5 shots 3 = 7 shots (models storing two values) '2 1' = 2 shots '3 0' = 3 shots '5 2' = 5 shots '7 3' = 7 shots
0x0107	SpotMeterLinkToAFFPoint	int32s	0 = Disable (use center AF point) 1 = Enable (use active AF point)
0x0108	SafetyShift	int32s	(value of 2 not used by some models) 0 = Disable

				1 = Enable (Tv/Av) 2 = Enable (ISO speed)
0x0109	UsableShootingModes UsableShootingModes	int32s int32s[2]	[Value 0] 0 = Disable 1 = Enable	
0x010a	UsableMeteringModes UsableMeteringModes	int32s int32s[2]	[Value 0] 0 = Disable 1 = Enable	
0x010b	ExposureModeInManual	int32s	0 = Specified metering mode 1 = Evaluative metering 2 = Partial metering 3 = Spot metering 4 = Center-weighted average	
0x010c	ShutterSpeedRange ShutterSpeedRange	int32s[3] int32s[4]	[Value 0] 0 = Disable 1 = Enable	
0x010d	ApertureRange ApertureRange	int32s[3] int32s[4]	[Value 0] 0 = Disable 1 = Enable	
0x010e	ApplyShootingMeteringMode	int32s[8]	[Value 0] 0 = Disable 1 = Enable	
0x010f	FlashSyncSpeedAv	int32s	(40D and 1Ds Mark III) 0 = Auto 1 = 1/250 Fixed (50D, 60D and 7D) 0 = Auto 1 = 1/250-1/60 Auto 2 = 1/250 Fixed (450D and 1000D) 0 = Auto 1 = 1/200 Fixed (1D Mark III and 1Ds Mark III) 0 = Auto 1 = 1/300 Fixed (1D Mark IV) 0 = Auto 1 = 1/300-1/60 Auto 2 = 1/300 Fixed (5D Mark II, 5D Mark III, 500D, 550D, 600D and 1100D) 0 = Auto 1 = 1/200-1/60 Auto 2 = 1/200 Fixed	
0x0110	AEMicroadjustment	int32s[3]	[Value 0] 0 = Disable 1 = Enable	
0x0111	FEMicroadjustment	int32s[3]	[Value 0] 0 = Disable 1 = Enable	
0x0112	SameExposureForNewAperture	int32s	0 = Disable 1 = ISO Speed 2 = Shutter Speed (EOS R) 0 = Disable 1 = ISO Speed 2 = ISO Speed/Shutter Speed 3 = Shutter Speed	
0x0113	ExposureCompAutoCancel	int32s	0 = Enable 1 = Disable	
0x0114	AELockMeterModeAfterFocus	int32s	Bit 0 = Evaluative Bit 1 = Partial Bit 2 = Spot Bit 3 = Center-weighted	
0x0201	LongExposureNoiseReduction	int32s	0 = Off 1 = Auto 2 = On	
0x0202	HighISONoiseReduction	int32s	(50D, 60D, 500D, 550D, 600D, 1100D, 5DmkII and 7D) 0 = Standard 1 = Low 2 = Strong 3 = Off (other models) 0 = Off 1 = On	

0x0203	HighlightTonePriority	int32s	0 = Disable 1 = Enable
0x0204	AutoLightingOptimizer	int32s	(50D, 500D, 5DmkII and 1DmkIV) 0 = Standard 1 = Low 2 = Strong 3 = Disable (other models) 0 = Enable 1 = Disable
0x0304	ETTLII	int32s	0 = Evaluative 1 = Average
0x0305	ShutterCurtainSync	int32s	0 = 1st-curtain sync 1 = 2nd-curtain sync
0x0306	FlashFiring	int32s	0 = Fires 1 = Does not fire
0x0407	ViewInfoDuringExposure	int32s	0 = Disable 1 = Enable
0x0408	LCDIlluminationDuringBulb	int32s	0 = Off 1 = On
0x0409	InfoButtonWhenShooting	int32s	(1D Mark III) 0 = Displays camera settings 1 = Displays shooting functions (1D Mark IV) 0 = Displays shooting functions 1 = Displays camera settings
0x040a	ViewfinderWarnings	int32s	Bit 0 = Monochrome Bit 1 = WB corrected Bit 2 = One-touch image quality Bit 3 = ISO expansion Bit 4 = Spot metering Bit 6 = Noise reduction Bit 7 = HDR
0x040b	LVShootingAreaDisplay	int32s	0 = Masked 1 = Outlined
0x040c	LVShootingAreaDisplay	int32s	0 = Masked 1 = Outlined
0x0501	USMLensElectronicMF	int32s	0 = Enable after one-shot AF 1 = Disable after one-shot AF 2 = Disable in AF mode
0x0502	AI servo Tracking Sensitivity	int32s	-2 = Slow -1 = Medium Slow 0 = Standard 1 = Medium Fast 2 = Fast
0x0503	AI Servo Image Priority	int32s	0 = 1: AF, 2: Tracking 1 = 1: AF, 2: Drive speed 2 = 1: Release, 2: Drive speed 3 = 1: Release, 2: Tracking
0x0504	AI Servo Tracking Method	int32s	0 = Main focus point priority 1 = Continuous AF track priority
0x0505	Lens Drive No AF	int32s	0 = Focus search on 1 = Focus search off
0x0506	Lens AF Stop Button	int32s	(value of 6 not used by 40D, 50D and 5DmkII) 0 = AF stop 1 = AF start 2 = AE lock 3 = AF point: M->Auto/Auto->ctr 4 = One Shot <-> AI servo 5 = IS start 6 = Switch to registered AF point 7 = Spot AF
0x0507	AF Microadjustment	int32s[5]	[Value 0] 0 = Disable 1 = Adjust all by same amount 2 = Adjust by lens
0x0508	AF Point Area Expansion	int32s	(5D Mark II) 0 = Disable 1 = Enable (1Ds Mark III) 0 = Disable 1 = Enable (left/right Assist AF points) 2 = Enable (surrounding Assist AF points)

			(other models) 0 = Disable 1 = Left/right AF points 2 = Surrounding AF points 3 = All 45 points area
0x0509	SelectableAFPoint	int32s	(1D Mark IV) 0 = 45 points 1 = 19 points 2 = 11 points 3 = Inner 9 points 4 = Outer 9 points (other models) 0 = 19 points 1 = Inner 9 points 2 = Outer 9 points 3 = 19 Points, Multi-controller selectable 4 = Inner 9 Points, Multi-controller selectable 5 = Outer 9 Points, Multi-controller selectable
0x050a	SwitchToRegisteredAFPoint	int32s	(1D Mark IV) 0 = Disable 1 = Switch with multi-controller 2 = Only while AEL is pressed (other models) 0 = Disable 1 = Enable
0x050b	AFPointAutoSelection	int32s	0 = Control-direct:disable/Main:enable 1 = Control-direct:disable/Main:disable 2 = Control-direct:enable/Main:enable
0x050c	AFPointDisplayDuringFocus	int32s	(1D models) 0 = On 1 = Off 2 = On (when focus achieved) (other models) 0 = Selected (constant) 1 = All (constant) 2 = Selected (pre-AF, focused) 3 = Selected (focused) 4 = Disable display
0x050d	AFPointBrightness	int32s	0 = Normal 1 = Brighter
0x050e	AFAssistBeam	int32s	(1D Mark IV and 6D) 0 = Emits 1 = Does not emit 2 = IR AF assist beam only (other models; values 2-3 not used by 1DmkIII or 5DmkII, value 3 new for 7D) 0 = Emits 1 = Does not emit 2 = Only ext. flash emits 3 = IR AF assist beam only
0x050f	AFPointSelectionMethod	int32s	(40D, 50D and 5DmkII) 0 = Normal 1 = Multi-controller direct 2 = Quick Control Dial direct (60D) 0 = AF point button: Activate AF Sel; Rear dial: Select AF points 1 = AF point button: Auto selection; Rear dial: Manual selection
0x0510	VFDisplayIllumination SuperimposedDisplay	int32s int32s	(7D) 0 = Auto 1 = Enable 2 = Disable (other models) 0 = On 1 = Off
0x0511	AFDuringLiveView	int32s	(40D) 0 = Disable 1 = Enable (450D and 1000D) 0 = Disable 1 = Quick mode 2 = Live mode
0x0512	SelectAFAreaSelectMode	int32s	[Value 0] 0 = Disable 1 = Enable 2 = Register 3 = Select AF-modes

0x0513	ManualAFPointSelectPattern	int32s	0 = Stops at AF area edges 1 = Continuous
0x0514	DisplayAllAFPoints	int32s	0 = Enable 1 = Disable
0x0515	FocusDisplayAIServoAndMF	int32s	0 = Enable 1 = Disable
0x0516	OrientationLinkedAFPoint	int32s	0 = Same for vertical and horizontal 1 = Select different AF points
0x0517	MultiControllerWhileMetering	int32s	0 = Off 1 = AF point selection
0x0518	AccelerationTracking	int32s	
0x0519	AIServoFirstImagePriority	int32s	-1 = Release priority 0 = Equal priority 1 = Focus priority
0x051a	AIServoSecondImagePriority	int32s	-1 = Shooting speed priority 0 = Equal priority 1 = Focus priority
0x051b	AFAreaSelectMethod	int32s	0 = AF area selection button 1 = Main dial
0x051c	AutoAFPointColorTracking	int32s	0 = On-Shot AF only 1 = Disable
0x051d	VFDisplayIllumination	int32s	[Value 0] 0 = Auto 1 = Enable 2 = Disable [Value 1] 0 = Non-illuminated 1 = Illuminated
0x051e	InitialAFPointAIServoAF	int32s	0 = Auto 1 = Initial AF point selected 2 = Manual AF point
0x060f	MirrorLockup	int32s	(value of 2 not used by some models) 0 = Disable 1 = Enable 2 = Enable: Down with Set
0x0610	ContinuousShootingSpeed	int32s[6]	[Value 0]
	ContinuousShootingSpeed	int32s[5]	0 = Disable
	ContinuousShootingSpeed	int32s[3]	1 = Enable [Value 0]
			0 = Disable
			1 = Enable
0x0611	ContinuousShotLimit	int32s[2]	[Value 0] 0 = Disable 1 = Enable
0x0612	RestrictDriveModes	int32s	[Value 0]
	RestrictDriveModes	int32s[2]	0 = Disable 1 = Enable
0x0701	Shutter-AELOCK	int32s	(500D, 550D, 600D, 1000D and 1100D)
	AFAndMeteringButtons	int32s	0 = AF/AE lock
	ShutterButtonAFOnButton	int32s	1 = AE lock/AF 2 = AF/AF lock, No AE lock 3 = AE/AF, No AE lock (250D) '0 0' = AF/AE lock '1 0' = AE lock/AF '2 0' = AF/AF lock, No AE lock '3 0' = AE/AF, No AE lock (60D) 0 = Metering start 1 = Metering + AF start 2 = AE lock 3 = AF stop 4 = No function (other models) 0 = Metering + AF start 1 = Metering + AF start/AF stop 2 = Metering start/Meter + AF start 3 = AE lock/Metering + AF start 4 = Metering + AF start/disable
0x0702	AFOnAELOCKButtonSwitch	int32s	0 = Disable 1 = Enable
0x0703	QuickControlDialInMeter	int32s	0 = Exposure comp/Aperture 1 = AF point selection

			<p>2 = ISO speed      3 = AF point selection swapped with Exposure comp      4 = ISO speed swapped with Exposure comp</p>
0x0704 SetButtonWhenShooting	int32s	(40D, 50D and 5DmkII; value of 5 is new for 50D, and 6 is new for 5DmkII)	<p>0 = Normal (disabled)      1 = Image quality      2 = Picture style      3 = Menu display      4 = Image playback      5 = Quick control screen      6 = Record movie (Live View)</p> <p>(60D)</p> <p>0 = Normal (disabled)      1 = Image quality      2 = Picture style      3 = White balance      4 = Flash exposure compensation      5 = Viewfinder leveling gauge</p> <p>(450D, 550D and 600D; value of 5 is new for 550D)</p> <p>0 = Normal (disabled)      1 = Image quality      2 = Flash exposure compensation      3 = LCD monitor On/Off      4 = Menu display      5 = ISO speed</p> <p>(1100D)</p> <p>0 = Normal (disabled)      1 = Image quality      2 = Flash exposure compensation      3 = LCD monitor On/Off      4 = Menu display      5 = Depth-of-field preview</p> <p>(1000D)</p> <p>0 = LCD monitor On/Off      1 = Image quality      2 = Flash exposure compensation      3 = Menu display      4 = Disabled</p> <p>(500D)</p> <p>0 = Quick control screen      1 = Image quality      2 = Flash exposure compensation      3 = LCD monitor On/Off      4 = Menu display      5 = Disabled</p> <p>(250D)</p> <p>(1DmkIII and 1DmkIV)</p> <p>0 = Normal (disabled)      1 = White balance      2 = Image size      3 = ISO speed      4 = Picture style      5 = Record func. + media/folder      6 = Menu display      7 = Image playback</p>
0x0705 ManualTv	int32s	0 = Tv=Main/Av=Control 1 = Tv=Control/Av=Main	
0x0706 DialDirectionTvAv	int32s	0 = Normal 1 = Reversed	
0x0707 AvSettingWithoutLens	int32s	0 = Disable 1 = Enable	
0x0708 WBMediaImageSizeSetting	int32s	0 = Rear LCD panel 1 = LCD monitor 2 = Off (disable button)	
0x0709 LockMicrophoneButton	int32s	[Value 0] 0 = Protect (hold:record memo) 1 = Record memo (protect:disable) 2 = Play memo (hold:record memo) 3 = Rating (protect/memo:disable)	
0x070a ButtonFunctionControlOff	int32s	0 = Normal (enable) 1 = Disable main, Control, Multi-control	
0x070b AssignFuncButton	int32s	0 = LCD brightness 1 = Image quality 2 = Exposure comp./AEB setting	

			3 = Image jump with main dial 4 = Live view function settings
0x070c	CustomControls	int32s	
0x070d	StartMovieShooting	int32s	0 = Default (from LV) 1 = Quick start (FEL button)
0x070e	FlashButtonFunction	int32s	0 = Raise built-in flash 1 = ISO speed
0x070f	MultiFunctionLock	int32s	[Value 0] 0 = Off 1 = On 2 = On (quick control dial) 3 = On (main dial and quick control dial) [Value 1] Bit 0 = Main dial Bit 1 = Quick control dial Bit 2 = Multi-controller
0x0710	TrashButtonFunction	int32s	0 = Normal (set center AF point) 1 = Depth-of-field preview
0x0711	ShutterReleaseWithoutLens	int32s	0 = Disable 1 = Enable
0x0712	ControlRingRotation	int32s	0 = Normal 1 = Reversed
0x0713	FocusRingRotation	int32s	0 = Normal 1 = Reversed
0x0714	RFLensMFFocusRingSensitivity	int32s	0 = Varies With Rotation Speed 1 = Linked To Rotation Angle
0x0715	CustomizeDials	int32s	
0x080b	FocusingScreen	int32s	(40D, 50D and 60D) 0 = Ef-A 1 = Ef-D 2 = Ef-S (5D Mark II) 0 = Eg-A 1 = Eg-D 2 = Eg-S (6D) 0 = Eg-A II 1 = Eg-D 2 = Eg-S (7D Mark II) 0 = Eh-A 1 = Eh-S (1DX) 0 = Ec-CV 1 = Ec-A,B,D,H,I,L (1DmkIII, 1DSmkIII and 1DmkIV) 0 = Ec-CIV 1 = Ec-A,B,C,CII,CIII,D,H,I,L 2 = Ec-S 3 = Ec-N,R
0x080c	TimerLength TimerLength	int32s[3] int32s[4]	[Value 0] 0 = Disable 1 = Enable
0x080d	ShortReleaseTimeLag	int32s	0 = Disable 1 = Enable
0x080e	AddAspectRatioInfo	int32s	0 = Off 4 = 6:7 1 = 6:6 5 = 10:12 2 = 3:4 6 = 5:7 3 = 4:5
0x080f	AddOriginalDecisionData	int32s	0 = Off 1 = On
0x0810	LiveViewExposureSimulation	int32s	0 = Disable (LCD auto adjust) 1 = Enable (simulates exposure)
0x0811	LCDDisplayAtPowerOn	int32s	0 = Display 1 = Retain power off status
0x0812	MemoAudioQuality	int32s	0 = High (48 kHz) 1 = Low (8 kHz)
0x0813	DefaultEraseOption	int32s	0 = Cancel selected 1 = Erase selected 2 = Erase RAW selected 3 = Erase non-RAW selected

0x0814	RetractLensOnPowerOff	int32s	0 = Enable 1 = Disable
0x0815	AddIPTCInformation	int32s	0 = Disable 1 = Enable
0x0816	AudioCompression	int32s	0 = Enable 1 = Disable

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Dec 20, 2021*

[<-- ExifTool Tag Names](#)

# CanonRaw Tags

These tags apply to CRW-format Canon RAW files and information in the APP0 "CIFF" segment of JPEG images. When writing CanonRaw/CIFF information, the length of the information is preserved (and the new information is truncated or padded as required) unless **Writable** is `resize`. Currently, only `JpgFromRaw` and `ThumbnailImage` are allowed to change size. See [canon\\_raw.html](#) for a description of the Canon CRW format.

CRW images also support the addition of a CanonVRD trailer, which in turn supports XMP. This trailer is created automatically if necessary when ExifTool is used to write XMP to a CRW image.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	NullRecord	undef	
0x0001	FreeBytes	undef	
0x0032	CanonColorInfo1	no	
0x0805	CanonFileDescription	string[32]	
	UserComment	string[256]	
0x080a	CanonRawMakeModel	-	--> <a href="#">CanonRaw MakeModel Tags</a>
0x080b	CanonFirmwareVersion	string[32]	
0x080c	ComponentVersion	string	
0x080d	ROMOperationMode	string[8]	
0x0810	OwnerName	string[32]	
0x0815	CanonImageType	string[32]	
0x0816	OriginalFileName	string[32]	
0x0817	ThumbnailFileName	string[32]	
0x100a	TargetImageType	int16u	0 = Real-world Subject 1 = Written Document
0x1010	ShutterReleaseMethod	int16u	0 = Single Shot 2 = Continuous Shooting
0x1011	ShutterReleaseTiming	int16u	0 = Priority on shutter 1 = Priority on focus
0x1016	ReleaseSetting	int16u	
0x101c	BaseISO	int16u	
0x1028	CanonFlashInfo?	int16u[4]	
0x1029	CanonFocalLength	-	--> <a href="#">Canon FocalLength Tags</a>
0x102a	CanonShotInfo	-	--> <a href="#">Canon ShotInfo Tags</a>
0x102c	CanonColorInfo2	no	
0x102d	CanonCameraSettings	-	--> <a href="#">Canon CameraSettings Tags</a>
0x1030	WhiteSample	-	--> <a href="#">CanonRaw WhiteSample Tags</a>
0x1031	SensorInfo	-	--> <a href="#">Canon SensorInfo Tags</a>
0x1033	CustomFunctions10D	-	--> <a href="#">CanonCustom Functions10D Tags</a>
	CustomFunctionsD30	-	--> <a href="#">CanonCustom FunctionsD30 Tags</a>
	CustomFunctionsD60	-	--> <a href="#">CanonCustom FunctionsD30 Tags</a>
	CustomFunctionsUnknown	-	--> <a href="#">CanonCustom FuncsUnknown Tags</a>
0x1038	CanonAFInfo	-	--> <a href="#">Canon AFInfo Tags</a>
0x1093	CanonFileInfo	-	--> <a href="#">Canon FileInfo Tags</a>
0x10a9	ColorBalance	-	--> <a href="#">Canon ColorBalance Tags</a>
0x10ae	ColorTemperature	int16u	
0x10b4	ColorSpace	int16u	1 = sRGB 2 = Adobe RGB 65535 = Uncalibrated
0x10b5	RawJpgInfo	-	--> <a href="#">CanonRaw RawJpgInfo Tags</a>
0x1803	ImageFormat	-	--> <a href="#">CanonRaw ImageFormat Tags</a>
0x1804	RecordID	int32u	
0x1806	SelfTimerTime	int32u	
0x1807	TargetDistanceSetting	float	
0x180b	SerialNumber	int32u	
	UnknownNumber?	yes	
0x180e	TimeStamp	-	--> <a href="#">CanonRaw TimeStamp Tags</a>

0x1810	ImageInfo	-	--> <a href="#">CanonRaw ImageInfo Tags</a>
0x1813	FlashInfo	-	--> <a href="#">CanonRaw FlashInfo Tags</a>
0x1814	MeasuredEV	float	(this is the Canon name for what could better be called MeasuredLV, and should be close to the calculated LightValue for a proper exposure with most models)
0x1817	FileNumber	int32u	
0x1818	ExposureInfo	-	--> <a href="#">CanonRaw ExposureInfo Tags</a>
0x1834	CanonModelID	int32u	--> <a href="#">Canon CanonModelID Values</a> (this is the complete list of model ID numbers, but note that many of these models do not produce CRW images)
0x1835	DecoderTable	-	--> <a href="#">CanonRaw DecoderTable Tags</a>
0x183b	SerialNumberFormat	int32u	0x90000000 = Format 1 0xa0000000 = Format 2
0x2005	RawData	no	
0x2007	JpgFromRaw	resize^	
0x2008	ThumbnailImage	resize^	
0x2804	ImageDescription	-	--> <a href="#">CanonRaw Tags</a>
0x2807	CameraObject	-	--> <a href="#">CanonRaw Tags</a>
0x3002	ShootingRecord	-	--> <a href="#">CanonRaw Tags</a>
0x3003	MeasuredInfo	-	--> <a href="#">CanonRaw Tags</a>
0x3004	CameraSpecification	-	--> <a href="#">CanonRaw Tags</a>
0x300a	ImageProps	-	--> <a href="#">CanonRaw Tags</a>
0x300b	ExifInformation	-	--> <a href="#">CanonRaw Tags</a>

## CanonRaw MakeModel Tags

Index1	Tag Name	Writable	Values / Notes
0	Make	string[6]	
6	Model	string	

## CanonRaw WhiteSample Tags

Index2	Tag Name	Writable	Values / Notes
1	WhiteSampleWidth	no	
2	WhiteSampleHeight	no	
3	WhiteSampleLeftBorder	no	
4	WhiteSampleTopBorder	no	
5	WhiteSampleBits	no	

## CanonRaw RawJpgInfo Tags

Index2	Tag Name	Writable	Values / Notes
1	RawJpgQuality	int16u	1 = Economy 2 = Normal 3 = Fine 5 = Superfine
2	RawJpgSize	int16u	0 = Large 1 = Medium 2 = Small
3	RawJpgWidth	int16u	
4	RawJpgHeight	int16u	

## CanonRaw ImageFormat Tags

Index4	Tag Name	Writable	Values / Notes

0	FileFormat	int32u	0x10000 = JPEG (lossy) 0x10002 = JPEG (non-quantization) 0x10003 = JPEG (lossy/non-quantization toggled) 0x20001 = CRW
1	TargetCompressionRatio	float	

## CanonRaw TimeStamp Tags

Index4	Tag Name	Writable	Values / Notes
0	DateTimeOriginal	int32u	
1	TimeZoneCode	int32s	
2	TimeZoneInfo	int32u	(set to 0x80000000 if TimeZoneCode is valid)

## CanonRaw ImageInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
1	ImageHeight	no	
2	PixelAspectRatio	no	
3	Rotation	int32s	
4	ComponentBitDepth	no	
5	ColorBitDepth	no	
6	ColorBW	no	

## CanonRaw FlashInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	FlashGuideNumber	float	
1	FlashThreshold	float	

## CanonRaw ExposureInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	ExposureCompensation	float	
1	ShutterSpeedValue	float	
2	ApertureValue	float	

## CanonRaw DecoderTable Tags

Index4	Tag Name	Writable	Values / Notes
0	DecoderTableName	no	
1	CompressedDataOffset	no	
3	CompressedDataLength	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Nov 28, 2019*

[-- ExifTool Tag Names](#)

# CanonVRD Tags

Canon Digital Photo Professional writes VRD (Recipe Data) information as a trailer record to JPEG, TIFF, CRW and CR2 images, or as stand-alone VRD or DR4 files. The tags listed below represent information found in these records. The complete VRD/DR4 data record may be accessed as a block using the Extra 'CanonVRD' or 'CanonDR4' tag, but this tag is not extracted or copied unless specified explicitly.

Tag ID	Tag Name	Writable	Values / Notes
0xfffff00f4	EditData	-	--> <a href="#">CanonVRD Edit Tags</a>
0xfffff00f5	IHLData	-	--> <a href="#">CanonVRD IHL Tags</a>
0xfffff00f6	XMP	undef!	--> <a href="#">XMP Tags</a>
0xfffff00f7	Edit4Data	-	--> <a href="#">CanonVRD Edit4 Tags</a>

## CanonVRD Edit Tags

Canon VRD edit information.

Index	Tag Name	Writable	Values / Notes
0	VRD1	-	--> <a href="#">CanonVRD Ver1 Tags</a>
1	VRDStampTool	-	--> <a href="#">CanonVRD StampTool Tags</a>
2	VRD2	-	--> <a href="#">CanonVRD Ver2 Tags</a>

## CanonVRD Ver1 Tags

Index1	Tag Name	Writable	Values / Notes
2	VRDVersion	no	
6	WBAdjRGGBLevels	int16u[4]	
24	WhiteBalanceAdj	int16u	0 = Auto 1 = Daylight 2 = Cloudy 3 = Tungsten 4 = Fluorescent 5 = Flash 8 = Shade 9 = Kelvin 30 = Manual (Click) 31 = Shot Settings
26	WBAdjColorTemp	int16u	
36	WBFineTuneActive	int16u	0 = No 1 = Yes
40	WBFineTuneSaturation	int16u	
44	WBFineTuneTone	int16u	
46	RawColorAdj	int16u	0 = Shot Settings 1 = Faithful 2 = Custom
48	RawCustomSaturation	int32s	
52	RawCustomTone	int32s	
56	RawBrightnessAdj	int32s	
60	ToneCurveProperty	int16u	0 = Shot Settings 4 = Custom 3 1 = Linear 5 = Custom 4 2 = Custom 1 6 = Custom 5 3 = Custom 2
122	DynamicRangeMin	int16u	
124	DynamicRangeMax	int16u	
272	ToneCurveActive	int16u	0 = No 1 = Yes
275	ToneCurveMode	int8u	0 = RGB 1 = Luminance
276	BrightnessAdj	int8s	
277	ContrastAdj	int8s	
278	SaturationAdj	int16s	
286	ColorToneAdj	int32s	(in degrees, so -1 is the same as 359)
294	LuminanceCurvePoints	int16u[21]	
336	LuminanceCurveLimits	int16u[4]	(4 numbers: input and output highlight and shadow points)

345	ToneCurveInterpolation	int8u	0 = Curve 1 = Straight
352	RedCurvePoints	int16u[21]	
394	RedCurveLimits	int16u[4]	
410	GreenCurvePoints	int16u[21]	
452	GreenCurveLimits	int16u[4]	
468	BlueCurvePoints	int16u[21]	
510	BlueCurveLimits	int16u[4]	
526	RGBCurvePoints	int16u[21]	
568	RGBCurveLimits	int16u[4]	
580	CropActive	int16u	0 = No 1 = Yes
582	CropLeft	int16u	(crop coordinates in original unrotated image)
584	CropTop	int16u	
586	CropWidth	int16u	
588	CropHeight	int16u	
602	SharpnessAdj	int16u	
608	CropAspectRatio	int16u	0 = Free 1 = 3:2 2 = 2:3 3 = 4:3 4 = 3:4 5 = A-size Landscape 6 = A-size Portrait 7 = Letter-size Landscape 8 = Letter-size Portrait 9 = 4:5 10 = 5:4 11 = 1:1 12 = Circle 65535 = Custom
610	ConstrainedCropWidth	float	
614	ConstrainedCropHeight	float	
618	CheckMark	int16u	0 = Clear 1 = 1 2 = 2 3 = 3
622	Rotation	int16u	0 = 0 1 = 90 2 = 180 3 = 270
624	WorkColorSpace	int16u	0 = sRGB 1 = Adobe RGB 2 = Wide Gamut RGB 3 = Apple RGB 4 = ColorMatch RGB

## CanonVRD StampTool Tags

Index1	Tag Name	Writable	Values / Notes
0	StampToolCount	no	

## CanonVRD Ver2 Tags

Tags added in DPP version 2.0 and later.

Index2	Tag Name	Writable	Values / Notes
2	PictureStyle	int16s	0 = Standard 4 = Faithful 1 = Portrait 5 = Monochrome 2 = Landscape 6 = Unknown? 3 = Neutral 7 = Custom
3	IsCustomPictureStyle	int16s	0 = No 1 = Yes
13	StandardRawColorTone	int16s	
14	StandardRawSaturation	int16s	

15	StandardRawContrast	int16s	
16	StandardRawLinear	int16s	0 = No 1 = Yes
17	StandardRawSharpness	int16s	
18	StandardRawHighlightPoint	int16s	
19	StandardRawShadowPoint	int16s	
20	StandardOutputHighlightPoint	int16s	
21	StandardOutputShadowPoint	int16s	
22	PortraitRawColorTone	int16s	
23	PortraitRawSaturation	int16s	
24	PortraitRawContrast	int16s	
25	PortraitRawLinear	int16s	0 = No 1 = Yes
26	PortraitRawSharpness	int16s	
27	PortraitRawHighlightPoint	int16s	
28	PortraitRawShadowPoint	int16s	
29	PortraitOutputHighlightPoint	int16s	
30	PortraitOutputShadowPoint	int16s	
31	LandscapeRawColorTone	int16s	
32	LandscapeRawSaturation	int16s	
33	LandscapeRawContrast	int16s	
34	LandscapeRawLinear	int16s	0 = No 1 = Yes
35	LandscapeRawSharpness	int16s	
36	LandscapeRawHighlightPoint	int16s	
37	LandscapeRawShadowPoint	int16s	
38	LandscapeOutputHighlightPoint	int16s	
39	LandscapeOutputShadowPoint	int16s	
40	NeutralRawColorTone	int16s	
41	NeutralRawSaturation	int16s	
42	NeutralRawContrast	int16s	
43	NeutralRawLinear	int16s	0 = No 1 = Yes
44	NeutralRawSharpness	int16s	
45	NeutralRawHighlightPoint	int16s	
46	NeutralRawShadowPoint	int16s	
47	NeutralOutputHighlightPoint	int16s	
48	NeutralOutputShadowPoint	int16s	
49	FaithfulRawColorTone	int16s	
50	FaithfulRawSaturation	int16s	
51	FaithfulRawContrast	int16s	
52	FaithfulRawLinear	int16s	0 = No 1 = Yes
53	FaithfulRawSharpness	int16s	
54	FaithfulRawHighlightPoint	int16s	
55	FaithfulRawShadowPoint	int16s	
56	FaithfulOutputHighlightPoint	int16s	
57	FaithfulOutputShadowPoint	int16s	
58	MonochromeFilterEffect	int16s	-2 = None -1 = Yellow 0 = Orange 1 = Red 2 = Green
59	MonochromeToningEffect	int16s	-2 = None -1 = Sepia 0 = Blue 1 = Purple 2 = Green
60	MonochromeContrast	int16s	
61	MonochromeLinear	int16s	0 = No 1 = Yes

62	MonochromeSharpness	int16s	
63	MonochromeRawHighlightPoint	int16s	
64	MonochromeRawShadowPoint	int16s	
65	MonochromeOutputHighlightPoint	int16s	
66	MonochromeOutputShadowPoint	int16s	
69	UnknownContrast?	int16s	
70	UnknownLinear?	int16s	0 = No 1 = Yes
71	UnknownSharpness?	int16s	
72	UnknownRawHighlightPoint?	int16s	
73	UnknownRawShadowPoint?	int16s	
74	UnknownOutputHighlightPoint?	int16s	
75	UnknownOutputShadowPoint?	int16s	
76	CustomColorTone	int16s	
77	CustomSaturation	int16s	
78	CustomContrast	int16s	
79	CustomLinear	int16s	0 = No 1 = Yes
80	CustomSharpness	int16s	
81	CustomRawHighlightPoint	int16s	
82	CustomRawShadowPoint	int16s	
83	CustomOutputHighlightPoint	int16s	
84	CustomOutputShadowPoint	int16s	
88	CustomPictureStyleData	no	(variable-length data structure)
94	ChrominanceNoiseReduction	int16s	(VRDVersion prior to 3.3.0) 0 = Off 58 = Low 100 = High (VRDVersion 3.3.0 or later) 0x0 = 0 0x64 = 6 0xa8 = 12 0xae = 18 0x10 = 1 0x74 = 7 0xa9 = 13 0xaf = 19 0x21 = 2 0x85 = 8 0xaa = 14 0xb0 = 20 0x32 = 3 0x96 = 9 0xab = 15 0x42 = 4 0xa6 = 10 0xac = 16 0x53 = 5 0xa7 = 11 0xad = 17
95	LuminanceNoiseReduction	int16s	(VRDVersion prior to 3.3.0) 0 = Off 65 = Low 100 = High (VRDVersion 3.3.0 or later) 0x0 = 0 0x8c = 6 0xb6 = 12 0xbc = 18 0x41 = 1 0x96 = 7 0xb7 = 13 0xbd = 19 0x64 = 2 0xa0 = 8 0xb8 = 14 0xbe = 20 0x6e = 3 0xaa = 9 0xb9 = 15 0x78 = 4 0xb4 = 10 0xba = 16 0x82 = 5 0xb5 = 11 0xbb = 17
96	ChrominanceNR_TIFF_JPEG	int16s	(VRDVersion prior to 3.3.0) 0 = Off 33 = Low 100 = High (VRDVersion 3.3.0 or later) 0x0 = 0 0x64 = 6 0xa8 = 12 0xae = 18 0x10 = 1 0x74 = 7 0xa9 = 13 0xaf = 19 0x21 = 2 0x85 = 8 0xaa = 14 0xb0 = 20 0x32 = 3 0x96 = 9 0xab = 15 0x42 = 4 0xa6 = 10 0xac = 16 0x53 = 5 0xa7 = 11 0xad = 17
98	ChromaticAberrationOn	int16s	0 = No 1 = Yes
99	DistortionCorrectionOn	int16s	0 = No 1 = Yes
100	PeripherallIlluminationOn	int16s	0 = No 1 = Yes
101	ColorBlur	int16s	0 = No 1 = Yes
102	ChromaticAberration	int16s	
103	DistortionCorrection	int16s	
104	PeripherallIllumination	int16s	

105	AberrationCorrectionDistance	int16s	(100% = infinity)
106	ChromaticAberrationRed	int16s	
107	ChromaticAberrationBlue	int16s	
109	LuminanceNR_TIFF_JPEG	int16s	(val = raw / 10)
110	AutoLightingOptimizerOn	int16s	0 = No 1 = Yes
111	AutoLightingOptimizer	int16s	100 = Low 200 = Standard 300 = Strong 32767 = n/a
117	StandardRawHighlight	int16s	
118	PortraitRawHighlight	int16s	
119	LandscapeRawHighlight	int16s	
120	NeutralRawHighlight	int16s	
121	FaithfulRawHighlight	int16s	
122	MonochromeRawHighlight	int16s	
123	UnknownRawHighlight?	int16s	
124	CustomRawHighlight	int16s	
126	StandardRawShadow	int16s	
127	PortraitRawShadow	int16s	
128	LandscapeRawShadow	int16s	
129	NeutralRawShadow	int16s	
130	FaithfulRawShadow	int16s	
131	MonochromeRawShadow	int16s	
132	UnknownRawShadow?	int16s	
133	CustomRawShadow	int16s	
139	AngleAdj	int32s	
142	CheckMark2	int16u	0 = Clear 3 = 3 1 = 1 4 = 4 2 = 2 5 = 5
144	UnsharpMask	int16s	0 = Off 1 = On
146	StandardUnsharpMaskStrength	int16s	
148	StandardUnsharpMaskFineness	int16s	
150	StandardUnsharpMaskThreshold	int16s	
152	PortraitUnsharpMaskStrength	int16s	
154	PortraitUnsharpMaskFineness	int16s	
156	PortraitUnsharpMaskThreshold	int16s	
158	LandscapeUnsharpMaskStrength	int16s	
160	LandscapeUnsharpMaskFineness	int16s	
162	LandscapeUnsharpMaskThreshold	int16s	
164	NeutralUnsharpMaskStrength	int16s	
166	NeutralUnsharpMaskFineness	int16s	
168	NeutralUnsharpMaskThreshold	int16s	
170	FaithfulUnsharpMaskStrength	int16s	
172	FaithfulUnsharpMaskFineness	int16s	
174	FaithfulUnsharpMaskThreshold	int16s	
176	MonochromeUnsharpMaskStrength	int16s	
178	MonochromeUnsharpMaskFineness	int16s	
180	MonochromeUnsharpMaskThreshold	int16s	
182	CustomUnsharpMaskStrength	int16s	
184	CustomUnsharpMaskFineness	int16s	
186	CustomUnsharpMaskThreshold	int16s	
188	CustomDefaultUnsharpStrength	int16s	
190	CustomDefaultUnsharpFineness	int16s	
192	CustomDefaultUnsharpThreshold	int16s	

214	CropCircleActive	int16s	0 = No 1 = Yes
215	CropCircleX	int16s	
216	CropCircleY	int16s	
217	CropCircleRadius	int16s	
220	DLOOn	int16s	0 = No 1 = Yes
221	DLOSetting	int16s	
222	DLOShootingDistance	int16s	(100% = infinity)
223	DLODataLength	no	
224	DLOInfo	-	--> <a href="#">CanonVRD DLOInfo Tags</a>
225	CameraRawColorTone	int16s	
226	CameraRawSaturation	int16s	
227	CameraRawContrast	int16s	
228	CameraRawLinear	int16s	0 = No 1 = Yes
229	CameraRawSharpness	int16s	
230	CameraRawHighlightPoint	int16s	
231	CameraRawShadowPoint	int16s	
232	CameraRawOutputHighlightPoint	int16s	
233	CameraRawOutputShadowPoint	int16s	

## CanonVRD DLOInfo Tags

Tags added when DLO (Digital Lens Optimizer) is on.

Index2	Tag Name	Writable	Values / Notes
4	DLOSettingApplied	int16s	
5	DLOVersion	string[10]	
10	DLOData	no	(variable-length Digital Lens Optimizer data, stored in JPEG-like format)

## CanonVRD IHL Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	IHL_EXIF	-	--> <a href="#">EXIF Tags</a>
	IHL_EXIF?	no	(extracted as a block if the <a href="#">Unknown</a> option is used, or processed as the first sub-document with the <a href="#">ExtractEmbedded</a> option)
0x0003	ThumbnailImage	no	
0x0004	PreviewImage	no	
0x0005	RawCodecVersion	no	
0x0006	CRCDevelParams?	no	

## CanonVRD Edit4 Tags

Canon DPP version 4 edit information.

Index	Tag Name	Writable	Values / Notes
0	DR4	-	--> <a href="#">CanonVRD DR4 Tags</a>

## CanonVRD DR4 Tags

Tags written by Canon DPP version 4 in CanonVRD trailers and DR4 files. Each tag has three associated flag words which are stored with the directory entry, some of which are extracted as a separate tag, indicated in the table below by a decimal appended to the tag ID (.0, .1 or .2).

Tag ID	Tag Name	Writable	Values / Notes
'header'	DR4Header	-	--> <a href="#">CanonVRD DR4Header Tags</a>
0x10002	Rotation	yes	
0x10003	AngleAdj	yes	

0x10021	CustomPictureStyle	yes	
0x10100	Rating	yes	0 = Unrated 1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 4294967295 = Rejected
0x10101	CheckMark	yes	0 = Clear 1 = 1 2 = 2 3 = 3 4 = 4 5 = 5
0x10200	WorkColorSpace	yes	1 = sRGB 2 = Adobe RGB 3 = Wide Gamut RGB 4 = Apple RGB 5 = ColorMatch RGB
0x20001	RawBrightnessAdj	yes	
0x20101	WhiteBalanceAdj	yes	-1 = Manual (Click) 0 = Auto 1 = Daylight 2 = Cloudy 3 = Tungsten 4 = Fluorescent 5 = Flash 8 = Shade 9 = Kelvin 255 = Shot Settings
0x20102	WBAdjColorTemp	yes	
0x20105	WBAdjMagentaGreen	yes	
0x20106	WBAdjBlueAmber	yes	
0x20125	WBAdjRGGBLevels	yes	
0x20200	GammaLinear	yes	0 = No 1 = Yes
0x20301	PictureStyle	yes	0x81 = Standard 0x82 = Portrait 0x83 = Landscape 0x84 = Neutral 0x85 = Faithful 0x86 = Monochrome 0x87 = Auto 0x88 = Fine Detail 0xf0 = Shot Settings 0xff = Custom
0x20303	ContrastAdj	yes	
0x20304	ColorToneAdj	yes	
0x20305	ColorSaturationAdj	yes	
0x20306	MonochromeToningEffect	yes	0 = None 1 = Sepia 2 = Blue 3 = Purple 4 = Green
0x20307	MonochromeFilterEffect	yes	0 = None 1 = Yellow 2 = Orange 3 = Red 4 = Green
0x20308	UnsharpMaskStrength	yes	
0x20309	UnsharpMaskFineness	yes	
0x2030a	UnsharpMaskThreshold	yes	
0x2030b	ShadowAdj	yes	
0x2030c	HighlightAdj	yes	
0x20310	SharpnessAdj	yes	0 = Sharpness 1 = Unsharp Mask
0x20310.0	SharpnessAdjOn	yes	0 = No 1 = Yes
0x20311	SharpnessStrength	yes	
0x20400	ToneCurve	-	--> <a href="#">CanonVRD ToneCurve Tags</a>
0x20400.1	ToneCurveOriginal	yes	0 = No 1 = Yes
0x20410	ToneCurveBrightness	yes	
0x20411	ToneCurveContrast	yes	
0x20500	AutoLightingOptimizer	yes	0 = Low 1 = Standard 2 = Strong
0x20500.0	AutoLightingOptimizerOn	yes	(ignored if gamma is linear) 0 = No 1 = Yes
0x20600	LuminanceNoiseReduction	yes	
0x20601	ChrominanceNoiseReduction	yes	

0x20670	ColorMoireReduction	yes	
0x20670.0	ColorMoireReductionOn	yes	0 = No 1 = Yes
0x20701	ShootingDistance	yes	(100% = infinity)
0x20702	PeripherallIllumination	yes	
0x20702.0	PeripherallIlluminationOn	yes	0 = No 1 = Yes
0x20703	ChromaticAberration	yes	
0x20703.0	ChromaticAberrationOn	yes	0 = No 1 = Yes
0x20704	ColorBlurOn	yes	0 = No 1 = Yes
0x20705	DistortionCorrection	yes	
0x20705.0	DistortionCorrectionOn	yes	0 = No 1 = Yes
0x20706	DLOSetting	yes	
0x20706.0	DLOOn	yes	0 = No 1 = Yes
0x20707	ChromaticAberrationRed	yes	
0x20708	ChromaticAberrationBlue	yes	
0x20709	DistortionEffect	yes	0 = Shot Settings 1 = Emphasize Linearity 2 = Emphasize Distance 3 = Emphasize Periphery 4 = Emphasize Center
0x2070b	DiffractionCorrectionOn	yes	0 = No 1 = Yes
0x20900	ColorHue	yes	
0x20901	SaturationAdj	yes	
0x20910	RedHSL	yes	
0x20911	OrangeHSL	yes	
0x20912	YellowHSL	yes	
0x20913	GreenHSL	yes	
0x20914	AquaHSL	yes	
0x20915	BlueHSL	yes	
0x20916	PurpleHSL	yes	
0x20917	MagentaHSL	yes	
0x20a00	GammalInfo	-	--> <a href="#">CanonVRD GammalInfo Tags</a>
0x20b10	DPRAWMicroadjustBackFront	yes	
0x20b12	DPRAWMicroadjustStrength	yes	
0x20b20	DPRAWBokehShift	yes	
0x20b21	DPRAWBokehShiftArea	yes	
0x20b30	DPRAWGhostingReductionArea	yes	
0x30101	CropAspectRatio	yes	0 = Free 4 = 2:3 8 = 4:5 1 = Custom 5 = 4:3 9 = 16:9 2 = 1:1 6 = 3:4 10 = 9:16 3 = 3:2 7 = 5:4
0x30102	CropAspectRatioCustom	yes	
0xf0100	CropInfo	-	--> <a href="#">CanonVRD CropInfo Tags</a>
0xf0500	CustomPictureStyleData	yes	
0xf0510	StampInfo	-	--> <a href="#">CanonVRD StampInfo Tags</a>
0xf0511	DustInfo	-	--> <a href="#">CanonVRD DustInfo Tags</a>
0xf0512	LensFocalLength	yes	

## CanonVRD DR4Header Tags

Index4	Tag Name	Writable	Values / Notes
3	DR4CameraModel	int32u	--> <a href="#">Canon CanonModelID Values</a>

## CanonVRD ToneCurve Tags

Index4	Tag Name	Writable	Values / Notes

0	ToneCurveColorSpace	int32u	0 = RGB 1 = Luminance
1	ToneCurveShape	int32u	0 = Curve 1 = Straight
3	ToneCurveInputRange	int32u[2]	(255 max)
5	ToneCurveOutputRange	int32u[2]	(255 max)
7	RGBCurvePoints	int32u[21]	
10	ToneCurveX	int32u	
11	ToneCurveY	int32u	
45	RedCurvePoints	int32u[21]	
83	GreenCurvePoints	int32u[21]	
121	BlueCurvePoints	int32u[21]	

## CanonVRD GammaInfo Tags

Index8	Tag Name	Writable	Values / Notes
2	GammaContrast	double	
3	GammaColorTone	double	
4	GammaSaturation	double	
5	GammaUnsharpMaskStrength	double	
6	GammaUnsharpMaskFineness	double	
7	GammaUnsharpMaskThreshold	double	
8	GammaSharpnessStrength	double	
9	GammaShadow	double	
10	GammaHighlight	double	
12	GammaBlackPoint	double	
13	GammaWhitePoint	double	
14	GammaMidPoint	double	
15	GammaCurveOutputRange	double[2]	(16383 max)

## CanonVRD CropInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	CropActive	int32s	0 = No 1 = Yes
1	CropRotatedOriginalWidth	int32s	
2	CropRotatedOriginalHeight	int32s	
3	CropX	int32s	
4	CropY	int32s	
5	CropWidth	int32s	
6	CropHeight	int32s	
7	CropRotation	int32s	
8	CropAngle	double	
10	CropOriginalWidth	int32s	
11	CropOriginalHeight	int32s	

## CanonVRD StampInfo Tags

Index4	Tag Name	Writable	Values / Notes
2	StampToolCount	no	

## CanonVRD DustInfo Tags

Index4	Tag Name	Writable	Values / Notes
2	DustDeleteApplied	no	0 = No 1 = Yes

[<-- ExifTool Tag Names](#)

# Casio Tags

Tag ID	Tag Name	Writable	Values / Notes	
0x0001	RecordingMode	int16u	1 = Single Shutter 2 = Panorama 3 = Night Scene 4 = Portrait 5 = Landscape	7 = Panorama 10 = Night Scene 15 = Portrait 16 = Landscape
0x0002	Quality	int16u	1 = Economy 2 = Normal 3 = Fine	
0x0003	FocusMode	int16u	2 = Macro 3 = Auto 4 = Manual 5 = Infinity 7 = Spot AF	
0x0004	FlashMode	int16u	1 = Auto 2 = On 3 = Off 4 = Off 5 = Red-eye Reduction 1 = Auto 2 = On 3 = Off 4 = Red-eye Reduction	
0x0005	FlashIntensity	int16u	11 = Weak 12 = Low 13 = Normal 14 = High 15 = Strong	
0x0006	ObjectDistance	int32u		
0x0007	WhiteBalance	int16u	1 = Auto 2 = Tungsten 3 = Daylight	4 = Fluorescent 5 = Shade 129 = Manual
0x000a	DigitalZoom	int32u	0x10000 = Off 0x10001 = 2x 0x19999 = 1.6x	0x20000 = 2x 0x33333 = 3.2x 0x40000 = 4x
0x000b	Sharpness	int16u	0 = Normal 1 = Soft 2 = Hard	16 = Normal 17 = +1 18 = -1
0x000c	Contrast	int16u	0 = Normal 1 = Low 2 = High	16 = Normal 17 = +1 18 = -1
0x000d	Saturation	int16u	0 = Normal 1 = Low 2 = High	16 = Normal 17 = +1 18 = -1
0x0014	ISO	int16u		
0x0015	FirmwareDate	string[18]		
0x0016	Enhancement	int16u	1 = Off 2 = Red 3 = Green 4 = Blue 5 = Flesh Tones	
0x0017	ColorFilter	int16u	1 = Off 2 = Black & White 3 = Sepia 4 = Red 5 = Green	6 = Blue 7 = Yellow 8 = Pink 9 = Purple
0x0018	AFPoint	int16u	(may not be valid for all models)	
			1 = Center 2 = Upper Left 3 = Upper Right 4 = Near Left/Right of Center 5 = Far Left/Right of Center 6 = Far Left/Right of Center/Bottom 7 = Top Near-left 8 = Near Upper/Left 9 = Top Near-right 10 = Top Left 11 = Top Center	

			12 = Top Right
			13 = Center Left
			14 = Center Right
			15 = Bottom Left
			16 = Bottom Center
			17 = Bottom Right

0x0019	FlashIntensity	int16u	1 = Normal 2 = Weak 3 = Strong
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>

## Casio Type2 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0002	PreviewImageSize	int16u[2]	
0x0003	PreviewImageLength	int32u*	
0x0004	PreviewImageStart	int32u*	
0x0008	QualityMode	int16u	0 = Economy 1 = Normal 2 = Fine
0x0009	CasioImageSize	int16u	0 = 640x480      21 = 2592x1944 4 = 1600x1200    22 = 2304x1728 5 = 2048x1536    36 = 3008x2008 20 = 2288x1712
0x000d	FocusMode	int16u	0 = Normal 1 = Macro
0x0014	ISO	int16u	3 = 50 4 = 64 6 = 100 9 = 200
0x0019	WhiteBalance	int16u	0 = Auto      3 = Tungsten 1 = Daylight    4 = Fluorescent 2 = Shade      5 = Manual
0x001d	FocalLength	rational64u	
0x001f	Saturation	int16u	0 = Low 1 = Normal 2 = High
0x0020	Contrast	int16u	0 = Low 1 = Normal 2 = High
0x0021	Sharpness	int16u	0 = Soft 1 = Normal 2 = Hard
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>
0x2000	PreviewImage	undef	
0x2001	FirmwareDate	string[18]	
0x2011	WhiteBalanceBias	int16u[2]	
0x2012	WhiteBalance	int16u	0 = Manual      6 = Fluorescent 1 = Daylight    9 = Tungsten? 2 = Cloudy      10 = Tungsten 3 = Shade      12 = Flash 4 = Flash?
0x2021	AFPointPosition	int16u[4]~	
0x2022	ObjectDistance	int32u	
0x2034	FlashDistance	int16u	
0x2076	SpecialEffectMode	int8u[3]	'0 0 0' = Off '1 0 0' = Makeup '2 0 0' = Mist Removal '3 0 0' = Vivid Landscape
0x2089	FaceInfo1	-	--> <a href="#">Casio FaceInfo1 Tags</a>
	FaceInfo2	-	--> <a href="#">Casio FaceInfo2 Tags</a>
	FaceInfoUnknown?	yes	
0x211c	FacesDetected	int8u	
0x3000	RecordMode	int16u	2 = Program AE 3 = Shutter Priority

			4 = Aperture Priority 5 = Manual 6 = Best Shot 17 = Movie 19 = Movie (19) 20 = YouTube Movie '2 0' = Program AE '3 0' = Shutter Priority '4 0' = Aperture Priority '5 0' = Manual '6 0' = Best Shot
0x3001	ReleaseMode	int16u	1 = Normal 3 = AE Bracketing 11 = WB Bracketing 13 = Contrast Bracketing 19 = High Speed Burst
0x3002	Quality	int16u	1 = Economy 2 = Normal 3 = Fine
0x3003	FocusMode	int16u	0 = Manual 1 = Focus Lock 2 = Macro 3 = Single-Area Auto Focus 5 = Infinity 6 = Multi-Area Auto Focus 8 = Super Macro
0x3006	HometownCity	string	
0x3007	BestShotMode	int16u	(EX-FC100) 0 = Off 11 = Sundown 1 = Auto 12 = High Speed Night Scene 2 = Portrait 13 = Night Scene Portrait 3 = Scenery 14 = Fireworks 4 = Portrait with Scenery 15 = High Speed Anti Shake 5 = Children 16 = Multi-motion Image 6 = Sports 17 = High Speed Best Selection 7 = Pet 18 = Move Out CS 8 = Flower 19 = Move In CS 9 = Natural Green 20 = Pre-record Movie 10 = Autumn Leaves 21 = For YouTube  (EX-FC150) 0 = Off 15 = High Speed Best Selection 1 = Auto 16 = Portrait 2 = Expression CS 17 = Scenery 3 = Baby CS 18 = Portrait with Scenery 4 = Child CS 19 = Flower 5 = Pet CS 20 = Natural Green 6 = Sports CS 21 = Autumn Leaves 7 = Child High Speed Movie 22 = Sundown 8 = Pet High Speed Movie 23 = Fireworks 9 = Sports High Speed Movie 24 = Multi-motion Image 10 = Lag Correction 25 = Move Out CS 11 = High Speed Lighting 26 = Move In CS 12 = High Speed Night Scene 27 = Pre-record Movie 13 = High Speed Night Scene and Portrait 28 = For YouTube 14 = High Speed Anti Shake  (EX-FC200S) 0 = Off 23 = Sports High Speed Movie 1 = Slow Motion Swing (behind) 24 = Portrait 2 = Slow Motion Swing (front) 25 = Scenery 3 = Self Slow Motion (behind) 26 = Portrait with Scenery 4 = Self Slow Motion (front) 27 = Children 5 = Swing Burst 28 = Sports 6 = HDR 29 = Candlelight Portrait 7 = HDR Art 30 = Party 8 = High Speed Night Scene 31 = Pet 9 = High Speed Night Scene and Portrait 32 = Flower 10 = High Speed Anti Shake 33 = Natural Green 11 = Multi SR Zoom 34 = Autumn Leaves 12 = Blurred Background 35 = Soft Flowing Water 13 = Wide Shot 36 = Splashing Water 14 = Slide Panorama 37 = Sundown 15 = High Speed Best Selection 38 = Fireworks 16 = Lag Correction 39 = Food 17 = High Speed CS 40 = Text 18 = Child CS 41 = Collection 19 = Pet CS 42 = Auction 20 = Sports CS

21 = Child High Speed Movie	43 = Pre-record Movie	
22 = Pet High Speed Movie	44 = For YouTube	
(EX-FH100)		
0 = Off	14 = High Speed Best Selection	
1 = Expression CS	15 = Portrait	
2 = Baby CS	16 = Scenery	
3 = Child CS	17 = Portrait with Scenery	
4 = Pet CS	18 = Flower	
5 = Sports CS	19 = Natural Green	
6 = Child High Speed Movie	20 = Autumn Leaves	
7 = Pet High Speed Movie	21 = Sundown	
8 = Sports High Speed Movie	22 = Fireworks	
9 = Lag Correction	23 = Multi-motion Image	
10 = High Speed Lighting	24 = Move Out CS	
11 = High Speed Night Scene	25 = Move In CS	
12 = High Speed Night Scene and Portrait	26 = Pre-record Movie	
13 = High Speed Anti Shake	27 = For YouTube	
(EX-G1)		
0 = Off	9 = Underwater	18 = Night Scene Portrait
1 = Auto	10 = Beach	19 = Fireworks
2 = Auto Best Shot	11 = Snow	20 = Food
3 = Dynamic Photo	12 = Children	21 = For eBay
4 = Interval Snapshot	13 = Sports	22 = Multi-motion Image
5 = Interval Movie	14 = Pet	23 = Pre-record Movie
6 = Portrait	15 = Flower	24 = For YouTube
7 = Scenery	16 = Sundown	25 = Voice Recording
8 = Portrait with Scenery	17 = Night Scene	
(EX-S10)		
0 = Off	13 = Natural Green	26 = Anti Shake
1 = Auto	14 = Autumn Leaves	27 = High Sensitivity
2 = Portrait	15 = Soft Flowing Water	28 = Underwater
3 = Scenery	16 = Splashing Water	29 = Monochrome
4 = Portrait with Scenery	17 = Sundown	30 = Retro
5 = Self-portrait (1 person)	18 = Night Scene	31 = Business Cards
6 = Self-portrait (2 people)	19 = Night Scene Portrait	32 = White Board
7 = Children	20 = Fireworks	33 = Silent
8 = Sports	21 = Food	34 = Pre-record Movie
9 = Candlelight Portrait	22 = Text	35 = For YouTube
10 = Party	23 = Collection	36 = Voice Recording
11 = Pet	24 = Auction	
12 = Flower	25 = Backlight	
(EX-S880)		
0 = Off	14 = Splashing Water	28 = Twilight
1 = Auto	15 = Sundown	29 = Layout (2 images)
2 = Portrait	16 = Night Scene	30 = Layout (3 images)
3 = Scenery	17 = Night Scene Portrait	31 = Auto Framing
4 = Portrait with Scenery	18 = Fireworks	32 = Old Photo
5 = Children	19 = Food	33 = Business Cards
6 = Sports	20 = Text	34 = White Board
7 = Candlelight Portrait	21 = Collection	35 = Silent
8 = Party	22 = Auction	36 = Short Movie
9 = Pet	23 = Backlight	37 = Past Movie
10 = Flower	24 = Anti Shake	38 = For YouTube
11 = Natural Green	25 = High Sensitivity	39 = Voice Recording
12 = Autumn Leaves	26 = Monochrome	
13 = Soft Flowing Water	27 = Retro	
(EX-Z16)		
0 = Off	8 = Party	16 = Food
1 = Auto	9 = Pet	17 = Text
2 = Portrait	10 = Flower	18 = For eBay
3 = Scenery	11 = Soft Flowing Water	19 = Backlight
4 = Portrait with Scenery	12 = Sundown	20 = Anti Shake
5 = Children	13 = Night Scene	21 = High Sensitivity
6 = Sports	14 = Night Scene Portrait	22 = For YouTube
7 = Candlelight Portrait	15 = Fireworks	23 = Voice Recording
(EX-Z9)		
0 = Off	8 = Party	16 = Food
1 = Auto	9 = Pet	17 = Text
2 = Movie	10 = Flower	18 = Auction
3 = Portrait	11 = Soft Flowing Water	19 = Backlight
4 = Scenery	12 = Sundown	20 = Anti Shake
5 = Children	13 = Night Scene	21 = High Sensitivity
6 = Sports	14 = Night Scene Portrait	22 = For YouTube
7 = Candlelight Portrait	15 = Fireworks	23 = Voice Recording
(EX-Z80)		
0 = Off	11 = Magazine	22 = Fireworks
1 = Auto	12 = Monochrome	23 = Underwater
2 = Portrait	13 = Retro	24 = Backlight

3 = Scenery	14 = Cross Filter	25 = High Sensitivity
4 = Portrait with Scenery	15 = Pastel	26 = Auction
5 = Pet	16 = Night Scene	27 = White Board
6 = Self-portrait (1 person)	17 = Night Scene Portrait	28 = Pre-record Movie
7 = Self-portrait (2 people)	18 = Party	29 = For YouTube
8 = Flower	19 = Sports	30 = Voice Recording
9 = Food	20 = Children	
10 = Fashion Accessories	21 = Sundown	
(EX-Z100 and EX-Z200)		
0 = Off	14 = Natural Green	28 = High Sensitivity
1 = Auto	15 = Autumn Leaves	29 = Underwater
2 = Auto Best Shot	16 = Soft Flowing Water	30 = Monochrome
3 = Portrait	17 = Splashing Water	31 = Retro
4 = Scenery	18 = Sundown	32 = Twilight
5 = Portrait with Scenery	19 = Night Scene	33 = ID Photo
6 = Self-portrait (1 person)	20 = Night Scene Portrait	34 = Business Cards
7 = Self-portrait (2 people)	21 = Fireworks	35 = White Board
8 = Children	22 = Food	36 = Silent
9 = Sports	23 = Text	37 = Pre-record Movie
10 = Candlelight Portrait	24 = Collection	38 = For YouTube
11 = Party	25 = Auction	39 = Voice Recording
12 = Pet	26 = Backlight	
13 = Flower	27 = Anti Shake	
(EX-Z750 JPEG images)		
0 = Off	11 = Soft Flowing Water	22 = Pastel
1 = Portrait	12 = Splashing Water	23 = Illustration
2 = Scenery	13 = Sundown	24 = Cross Filter
3 = Portrait with Scenery	14 = Night Scene	25 = Monochrome
4 = Children	15 = Night Scene Portrait	26 = Retro
5 = Sports	16 = Fireworks	27 = Twilight
6 = Candlelight Portrait	17 = Food	28 = Old Photo
7 = Party	18 = Text	29 = ID Photo
8 = Pet	19 = Collection	30 = Business Cards
9 = Flower	20 = Backlight	31 = White Board
10 = Natural Green	21 = Anti Shake	
(EX-Z750 movies)		
0 = Off	3 = Night Scene	6 = Silent
1 = Portrait	4 = Fireworks	
2 = Scenery	5 = Backlight	
(EX-Z850 JPEG images)		
0 = Off	12 = Soft Flowing Water	24 = High Sensitivity
1 = Portrait	13 = Splashing Water	25 = Pastel
2 = Scenery	14 = Sundown	26 = Illustration
3 = Portrait with Scenery	15 = Night Scene	27 = Cross Filter
4 = Children	16 = Night Scene Portrait	28 = Monochrome
5 = Sports	17 = Fireworks	29 = Retro
6 = Candlelight Portrait	18 = Food	30 = Twilight
7 = Party	19 = Text	31 = ID Photo
8 = Pet	20 = Collection	32 = Old Photo
9 = Flower	21 = For eBay	33 = Business Cards
10 = Natural Green	22 = Backlight	34 = White Board
11 = Autumn Leaves	23 = Anti Shake	
(EX-Z850 movies)		
0 = Off	4 = Fireworks	8 = Short Movie
1 = Portrait	5 = Backlight	9 = Past Movie
2 = Scenery	6 = High Sensitivity	
3 = Night Scene	7 = Silent	
(EX-Z1050)		
0 = Off	13 = Autumn Leaves	26 = High Sensitivity
1 = Auto	14 = Soft Flowing Water	27 = Underwater
2 = Movie	15 = Splashing Water	28 = Monochrome
3 = Portrait	16 = Sundown	29 = Retro
4 = Scenery	17 = Night Scene	30 = Twilight
5 = Portrait with Scenery	18 = Night Scene Portrait	31 = Layout (2 images)
6 = Children	19 = Fireworks	32 = Layout (3 images)
7 = Sports	20 = Food	33 = Auto Framing
8 = Candlelight Portrait	21 = Text	34 = ID Photo
9 = Party	22 = Collection	35 = Old Photo
10 = Pet	23 = For eBay	36 = Business Cards
11 = Flower	24 = Backlight	37 = White Board
12 = Natural Green	25 = Anti Shake	38 = Voice Recording
(EX-Z1080)		
0 = Off	14 = Soft Flowing Water	28 = Monochrome
1 = Auto	15 = Splashing Water	29 = Retro
2 = Movie	16 = Sundown	30 = Twilight
3 = Portrait	17 = Night Scene	31 = Layout (2 images)
4 = Scenery	18 = Night Scene Portrait	32 = Layout (3 images)
5 = Portrait with Scenery	19 = Fireworks	33 = Auto Framing

6 = Children	20 = Food	34 = ID Photo
7 = Sports	21 = Text	35 = Old Photo
8 = Candlelight Portrait	22 = Collection	36 = Business Cards
9 = Party	23 = For eBay	37 = White Board
10 = Pet	24 = Backlight	38 = Short Movie
11 = Flower	25 = Anti Shake	39 = Past Movie
12 = Natural Green	26 = High Sensitivity	40 = For YouTube
13 = Autumn Leaves	27 = Underwater	41 = Voice Recording

(EX-Z1200 JPEG images)

0 = Off	12 = Soft Flowing Water	24 = Underwater
1 = Portrait	13 = Splashing Water	25 = Monochrome
2 = Scenery	14 = Sundown	26 = Retro
3 = Portrait with Scenery	15 = Night Scene	27 = Twilight
4 = Children	16 = Night Scene Portrait	28 = Layout (2 images)
5 = Sports	17 = Fireworks	29 = Layout (3 images)
6 = Candlelight Portrait	18 = Food	30 = Auto Framing
7 = Party	19 = Text	31 = ID Photo
8 = Pet	20 = Collection	32 = Old Photo
9 = Flower	21 = Auction	33 = Business Cards
10 = Natural Green	22 = Backlight	34 = White Board
11 = Autumn Leaves	23 = High Sensitivity	

(EX-Z1200 movies)

0 = Off	4 = Fireworks	8 = Short Movie
1 = Portrait	5 = Backlight	9 = Past Movie
2 = Scenery	6 = High Sensitivity	
3 = Night Scene	7 = Silent	

(EX-Z2000)

0 = Off	14 = Autumn Leaves	28 = Crayon
1 = Auto	15 = Soft Flowing Water	29 = Water Color
2 = Premium Auto	16 = Splashing Water	30 = Monochrome
3 = Dynamic Photo	17 = Sundown	31 = Retro
4 = Portrait	18 = Night Scene	32 = Twilight
5 = Scenery	19 = Night Scene Portrait	33 = Multi-motion Image
6 = Portrait with Scenery	20 = Fireworks	34 = ID Photo
7 = Children	21 = Food	35 = Business Cards
8 = Sports	22 = Text	36 = White Board
9 = Candlelight Portrait	23 = Collection	37 = Silent
10 = Party	24 = For eBay	38 = Pre-record Movie
11 = Pet	25 = Backlight	39 = For YouTube
12 = Flower	26 = High Sensitivity	40 = Voice Recording
13 = Natural Green	27 = Oil Painting	

(EX-Z2300)

0 = Off	14 = Autumn Leaves	28 = Crayon
1 = Auto	15 = Soft Flowing Water	29 = Water Color
2 = Premium Auto	16 = Splashing Water	30 = Monochrome
3 = Dynamic Photo	17 = Sundown	31 = Retro
4 = Portrait	18 = Night Scene	32 = Twilight
5 = Scenery	19 = Night Scene Portrait	33 = Multi-motion Image
6 = Portrait with Scenery	20 = Fireworks	34 = ID Photo
7 = Children	21 = Food	35 = Business Cards
8 = Sports	22 = Text	36 = White Board
9 = Candlelight Portrait	23 = Collection	37 = Silent
10 = Party	24 = Auction	38 = Pre-record Movie
11 = Pet	25 = Backlight	39 = For YouTube
12 = Flower	26 = High Sensitivity	40 = Voice Recording
13 = Natural Green	27 = Oil Painting	

(EX-Z3000)

0 = Off	3 = Portrait with Scenery	6 = Night Scene
1 = Portrait	4 = Children	
2 = Scenery	5 = Sports	

(EX-ZR100)

0 = Off	17 = Candlelight Portrait
1 = Child CS	18 = Party
2 = Pet CS	19 = Pet
3 = Sports CS	20 = Flower
4 = Child High Speed Movie	21 = Natural Green
5 = Pet High Speed Movie	22 = Autumn Leaves
6 = Sports High Speed Movie	23 = Soft Flowing Water
7 = Multi SR Zoom	24 = Splashing Water
8 = Lag Correction	25 = Sundown
9 = High Speed Night Scene	26 = Fireworks
10 = High Speed Night Scene and Portrait	27 = Food
11 = High Speed Anti Shake	28 = Text
12 = Portrait	29 = Collection
13 = Scenery	30 = For eBay
14 = Portrait with Scenery	31 = Pre-record Movie
15 = Children	32 = For YouTube
16 = Sports	

(EX-ZR200)

0 = Off	18 = Sports
1 = High Speed Night Scene	19 = Candlelight Portrait
2 = High Speed Night Scene and Portrait	20 = Party
3 = High Speed Anti Shake	21 = Pet
4 = Blurred Background	22 = Flower
5 = Wide Shot	23 = Natural Green
6 = High Speed Best Selection	24 = Autumn Leaves
7 = Lag Correction	25 = Soft Flowing Water
8 = Child CS	26 = Splashing Water
9 = Pet CS	27 = Sundown
10 = Sports CS	28 = Fireworks
11 = Child High Speed Movie	29 = Food
12 = Pet High Speed Movie	30 = Text
13 = Sports High Speed Movie	31 = Collection
14 = Portrait	32 = Auction
15 = Scenery	33 = Pre-record Movie
16 = Portrait with Scenery	34 = For YouTube
17 = Children	

(QV-4000)

0 = Off	2 = Scenery	4 = Night Scene
1 = People	3 = Flower	5 = Soft Focus

(EX-ZR300)

1 = High Speed Night Shot	19 = Children
2 = Blurred Background	20 = Sports
3 = Toy Camera	21 = Candlelight Portrait
4 = Soft Focus	22 = Party
5 = Light Tone	23 = Pet
6 = Pop	24 = Flower
7 = Sepia	25 = Natural Green
8 = Monochrome	26 = Autumn Leaves
9 = Miniature	27 = Soft Flowing Water
10 = Wide Shot	28 = Splashing Water
11 = High Speed Best Selection	29 = Sundown
12 = Lag Correction	30 = Fireworks
13 = High Speed Night Scene	31 = Food
14 = High Speed Night Scene and Portrait	32 = Text
15 = High Speed Anti Shake	33 = Collection
16 = Portrait	34 = Auction
17 = Scenery	35 = Prerecord (Movie)
18 = Portrait with Scenery	36 = For YouTube

(other models not yet decoded)

0x3008	AutoISO	int16u	1 = On 2 = Off 7 = On (high sensitivity) 8 = On (anti-shake) 10 = High Speed
0x3009	AFMode	int16u	0 = Off    3 = Face Detection 1 = Spot    4 = Tracking 2 = Multi    5 = Intelligent
0x3011	Sharpness	undef[2]	
0x3012	Contrast	undef[2]	
0x3013	Saturation	undef[2]	
0x3014	ISO	int16u	
0x3015	ColorMode	int16u	0 = Off 2 = Black & White 3 = Sepia
0x3016	Enhancement	int16u	0 = Off 1 = Scenery 3 = Green 5 = Underwater 9 = Flesh Tones
0x3017	ColorFilter	int16u	0 = Off    5 = Red 1 = Blue    6 = Purple 3 = Green    7 = Pink 4 = Yellow
0x301b	ArtMode	int16u	0 = Normal 8 = Silent Movie 39 = HDR 45 = Premium Auto 47 = Painting 49 = Crayon Drawing 51 = Panorama 52 = Art HDR

62 = High Speed Night Shot  
 64 = Monochrome  
 67 = Toy Camera  
 68 = Pop Art  
 69 = Light Tone

0x301c	SequenceNumber	int16u	
0x301d	BracketSequence	int16u[2]	
0x3020	ImageStabilization	int16u	0 = Off 1 = On 2 = Best Shot 3 = Movie Anti-Shake '0 0' = Off '0 1' = Off (1) '0 3' = CCD Shift '2 1' = High Sensitivity '2 3' = CCD Shift + High Sensitivity '16 0' = Slow Shutter '18 0' = Anti-Shake '20 0' = High Sensitivity
0x302a	LightingMode	int16u	0 = Off 1 = High Dynamic Range 5 = Shadow Enhance Low 6 = Shadow Enhance High
0x302b	PortraitRefiner	int16u	0 = Off 1 = +1 2 = +2
0x3030	SpecialEffectLevel	int16u	
0x3031	SpecialEffectSetting	int16u	0 = Off 1 = Makeup 2 = Mist Removal 3 = Vivid Landscape 16 = Art Shot
0x3103	DriveMode	int16u	0 = Single Shot 1 = Continuous Shooting 2 = Continuous (2 fps) 3 = Continuous (3 fps) 4 = Continuous (4 fps) 5 = Continuous (5 fps) 6 = Continuous (6 fps) 7 = Continuous (7 fps) <span style="float: right;">             10 = Continuous (10 fps)              12 = Continuous (12 fps)              15 = Continuous (15 fps)              20 = Continuous (20 fps)              30 = Continuous (30 fps)              40 = Continuous (40 fps)              60 = Continuous (60 fps)              240 = Auto-N           </span>
0x310b	ArtModeParameters	int8u[3]	
0x4001	CaptureFrameRate	int16u[n]	
0x4003	VideoQuality	int16u	1 = Standard 3 = HD (720p) 4 = Full HD (1080p) 5 = Low

## Casio FaceInfo1 Tags

Face-detect tags extracted from models such as the EX-H5.

Index1	Tag Name	Writable	Values / Notes
0	FacesDetected	int8u	
1	FaceDetectFrameSize	int16u[2]	
13	Face1Position	int16u[4]	(left, top, right and bottom of detected face in coordinates of FaceDetectFrameSize, with increasing Y downwards)
124	Face2Position	int16u[4]	
235	Face3Position	int16u[4]	
346	Face4Position	int16u[4]	
457	Face5Position	int16u[4]	
568	Face6Position	int16u[4]	
679	Face7Position	int16u[4]	
790	Face8Position	int16u[4]	
901	Face9Position	int16u[4]	
1012	Face10Position	int16u[4]	

# Casio FaceInfo2 Tags

Face-detect tags extracted from models such as the EX-H20G and EX-ZR100.

Index1	Tag Name	Writable	Values / Notes
2	FacesDetected	int8u	
4	FaceDetectFrameSize	int16u[2]	
8	FaceOrientation	int8u	(orientation of face relative to unrotated image) 0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW 3 = Rotate 180
24	Face1Position	int16u[4]	(left, top, right and bottom of detected face in coordinates of FaceDetectFrameSize, with increasing Y downwards)
76	Face2Position	int16u[4]	
128	Face3Position	int16u[4]	
180	Face4Position	int16u[4]	
232	Face5Position	int16u[4]	
284	Face6Position	int16u[4]	
336	Face7Position	int16u[4]	
388	Face8Position	int16u[4]	
440	Face9Position	int16u[4]	
492	Face10Position	int16u[4]	

# Casio QVCI Tags

This information is found in the APP1 QVCI segment of JPEG images from the Casio QV-7000SX.

Index1	Tag Name	Writable	Values / Notes
44	CasioQuality	no	1 = Economy 2 = Normal 3 = Fine 4 = Super Fine
55	FocalRange?	no	
77	DateTimeOriginal	no	
98	ModelType	no	
114	ManufactureIndex	no	
124	ManufactureCode	no	

# Casio AVI Tags

This information is found in Casio GV-10 AVI videos.

Index1	Tag Name	Writable	Values / Notes
0	Software	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Dec 6, 2022

[--> ExifTool Tag Names](#)

# Composite Tags

The values of the composite tags are **Derived From** the values of other tags. These are convenience tags which are calculated after all other information is extracted. Only a few of these tags are writable directly, the others are changed by writing the corresponding **Derived From** tags. User-defined Composite tags, also useful for custom-formatting of tag values, may be created via the [ExifTool configuration file](#).

Tag Name	Writable	Derived From	Values / Notes
AdvancedSceneMode	no	Model SceneMode AdvancedSceneType	--> <a href="#">Panasonic AdvancedSceneMode Values</a>
Aperture	no	FNumber ApertureValue	
AudioBitrate	no	MPEG:MPEGAudioVersion MPEG:SampleRate MPEG:VBRBytes MPEG:VBRFrames	(calculated for variable-bitrate MPEG audio)
AutoFocus	no	Nikon:FocusMode	0 = Off 1 = On
AvgBitrate	no	QuickTime::MediaContentSize QuickTime::Duration	
BlueBalance	no	WB_RGGBLevels WB_RGBGLevels WB_RBGGLevels WB_GRBGLevels WB_GRGBLevels WB_GBRGLevels WB_RGBLevels WB_GRBLevels WB_RBLevels WBBlueLevel WBGreenLevel	
CDDBDiscPlayTime	no	CDDB1Info	
CDDBDiscTracks	no	CDDB1Info	
CFAPattern	no	CFARepeatPatternDim CFAPattern2	
CircleOfConfusion	no	ScaleFactor35efl	(calculated as D/1440, where D is the focal plane diagonal in mm. This value may be incorrect if the image has been resized)
ConditionalFEC	no	FlashExposureComp FlashBits	
ContrastDetectAF	no	Nikon:FocusMode Nikon:AFDetectionMethod	0 = Off 1 = On
DOF	no	FocalLength Aperture CircleOfConfusion FocusDistance SubjectDistance ObjectDistance ApproximateFocusDistance FocusDistanceLower FocusDistanceUpper	(this value may be incorrect if the image has been resized)
DateCreated	no	Kodak:YearCreated Kodak:MonthDayCreated	
DateTimeCreated	no	IPTC:DateCreated IPTC:TimeCreated	
DateTimeOriginal	no	DateTimeCreated DateCreated TimeCreated	
DateTimeOriginal	no	ID3:RecordingTime ID3:Year ID3:Date ID3:Time	

DepthMapTiff	no	DepthMapData DepthMapWidth DepthMapHeight	
DigitalCreationDateTime	no	IPTC:DigitalCreationDate IPTC:DigitalCreationTime	
DigitalZoom	no	Canon:ZoomSourceWidth Canon:ZoomTargetWidth Canon:DigitalZoom	
DriveMode	no	ContinuousDrive SelfTimer	0 = Continuous Shooting 1 = Self-timer Operation 2 = Single-frame Shooting
Duration	no	AIFF:SampleRate AIFF:NumSampleFrames	
Duration	no	APE:SampleRate APE:TotalFrames APE:BlocksPerFrame APE:FinalFrameBlocks	
Duration	no	FLAC:SampleRate FLAC:TotalSamples	
Duration	no	FileSize ID3Size MPEG:AudioBitrate MPEG:VideoBitrate MPEG:VBRFrames MPEG:SampleRate MPEG:MPEGAudioVersion	
Duration	no	RIFF:FrameRate RIFF:FrameCount VideoFrameRate VideoFrameCount	
Duration	no	RIFF:AvgBytesPerSec FileSize FrameCount VideoFrameCount	
Duration	no	Vorbis:NominalBitrate FileSize	
ExtenderStatus	no	Olympus:Extender Olympus:LensType MaxApertureValue	(Olympus cameras have the quirk that they may retain the extender settings after the extender is removed until the camera is powered off. This tag is an attempt to represent the actual status of the extender.) 0 = Not attached 1 = Attached 2 = Removed
FOV	no	FocalLength ScaleFactor35efl FocusDistance	(calculated for the long image dimension. This value may be incorrect for fisheye lenses, or if the image has been resized)
FileNumber	yes	DirectoryIndex FileIndex	
Flash	yes	XMP:FlashFired XMP:FlashReturn XMP:FlashMode XMP:FlashFunction XMP:FlashRedEyeMode XMP:Flash	--> <a href="#">EXIF Flash Values</a> (facilitates copying camera flash information between XMP and EXIF)
FlashType	no	FlashBits	(may report "Built-in Flash" for some Canon cameras with external flash in manual mode) 0 = Built-In Flash 1 = External
FocalLength35efl	no	FocalLength ScaleFactor35efl	(this value may be incorrect if the image has been resized)
FocusDistance	no	Sony:FocusPosition FocalLength	(distance in metres = FocusPosition * FocalLength / 1000)
FocusDistance2	no	Sony:FocusPosition2 FocalLengthIn35mmFormat	

GPSAltitude	no	GPS:GPSAltitude GPS:GPSAltitudeRef XMP:GPSAltitude XMP:GPSAltitudeRef	
GPSAltitude	no	QuickTime:GPSCoordinates	
GPSAltitude	no	QuickTime:LocationInformation	
GPSAltitudeRef	no	QuickTime:GPSCoordinates	0 = Above Sea Level 1 = Below Sea Level
GPSAltitudeRef	no	QuickTime:LocationInformation	0 = Above Sea Level 1 = Below Sea Level
GPSDateTime	no	GPS:GPSTimeStamp GPS:GPSTimeStamp	
GPSDateTime	no	Parrot:GPSLatitude Main:CreateDate SampleTime	
GPSDateTime	no	Sony:GPSTimeStamp Sony:GPSTimeStamp	
GPSDestLatitude	no	GPS:GPSDestLatitude GPS:GPSDestLatitudeRef	
GPSDestLatitudeRef	no	XMP-exif:GPSDestLatitude	'N' = North 'S' = South
GPSDestLongitude	no	GPS:GPSDestLongitude GPS:GPSDestLongitudeRef	
GPSDestLongitudeRef	no	XMP-exif:GPSDestLongitude	'E' = East 'W' = West
GPSLatitude	yes/	GPS:GPSLatitude GPS:GPSLatitudeRef	
GPSLatitude	no	QuickTime:GPSCoordinates	
GPSLatitude	no	QuickTime:LocationInformation	
GPSLatitude	no	Sony:GPSLatitude Sony:GPSLatitudeRef	
GPSLatitudeRef	no	XMP-exif:GPSLatitude	'N' = North 'S' = South
GPSLongitude	yes/	GPS:GPSLongitude GPS:GPSLongitudeRef	
GPSLongitude	no	QuickTime:GPSCoordinates	
GPSLongitude	no	QuickTime:LocationInformation	
GPSLongitude	no	Sony:GPSLongitude Sony:GPSLongitudeRef	
GPSLongitudeRef	no	XMP-exif:GPSLongitude	'E' = East 'W' = West
GPSPosition	yes!	GPSLatitude GPSLongitude	(when written, writes GPSLatitude, GPSLatitudeRef, GPSLongitude and GPSLongitudeRef. This tag may be written using the same coordinate format as provided by Google Maps when right-clicking on a location)
HiddenData	no	Sony:HiddenDataOffset Sony:HiddenDataLength	(hidden data in some Sony JPG and ARW images, extracted only if specifically requested)
HyperfocalDistance	no	FocalLength Aperture CircleOfConfusion	(this value may be incorrect if the image has been resized)
IDCPreviewImage	no	IDCPreviewStart IDCPreviewLength	
ISO	no	Canon:CameralISO Canon:BaseISO Canon:AutoISO	(use CameralISO if numerical, otherwise calculate as BaseISO * AutoISO / 100)
ImageHeight	no	IFD0:SensorTopBorder IFD0:SensorBottomBorder	
ImageHeight	no	Main:PostScript:ImageData PostScript:BoundingBox	
ImageSize	no	ImageWidth ImageHeight	

		ExifImageWidth ExifImageHeight RawImageCroppedSize	
ImageWidth	no	IFD0:SensorLeftBorder IFD0:SensorRightBorder	
ImageWidth	no	Main:PostScript:ImageData PostScript:BoundingBox	
JpgFromRaw	yes	JpgFromRawStart JpgFromRawLength	(this tag is writable, and may be used to update existing embedded images, but not create or delete them)
Lens	no	Canon:MinFocalLength Canon:MaxFocalLength	
Lens35efl	no	Canon:MinFocalLength Canon:MaxFocalLength Lens ScaleFactor35efl	
LensID	no	LensType FocalLength MaxAperture MaxApertureValue MinFocalLength MaxFocalLength LensModel LensFocalRange LensSpec LensType2 LensType3 LensFocalLength RFLensType	(attempt to identify the actual lens from all lenses with a given LensType. Applies only to LensType values with a lookup table. May be configured by adding user-defined lenses)
LensID	no	LensModel Lens XMP-aux:LensID Make	
LensID	no	Nikon:LensIDNumber LensFStops MinFocalLength MaxFocalLength MaxApertureAtMinFocal MaxApertureAtMaxFocal MCUVersion Nikon:LensType	--> <a href="#">Nikon LensID Values</a>
LensID	no	Ricoh:LensFirmware	--> <a href="#">Ricoh LensID Values</a>
LensID	no	XMP-aux:LensID Make LensInfo FocalLength LensModel MaxApertureValue	(attempt to convert numerical XMP-aux:LensID stored by Adobe applications)
LensSpec	no	Nikon:Lens Nikon:LensType	
LensType	no	LensTypeMake LensTypeModel	--> <a href="#">Olympus LensType Values</a> (based on tags found in some Panasonic RW2 images)
LightValue	no	Aperture ShutterSpeed ISO	(calculated LV = 2 * log2(Aperture) - log2(ShutterSpeed) - log2(ISO/100); similar to exposure value but normalized to ISO 100)
MPIImage	no	MPIImageStart MPIImageLength MPIImageType	(the first MPF "Large Thumbnail" is extracted as PreviewImage, and the rest of the embedded MPF images are extracted as MPIImage#. The <a href="#">ExtractEmbedded</a> option may be used to extract information from these embedded images.)
Megapixels	no	ImageSize	
OriginalDecisionData	yes!	OriginalDecisionDataOffset	
OtherImage	yes	OtherImageStart OtherImageLength	(this tag is writable, and may be used to update existing embedded images, but not create or delete them)

		OtherImageStart (1) OtherImageLength (1)	
PeakSpectralSensitivity	no	FLIR:PlanckB	
PhaseDetectAF	no	Nikon:FocusPointSchema Nikon:AFDetectionMethod	0 = Off                    3 = On (39-point) 1 = On (51-point)      7 = On (153-point) 2 = On (11-point)      9 = On (105-point)
PreviewImage	yes	PreviewImageStart PreviewImageLength PreviewImageValid PreviewImageStart (1) PreviewImageLength (1)	(this tag is writable, and may be used to update existing embedded images, but not create or delete them)
PreviewImage	no	ScreenNail	
PreviewImageSize	no	PreviewImageWidth PreviewImageHeight	
PreviewJXL	no	PreviewJXLStart PreviewJXLLength PreviewJXLStart (1) PreviewJXLLength (1)	
RedBalance	no	WB_RGGBLevels WB_RGBLevels WB_RBGGLevels WB_GRBGLevels WB_GRGBLevels WB_GBRGLevels WB_RGBLevels WB_GRBLevels WB_RBLevels WBRedLevel WBGreenLevel	
RedEyeReduction	no	CanonFlashMode FlashBits	0 = Off 1 = On
RicohPitch	no	Ricoh:Accelerometer	
RicohRoll	no	Ricoh:Accelerometer	
Rotation	yes!	QuickTime:MatrixStructure QuickTime:HandlerType	(degrees of clockwise camera rotation. Writing this tag updates QuickTime MatrixStructure for all tracks with a non-zero image size)
RunTimeSincePowerUp	no	Apple:RunTimeValue Apple:RunTimeScale	
ScaleFactor35efl	no	FocalLength FocalLengthIn35mmFormat Composite:DigitalZoom FocalPlaneDiagonal SensorSize FocalPlaneXSize FocalPlaneYSize FocalPlaneResolutionUnit FocalPlaneXResolution FocalPlaneYResolution ExifImageWidth ExifImageHeight CanonImageWidth CanonImageHeight ImageWidth ImageHeight	(this value and any derived values may be incorrect if the image has been resized)
ShootingMode	no	CanonExposureMode EasyMode BulbDuration	
ShutterCurtainHack	no	FlashBits ShutterCurtainSync	0 = 1st-curtain sync 1 = 2nd-curtain sync
ShutterSpeed	no	ExposureTime ShutterSpeedValue BulbDuration	
SingleShotDepthMapTiff	no	SingleShotDepthMap SegWidth SegHeight	

SubSecCreateDate	yes	EXIF:CreateDate SubSecTimeDigitized OffsetTimeDigitized	
SubSecDateTimeOriginal	yes	EXIF:DateTimeOriginal SubSecTimeOriginal OffsetTimeOriginal	
SubSecModifyDate	yes	EXIF:ModifyDate SubSecTime OffsetTime	
ThumbnailImage	yes	ThumbnailOffset ThumbnailLength	(this tag is writable, and may be used to update existing thumbnails, but may only create a thumbnail in IFD1 of certain types of files. Note that for this and other Composite embedded-image tags the family 0 and 1 groups match those of the originating tags)
ThumbnailTIFF	no	SubfileType Compression ImageWidth ImageHeight BitsPerSample PhotometricInterpretation StripOffsets SamplesPerPixel RowsPerStrip StripByteCounts PlanarConfiguration Orientation	
VolumeSize	no	ISO:VolumeBlockCount ISO:VolumeBlockSize	
WB_RGBLevels	no	KDC_IFD:WhiteBalance WB_RGBLevelsAuto WB_RGBLevelsFluorescent WB_RGBLevelsTungsten WB_RGBLevelsDaylight WB_RGBLevels4 WB_RGBLevels5 WB_RGBLevelsShade	
WB_RGBLevels	no	KodakIFD:WhiteBalance WB_RGBMul0 WB_RGBMul1 WB_RGBMul2 WB_RGBMul3 WB_RGBCoeffs0 WB_RGBCoeffs1 WB_RGBCoeffs2 WB_RGBCoeffs3 KodakIFD:ColorTemperature Kodak:WB_RGBLevels	
WB_RGGBLevels	no	Canon:WhiteBalance WB_RGGBLevelsAsShot WB_RGGBLevelsAuto WB_RGGBLevelsDaylight WB_RGGBLevelsCloudy WB_RGGBLevelsTungsten WB_RGGBLevelsFluorescent WB_RGGBLevelsFlash WB_RGGBLevelsCustom WB_RGGBLevelsShade WB_RGGBLevelsKelvin	
WB_RGGBLevels	no	WB_RGGBLevelsUncorrected WB_RGGBLevelsBlack	
ZoomedPreviewImage	no	ZoomedPreviewStart ZoomedPreviewLength	

[<-- ExifTool Tag Names](#)

# DICOM Tags

The DICOM format is based on the ACR-NEMA specification, but adds a file header and a number of new tags. ExifTool will extract information from either type of file. The Tag ID's in the following table are the tag group and element numbers in hexadecimal, as given in the DICOM specification (see <http://medical.nema.org/>). The table below contains tags from the DICOM 2009 and earlier specifications plus some vendor-specific private tags.

Note that DICOM information may be saved in other file formats using the [XMP DICOM Tags](#).

Tag ID	Tag Name	Writable	Values / Notes
0002,0000	FileMetaInfoGroupLength	no	
0002,0001	FileMetaInfoVersion	no	
0002,0002	MediaStorageSOPClassUID	no	
0002,0003	MediaStorageSOPInstanceUID	no	
0002,0010	TransferSyntaxUID	no	
0002,0012	ImplementationClassUID	no	
0002,0013	ImplementationVersionName	no	
0002,0016	SourceApplicationEntityTitle	no	
0002,0100	PrivateInformationCreatorUID	no	
0002,0102	PrivateInformation	no	
0004,1130	FileSetID	no	
0004,1141	FileSetDescriptorFileID	no	
0004,1142	SpecificCharacterSetOfFile	no	
0004,1200	FirstDirectoryRecordOffset	no	
0004,1202	LastDirectoryRecordOffset	no	
0004,1212	FileSetConsistencyFlag	no	
0004,1220	DirectoryRecordSequence	no	
0004,1400	OffsetOfNextDirectoryRecord	no	
0004,1410	RecordInUseFlag	no	
0004,1420	LowerLevelDirectoryEntityOffset	no	
0004,1430	DirectoryRecordType	no	
0004,1432	PrivateRecordUID	no	
0004,1500	ReferencedFileID	no	
0004,1504	MRDRDirectoryRecordOffset	no	
0004,1510	ReferencedSOPClassUIDInFile	no	
0004,1511	ReferencedSOPInstanceUIDInFile	no	
0004,1512	ReferencedTransferSyntaxUIDInFile	no	
0004,151A	ReferencedRelatedSOPClassUIDInFile	no	
0004,1600	NumberOfReferences	no	
0008,0000	IdentifyingGroupLength	no	
0008,0001	LengthToEnd	no	
0008,0005	SpecificCharacterSet	no	
0008,0006	LanguageCodeSequence	no	
0008,0008	ImageType	no	
0008,0010	RecognitionCode	no	
0008,0012	InstanceCreationDate	no	
0008,0013	InstanceCreationTime	no	
0008,0014	InstanceCreatorUID	no	
0008,0016	SOPClassUID	no	
0008,0018	SOPInstanceUID	no	
0008,001A	RelatedGeneralSOPClassUID	no	
0008,001B	OriginalSpecializedSOPClassUID	no	
0008,0020	StudyDate	no	
0008,0021	SeriesDate	no	
0008,0022	AcquisitionDate	no	

0008,0023	ContentDate	no	
0008,0024	OverlayDate	no	
0008,0025	CurveDate	no	
0008,002A	AcquisitionDateTime	no	
0008,0030	StudyTime	no	
0008,0031	SeriesTime	no	
0008,0032	AcquisitionTime	no	
0008,0033	ContentTime	no	
0008,0034	OverlayTime	no	
0008,0035	CurveTime	no	
0008,0040	DataSetType	no	
0008,0041	DataSetSubtype	no	
0008,0042	NuclearMedicineSeriesType	no	
0008,0050	AccessionNumber	no	
0008,0052	QueryRetrieveLevel	no	
0008,0054	RetrieveAETitle	no	
0008,0056	InstanceAvailability	no	
0008,0058	FailedSOPInstanceUIDList	no	
0008,0060	Modality	no	
0008,0061	ModalitiesInStudy	no	
0008,0062	SOPClassesInStudy	no	
0008,0064	ConversionType	no	
0008,0068	PresentationIntentType	no	
0008,0070	Manufacturer	no	
0008,0080	InstitutionName	no	
0008,0081	InstitutionAddress	no	
0008,0082	InstitutionCodeSequence	no	
0008,0090	ReferringPhysicianName	no	
0008,0092	ReferringPhysicianAddress	no	
0008,0094	ReferringPhysicianTelephoneNumber	no	
0008,0096	ReferringPhysicianIDSequence	no	
0008,0100	CodeValue	no	
0008,0102	CodingSchemeDesignator	no	
0008,0103	CodingSchemeVersion	no	
0008,0104	CodeMeaning	no	
0008,0105	MappingResource	no	
0008,0106	ContextGroupVersion	no	
0008,0107	ContextGroupLocalVersion	no	
0008,010B	ContextGroupExtensionFlag	no	
0008,010C	CodingSchemeUID	no	
0008,010D	ContextGroupExtensionCreatorUID	no	
0008,010F	ContextIdentifier	no	
0008,0110	CodingSchemeIDSequence	no	
0008,0112	CodingSchemeRegistry	no	
0008,0114	CodingSchemeExternalID	no	
0008,0115	CodingSchemeName	no	
0008,0116	ResponsibleOrganization	no	
0008,0117	ContextUID	no	
0008,0201	TimezoneOffsetFromUTC	no	
0008,1000	NetworkID	no	
0008,1010	StationName	no	
0008,1030	StudyDescription	no	
0008,1032	ProcedureCodeSequence	no	

0008,103E	SeriesDescription	no
0008,1040	InstitutionalDepartmentName	no
0008,1048	PhysiciansOfRecord	no
0008,1049	PhysiciansOfRecordIDSequence	no
0008,1050	PerformingPhysicianName	no
0008,1052	PerformingPhysicianIDSequence	no
0008,1060	NameOfPhysicianReadingStudy	no
0008,1062	PhysicianReadingStudyIDSequence	no
0008,1070	OperatorsName	no
0008,1072	OperatorIDSequence	no
0008,1080	AdmittingDiagnosesDescription	no
0008,1084	AdmittingDiagnosesCodeSequence	no
0008,1090	ManufacturersModelName	no
0008,1100	ReferencedResultsSequence	no
0008,1110	ReferencedStudySequence	no
0008,1111	ReferencedProcedureStepSequence	no
0008,1115	ReferencedSeriesSequence	no
0008,1120	ReferencedPatientSequence	no
0008,1125	ReferencedVisitSequence	no
0008,1130	ReferencedOverlaySequence	no
0008,113A	ReferencedWaveformSequence	no
0008,1140	ReferencedImageSequence	no
0008,1145	ReferencedCurveSequence	no
0008,114A	ReferencedInstanceSequence	no
0008,1150	ReferencedSOPClassUID	no
0008,1155	ReferencedSOPInstanceUID	no
0008,115A	SOPClassesSupported	no
0008,1160	ReferencedFrameNumber	no
0008,1161	SimpleFrameList	no
0008,1162	CalculatedFrameList	no
0008,1163	TimeRange	no
0008,1164	FrameExtractionSequence	no
0008,1195	TransactionUID	no
0008,1197	FailureReason	no
0008,1198	FailedSOPSequence	no
0008,1199	ReferencedSOPSequence	no
0008,1200	OtherReferencedStudiesSequence	no
0008,1250	RelatedSeriesSequence	no
0008,2110	LossyImageCompression	no
0008,2111	DerivationDescription	no
0008,2112	SourceImageSequence	no
0008,2120	StageName	no
0008,2122	StageNumber	no
0008,2124	NumberOfStages	no
0008,2127	ViewName	no
0008,2128	ViewNumber	no
0008,2129	NumberOfEventTimers	no
0008,212A	NumberOfViewsInStage	no
0008,2130	EventElapsedTimes	no
0008,2132	EventTimerNames	no
0008,2133	EventTimerSequence	no
0008,2134	EventTimeOffset	no
0008,2135	EventCodeSequence	no

0008,2142	StartTrim	no	
0008,2143	StopTrim	no	
0008,2144	RecommendedDisplayFrameRate	no	
0008,2200	TransducerPosition	no	
0008,2204	TransducerOrientation	no	
0008,2208	AnatomicStructure	no	
0008,2218	AnatomicRegionSequence	no	
0008,2220	AnatomicRegionModifierSequence	no	
0008,2228	PrimaryAnatomicStructureSequence	no	
0008,2229	AnatomicStructureOrRegionSequence	no	
0008,2230	AnatomicStructureModifierSequence	no	
0008,2240	TransducerPositionSequence	no	
0008,2242	TransducerPositionModifierSequence	no	
0008,2244	TransducerOrientationSequence	no	
0008,2246	TransducerOrientationModifierSeq	no	
0008,2253	AnatomicEntrancePortalCodeSeqTrial	no	
0008,2255	AnatomicApproachDirCodeSeqTrial	no	
0008,2256	AnatomicPerspectiveDescrTrial	no	
0008,2257	AnatomicPerspectiveCodeSeqTrial	no	
0008,3001	AlternateRepresentationSequence	no	
0008,3010	IrradiationEventUID	no	
0008,4000	IdentifyingComments	no	
0008,9007	FrameType	no	
0008,9092	ReferencedImageEvidenceSequence	no	
0008,9121	ReferencedRawDataSequence	no	
0008,9123	CreatorVersionUID	no	
0008,9124	DerivationImageSequence	no	
0008,9154	SourceImageEvidenceSequence	no	
0008,9205	PixelPresentation	no	
0008,9206	VolumetricProperties	no	
0008,9207	VolumeBasedCalculationTechnique	no	
0008,9208	ComplexImageComponent	no	
0008,9209	AcquisitionContrast	no	
0008,9215	DerivationCodeSequence	no	
0008,9237	GrayscalePresentationStateSequence	no	
0008,9410	ReferencedOtherPlaneSequence	no	
0008,9458	FrameDisplaySequence	no	
0008,9459	RecommendedDisplayFrameRateInFloat	no	
0008,9460	SkipFrameRangeFlag	no	
0009,1001	FullFidelity	no	
0009,1002	SuiteID	no	
0009,1004	ProductID	no	
0009,1027	ImageActualDate	no	
0009,1030	ServiceID	no	
0009,1031	MobileLocationNumber	no	
0009,10E3	EquipmentUID	no	
0009,10E6	GenesisVersionNow	no	
0009,10E7	ExamRecordChecksum	no	
0009,10E9	ActualSeriesDataTimeStamp	no	
0010,0000	PatientGroupLength	no	
0010,0010	PatientName	no	
0010,0020	PatientID	no	
0010,0021	IssuerOfPatientID	no	

0010,0022	TypeOfPatientID	no
0010,0030	PatientBirthDate	no
0010,0032	PatientBirthTime	no
0010,0040	PatientSex	no
0010,0050	PatientInsurancePlanCodeSequence	no
0010,0101	PatientPrimaryLanguageCodeSeq	no
0010,0102	PatientPrimaryLanguageCodeModSeq	no
0010,1000	OtherPatientIDs	no
0010,1001	OtherPatientNames	no
0010,1002	OtherPatientIDsSequence	no
0010,1005	PatientBirthName	no
0010,1010	PatientAge	no
0010,1020	PatientSize	no
0010,1030	PatientWeight	no
0010,1040	PatientAddress	no
0010,1050	InsurancePlanIdentification	no
0010,1060	PatientMotherBirthName	no
0010,1080	MilitaryRank	no
0010,1081	BranchOfService	no
0010,1090	MedicalRecordLocator	no
0010,2000	MedicalAlerts	no
0010,2110	Allergies	no
0010,2150	CountryOfResidence	no
0010,2152	RegionOfResidence	no
0010,2154	PatientTelephoneNumbers	no
0010,2160	EthnicGroup	no
0010,2180	Occupation	no
0010,21A0	SmokingStatus	no
0010,21B0	AdditionalPatientHistory	no
0010,21C0	PregnancyStatus	no
0010,21D0	LastMenstrualDate	no
0010,21F0	PatientReligiousPreference	no
0010,2201	PatientSpeciesDescription	no
0010,2202	PatientSpeciesCodeSequence	no
0010,2203	PatientSexNeutered	no
0010,2210	AnatomicalOrientationType	no
0010,2292	PatientBreedDescription	no
0010,2293	PatientBreedCodeSequence	no
0010,2294	BreedRegistrationSequence	no
0010,2295	BreedRegistrationNumber	no
0010,2296	BreedRegistryCodeSequence	no
0010,2297	ResponsiblePerson	no
0010,2298	ResponsiblePersonRole	no
0010,2299	ResponsibleOrganization	no
0010,4000	PatientComments	no
0010,9431	ExaminedBodyThickness	no
0011,1010	PatientStatus	no
0012,0010	ClinicalTrialSponsorName	no
0012,0020	ClinicalTrialProtocolID	no
0012,0021	ClinicalTrialProtocolName	no
0012,0030	ClinicalTrialSiteID	no
0012,0031	ClinicalTrialSiteName	no
0012,0040	ClinicalTrialSubjectID	no

0012,0042	ClinicalTrialSubjectReadingID	no	
0012,0050	ClinicalTrialTimePointID	no	
0012,0051	ClinicalTrialTimePointDescription	no	
0012,0060	ClinicalTrialCoordinatingCenter	no	
0012,0062	PatientIdentityRemoved	no	
0012,0063	DeidentificationMethod	no	
0012,0064	DeidentificationMethodCodeSequence	no	
0012,0071	ClinicalTrialSeriesID	no	
0012,0072	ClinicalTrialSeriesDescription	no	
0012,0084	DistributionType	no	
0012,0085	ConsentForDistributionFlag	no	
0018,0000	AcquisitionGroupLength	no	
0018,0010	ContrastBolusAgent	no	
0018,0012	ContrastBolusAgentSequence	no	
0018,0014	ContrastBolusAdministrationRoute	no	
0018,0015	BodyPartExamined	no	
0018,0020	ScanningSequence	no	
0018,0021	SequenceVariant	no	
0018,0022	ScanOptions	no	
0018,0023	MRAcquisitionType	no	
0018,0024	SequenceName	no	
0018,0025	AngioFlag	no	
0018,0026	InterventionDrugInformationSeq	no	
0018,0027	InterventionDrugStopTime	no	
0018,0028	InterventionDrugDose	no	
0018,0029	InterventionDrugSequence	no	
0018,002A	AdditionalDrugSequence	no	
0018,0030	Radionuclide	no	
0018,0031	Radiopharmaceutical	no	
0018,0032	EnergyWindowCenterline	no	
0018,0033	EnergyWindowTotalWidth	no	
0018,0034	InterventionDrugName	no	
0018,0035	InterventionDrugStartTime	no	
0018,0036	InterventionSequence	no	
0018,0037	TherapyType	no	
0018,0038	InterventionStatus	no	
0018,0039	TherapyDescription	no	
0018,003A	InterventionDescription	no	
0018,0040	CineRate	no	
0018,0042	InitialCineRunState	no	
0018,0050	SliceThickness	no	
0018,0060	KVP	no	
0018,0070	CountsAccumulated	no	
0018,0071	AcquisitionTerminationCondition	no	
0018,0072	EffectiveDuration	no	
0018,0073	AcquisitionStartCondition	no	
0018,0074	AcquisitionStartConditionData	no	
0018,0075	AcquisitionEndConditionData	no	
0018,0080	RepetitionTime	no	
0018,0081	EchoTime	no	
0018,0082	InversionTime	no	
0018,0083	NumberOfAverages	no	
0018,0084	ImagingFrequency	no	

0018,0085	ImagedNucleus	no
0018,0086	EchoNumber	no
0018,0087	MagneticFieldStrength	no
0018,0088	SpacingBetweenSlices	no
0018,0089	NumberOfPhaseEncodingSteps	no
0018,0090	DataCollectionDiameter	no
0018,0091	EchoTrainLength	no
0018,0093	PercentSampling	no
0018,0094	PercentPhaseFieldOfView	no
0018,0095	PixelBandwidth	no
0018,1000	DeviceSerialNumber	no
0018,1002	DeviceUID	no
0018,1003	DeviceID	no
0018,1004	PlateID	no
0018,1005	GeneratorID	no
0018,1006	GridID	no
0018,1007	CassetteID	no
0018,1008	GantryID	no
0018,1010	SecondaryCaptureDeviceID	no
0018,1011	HardcopyCreationDeviceID	no
0018,1012	DateOfSecondaryCapture	no
0018,1014	TimeOfSecondaryCapture	no
0018,1016	SecondaryCaptureDeviceManufacturer	no
0018,1017	HardcopyDeviceManufacturer	no
0018,1018	SecondaryCaptureDeviceModelName	no
0018,1019	SecondaryCaptureDeviceSoftwareVers	no
0018,101A	HardcopyDeviceSoftwareVersion	no
0018,101B	HardcopyDeviceModelName	no
0018,1020	SoftwareVersion	no
0018,1022	VideoImageFormatAcquired	no
0018,1023	DigitalImageFormatAcquired	no
0018,1030	ProtocolName	no
0018,1040	ContrastBolusRoute	no
0018,1041	ContrastBolusVolume	no
0018,1042	ContrastBolusStartTime	no
0018,1043	ContrastBolusStopTime	no
0018,1044	ContrastBolusTotalDose	no
0018,1045	SyringeCounts	no
0018,1046	ContrastFlowRate	no
0018,1047	ContrastFlowDuration	no
0018,1048	ContrastBolusIngredient	no
0018,1049	ContrastBolusConcentration	no
0018,1050	SpatialResolution	no
0018,1060	TriggerTime	no
0018,1061	TriggerSourceOrType	no
0018,1062	NominalInterval	no
0018,1063	FrameTime	no
0018,1064	CardiacFramingType	no
0018,1065	FrameTimeVector	no
0018,1066	FrameDelay	no
0018,1067	ImageTriggerDelay	no
0018,1068	MultiplexGroupTimeOffset	no
0018,1069	TriggerTimeOffset	no

0018,106A	SynchronizationTrigger	no	
0018,106C	SynchronizationChannel	no	
0018,106E	TriggerSamplePosition	no	
0018,1070	RadiopharmaceuticalRoute	no	
0018,1071	RadiopharmaceuticalVolume	no	
0018,1072	RadiopharmaceuticalStartTime	no	
0018,1073	RadiopharmaceuticalStopTime	no	
0018,1074	RadionuclideTotalDose	no	
0018,1075	RadionuclideHalfLife	no	
0018,1076	RadionuclidePositronFraction	no	
0018,1077	RadiopharmaceuticalSpecActivity	no	
0018,1078	RadiopharmaceuticalStartTime	no	
0018,1079	RadiopharmaceuticalStopTime	no	
0018,1080	BeatRejectionFlag	no	
0018,1081	LowRRValue	no	
0018,1082	HighRRValue	no	
0018,1083	IntervalsAcquired	no	
0018,1084	IntervalsRejected	no	
0018,1085	PVCRejection	no	
0018,1086	SkipBeats	no	
0018,1088	HeartRate	no	
0018,1090	CardiacNumberOfImages	no	
0018,1094	TriggerWindow	no	
0018,1100	ReconstructionDiameter	no	
0018,1110	DistanceSourceToDetector	no	
0018,1111	DistanceSourceToPatient	no	
0018,1114	EstimatedRadiographicMagnification	no	
0018,1120	GantryDetectorTilt	no	
0018,1121	GantryDetectorSlew	no	
0018,1130	TableHeight	no	
0018,1131	TableTraverse	no	
0018,1134	TableMotion	no	
0018,1135	TableVerticalIncrement	no	
0018,1136	TableLaterallIncrement	no	
0018,1137	TableLongitudinalIncrement	no	
0018,1138	TableAngle	no	
0018,113A	TableType	no	
0018,1140	RotationDirection	no	
0018,1141	AngularPosition	no	
0018,1142	RadialPosition	no	
0018,1143	ScanArc	no	
0018,1144	AngularStep	no	
0018,1145	CenterOfRotationOffset	no	
0018,1146	RotationOffset	no	
0018,1147	FieldOfViewShape	no	
0018,1149	FieldOfViewDimensions	no	
0018,1150	ExposureTime	no	
0018,1151	XRayTubeCurrent	no	
0018,1152	Exposure	no	
0018,1153	ExposureInMicroAmpSec	no	
0018,1154	AveragePulseWidth	no	
0018,1155	RadiationSetting	no	
0018,1156	RectificationType	no	

0018,115A	RadiationMode	no
0018,115E	ImageAreaDoseProduct	no
0018,1160	FilterType	no
0018,1161	TypeOfFilters	no
0018,1162	IntensifierSize	no
0018,1164	ImagerPixelSpacing	no
0018,1166	Grid	no
0018,1170	GeneratorPower	no
0018,1180	CollimatorGridName	no
0018,1181	CollimatorType	no
0018,1182	FocalDistance	no
0018,1183	XFocusCenter	no
0018,1184	YFocusCenter	no
0018,1190	FocalSpots	no
0018,1191	AnodeTargetMaterial	no
0018,11A0	BodyPartThickness	no
0018,11A2	CompressionForce	no
0018,1200	DateOfLastCalibration	no
0018,1201	TimeOfLastCalibration	no
0018,1210	ConvolutionKernel	no
0018,1240	UpperLowerPixelValues	no
0018,1242	ActualFrameDuration	no
0018,1243	CountRate	no
0018,1244	PreferredPlaybackSequencing	no
0018,1250	ReceiveCoilName	no
0018,1251	TransmitCoilName	no
0018,1260	PlateType	no
0018,1261	PhosphorType	no
0018,1300	ScanVelocity	no
0018,1301	WholeBodyTechnique	no
0018,1302	ScanLength	no
0018,1310	AcquisitionMatrix	no
0018,1312	InPlanePhaseEncodingDirection	no
0018,1314	FlipAngle	no
0018,1315	VariableFlipAngleFlag	no
0018,1316	SAR	no
0018,1318	DB-Dt	no
0018,1400	AcquisitionDeviceProcessingDescr	no
0018,1401	AcquisitionDeviceProcessingCode	no
0018,1402	CassetteOrientation	no
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0018,1404	ExposuresOnPlate	no
0018,1405	RelativeXRayExposure	no
0018,1450	ColumnAngulation	no
0018,1460	TomoLayerHeight	no
0018,1470	TomoAngle	no
0018,1480	TomoTime	no
0018,1490	TomoType	no
0018,1491	TomoClass	no
0018,1495	NumberOfTomosynthesisSourceImages	no
0018,1500	PositionerMotion	no
0018,1508	PositionerType	no
0018,1510	PositionerPrimaryAngle	no

0018,1511	PositionerSecondaryAngle	no	
0018,1520	PositionerPrimaryAngleIncrement	no	
0018,1521	PositionerSecondaryAngleIncrement	no	
0018,1530	DetectorPrimaryAngle	no	
0018,1531	DetectorSecondaryAngle	no	
0018,1600	ShutterShape	no	
0018,1602	ShutterLeftVerticalEdge	no	
0018,1604	ShutterRightVerticalEdge	no	
0018,1606	ShutterUpperHorizontalEdge	no	
0018,1608	ShutterLowerHorizontalEdge	no	
0018,1610	CenterOfCircularShutter	no	
0018,1612	RadiusOfCircularShutter	no	
0018,1620	VerticesOfPolygonalShutter	no	
0018,1622	ShutterPresentationValue	no	
0018,1623	ShutterOverlayGroup	no	
0018,1624	ShutterPresentationColorCIELabVal	no	
0018,1700	CollimatorShape	no	
0018,1702	CollimatorLeftVerticalEdge	no	
0018,1704	CollimatorRightVerticalEdge	no	
0018,1706	CollimatorUpperHorizontalEdge	no	
0018,1708	CollimatorLowerHorizontalEdge	no	
0018,1710	CenterOfCircularCollimator	no	
0018,1712	RadiusOfCircularCollimator	no	
0018,1720	VerticesOfPolygonalCollimator	no	
0018,1800	AcquisitionTimeSynchronized	no	
0018,1801	TimeSource	no	
0018,1802	TimeDistributionProtocol	no	
0018,1803	NTPSourceAddress	no	
0018,2001	PageNumberVector	no	
0018,2002	FrameLabelVector	no	
0018,2003	FramePrimaryAngleVector	no	
0018,2004	FrameSecondaryAngleVector	no	
0018,2005	SliceLocationVector	no	
0018,2006	DisplayWindowLabelVector	no	
0018,2010	NominalScannedPixelSpacing	no	
0018,2020	DigitizingDeviceTransportDirection	no	
0018,2030	RotationOfScannedFilm	no	
0018,3100	IVUSAcquisition	no	
0018,3101	IVUSPullbackRate	no	
0018,3102	IVUSGatedRate	no	
0018,3103	IVUSPullbackStartFrameNumber	no	
0018,3104	IVUSPullbackStopFrameNumber	no	
0018,3105	LesionNumber	no	
0018,4000	AcquisitionComments	no	
0018,5000	OutputPower	no	
0018,5010	TransducerData	no	
0018,5012	FocusDepth	no	
0018,5020	ProcessingFunction	no	
0018,5021	PostprocessingFunction	no	
0018,5022	MechanicalIndex	no	
0018,5024	BoneThermalIndex	no	
0018,5026	CranialThermalIndex	no	
0018,5027	SoftTissueThermalIndex	no	

0018,5028	SoftTissueFocusThermalIndex	no	
0018,5029	SoftTissueSurfaceThermalIndex	no	
0018,5030	DynamicRange	no	
0018,5040	TotalGain	no	
0018,5050	DepthOfScanField	no	
0018,5100	PatientPosition	no	
0018,5101	ViewPosition	no	
0018,5104	ProjectionEponymousNameCodeSeq	no	
0018,5210	ImageTransformationMatrix	no	
0018,5212	ImageTranslationVector	no	
0018,6000	Sensitivity	no	
0018,6011	SequenceOfUltrasoundRegions	no	
0018,6012	RegionSpatialFormat	no	
0018,6014	RegionDataType	no	
0018,6016	RegionFlags	no	
0018,6018	RegionLocationMinX0	no	
0018,601A	RegionLocationMinY0	no	
0018,601C	RegionLocationMaxX1	no	
0018,601E	RegionLocationMaxY1	no	
0018,6020	ReferencePixelX0	no	
0018,6022	ReferencePixelY0	no	
0018,6024	PhysicalUnitsXDirection	no	
0018,6026	PhysicalUnitsYDirection	no	
0018,6028	ReferencePixelPhysicalValueX	no	
0018,602A	ReferencePixelPhysicalValueY	no	
0018,602C	PhysicalDeltaX	no	
0018,602E	PhysicalDeltaY	no	
0018,6030	TransducerFrequency	no	
0018,6031	TransducerType	no	
0018,6032	PulseRepetitionFrequency	no	
0018,6034	DopplerCorrectionAngle	no	
0018,6036	SteeringAngle	no	
0018,6038	DopplerSampleVolumeXPosRetired	no	
0018,6039	DopplerSampleVolumeXPosition	no	
0018,603A	DopplerSampleVolumeYPosRetired	no	
0018,603B	DopplerSampleVolumeYPosition	no	
0018,603C	TMLinePositionX0Retired	no	
0018,603D	TMLinePositionX0	no	
0018,603E	TMLinePositionY0Retired	no	
0018,603F	TMLinePositionY0	no	
0018,6040	TMLinePositionX1Retired	no	
0018,6041	TMLinePositionX1	no	
0018,6042	TMLinePositionY1Retired	no	
0018,6043	TMLinePositionY1	no	
0018,6044	PixelComponentOrganization	no	
0018,6046	PixelComponentMask	no	
0018,6048	PixelComponentRangeStart	no	
0018,604A	PixelComponentRangeStop	no	
0018,604C	PixelComponentPhysicalUnits	no	
0018,604E	PixelComponentDataType	no	
0018,6050	NumberOfTableBreakPoints	no	
0018,6052	TableOfXBreakPoints	no	
0018,6054	TableOfYBreakPoints	no	

0018,6056	NumberOfTableEntries	no	
0018,6058	TableOfPixelValues	no	
0018,605A	TableOfParameterValues	no	
0018,6060	RWaveTimeVector	no	
0018,7000	DetectorConditionsNominalFlag	no	
0018,7001	DetectorTemperature	no	
0018,7004	DetectorType	no	
0018,7005	DetectorConfiguration	no	
0018,7006	DetectorDescription	no	
0018,7008	DetectorMode	no	
0018,700A	DetectorID	no	
0018,700C	DateOfLastDetectorCalibration	no	
0018,700E	TimeOfLastDetectorCalibration	no	
0018,7010	DetectorExposuresSinceCalibration	no	
0018,7011	DetectorExposuresSinceManufactured	no	
0018,7012	DetectorTimeSinceLastExposure	no	
0018,7014	DetectorActiveTime	no	
0018,7016	DetectorActiveOffsetFromExposure	no	
0018,701A	DetectorBinning	no	
0018,7020	DetectorElementPhysicalSize	no	
0018,7022	DetectorElementSpacing	no	
0018,7024	DetectorActiveShape	no	
0018,7026	DetectorActiveDimensions	no	
0018,7028	DetectorActiveOrigin	no	
0018,702A	DetectorManufacturerName	no	
0018,702B	DetectorManufacturersModelName	no	
0018,7030	FieldOfViewOrigin	no	
0018,7032	FieldOfViewRotation	no	
0018,7034	FieldOfViewHorizontalFlip	no	
0018,7040	GridAbsorbingMaterial	no	
0018,7041	GridSpacingMaterial	no	
0018,7042	GridThickness	no	
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0018,7046	GridAspectRatio	no	
0018,7048	GridPeriod	no	
0018,704C	GridFocalDistance	no	
0018,7050	FilterMaterial	no	
0018,7052	FilterThicknessMinimum	no	
0018,7054	FilterThicknessMaximum	no	
0018,7060	ExposureControlMode	no	
0018,7062	ExposureControlModeDescription	no	
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0018,9004	ContentQualification	no	
0018,9005	PulseSequenceName	no	
0018,9006	MRImagingModifierSequence	no	
0018,9008	EchoPulseSequence	no	
0018,9009	InversionRecovery	no	
0018,9010	FlowCompensation	no	
0018,9011	MultipleSpinEcho	no	
0018,9012	MultiPlanarExcitation	no	

0018,9014	PhaseContrast	no
0018,9015	TimeOfFlightContrast	no
0018,9016	Spoiling	no
0018,9017	SteadyStatePulseSequence	no
0018,9018	EchoPlanarPulseSequence	no
0018,9019	TagAngleFirstAxis	no
0018,9020	MagnetizationTransfer	no
0018,9021	T2Preparation	no
0018,9022	BloodSignalNulling	no
0018,9024	SaturationRecovery	no
0018,9025	SpectrallySelectedSuppression	no
0018,9026	SpectrallySelectedExcitation	no
0018,9027	SpatialPresaturation	no
0018,9028	Tagging	no
0018,9029	OversamplingPhase	no
0018,9030	TagSpacingFirstDimension	no
0018,9032	GeometryOfKSpaceTraversal	no
0018,9033	SegmentedKSpaceTraversal	no
0018,9034	RectilinearPhaseEncodeReordering	no
0018,9035	TagThickness	no
0018,9036	PartialFourierDirection	no
0018,9037	CardiacSynchronizationTechnique	no
0018,9041	ReceiveCoilManufacturerName	no
0018,9042	MRReceiveCoilSequence	no
0018,9043	ReceiveCoilType	no
0018,9044	QuadratureReceiveCoil	no
0018,9045	MultiCoilDefinitionSequence	no
0018,9046	MultiCoilConfiguration	no
0018,9047	MultiCoilElementName	no
0018,9048	MultiCoilElementUsed	no
0018,9049	MRTxTransmitCoilSequence	no
0018,9050	TransmitCoilManufacturerName	no
0018,9051	TransmitCoilType	no
0018,9052	SpectralWidth	no
0018,9053	ChemicalShiftReference	no
0018,9054	VolumeLocalizationTechnique	no
0018,9058	MRAcquisitionFrequencyEncodeSteps	no
0018,9059	Decoupling	no
0018,9060	DecoupledNucleus	no
0018,9061	DecouplingFrequency	no
0018,9062	DecouplingMethod	no
0018,9063	DecouplingChemicalShiftReference	no
0018,9064	KSpaceFiltering	no
0018,9065	TimeDomainFiltering	no
0018,9066	NumberOfZeroFills	no
0018,9067	BaselineCorrection	no
0018,9069	ParallelReductionFactorInPlane	no
0018,9070	CardiacRRIntervalSpecified	no
0018,9073	AcquisitionDuration	no
0018,9074	FrameAcquisitionDateTime	no
0018,9075	DiffusionDirectionality	no
0018,9076	DiffusionGradientDirectionSequence	no
0018,9077	ParallelAcquisition	no

0018,9078	ParallelAcquisitionTechnique	no	
0018,9079	InversionTimes	no	
0018,9080	MetaboliteMapDescription	no	
0018,9081	PartialFourier	no	
0018,9082	EffectiveEchoTime	no	
0018,9083	MetaboliteMapCodeSequence	no	
0018,9084	ChemicalShiftSequence	no	
0018,9085	CardiacSignalSource	no	
0018,9087	DiffusionBValue	no	
0018,9089	DiffusionGradientOrientation	no	
0018,9090	VelocityEncodingDirection	no	
0018,9091	VelocityEncodingMinimumValue	no	
0018,9093	NumberOfKSpaceTrajectories	no	
0018,9094	CoverageOfKSpace	no	
0018,9095	SpectroscopyAcquisitionPhaseRows	no	
0018,9096	ParallelReductFactorInPlaneRetired	no	
0018,9098	TransmitterFrequency	no	
0018,9100	ResonantNucleus	no	
0018,9101	FrequencyCorrection	no	
0018,9103	MRSpectroscopyFOV-GeometrySequence	no	
0018,9104	SlabThickness	no	
0018,9105	SlabOrientation	no	
0018,9106	MidSlabPosition	no	
0018,9107	MRSpatialSaturationSequence	no	
0018,9112	MRTimingAndRelatedParametersSeq	no	
0018,9114	MREchoSequence	no	
0018,9115	MRModifierSequence	no	
0018,9117	MRDiffusionSequence	no	
0018,9118	CardiacTriggerSequence	no	
0018,9119	MRAveragesSequence	no	
0018,9125	MRFOV-GeometrySequence	no	
0018,9126	VolumeLocalizationSequence	no	
0018,9127	SpectroscopyAcquisitionDataColumns	no	
0018,9147	DiffusionAnisotropyType	no	
0018,9151	FrameReferenceDateTime	no	
0018,9152	MRMetaboliteMapSequence	no	
0018,9155	ParallelReductionFactorOutOfPlane	no	
0018,9159	SpectroscopyOutOfPlanePhaseSteps	no	
0018,9166	BulkMotionStatus	no	
0018,9168	ParallelReductionFactSecondInPlane	no	
0018,9169	CardiacBeatRejectionTechnique	no	
0018,9170	RespiratoryMotionCompTechnique	no	
0018,9171	RespiratorySignalSource	no	
0018,9172	BulkMotionCompensationTechnique	no	
0018,9173	BulkMotionSignalSource	no	
0018,9174	ApplicableSafetyStandardAgency	no	
0018,9175	ApplicableSafetyStandardDescr	no	
0018,9176	OperatingModeSequence	no	
0018,9177	OperatingModeType	no	
0018,9178	OperatingMode	no	
0018,9179	SpecificAbsorptionRateDefinition	no	
0018,9180	GradientOutputType	no	
0018,9181	SpecificAbsorptionRateValue	no	

0018,9182	GradientOutput	no
0018,9183	FlowCompensationDirection	no
0018,9184	TaggingDelay	no
0018,9185	RespiratoryMotionCompTechDescr	no
0018,9186	RespiratorySignalSourceID	no
0018,9195	ChemicalShiftsMinIntegrateLimitHz	no
0018,9196	ChemicalShiftsMaxIntegrateLimitHz	no
0018,9197	MRVelocityEncodingSequence	no
0018,9198	FirstOrderPhaseCorrection	no
0018,9199	WaterReferencedPhaseCorrection	no
0018,9200	MRSpectroscopyAcquisitionType	no
0018,9214	RespiratoryCyclePosition	no
0018,9217	VelocityEncodingMaximumValue	no
0018,9218	TagSpacingSecondDimension	no
0018,9219	TagAngleSecondAxis	no
0018,9220	FrameAcquisitionDuration	no
0018,9226	MRIImageFrameTypeSequence	no
0018,9227	MRSpectroscopyFrameTypeSequence	no
0018,9231	MRAcqPhaseEncodingStepsInPlane	no
0018,9232	MRAcqPhaseEncodingStepsOutOfPlane	no
0018,9234	SpectroscopyAcqPhaseColumns	no
0018,9236	CardiacCyclePosition	no
0018,9239	SpecificAbsorptionRateSequence	no
0018,9240	RFEchoTrainLength	no
0018,9241	GradientEchoTrainLength	no
0018,9295	ChemicalShiftsMinIntegrateLimitPPM	no
0018,9296	ChemicalShiftsMaxIntegrateLimitPPM	no
0018,9301	CTAcquisitionTypeSequence	no
0018,9302	AcquisitionType	no
0018,9303	TubeAngle	no
0018,9304	CTAcquisitionDetailsSequence	no
0018,9305	RevolutionTime	no
0018,9306	SingleCollimationWidth	no
0018,9307	TotalCollimationWidth	no
0018,9308	CTTableDynamicsSequence	no
0018,9309	TableSpeed	no
0018,9310	TableFeedPerRotation	no
0018,9311	SpiralPitchFactor	no
0018,9312	CTGeometrySequence	no
0018,9313	DataCollectionCenterPatient	no
0018,9314	CTReconstructionSequence	no
0018,9315	ReconstructionAlgorithm	no
0018,9316	ConvolutionKernelGroup	no
0018,9317	ReconstructionFieldOfView	no
0018,9318	ReconstructionTargetCenterPatient	no
0018,9319	ReconstructionAngle	no
0018,9320	ImageFilter	no
0018,9321	CTExposureSequence	no
0018,9322	ReconstructionPixelSpacing	no
0018,9323	ExposureModulationType	no
0018,9324	EstimatedDoseSaving	no
0018,9325	CTXRayDetailsSequence	no
0018,9326	CTPositionSequence	no

0018,9327	TablePosition	no	
0018,9328	ExposureTimeInMilliSec	no	
0018,9329	CTImageFrameTypeSequence	no	
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0018,9332	ExposureInMilliAmpSec	no	
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0018,9334	FluoroscopyFlag	no	
0018,9335	SourceToDataCollectionCenterDist	no	
0018,9337	ContrastBolusAgentNumber	no	
0018,9338	ContrastBolusIngredientCodeSeq	no	
0018,9340	ContrastAdministrationProfileSeq	no	
0018,9341	ContrastBolusUsageSequence	no	
0018,9342	ContrastBolusAgentAdministered	no	
0018,9343	ContrastBolusAgentDetected	no	
0018,9344	ContrastBolusAgentPhase	no	
0018,9345	CTDlvol	no	
0018,9346	CTDIPhantomTypeCodeSequence	no	
0018,9351	CalciumScoringMassFactorPatient	no	
0018,9352	CalciumScoringMassFactorDevice	no	
0018,9353	EnergyWeightingFactor	no	
0018,9360	CTAdditionalXRaySourceSequence	no	
0018,9401	ProjectionPixelCalibrationSequence	no	
0018,9402	DistanceSourceToIsocenter	no	
0018,9403	DistanceObjectToTableTop	no	
0018,9404	ObjectPixelSpacingInCenterOfBeam	no	
0018,9405	PositionerPositionSequence	no	
0018,9406	TablePositionSequence	no	
0018,9407	CollimatorShapeSequence	no	
0018,9412	XA-XRFFrameCharacteristicsSequence	no	
0018,9417	FrameAcquisitionSequence	no	
0018,9420	XRayReceptorType	no	
0018,9423	AcquisitionProtocolName	no	
0018,9424	AcquisitionProtocolDescription	no	
0018,9425	ContrastBolusIngredientOpaque	no	
0018,9426	DistanceReceptorPlaneToDetHousing	no	
0018,9427	IntensifierActiveShape	no	
0018,9428	IntensifierActiveDimensions	no	
0018,9429	PhysicalDetectorSize	no	
0018,9430	PositionOfIsocenterProjection	no	
0018,9432	FieldOfViewSequence	no	
0018,9433	FieldOfViewDescription	no	
0018,9434	ExposureControlSensingRegionsSeq	no	
0018,9435	ExposureControlSensingRegionShape	no	
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0018,9437	ExposureControlSensRegionRightEdge	no	
0018,9440	CenterOfCircExposControlSensRegion	no	
0018,9441	RadiusOfCircExposControlSensRegion	no	
0018,9447	ColumnAngulationPatient	no	
0018,9449	BeamAngle	no	
0018,9451	FrameDetectorParametersSequence	no	
0018,9452	CalculatedAnatomyThickness	no	
0018,9455	CalibrationSequence	no	
0018,9456	ObjectThicknessSequence	no	

0018,9457	PlaneIdentification	no	
0018,9461	FieldOfViewDimensionsInFloat	no	
0018,9462	IsocenterReferenceSystemSequence	no	
0018,9463	PositionerIsocenterPrimaryAngle	no	
0018,9464	PositionerIsocenterSecondaryAngle	no	
0018,9465	PositionerIsocenterDetRotAngle	no	
0018,9466	TableXPositionTolIsocenter	no	
0018,9467	TableYPositionTolIsocenter	no	
0018,9468	TableZPositionTolIsocenter	no	
0018,9469	TableHorizontalRotationAngle	no	
0018,9470	TableHeadTiltAngle	no	
0018,9471	TableCradleTiltAngle	no	
0018,9472	FrameDisplayShutterSequence	no	
0018,9473	AcquiredImageAreaDoseProduct	no	
0018,9474	CArmPositionerTabletopRelationship	no	
0018,9476	XRayGeometrySequence	no	
0018,9477	IrradiationEventIDSequence	no	
0018,9504	XRay3DFrameTypeSequence	no	
0018,9506	ContributingSourcesSequence	no	
0018,9507	XRay3DAcquisitionSequence	no	
0018,9508	PrimaryPositionerScanArc	no	
0018,9509	SecondaryPositionerScanArc	no	
0018,9510	PrimaryPositionerScanStartAngle	no	
0018,9511	SecondaryPositionerScanStartAngle	no	
0018,9514	PrimaryPositionerIncrement	no	
0018,9515	SecondaryPositionerIncrement	no	
0018,9516	StartAcquisitionDateTime	no	
0018,9517	EndAcquisitionDateTime	no	
0018,9524	ApplicationName	no	
0018,9525	ApplicationVersion	no	
0018,9526	ApplicationManufacturer	no	
0018,9527	AlgorithmType	no	
0018,9528	AlgorithmDescription	no	
0018,9530	XRay3DReconstructionSequence	no	
0018,9531	ReconstructionDescription	no	
0018,9538	PerProjectionAcquisitionSequence	no	
0018,9601	DiffusionBMatrixSequence	no	
0018,9602	DiffusionBValueXX	no	
0018,9603	DiffusionBValueXY	no	
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0018,9606	DiffusionBValueYZ	no	
0018,9607	DiffusionBValueZZ	no	
0018,9701	DecayCorrectionDateTime	no	
0018,9715	StartDensityThreshold	no	
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0018,9725	DetectorGeometry	no	
0018,9727	AxialDetectorDimension	no	
0018,9735	PETPositionSequence	no	
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0018,9740	NumberOfSubsets	no	
0018,9751	PETFrameTypeSequence	no	
0018,9756	ReconstructionType	no	

0018,9758	DecayCorrected	no	
0018,9759	AttenuationCorrected	no	
0018,9760	ScatterCorrected	no	
0018,9761	DeadTimeCorrected	no	
0018,9762	GantryMotionCorrected	no	
0018,9763	PatientMotionCorrected	no	
0018,9765	RandomsCorrected	no	
0018,9767	SensitivityCalibrated	no	
0018,9801	DepthsOfFocus	no	
0018,9804	ExclusionStartDatetime	no	
0018,9805	ExclusionDuration	no	
0018,9807	Image DataType Sequence	no	
0018,9808	Data Type	no	
0018,980B	Aliased Data Type	no	
0018,A001	Contributing Equipment Sequence	no	
0018,A002	Contribution Date Time	no	
0018,A003	Contribution Description	no	
0019,1002	Number Of Cells In Detector	no	
0019,1003	Cell Number At Theta	no	
0019,1004	Cell Spacing	no	
0019,100F	Horiz Frame Of Ref	no	
0019,1011	Series Contrast	no	
0019,1012	Last Pseq	no	
0019,1013	Start Number For Baseline	no	
0019,1014	End Number For Baseline	no	
0019,1015	Start Number For Enhanced Scans	no	
0019,1016	End Number For Enhanced Scans	no	
0019,1017	Series Plane	no	
0019,1018	First Scan Ras	no	
0019,1019	First Scan Location	no	
0019,101A	Last Scan Ras	no	
0019,101B	Last Scan Loc	no	
0019,101E	Display Field Of View	no	
0019,1023	Table Speed	no	
0019,1024	Mid Scan Time	no	
0019,1025	Mid Scan Flag	no	
0019,1026	Degrees Of Azimuth	no	
0019,1027	Gantry Period	no	
0019,102A	X Ray On Position	no	
0019,102B	X Ray Off Position	no	
0019,102C	Number Of Triggers	no	
0019,102E	Angle Of First View	no	
0019,102F	Trigger Frequency	no	
0019,1039	Scan FOV Type	no	
0019,1040	Stat Recon Flag	no	
0019,1041	Compute Type	no	
0019,1042	Segment Number	no	
0019,1043	Total Segments Requested	no	
0019,1044	Interscan Delay	no	
0019,1047	View Compression Factor	no	
0019,104A	Total No Of Ref Channels	no	
0019,104B	Data Size For Scan Data	no	
0019,1052	Recon Post Proc flag	no	

0019,1057	CTWaterNumber	no
0019,1058	CTBoneNumber	no
0019,105A	AcquisitionDuration	no
0019,105E	NumberOfChannels	no
0019,105F	IncrementBetweenChannels	no
0019,1060	StartingView	no
0019,1061	NumberOfViews	no
0019,1062	IncrementBetweenViews	no
0019,106A	DependantOnNoViewsProcessed	no
0019,106B	FieldOfViewInDetectorCells	no
0019,1070	ValueOfBackProjectionButton	no
0019,1071	SetIfFatqEstimatesWereUsed	no
0019,1072	ZChanAvgOverViews	no
0019,1073	AvgOfLeftRefChansOverViews	no
0019,1074	MaxLeftChanOverViews	no
0019,1075	AvgOfRightRefChansOverViews	no
0019,1076	MaxRightChanOverViews	no
0019,107D	SecondEcho	no
0019,107E	NumberOfEchoes	no
0019,107F	TableDelta	no
0019,1081	Contiguous	no
0019,1084	PeakSAR	no
0019,1085	MonitorSAR	no
0019,1087	CardiacRepetitionTime	no
0019,1088	ImagesPerCardiacCycle	no
0019,108A	ActualReceiveGainAnalog	no
0019,108B	ActualReceiveGainDigital	no
0019,108D	DelayAfterTrigger	no
0019,108F	Swappf	no
0019,1090	PauseInterval	no
0019,1091	PulseTime	no
0019,1092	SliceOffsetOnFreqAxis	no
0019,1093	CenterFrequency	no
0019,1094	TransmitGain	no
0019,1095	AnalogReceiverGain	no
0019,1096	DigitalReceiverGain	no
0019,1097	BitmapDefiningCVs	no
0019,1098	CenterFreqMethod	no
0019,109B	PulseSeqMode	no
0019,109C	PulseSeqName	no
0019,109D	PulseSeqDate	no
0019,109E	InternalPulseSeqName	no
0019,109F	TransmittingCoil	no
0019,10A0	SurfaceCoilType	no
0019,10A1	ExtremityCoilFlag	no
0019,10A2	RawDataRunNumber	no
0019,10A3	CalibratedFieldStrength	no
0019,10A4	SATFatWaterBone	no
0019,10A5	ReceiveBandwidth	no
0019,10A7	UserData01	no
0019,10A8	UserData02	no
0019,10A9	UserData03	no
0019,10AA	UserData04	no

0019,10AB	UserData05	no	
0019,10AC	UserData06	no	
0019,10AD	UserData07	no	
0019,10AE	UserData08	no	
0019,10AF	UserData09	no	
0019,10B0	UserData10	no	
0019,10B1	UserData11	no	
0019,10B2	UserData12	no	
0019,10B3	UserData13	no	
0019,10B4	UserData14	no	
0019,10B5	UserData15	no	
0019,10B6	UserData16	no	
0019,10B7	UserData17	no	
0019,10B8	UserData18	no	
0019,10B9	UserData19	no	
0019,10BA	UserData20	no	
0019,10BB	UserData21	no	
0019,10BC	UserData22	no	
0019,10BD	UserData23	no	
0019,10BE	ProjectionAngle	no	
0019,10C0	SaturationPlanes	no	
0019,10C1	SurfaceCoilIntensity	no	
0019,10C2	SATLocationR	no	
0019,10C3	SATLocationL	no	
0019,10C4	SATLocationA	no	
0019,10C5	SATLocationP	no	
0019,10C6	SATLocationH	no	
0019,10C7	SATLocationF	no	
0019,10C8	SATThicknessR-L	no	
0019,10C9	SATThicknessA-P	no	
0019,10CA	SATThicknessH-F	no	
0019,10CB	PrescribedFlowAxis	no	
0019,10CC	VelocityEncoding	no	
0019,10CD	ThicknessDisclaimer	no	
0019,10CE	PrescanType	no	
0019,10CF	PrescanStatus	no	
0019,10D0	RawDataType	no	
0019,10D2	ProjectionAlgorithm	no	
0019,10D3	ProjectionAlgorithm	no	
0019,10D5	FractionalEcho	no	
0019,10D6	PrepPulse	no	
0019,10D7	CardiacPhases	no	
0019,10D8	VariableEchoflag	no	
0019,10D9	ConcatenatedSAT	no	
0019,10DA	ReferenceChannelUsed	no	
0019,10DB	BackProjectorCoefficient	no	
0019,10DC	PrimarySpeedCorrectionUsed	no	
0019,10DD	OverrangeCorrectionUsed	no	
0019,10DE	DynamicZAlphaValue	no	
0019,10DF	UserData	no	
0019,10E0	UserData	no	
0019,10E2	VelocityEncodeScale	no	
0019,10F2	FastPhases	no	

0019,10F9	TransmissionGain	no	
0020,0000	RelationshipGroupLength	no	
0020,000D	StudyInstanceUID	no	
0020,000E	SeriesInstanceUID	no	
0020,0010	StudyID	no	
0020,0011	SeriesNumber	no	
0020,0012	AcquisitionNumber	no	
0020,0013	InstanceNumber	no	
0020,0014	IsotopeNumber	no	
0020,0015	PhaseNumber	no	
0020,0016	IntervalNumber	no	
0020,0017	TimeSlotNumber	no	
0020,0018	AngleNumber	no	
0020,0019	ItemNumber	no	
0020,0020	PatientOrientation	no	
0020,0022	OverlayNumber	no	
0020,0024	CurveNumber	no	
0020,0026	LookupTableNumber	no	
0020,0030	ImagePosition	no	
0020,0032	ImagePositionPatient	no	
0020,0035	ImageOrientation	no	
0020,0037	ImageOrientationPatient	no	
0020,0050	Location	no	
0020,0052	FrameOfReferenceUID	no	
0020,0060	L laterality	no	
0020,0062	ImageLaterality	no	
0020,0070	ImageGeometryType	no	
0020,0080	MaskingImage	no	
0020,0100	TemporalPositionIdentifier	no	
0020,0105	NumberOfTemporalPositions	no	
0020,0110	TemporalResolution	no	
0020,0200	SynchronizationFrameOfReferenceUID	no	
0020,1000	SeriesInStudy	no	
0020,1001	AcquisitionsInSeries	no	
0020,1002	ImagesInAcquisition	no	
0020,1003	ImagesInSeries	no	
0020,1004	AcquisitionsInStudy	no	
0020,1005	ImagesInStudy	no	
0020,1020	Reference	no	
0020,1040	PositionReferenceIndicator	no	
0020,1041	SliceLocation	no	
0020,1070	OtherStudyNumbers	no	
0020,1200	NumberOfPatientRelatedStudies	no	
0020,1202	NumberOfPatientRelatedSeries	no	
0020,1204	NumberOfPatientRelatedInstances	no	
0020,1206	NumberOfStudyRelatedSeries	no	
0020,1208	NumberOfStudyRelatedInstances	no	
0020,1209	NumberOfSeriesRelatedInstances	no	
0020,31xx	SourceImageIDs	no	
0020,3401	ModifyingDeviceID	no	
0020,3402	ModifiedImageID	no	
0020,3403	ModifiedImageDate	no	
0020,3404	ModifyingDeviceManufacturer	no	

0020,3405	ModifiedImageTime	no
0020,3406	ModifiedImageDescription	no
0020,4000	ImageComments	no
0020,5000	OriginalImageIdentification	no
0020,5002	OriginalImageIdentificationNomenclature	no
0020,9056	StackID	no
0020,9057	InStackPositionNumber	no
0020,9071	FrameAnatomySequence	no
0020,9072	FrameLaterality	no
0020,9111	FrameContentSequence	no
0020,9113	PlanePositionSequence	no
0020,9116	PlaneOrientationSequence	no
0020,9128	TemporalPositionIndex	no
0020,9153	TriggerDelayTime	no
0020,9156	FrameAcquisitionNumber	no
0020,9157	DimensionIndexValues	no
0020,9158	FrameComments	no
0020,9161	ConcatenationUID	no
0020,9162	InConcatenationNumber	no
0020,9163	InConcatenationTotalNumber	no
0020,9164	DimensionOrganizationUID	no
0020,9165	DimensionIndexPointer	no
0020,9167	FunctionalGroupPointer	no
0020,9213	DimensionIndexPrivateCreator	no
0020,9221	DimensionOrganizationSequence	no
0020,9222	DimensionIndexSequence	no
0020,9228	ConcatenationFrameOffsetNumber	no
0020,9238	FunctionalGroupPrivateCreator	no
0020,9241	NominalPercentageOfCardiacPhase	no
0020,9245	NominalPercentOfRespiratoryPhase	no
0020,9246	StartingRespiratoryAmplitude	no
0020,9247	StartingRespiratoryPhase	no
0020,9248	EndingRespiratoryAmplitude	no
0020,9249	EndingRespiratoryPhase	no
0020,9250	RespiratoryTriggerType	no
0020,9251	RRIntervalTimeNominal	no
0020,9252	ActualCardiacTriggerDelayTime	no
0020,9253	RespiratorySynchronizationSequence	no
0020,9254	RespiratoryIntervalTime	no
0020,9255	NominalRespiratoryTriggerDelayTime	no
0020,9256	RespiratoryTriggerDelayThreshold	no
0020,9257	ActualRespiratoryTriggerDelayTime	no
0020,9301	ImagePositionVolume	no
0020,9302	ImageOrientationVolume	no
0020,9308	ApexPosition	no
0020,9421	DimensionDescriptionLabel	no
0020,9450	PatientOrientationInFrameSequence	no
0020,9453	FrameLabel	no
0020,9518	AcquisitionIndex	no
0020,9529	ContributingSOPInstancesRefSeq	no
0020,9536	ReconstructionIndex	no
0021,1003	SeriesFromWhichPrescribed	no
0021,1005	GenesisVersionNow	no

0021,1007	SeriesRecordChecksum	no
0021,1018	GenesisVersionNow	no
0021,1019	AcqreconRecordChecksum	no
0021,1020	TableStartLocation	no
0021,1035	SeriesFromWhichPrescribed	no
0021,1036	ImageFromWhichPrescribed	no
0021,1037	ScreenFormat	no
0021,104A	AnatomicalReferenceForScout	no
0021,104F	LocationsInAcquisition	no
0021,1050	GraphicallyPrescribed	no
0021,1051	RotationFromSourceXRot	no
0021,1052	RotationFromSourceYRot	no
0021,1053	RotationFromSourceZRot	no
0021,1054	ImagePosition	no
0021,1055	ImageOrientation	no
0021,1056	IntegerSlop	no
0021,1057	IntegerSlop	no
0021,1058	IntegerSlop	no
0021,1059	IntegerSlop	no
0021,105A	IntegerSlop	no
0021,105B	FloatSlop	no
0021,105C	FloatSlop	no
0021,105D	FloatSlop	no
0021,105E	FloatSlop	no
0021,105F	FloatSlop	no
0021,1081	AutoWindowLevelAlpha	no
0021,1082	AutoWindowLevelBeta	no
0021,1083	AutoWindowLevelWindow	no
0021,1084	ToWindowLevelLevel	no
0021,1090	TubeFocalSpotPosition	no
0021,1091	BiopsyPosition	no
0021,1092	BiopsyTLocation	no
0021,1093	BiopsyRefLocation	no
0022,0001	LightPathFilterPassThroughWavelen	no
0022,0002	LightPathFilterPassBand	no
0022,0003	ImagePathFilterPassThroughWavelen	no
0022,0004	ImagePathFilterPassBand	no
0022,0005	PatientEyeMovementCommanded	no
0022,0006	PatientEyeMovementCommandCodeSeq	no
0022,0007	SphericalLensPower	no
0022,0008	CylinderLensPower	no
0022,0009	CylinderAxis	no
0022,000A	EmmetropicMagnification	no
0022,000B	IntraOcularPressure	no
0022,000C	HorizontalFieldOfView	no
0022,000D	PupilDilated	no
0022,000E	DegreeOfDilation	no
0022,0010	StereoBaselineAngle	no
0022,0011	StereoBaselineDisplacement	no
0022,0012	StereoHorizontalPixelOffset	no
0022,0013	StereoVerticalPixelOffset	no
0022,0014	StereoRotation	no
0022,0015	AcquisitionDeviceTypeCodeSequence	no

0022,0016	IlluminationTypeCodeSequence	no	
0022,0017	LightPathFilterTypeStackCodeSeq	no	
0022,0018	ImagePathFilterTypeStackCodeSeq	no	
0022,0019	LensesCodeSequence	no	
0022,001A	ChannelDescriptionCodeSequence	no	
0022,001B	RefractiveStateSequence	no	
0022,001C	MydriaticAgentCodeSequence	no	
0022,001D	RelativeImagePositionCodeSequence	no	
0022,0020	StereoPairsSequence	no	
0022,0021	LeftImageSequence	no	
0022,0022	RightImageSequence	no	
0022,0030	AxialLengthOfTheEye	no	
0022,0031	OphthalmicFrameLocationSequence	no	
0022,0032	ReferenceCoordinates	no	
0022,0035	DepthSpatialResolution	no	
0022,0036	MaximumDepthDistortion	no	
0022,0037	AlongScanSpatialResolution	no	
0022,0038	MaximumAlongScanDistortion	no	
0022,0039	OphthalmicImageOrientation	no	
0022,0041	DepthOfTransverseImage	no	
0022,0042	MydriaticAgentConcUnitsSeq	no	
0022,0048	AcrossScanSpatialResolution	no	
0022,0049	MaximumAcrossScanDistortion	no	
0022,004E	MydriaticAgentConcentration	no	
0022,0055	IlluminationWaveLength	no	
0022,0056	IlluminationPower	no	
0022,0057	IlluminationBandwidth	no	
0022,0058	MydriaticAgentSequence	no	
0023,1001	NumberOfSeriesInStudy	no	
0023,1002	NumberOfUnarchivedSeries	no	
0023,1010	ReferenceImageField	no	
0023,1050	SummaryImage	no	
0023,1070	StartTimeSecsInFirstAxial	no	
0023,1074	NoofUpdatesToHeader	no	
0023,107D	IndicatesIfTheStudyHasCompleteInfo	no	
0025,1006	LastPulseSequenceUsed	no	
0025,1007	ImagesInSeries	no	
0025,1010	LandmarkCounter	no	
0025,1011	NumberOfAcquisitions	no	
0025,1014	IndicatesNoofUpdatesToHeader	no	
0025,1017	SeriesCompleteFlag	no	
0025,1018	NumberOfImagesArchived	no	
0025,1019	LastImageNumberUsed	no	
0025,101A	PrimaryReceiverSuiteAndHost	no	
0027,1006	ImageArchiveFlag	no	
0027,1010	ScoutType	no	
0027,101C	VmaMamp	no	
0027,101D	VmaPhase	no	
0027,101E	VmaMod	no	
0027,101F	VmaClip	no	
0027,1020	SmartScanOnOffFlag	no	
0027,1030	ForeignImageRevision	no	
0027,1031	ImagingMode	no	

0027,1032	PulseSequence	no
0027,1033	ImagingOptions	no
0027,1035	PlaneType	no
0027,1036	ObliquePlane	no
0027,1040	RASLetterOfImageLocation	no
0027,1041	ImageLocation	no
0027,1042	CenterRCoordOfPanelImage	no
0027,1043	CenterACoordOfPanelImage	no
0027,1044	CenterSCoordOfPanelImage	no
0027,1045	NormalRCoord	no
0027,1046	NormalACoord	no
0027,1047	NormalSCoord	no
0027,1048	RCoordOfTopRightCorner	no
0027,1049	ACoordOfTopRightCorner	no
0027,104A	SCoordOfTopRightCorner	no
0027,104B	RCoordOfBottomRightCorner	no
0027,104C	ACoordOfBottomRightCorner	no
0027,104D	SCoordOfBottomRightCorner	no
0027,1050	TableStartLocation	no
0027,1051	TableEndLocation	no
0027,1052	RASLetterForSideOfImage	no
0027,1053	RASLetterForAnteriorPosterior	no
0027,1054	RASLetterForScoutStartLoc	no
0027,1055	RASLetterForScoutEndLoc	no
0027,1060	ImageDimensionX	no
0027,1061	ImageDimensionY	no
0027,1062	NumberOfExcitations	no
0028,0000	ImagePresentationGroupLength	no
0028,0002	SamplesPerPixel	no
0028,0003	SamplesPerPixelUsed	no
0028,0004	PhotometricInterpretation	no
0028,0005	ImageDimensions	no
0028,0006	PlanarConfiguration	no
0028,0008	NumberOfFrames	no
0028,0009	FrameIncrementPointer	no
0028,000A	FrameDimensionPointer	no
0028,0010	Rows	no
0028,0011	Columns	no
0028,0012	Planes	no
0028,0014	UltrasoundColorDataPresent	no
0028,0030	PixelSpacing	no
0028,0031	ZoomFactor	no
0028,0032	ZoomCenter	no
0028,0034	PixelAspectRatio	no
0028,0040	ImageFormat	no
0028,0050	ManipulatedImage	no
0028,0051	CorrectedImage	no
0028,005F	CompressionRecognitionCode	no
0028,0060	CompressionCode	no
0028,0061	CompressionOriginator	no
0028,0062	CompressionLabel	no
0028,0063	CompressionDescription	no
0028,0065	CompressionSequence	no

0028,0066	CompressionStepPointers	no	
0028,0068	RepeatInterval	no	
0028,0069	BitsGrouped	no	
0028,0070	PerimeterTable	no	
0028,0071	PerimeterValue	no	
0028,0080	PredictorRows	no	
0028,0081	PredictorColumns	no	
0028,0082	PredictorConstants	no	
0028,0090	BlockedPixels	no	
0028,0091	BlockRows	no	
0028,0092	BlockColumns	no	
0028,0093	RowOverlap	no	
0028,0094	ColumnOverlap	no	
0028,0100	BitsAllocated	no	
0028,0101	BitsStored	no	
0028,0102	HighBit	no	
0028,0103	PixelRepresentation	no	0 = Unsigned 1 = Signed
0028,0104	SmallestValidPixelValue	no	
0028,0105	LargestValidPixelValue	no	
0028,0106	SmallestImagePixelValue	no	
0028,0107	LargestImagePixelValue	no	
0028,0108	SmallestPixelValueInSeries	no	
0028,0109	LargestPixelValueInSeries	no	
0028,0110	SmallestImagePixelValueInPlane	no	
0028,0111	LargestImagePixelValueInPlane	no	
0028,0120	PixelPaddingValue	no	
0028,0121	PixelPaddingRangeLimit	no	
0028,0200	ImageLocation	no	
0028,0300	QualityControlImage	no	
0028,0301	BurnedInAnnotation	no	
0028,0400	TransformLabel	no	
0028,0401	TransformVersionNumber	no	
0028,0402	NumberOfTransformSteps	no	
0028,0403	SequenceOfCompressedData	no	
0028,0404	DetailsOfCoefficients	no	
0028,04x2	CoefficientCoding	no	
0028,04x3	CoefficientCodingPointers	no	
0028,0700	DCTLabel	no	
0028,0701	DataBlockDescription	no	
0028,0702	DataBlock	no	
0028,0710	NormalizationFactorFormat	no	
0028,0720	ZonalMapNumberFormat	no	
0028,0721	ZonalMapLocation	no	
0028,0722	ZonalMapFormat	no	
0028,0730	AdaptiveMapFormat	no	
0028,0740	CodeNumberFormat	no	
0028,08x0	CodeLabel	no	
0028,08x2	NumberOfTables	no	
0028,08x3	CodeTableLocation	no	
0028,08x4	BitsForCodeWord	no	
0028,08x8	ImageDataLocation	no	
0028,0A02	PixelSpacingCalibrationType	no	
0028,0A04	PixelSpacingCalibrationDescription	no	

0028,1040	PixelIntensityRelationship	no	
0028,1041	PixelIntensityRelationshipSign	no	
0028,1050	WindowCenter	no	
0028,1051	WindowWidth	no	
0028,1052	RescaleIntercept	no	
0028,1053	RescaleSlope	no	
0028,1054	RescaleType	no	
0028,1055	WindowCenterAndWidthExplanation	no	
0028,1056	VOI_LUTFunction	no	
0028,1080	GrayScale	no	
0028,1090	RecommendedViewingMode	no	
0028,1100	GrayLookupTableDescriptor	no	
0028,1101	RedPaletteColorTableDescriptor	no	
0028,1102	GreenPaletteColorTableDescriptor	no	
0028,1103	BluePaletteColorTableDescriptor	no	
0028,1111	LargeRedPaletteColorTableDescr	no	
0028,1112	LargeGreenPaletteColorTableDescr	no	
0028,1113	LargeBluePaletteColorTableDescr	no	
0028,1199	PaletteColorTableUID	no	
0028,1200	GrayLookupTableData	no	
0028,1201	RedPaletteColorTableData	no	
0028,1202	GreenPaletteColorTableData	no	
0028,1203	BluePaletteColorTableData	no	
0028,1211	LargeRedPaletteColorTableData	no	
0028,1212	LargeGreenPaletteColorTableData	no	
0028,1213	LargeBluePaletteColorTableData	no	
0028,1214	LargePaletteColorLookupTableUID	no	
0028,1221	SegmentedRedColorTableData	no	
0028,1222	SegmentedGreenColorTableData	no	
0028,1223	SegmentedBlueColorTableData	no	
0028,1300	BreastImplantPresent	no	
0028,1350	PartialView	no	
0028,1351	PartialViewDescription	no	
0028,1352	PartialViewCodeSequence	no	
0028,135A	SpatialLocationsPreserved	no	
0028,1402	DataPathAssignment	no	
0028,1404	BlendingLUT1Sequence	no	
0028,1406	BlendingWeightConstant	no	
0028,1408	BlendingLookupTableData	no	
0028,140C	BlendingLUT2Sequence	no	
0028,140E	DataPathID	no	
0028,140F	RGBLUTTransferFunction	no	
0028,1410	AlphaLUTTransferFunction	no	
0028,2000	ICCPProfile	no	
0028,2110	LossyImageCompression	no	
0028,2112	LossyImageCompressionRatio	no	
0028,2114	LossyImageCompressionMethod	no	
0028,3000	ModalityLUTSequence	no	
0028,3002	LUTDescriptor	no	
0028,3003	LUTEExplanation	no	
0028,3004	ModalityLUTType	no	
0028,3006	LUTData	no	
0028,3010	VOILUTSequence	no	

0028,3110	SoftcopyVOILUTSequence	no	
0028,4000	ImagePresentationComments	no	
0028,5000	BiPlaneAcquisitionSequence	no	
0028,6010	RepresentativeFrameNumber	no	
0028,6020	FrameNumbersOfInterest	no	
0028,6022	FrameOfInterestDescription	no	
0028,6023	FrameOfInterestType	no	
0028,6030	MaskPointers	no	
0028,6040	RWavePointer	no	
0028,6100	MaskSubtractionSequence	no	
0028,6101	MaskOperation	no	
0028,6102	ApplicableFrameRange	no	
0028,6110	MaskFrameNumbers	no	
0028,6112	ContrastFrameAveraging	no	
0028,6114	MaskSubPixelShift	no	
0028,6120	TIDOffset	no	
0028,6190	MaskOperationExplanation	no	
0028,7FE0	PixelDataProviderURL	no	
0028,9001	DataPointRows	no	
0028,9002	DataPointColumns	no	
0028,9003	SignalDomainColumns	no	
0028,9099	LargestMonochromePixelValue	no	
0028,9108	DataRepresentation	no	
0028,9110	PixelMeasuresSequence	no	
0028,9132	FrameVOILUTSequence	no	
0028,9145	PixelValueTransformationSequence	no	
0028,9235	SignalDomainRows	no	
0028,9411	DisplayFilterPercentage	no	
0028,9415	FramePixelShiftSequence	no	
0028,9416	SubtractionItemID	no	
0028,9422	PixelIntensityRelationshipLUTSeq	no	
0028,9443	FramePixelDataPropertiesSequence	no	
0028,9444	GeometricalProperties	no	
0028,9445	GeometricMaximumDistortion	no	
0028,9446	ImageProcessingApplied	no	
0028,9454	MaskSelectionMode	no	
0028,9474	LUTFunction	no	
0028,9478	MaskVisibilityPercentage	no	
0028,9501	PixelShiftSequence	no	
0028,9502	RegionPixelShiftSequence	no	
0028,9503	VerticesOfTheRegion	no	
0028,9506	PixelShiftFrameRange	no	
0028,9507	LUTFrameRange	no	
0028,9520	ImageToEquipmentMappingMatrix	no	
0028,9537	EquipmentCoordinateSystemID	no	
0029,1004	LowerRangeOfPixels1a	no	
0029,1005	LowerRangeOfPixels1b	no	
0029,1006	LowerRangeOfPixels1c	no	
0029,1007	LowerRangeOfPixels1d	no	
0029,1008	LowerRangeOfPixels1e	no	
0029,1009	LowerRangeOfPixels1f	no	
0029,100A	LowerRangeOfPixels1g	no	
0029,1015	LowerRangeOfPixels1h	no	

0029,1016	LowerRangeOfPixels1i	no	
0029,1017	LowerRangeOfPixels2	no	
0029,1018	UpperRangeOfPixels2	no	
0029,101A	LenOfTotHdrInBytes	no	
0029,1026	VersionOfTheHdrStruct	no	
0029,1034	AdvantageCompOverflow	no	
0029,1035	AdvantageCompUnderflow	no	
0032,0000	StudyGroupLength	no	
0032,000A	StudyStatusID	no	
0032,000C	StudyPriorityID	no	
0032,0012	StudyDIssuer	no	
0032,0032	StudyVerifiedDate	no	
0032,0033	StudyVerifiedTime	no	
0032,0034	StudyReadDate	no	
0032,0035	StudyReadTime	no	
0032,1000	ScheduledStudyStartDate	no	
0032,1001	ScheduledStudyStartTime	no	
0032,1010	ScheduledStudyStopDate	no	
0032,1011	ScheduledStudyStopTime	no	
0032,1020	ScheduledStudyLocation	no	
0032,1021	ScheduledStudyLocationAETitle	no	
0032,1030	ReasonForStudy	no	
0032,1031	RequestingPhysicianIDSSequence	no	
0032,1032	RequestingPhysician	no	
0032,1033	RequestingService	no	
0032,1040	StudyArrivalDate	no	
0032,1041	StudyArrivalTime	no	
0032,1050	StudyCompletionDate	no	
0032,1051	StudyCompletionTime	no	
0032,1055	StudyComponentStatusID	no	
0032,1060	RequestedProcedureDescription	no	
0032,1064	RequestedProcedureCodeSequence	no	
0032,1070	RequestedContrastAgent	no	
0032,4000	StudyComments	no	
0038,0004	ReferencedPatientAliasSequence	no	
0038,0008	VisitStatusID	no	
0038,0010	AdmissionID	no	
0038,0011	IssuerOfAdmissionID	no	
0038,0016	RouteOfAdmissions	no	
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0038,001B	ScheduledAdmissionTime	no	
0038,001C	ScheduledDischargeDate	no	
0038,001D	ScheduledDischargeTime	no	
0038,001E	ScheduledPatientInstitResidence	no	
0038,0020	AdmittingDate	no	
0038,0021	AdmittingTime	no	
0038,0030	DischargeDate	no	
0038,0032	DischargeTime	no	
0038,0040	DischargeDiagnosisDescription	no	
0038,0044	DischargeDiagnosisCodeSequence	no	
0038,0050	SpecialNeeds	no	
0038,0060	ServiceEpisodeID	no	
0038,0061	IssuerOfServiceEpisodeID	no	

0038,0062	ServiceEpisodeDescription	no	
0038,0100	PertinentDocumentsSequence	no	
0038,0300	CurrentPatientLocation	no	
0038,0400	PatientInstitutionResidence	no	
0038,0500	PatientState	no	
0038,0502	PatientClinicalTrialParticipSeq	no	
0038,4000	VisitComments	no	
003A,0004	WaveformOriginality	no	
003A,0005	NumberOfWaveformChannels	no	
003A,0010	NumberOfWaveformSamples	no	
003A,001A	SamplingFrequency	no	
003A,0020	MultiplexGroupLabel	no	
003A,0200	ChannelDefinitionSequence	no	
003A,0202	WaveformChannelNumber	no	
003A,0203	ChannelLabel	no	
003A,0205	ChannelStatus	no	
003A,0208	ChannelSourceSequence	no	
003A,0209	ChannelSourceModifiersSequence	no	
003A,020A	SourceWaveformSequence	no	
003A,020C	ChannelDerivationDescription	no	
003A,0210	ChannelSensitivity	no	
003A,0211	ChannelSensitivityUnitsSequence	no	
003A,0212	ChannelSensitivityCorrectionFactor	no	
003A,0213	ChannelBaseline	no	
003A,0214	ChannelTimeSkew	no	
003A,0215	ChannelSampleSkew	no	
003A,0218	ChannelOffset	no	
003A,021A	WaveformBitsStored	no	
003A,0220	FilterLowFrequency	no	
003A,0221	FilterHighFrequency	no	
003A,0222	NotchFilterFrequency	no	
003A,0223	NotchFilterBandwidth	no	
003A,0230	WaveformDataDisplayScale	no	
003A,0231	WaveformDisplayBkgCIELabValue	no	
003A,0240	WaveformPresentationGroupSequence	no	
003A,0241	PresentationGroupNumber	no	
003A,0242	ChannelDisplaySequence	no	
003A,0244	ChannelRecommendDisplayCIELabValue	no	
003A,0245	ChannelPosition	no	
003A,0246	DisplayShadingFlag	no	
003A,0247	FractionalChannelDisplayScale	no	
003A,0248	AbsoluteChannelDisplayScale	no	
003A,0300	MultiplexAudioChannelsDescrCodeSeq	no	
003A,0301	ChannelIdentificationCode	no	
003A,0302	ChannelMode	no	
0040,0001	ScheduledStationAETitle	no	
0040,0002	ScheduledProcedureStepStartDate	no	
0040,0003	ScheduledProcedureStepStartTime	no	
0040,0004	ScheduledProcedureStepEndDate	no	
0040,0005	ScheduledProcedureStepEndTime	no	
0040,0006	ScheduledPerformingPhysiciansName	no	
0040,0007	ScheduledProcedureStepDescription	no	
0040,0008	ScheduledProtocolCodeSequence	no	

0040,0009	ScheduledProcedureStepID	no	
0040,000A	StageCodeSequence	no	
0040,000B	ScheduledPerformingPhysicianIDSeq	no	
0040,0010	ScheduledStationName	no	
0040,0011	ScheduledProcedureStepLocation	no	
0040,0012	PreMedication	no	
0040,0020	ScheduledProcedureStepStatus	no	
0040,0031	LocalNamespaceEntityID	no	
0040,0032	UniversalEntityID	no	
0040,0033	UniversalEntityIDType	no	
0040,0035	IdentifierTypeCode	no	
0040,0036	AssigningFacilitySequence	no	
0040,0100	ScheduledProcedureStepSequence	no	
0040,0220	ReferencedNonImageCompositeSOPSeq	no	
0040,0241	PerformedStationAETitle	no	
0040,0242	PerformedStationName	no	
0040,0243	PerformedLocation	no	
0040,0244	PerformedProcedureStepStartDate	no	
0040,0245	PerformedProcedureStepStartTime	no	
0040,0250	PerformedProcedureStepEndDate	no	
0040,0251	PerformedProcedureStepEndTime	no	
0040,0252	PerformedProcedureStepStatus	no	
0040,0253	PerformedProcedureStepID	no	
0040,0254	PerformedProcedureStepDescription	no	
0040,0255	PerformedProcedureTypeDescription	no	
0040,0260	PerformedProtocolCodeSequence	no	
0040,0261	PerformedProtocolType	no	
0040,0270	ScheduledStepAttributesSequence	no	
0040,0275	RequestAttributesSequence	no	
0040,0280	CommentsOnPerformedProcedureStep	no	
0040,0281	ProcStepDiscontinueReasonCodeSeq	no	
0040,0293	QuantitySequence	no	
0040,0294	Quantity	no	
0040,0295	MeasuringUnitsSequence	no	
0040,0296	BillingItemSequence	no	
0040,0300	TotalTimeOfFluoroscopy	no	
0040,0301	TotalNumberOfExposures	no	
0040,0302	EntranceDose	no	
0040,0303	ExposedArea	no	
0040,0306	DistanceSourceToEntrance	no	
0040,0307	DistanceSourceToSupport	no	
0040,030E	ExposureDoseSequence	no	
0040,0310	CommentsOnRadiationDose	no	
0040,0312	XRayOutput	no	
0040,0314	HalfValueLayer	no	
0040,0316	OrganDose	no	
0040,0318	OrganExposed	no	
0040,0320	BillingProcedureStepSequence	no	
0040,0321	FilmConsumptionSequence	no	
0040,0324	BillingSuppliesAndDevicesSequence	no	
0040,0330	ReferencedProcedureStepSequence	no	
0040,0340	PerformedSeriesSequence	no	
0040,0400	CommentsOnScheduledProcedureStep	no	

0040,0440	ProtocolContextSequence	no	
0040,0441	ContentItemModifierSequence	no	
0040,050A	SpecimenAccessionNumber	no	
0040,0512	ContainerIdentifier	no	
0040,051A	ContainerDescription	no	
0040,0550	SpecimenSequence	no	
0040,0551	SpecimenIdentifier	no	
0040,0552	SpecimenDescriptionSequenceTrial	no	
0040,0553	SpecimenDescriptionTrial	no	
0040,0554	SpecimenUID	no	
0040,0555	AcquisitionContextSequence	no	
0040,0556	AcquisitionContextDescription	no	
0040,059A	SpecimenTypeCodeSequence	no	
0040,0600	SpecimenShortDescription	no	
0040,06FA	SlideIdentifier	no	
0040,071A	ImageCenterPointCoordinatesSeq	no	
0040,072A	XOffsetInSlideCoordinateSystem	no	
0040,073A	YOffsetInSlideCoordinateSystem	no	
0040,074A	ZOffsetInSlideCoordinateSystem	no	
0040,08D8	PixelSpacingSequence	no	
0040,08DA	CoordinateSystemAxisCodeSequence	no	
0040,08EA	MeasurementUnitsCodeSequence	no	
0040,09F8	VitalStainCodeSequenceTrial	no	
0040,1001	RequestedProcedureID	no	
0040,1002	ReasonForRequestedProcedure	no	
0040,1003	RequestedProcedurePriority	no	
0040,1004	PatientTransportArrangements	no	
0040,1005	RequestedProcedureLocation	no	
0040,1006	PlacerOrderNumber-Procedure	no	
0040,1007	FillerOrderNumber-Procedure	no	
0040,1008	ConfidentialityCode	no	
0040,1009	ReportingPriority	no	
0040,100A	ReasonForRequestedProcedureCodeSeq	no	
0040,1010	NamesOfIntendedRecipientsOfResults	no	
0040,1011	IntendedRecipientsOfResultsIDSeq	no	
0040,1101	PersonIdentificationCodeSequence	no	
0040,1102	PersonAddress	no	
0040,1103	PersonTelephoneNumber	no	
0040,1400	RequestedProcedureComments	no	
0040,2001	ReasonForImagingServiceRequest	no	
0040,2004	IssueDateOfImagingServiceRequest	no	
0040,2005	IssueTimeOfImagingServiceRequest	no	
0040,2006	PlacerOrderNum-ImagingServiceReq	no	
0040,2007	FillerOrderNum-ImagingServiceReq	no	
0040,2008	OrderEnteredBy	no	
0040,2009	OrderEntererLocation	no	
0040,2010	OrderCallbackPhoneNumber	no	
0040,2016	PlacerOrderNum-ImagingServiceReq	no	
0040,2017	FillerOrderNum-ImagingServiceReq	no	
0040,2400	ImagingServiceRequestComments	no	
0040,3001	ConfidentialityOnPatientDataDescr	no	
0040,4001	GenPurposeScheduledProcStepStatus	no	
0040,4002	GenPurposePerformedProcStepStatus	no	

0040,4003	GenPurposeSchedProcStepPriority	no	
0040,4004	SchedProcessingApplicationsCodeSeq	no	
0040,4005	SchedProcedureStepStartDateAndTime	no	
0040,4006	MultipleCopiesFlag	no	
0040,4007	PerformedProcessingAppsCodeSeq	no	
0040,4009	HumanPerformerCodeSequence	no	
0040,4010	SchedProcStepModificationDateTime	no	
0040,4011	ExpectedCompletionDateAndTime	no	
0040,4015	ResultingGenPurposePerfProcStepSeq	no	
0040,4016	RefGenPurposeSchedProcStepSeq	no	
0040,4018	ScheduledWorkitemCodeSequence	no	
0040,4019	PerformedWorkitemCodeSequence	no	
0040,4020	InputAvailabilityFlag	no	
0040,4021	InputInformationSequence	no	
0040,4022	RelevantInformationSequence	no	
0040,4023	RefGenPurSchedProcStepTransUID	no	
0040,4025	ScheduledStationNameCodeSequence	no	
0040,4026	ScheduledStationClassCodeSequence	no	
0040,4027	SchedStationGeographicLocCodeSeq	no	
0040,4028	PerformedStationNameCodeSequence	no	
0040,4029	PerformedStationClassCodeSequence	no	
0040,4030	PerformedStationGeogLocCodeSeq	no	
0040,4031	RequestedSubsequentWorkItemCodeSeq	no	
0040,4032	NonDICOMOutputCodeSequence	no	
0040,4033	OutputInformationSequence	no	
0040,4034	ScheduledHumanPerformersSequence	no	
0040,4035	ActualHumanPerformersSequence	no	
0040,4036	HumanPerformersOrganization	no	
0040,4037	HumanPerformerName	no	
0040,4040	RawDataHandling	no	
0040,8302	EntranceDoseInMilliGy	no	
0040,9094	RefImageRealWorldValueMappingSeq	no	
0040,9096	RealWorldValueMappingSequence	no	
0040,9098	PixelValueMappingCodeSequence	no	
0040,9210	LUTLabel	no	
0040,9211	RealWorldValueLastValueMapped	no	
0040,9212	RealWorldValueLUTData	no	
0040,9216	RealWorldValueFirstValueMapped	no	
0040,9224	RealWorldValueIntercept	no	
0040,9225	RealWorldValueSlope	no	
0040,A010	RelationshipType	no	
0040,A027	VerifyingOrganization	no	
0040,A030	VerificationDateTime	no	
0040,A032	ObservationDateTime	no	
0040,A040	ValueType	no	
0040,A043	ConceptNameCodeSequence	no	
0040,A050	ContinuityOfContent	no	
0040,A073	VerifyingObserverSequence	no	
0040,A075	VerifyingObserverName	no	
0040,A078	AuthorObserverSequence	no	
0040,A07A	ParticipantSequence	no	
0040,A07C	CustodialOrganizationSequence	no	
0040,A080	ParticipationType	no	

0040,A082	ParticipationDateTime	no
0040,A084	ObserverType	no
0040,A088	VerifyingObserverIdentCodeSequence	no
0040,A090	EquivalentCDADocumentSequence	no
0040,A0B0	ReferencedWaveformChannels	no
0040,A120	DateTime	no
0040,A121	Date	no
0040,A122	Time	no
0040,A123	PersonName	no
0040,A124	UID	no
0040,A130	TemporalRangeType	no
0040,A132	ReferencedSamplePositions	no
0040,A136	ReferencedFrameNumbers	no
0040,A138	ReferencedTimeOffsets	no
0040,A13A	ReferencedDateTime	no
0040,A160	TextValue	no
0040,A168	ConceptCodeSequence	no
0040,A170	PurposeOfReferenceCodeSequence	no
0040,A180	AnnotationGroupNumber	no
0040,A195	ModifierCodeSequence	no
0040,A300	MeasuredValueSequence	no
0040,A301	NumericValueQualifierCodeSequence	no
0040,A30A	NumericValue	no
0040,A353	AddressTrial	no
0040,A354	TelephoneNumberTrial	no
0040,A360	PredecessorDocumentsSequence	no
0040,A370	ReferencedRequestSequence	no
0040,A372	PerformedProcedureCodeSequence	no
0040,A375	CurrentRequestedProcEvidenceSeq	no
0040,A385	PertinentOtherEvidenceSequence	no
0040,A390	HL7StructuredDocumentRefSeq	no
0040,A491	CompletionFlag	no
0040,A492	CompletionFlagDescription	no
0040,A493	VerificationFlag	no
0040,A494	ArchiveRequested	no
0040,A496	PreliminaryFlag	no
0040,A504	ContentTemplateSequence	no
0040,A525	IdenticalDocumentsSequence	no
0040,A730	ContentSequence	no
0040,B020	AnnotationSequence	no
0040,DB00	TemplateIdentifier	no
0040,DB06	TemplateVersion	no
0040,DB07	TemplateLocalVersion	no
0040,DB0B	TemplateExtensionFlag	no
0040,DB0C	TemplateExtensionOrganizationUID	no
0040,DB0D	TemplateExtensionCreatorUID	no
0040,DB73	ReferencedContentItemIdentifier	no
0040,E001	HL7InstanceIdentifier	no
0040,E004	HL7DocumentEffectiveTime	no
0040,E006	HL7DocumentTypeCodeSequence	no
0040,E010	RetrieveURI	no
0040,E011	RetrieveLocationUID	no
0042,0010	DocumentTitle	no

0042,0011	EncapsulatedDocument	no
0042,0012	MIMETypeOfEncapsulatedDocument	no
0042,0013	SourceInstanceSequence	no
0042,0014	ListOfMIMETypes	no
0043,1001	BitmapOfPrescanOptions	no
0043,1002	GradientOffsetInX	no
0043,1003	GradientOffsetInY	no
0043,1004	GradientOffsetInZ	no
0043,1005	ImgIsOriginalOrUnoriginal	no
0043,1006	NumberOfEPIShots	no
0043,1007	ViewsPerSegment	no
0043,1008	RespiratoryRateBpm	no
0043,1009	RespiratoryTriggerPoint	no
0043,100A	TypeOfReceiverUsed	no
0043,100B	PeakRateOfChangeOfGradientField	no
0043,100C	LimitsInUnitsOfPercent	no
0043,100D	PSDEstimatedLimit	no
0043,100E	PSDEstimatedLimitInTeslaPerSecond	no
0043,100F	Saravghead	no
0043,1010	WindowValue	no
0043,1011	TotalInputViews	no
0043,1012	X-RayChain	no
0043,1013	DeconKernelParameters	no
0043,1014	CalibrationParameters	no
0043,1015	TotalOutputViews	no
0043,1016	NumberOfOverranges	no
0043,1017	IBHImageScaleFactors	no
0043,1018	BBHCoefficients	no
0043,1019	NumberOfBBHChainsToBlend	no
0043,101A	StartingChannelNumber	no
0043,101B	PpscanParameters	no
0043,101C	GEImageIntegrity	no
0043,101D	LevelValue	no
0043,101E	DeltaStartTime	no
0043,101F	MaxOverrangesInAView	no
0043,1020	AvgOverrangesAllViews	no
0043,1021	CorrectedAfterGlowTerms	no
0043,1025	ReferenceChannels	no
0043,1026	NoViewsRefChansBlocked	no
0043,1027	ScanPitchRatio	no
0043,1028	UniqueImagelden	no
0043,1029	HistogramTables	no
0043,102A	UserDefinedData	no
0043,102B	PrivateScanOptions	no
0043,102C	EffectiveEchoSpacing	no
0043,102D	StringSlopField1	no
0043,102E	StringSlopField2	no
0043,102F	RawDataType	no
0043,1030	RawDataType	no
0043,1031	RACordOfTargetReconCenter	no
0043,1032	RawDataType	no
0043,1033	NegScanspacing	no
0043,1034	OffsetFrequency	no

0043,1035	UserUsageTag	no	
0043,1036	UserFillMapMSW	no	
0043,1037	UserFillMapLSW	no	
0043,1038	User25-48	no	
0043,1039	SlopInt6-9	no	
0043,1040	TriggerOnPosition	no	
0043,1041	DegreeOfRotation	no	
0043,1042	DASTriggerSource	no	
0043,1043	DASFpaGain	no	
0043,1044	DASOutputSource	no	
0043,1045	DASAdInput	no	
0043,1046	DASCalMode	no	
0043,1047	DASCalFrequency	no	
0043,1048	DASRegXm	no	
0043,1049	DASAutoZero	no	
0043,104A	StartingChannelOfView	no	
0043,104B	DASXmPattern	no	
0043,104C	TGGCTriggerMode	no	
0043,104D	StartScanToXrayOnDelay	no	
0043,104E	DurationOfXrayOn	no	
0043,1060	SlopInt10-17	no	
0043,1061	ScannerStudyEntityUID	no	
0043,1062	ScannerStudyID	no	
0043,106f	ScannerTableEntry	no	
0044,0001	ProductPackageIdentifier	no	
0044,0002	SubstanceAdministrationApproval	no	
0044,0003	ApprovalStatusFurtherDescription	no	
0044,0004	ApprovalStatusDateTime	no	
0044,0007	ProductTypeCodeSequence	no	
0044,0008	ProductName	no	
0044,0009	ProductDescription	no	
0044,000A	ProductLotIdentifier	no	
0044,000B	ProductExpirationDateTime	no	
0044,0010	SubstanceAdministrationDateTime	no	
0044,0011	SubstanceAdministrationNotes	no	
0044,0012	SubstanceAdministrationDeviceID	no	
0044,0013	ProductParameterSequence	no	
0044,0019	SubstanceAdminParameterSeq	no	
0045,1001	NumberOfMacroRowsInDetector	no	
0045,1002	MacroWidthAtISOCenter	no	
0045,1003	DASType	no	
0045,1004	DASGain	no	
0045,1005	DASTemperature	no	
0045,1006	TableDirectionInOrOut	no	
0045,1007	ZSmoothingFactor	no	
0045,1008	ViewWeightingMode	no	
0045,1009	SigmaRowNumberWhichRowsWereUsed	no	
0045,100A	MinimumDasValueFoundInTheScanData	no	
0045,100B	MaximumOffsetShiftValueUsed	no	
0045,100C	NumberOfViewsShifted	no	
0045,100D	ZTrackingFlag	no	
0045,100E	MeanZError	no	
0045,100F	ZTrackingMaximumError	no	

0045,1010	StartingViewForRow2a	no	
0045,1011	NumberOfViewsInRow2a	no	
0045,1012	StartingViewForRow1a	no	
0045,1013	SigmaMode	no	
0045,1014	NumberOfViewsInRow1a	no	
0045,1015	StartingViewForRow2b	no	
0045,1016	NumberOfViewsInRow2b	no	
0045,1017	StartingViewForRow1b	no	
0045,1018	NumberOfViewsInRow1b	no	
0045,1019	AirFilterCalibrationDate	no	
0045,101A	AirFilterCalibrationTime	no	
0045,101B	PhantomCalibrationDate	no	
0045,101C	PhantomCalibrationTime	no	
0045,101D	ZSlopeCalibrationDate	no	
0045,101E	ZSlopeCalibrationTime	no	
0045,101F	CrosstalkCalibrationDate	no	
0045,1020	CrosstalkCalibrationTime	no	
0045,1021	IterboneOptionFlag	no	
0045,1022	PeristalticFlagOption	no	
0046,0012	LensDescription	no	
0046,0014	RightLensSequence	no	
0046,0015	LeftLensSequence	no	
0046,0018	CylinderSequence	no	
0046,0028	PrismSequence	no	
0046,0030	HorizontalPrismPower	no	
0046,0032	HorizontalPrismBase	no	
0046,0034	VerticalPrismPower	no	
0046,0036	VerticalPrismBase	no	
0046,0038	LensSegmentType	no	
0046,0040	OpticalTransmittance	no	
0046,0042	ChannelWidth	no	
0046,0044	PupilSize	no	
0046,0046	CornealSize	no	
0046,0060	DistancePupillaryDistance	no	
0046,0062	NearPupillaryDistance	no	
0046,0064	OtherPupillaryDistance	no	
0046,0075	RadiusOfCurvature	no	
0046,0076	KeratometricPower	no	
0046,0077	KeratometricAxis	no	
0046,0092	BackgroundColor	no	
0046,0094	Optotype	no	
0046,0095	OptotypePresentation	no	
0046,0100	AddNearSequence	no	
0046,0101	AddIntermediateSequence	no	
0046,0102	AddOtherSequence	no	
0046,0104	AddPower	no	
0046,0106	ViewingDistance	no	
0046,0125	ViewingDistanceType	no	
0046,0135	VisualAcuityModifiers	no	
0046,0137	DecimalVisualAcuity	no	
0046,0139	OptotypeDetailedDefinition	no	
0046,0146	SpherePower	no	
0046,0147	CylinderPower	no	

0050,0004	CalibrationImage	no	
0050,0010	DeviceSequence	no	
0050,0014	DeviceLength	no	
0050,0015	ContainerComponentWidth	no	
0050,0016	DeviceDiameter	no	
0050,0017	DeviceDiameterUnits	no	
0050,0018	DeviceVolume	no	
0050,0019	InterMarkerDistance	no	
0050,001B	ContainerComponentID	no	
0050,0020	DeviceDescription	no	
0054,0010	EnergyWindowVector	no	
0054,0011	NumberOfEnergyWindows	no	
0054,0012	EnergyWindowInformationSequence	no	
0054,0013	EnergyWindowRangeSequence	no	
0054,0014	EnergyWindowLowerLimit	no	
0054,0015	EnergyWindowUpperLimit	no	
0054,0016	RadiopharmaceuticalInformationSeq	no	
0054,0017	ResidualSyringeCounts	no	
0054,0018	EnergyWindowName	no	
0054,0020	DetectorVector	no	
0054,0021	NumberOfDetectors	no	
0054,0022	DetectorInformationSequence	no	
0054,0030	PhaseVector	no	
0054,0031	NumberOfPhases	no	
0054,0032	PhaseInformationSequence	no	
0054,0033	NumberOfFramesInPhase	no	
0054,0036	PhaseDelay	no	
0054,0038	PauseBetweenFrames	no	
0054,0039	PhaseDescription	no	
0054,0050	RotationVector	no	
0054,0051	NumberOfRotations	no	
0054,0052	RotationInformationSequence	no	
0054,0053	NumberOfFramesInRotation	no	
0054,0060	RRIntervalVector	no	
0054,0061	NumberOfRRIntervals	no	
0054,0062	GatedInformationSequence	no	
0054,0063	DataInformationSequence	no	
0054,0070	TimeSlotVector	no	
0054,0071	NumberOfTimeSlots	no	
0054,0072	TimeSlotInformationSequence	no	
0054,0073	TimeSlotTime	no	
0054,0080	SliceVector	no	
0054,0081	NumberOfSlices	no	
0054,0090	AngularViewVector	no	
0054,0100	TimeSliceVector	no	
0054,0101	NumberOfTimeSlices	no	
0054,0200	StartAngle	no	
0054,0202	TypeOfDetectorMotion	no	
0054,0210	TriggerVector	no	
0054,0211	NumberOfTriggersInPhase	no	
0054,0220	ViewCodeSequence	no	
0054,0222	ViewModifierCodeSequence	no	
0054,0300	RadionuclideCodeSequence	no	

0054,0302	AdministrationRouteCodeSequence	no	
0054,0304	RadiopharmaceuticalCodeSequence	no	
0054,0306	CalibrationDataSequence	no	
0054,0308	EnergyWindowNumber	no	
0054,0400	ImageID	no	
0054,0410	PatientOrientationCodeSequence	no	
0054,0412	PatientOrientationModifierCodeSeq	no	
0054,0414	PatientGantryRelationshipCodeSeq	no	
0054,0500	SliceProgressionDirection	no	
0054,1000	SeriesType	no	
0054,1001	Units	no	
0054,1002	CountsSource	no	
0054,1004	ReprojectionMethod	no	
0054,1100	RandomsCorrectionMethod	no	
0054,1101	AttenuationCorrectionMethod	no	
0054,1102	DecayCorrection	no	
0054,1103	ReconstructionMethod	no	
0054,1104	DetectorLinesOfResponseUsed	no	
0054,1105	ScatterCorrectionMethod	no	
0054,1200	AxialAcceptance	no	
0054,1201	AxialMash	no	
0054,1202	TransverseMash	no	
0054,1203	DetectorElementSize	no	
0054,1210	CoincidenceWindowWidth	no	
0054,1220	SecondaryCountsType	no	
0054,1300	FrameReferenceTime	no	
0054,1310	PrimaryCountsAccumulated	no	
0054,1311	SecondaryCountsAccumulated	no	
0054,1320	SliceSensitivityFactor	no	
0054,1321	DecayFactor	no	
0054,1322	DoseCalibrationFactor	no	
0054,1323	ScatterFractionFactor	no	
0054,1324	DeadTimeFactor	no	
0054,1330	ImageIndex	no	
0054,1400	CountsIncluded	no	
0054,1401	DeadTimeCorrectionFlag	no	
0060,3000	HistogramSequence	no	
0060,3002	HistogramNumberOfBins	no	
0060,3004	HistogramFirstBinValue	no	
0060,3006	HistogramLastBinValue	no	
0060,3008	HistogramBinWidth	no	
0060,3010	HistogramExplanation	no	
0060,3020	HistogramData	no	
0062,0001	SegmentationType	no	
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0062,0003	SegmentedPropertyCategoryCodeSeq	no	
0062,0004	SegmentNumber	no	
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0062,0006	SegmentDescription	no	
0062,0008	SegmentAlgorithmType	no	
0062,0009	SegmentAlgorithmName	no	
0062,000A	SegmentIdentificationSequence	no	
0062,000B	ReferencedSegmentNumber	no	

0062,000C	RecommendedDisplayGrayscaleValue	no	
0062,000D	RecommendedDisplayCIELabValue	no	
0062,000E	MaximumFractionalValue	no	
0062,000F	SegmentedPropertyTypeCodeSequence	no	
0062,0010	SegmentationFractionalType	no	
0064,0002	DeformableRegistrationSequence	no	
0064,0003	SourceFrameOfReferenceUID	no	
0064,0005	DeformableRegistrationGridSequence	no	
0064,0007	GridDimensions	no	
0064,0008	GridResolution	no	
0064,0009	VectorGridData	no	
0064,000F	PreDeformationMatrixRegistSeq	no	
0064,0010	PostDeformationMatrixRegistSeq	no	
0066,0001	NumberOfSurfaces	no	
0066,0002	SurfaceSequence	no	
0066,0003	SurfaceNumber	no	
0066,0004	SurfaceComments	no	
0066,0009	SurfaceProcessing	no	
0066,000A	SurfaceProcessingRatio	no	
0066,000E	FiniteVolume	no	
0066,0010	Manifold	no	
0066,0011	SurfacePointsSequence	no	
0066,0015	NumberOfSurfacePoints	no	
0066,0016	PointCoordinatesData	no	
0066,0017	PointPositionAccuracy	no	
0066,0018	MeanPointDistance	no	
0066,0019	MaximumPointDistance	no	
0066,001B	AxisOfRotation	no	
0066,001C	CenterOfRotation	no	
0066,001E	NumberOfVectors	no	
0066,001F	VectorDimensionality	no	
0066,0020	VectorAccuracy	no	
0066,0021	VectorCoordinateData	no	
0066,0023	TrianglePointIndexList	no	
0066,0024	EdgePointIndexList	no	
0066,0025	VertexPointIndexList	no	
0066,0026	TriangleStripSequence	no	
0066,0027	TriangleFanSequence	no	
0066,0028	LineSequence	no	
0066,0029	PrimitivePointIndexList	no	
0066,002A	SurfaceCount	no	
0066,002F	AlgorithmFamilyCodeSequ	no	
0066,0031	AlgorithmVersion	no	
0066,0032	AlgorithmParameters	no	
0066,0034	FacetSequence	no	
0066,0036	AlgorithmName	no	
0070,0001	GraphicAnnotationSequence	no	
0070,0002	GraphicLayer	no	
0070,0003	BoundingBoxAnnotationUnits	no	
0070,0004	AnchorPointAnnotationUnits	no	
0070,0005	GraphicAnnotationUnits	no	
0070,0006	UnformattedTextValue	no	
0070,0008	TextObjectSequence	no	

0070,0009	GraphicObjectSequence	no	
0070,0010	BoundingBoxTopLeftHandCorner	no	
0070,0011	BoundingBoxBottomRightHandCorner	no	
0070,0012	BoundingBoxTextHorizJustification	no	
0070,0014	AnchorPoint	no	
0070,0015	AnchorPointVisibility	no	
0070,0020	GraphicDimensions	no	
0070,0021	NumberOfGraphicPoints	no	
0070,0022	GraphicData	no	
0070,0023	GraphicType	no	
0070,0024	GraphicFilled	no	
0070,0040	ImageRotationRetired	no	
0070,0041	ImageHorizontalFlip	no	
0070,0042	ImageRotation	no	
0070,0050	DisplayedAreaTopLeftTrial	no	
0070,0051	DisplayedAreaBottomRightTrial	no	
0070,0052	DisplayedAreaTopLeft	no	
0070,0053	DisplayedAreaBottomRight	no	
0070,005A	DisplayedAreaSelectionSequence	no	
0070,0060	GraphicLayerSequence	no	
0070,0062	GraphicLayerOrder	no	
0070,0066	GraphicLayerRecDisplayGrayscale	no	
0070,0067	GraphicLayerRecDisplayRGBValue	no	
0070,0068	GraphicLayerDescription	no	
0070,0080	ContentLabel	no	
0070,0081	ContentDescription	no	
0070,0082	PresentationCreationDate	no	
0070,0083	PresentationCreationTime	no	
0070,0084	ContentCreatorName	no	
0070,0086	ContentCreatorIDCodeSequence	no	
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0070,0102	PresentationPixelAspectRatio	no	
0070,0103	PresentationPixelMagRatio	no	
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0070,0309	MatrixRegistrationSequence	no	
0070,030A	MatrixSequence	no	
0070,030C	FrameOfRefTransformationMatrixType	no	
0070,030D	RegistrationTypeCodeSequence	no	
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0070,0310	FiducialIdentifier	no	
0070,0311	FiducialIdentifierCodeSequence	no	
0070,0312	ContourUncertaintyRadius	no	
0070,0314	UsedFiducialsSequence	no	
0070,0318	GraphicCoordinatesDataSequence	no	
0070,031A	FiducialUID	no	
0070,031C	FiducialSetSequence	no	
0070,031E	FiducialSequence	no	
0070,0401	GraphicLayerRecomDisplayCIELabVal	no	
0070,0402	BlendingSequence	no	
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0070,0404	ReferencedSpatialRegistrationSeq	no	

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0072,0002	HangingProtocolName	no	
0072,0004	HangingProtocolDescription	no	
0072,0006	HangingProtocolLevel	no	
0072,0008	HangingProtocolCreator	no	
0072,000A	HangingProtocolCreationDateTime	no	
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0072,000E	HangingProtocolUserIDCodeSequence	no	
0072,0010	HangingProtocolUserGroupName	no	
0072,0012	SourceHangingProtocolSequence	no	
0072,0014	NumberOfPriorsReferenced	no	
0072,0020	ImageSetsSequence	no	
0072,0022	ImageSetSelectorSequence	no	
0072,0024	ImageSetSelectorUsageFlag	no	
0072,0026	SelectorAttribute	no	
0072,0028	SelectorValueNumber	no	
0072,0030	TimeBasedImageSetsSequence	no	
0072,0032	ImageSetNumber	no	
0072,0034	ImageSetSelectorCategory	no	
0072,0038	RelativeTime	no	
0072,003A	RelativeTimeUnits	no	
0072,003C	AbstractPriorValue	no	
0072,003E	AbstractPriorCodeSequence	no	
0072,0040	ImageSetLabel	no	
0072,0050	SelectorAttributeVR	no	
0072,0052	SelectorSequencePointer	no	
0072,0054	SelectorSeqPointerPrivateCreator	no	
0072,0056	SelectorAttributePrivateCreator	no	
0072,0060	SelectorATValue	no	
0072,0062	SelectorCSValue	no	
0072,0064	SelectorISValue	no	
0072,0066	SelectorLOValue	no	
0072,0068	SelectorLTValue	no	
0072,006A	SelectorPNValue	no	
0072,006C	SelectorSHValue	no	
0072,006E	SelectorSTValue	no	
0072,0070	SelectorUTValue	no	
0072,0072	SelectorDSValue	no	
0072,0074	SelectorFDValue	no	
0072,0076	SelectorFLValue	no	
0072,0078	SelectorULValue	no	
0072,007A	SelectorUSValue	no	
0072,007C	SelectorSLValue	no	
0072,007E	SelectorSSValue	no	
0072,0080	SelectorCodeSequenceValue	no	
0072,0100	NumberOfScreens	no	
0072,0102	NominalScreenDefinitionSequence	no	
0072,0104	NumberOfVerticalPixels	no	
0072,0106	NumberOfHorizontalPixels	no	
0072,0108	DisplayEnvironmentSpatialPosition	no	
0072,010A	ScreenMinimumGrayscaleBitDepth	no	
0072,010C	ScreenMinimumColorBitDepth	no	
0072,010E	ApplicationMaximumRepaintTime	no	

0072,0200	DisplaySetsSequence	no	
0072,0202	DisplaySetNumber	no	
0072,0203	DisplaysetLabel	no	
0072,0204	DisplaySetPresentationGroup	no	
0072,0206	DisplaySetPresentationGroupDescr	no	
0072,0208	PartialDataDisplayHandling	no	
0072,0210	SynchronizedScrollingSequence	no	
0072,0212	DisplaySetScrollingGroup	no	
0072,0214	NavigationIndicatorSequence	no	
0072,0216	NavigationDisplaySet	no	
0072,0218	ReferenceDisplaySets	no	
0072,0300	ImageBoxesSequence	no	
0072,0302	ImageBoxNumber	no	
0072,0304	ImageBoxLayoutType	no	
0072,0306	ImageBoxTileHorizontalDimension	no	
0072,0308	ImageBoxTileVerticalDimension	no	
0072,0310	ImageBoxScrollDirection	no	
0072,0312	ImageBoxSmallScrollType	no	
0072,0314	ImageBoxSmallScrollAmount	no	
0072,0316	ImageBoxLargeScrollType	no	
0072,0318	ImageBoxLargeScrollAmount	no	
0072,0320	ImageBoxOverlapPriority	no	
0072,0330	CineRelativeToRealTime	no	
0072,0400	FilterOperationsSequence	no	
0072,0402	FilterByCategory	no	
0072,0404	FilterByAttributePresence	no	
0072,0406	FilterByOperator	no	
0072,0432	SynchronizedImageBoxList	no	
0072,0434	TypeOfSynchronization	no	
0072,0500	BlendingOperationType	no	
0072,0510	ReformattingOperationType	no	
0072,0512	ReformattingThickness	no	
0072,0514	ReformattingInterval	no	
0072,0516	ReformattingOpInitialViewDir	no	
0072,0520	RenderingType3D	no	
0072,0600	SortingOperationsSequence	no	
0072,0602	SortByCategory	no	
0072,0604	SortingDirection	no	
0072,0700	DisplaySetPatientOrientation	no	
0072,0702	VOIType	no	
0072,0704	PseudoColorType	no	
0072,0706	ShowGrayscaleInverted	no	
0072,0710	ShowImageTrueSizeFlag	no	
0072,0712	ShowGraphicAnnotationFlag	no	
0072,0714	ShowPatientDemographicsFlag	no	
0072,0716	ShowAcquisitionTechniquesFlag	no	
0072,0717	DisplaySetHorizontalJustification	no	
0072,0718	DisplaySetVerticalJustification	no	
0074,1000	UnifiedProcedureStepState	no	
0074,1002	UPSProgressInformationSequence	no	
0074,1004	UnifiedProcedureStepProgress	no	
0074,1006	UnifiedProcedureStepProgressDescr	no	
0074,1008	UnifiedProcedureStepComURISeq	no	

0074,100a	ContactURI	no	
0074,100c	ContactDisplayName	no	
0074,1020	BeamTaskSequence	no	
0074,1022	BeamTaskType	no	
0074,1024	BeamOrderIndex	no	
0074,1030	DeliveryVerificationImageSequence	no	
0074,1032	VerificationImageTiming	no	
0074,1034	DoubleExposureFlag	no	
0074,1036	DoubleExposureOrdering	no	
0074,1038	DoubleExposureMeterset	no	
0074,103A	DoubleExposureFieldDelta	no	
0074,1040	RelatedReferenceRTImageSequence	no	
0074,1042	GeneralMachineVerificationSequence	no	
0074,1044	ConventionalMachineVerificationSeq	no	
0074,1046	IonMachineVerificationSequence	no	
0074,1048	FailedAttributesSequence	no	
0074,104A	OverriddenAttributesSequence	no	
0074,104C	ConventionalControlPointVerifySeq	no	
0074,104E	IonControlPointVerificationSeq	no	
0074,1050	AttributeOccurrenceSequence	no	
0074,1052	AttributeOccurrencePointer	no	
0074,1054	AttributeItemSelector	no	
0074,1056	AttributeOccurrencePrivateCreator	no	
0074,1200	ScheduledProcedureStepPriority	no	
0074,1202	WorklistLabel	no	
0074,1204	ProcedureStepLabel	no	
0074,1210	ScheduledProcessingParametersSeq	no	
0074,1212	PerformedProcessingParametersSeq	no	
0074,1216	UPSPerformedProcedureSequence	no	
0074,1220	RelatedProcedureStepSequence	no	
0074,1222	ProcedureStepRelationshipType	no	
0074,1230	DeletionLock	no	
0074,1234	ReceivingAE	no	
0074,1236	RequestingAE	no	
0074,1238	ReasonForCancellation	no	
0074,1242	SCPStatus	no	
0074,1244	SubscriptionListStatus	no	
0074,1246	UPSLListStatus	no	
0088,0130	StorageMediaFileSetID	no	
0088,0140	StorageMediaFileSetUID	no	
0088,0200	IconImageSequence	no	
0088,0904	TopicTitle	no	
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0088,0910	TopicAuthor	no	
0088,0912	TopicKeywords	no	
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0100,0420	SOPAuthorizationDateAndTime	no	
0100,0424	SOPAuthorizationComment	no	
0100,0426	AuthorizationEquipmentCertNumber	no	
0400,0005	MACIDNumber	no	
0400,0010	MACCalculationTransferSyntaxUID	no	
0400,0015	MACAlgorithm	no	
0400,0020	DataElementsSigned	no	

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0400,0105	DigitalSignatureDateTime	no	
0400,0110	CertificateType	no	
0400,0115	CertificateOfSigner	no	
0400,0120	Signature	no	
0400,0305	CertifiedTimestampType	no	
0400,0310	CertifiedTimestamp	no	
0400,0401	DigitalSignaturePurposeCodeSeq	no	
0400,0402	ReferencedDigitalSignatureSeq	no	
0400,0403	ReferencedSOPInstanceMACSeq	no	
0400,0404	MAC	no	
0400,0500	EncryptedAttributesSequence	no	
0400,0510	EncryptedContentTransferSyntaxUID	no	
0400,0520	EncryptedContent	no	
0400,0550	ModifiedAttributesSequence	no	
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0400,0562	AttributeModificationDateTime	no	
0400,0563	ModifyingSystem	no	
0400,0564	SourceOfPreviousValues	no	
0400,0565	ReasonForTheAttributeModification	no	
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1000,xxx3	HuffmanTableTriplet	no	
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1000,xxx5	ShiftTableTriplet	no	
1010,xxxx	ZonalMap	no	
2000,0010	NumberOfCopies	no	
2000,001E	PrinterConfigurationSequence	no	
2000,0020	PrintPriority	no	
2000,0030	MediumType	no	
2000,0040	FilmDestination	no	
2000,0050	FilmSessionLabel	no	
2000,0060	MemoryAllocation	no	
2000,0061	MaximumMemoryAllocation	no	
2000,0062	ColorImagePrintingFlag	no	
2000,0063	CollationFlag	no	
2000,0065	AnnotationFlag	no	
2000,0067	ImageOverlayFlag	no	
2000,0069	PresentationLUTFlag	no	
2000,006A	ImageBoxPresentationLUTFlag	no	
2000,00A0	MemoryBitDepth	no	
2000,00A1	PrintingBitDepth	no	
2000,00A2	MediaInstalledSequence	no	
2000,00A4	OtherMediaAvailableSequence	no	
2000,00A8	SupportedImageDisplayFormatSeq	no	
2000,0500	ReferencedFilmBoxSequence	no	
2000,0510	ReferencedStoredPrintSequence	no	
2010,0010	ImageDisplayFormat	no	
2010,0030	AnnotationDisplayFormatID	no	
2010,0040	FilmOrientation	no	
2010,0050	FilmSizeID	no	
2010,0052	PrinterResolutionID	no	

2010,0054	DefaultPrinterResolutionID	no	
2010,0060	MagnificationType	no	
2010,0080	SmoothingType	no	
2010,00A6	DefaultMagnificationType	no	
2010,00A7	OtherMagnificationTypesAvailable	no	
2010,00A8	DefaultSmoothingType	no	
2010,00A9	OtherSmoothingTypesAvailable	no	
2010,0100	BorderDensity	no	
2010,0110	EmptyImageDensity	no	
2010,0120	MinDensity	no	
2010,0130	MaxDensity	no	
2010,0140	Trim	no	
2010,0150	ConfigurationInformation	no	
2010,0152	ConfigurationInformationDescr	no	
2010,0154	MaximumCollatedFilms	no	
2010,015E	Illumination	no	
2010,0160	ReflectedAmbientLight	no	
2010,0376	PrinterPixelSpacing	no	
2010,0500	ReferencedFilmSessionSequence	no	
2010,0510	ReferencedImageBoxSequence	no	
2010,0520	ReferencedBasicAnnotationBoxSeq	no	
2020,0010	ImageBoxPosition	no	
2020,0020	Polarity	no	
2020,0030	RequestedImageSize	no	
2020,0040	RequestedDecimate-CropBehavior	no	
2020,0050	RequestedResolutionID	no	
2020,00A0	RequestedImageSizeFlag	no	
2020,00A2	DecimateCropResult	no	
2020,0110	BasicGrayscaleImageSequence	no	
2020,0111	BasicColorImageSequence	no	
2020,0130	ReferencedImageOverlayBoxSequence	no	
2020,0140	ReferencedVOILUTBoxSequence	no	
2030,0010	AnnotationPosition	no	
2030,0020	TextString	no	
2040,0010	ReferencedOverlayPlaneSequence	no	
2040,0011	ReferencedOverlayPlaneGroups	no	
2040,0020	OverlayPixelDataSequence	no	
2040,0060	OverlayMagnificationType	no	
2040,0070	OverlaySmoothingType	no	
2040,0072	OverlayOrImageMagnification	no	
2040,0074	MagnifyToNumberOfColumns	no	
2040,0080	OverlayForegroundDensity	no	
2040,0082	OverlayBackgroundDensity	no	
2040,0090	OverlayMode	no	
2040,0100	ThresholdDensity	no	
2040,0500	ReferencedImageBoxSequence	no	
2050,0010	PresentationLUTSequence	no	
2050,0020	PresentationLUTShape	no	
2050,0500	ReferencedPresentationLUTSequence	no	
2100,0010	PrintJobID	no	
2100,0020	ExecutionStatus	no	
2100,0030	ExecutionStatusInfo	no	
2100,0040	CreationDate	no	

2100,0050	CreationTime	no	
2100,0070	Originator	no	
2100,0140	DestinationAE	no	
2100,0160	OwnerID	no	
2100,0170	NumberOfFilms	no	
2100,0500	ReferencedPrintJobSequence	no	
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2110,0020	PrinterStatusInfo	no	
2110,0030	PrinterName	no	
2110,0099	PrintQueueID	no	
2120,0010	QueueStatus	no	
2120,0050	PrintJobDescriptionSequence	no	
2120,0070	ReferencedPrintJobSequence	no	
2130,0010	PrintManagementCapabilitiesSeq	no	
2130,0015	PrinterCharacteristicsSequence	no	
2130,0030	FilmBoxContentSequence	no	
2130,0040	ImageBoxContentSequence	no	
2130,0050	AnnotationContentSequence	no	
2130,0060	ImageOverlayBoxContentSequence	no	
2130,0080	PresentationLUTContentSequence	no	
2130,00A0	ProposedStudySequence	no	
2130,00C0	OriginalImageSequence	no	
2200,0001	LabelFromInfoExtractedFromInstance	no	
2200,0002	LabelText	no	
2200,0003	LabelStyleSelection	no	
2200,0004	MediaDisposition	no	
2200,0005	BarcodeValue	no	
2200,0006	BarcodeSymbology	no	
2200,0007	AllowMediaSplitting	no	
2200,0008	IncludeNonDICOMObjects	no	
2200,0009	IncludeDisplayApplication	no	
2200,000A	SaveComplInstancesAfterMediaCreate	no	
2200,000B	TotalNumberMediaPiecesCreated	no	
2200,000C	RequestedMediaApplicationProfile	no	
2200,000D	ReferencedStorageMediaSequence	no	
2200,000E	FailureAttributes	no	
2200,000F	AllowLossyCompression	no	
2200,0020	RequestPriority	no	
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3002,0003	RTImageName	no	
3002,0004	RTImageDescription	no	
3002,000A	ReportedValuesOrigin	no	
3002,000C	RTImagePlane	no	
3002,000D	XRayImageReceptorTranslation	no	
3002,000E	XRayImageReceptorAngle	no	
3002,0010	RTImageOrientation	no	
3002,0011	ImagePlanePixelSpacing	no	
3002,0012	RTImagePosition	no	
3002,0020	RadiationMachineName	no	
3002,0022	RadiationMachineSAD	no	
3002,0024	RadiationMachineSSD	no	
3002,0026	RTImageSID	no	
3002,0028	SourceToReferenceObjectDistance	no	

3002,0029	FractionNumber	no	
3002,0030	ExposureSequence	no	
3002,0032	MetersetExposure	no	
3002,0034	DiaphragmPosition	no	
3002,0040	FluenceMapSequence	no	
3002,0041	FluenceDataSource	no	
3002,0042	FluenceDataScale	no	
3002,0051	FluenceMode	no	
3002,0052	FluenceModelID	no	
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3004,0004	DoseType	no	
3004,0006	DoseComment	no	
3004,0008	NormalizationPoint	no	
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3004,000C	GridFrameOffsetVector	no	
3004,000E	DoseGridScaling	no	
3004,0010	RTDoseROISequence	no	
3004,0012	DoseValue	no	
3004,0014	TissueHeterogeneityCorrection	no	
3004,0040	DVHNormalizationPoint	no	
3004,0042	DVHNormalizationDoseValue	no	
3004,0050	DVHSequence	no	
3004,0052	DVHDoseScaling	no	
3004,0054	DVHVolumeUnits	no	
3004,0056	DVHNumberOfBins	no	
3004,0058	DVHData	no	
3004,0060	DVHReferencedROISequence	no	
3004,0062	DVHROIContributionType	no	
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3004,0072	DVHMaximumDose	no	
3004,0074	DVHMeanDose	no	
3006,0002	StructureSetLabel	no	
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3006,0006	StructureSetDescription	no	
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3006,0009	StructureSetTime	no	
3006,0010	ReferencedFrameOfReferenceSequence	no	
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3006,0014	RTReferencedSeriesSequence	no	
3006,0016	ContourImageSequence	no	
3006,0020	StructureSetROISequence	no	
3006,0022	ROINumber	no	
3006,0024	ReferencedFrameOfReferenceUID	no	
3006,0026	ROIName	no	
3006,0028	ROIDescription	no	
3006,002A	ROIDisplayColor	no	
3006,002C	ROIVolume	no	
3006,0030	RTRelatedROISequence	no	
3006,0033	RTROIRelationship	no	
3006,0036	ROIGenerationAlgorithm	no	
3006,0038	ROIGenerationDescription	no	
3006,0039	ROIContourSequence	no	

3006,0040	ContourSequence	no	
3006,0042	ContourGeometricType	no	
3006,0044	ContourSlabThickness	no	
3006,0045	ContourOffsetVector	no	
3006,0046	NumberOfContourPoints	no	
3006,0048	ContourNumber	no	
3006,0049	AttachedContours	no	
3006,0050	ContourData	no	
3006,0080	RTROIObservationsSequence	no	
3006,0082	ObservationNumber	no	
3006,0084	ReferencedROINumber	no	
3006,0085	ROIObservationLabel	no	
3006,0086	RTROIIdentificationCodeSequence	no	
3006,0088	ROIObservationDescription	no	
3006,00A0	RelatedRTROIObservationsSequence	no	
3006,00A4	RTROIInterpretedType	no	
3006,00A6	ROIInterpreter	no	
3006,00B0	ROIPhysicalPropertiesSequence	no	
3006,00B2	ROIPhysicalProperty	no	
3006,00B4	ROIPhysicalPropertyValue	no	
3006,00B6	ROIElementalCompositionSequence	no	
3006,00B7	ROIElementalCompAtomicNumber	no	
3006,00B8	ROIElementalCompAtomicMassFraction	no	
3006,00C0	FrameOfReferenceRelationshipSeq	no	
3006,00C2	RelatedFrameOfReferenceUID	no	
3006,00C4	FrameOfReferenceTransformType	no	
3006,00C6	FrameOfReferenceTransformMatrix	no	
3006,00C8	FrameOfReferenceTransformComment	no	
3008,0010	MeasuredDoseReferenceSequence	no	
3008,0012	MeasuredDoseDescription	no	
3008,0014	MeasuredDoseType	no	
3008,0016	MeasuredDoseValue	no	
3008,0020	TreatmentSessionBeamSequence	no	
3008,0021	TreatmentSessionIonBeamSequence	no	
3008,0022	CurrentFractionNumber	no	
3008,0024	TreatmentControlPointDate	no	
3008,0025	TreatmentControlPointTime	no	
3008,002A	TreatmentTerminationStatus	no	
3008,002B	TreatmentTerminationCode	no	
3008,002C	TreatmentVerificationStatus	no	
3008,0030	ReferencedTreatmentRecordSequence	no	
3008,0032	SpecifiedPrimaryMeterset	no	
3008,0033	SpecifiedSecondaryMeterset	no	
3008,0036	DeliveredPrimaryMeterset	no	
3008,0037	DeliveredSecondaryMeterset	no	
3008,003A	SpecifiedTreatmentTime	no	
3008,003B	DeliveredTreatmentTime	no	
3008,0040	ControlPointDeliverySequence	no	
3008,0041	IonControlPointDeliverySequence	no	
3008,0042	SpecifiedMeterset	no	
3008,0044	DeliveredMeterset	no	
3008,0045	MetersetRateSet	no	
3008,0046	MetersetRateDelivered	no	

3008,0047	ScanSpotMetersetsDelivered	no	
3008,0048	DoseRateDelivered	no	
3008,0050	TreatmentSummaryCalcDoseRefSeq	no	
3008,0052	CumulativeDoseToDoseReference	no	
3008,0054	FirstTreatmentDate	no	
3008,0056	MostRecentTreatmentDate	no	
3008,005A	NumberOfFractionsDelivered	no	
3008,0060	OverrideSequence	no	
3008,0061	ParameterSequencePointer	no	
3008,0062	OverrideParameterPointer	no	
3008,0063	ParameterItemIndex	no	
3008,0064	MeasuredDoseReferenceNumber	no	
3008,0065	ParameterPointer	no	
3008,0066	OverrideReason	no	
3008,0068	CorrectedParameterSequence	no	
3008,006A	CorrectionValue	no	
3008,0070	CalculatedDoseReferenceSequence	no	
3008,0072	CalculatedDoseReferenceNumber	no	
3008,0074	CalculatedDoseReferenceDescription	no	
3008,0076	CalculatedDoseReferenceDoseValue	no	
3008,0078	StartMeterset	no	
3008,007A	EndMeterset	no	
3008,0080	ReferencedMeasuredDoseReferenceSeq	no	
3008,0082	ReferencedMeasuredDoseReferenceNum	no	
3008,0090	ReferencedCalculatedDoseRefSeq	no	
3008,0092	ReferencedCalculatedDoseRefNumber	no	
3008,00A0	BeamLimitingDeviceLeafPairsSeq	no	
3008,00B0	RecordedWedgeSequence	no	
3008,00C0	RecordedCompensatorSequence	no	
3008,00D0	RecordedBlockSequence	no	
3008,00E0	TreatmentSummaryMeasuredDoseRefSeq	no	
3008,00F0	RecordedSnoutSequence	no	
3008,00F2	RecordedRangeShifterSequence	no	
3008,00F4	RecordedLateralSpreadingDeviceSeq	no	
3008,00F6	RecordedRangeModulatorSequence	no	
3008,0100	RecordedSourceSequence	no	
3008,0105	SourceSerialNumber	no	
3008,0110	TreatmentSessionAppSetupSeq	no	
3008,0116	ApplicationSetupCheck	no	
3008,0120	RecordedBrachyAccessoryDeviceSeq	no	
3008,0122	ReferencedBrachyAccessoryDeviceNum	no	
3008,0130	RecordedChannelSequence	no	
3008,0132	SpecifiedChannelTotalTime	no	
3008,0134	DeliveredChannelTotalTime	no	
3008,0136	SpecifiedNumberOfPulses	no	
3008,0138	DeliveredNumberOfPulses	no	
3008,013A	SpecifiedPulseRepetitionInterval	no	
3008,013C	DeliveredPulseRepetitionInterval	no	
3008,0140	RecordedSourceApplicatorSequence	no	
3008,0142	ReferencedSourceApplicatorNumber	no	
3008,0150	RecordedChannelShieldSequence	no	
3008,0152	ReferencedChannelShieldNumber	no	
3008,0160	BrachyControlPointDeliveredSeq	no	

3008,0162	SafePositionExitDate	no	
3008,0164	SafePositionExitTime	no	
3008,0166	SafePositionReturnDate	no	
3008,0168	SafePositionReturnTime	no	
3008,0200	CurrentTreatmentStatus	no	
3008,0202	TreatmentStatusComment	no	
3008,0220	FractionGroupSummarySequence	no	
3008,0223	ReferencedFractionNumber	no	
3008,0224	FractionGroupType	no	
3008,0230	BeamStopperPosition	no	
3008,0240	FractionStatusSummarySequence	no	
3008,0250	TreatmentDate	no	
3008,0251	TreatmentTime	no	
300A,0002	RTPlanLabel	no	
300A,0003	RTPlanName	no	
300A,0004	RTPlanDescription	no	
300A,0006	RTPlanDate	no	
300A,0007	RTPlanTime	no	
300A,0009	TreatmentProtocols	no	
300A,000A	PlanIntent	no	
300A,000B	TreatmentSites	no	
300A,000C	RTPlanGeometry	no	
300A,000E	PrescriptionDescription	no	
300A,0010	DoseReferenceSequence	no	
300A,0012	DoseReferenceNumber	no	
300A,0013	DoseReferenceUID	no	
300A,0014	DoseReferenceStructureType	no	
300A,0015	NominalBeamEnergyUnit	no	
300A,0016	DoseReferenceDescription	no	
300A,0018	DoseReferencePointCoordinates	no	
300A,001A	NominalPriorDose	no	
300A,0020	DoseReferenceType	no	
300A,0021	ConstraintWeight	no	
300A,0022	DeliveryWarningDose	no	
300A,0023	DeliveryMaximumDose	no	
300A,0025	TargetMinimumDose	no	
300A,0026	TargetPrescriptionDose	no	
300A,0027	TargetMaximumDose	no	
300A,0028	TargetUnderdoseVolumeFraction	no	
300A,002A	OrganAtRiskFullVolumeDose	no	
300A,002B	OrganAtRiskLimitDose	no	
300A,002C	OrganAtRiskMaximumDose	no	
300A,002D	OrganAtRiskOverdoseVolumeFraction	no	
300A,0040	ToleranceTableSequence	no	
300A,0042	ToleranceTableName	no	
300A,0043	ToleranceTableLabel	no	
300A,0044	GantryAngleTolerance	no	
300A,0046	BeamLimitingDeviceAngleTolerance	no	
300A,0048	BeamLimitingDeviceToleranceSeq	no	
300A,004A	BeamLimitingDevicePositionTol	no	
300A,004B	SnoutPositionTolerance	no	
300A,004C	PatientSupportAngleTolerance	no	
300A,004E	TableTopEccentricAngleTolerance	no	

300A,004F	TableTopPitchAngleTolerance	no	
300A,0050	TableTopRollAngleTolerance	no	
300A,0051	TableTopVerticalPositionTolerance	no	
300A,0052	TableTopLongitudinalPositionTol	no	
300A,0053	TableTopLateralPositionTolerance	no	
300A,0055	RTPlanRelationship	no	
300A,0070	FractionGroupSequence	no	
300A,0071	FractionGroupNumber	no	
300A,0072	FractionGroupDescription	no	
300A,0078	NumberOfFractionsPlanned	no	
300A,0079	NumberFractionPatternDigitsPerDay	no	
300A,007A	RepeatFractionCycleLength	no	
300A,007B	FractionPattern	no	
300A,0080	NumberOfBeams	no	
300A,0082	BeamDoseSpecificationPoint	no	
300A,0084	BeamDose	no	
300A,0086	BeamMeterset	no	
300A,0088	BeamDosePointDepth	no	
300A,0089	BeamDosePointEquivalentDepth	no	
300A,008A	BeamDosePointSSD	no	
300A,00A0	NumberOfBrachyApplicationSetups	no	
300A,00A2	BrachyAppSetupDoseSpecPoint	no	
300A,00A4	BrachyApplicationSetupDose	no	
300A,00B0	BeamSequence	no	
300A,00B2	TreatmentMachineName	no	
300A,00B3	PrimaryDosimeterUnit	no	
300A,00B4	SourceAxisDistance	no	
300A,00B6	BeamLimitingDeviceSequence	no	
300A,00B8	RTBeamLimitingDeviceType	no	
300A,00BA	SourceToBeamLimitingDeviceDistance	no	
300A,00BB	IsocenterToBeamLimitingDeviceDist	no	
300A,00BC	NumberOfLeafJawPairs	no	
300A,00BE	LeafPositionBoundaries	no	
300A,00C0	BeamNumber	no	
300A,00C2	BeamName	no	
300A,00C3	BeamDescription	no	
300A,00C4	BeamType	no	
300A,00C6	RadiationType	no	
300A,00C7	HighDoseTechniqueType	no	
300A,00C8	ReferenceImageNumber	no	
300A,00CA	PlannedVerificationImageSequence	no	
300A,00CC	ImagingDeviceSpecificAcqParams	no	
300A,00CE	TreatmentDeliveryType	no	
300A,00D0	NumberOfWedges	no	
300A,00D1	WedgeSequence	no	
300A,00D2	WedgeNumber	no	
300A,00D3	WedgeType	no	
300A,00D4	WedgeID	no	
300A,00D5	WedgeAngle	no	
300A,00D6	WedgeFactor	no	
300A,00D7	TotalWedgeTrayWaterEquivThickness	no	
300A,00D8	WedgeOrientation	no	
300A,00D9	IsocenterToWedgeTrayDistance	no	

300A,00DA	SourceToWedgeTrayDistance	no
300A,00DB	WedgeThinEdgePosition	no
300A,00DC	BolusID	no
300A,00DD	BolusDescription	no
300A,00E0	NumberOfCompensators	no
300A,00E1	MaterialID	no
300A,00E2	TotalCompensatorTrayFactor	no
300A,00E3	CompensatorSequence	no
300A,00E4	CompensatorNumber	no
300A,00E5	CompensatorID	no
300A,00E6	SourceToCompensatorTrayDistance	no
300A,00E7	CompensatorRows	no
300A,00E8	CompensatorColumns	no
300A,00E9	CompensatorPixelSpacing	no
300A,00EA	CompensatorPosition	no
300A,00EB	CompensatorTransmissionData	no
300A,00EC	CompensatorThicknessData	no
300A,00ED	NumberOfBoli	no
300A,00EE	CompensatorType	no
300A,00F0	NumberOfBlocks	no
300A,00F2	TotalBlockTrayFactor	no
300A,00F3	TotalBlockTrayWaterEquivThickness	no
300A,00F4	BlockSequence	no
300A,00F5	BlockTrayID	no
300A,00F6	SourceToBlockTrayDistance	no
300A,00F7	IsocenterToBlockTrayDistance	no
300A,00F8	BlockType	no
300A,00F9	AccessoryCode	no
300A,00FA	BlockDivergence	no
300A,00FB	BlockMountingPosition	no
300A,00FC	BlockNumber	no
300A,00FE	BlockName	no
300A,0100	BlockThickness	no
300A,0102	BlockTransmission	no
300A,0104	BlockNumberOfPoints	no
300A,0106	BlockData	no
300A,0107	ApplicatorSequence	no
300A,0108	ApplicatorID	no
300A,0109	ApplicatorType	no
300A,010A	ApplicatorDescription	no
300A,010C	CumulativeDoseReferenceCoefficient	no
300A,010E	FinalCumulativeMetersetWeight	no
300A,0110	NumberOfControlPoints	no
300A,0111	ControlPointSequence	no
300A,0112	ControlPointIndex	no
300A,0114	NominalBeamEnergy	no
300A,0115	DoseRateSet	no
300A,0116	WedgePositionSequence	no
300A,0118	WedgePosition	no
300A,011A	BeamLimitingDevicePositionSequence	no
300A,011C	LeafJawPositions	no
300A,011E	GantryAngle	no
300A,011F	GantryRotationDirection	no

300A,0120	BeamLimitingDeviceAngle	no
300A,0121	BeamLimitingDeviceRotateDirection	no
300A,0122	PatientSupportAngle	no
300A,0123	PatientSupportRotationDirection	no
300A,0124	TableTopEccentricAxisDistance	no
300A,0125	TableTopEccentricAngle	no
300A,0126	TableTopEccentricRotateDirection	no
300A,0128	TableTopVerticalPosition	no
300A,0129	TableTopLongitudinalPosition	no
300A,012A	TableTopLateralPosition	no
300A,012C	IsocenterPosition	no
300A,012E	SurfaceEntryPoint	no
300A,0130	SourceToSurfaceDistance	no
300A,0134	CumulativeMetersetWeight	no
300A,0140	TableTopPitchAngle	no
300A,0142	TableTopPitchRotationDirection	no
300A,0144	TableTopRollAngle	no
300A,0146	TableTopRollRotationDirection	no
300A,0148	HeadFixationAngle	no
300A,014A	GantryPitchAngle	no
300A,014C	GantryPitchRotationDirection	no
300A,014E	GantryPitchAngleTolerance	no
300A,0180	PatientSetupSequence	no
300A,0182	PatientSetupNumber	no
300A,0183	PatientSetupLabel	no
300A,0184	PatientAdditionalPosition	no
300A,0190	FixationDeviceSequence	no
300A,0192	FixationDeviceType	no
300A,0194	FixationDeviceLabel	no
300A,0196	FixationDeviceDescription	no
300A,0198	FixationDevicePosition	no
300A,0199	FixationDevicePitchAngle	no
300A,019A	FixationDeviceRollAngle	no
300A,01A0	ShieldingDeviceSequence	no
300A,01A2	ShieldingDeviceType	no
300A,01A4	ShieldingDeviceLabel	no
300A,01A6	ShieldingDeviceDescription	no
300A,01A8	ShieldingDevicePosition	no
300A,01B0	SetupTechnique	no
300A,01B2	SetupTechniqueDescription	no
300A,01B4	SetupDeviceSequence	no
300A,01B6	SetupDeviceType	no
300A,01B8	SetupDeviceLabel	no
300A,01BA	SetupDeviceDescription	no
300A,01BC	SetupDeviceParameter	no
300A,01D0	SetupReferenceDescription	no
300A,01D2	TableTopVerticalSetupDisplacement	no
300A,01D4	TableTopLongitudinalSetupDisplace	no
300A,01D6	TableTopLateralSetupDisplacement	no
300A,0200	BrachyTreatmentTechnique	no
300A,0202	BrachyTreatmentType	no
300A,0206	TreatmentMachineSequence	no
300A,0210	SourceSequence	no

300A,0212	SourceNumber	no	
300A,0214	SourceType	no	
300A,0216	SourceManufacturer	no	
300A,0218	ActiveSourceDiameter	no	
300A,021A	ActiveSourceLength	no	
300A,0222	SourceEncapsulationNomThickness	no	
300A,0224	SourceEncapsulationNomTransmission	no	
300A,0226	SourceIsotopeName	no	
300A,0228	SourceIsotopeHalfLife	no	
300A,0229	SourceStrengthUnits	no	
300A,022A	ReferenceAirKermaRate	no	
300A,022B	SourceStrength	no	
300A,022C	SourceStrengthReferenceDate	no	
300A,022E	SourceStrengthReferenceTime	no	
300A,0230	ApplicationSetupSequence	no	
300A,0232	ApplicationSetupType	no	
300A,0234	ApplicationSetupNumber	no	
300A,0236	ApplicationSetupName	no	
300A,0238	ApplicationSetupManufacturer	no	
300A,0240	TemplateNumber	no	
300A,0242	TemplateType	no	
300A,0244	TemplateName	no	
300A,0250	TotalReferenceAirKerma	no	
300A,0260	BrachyAccessoryDeviceSequence	no	
300A,0262	BrachyAccessoryDeviceNumber	no	
300A,0263	BrachyAccessoryDeviceID	no	
300A,0264	BrachyAccessoryDeviceType	no	
300A,0266	BrachyAccessoryDeviceName	no	
300A,026A	BrachyAccessoryDeviceNomThickness	no	
300A,026C	BrachyAccessoryDevNomTransmission	no	
300A,0280	ChannelSequence	no	
300A,0282	ChannelNumber	no	
300A,0284	ChannelLength	no	
300A,0286	ChannelTotalTime	no	
300A,0288	SourceMovementType	no	
300A,028A	NumberOfPulses	no	
300A,028C	PulseRepetitionInterval	no	
300A,0290	SourceApplicatorNumber	no	
300A,0291	SourceApplicatorID	no	
300A,0292	SourceApplicatorType	no	
300A,0294	SourceApplicatorName	no	
300A,0296	SourceApplicatorLength	no	
300A,0298	SourceApplicatorManufacturer	no	
300A,029C	SourceApplicatorWallNomThickness	no	
300A,029E	SourceApplicatorWallNomTrans	no	
300A,02A0	SourceApplicatorStepSize	no	
300A,02A2	TransferTubeNumber	no	
300A,02A4	TransferTubeLength	no	
300A,02B0	ChannelShieldSequence	no	
300A,02B2	ChannelShieldNumber	no	
300A,02B3	ChannelShieldID	no	
300A,02B4	ChannelShieldName	no	
300A,02B8	ChannelShieldNominalThickness	no	

300A,02BA	ChannelShieldNominalTransmission	no	
300A,02C8	FinalCumulativeTimeWeight	no	
300A,02D0	BrachyControlPointSequence	no	
300A,02D2	ControlPointRelativePosition	no	
300A,02D4	ControlPoint3DPosition	no	
300A,02D6	CumulativeTimeWeight	no	
300A,02E0	CompensatorDivergence	no	
300A,02E1	CompensatorMountingPosition	no	
300A,02E2	SourceToCompensatorDistance	no	
300A,02E3	TotalCompTrayWaterEquivThickness	no	
300A,02E4	IsocenterToCompensatorTrayDistance	no	
300A,02E5	CompensatorColumnOffset	no	
300A,02E6	IsocenterToCompensatorDistances	no	
300A,02E7	CompensatorRelStoppingPowerRatio	no	
300A,02E8	CompensatorMillingToolDiameter	no	
300A,02EA	IonRangeCompensatorSequence	no	
300A,02EB	CompensatorDescription	no	
300A,0302	RadiationMassNumber	no	
300A,0304	RadiationAtomicNumber	no	
300A,0306	RadiationChargeState	no	
300A,0308	ScanMode	no	
300A,030A	VirtualSourceAxisDistances	no	
300A,030C	SnoutSequence	no	
300A,030D	SnoutPosition	no	
300A,030F	SnoutID	no	
300A,0312	NumberOfRangeShifters	no	
300A,0314	RangeShifterSequence	no	
300A,0316	RangeShifterNumber	no	
300A,0318	RangeShifterID	no	
300A,0320	RangeShifterType	no	
300A,0322	RangeShifterDescription	no	
300A,0330	NumberOfLateralSpreadingDevices	no	
300A,0332	LateralSpreadingDeviceSequence	no	
300A,0334	LateralSpreadingDeviceNumber	no	
300A,0336	LateralSpreadingDeviceID	no	
300A,0338	LateralSpreadingDeviceType	no	
300A,033A	LateralSpreadingDeviceDescription	no	
300A,033C	LateralSpreadingDevWaterEquivThick	no	
300A,0340	NumberOfRangeModulators	no	
300A,0342	RangeModulatorSequence	no	
300A,0344	RangeModulatorNumber	no	
300A,0346	RangeModulatorID	no	
300A,0348	RangeModulatorType	no	
300A,034A	RangeModulatorDescription	no	
300A,034C	BeamCurrentModulationID	no	
300A,0350	PatientSupportType	no	
300A,0352	PatientSupportID	no	
300A,0354	PatientSupportAccessoryCode	no	
300A,0356	FixationLightAzimuthalAngle	no	
300A,0358	FixationLightPolarAngle	no	
300A,035A	MetersetRate	no	
300A,0360	RangeShifterSettingsSequence	no	
300A,0362	RangeShifterSetting	no	

300A,0364	IsocenterToRangeShifterDistance	no	
300A,0366	RangeShifterWaterEquivThickness	no	
300A,0370	LateralSpreadingDeviceSettingsSeq	no	
300A,0372	LateralSpreadingDeviceSetting	no	
300A,0374	IsocenterToLateralSpreadingDevDist	no	
300A,0380	RangeModulatorSettingsSequence	no	
300A,0382	RangeModulatorGatingStartValue	no	
300A,0384	RangeModulatorGatingStopValue	no	
300A,038A	IsocenterToRangeModulatorDistance	no	
300A,0390	ScanSpotTuneID	no	
300A,0392	NumberOfScanSpotPositions	no	
300A,0394	ScanSpotPositionMap	no	
300A,0396	ScanSpotMetersetWeights	no	
300A,0398	ScanningSpotSize	no	
300A,039A	NumberOfPaintings	no	
300A,03A0	IonToleranceTableSequence	no	
300A,03A2	IonBeamSequence	no	
300A,03A4	IonBeamLimitingDeviceSequence	no	
300A,03A6	IonBlockSequence	no	
300A,03A8	IonControlPointSequence	no	
300A,03AA	IonWedgeSequence	no	
300A,03AC	IonWedgePositionSequence	no	
300A,0401	ReferencedSetupImageSequence	no	
300A,0402	SetupImageComment	no	
300A,0410	MotionSynchronizationSequence	no	
300A,0412	ControlPointOrientation	no	
300A,0420	GeneralAccessorySequence	no	
300A,0421	GeneralAccessoryID	no	
300A,0422	GeneralAccessoryDescription	no	
300A,0423	GeneralAccessoryType	no	
300A,0424	GeneralAccessoryNumber	no	
300C,0002	ReferencedRTPlanSequence	no	
300C,0004	ReferencedBeamSequence	no	
300C,0006	ReferencedBeamNumber	no	
300C,0007	ReferencedReferenceImageNumber	no	
300C,0008	StartCumulativeMetersetWeight	no	
300C,0009	EndCumulativeMetersetWeight	no	
300C,000A	ReferencedBrachyAppSetupSeq	no	
300C,000C	ReferencedBrachyAppSetupNumber	no	
300C,000E	ReferencedSourceNumber	no	
300C,0020	ReferencedFractionGroupSequence	no	
300C,0022	ReferencedFractionGroupNumber	no	
300C,0040	ReferencedVerificationImageSeq	no	
300C,0042	ReferencedReferenceImageSequence	no	
300C,0050	ReferencedDoseReferenceSequence	no	
300C,0051	ReferencedDoseReferenceNumber	no	
300C,0055	BrachyReferencedDoseReferenceSeq	no	
300C,0060	ReferencedStructureSetSequence	no	
300C,006A	ReferencedPatientSetupNumber	no	
300C,0080	ReferencedDoseSequence	no	
300C,00A0	ReferencedToleranceTableName	no	
300C,00B0	ReferencedBolusSequence	no	
300C,00C0	ReferencedWedgeNumber	no	

300C,00D0	ReferencedCompensatorNumber	no	
300C,00E0	ReferencedBlockNumber	no	
300C,00F0	ReferencedControlPointIndex	no	
300C,00F2	ReferencedControlPointSequence	no	
300C,00F4	ReferencedStartControlPointIndex	no	
300C,00F6	ReferencedStopControlPointIndex	no	
300C,0100	ReferencedRangeShifterNumber	no	
300C,0102	ReferencedLateralSpreadingDevNum	no	
300C,0104	ReferencedRangeModulatorNumber	no	
300E,0002	ApprovalStatus	no	
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300E,0005	ReviewTime	no	
300E,0008	ReviewerName	no	
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4008,010C	InterpretationAuthor	no	
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4008,011A	DistributionAddress	no	
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50xx,0005	CurveDimensions	no	
50xx,0010	NumberOfPoints	no	
50xx,0020	TypeOfData	no	
50xx,0022	CurveDescription	no	
50xx,0030	AxisUnits	no	
50xx,0040	AxisLabels	no	
50xx,0103	DataValueRepresentation	no	
50xx,0104	MinimumCoordinateValue	no	
50xx,0105	MaximumCoordinateValue	no	

50xx,0106	CurveRange	no	
50xx,0110	CurveDataDescriptor	no	
50xx,0112	CoordinateStartValue	no	
50xx,0114	CoordinateStepValue	no	
50xx,1001	CurveActivationLayer	no	
50xx,2000	AudioType	no	
50xx,2002	AudioSampleFormat	no	
50xx,2004	NumberOfChannels	no	
50xx,2006	NumberOfSamples	no	
50xx,2008	SampleRate	no	
50xx,200A	TotalTime	no	
50xx,200C	AudioSampleData	no	
50xx,200E	AudioComments	no	
50xx,2500	CurveLabel	no	
50xx,2600	ReferencedOverlaySequence	no	
50xx,2610	ReferencedOverlayGroup	no	
50xx,3000	CurveData	no	
5200,9229	SharedFunctionalGroupsSequence	no	
5200,9230	PerFrameFunctionalGroupsSequence	no	
5400,0100	WaveformSequence	no	
5400,0110	ChannelMinimumValue	no	
5400,0112	ChannelMaximumValue	no	
5400,1004	WaveformBitsAllocated	no	
5400,1006	WaveformSampleInterpretation	no	
5400,100A	WaveformPaddingValue	no	
5400,1010	WaveformData	no	
5600,0010	FirstOrderPhaseCorrectionAngle	no	
5600,0020	SpectroscopyData	no	
6000,0000	OverlayGroupLength	no	
60xx,0010	OverlayRows	no	
60xx,0011	OverlayColumns	no	
60xx,0012	OverlayPlanes	no	
60xx,0015	NumberOfFramesInOverlay	no	
60xx,0022	OverlayDescription	no	
60xx,0040	OverlayType	no	
60xx,0045	OverlaySubtype	no	
60xx,0050	OverlayOrigin	no	
60xx,0051	ImageFrameOrigin	no	
60xx,0052	OverlayPlaneOrigin	no	
60xx,0060	OverlayCompressionCode	no	
60xx,0061	OverlayCompressionOriginator	no	
60xx,0062	OverlayCompressionLabel	no	
60xx,0063	OverlayCompressionDescription	no	
60xx,0066	OverlayCompressionStepPointers	no	
60xx,0068	OverlayRepeatInterval	no	
60xx,0069	OverlayBitsGrouped	no	
60xx,0100	OverlayBitsAllocated	no	
60xx,0102	OverlayBitPosition	no	
60xx,0110	OverlayFormat	no	
60xx,0200	OverlayLocation	no	
60xx,0800	OverlayCodeLabel	no	
60xx,0802	OverlayNumberOfTables	no	
60xx,0803	OverlayCodeTableLocation	no	

60xx,0804	OverlayBitsForCodeWord	no	
60xx,1001	OverlayActivationLayer	no	
60xx,1100	OverlayDescriptorGray	no	
60xx,1101	OverlayDescriptorRed	no	
60xx,1102	OverlayDescriptorGreen	no	
60xx,1103	OverlayDescriptorBlue	no	
60xx,1200	OverlaysGray	no	
60xx,1201	OverlaysRed	no	
60xx,1202	OverlaysGreen	no	
60xx,1203	OverlaysBlue	no	
60xx,1301	ROIArea	no	
60xx,1302	ROIMean	no	
60xx,1303	ROIStandardDeviation	no	
60xx,1500	OverlayLabel	no	
60xx,3000	OverlayData	no	
60xx,4000	OverlayComments	no	
7Fxx,0000	PixelDataGroupLength	no	
7Fxx,0010	PixelData	no	
7Fxx,0011	VariableNextDataGroup	no	
7Fxx,0020	VariableCoefficientsSDVN	no	
7Fxx,0030	VariableCoefficientsSDHN	no	
7Fxx,0040	VariableCoefficientsSDDN	no	
FFFA,FFFA	DigitalSignaturesSequence	no	
FFFC,FFFC	DataSetTrailingPadding	no	
FFFE,E000	StartOfItem	no	
FFFE,E00D	EndOfItems	no	
FFFE,E0DD	EndOfSequence	no	

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*Last revised Jan 2, 2013*

[-- ExifTool Tag Names](#)

# DJI Tags

This table lists tags found in the maker notes of images from some DJI Phantom drones.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Make	string	
0x0003	SpeedX	float	
0x0004	SpeedY	float	
0x0005	SpeedZ	float	
0x0006	Pitch	float	
0x0007	Yaw	float	
0x0008	Roll	float	
0x0009	CameraPitch	float	
0x000a	CameraYaw	float	
0x000b	CameraRoll	float	

# DJI XMP Tags

XMP tags used by DJI for images from drones.

These tags belong to the ExifTool XMP-drone-dji family 1 group.

Tag Name	Writable	Values / Notes
AbsoluteAltitude	real	
CalibratedFocalLength	real	
CalibratedOpticalCenterX	real	
CalibratedOpticalCenterY	real	
CamReverse	string	
DewarpData	string	
DewarpFlag	string	
FlightPitchDegree	real	
FlightRollDegree	real	
FlightXSpeed	real	
FlightYSpeed	real	
FlightYawDegree	real	
FlightZSpeed	real	
GPSLatitude	real/	
GPSLongitude	real/	
GPSLongitude	real/	
GimbalPitchDegree	real	
GimbalReverse	string	
GimbalRollDegree	real	
GimbalYawDegree	real	
Latitude	real	
Longitude	real	
RelativeAltitude	real	
RtkFlag	string	
RtkStdHgt	real	
RtkStdLat	real	
RtkStdLon	real	
SelfData	string	

# DJI Info Tags

Tags written by some DJI drones.

Tag ID	Tag Name	Writable	Values / Notes
'FlightDegree(Y,P,R)'	FlightDegree	no	
'FlightSpeed(X,Y,Z)'	FlightSpeed	no	
'GimbalDegree(Y,P,R)'	GimbalDegree	no	
'adj_dbg_info'	ADJDebugInfo	no	
'ae_dbg_info'	AEDebugInfo	no	
'ae_histogram_info'	AEHistogramInfo	no	
'ae_liveview_histogram_info'	AELiveViewHistogramInfo	no	
'ae_liveview_local_histogram'	AELiveViewLocalHistogram	no	
'ae_local_histogram'	AELocalHistogram	no	
'af_dbg_info'	AFDebugInfo	no	
'awb_dbg_info'	AWBDebugInfo	no	
'hiso'	Histogram	no	
'hyperlapse_dbg_info'	HyperlapsDebugInfo	no	
'sensor_id'	SensorID	no	
'xidiri'	Xidiri	no	

## DJI ThermalParams Tags

Thermal parameters extracted from APP4 of DJI RJPEG files from the ZH20T.

Index1	Tag Name	Writable	Values / Notes
36	K1	no	
40	K2	no	
44	K3	no	
48	K4	no	
52	KF	no	
56	B1	no	
60	B2	no	
68	ObjectDistance	no	
70	RelativeHumidity	no	
72	Emissivity	no	
74	Reflection	no	
76	AmbientTemperature	no	
80	D2	no	
84	KJ	no	
86	DB	no	
88	KK	no	

## DJI ThermalParams2 Tags

Thermal parameters extracted from APP4 of DJI M3T RJPEG files.

Index1	Tag Name	Writable	Values / Notes
0	AmbientTemperature	no	
4	ObjectDistance	no	
8	Emissivity	no	
12	RelativeHumidity	no	
16	ReflectedTemperature	no	
101	IDString	no	

## DJI ThermalParams3 Tags

Thermal parameters extracted from APP4 of some DJI RJPEG files.

Index	Tag Name	Writable	Values / Notes
4	RelativeHumidity	no	
6	ObjectDistance	no	
8	Emissivity	no	
10	ReflectedTemperature	no	

## DJI Protobuf Tags

Tags found in protobuf-format DJI djmd and dbgi timed metadata. The known tags listed below are extracted by default, but unknown djmd tags may be extracted as well by setting the Unknown option to 1, or 2 to also extract unknown dbgi debug tags. Tag ID's are composed of the corresponding .proto file name combined with the hierarchical protobuf field numbers.

ExifTool currently extracts timed GPS plus a few other tags from DJI devices which use the following protocols:  
dvtm\_AVATA2.proto (Avata 2), dvtm\_ac203.proto (Osmo Action 4), dvtm\_ac204.proto (Osmo Action 5),  
dvtm\_wm265e.proto (Mavic 3), dvtm\_pm320.proto (Matrice 30), dvtm\_Mini4\_Pro.proto (Mini 4 Pro),  
dvtm\_dji\_neo.proto (DJI Neo), dvtm\_Air3.proto (Air 3), dvtm\_Air3s.proto (Air 3s), dvtm\_PP-101.proto (Osmo Pocket 3),  
dvtm\_oq101.proto (Osmo 360), dvtm\_wa345e.proto (Matrice 4E) and dvtm\_wm261.proto (Mavic Pro 3).

Note that with the protobuf format, numerical tags missing from the output for a given protocol should be considered to have the default value of 0.

Tag ID	Tag Name	Writable	Values / Notes
'Protocol'	Protocol	no	(typically protobuf field 1-1-1, but ExifTool doesn't rely on this)
'dvtm_AVATA2_1-1-5'	SerialNumber	no	(Avata 2)
'dvtm_AVATA2_1-1-10'	Model	no	
'dvtm_AVATA2_2-2-3-1'	SerialNumber2	no	
'dvtm_AVATA2_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_AVATA2_3-1-2'	TimeStamp	no	
'dvtm_AVATA2_3-2-2-1'	ISO	no	
'dvtm_AVATA2_3-2-4-1'	ShutterSpeed	no	
'dvtm_AVATA2_3-2-6-1'	ColorTemperature	no	
'dvtm_AVATA2_3-2-10-1'	FNumber	no	
'dvtm_AVATA2_3-4-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_AVATA2_3-4-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_AVATA2_3-4-4-2'	AbsoluteAltitude	no	
'dvtm_AVATA2_3-4-5-1'	RelativeAltitude	no	
'dvtm_Air3_1-1-5'	SerialNumber	no	(Air 3)
'dvtm_Air3_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_Air3_3-1-2'	TimeStamp	no	
'dvtm_Air3_3-2-7-1'	ISO	no	
'dvtm_Air3_3-2-10-1'	ShutterSpeed	no	
'dvtm_Air3_3-2-11-1'	FNumber	no	
'dvtm_Air3_3-2-32-1'	ColorTemperature	no	
'dvtm_Air3_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_Air3_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_Air3_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_Air3_3-3-5-1'	RelativeAltitude	no	
'dvtm_Air3_3-4-3'	GimballInfo	-	--> <a href="#">DJI GimballInfo Tags</a>
'dvtm_Air3s_1-1-5'	SerialNumber	no	(Air 3s)
'dvtm_Air3s_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_Air3s_3-1-2'	TimeStamp	no	
'dvtm_Air3s_3-2-7-1'	ISO	no	
'dvtm_Air3s_3-2-10-1'	ShutterSpeed	no	
'dvtm_Air3s_3-2-11-1'	FNumber	no	
'dvtm_Air3s_3-2-32-1'	ColorTemperature	no	
'dvtm_Air3s_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>

'dvtm_Air3s_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_Air3s_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_Air3s_3-3-5-1'	RelativeAltitude	no	
'dvtm_Air3s_3-4-3'	GimbalInfo	-	--> <a href="#">DJI GimbalInfo Tags</a>
'dvtm_Mini4_Pro_1-1-5'	SerialNumber	no	(Mini 4 Pro)
'dvtm_Mini4_Pro_1-1-10'	Model	no	
'dvtm_Mini4_Pro_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_Mini4_Pro_3-2-7-1'	ISO	no	
'dvtm_Mini4_Pro_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_Mini4_Pro_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_Mini4_Pro_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_Mini4_Pro_3-3-5-1'	RelativeAltitude	no	
'dvtm_Mini4_Pro_3-4-3'	GimbalInfo	-	--> <a href="#">DJI GimbalInfo Tags</a>
'dvtm_Mini4_Pro_3-2-10-1'	ShutterSpeed	no	
'dvtm_Mini4_Pro_3-2-11-1'	FNumber	no	
'dvtm_Mini4_Pro_3-2-32-1'	ColorTemperature	no	
'dvtm_PP-101_1-1-5'	SerialNumber	no	(Osmo Pocket 3)
'dvtm_PP-101_1-1-10'	Model	no	
'dvtm_PP-101_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_PP-101_3-1-2'	TimeStamp	no	
'dvtm_PP-101_3-2-9-1'	ISO	no	
'dvtm_PP-101_3-2-10-1'	ShutterSpeed	no	
'dvtm_PP-101_3-2-24-1'	ColorTemperature	no	
'dvtm_ac203_1-1-5'	SerialNumber	no	(Osmo Action 4)
'dvtm_ac203_1-1-10'	Model	no	
'dvtm_ac203_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_ac203_3-2-2-1'	ISO	no	
'dvtm_ac203_3-2-4-1'	ShutterSpeed	no	
'dvtm_ac203_3-2-6-1'	ColorTemperature	no	
'dvtm_ac203_3-2-10-2'	AccelerometerX	no	
'dvtm_ac203_3-2-10-3'	AccelerometerY	no	
'dvtm_ac203_3-2-10-4'	AccelerometerZ	no	
'dvtm_ac203_3-4-2-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_ac203_3-4-2-2'	GPSAltitude	no	
'dvtm_ac203_3-4-2-6-1'	GPSDateTime	no	
'dvtm_ac204_1-1-5'	SerialNumber	no	(Osmo Action 5)
'dvtm_ac204_1-1-10'	Model	no	
'dvtm_ac204_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_ac204_3-2-4-1'	ShutterSpeed	no	
'dvtm_ac204_3-2-6-1'	ColorTemperature	no	
'dvtm_ac204_3-2-10-2'	AccelerometerX	no	
'dvtm_ac204_3-2-10-3'	AccelerometerY	no	
'dvtm_ac204_3-2-10-4'	AccelerometerZ	no	
'dvtm_ac204_3-4-2-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_ac204_3-4-2-2'	GPSAltitude	no	
'dvtm_ac204_3-4-2-6-1'	GPSDateTime	no	
'dvtm_dji_neo_1-1-5'	SerialNumber	no	(DJI Neo)
'dvtm_dji_neo_1-1-10'	Model	no	
'dvtm_dji_neo_2-2-3-1'	SerialNumber2	no	
'dvtm_dji_neo_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_dji_neo_3-1-2'	TimeStamp	no	
'dvtm_dji_neo_3-2-2-1'	ISO	no	
'dvtm_dji_neo_3-2-4-1'	ShutterSpeed	no	

'dvtm_dji_neo_3-2-6-1'	ColorTemperature	no	
'dvtm_dji_neo_3-2-10-1'	FNumber	no	
'dvtm_dji_neo_3-4-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_dji_neo_3-4-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_dji_neo_3-4-4-2'	AbsoluteAltitude	no	
'dvtm_oq101_1-1-5'	SerialNumber	no	(Osmo 360)
'dvtm_oq101_1-1-10'	Model	no	
'dvtm_oq101_1-14-1'	FNumber	no	
'dvtm_oq101_3-1-2'	TimeStamp	no	
'dvtm_oq101_3-2-3-1'	ISO	no	
'dvtm_oq101_3-2-4-1'	ShutterSpeed	no	
'dvtm_oq101_3-2-6-1'	ColorTemperature	no	
'dvtm_oq101_3-2-10-2'	AccelerometerX	no	
'dvtm_oq101_3-2-10-3'	AccelerometerY	no	
'dvtm_oq101_3-2-10-4'	AccelerometerZ	no	
'dvtm_oq101_3-4-2-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_oq101_3-4-2-2'	AbsoluteAltitude	no	
'dvtm_oq101_3-4-2-6-1'	GPSDateTime	no	
'dvtm_pm320_1-1-5'	SerialNumber	no	(Matrice 30)
'dvtm_pm320_1-1-10'	Model	no	
'dvtm_pm320_2-2'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_pm320_3-2-2-1'	ISO	no	
'dvtm_pm320_3-2-3-1'	ShutterSpeed	no	
'dvtm_pm320_3-2-4-1'	FNumber	no	
'dvtm_pm320_3-2-6-1'	DigitalZoom	no	
'dvtm_pm320_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_pm320_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_pm320_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_pm320_3-3-5-1'	RelativeAltitude	no	
'dvtm_pm320_3-4-3'	GimballInfo	-	--> <a href="#">DJI GimballInfo Tags</a>
'dvtm_wa345e_1-1-5'	SerialNumber	no	(Matrice 4E)
'dvtm_wa345e_1-1-10'	Model	no	
'dvtm_wa345e_2-2'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_wa345e_3-1-2'	TimeStamp	no	
'dvtm_wa345e_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_wa345e_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_wa345e_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_wa345e_3-3-4-6-1'	GPSDateTime	no	
'dvtm_wa345e_3-3-5-1'	RelativeAltitude	no	
'dvtm_wa345e_3-4-3'	GimballInfo	-	--> <a href="#">DJI GimballInfo Tags</a>
'dvtm_wm261_1-1-5'	SerialNumber	no	(Mavic Pro 3)
'dvtm_wm261_1-1-10'	Model	no	
'dvtm_wm261_2-3'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_wm261_3-1-2'	TimeStamp	no	
'dvtm_wm261_3-2-9-1'	ISO	no	
'dvtm_wm261_3-2-10-1'	ShutterSpeed	no	
'dvtm_wm261_3-2-11-1'	FNumber	no	
'dvtm_wm261_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_wm261_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_wm261_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_wm261_3-3-4-6-1'	GPSDateTime	no	
'dvtm_wm261_3-3-5-1'	RelativeAltitude	no	
'dvtm_wm261_3-4-3'	GimballInfo	-	--> <a href="#">DJI GimballInfo Tags</a>

'dvtm_wm265e_1-1-5'	SerialNumber	no	(Mavic 3)
'dvtm_wm265e_1-1-10'	Model	no	
'dvtm_wm265e_2-2'	FrameInfo	-	--> <a href="#">DJI FrameInfo Tags</a>
'dvtm_wm265e_3-2-2-1'	ISO	no	
'dvtm_wm265e_3-2-3-1'	ShutterSpeed	no	
'dvtm_wm265e_3-2-6-1'	DigitalZoom	no	
'dvtm_wm265e_3-3-3'	DroneInfo	-	--> <a href="#">DJI DroneInfo Tags</a>
'dvtm_wm265e_3-3-4-1'	GPSInfo	-	--> <a href="#">DJI GPSInfo Tags</a>
'dvtm_wm265e_3-3-4-2'	AbsoluteAltitude	no	
'dvtm_wm265e_3-3-5-1'	RelativeAltitude	no	
'dvtm_wm265e_3-4-3'	GimbalInfo	-	--> <a href="#">DJI GimbalInfo Tags</a>

## DJI FrameInfo Tags

Field #	Tag Name	Writable	Values / Notes
1	FrameWidth	no	
2	FrameHeight	no	
3	FrameRate	no	

## DJI DroneInfo Tags

Field #	Tag Name	Writable	Values / Notes
1	DroneRoll	no	
2	DronePitch	no	
3	DroneYaw	no	

## DJI GPSInfo Tags

Field #	Tag Name	Writable	Values / Notes
1	CoordinateUnits	no	(not extracted, but used internally to convert coordinates to degrees)
2	GPSLatitude	no	
3	GPSLongitude	no	

## DJI GimbalInfo Tags

Field #	Tag Name	Writable	Values / Notes
1	GimbalPitch	no	
2	GimbalRoll	no	
3	GimbalYaw	no	

## DJI Glamour Tags

Glamour settings used by some DJI models.

Tag ID	Tag Name	Writable	Values / Notes
'acne_spot_removal'	AcneSpotRemoval	no	
'beauty_enable'	BeautyEnable	no	
'blush'	Blush	no	
'dark_circle'	DarkCircle	no	
'eye_enlarge'	EyeEnlarge	no	
'eyebrows'	Eyebrows	no	
'face_slimming'	FaceSlimming	no	
'head_shrinking'	HeadShrinking	no	
'leg_longer'	LegLonger	no	

'lipstick'	Lipstick	no
'mouth_beautify'	MouthModify	no
'nose_slimming'	NoseSlimming	no
'smoother'	Smoother	no
'teeth_whitening'	TeethWhitening	no
'whitening'	Whitening	no

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Oct 7, 2025*

[<-- ExifTool Tag Names](#)

# DNG Tags

The main DNG tags are found in the EXIF table. The tables below define only information found within structures of these main DNG tag values. See <https://helpx.adobe.com/camera-raw/digital-negative.html> for the official DNG specification.

## DNG AdobeData Tags

This information is found in the "Adobe" DNGPrivateData.

The maker notes ('MakN') are processed by ExifTool, but some information may have been lost by the Adobe DNG Converter. This is because the Adobe DNG Converter (as of version 6.3) doesn't properly handle information referenced from inside the maker notes that lies outside the original maker notes block. This information is lost when only the maker note block is copied to the DNG image. While this doesn't effect all makes of cameras, it is a problem for some major brands such as Olympus and Sony.

Other entries in this table represent proprietary information that is extracted from the original RAW image and restructured to a different (but still proprietary) Adobe format.

Tag ID	Tag Name	Writable	Values / Notes
'CRW'	AdobeCRW	-	--> <a href="#">CanonRaw Tags</a>
'Koda'	AdobeKoda	-	--> <a href="#">Kodak IFD Tags</a>
'Leaf'	AdobeLeaf	-	--> <a href="#">Leaf SubIFD Tags</a>
'MRW'	AdobeMRW	-	--> <a href="#">MinoltaRaw Tags</a>
'MakN'	MakerNoteApple	undef	--> <a href="#">Apple Tags</a>
	MakerNoteNikon	undef	--> <a href="#">Nikon Tags</a>
	MakerNoteCanon	undef	--> <a href="#">Canon Tags</a>
	MakerNoteCasio	undef	--> <a href="#">Casio Tags</a>
	MakerNoteCasio2	undef	--> <a href="#">Casio Type2 Tags</a>
	MarkerNoteDJIInfo	undef	--> <a href="#">DJI Info Tags</a>
	MarkerNoteDJI	undef	--> <a href="#">DJI Tags</a>
	MarkerNoteFLIR	undef	--> <a href="#">FLIR Tags</a>
	MarkerNoteFujiFilm	undef	--> <a href="#">FujiFilm Tags</a>
	MarkerNoteGE	undef	--> <a href="#">GE Tags</a>
	MarkerNoteGE2	undef	--> <a href="#">FujiFilm Tags</a>
	MarkerNoteGoogle	undef	--> <a href="#">Google HDRPlusMakerNote Tags</a>
	MarkerNoteHasselblad	undef	--> <a href="#">Unknown Tags</a>
	MarkerNoteHP	undef	--> <a href="#">HP Tags</a>
	MarkerNoteHP2	undef	--> <a href="#">HP Type2 Tags</a>
	MarkerNoteHP4	undef	--> <a href="#">HP Type4 Tags</a>
	MarkerNoteHP6	undef	--> <a href="#">HP Type6 Tags</a>
	MarkerNoteISL	undef	--> <a href="#">Unknown Tags</a>
	MarkerNoteJVC	undef	--> <a href="#">JVC Tags</a>
	MarkerNoteJVCText	undef	--> <a href="#">JVC Text Tags</a>
	MarkerNoteKodak1a	undef	--> <a href="#">Kodak Tags</a>
	MarkerNoteKodak1b	undef	--> <a href="#">Kodak Tags</a>
	MarkerNoteKodak2	undef	--> <a href="#">Kodak Type2 Tags</a>
	MarkerNoteKodak3	undef	--> <a href="#">Kodak Type3 Tags</a>
	MarkerNoteKodak4	undef	--> <a href="#">Kodak Type4 Tags</a>
	MarkerNoteKodak5	undef	--> <a href="#">Kodak Type5 Tags</a>
	MarkerNoteKodak6a	undef	--> <a href="#">Kodak Type6 Tags</a>
	MarkerNoteKodak6b	undef	--> <a href="#">Kodak Type6 Tags</a>
	MarkerNoteKodak7	undef	--> <a href="#">Kodak Type7 Tags</a>
	MarkerNoteKodak8a	undef	--> <a href="#">Kodak Type8 Tags</a>
	MarkerNoteKodak8b	undef	--> <a href="#">Kodak Type8 Tags</a>
	MarkerNoteKodak8c	undef	--> <a href="#">Kodak Type8 Tags</a>
	MarkerNoteKodak9	undef	--> <a href="#">Kodak Type9 Tags</a>
	MarkerNoteKodak10	undef	--> <a href="#">Kodak Type10 Tags</a>
	MarkerNoteKodak11	undef	--> <a href="#">Kodak Type11 Tags</a>
	MarkerNoteKodak12	undef	--> <a href="#">Kodak Type11 Tags</a>
	MarkerNoteKodakUnknown	undef	--> <a href="#">Kodak Unknown Tags</a>
	MarkerNoteKyocera	undef	--> <a href="#">Unknown Tags</a>
	MarkerNoteMinolta	undef	--> <a href="#">Minolta Tags</a>
	MarkerNoteMinolta2	undef	--> <a href="#">Olympus Tags</a>
	MarkerNoteMinolta3	undef	(not EXIF-based)
	MarkerNoteMotorola	undef	--> <a href="#">Motorola Tags</a>
	MarkerNoteNikon2	undef	--> <a href="#">Nikon Type2 Tags</a>

MarkerNoteNikon3	undef	--> <a href="#">Nikon Tags</a>	
MarkerNoteNintendo	undef	--> <a href="#">Nintendo Tags</a>	
MarkerNoteOlympus	undef	--> <a href="#">Olympus Tags</a>	
MarkerNoteOlympus2	undef	--> <a href="#">Olympus Tags</a>	
MarkerNoteOlympus3	undef	--> <a href="#">Olympus Tags</a>	
MarkerNoteLeica	undef	--> <a href="#">Panasonic Tags</a>	
MarkerNoteLeica2	undef	--> <a href="#">Panasonic Leica2 Tags</a>	
MarkerNoteLeica3	undef	--> <a href="#">Panasonic Leica3 Tags</a>	
MarkerNoteLeica4	undef	--> <a href="#">Panasonic Leica4 Tags</a>	
MarkerNoteLeica5	undef	--> <a href="#">Panasonic Leica5 Tags</a>	
MarkerNoteLeica6	undef	--> <a href="#">Panasonic Leica6 Tags</a>	
MarkerNoteLeica7	undef	--> <a href="#">Panasonic Leica7 Tags</a>	
MarkerNoteLeica8	undef	--> <a href="#">Panasonic Leica8 Tags</a>	
MarkerNoteLeica9	undef	--> <a href="#">Panasonic Leica9 Tags</a>	
MarkerNoteLeica10	undef	--> <a href="#">Panasonic Tags</a>	
MarkerNotePanasonic	undef	--> <a href="#">Panasonic Tags</a>	
MarkerNotePanasonic2	undef	--> <a href="#">Panasonic Type2 Tags</a>	
MarkerNotePanasonic3	undef	--> <a href="#">Panasonic Tags</a>	
MarkerNotePentax	undef	--> <a href="#">Pentax Tags</a>	
MarkerNotePentax2	undef	--> <a href="#">Pentax Type2 Tags</a>	
MarkerNotePentax3	undef	--> <a href="#">Casio Type2 Tags</a>	
MarkerNotePentax4	undef	--> <a href="#">Pentax Type4 Tags</a>	
MarkerNotePentax5	undef	--> <a href="#">Pentax Tags</a>	
MarkerNotePentax6	undef	--> <a href="#">Pentax S1 Tags</a>	
MarkerNotePhaseOne	undef	--> <a href="#">PhaseOne Tags</a>	
MarkerNoteReconyxHyperFire	undef	--> <a href="#">Reconyx HyperFire Tags</a>	
MarkerNoteReconyxUltraFire	undef	--> <a href="#">Reconyx UltraFire Tags</a>	
MarkerNoteReconyxHyperFire2	undef	--> <a href="#">Reconyx HyperFire2 Tags</a>	
MarkerNoteReconyxMicroFire	undef	--> <a href="#">Reconyx MicroFire Tags</a>	
MarkerNoteReconyxHyperFire4K	undef	--> <a href="#">Reconyx HyperFire4K Tags</a>	
MarkerNoteRicohPentax	undef	--> <a href="#">Pentax Tags</a>	
MarkerNoteRicoh	undef	--> <a href="#">Ricoh Tags</a>	
MarkerNoteRicoh2	undef	--> <a href="#">Ricoh Type2 Tags</a>	
MarkerNoteRicohText	undef	--> <a href="#">Ricoh Text Tags</a>	
MarkerNoteSamsung1a	undef	(Samsung "STMN" maker notes without PreviewImage)	
MarkerNoteSamsung1b	undef	--> <a href="#">Samsung Tags</a>	
MarkerNoteSamsung2	undef	--> <a href="#">Samsung Type2 Tags</a>	
MarkerNoteSanyo	undef	--> <a href="#">Sanyo Tags</a>	
MarkerNoteSanyoC4	undef	--> <a href="#">Sanyo Tags</a>	
MarkerNoteSanyoPatch	undef	--> <a href="#">Sanyo Tags</a>	
MarkerNoteSigma	undef	--> <a href="#">Sigma Tags</a>	
MarkerNoteSony	undef	--> <a href="#">Sony Tags</a>	
MarkerNoteSony2	undef	--> <a href="#">Olympus Tags</a>	
MarkerNoteSony3	undef	--> <a href="#">Olympus Tags</a>	
MarkerNoteSony4	undef	--> <a href="#">Sony PIC Tags</a>	
MarkerNoteSony5	undef	--> <a href="#">Sony Tags</a>	
MarkerNoteSonyEricsson	undef	--> <a href="#">Sony Ericsson Tags</a>	
MarkerNoteSonySRF	undef	--> <a href="#">Sony SRF Tags</a>	
MarkerNoteUnknownText	undef	(unknown text-based maker notes)	
MarkerNoteUnknownBinary	undef	(unknown binary maker notes)	
MarkerNoteUnknown	undef	--> <a href="#">Unknown Tags</a>	
'Pano'	AdobePano	-	--> <a href="#">PanasonicRaw Tags</a>
'RAF '	AdobeRAF	-	--> <a href="#">FujiFilm RAF Tags</a>
'SR2 '	AdobeSR2	-	--> <a href="#">Sony SR2Private Tags</a>

## DNG OriginalRaw Tags

This table defines tags extracted from the DNG OriginalRawFileData information.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	OriginalRawImage	no	
0x0001	OriginalRawResource	no	
0x0002	OriginalRawFileType	no	
0x0003	OriginalRawCreator	no	
0x0004	OriginalTHMImage	no	
0x0005	OriginalTHMResource	no	

0x0006	OriginalTHMFileType	no
0x0007	OriginalTHMCreator	no

## DNG ImageSeq Tags

Index1	Tag Name	Writable	Values / Notes
0	SeqID	no	
1	SeqType	no	
2	SeqFrameInfo	no	
3	SeqIndex	no	
7	SeqCount	no	
11	SeqFinal	no	0 = No 1 = Yes

## DNG ProfileDynamicRange Tags

Index1	Tag Name	Writable	Values / Notes
0	PDRVersion	no	
2	DynamicRange	no	0 = Standard 1 = High
4	HintMaxOutputValue	no	

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Last revised Sep 21, 2025

[--> ExifTool Tag Names](#)

# DPX Tags

Tags extracted from DPX (Digital Picture Exchange) images.

Index1	Tag Name	Writable	Values / Notes
0	ByteOrder	no	'SDPX' = Big-endian 'XPDS' = Little-endian
8	HeaderVersion	no	
16	DPXFileSize	no	
20	DittoKey	no	0 = Same 1 = New
36	ImageFileName	no	
136	CreateDate	no	
160	Creator	no	
260	Project	no	
460	Copyright	no	
660	EncryptionKey	no	
768	Orientation	no	0 = Horizontal (normal) 1 = Mirror vertical 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror horizontal and rotate 270 CW 5 = Rotate 90 CW 6 = Rotate 270 CW 7 = Mirror horizontal and rotate 90 CW
770	ImageElements	no	
772	ImageWidth	no	
776	ImageHeight	no	
780	DataSign	no	0 = Unsigned 1 = Signed
800	ComponentsConfiguration	no	0 = User-defined single component 1 = Red (R) 2 = Green (G) 3 = Blue (B) 4 = Alpha (matte) 6 = Luminance (Y) 7 = Chrominance (Cb, Cr, subsampled by two) 8 = Depth (Z) 9 = Composite video 50 = R, G, B 51 = R, G, B, Alpha 52 = Alpha, B, G, R 100 = Cb, Y, Cr, Y (4:2:2) 101 = Cb, Y, A, Cr, Y, A (4:2:2:4) 102 = Cb, Y, Cr (4:4:4) 103 = Cb, Y, Cr, A (4:4:4:4) 150 = User-defined 2 component element 151 = User-defined 3 component element 152 = User-defined 4 component element 153 = User-defined 5 component element 154 = User-defined 6 component element 155 = User-defined 7 component element 156 = User-defined 8 component element
801	TransferCharacteristic	no	0 = User-defined 1 = Printing density 2 = Linear 3 = Logarithmic 4 = Unspecified video 5 = SMPTE 274M 6 = ITU-R 709-4 7 = ITU-R 601-5 system B or G (625) 8 = ITU-R 601-5 system M (525) 9 = Composite video (NTSC) 10 = Composite video (PAL) 11 = Z (depth) - linear 12 = Z (depth) - homogeneous 13 = SMPTE ADX 14 = ITU-R 2020 NCL 15 = ITU-R 2020 CL

16 = IEC 61966-2-4 xvYCC  
 17 = ITU-R 2100 NCL/PQ  
 18 = ITU-R 2100 ICtCp/PQ  
 19 = ITU-R 2100 NCL/HLG  
 20 = ITU-R 2100 ICtCp/HLG  
 21 = RP 431-2:2011 Gama 2.6  
 22 = IEC 61966-2-1 sRGB

802	ColorimetricSpecification	no	0 = User-defined 1 = Printing density 4 = Unspecified video 5 = SMPTE 274M 6 = ITU-R 709-4 7 = ITU-R 601-5 system B or G (625) 8 = ITU-R 601-5 system M (525) 9 = Composite video (NTSC) 10 = Composite video (PAL) 13 = SMPTE ADX 14 = ITU-R 2020 15 = P3D65 16 = P3DCI 17 = P3D60 18 = ACES
803	BitDepth	no	
820	ImageDescription	no	
892	Image2Description	no	
964	Image3Description	no	
1036	Image4Description	no	
1108	Image5Description	no	
1180	Image6Description	no	
1252	Image7Description	no	
1324	Image8Description	no	
1432	SourceFileName	no	
1532	SourceCreateDate	no	
1556	InputDeviceName	no	
1588	InputDeviceSerialNumber	no	
1628	AspectRatio	no	
1724	OriginalFrameRate	no	
1728	ShutterAngle	no	
1732	FrameID	no	
1764	SlateInformation	no	
1920	TimeCode	no	
1940	FrameRate	no	
1972	Reserved5?	no	
2048	UserID	no	

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*Last revised May 21, 2024*

[-- ExifTool Tag Names](#)

# DSF Tags

Tags read from the 'fmt' header of a DSF (DSD Stream File) audio files. As well, ID3 metadata may also exist in these files. See [https://dsd-guide.com/sites/default/files/white-papers/DSFFileFormatSpec\\_E.pdf](https://dsd-guide.com/sites/default/files/white-papers/DSFFileFormatSpec_E.pdf) for the specification.

Index	Tag Name	Writable	Values / Notes
3	FormatVersion	no	
4	FormatID	no	0 = DSD Raw
5	ChannelType	no	1 = Mono 2 = Stereo (Left, Right) 3 = 3 Channels (Left, Right, Center) 4 = Quad (Left, Right, Back L, Back R) 5 = 4 Channels (Left, Right, Center, Bass) 6 = 5 Channels (Left, Right, Center, Back L, Back R) 7 = 5.1 Channels (Left, Right, Center, Bass, Back L, Back R)
6	ChannelCount	no	
7	SampleRate	no	
8	BitsPerSample	no	
9	SampleCount	no	
11	BlockSize	no	

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Last revised Sep 25, 2025

[-- ExifTool Tag Names](#)

# DV Tags

The following tags are extracted from DV videos.

Tag Name	Writable	Values / Notes
AspectRatio	no	
AudioBitsPerSample	no	
AudioChannels	no	
AudioSampleRate	no	
Colorimetry	no	
DateTimeOriginal	no	
Duration	no	
FrameRate	no	
ImageHeight	no	
ImageWidth	no	
TotalBitrate	no	
VideoFormat	no	
VideoScanType	no	

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*Last revised Jan 3, 2011*

[<-- ExifTool Tag Names](#)

# DarwinCore Tags

Tags defined in the Darwin Core (dwc) XMP namespace. See <http://rs.tdwg.org/dwc/index.htm> for the official specification.

These tags belong to the ExifTool XMP-dwc family 1 group.

Tag Name	Writable	Values / Notes
DCTermsLocation	struct	--> <a href="#">DarwinCore DCTermsLocation Struct</a>
DCContinent	string_	(dctermsLocationContinent)
DCCoordinatePrecision	string_	(dctermsLocationCoordinatePrecision)
DCCoordinateUncertaintyInMeters	string_	(dctermsLocationCoordinateUncertaintyInMeters)
DCCountry	string_	(dctermsLocationCountry)
DCCountryCode	string_	(dctermsLocationCountryCode)
DCCounty	string_	(dctermsLocationCounty)
DCDecimalLatitude	string_	(dctermsLocationDecimalLatitude)
DCDecimalLongitude	string_	(dctermsLocationDecimalLongitude)
DCFootprintSpatialFit	string_	(dctermsLocationFootprintSpatialFit)
DCFootprintSRS	string_	(dctermsLocationFootprintSRS)
DCFootprintWKT	string_	(dctermsLocationFootprintWKT)
DCGeodeticDatum	string_	(dctermsLocationGeodeticDatum)
DCGeoreferencedBy	string_	(dctermsLocationGeoreferencedBy)
DCGeoreferencedDate	string_	(dctermsLocationGeoreferencedDate)
DCGeoreferenceProtocol	string_	(dctermsLocationGeoreferenceProtocol)
DCGeoreferenceRemarks	string_	(dctermsLocationGeoreferenceRemarks)
DCGeoreferenceSources	string_	(dctermsLocationGeoreferenceSources)
DCGeoreferenceVerificationStatus	string_	(dctermsLocationGeoreferenceVerificationStatus)
DCHigherGeography	string_	(dctermsLocationHigherGeography)
DCHigherGeographyID	string_	(dctermsLocationHigherGeographyID)
DCIsland	string_	(dctermsLocationIsland)
DCIslandGroup	string_	(dctermsLocationIslandGroup)
DCLocality	string_	(dctermsLocationLocality)
DCLocationAccordingTo	string_	(dctermsLocationLocationAccordingTo)
DCLocationID	string_	(dctermsLocationLocationID)
DCLocationRemarks	string_	(dctermsLocationLocationRemarks)
DCMaximumDepthInMeters	string_	(dctermsLocationMaximumDepthInMeters)
DCMaximumDistanceAboveSurfaceInMeters	string_	(dctermsLocationMaximumDistanceAboveSurfaceInMeters)
DCMaximumElevationInMeters	string_	(dctermsLocationMaximumElevationInMeters)
DCMinimumDepthInMeters	string_	(dctermsLocationMinimumDepthInMeters)
DCMinimumDistanceAboveSurfaceInMeters	string_	(dctermsLocationMinimumDistanceAboveSurfaceInMeters)
DCMinimumElevationInMeters	string_	(dctermsLocationMinimumElevationInMeters)
DCMunicipality	string_	(dctermsLocationMunicipality)
DCPointRadiusSpatialFit	string_	(dctermsLocationPointRadiusSpatialFit)
DCStateProvince	string_	(dctermsLocationStateProvince)
DCVerbatimCoordinates	string_	(dctermsLocationVerbatimCoordinates)
DCVerbatimCoordinateSystem	string_	(dctermsLocationVerbatimCoordinateSystem)
DCVerbatimDepth	string_	(dctermsLocationVerbatimDepth)
DCVerbatimElevation	string_	(dctermsLocationVerbatimElevation)
DCVerbatimLatitude	string_	(dctermsLocationVerbatimLatitude)
DCVerbatimLocality	string_	(dctermsLocationVerbatimLocality)
DCVerbatimLongitude	string_	(dctermsLocationVerbatimLongitude)
DCVerbatimSRS	string_	(dctermsLocationVerbatimSRS)
DCVerticalDatum	string_	(dctermsLocationVerticalDatum)
DCWaterBody	string_	(dctermsLocationWaterBody)

DCEvent	struct	--> <a href="#">DarwinCore Event Struct</a> (tag ID is 'Event')
EventDay	integer_	
EventEarliestDate	date_	
EventEndDayOfYear	integer_	
EventDate	date_	(EventEventDate)
EventID	string/_	(EventEventID; avoided in favor of XMP-iptcExt:EventID)
EventRemarks	lang-alt_	(EventEventRemarks)
EventTime	string_	(EventEventTime)
EventEventType	string_	
EventFieldNotes	string_	
EventFieldNumber	string_	
EventHabitat	string_	
EventLatestDate	date_	
EventMonth	integer_	
EventParentEventID	string_	
EventSampleSizeUnit	string_	
EventSampleSizeValue	string_	
EventSamplingEffort	string_	
EventSamplingProtocol	string_	
EventStartDayOfYear	integer_	
EventVerbatimEventDate	string_	
EventYear	integer_	
FossilSpecimen	struct	--> <a href="#">DarwinCore MaterialSample Struct</a>
FossilSpecimenMaterialSampleID	string_	
GeologicalContext	struct	--> <a href="#">DarwinCore GeologicalContext Struct</a>
GeologicalContextBed	string_	
EarliestAgeOrLowestStage	string_	(GeologicalContextEarliestAgeOrLowestStage)
EarliestEonOrLowestEonothem	string_	(GeologicalContextEarliestEonOrLowestEonothem)
EarliestEpochOrLowestSeries	string_	(GeologicalContextEarliestEpochOrLowestSeries)
EarliestEraOrLowestErathem	string_	(GeologicalContextEarliestEraOrLowestErathem)
EarliestPeriodOrLowestSystem	string_	(GeologicalContextEarliestPeriodOrLowestSystem)
GeologicalContextFormation	string_	
GeologicalContextID	string_	(GeologicalContextGeologicalContextID)
GeologicalContextGroup	string_	
HighestBiostratigraphicZone	string_	(GeologicalContextHighestBiostratigraphicZone)
LatestAgeOrHighestStage	string_	(GeologicalContextLatestAgeOrHighestStage)
LatestEonOrHighestEonothem	string_	(GeologicalContextLatestEonOrHighestEonothem)
LatestEpochOrHighestSeries	string_	(GeologicalContextLatestEpochOrHighestSeries)
LatestEraOrHighestErathem	string_	(GeologicalContextLatestEraOrHighestErathem)
LatestPeriodOrHighestSystem	string_	(GeologicalContextLatestPeriodOrHighestSystem)
LithostratigraphicTerms	string_	(GeologicalContextLithostratigraphicTerms)
LowestBiostratigraphicZone	string_	(GeologicalContextLowestBiostratigraphicZone)
GeologicalContextMember	string_	
HumanObservation	struct	--> <a href="#">DarwinCore Event Struct</a>
HumanObservationDay	integer_	
HumanObservationEarliestDate	date_	
HumanObservationEndDayOfYear	integer_	
HumanObservationEventDate	date_	
HumanObservationEventID	string/_	(avoided in favor of XMP-iptcExt:EventID)
HumanObservationEventRemarks	lang-alt_	
HumanObservationEventTime	string_	
HumanObservationEventType	string_	

HumanObservationFieldNotes	string_	
HumanObservationFieldNumber	string_	
HumanObservationHabitat	string_	
HumanObservationLatestDate	date_	
HumanObservationMonth	integer_	
HumanObservationParentEventID	string_	
HumanObservationSampleSizeUnit	string_	
HumanObservationSampleSizeValue	string_	
HumanObservationSamplingEffort	string_	
HumanObservationSamplingProtocol	string_	
HumanObservationStartDayOfYear	integer_	
HumanObservationVerbatimEventDate	string_	
HumanObservationYear	integer_	
Identification	struct	--> <a href="#">DarwinCore Identification Struct</a>
DatIdentified	date_	(IdentificationDatIdentified)
IdentificationID	string_	(IdentificationIdentificationID)
IdentificationQualifier	string_	(IdentificationIdentificationQualifier)
IdentificationReferences	string_	(IdentificationIdentificationReferences)
IdentificationRemarks	string_	(IdentificationIdentificationRemarks)
IdentificationVerificationStatus	string_	(IdentificationIdentificationVerificationStatus)
IdentifiedBy	string_	(IdentificationIdentifiedBy)
IdentifiedByID	string_	(IdentificationIdentifiedByID)
TypeStatus	string_	(IdentificationTypeStatus)
VerbatimIdentification	string_	(IdentificationVerbatimIdentification)
LivingSpecimen	struct	--> <a href="#">DarwinCore MaterialSample Struct</a>
LivingSpecimenMaterialSampleID	string_	
MachineObservation	struct	--> <a href="#">DarwinCore Event Struct</a>
MachineObservationDay	integer_	
MachineObservationEarliestDate	date_	
MachineObservationEndDayOfYear	integer_	
MachineObservationEventDate	date_	
MachineObservationEventID	string/_	(avoided in favor of XMP-iptcExt:EventID)
MachineObservationEventRemarks	lang-alt_	
MachineObservationEventTime	string_	
MachineObservationEventType	string_	
MachineObservationFieldNotes	string_	
MachineObservationFieldNumber	string_	
MachineObservationHabitat	string_	
MachineObservationLatestDate	date_	
MachineObservationMonth	integer_	
MachineObservationParentEventID	string_	
MachineObservationSampleSizeUnit	string_	
MachineObservationSampleSizeValue	string_	
MachineObservationSamplingEffort	string_	
MachineObservationSamplingProtocol	string_	
MachineObservationStartDayOfYear	integer_	
MachineObservationVerbatimEventDate	string_	
MachineObservationYear	integer_	
MaterialSample	struct	--> <a href="#">DarwinCore MaterialSample Struct</a>
MaterialSampleID	string_	(MaterialSampleMaterialSampleID)
MeasurementOrFact	struct	--> <a href="#">DarwinCore MeasurementOrFact Struct</a>
MeasurementAccuracy	string_	(MeasurementOrFactMeasurementAccuracy)
MeasurementDeterminedBy	string_	(MeasurementOrFactMeasurementDeterminedBy)

MeasurementDeterminedDate	date_	(MeasurementOrFactMeasurementDeterminedDate)
MeasurementID	string_	(MeasurementOrFactMeasurementID)
MeasurementMethod	string_	(MeasurementOrFactMeasurementMethod)
MeasurementRemarks	string_	(MeasurementOrFactMeasurementRemarks)
MeasurementType	string_	(MeasurementOrFactMeasurementType)
MeasurementUnit	string_	(MeasurementOrFactMeasurementUnit)
MeasurementValue	string_	(MeasurementOrFactMeasurementValue)
ParentMeasurementID	string_	(MeasurementOrFactParentMeasurementID)
Occurrence	struct	--> <a href="#">DarwinCore Occurrence Struct</a>
OccurrenceAssociatedMedia	string_	
OccurrenceAssociatedOccurrences	string_	
OccurrenceAssociatedReferences	string_	
OccurrenceAssociatedSequences	string_	
OccurrenceAssociatedTaxa	string_	
OccurrenceBehavior	string_	
OccurrenceCaste	string_	
OccurrenceCatalogNumber	string_	
OccurrenceDegreeOfEstablishment	string_	
OccurrenceDisposition	string_	
OccurrenceEstablishmentMeans	string_	
OccurrenceGeoreferenceVerificationStatus	string_	
OccurrenceIndividualCount	string_	
OccurrenceIndividualID	string_	
OccurrenceLifeStage	string_	
OccurrenceDetails	string_	(OccurrenceOccurrenceDetails)
OccurrenceID	string_	(OccurrenceOccurrenceID)
OccurrenceRemarks	string_	(OccurrenceOccurrenceRemarks)
OccurrenceStatus	string_	(OccurrenceOccurrenceStatus)
OccurrenceOrganismQuantity	string_	
OccurrenceOrganismQuantityType	string_	
OccurrenceOtherCatalogNumbers	string_	
OccurrencePathway	string_	
OccurrencePreparations	string_	
OccurrencePreviousIdentifications	string_	
OccurrenceRecordedBy	string_	
OccurrenceRecordedByID	string_	
OccurrenceRecordNumber	string_	
OccurrenceReproductiveCondition	string_	
OccurrenceSex	string_	
OccurrenceVitality	string_	
Organism	struct	--> <a href="#">DarwinCore Organism Struct</a>
OrganismAssociatedOccurrences	string_	
OrganismAssociatedOrganisms	string_	
OrganismID	string_	(OrganismOrganismID)
OrganismName	string_	(OrganismOrganismName)
OrganismRemarks	string_	(OrganismOrganismRemarks)
OrganismScope	string_	(OrganismOrganismScope)
OrganismPreviousIdentifications	string_	
PreservedSpecimen	struct	--> <a href="#">DarwinCore MaterialSample Struct</a>
PreservedSpecimenMaterialSampleID	string_	
Record	struct	--> <a href="#">DarwinCore Record Struct</a>
RecordBasisOfRecord	string_	
RecordCollectionCode	string_	

RecordCollectionID	string_	
RecordDataGeneralizations	string_	
RecordDatasetID	string_	
RecordDatasetName	string_	
RecordDynamicProperties	string_	
RecordInformationWithheld	string_	
RecordInstitutionCode	string_	
RecordInstitutionID	string_	
RecordOwnerInstitutionCode	string_	
ResourceRelationship	struct	--> <a href="#">DarwinCore ResourceRelationship Struct</a>
RelatedResourceID	string_	(ResourceRelationshipRelatedResourceID)
RelationshipAccordingTo	string_	(ResourceRelationshipRelationshipAccordingTo)
RelationshipEstablishedDate	date_	(ResourceRelationshipRelationshipEstablishedDate)
RelationshipOfResource	string_	(ResourceRelationshipRelationshipOfResource)
RelationshipOfResourceID	string_	(ResourceRelationshipRelationshipOfResourceID)
RelationshipRemarks	string_	(ResourceRelationshipRelationshipRemarks)
ResourceID	string_	(ResourceRelationshipResourceRelationshipID)
ResourceRelationshipID	string_	(ResourceRelationshipResourceRelationshipID)
Taxon	struct	--> <a href="#">DarwinCore Taxon Struct</a>
TaxonAcceptedNameUsage	string_	
TaxonAcceptedNameUsageId	string_	
TaxonClass	string_	
TaxonCultivarEpithet	string_	
TaxonFamily	string_	
TaxonGenericName	string_	
TaxonGenus	string_	
TaxonHigherClassification	string_	
TaxonInfragenericEpithet	string_	
TaxonInfraspecificEpithet	string_	
TaxonKingdom	string_	
TaxonNameAccordingTo	string_	
TaxonNameAccordingToID	string_	
TaxonNamePublishedIn	string_	
TaxonNamePublishedInID	string_	
TaxonNamePublishedInYear	string_	
TaxonNomenclaturalCode	string_	
TaxonNomenclaturalStatus	string_	
TaxonOrder	string_	
TaxonOriginalNameUsage	string_	
TaxonOriginalNameUsageId	string_	
TaxonParentNameUsage	string_	
TaxonParentNameUsageId	string_	
TaxonPhylum	string_	
TaxonScientificName	string_	
TaxonScientificNameAuthorship	string_	
TaxonScientificNameID	string_	
TaxonSpecificEpithet	string_	
TaxonSubFamily	string_	
TaxonSubgenus	string_	
TaxonSubTribe	string_	
TaxonSuperFamily	string_	
TaxonConceptID	string_	(TaxonTaxonConceptID)
TaxonID	string_	(TaxonTaxonID)

TaxonTaxonomicStatus	string_	
TaxonRank	string_	(TaxonTaxonRank)
TaxonRemarks	string_	(TaxonTaxonRemarks)
TaxonTribe	string_	
TaxonVerbatimTaxonRank	string_	
TaxonVernacularName	lang-alt_	

## DarwinCore DCTermsLocation Struct

Field Name	Writable	Values / Notes
Continent	string	
CoordinatePrecision	string	
CoordinateUncertaintyInMeters	string	
Country	string	
CountryCode	string	
County	string	
DecimalLatitude	string	
DecimalLongitude	string	
FootprintSRS	string	
FootprintSpatialFit	string	
FootprintWKT	string	
GeodeticDatum	string	
GeoreferenceProtocol	string	
GeoreferenceRemarks	string	
GeoreferenceSources	string	
GeoreferenceVerificationStatus	string	
GeoreferencedBy	string	
GeoreferencedDate	string	
HigherGeography	string	
HigherGeographyID	string	
Island	string	
IslandGroup	string	
Locality	string	
LocationAccordingTo	string	
LocationID	string	
LocationRemarks	string	
MaximumDepthInMeters	string	
MaximumDistanceAboveSurfaceInMeters	string	
MaximumElevationInMeters	string	
MinimumDepthInMeters	string	
MinimumDistanceAboveSurfaceInMeters	string	
MinimumElevationInMeters	string	
Municipality	string	
PointRadiusSpatialFit	string	
StateProvince	string	
VerbatimCoordinateSystem	string	
VerbatimCoordinates	string	
VerbatimDepth	string	
VerbatimElevation	string	
VerbatimLatitude	string	
VerbatimLocality	string	
VerbatimLongitude	string	
VerbatimSRS	string	

VerticalDatum	string
WaterBody	string

## DarwinCore Event Struct

Field Name	Writable	Values / Notes
Day	integer	
EarliestDate	date	
EndDayOfYear	integer	
EventDate	date	
EventID	string	(avoided in favor of XMP-iptcExt:EventID)
EventRemarks	lang-alt	
EventTime	string	
EventType	string	
FieldNotes	string	
FieldNumber	string	
Habitat	string	
LatestDate	date	
Month	integer	
ParentEventID	string	
SampleSizeUnit	string	
SampleSizeValue	string	
SamplingEffort	string	
SamplingProtocol	string	
StartDayOfYear	integer	
VerbatimEventDate	string	
Year	integer	

## DarwinCore MaterialSample Struct

Field Name	Writable	Values / Notes
MaterialSampleID	string	

## DarwinCore GeologicalContext Struct

Field Name	Writable	Values / Notes
Bed	string	
EarliestAgeOrLowestStage	string	
EarliestEonOrLowestEonothem	string	
EarliestEpochOrLowestSeries	string	
EarliestEraOrLowestErathem	string	
EarliestPeriodOrLowestSystem	string	
Formation	string	
GeologicalContextID	string	
Group	string	
HighestBiostratigraphicZone	string	
LatestAgeOrHighestStage	string	
LatestEonOrHighestEonothem	string	
LatestEpochOrHighestSeries	string	
LatestEraOrHighestErathem	string	
LatestPeriodOrHighestSystem	string	
LithostratigraphicTerms	string	
LowestBiostratigraphicZone	string	
Member	string	

## DarwinCore Identification Struct

Field Name	Writable	Values / Notes
Dat_IDENTIFIED	date	
IdentificationID	string	
IdentificationQualifier	string	
IdentificationReferences	string	
IdentificationRemarks	string	
IdentificationVerificationStatus	string	
IdentifiedBy	string	
IdentifiedByID	string	
TypeStatus	string	
VerbatimIdentification	string	

## DarwinCore MeasurementOrFact Struct

Field Name	Writable	Values / Notes
MeasurementAccuracy	string	
MeasurementDeterminedBy	string	
MeasurementDeterminedDate	date	
MeasurementID	string	
MeasurementMethod	string	
MeasurementRemarks	string	
MeasurementType	string	
MeasurementUnit	string	
MeasurementValue	string	
ParentMeasurementID	string	

## DarwinCore Occurrence Struct

Field Name	Writable	Values / Notes
AssociatedMedia	string	
AssociatedOccurrences	string	
AssociatedReferences	string	
AssociatedSequences	string	
AssociatedTaxa	string	
Behavior	string	
Caste	string	
CatalogNumber	string	
DegreeOfEstablishment	string	
Disposition	string	
EstablishmentMeans	string	
GeoreferenceVerificationStatus	string	
IndividualCount	string	
IndividualID	string	
LifeStage	string	
OccurrenceDetails	string	
OccurrenceID	string	
OccurrenceRemarks	string	
OccurrenceStatus	string	
OrganismQuantity	string	
OrganismQuantityType	string	
OtherCatalogNumbers	string	

Pathway	string
Preparations	string
PreviousIdentifications	string
RecordNumber	string
RecordedBy	string
RecordedByID	string
ReproductiveCondition	string
Sex	string
Vitality	string

## DarwinCore Organism Struct

Field Name	Writable	Values / Notes
AssociatedOccurrences	string	
AssociatedOrganisms	string	
OrganismID	string	
OrganismName	string	
OrganismRemarks	string	
OrganismScope	string	
PreviousIdentifications	string	

## DarwinCore Record Struct

Field Name	Writable	Values / Notes
BasisOfRecord	string	
CollectionCode	string	
CollectionID	string	
DataGeneralizations	string	
DatasetID	string	
DatasetName	string	
DynamicProperties	string	
InformationWithheld	string	
InstitutionCode	string	
InstitutionID	string	
OwnerInstitutionCode	string	

## DarwinCore ResourceRelationship Struct

Field Name	Writable	Values / Notes
RelatedResourceID	string	
RelationshipAccordingTo	string	
RelationshipEstablishedDate	date	
RelationshipOfResource	string	
RelationshipOfResourceID	string	
RelationshipRemarks	string	
ResourceID	string	
ResourceRelationshipID	string	

## DarwinCore Taxon Struct

Field Name	Writable	Values / Notes
AcceptedNameUsage	string	
AcceptedNameUsageId	string	
Class	string	

CultivarEpithet	string
Family	string
GenericName	string
Genus	string
HigherClassification	string
InfragenericEpithet	string
InfraspecificEpithet	string
Kingdom	string
NameAccordingTo	string
NameAccordingToID	string
NamePublishedIn	string
NamePublishedInID	string
NamePublishedInYear	string
NomenclaturalCode	string
NomenclaturalStatus	string
Order	string
OriginalNameUsage	string
OriginalNameUsageID	string
ParentNameUsage	string
ParentNameUsageID	string
Phylum	string
ScientificName	string
ScientificNameAuthorship	string
ScientificNameID	string
SpecificEpithet	string
SubFamily	string
SubTribe	string
Subgenus	string
SuperFamily	string
TaxonConceptID	string
TaxonID	string
TaxonRank	string
TaxonRemarks	string
TaxonomicStatus	string
Tribe	string
VerbatimTaxonRank	string
VernacularName	lang-alt

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Sep 22, 2025*

[-- ExifTool Tag Names](#)

# DjVu Tags

Information is extracted from the following chunks in DjVu images. See <http://www.djvu.org/> for the DjVu specification.

Tag ID	Tag Name	Writable	Values / Notes
'ANTa'	ANTa	-	--> <a href="#">DjVu Ant Tags</a>
'ANTz'	CompressedAnnotation	-	--> <a href="#">DjVu Ant Tags</a>
'FORM'	FORM	-	--> <a href="#">DjVu Form Tags</a>
'INCL'	IncludedFileID	no	
'INFO'	INFO	-	--> <a href="#">DjVu Info Tags</a>

## DjVu Ant Tags

Information extracted from annotation chunks.

Tag ID	Tag Name	Writable	Values / Notes
'metadata'	Metadata	-	--> <a href="#">DjVu Meta Tags</a>
'xmp'	XMP	-	--> <a href="#">XMP Tags</a>

## DjVu Meta Tags

This table lists the standard DjVu metadata tags, but ExifTool will extract any tags that exist even if they don't appear here. The DjVu v3 documentation endorses tags borrowed from two standards: 1) BibTeX bibliography system tags (all lowercase Tag ID's in the table below), and 2) PDF DocInfo tags (capitalized Tag ID's).

Tag ID	Tag Name	Writable	Values / Notes
'Author'	Author	no	
'CreationDate'	CreateDate	no	
'Creator'	Creator	no	
'Keywords'	Keywords	no	
'ModDate'	ModifyDate	no	
'Producer'	Producer	no	
'Subject'	Subject	no	
'Title'	Title	no	
'Trapped'	Trapped	no	
'address'	Address	no	
'annotate'	Annotation	no	
'author'	Author	no	
'booktitle'	BookTitle	no	
'chapter'	Chapter	no	
'crossref'	CrossRef	no	
'edition'	Edition	no	
'eprint'	EPrint	no	
'howpublished'	HowPublished	no	
'institution'	Institution	no	
'journal'	Journal	no	
'key'	Key	no	
'month'	Month	no	
'note'	Note	no	
'number'	Number	no	
'organization'	Organization	no	
'pages'	Pages	no	
'publisher'	Publisher	no	
'school'	School	no	
'series'	Series	no	

'title'	Title	no
'type'	Type	no
'url'	URL	no
'volume'	Volume	no
'year'	Year	no

## DjVu Form Tags

Index1	Tag Name	Writable	Values / Notes
0	SubfileType	no	'BM44' = Grayscale IW44 'DJVI' = Shared component 'DJVM' = Multi-page document 'DJVU' = Single-page image 'PM44' = Color IW44 'THUM' = Thumbnail image

## DjVu Info Tags

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
2	ImageHeight	no	
4	DjVuVersion	no	
6	SpatialResolution	no	
8	Gamma	no	
9	Orientation	no	[val & 0x7] 1 = Horizontal (normal) 2 = Rotate 180 5 = Rotate 90 CW 6 = Rotate 270 CW

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Oct 24, 2018

[<-- ExifTool Tag Names](#)

# EXE Tags

This module extracts information from various types of Windows, MacOS and Unix executable and library files. The first table below lists information extracted from the header of Windows PE (Portable Executable) EXE files and DLL libraries.

Index2	Tag Name	Writable	Values / Notes
0	MachineType	no	0x0 = Unknown 0x1 = Target host 0x14c = Intel 386 or later, and compatibles 0x14d = Intel i860 0x162 = MIPS R3000 0x166 = MIPS little endian (R4000) 0x168 = MIPS R10000 0x169 = MIPS little endian WCI v2 0x183 = Alpha AXP (old) 0x184 = Alpha AXP 0x1a2 = Hitachi SH3 0x1a3 = Hitachi SH3 DSP 0x1a4 = Hitachi SH3E 0x1a6 = Hitachi SH4 0x1a8 = Hitachi SH5 0x1c0 = ARM little endian 0x1c2 = Thumb 0x1c4 = Thumb 2 little endian 0x1d3 = Matsushita AM33 0x1f0 = PowerPC little endian 0x1f1 = PowerPC with floating point support 0x200 = Intel IA64 0x266 = MIPS16 0x268 = Motorola 68000 series 0x284 = Alpha AXP 64-bit 0x366 = MIPS with FPU 0x466 = MIPS16 with FPU 0x520 = Infineon Tricore 0xcef = CEF 0xebc = EFI Byte Code 0x3a64 = Compiled Hybrid PE 0x5032 = RISC-V 32-bit 0x5064 = RISC-V 64-bit 0x5128 = RISC-V 128-bit 0x6232 = LoongArch 32-bit 0x6264 = LoongArch 64-bit 0x8664 = AMD AMD64 0x9041 = Mitsubishi M32R little endian 0xaa64 = ARM64 little endian 0xc0ee = clr pure MSIL 0xec20 = Dotnet 0xEC20
2	TimeStamp	no	
9	ImageFileCharacteristics	no	Bit 0 = No relocs Bit 1 = Executable Bit 2 = No line numbers Bit 3 = No symbols Bit 4 = Aggressive working-set trim Bit 5 = Large address aware Bit 7 = Bytes reversed lo Bit 8 = 32-bit Bit 9 = No debug Bit 10 = Removable run from swap Bit 11 = Net run from swap Bit 12 = System file Bit 13 = DLL Bit 14 = Uniprocessor only Bit 15 = Bytes reversed hi
10	PEType	no	0x107 = ROM Image 0x10b = PE32 0x20b = PE32+
11	LinkerVersion	no	
12	CodeSize	no	
14	InitializedDataSize	no	
16	UninitializedDataSize	no	
18	EntryPoint	no	

30	OSVersion	no	
32	ImageVersion	no	
34	SubsystemVersion	no	
44	Subsystem	no	0 = Unknown 1 = Native 2 = Windows GUI 3 = Windows command line 5 = OS/2 command line 7 = POSIX command line 9 = Windows CE GUI 10 = EFI application 11 = EFI boot service 12 = EFI runtime driver 13 = EFI ROM 14 = XBOX

## EXE PEVersion Tags

Information extracted from the VS\_VERSION\_INFO structure of Windows PE files.

Index	Tag Name	Writable	Values / Notes	
2	FileVersionNumber	no		
4	ProductVersionNumber	no		
6	FileFlagsMask	no		
7	FileFlags	no	Bit 0 = Debug Bit 1 = Pre-release Bit 2 = Patched	Bit 3 = Private build Bit 4 = Info inferred Bit 5 = Special build
8	FileOS	no	0x1 = Win16 0x2 = PM-16 0x3 = PM-32 0x4 = Win32 0x10000 = DOS 0x10001 = Windows 16-bit 0x10004 = Windows 32-bit 0x20000 = OS/2 16-bit 0x20002 = OS/2 16-bit PM-16 0x30000 = OS/2 32-bit 0x30003 = OS/2 32-bit PM-32 0x40000 = Windows NT 0x40004 = Windows NT 32-bit	
9	ObjectFileType	no	0 = Unknown 1 = Executable application 2 = Dynamic link library 3 = Driver 4 = Font 5 = VxD 7 = Static library	
10	FileSubtype	no		

## EXE PEString Tags

Resource strings found in Windows PE files. The **TagID**'s are not shown because they are the same as the **Tag Name**. ExifTool will extract any existing StringFileInfo tags even if not listed in this table.

Tag Name	Writable	Values / Notes
BuildDate	no	
BuildVersion	no	
CharacterSet	no	(extracted from the StringFileInfo value) '0000' = ASCII '03A4' = Windows, Japan (Shift - JIS X-0208) '03A8' = Windows, Chinese (Simplified) '03B5' = Windows, Korea (Shift - KSC 5601) '03B6' = Windows, Taiwan (Big5) '04B0' = Unicode '04E2' = Windows, Latin2 (Eastern European) '04E3' = Windows, Cyrillic '04E4' = Windows, Latin1 '04E5' = Windows, Greek

'04E6' = Windows, Turkish  
 '04E7' = Windows, Hebrew  
 '04E8' = Windows, Arabic

Comments	no	
CompanyName	no	
Copyright	no	
FileDescription	no	
FileVersion	no	
InternalName	no	
LanguageCode	no	--> <a href="#">EXE LanguageCode Values</a> (Windows code page; extracted from the StringFileInfo value)
LegalCopyright	no	
LegalTrademarks	no	
OriginalFileName	no	
PrivateBuild	no	
ProductName	no	
ProductVersion	no	
SpecialBuild	no	

## EXE LanguageCode Values

See [https://docs.microsoft.com/en-us/openspecs/windows\\_protocols/ms-lcid](https://docs.microsoft.com/en-us/openspecs/windows_protocols/ms-lcid) for the full list of Microsoft language codes.

Value	LanguageCode	Value	LanguageCode	Value	LanguageCode
'0000'	= Neutral	'0437'	= Georgian	'040E'	= Hungarian
'0400'	= Process default	'0438'	= Faeroese	'040F'	= Icelandic
'0401'	= Arabic	'0439'	= Hindi	'041A'	= Croato-Serbian (Latin)
'0402'	= Bulgarian	'0440'	= Kyrgyz	'041B'	= Slovak
'0403'	= Catalan	'0441'	= Swahili	'041C'	= Albanian
'0404'	= Chinese (Traditional)	'0443'	= Uzbek	'041D'	= Swedish
'0405'	= Czech	'0444'	= Tatar	'041E'	= Thai
'0406'	= Danish	'0445'	= Bengali	'041F'	= Turkish
'0407'	= German	'0446'	= Punjabi	'042a'	= Vietnamese
'0408'	= Greek	'0447'	= Gujarati	'042b'	= Armenian
'0409'	= English (U.S.)	'0448'	= Oriya	'042c'	= Azeri
'0410'	= Italian	'0449'	= Tamil	'042d'	= Basque
'0411'	= Japanese	'0450'	= Mongolian	'042e'	= Sorbian
'0412'	= Korean	'0456'	= Galician	'042f'	= Macedonian
'0413'	= Dutch	'0457'	= Konkani	'043a'	= Maltese
'0414'	= Norwegian (Bokml)	'0458'	= Manipuri	'043b'	= Saami
'0415'	= Polish	'0459'	= Sindhi	'043c'	= Gaelic
'0416'	= Portuguese (Brazilian)	'0460'	= Kashmiri	'043e'	= Malay
'0417'	= Rhaeto-Romanic	'0461'	= Nepali	'043f'	= Kazak
'0418'	= Romanian	'0465'	= Divehi	'044a'	= Telugu
'0419'	= Russian	'0490'	= Walon	'044b'	= Kannada
'0420'	= Urdu	'0491'	= Cornish	'044c'	= Malayalam
'0421'	= Indonesian	'0492'	= Welsh	'044d'	= Assamese
'0422'	= Ukrainian	'0493'	= Breton	'044e'	= Marathi
'0423'	= Belarusian	'0800'	= Neutral 2	'044f'	= Sanskrit
'0424'	= Slovenian	'0804'	= Chinese (Simplified)	'045a'	= Syriac
'0425'	= Estonian	'0807'	= German (Swiss)	'047f'	= Invariant
'0426'	= Latvian	'0809'	= English (British)	'048f'	= Esperanto
'0427'	= Lithuanian	'0810'	= Italian (Swiss)	'080A'	= Spanish (Mexican)
'0428'	= Maori	'0813'	= Dutch (Belgian)	'080C'	= French (Belgian)
'0429'	= Farsi	'0814'	= Norwegian (Nynorsk)	'081A'	= Serbo-Croatian (Cyrillic)
'0430'	= Sutu	'0816'	= Portuguese	'0C07'	= German (Austrian)
'0431'	= Tsonga	'1009'	= English (Canadian)	'0C09'	= English (Australian)
'0432'	= Tswana	'007F'	= Invariant	'0C0A'	= Spanish (Modern)
'0433'	= Venda	'040A'	= Spanish (Castilian)	'0C0C'	= French (Canadian)
'0434'	= Xhosa	'040B'	= Finnish	'100C'	= French (Swiss)
'0435'	= Zulu	'040C'	= French		
'0436'	= Afrikaans	'040D'	= Hebrew		

## EXE DebugRSDS Tags

Index1	Tag Name	Writable	Values / Notes
0	PDBModifyDate	no	(Taken from debug directory entry pointing to RSDS record.)
20	PDBAge	no	
24	PDBFileName	no	

## EXE DebugNB10 Tags

CodeView NB10 debug information found in some Windows EXE files.

Index1	Tag Name	Writable	Values / Notes
0	PDBModifyDate	no	(Taken from debug directory entry pointing to NB10 record.)
8	PDBCreateDate	no	
12	PDBAge	no	
16	PDBFileName	no	

## EXE Misc Tags

Miscellaneous CodeView debug information in Windows EXE files.

Index1	Tag Name	Writable	Values / Notes
12	EXEFileName	no	

## EXE MachO Tags

Information extracted from Mach-O (Mac OS X) executable files and DYLIB libraries.

Index	Tag Name	Writable	Values / Notes
0	CPUArchitecture	no	
1	CPUByteOrder	no	
2	CPUCount	no	
3	CPUType	no+	<ul style="list-style-type: none"> <li>-1 = Any</li> <li>1 = VAX</li> <li>2 = ROMP</li> <li>4 = NS32032</li> <li>5 = NS32332</li> <li>6 = MC680x0</li> <li>7 = x86</li> <li>8 = MIPS</li> <li>9 = NS32532</li> <li>10 = MC98000</li> <li>11 = HPPA</li> <li>12 = ARM</li> <li>13 = MC88000</li> <li>14 = SPARC</li> <li>15 = i860 big endian</li> <li>16 = i860 little endian</li> <li>17 = RS6000</li> <li>18 = PowerPC</li> <li>255 = VEO</li> </ul>
4	CPUSubtype	no+	<ul style="list-style-type: none"> <li>'1 0' = VAX (all)</li> <li>'1 1' = VAX780</li> <li>'1 2' = VAX785</li> <li>'1 3' = VAX750</li> <li>'1 4' = VAX730</li> <li>'1 5' = UVAXI</li> <li>'1 6' = UVAXII</li> <li>'1 7' = VAX8200</li> <li>'1 8' = VAX8500</li> <li>'1 9' = VAX8600</li> <li>'1 10' = VAX8650</li> <li>'1 11' = VAX8800</li> <li>'1 12' = UVAXIII</li> <li>'2 0' = RT (all)</li> <li>'2 1' = RT PC</li> <li>'2 2' = RT APC</li> <li>'2 3' = RT 135</li> <li>'4 0' = NS32032 (all)</li> <li>'4 1' = NS32032 DPC (032 CPU)</li> <li>'4 2' = NS32032 SQT</li> <li>'4 3' = NS32032 APC FPU (32081)</li> <li>'4 4' = NS32032 APC FPA (Weitek)</li> <li>'4 5' = NS32032 XPC (532)</li> <li>'5 0' = NS32332 (all)</li> <li>'5 1' = NS32332 DPC (032 CPU)</li> </ul>

'5 2' = NS32332 SQT  
 '5 3' = NS32332 APC FPU (32081)  
 '5 4' = NS32332 APC FPA (Weitek)  
 '5 5' = NS32332 XPC (532)  
 '6 1' = MC680x0 (all)  
 '6 2' = MC68040  
 '6 3' = MC68030  
 '7 3' = i386 (all)  
 '7 4' = i486  
 '7 5' = i586  
 '7 8' = Pentium III  
 '7 9' = Pentium M  
 '7 10' = Pentium 4  
 '7 11' = Itanium  
 '7 12' = Xeon  
 '7 22' = Pentium Pro  
 '7 24' = Pentium III M  
 '7 26' = Pentium 4 M  
 '7 27' = Itanium 2  
 '7 28' = Xeon MP  
 '7 40' = Pentium III Xeon  
 '7 54' = Pentium II M3  
 '7 86' = Pentium II M5  
 '7 103' = Celeron  
 '7 119' = Celeron Mobile  
 '7 132' = i486SX  
 '8 0' = MIPS (all)  
 '8 1' = MIPS R2300  
 '8 2' = MIPS R2600  
 '8 3' = MIPS R2800  
 '8 4' = MIPS R2000a  
 '8 5' = MIPS R2000  
 '8 6' = MIPS R3000a  
 '8 7' = MIPS R3000  
 '10 0' = MC98000 (all)  
 '10 1' = MC98601  
 '11 0' = HPPA (all)  
 '11 1' = HPPA 7100LC  
 '12 0' = ARM (all)  
 '12 1' = ARM A500 ARCH  
 '12 2' = ARM A500  
 '12 3' = ARM A440  
 '12 4' = ARM M4  
 '12 5' = ARM A680/V4T  
 '12 6' = ARM V6  
 '12 7' = ARM V5TEJ  
 '12 8' = ARM XSCALE  
 '12 9' = ARM V7  
 '13 0' = MC88000 (all)  
 '13 1' = MC88100  
 '13 2' = MC88110  
 '14 0' = SPARC (all)  
 '14 1' = SUN 4/260  
 '14 2' = SUN 4/110  
 '15 0' = i860 (all)  
 '15 1' = i860 860  
 '16 0' = i860 little (all)  
 '16 1' = i860 little  
 '17 0' = RS6000 (all)  
 '17 1' = RS6000  
 '18 0' = PowerPC (all)  
 '18 1' = PowerPC 601  
 '18 2' = PowerPC 602  
 '18 3' = PowerPC 603  
 '18 4' = PowerPC 603e  
 '18 5' = PowerPC 603ev  
 '18 6' = PowerPC 604  
 '18 7' = PowerPC 604e  
 '18 8' = PowerPC 620  
 '18 9' = PowerPC 750  
 '18 10' = PowerPC 7400  
 '18 11' = PowerPC 7450  
 '18 100' = PowerPC 970  
 '255 1' = VEO 1  
 '255 2' = VEO 2

5	ObjectType	no	-1 = Static library 0x1 = Relocatable object 0x2 = Demand paged executable 0x3 = Fixed VM shared library
---	------------	----	---

		0x4 = Core
		0x5 = Preloaded executable
		0x6 = Dynamically bound shared library
		0x7 = Dynamic link editor
		0x8 = Dynamically bound bundle
		0x9 = Shared library stub for static linking
		0xa = Debug information
		0xb = x86_64 kexts

6 ObjectFlags	no	Bit 0 = No undefs Bit 1 = Incremental link Bit 2 = Dyld link Bit 3 = Bind at load Bit 4 = Prebound Bit 5 = Split segs Bit 6 = Lazy init Bit 7 = Two level Bit 8 = Force flat Bit 9 = No multi defs Bit 10 = No fix prebinding Bit 11 = Prebindable Bit 12 = All mods bound Bit 13 = Subsections via symbols Bit 14 = Canonical Bit 15 = Weak defines Bit 16 = Binds to weak Bit 17 = Allow stack execution Bit 18 = Dead stripable dylib Bit 19 = Root safe Bit 20 = No reexported dylibs Bit 21 = Random address
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## EXE PEF Tags

Information extracted from PEF (Classic Mac OS) executable files and libraries.

Index	Tag Name	Writable	Values / Notes
2	CPUArchitecture	no	'm68k' = 68000 'ppc' = PowerPC
3	PEFVersion	no	
4	TimeStamp	no	

## EXE ELF Tags

Information extracted from ELF (Unix) executable files and SO libraries.

Index	Tag Name	Writable	Values / Notes
4	CPUArchitecture	no	1 = 32 bit 2 = 64 bit
5	CPUBYTEORDER	no	1 = Little endian 2 = Big endian
16	ObjectFileType	no	0 = None 1 = Relocatable file 2 = Executable file 3 = Shared object file 4 = Core file
18	CPUType	no	0 = None 1 = AT&T WE 32100 2 = SPARC 3 = i386 4 = Motorola 68000 5 = Motorola 88000 6 = i486 7 = i860 8 = MIPS R3000 9 = IBM System/370 10 = MIPS R4000 15 = HP PA-RISC 18 = Sun v8plus 19 = Intel 80960 20 = PowerPC 21 = PowerPC 64-bit 22 = IBM S/390

23	= Cell BE SPU
36	= NEC V800
37	= Fujitsu FR20
38	= TRW RH-32
39	= Motorola RCE
40	= Arm (up to Armv7/AArch32)
41	= Digital Alpha
42	= SuperH
43	= SPARC v9 64-bit
44	= Siemens TriCore
45	= Argonaut RISC Core
46	= Renesas H8/300,300H,H8S
47	= Hitachi H8/300H
48	= Hitachi H8S
49	= Hitachi H8/500
50	= HP/Intel IA-64
51	= Stanford MIPS-X
52	= Motorola ColdFire
53	= Motorola M68HC12
54	= Fujitsu MMA Multimedia Accelerator
55	= Siemens PCP
56	= Sony nCPU embedded RISC processor
57	= Denso NDR1 microprocessor
58	= Motorola Star*Core processor
59	= Toyota ME16 processor
60	= STMicroelectronics ST100 processor
61	= Advanced Logic Corp. TinyJ embedded processor family
62	= AMD x86-64
63	= Sony DSP Processor
64	= Digital Equipment Corp. PDP-10
65	= Digital Equipment Corp. PDP-11
66	= Siemens FX66 microcontroller
67	= STMicroelectronics ST9+ 8/16 bit microcontroller
68	= STMicroelectronics ST7 8-bit microcontroller
69	= Motorola MC68HC16 Microcontroller
70	= Motorola MC68HC11 Microcontroller
71	= Motorola MC68HC08 Microcontroller
72	= Motorola MC68HC05 Microcontroller
73	= Silicon Graphics SVx
74	= STMicroelectronics ST19 8-bit microcontroller
75	= Digital VAX
76	= Axis Communications 32-bit embedded processor
77	= Infineon Technologies 32-bit embedded processor
78	= Element 14 64-bit DSP Processor
79	= LSI Logic 16-bit DSP Processor
87	= NEC v850
88	= Renesas M32R
140	= TMS320C6000 Family
175	= MCST Elbrus e2k
183	= Arm 64-bits (Armv8/AArch64)
220	= Zilog Z80
243	= RISC-V
247	= Berkeley Packet Filter
257	= WDC 65C816
21569	= Fujitsu FR-V
36902	= Alpha
36929	= m32r (old)
36992	= v850 (old)
41872	= S/390 (old)

## EXE AR Tags

Information extracted from static libraries.

Index1	Tag Name	Writable	Values / Notes
16	CreateDate	no	

## EXE CHM Tags

Tags extracted from Microsoft Compiled HTML files.

Index4	Tag Name	Writable	Values / Notes
1	CHMVersion	no	
5	LanguageCode	no	--> <a href="#">EXE LanguageCode Values</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Jan 25, 2025*

[<-- ExifTool Tag Names](#)

# EXIF Tags

EXIF stands for "Exchangeable Image File Format". This type of information is formatted according to the TIFF specification, and may be found in JPG, TIFF, PNG, JP2, PGF, MIFF, HDP, PSP and XCF images, as well as many TIFF-based RAW images, and even some AVI and MOV videos.

The EXIF meta information is organized into different Image File Directories (IFD's) within an image. The names of these IFD's correspond to the ExifTool family 1 group names. When writing EXIF information, the default **Group** listed below is used unless another group is specified.

Mandatory tags (indicated by a colon after the **Writable** type) may be added automatically with default values when creating a new IFD, and the IFD is removed automatically when deleting tags if only default-valued mandatory tags remain.

The table below lists all EXIF tags. Also listed are TIFF, DNG, HDP and other tags which are not part of the EXIF specification, but may co-exist with EXIF tags in some images. Tags which are part of the EXIF 3.0 specification have an underlined **Tag Name** in the HTML version of this documentation. See [https://www.cipa.jp/std/documents/download\\_e.html?CIPA\\_DC-008-2024-E](https://www.cipa.jp/std/documents/download_e.html?CIPA_DC-008-2024-E) for the official EXIF 3.0 specification.

Tag ID	Tag Name	Writable	Group	Values / Notes
0x0001	<u>InteropIndex</u>	string!	InteropIFD	'R03' = R03 - DCF option file (Adobe RGB) 'R98' = R98 - DCF basic file (sRGB) 'THM' = THM - DCF thumbnail file
0x0002	InteropVersion	undef!:	InteropIFD	
0x000b	ProcessingSoftware	string	IFD0	(used by ACD Systems Digital Imaging)
0x00fe	SubfileType	int32u!	IFD0	(called NewSubFileType by the TIFF specification) 0x0 = Full-resolution image 0x1 = Reduced-resolution image 0x2 = Single page of multi-page image 0x3 = Single page of multi-page reduced-resolution image 0x4 = Transparency mask 0x5 = Transparency mask of reduced-resolution image 0x6 = Transparency mask of multi-page image 0x7 = Transparency mask of reduced-resolution multi-page image 0x8 = Depth map 0x9 = Depth map of reduced-resolution image 0x10 = Enhanced image data 0x10001 = Alternate reduced-resolution image 0x10004 = Semantic Mask 0xffffffff = invalid Bit 0 = Reduced resolution Bit 1 = Single page Bit 2 = Transparency mask Bit 3 = TIFF/IT final page Bit 4 = TIFF-FX mixed raster content
0x00ff	OldSubfileType	int16u!	IFD0	(called SubFileType by the TIFF specification) 1 = Full-resolution image 2 = Reduced-resolution image 3 = Single page of multi-page image
0x0100	<u>ImageWidth</u>	int32u!	IFD0	
0x0101	<u>ImageHeight</u>	int32u!	IFD0	(called ImageLength by the EXIF spec.)
0x0102	<u>BitsPerSample</u>	int16u[n]!	IFD0	
0x0103	<u>Compression</u>	int16u!:	IFD0	--> <a href="#">EXIF Compression Values</a>
0x0106	<u>PhotometricInterpretation</u>	int16u!	IFD0	0 = WhitelsZero 1 = BlacklsZero 2 = RGB 3 = RGB Palette 4 = Transparency Mask 5 = CMYK 6 = YCbCr 8 = CIELab 9 = ICCLab 10 = ITULab 32803 = Color Filter Array

32844 = Pixar LogL  
 32845 = Pixar LogLuv  
 32892 = Sequential Color Filter  
 34892 = Linear Raw  
 51177 = Depth Map  
 52527 = Semantic Mask

0x0107	Thresholding	int16u!	IFD0	1 = No dithering or halftoning 2 = Ordered dither or halftone 3 = Randomized dither
0x0108	CellWidth	int16u!	IFD0	
0x0109	CellLength	int16u!	IFD0	
0x010a	FillOrder	int16u!	IFD0	1 = Normal 2 = Reversed
0x010d	DocumentName	string	IFD0	
0x010e	<a href="#">ImageDescription</a>	string	IFD0	
0x010f	<a href="#">Make</a>	string	IFD0	
0x0110	<a href="#">Model</a>	string	IFD0	
0x0111	<a href="#">StripOffsets</a> OtherImageStart PreviewJXLStart StripOffsets PreviewImageStart PreviewImageStart JpgFromRawStart	no no no no int32u* int32u* int32u*	- - - - IFD0 All SubIFD2	(called StripOffsets in most locations, but it is PreviewImageStart in IFD0 of CR2 images and various IFD's of DNG images except for SubIFD2 where it is JpgFromRawStart)
0x0112	<a href="#">Orientation</a>	int16u	IFD0	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical 5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
0x0115	<a href="#">SamplesPerPixel</a>	int16u!	IFD0	
0x0116	<a href="#">RowsPerStrip</a>	int32u!	IFD0	
0x0117	<a href="#">StripByteCounts</a> OtherImageLength PreviewJXLLength StripByteCounts PreviewImageLength PreviewImageLength JpgFromRawLength	no no no no int32u* int32u* int32u*	- - - - IFD0 All SubIFD2	(called StripByteCounts in most locations, but it is PreviewImageLength in IFD0 of CR2 images and various IFD's of DNG images except for SubIFD2 where it is JpgFromRawLength)
0x0118	MinSampleValue	int16u	IFD0	
0x0119	MaxSampleValue	int16u	IFD0	
0x011a	<a href="#">XResolution</a>	rational64u:	IFD0	
0x011b	<a href="#">YResolution</a>	rational64u:	IFD0	
0x011c	<a href="#">PlanarConfiguration</a>	int16u!	IFD0	1 = Chunky 2 = Planar
0x011d	PageName	string	IFD0	
0x011e	XPosition	rational64u	IFD0	
0x011f	YPosition	rational64u	IFD0	
0x0120	FreeOffsets	no	-	
0x0121	FreeByteCounts	no	-	
0x0122	GrayResponseUnit	int16u	IFD0	1 = 0.1 2 = 0.001 3 = 0.0001 4 = 1e-05 5 = 1e-06
0x0123	GrayResponseCurve	no	-	
0x0124	T4Options	no	-	Bit 0 = 2-Dimensional encoding Bit 1 = Uncompressed Bit 2 = Fill bits added
0x0125	T6Options	no	-	Bit 1 = Uncompressed
0x0128	<a href="#">ResolutionUnit</a>	int16u:	IFD0	(the value 1 is not standard EXIF) 1 = None

2 = inches  
3 = cm

0x0129	PageNumber	int16u[2]	IFD0	
0x012c	ColorResponseUnit	no	-	
0x012d	<u>TransferFunction</u>	int16u[768]!	IFD0	
0x0131	<u>Software</u>	string	IFD0	
0x0132	<u>ModifyDate</u>	string	IFD0	(called DateTime by the EXIF spec.)
0x013b	<u>Artist</u>	string	IFD0	(becomes a list-type tag when the MWG module is loaded)
0x013c	HostComputer	string	IFD0	
0x013d	Predictor	int16u!	IFD0	1 = None 2 = Horizontal differencing 3 = Floating point 34892 = Horizontal difference X2 34893 = Horizontal difference X4 34894 = Floating point X2 34895 = Floating point X4
0x013e	<u>WhitePoint</u>	rational64u[2]	IFD0	
0x013f	<u>PrimaryChromaticities</u>	rational64u[6]	IFD0	
0x0140	ColorMap	no	-	
0x0141	HalftoneHints	int16u[2]	IFD0	
0x0142	TileWidth	int32u!	IFD0	
0x0143	TileLength	int32u!	IFD0	
0x0144	TileOffsets	no	-	
0x0145	TileByteCounts	no	-	
0x0146	BadFaxLines	no	-	
0x0147	CleanFaxData	no	-	0 = Clean 1 = Regenerated 2 = Unclean
0x0148	ConsecutiveBadFaxLines	no	-	
0x014a	SubIFD A100DataOffset	- no	- IFD0	--> <a href="#">EXIF Tags</a> (the data offset in original Sony DSLR-A100 ARW images)
0x014c	InkSet	int16u	IFD0	1 = CMYK 2 = Not CMYK
0x014d	InkNames	no	-	
0x014e	NumberofInks	no	-	
0x0150	DotRange	no	-	
0x0151	TargetPrinter	string	IFD0	
0x0152	ExtraSamples	no	-	0 = Unspecified 1 = Associated Alpha 2 = Unassociated Alpha
0x0153	SampleFormat	no	SubIFD	(SamplesPerPixel values) [Values 0-3] 1 = Unsigned 4 = Undefined 2 = Signed 5 = Complex int 3 = Float 6 = Complex float
0x0154	SMinSampleValue	no	-	
0x0155	SMaxSampleValue	no	-	
0x0156	TransferRange	no	-	
0x0157	ClipPath	no	-	
0x0158	XClipPathUnits	no	-	
0x0159	YClipPathUnits	no	-	
0x015a	Indexed	no	-	0 = Not indexed 1 = Indexed
0x015b	JPEGTables	no	-	
0x015f	OPIProxy	no	-	0 = Higher resolution image does not exist 1 = Higher resolution image exists
0x0190	GlobalParametersIFD	-	-	--> <a href="#">EXIF Tags</a>
0x0191	ProfileType	no	-	0 = Unspecified 1 = Group 3 FAX

0x0192 FaxProfile	no	-	0 = Unknown 1 = Minimal B&W lossless, S 2 = Extended B&W lossless, F 3 = Lossless JBIG B&W, J 4 = Lossy color and grayscale, C 5 = Lossless color and grayscale, L 6 = Mixed raster content, M 7 = Profile T 255 = Multi Profiles
0x0193 CodingMethods	no	-	Bit 0 = Unspecified compression Bit 1 = Modified Huffman Bit 2 = Modified Read Bit 3 = Modified MR Bit 4 = JBIG Bit 5 = Baseline JPEG Bit 6 = JBIG color
0x0194 VersionYear	no	-	
0x0195 ModeNumber	no	-	
0x01b1 Decode	no	-	
0x01b2 DefaultImageColor	no	-	
0x01b3 T82Options	no	-	
0x01b5 JPEGTables	no	-	
0x0200 JPEGProc	no	-	1 = Baseline 14 = Lossless
0x0201 <u>ThumbnailOffset</u> ThumbnailOffset ThumbnailOffset ThumbnailOffset PreviewImageStart PreviewImageStart JpgFromRawStart JpgFromRawStart OtherImageStart OtherImageStart OtherImageStart	int32u* int32u* int32u* int32u* int32u* int32u* int32u* int32u* int32u* no	IFD1 IFD0 SubIFD MarkerNotes IFD0 SubIFD IFD2 SubIFD1 SubIFD2 -	(called JPEGInterchangeFormat in the specification, this is ThumbnailOffset in IFD1 of JPEG and some TIFF-based images, IFD0 of MRW images and AVI and MOV videos, and the SubIFD in IFD1 of SRW images; PreviewImageStart in MarkerNotes and IFD0 of ARW and SR2 images; JpgFromRawStart in SubIFD of NEF images and IFD2 of PEF images; and OtherImageStart in everything else)
0x0202 <u>ThumbnailLength</u> ThumbnailLength ThumbnailLength ThumbnailLength PreviewImageLength PreviewImageLength JpgFromRawLength JpgFromRawLength OtherImageLength OtherImageLength OtherImageLength	int32u* int32u* int32u* int32u* int32u* int32u* int32u* int32u* int32u* no	IFD1 IFD0 SubIFD MarkerNotes IFD0 SubIFD IFD2 SubIFD1 SubIFD2 -	(called JPEGInterchangeFormatLength in the specification, this is ThumbnailLength in IFD1 of JPEG and some TIFF-based images, IFD0 of MRW images and AVI and MOV videos, and the SubIFD in IFD1 of SRW images; PreviewImageLength in MarkerNotes and IFD0 of ARW and SR2 images; JpgFromRawLength in SubIFD of NEF images, and IFD2 of PEF images; and OtherImageLength in everything else)
0x0203 JPEGRestartInterval	no	-	
0x0205 JPEGLosslessPredictors	no	-	
0x0206 JPEGPointTransforms	no	-	
0x0207 JPEGQTables	no	-	
0x0208 JPEGDCTables	no	-	
0x0209 JPEGACTables	no	-	
0x0211 <u>YCbCrCoefficients</u>	rational64u[3]!	IFD0	
0x0212 <u>YCbCrSubSampling</u>	int16u[2]!	IFD0	'1 1' = YCbCr4:4:4 (1 1) '1 2' = YCbCr4:4:0 (1 2) '1 4' = YCbCr4:4:1 (1 4) '2 1' = YCbCr4:2:2 (2 1) '2 2' = YCbCr4:2:0 (2 2) '2 4' = YCbCr4:2:1 (2 4) '4 1' = YCbCr4:1:1 (4 1) '4 2' = YCbCr4:1:0 (4 2)
0x0213 <u>YCbCrPositioning</u>	int16ul:	IFD0	1 = Centered 2 = Co-sited
0x0214 <u>ReferenceBlackWhite</u>	rational64u[6]	IFD0	
0x022f StripRowCounts	no	-	
0x02bc ApplicationNotes	int8u!	IFD0	--> <a href="#">XMP Tags</a>

0x0303	RenderingIntent	no	-	0 = Perceptual 1 = Relative Colorimetric 2 = Saturation 3 = Absolute colorimetric
0x03e7	USPTOMiscellaneous	no	-	
0x1000	RelatedImageFileFormat	string!	InteropIFD	
0x1001	RelatedImageWidth	int16u!	InteropIFD	
0x1002	RelatedImageHeight	int16u!	InteropIFD	(called RelatedImageLength by the DCF spec.)
0x4746	Rating	int16u/	IFD0	
0x4747	XP_DIP_XML	no	-	
0x4748	StitchInfo	-	-	--> <a href="#">Microsoft Stitch Tags</a>
0x4749	RatingPercent	int16u/	IFD0	
0x5001	ResolutionXUnit	no	-	(ID's from 0x5001 to 0x5113 are obscure tags defined by Microsoft)
0x5002	ResolutionYUnit	no	-	
0x5003	ResolutionXLengthUnit	no	-	
0x5004	ResolutionYLengthUnit	no	-	
0x5005	PrintFlags	no	-	
0x5006	PrintFlagsVersion	no	-	
0x5007	PrintFlagsCrop	no	-	
0x5008	PrintFlagsBleedWidth	no	-	
0x5009	PrintFlagsBleedWidthScale	no	-	
0x500a	HalftoneLPI	no	-	
0x500b	HalftoneLPIUnit	no	-	
0x500c	HalftoneDegree	no	-	
0x500d	HalftoneShape	no	-	
0x500e	HalftoneMisc	no	-	
0x500f	HalftoneScreen	no	-	
0x5010	JPEGQuality	no	-	
0x5011	GridSize	no	-	
0x5012	ThumbnailFormat	no	-	
0x5013	ThumbnailWidth	no	-	
0x5014	ThumbnailHeight	no	-	
0x5015	ThumbnailColorDepth	no	-	
0x5016	ThumbnailPlanes	no	-	
0x5017	ThumbnailRawBytes	no	-	
0x5018	ThumbnailLength	no	-	
0x5019	ThumbnailCompressedSize	no	-	
0x501a	ColorTransferFunction	no	-	
0x501b	ThumbnailData	no	-	
0x5020	ThumbnailImageWidth	no	-	
0x5021	ThumbnailImageHeight	no	-	
0x5022	ThumbnailBitsPerSample	no	-	
0x5023	ThumbnailCompression	no	-	
0x5024	ThumbnailPhotometricInterp	no	-	
0x5025	ThumbnailDescription	no	-	
0x5026	ThumbnailEquipMake	no	-	
0x5027	ThumbnailEquipModel	no	-	
0x5028	ThumbnailStripOffsets	no	-	
0x5029	ThumbnailOrientation	no	-	
0x502a	ThumbnailSamplesPerPixel	no	-	
0x502b	ThumbnailRowsPerStrip	no	-	
0x502c	ThumbnailStripByteCounts	no	-	
0x502d	ThumbnailResolutionX	no	-	

0x502e	ThumbnailResolutionY	no	-	
0x502f	ThumbnailPlanarConfig	no	-	
0x5030	ThumbnailResolutionUnit	no	-	
0x5031	ThumbnailTransferFunction	no	-	
0x5032	ThumbnailSoftware	no	-	
0x5033	ThumbnailDateTime	no	-	
0x5034	ThumbnailArtist	no	-	
0x5035	ThumbnailWhitePoint	no	-	
0x5036	ThumbnailPrimaryChromaticities	no	-	
0x5037	ThumbnailYCbCrCoefficients	no	-	
0x5038	ThumbnailYCbCrSubsampling	no	-	
0x5039	ThumbnailYCbCrPositioning	no	-	
0x503a	ThumbnailRefBlackWhite	no	-	
0x503b	ThumbnailCopyright	no	-	
0x5090	LuminanceTable	no	-	
0x5091	ChrominanceTable	no	-	
0x5100	FrameDelay	no	-	
0x5101	LoopCount	no	-	
0x5102	GlobalPalette	no	-	
0x5103	IndexBackground	no	-	
0x5104	IndexTransparent	no	-	
0x5110	PixelUnits	no	-	
0x5111	PixelsPerUnitX	no	-	
0x5112	PixelsPerUnitY	no	-	
0x5113	PaletteHistogram	no	-	
0x7000	SonyRawFileType	no	-	0 = Sony Uncompressed 14-bit RAW 1 = Sony Uncompressed 12-bit RAW 2 = Sony Compressed RAW 3 = Sony Lossless Compressed RAW 4 = Sony Lossless Compressed RAW 2
0x7010	SonyToneCurve	no	-	
0x7031	VignettingCorrection	int16s!	SubIFD	(found in Sony ARW images) 256 = Off 257 = Auto 272 = Auto (ILCE-1) 511 = No correction params available
0x7032	VignettingCorrParams	int16s[17]!	SubIFD	(found in Sony ARW images)
0x7034	ChromaticAberrationCorrection	int16s!	SubIFD	(found in Sony ARW images) 0 = Off 1 = Auto 255 = No correction params available
0x7035	ChromaticAberrationCorrParams	int16s[33]!	SubIFD	(found in Sony ARW images)
0x7036	DistortionCorrection	int16s!	SubIFD	(found in Sony ARW images) 0 = Off 1 = Auto 17 = Auto fixed by lens 255 = No correction params available
0x7037	DistortionCorrParams	int16s[17]!	SubIFD	(found in Sony ARW images)
0x7038	SonyRawImageSize	int32u[2]!	SubIFD	(size of actual image in Sony ARW files)
0x7310	BlackLevel	int16u[4]!	SubIFD	(found in Sony ARW images)
0x7313	WB_RGGBLevels	int16s[4]!	SubIFD	(found in Sony ARW images)
0x74c7	SonyCropTopLeft	int32u[2]!	SubIFD	
0x74c8	SonyCropSize	int32u[2]!	SubIFD	
0x800d	ImageID	no	-	
0x80a3	WangTag1	no	-	
0x80a4	WangAnnotation	no	-	
0x80a5	WangTag3	no	-	
0x80a6	WangTag4	no	-	

0x80b9	ImageReferencePoints	no	-	
0x80ba	RegionXformTackPoint	no	-	
0x80bb	WarpQuadrilateral	no	-	
0x80bc	AffineTransformMat	no	-	
0x80e3	Matteing	no	-	
0x80e4	DataType	no	-	
0x80e5	ImageDepth	no	-	
0x80e6	TileDepth	no	-	
0x8214	ImageFullWidth	no	-	
0x8215	ImageFullHeight	no	-	
0x8216	TextureFormat	no	-	
0x8217	WrapModes	no	-	
0x8218	FovCot	no	-	
0x8219	MatrixWorldToScreen	no	-	
0x821a	MatrixWorldToCamera	no	-	
0x827d	Model2	no	-	
0x828d	CFARepeatPatternDim	int16u[2]!	SubIFD	
0x828e	CFAPattern2	int8u[n]!	SubIFD	
0x828f	BatteryLevel	no	-	
0x8290	KodakIFD	-	-	--> <a href="#">Kodak IFD Tags</a> (used in various types of Kodak images)
0x8298	<u>Copyright</u>	string	IFD0	(may contain copyright notices for photographer and editor, separated by a newline. As per the EXIF specification, the newline is replaced by a null byte when writing to file, but this may be avoided by disabling the print conversion)
0x829a	<u>ExposureTime</u>	rational64u	ExifIFD	
0x829d	<u>FNumber</u>	rational64u	ExifIFD	
0x82a5	MDFileTag	no	-	(tags 0x82a5-0x82ac are used in Molecular Dynamics GEL files)
0x82a6	MDScalePixel	no	-	
0x82a7	MDColorTable	no	-	
0x82a8	MDLabName	no	-	
0x82a9	MDSampleInfo	no	-	
0x82aa	MDPrepDate	no	-	
0x82ab	MDPrepTime	no	-	
0x82ac	MDFileUnits	no	-	
0x830e	PixelScale	double[3]	IFD0	
0x8335	AdventScale	no	-	
0x8336	AdventRevision	no	-	
0x835c	UIC1Tag	no	-	
0x835d	UIC2Tag	no	-	
0x835e	UIC3Tag	no	-	
0x835f	UIC4Tag	no	-	
0x83bb	IPTC-NAA	int32u!	IFD0	--> <a href="#">IPTC Tags</a>
0x847e	IntergraphPacketData	no	-	
0x847f	IntergraphFlagRegisters	no	-	
0x8480	IntergraphMatrix	double[n]	IFD0	
0x8481	INGRReserved	no	-	
0x8482	ModelTiePoint	double[n]	IFD0	
0x84e0	Site	no	-	
0x84e1	ColorSequence	no	-	
0x84e2	IT8Header	no	-	
0x84e3	RasterPadding	no	-	0 = Byte 1 = Word

2 = Long Word  
9 = Sector  
10 = Long Sector

0x84e4	BitsPerRunLength	no	-	
0x84e5	BitsPerExtendedRunLength	no	-	
0x84e6	ColorTable	no	-	
0x84e7	ImageColorIndicator	no	-	0 = Unspecified Image Color 1 = Specified Image Color
0x84e8	BackgroundColorIndicator	no	-	0 = Unspecified Background Color 1 = Specified Background Color
0x84e9	ImageColorValue	no	-	
0x84ea	BackgroundColorValue	no	-	
0x84eb	PixelIntensityRange	no	-	
0x84ec	TransparencyIndicator	no	-	
0x84ed	ColorCharacterization	no	-	
0x84ee	HCUsage	no	-	0 = CT 1 = Line Art 2 = Trap
0x84ef	TrapIndicator	no	-	
0x84f0	CMYKEquivalent	no	-	
0x8546	SEMInfo	string	IFD0	(found in some scanning electron microscope images)
0x8568	AFCP_IPTC	-	-	--> <a href="#">IPTC Tags</a>
0x85b8	PixelMagicJBIGOptions	no	-	
0x85d7	JPLCartoIFD	no	-	
0x85d8	ModelTransform	double[16]	IFD0	
0x8602	WB_GRGBLevels	no	-	(found in IFD0 of Leaf MOS images)
0x8606	LeafData	-	-	--> <a href="#">Leaf Tags</a>
0x8649	PhotoshopSettings	-	IFD0	--> <a href="#">Photoshop Tags</a>
0x8769	<u>ExifOffset</u>	-	IFD0	--> <a href="#">EXIF Tags</a>
0x8773	ICC_Profile	-	IFD0	--> <a href="#">ICC_Profile Tags</a>
0x877f	TIFF_FXExtensions	no	-	Bit 0 = Resolution/Image Width Bit 1 = N Layer Profile M Bit 2 = Shared Data Bit 3 = B&W JBIG2 Bit 4 = JBIG2 Profile M
0x8780	MultiProfiles	no	-	Bit 0 = Profile S Bit 1 = Profile F Bit 2 = Profile J Bit 3 = Profile C Bit 4 = Profile L Bit 5 = Profile M Bit 6 = Profile T Bit 7 = Resolution/Image Width Bit 8 = N Layer Profile M Bit 9 = Shared Data Bit 10 = JBIG2 Profile M
0x8781	SharedData	no	-	
0x8782	T88Options	no	-	
0x87ac	ImageLayer	no	-	
0x87af	GeoTiffDirectory	int16u[0.5]	IFD0	(these "GeoTiff" tags may read and written as a block, but they aren't extracted unless specifically requested. Byte order changes are handled automatically when copying between TIFF images with different byte order)
0x87b0	GeoTiffDoubleParams	double[0.125]	IFD0	
0x87b1	GeoTiffAsciiParams	string	IFD0	
0x87be	JBIGOptions	no	-	
0x8822	<u>ExposureProgram</u>	int16u	ExifIFD	(the value of 9 is not standard EXIF, but is used by some Canon models) 0 = Not Defined 1 = Manual 2 = Program AE

3 = Aperture-priority AE  
 4 = Shutter speed priority AE  
 5 = Creative (Slow speed)  
 6 = Action (High speed)  
 7 = Portrait  
 8 = Landscape  
 9 = Bulb

0x8824	<a href="#">SpectralSensitivity</a>	string	ExifIFD	
0x8825	<a href="#">GPSInfo</a>	-	IFD0	--> <a href="#">GPS Tags</a>
0x8827	<a href="#">ISO</a>	int16u[n]	ExifIFD	(called ISO Speed Ratings by EXIF 2.2, then Photographic Sensitivity by the EXIF 2.3 spec.)
0x8828	<a href="#">Opto-ElectricConvFactor</a>	no	-	(called OECF by the EXIF spec.)
0x8829	<a href="#">Interlace</a>	no	-	
0x882a	<a href="#">TimeZoneOffset</a>	int16s[n]	ExifIFD	(1 or 2 values: 1. The time zone offset of DateTimeOriginal from GMT in hours, 2. If present, the time zone offset of ModifyDate)
0x882b	<a href="#">SelfTimerMode</a>	int16u	ExifIFD	
0x8830	<a href="#">SensitivityType</a>	int16u	ExifIFD	(applies to EXIF:ISO tag) 0 = Unknown 1 = Standard Output Sensitivity 2 = Recommended Exposure Index 3 = ISO Speed 4 = Standard Output Sensitivity and Recommended Exposure Index 5 = Standard Output Sensitivity and ISO Speed 6 = Recommended Exposure Index and ISO Speed 7 = Standard Output Sensitivity, Recommended Exposure Index and ISO Speed
0x8831	<a href="#">StandardOutputSensitivity</a>	int32u	ExifIFD	
0x8832	<a href="#">RecommendedExposureIndex</a>	int32u	ExifIFD	
0x8833	<a href="#">ISOSpeed</a>	int32u	ExifIFD	
0x8834	<a href="#">ISOSpeedLatitudeyy</a>	int32u	ExifIFD	
0x8835	<a href="#">ISOSpeedLatitudezzz</a>	int32u	ExifIFD	
0x885c	<a href="#">FaxRecvParams</a>	no	-	
0x885d	<a href="#">FaxSubAddress</a>	no	-	
0x885e	<a href="#">FaxRecvTime</a>	no	-	
0x8871	<a href="#">FedexEDR</a>	no	-	
0x888a	<a href="#">LeafSubIFD</a>	-	-	--> <a href="#">Leaf SubIFD Tags</a>
0x9000	<a href="#">ExifVersion</a>	undef:	ExifIFD	
0x9003	<a href="#">DateTimeOriginal</a>	string	ExifIFD	(date/time when original image was taken)
0x9004	<a href="#">CreateDate</a>	string	ExifIFD	(called DateTimeDigitized by the EXIF spec.)
0x9009	<a href="#">GooglePlusUploadCode</a>	undef[n]	ExifIFD	
0x9010	<a href="#">OffsetTime</a>	string	ExifIFD	(time zone for ModifyDate)
0x9011	<a href="#">OffsetTimeOriginal</a>	string	ExifIFD	(time zone for DateTimeOriginal)
0x9012	<a href="#">OffsetTimeDigitized</a>	string	ExifIFD	(time zone for CreateDate)
0x9101	<a href="#">ComponentsConfiguration</a>	undef[4]!:	ExifIFD	0 = - 4 = R 1 = Y 5 = G 2 = Cb 6 = B 3 = Cr
0x9102	<a href="#">CompressedBitsPerPixel</a>	rational64u!	ExifIFD	
0x9201	<a href="#">ShutterSpeedValue</a>	rational64s	ExifIFD	(displayed in seconds, but stored as an APEX value)
0x9202	<a href="#">ApertureValue</a>	rational64u	ExifIFD	(displayed as an F number, but stored as an APEX value)
0x9203	<a href="#">BrightnessValue</a>	rational64s	ExifIFD	
0x9204	<a href="#">ExposureCompensation</a>	rational64s	ExifIFD	(called ExposureBiasValue by the EXIF spec.)
0x9205	<a href="#">MaxApertureValue</a>	rational64u	ExifIFD	(displayed as an F number, but stored as an APEX value)
0x9206	<a href="#">SubjectDistance</a>	rational64u	ExifIFD	

0x9207	<u>MeteringMode</u>	int16u	ExifIFD	0 = Unknown 1 = Average 2 = Center-weighted average 3 = Spot 4 = Multi-spot 5 = Multi-segment 6 = Partial 255 = Other
0x9208	<u>LightSource</u>	int16u	ExifIFD	--> <a href="#">EXIF LightSource Values</a>
0x9209	<u>Flash</u>	int16u	ExifIFD	--> <a href="#">EXIF Flash Values</a>
0x920a	<u>FocalLength</u>	rational64u	ExifIFD	
0x920b	FlashEnergy	no	-	
0x920c	SpatialFrequencyResponse	no	-	
0x920d	Noise	no	-	
0x920e	<u>FocalPlaneXResolution</u>	no	-	
0x920f	<u>FocalPlaneYResolution</u>	no	-	
0x9210	<u>FocalPlaneResolutionUnit</u>	no	-	1 = None 2 = inches 3 = cm 4 = mm 5 = um
0x9211	ImageNumber	int32u	ExifIFD	
0x9212	SecurityClassification	string	ExifIFD	'C' = Confidential 'R' = Restricted 'S' = Secret 'T' = Top Secret 'U' = Unclassified
0x9213	ImageHistory	string	ExifIFD	
0x9214	<u>SubjectArea</u>	int16u[n]	ExifIFD	
0x9215	ExposureIndex	no	-	
0x9216	<u>TIFF-EPStandardID</u>	no	-	
0x9217	SensingMethod	no	-	1 = Monochrome area 2 = One-chip color area 3 = Two-chip color area 4 = Three-chip color area 5 = Color sequential area 6 = Monochrome linear 7 = Trilinear 8 = Color sequential linear
0x923a	CIP3DataFile	no	-	
0x923b	CIP3Sheet	no	-	
0x923c	CIP3Side	no	-	
0x923f	StoNits	no	-	
0x927c	MakerNoteApple	undef	ExifIFD	--> <a href="#">Apple Tags</a>
	MakerNoteNikon	undef	ExifIFD	--> <a href="#">Nikon Tags</a>
	MakerNoteCanon	undef	ExifIFD	--> <a href="#">Canon Tags</a>
	MakerNoteCasio	undef	ExifIFD	--> <a href="#">Casio Tags</a>
	MakerNoteCasio2	undef	ExifIFD	--> <a href="#">Casio Type2 Tags</a>
	MakerNoteDJIInfo	undef	ExifIFD	--> <a href="#">DJI Info Tags</a>
	MakerNoteDJI	undef	ExifIFD	--> <a href="#">DJI Tags</a>
	MakerNoteFLIR	undef	ExifIFD	--> <a href="#">FLIR Tags</a>
	MakerNoteFujiFilm	undef	ExifIFD	--> <a href="#">FujiFilm Tags</a>
	MakerNoteGE	undef	ExifIFD	--> <a href="#">GE Tags</a>
	MakerNoteGE2	undef	ExifIFD	--> <a href="#">FujiFilm Tags</a>
	MakerNoteGoogle	undef	ExifIFD	--> <a href="#">Google HDRPlusMakerNote Tags</a>
	MakerNoteHasselblad	undef	ExifIFD	--> <a href="#">Unknown Tags</a>
	MakerNoteHP	undef	ExifIFD	--> <a href="#">HP Tags</a>
	MakerNoteHP2	undef	ExifIFD	--> <a href="#">HP Type2 Tags</a>
	MakerNoteHP4	undef	ExifIFD	--> <a href="#">HP Type4 Tags</a>
	MakerNoteHP6	undef	ExifIFD	--> <a href="#">HP Type6 Tags</a>
	MarkerNoteISL	undef	ExifIFD	--> <a href="#">Unknown Tags</a>
	MarkerNoteJVC	undef	ExifIFD	--> <a href="#">JVC Tags</a>
	MarkerNoteJVCText	undef	ExifIFD	--> <a href="#">JVC Text Tags</a>
	MarkerNoteKodak1a	undef	ExifIFD	--> <a href="#">Kodak Tags</a>
	MarkerNoteKodak1b	undef	ExifIFD	--> <a href="#">Kodak Tags</a>
	MarkerNoteKodak2	undef	ExifIFD	--> <a href="#">Kodak Type2 Tags</a>

MarkerNoteKodak3	undef	ExifIFD	--> <a href="#">Kodak Type3 Tags</a>
MarkerNoteKodak4	undef	ExifIFD	--> <a href="#">Kodak Type4 Tags</a>
MarkerNoteKodak5	undef	ExifIFD	--> <a href="#">Kodak Type5 Tags</a>
MarkerNoteKodak6a	undef	ExifIFD	--> <a href="#">Kodak Type6 Tags</a>
MarkerNoteKodak6b	undef	ExifIFD	--> <a href="#">Kodak Type6 Tags</a>
MarkerNoteKodak7	undef	ExifIFD	--> <a href="#">Kodak Type7 Tags</a>
MarkerNoteKodak8a	undef	ExifIFD	--> <a href="#">Kodak Type8 Tags</a>
MarkerNoteKodak8b	undef	ExifIFD	--> <a href="#">Kodak Type8 Tags</a>
MarkerNoteKodak8c	undef	ExifIFD	--> <a href="#">Kodak Type8 Tags</a>
MarkerNoteKodak9	undef	ExifIFD	--> <a href="#">Kodak Type9 Tags</a>
MarkerNoteKodak10	undef	ExifIFD	--> <a href="#">Kodak Type10 Tags</a>
MarkerNoteKodak11	undef	ExifIFD	--> <a href="#">Kodak Type11 Tags</a>
MarkerNoteKodak12	undef	ExifIFD	--> <a href="#">Kodak Type11 Tags</a>
MarkerNoteKodakUnknown	undef	ExifIFD	--> <a href="#">Kodak Unknown Tags</a>
MarkerNoteKyocera	undef	ExifIFD	--> <a href="#">Unknown Tags</a>
MarkerNoteMinolta	undef	ExifIFD	--> <a href="#">Minolta Tags</a>
MarkerNoteMinolta2	undef	ExifIFD	--> <a href="#">Olympus Tags</a>
MarkerNoteMinolta3	undef	ExifIFD	(not EXIF-based)
MarkerNoteMotorola	undef	ExifIFD	--> <a href="#">Motorola Tags</a>
MarkerNoteNikon2	undef	ExifIFD	--> <a href="#">Nikon Type2 Tags</a>
MarkerNoteNikon3	undef	ExifIFD	--> <a href="#">Nikon Tags</a>
MarkerNoteNintendo	undef	ExifIFD	--> <a href="#">Nintendo Tags</a>
MarkerNoteOlympus	undef	ExifIFD	--> <a href="#">Olympus Tags</a>
MarkerNoteOlympus2	undef	ExifIFD	--> <a href="#">Olympus Tags</a>
MarkerNoteOlympus3	undef	ExifIFD	--> <a href="#">Olympus Tags</a>
MarkerNoteLeica	undef	ExifIFD	--> <a href="#">Panasonic Tags</a>
MarkerNoteLeica2	undef	ExifIFD	--> <a href="#">Panasonic Leica2 Tags</a>
MarkerNoteLeica3	undef	ExifIFD	--> <a href="#">Panasonic Leica3 Tags</a>
MarkerNoteLeica4	undef	ExifIFD	--> <a href="#">Panasonic Leica4 Tags</a>
MarkerNoteLeica5	undef	ExifIFD	--> <a href="#">Panasonic Leica5 Tags</a>
MarkerNoteLeica6	undef	ExifIFD	--> <a href="#">Panasonic Leica6 Tags</a>
MarkerNoteLeica7	undef	ExifIFD	--> <a href="#">Panasonic Leica6 Tags</a>
MarkerNoteLeica8	undef	ExifIFD	--> <a href="#">Panasonic Leica5 Tags</a>
MarkerNoteLeica9	undef	ExifIFD	--> <a href="#">Panasonic Leica9 Tags</a>
MarkerNoteLeica10	undef	ExifIFD	--> <a href="#">Panasonic Tags</a>
MarkerNotePanasonic	undef	ExifIFD	--> <a href="#">Panasonic Tags</a>
MarkerNotePanasonic2	undef	ExifIFD	--> <a href="#">Panasonic Type2 Tags</a>
MarkerNotePanasonic3	undef	ExifIFD	--> <a href="#">Panasonic Tags</a>
MarkerNotePentax	undef	ExifIFD	--> <a href="#">Pentax Tags</a>
MarkerNotePentax2	undef	ExifIFD	--> <a href="#">Pentax Type2 Tags</a>
MarkerNotePentax3	undef	ExifIFD	--> <a href="#">Casio Type2 Tags</a>
MarkerNotePentax4	undef	ExifIFD	--> <a href="#">Pentax Type4 Tags</a>
MarkerNotePentax5	undef	ExifIFD	--> <a href="#">Pentax Tags</a>
MarkerNotePentax6	undef	ExifIFD	--> <a href="#">Pentax S1 Tags</a>
MarkerNotePhaseOne	undef	ExifIFD	--> <a href="#">PhaseOne Tags</a>
MarkerNoteReconyxHyperFire	undef	ExifIFD	--> <a href="#">Reconyx HyperFire Tags</a>
MarkerNoteReconyxUltraFire	undef	ExifIFD	--> <a href="#">Reconyx UltraFire Tags</a>
MarkerNoteReconyxHyperFire2	undef	ExifIFD	--> <a href="#">Reconyx HyperFire2 Tags</a>
MarkerNoteReconyxMicroFire	undef	ExifIFD	--> <a href="#">Reconyx MicroFire Tags</a>
MarkerNoteReconyxHyperFire4K	undef	ExifIFD	--> <a href="#">Reconyx HyperFire4K Tags</a>
MarkerNoteRicohPentax	undef	ExifIFD	--> <a href="#">Pentax Tags</a>
MarkerNoteRicoh	undef	ExifIFD	--> <a href="#">Ricoh Tags</a>
MarkerNoteRicoh2	undef	ExifIFD	--> <a href="#">Ricoh Type2 Tags</a>
MarkerNoteRicohText	undef	ExifIFD	--> <a href="#">Ricoh Text Tags</a>
MarkerNoteSamsung1a	undef	ExifIFD	(Samsung "STMN" maker notes without PreviewImage)
MarkerNoteSamsung1b	undef	ExifIFD	
MarkerNoteSamsung2	undef	ExifIFD	--> <a href="#">Samsung Tags</a>
MarkerNoteSanyo	undef	ExifIFD	--> <a href="#">Samsung Type2 Tags</a>
MarkerNoteSanyoC4	undef	ExifIFD	--> <a href="#">Sanyo Tags</a>
MarkerNoteSanyoPatch	undef	ExifIFD	--> <a href="#">Sanyo Tags</a>
MarkerNoteSigma	undef	ExifIFD	--> <a href="#">Sanyo Tags</a>
MarkerNoteSony	undef	ExifIFD	--> <a href="#">Sigma Tags</a>
MarkerNoteSony2	undef	ExifIFD	--> <a href="#">Sony Tags</a>
MarkerNoteSony3	undef	ExifIFD	--> <a href="#">Olympus Tags</a>
MarkerNoteSony4	undef	ExifIFD	--> <a href="#">Olympus Tags</a>
MarkerNoteSony5	undef	ExifIFD	--> <a href="#">Sony PIC Tags</a>
MarkerNoteSonyEricsson	undef	ExifIFD	--> <a href="#">Sony Tags</a>
MarkerNoteSonySRF	undef	ExifIFD	--> <a href="#">Sony Ericsson Tags</a>
MarkerNoteUnknownText	undef	ExifIFD	--> <a href="#">Sony SRF Tags</a>
			(unknown text-based maker notes)

	<u>MakerNoteUnknownBinary</u> <u>MakerNoteUnknown</u>	undef undef	ExifIFD ExifIFD	(unknown binary maker notes) --> <a href="#">Unknown Tags</a>
0x9286	<u>UserComment</u>	undef	ExifIFD	
0x9290	<u>SubSecTime</u>	string	ExifIFD	(fractional seconds for ModifyDate)
0x9291	<u>SubSecTimeOriginal</u>	string	ExifIFD	(fractional seconds for DateTimeOriginal)
0x9292	<u>SubSecTimeDigitized</u>	string	ExifIFD	(fractional seconds for CreateDate)
0x932f	MSDocumentText	no	-	
0x9330	MSPropertySetStorage	no	-	
0x9331	MSDocumentTextPosition	no	-	
0x935c	<u>ImageSourceData</u>	undef!	IFD0	--> <a href="#">Photoshop DocumentData Tags</a>
0x9400	<u>AmbientTemperature</u>	rational64s	ExifIFD	(ambient temperature in degrees C, called Temperature by the EXIF spec.)
0x9401	<u>Humidity</u>	rational64u	ExifIFD	(ambient relative humidity in percent)
0x9402	<u>Pressure</u>	rational64u	ExifIFD	(air pressure in hPa or mbar)
0x9403	<u>WaterDepth</u>	rational64s	ExifIFD	(depth under water in metres, negative for above water)
0x9404	<u>Acceleration</u>	rational64u	ExifIFD	(directionless camera acceleration in units of mGal, or 10-5 m/s <sup>2</sup> )
0x9405	<u>CameraElevationAngle</u>	rational64s	ExifIFD	
0x9999	XiaomiSettings	string!	ExifIFD	--> <a href="#">JSON Tags</a>
0x9a00	XiaomiModel	string!	ExifIFD	
0x9c9b	XPTitle	int8u	IFD0	(tags 0x9c9b-0x9c9f are used by Windows Explorer; special characters in these values are converted to UTF-8 by default, or Windows Latin1 with the -L option. XPTitle is ignored by Windows Explorer if ImageDescription exists)
0x9c9c	XPComment	int8u	IFD0	
0x9c9d	XPAuthor	int8u	IFD0	(ignored by Windows Explorer if Artist exists)
0x9c9e	XPKeywords	int8u	IFD0	
0x9c9f	XPSubject	int8u	IFD0	
0xa000	<u>FlashpixVersion</u>	undef:	ExifIFD	
0xa001	<u>ColorSpace</u>	int16u:	ExifIFD	(the value of 0x2 is not standard EXIF. Instead, an Adobe RGB image is indicated by "Uncalibrated" with an InteropIndex of "R03". The values 0xffffd and 0xffffe are also non-standard, and are used by some Sony cameras) 0x1 = sRGB 0x2 = Adobe RGB 0xffffd = Wide Gamut RGB 0xffffe = ICC Profile 0xffff = Uncalibrated
0xa002	<u>ExifImageWidth</u>	int16u:	ExifIFD	(called PixelXDimension by the EXIF spec.)
0xa003	<u>ExifImageHeight</u>	int16u:	ExifIFD	(called PixelYDimension by the EXIF spec.)
0xa004	<u>RelatedSoundFile</u>	string	ExifIFD	
0xa005	<u>InteropOffset</u>	-	-	--> <a href="#">EXIF Tags</a>
0xa010	SamsungRawPointersOffset	no	-	
0xa011	SamsungRawPointersLength	no	-	
0xa101	SamsungRawByteOrder	no	-	
0xa102	SamsungRawUnknown?	no	-	
0xa20b	<u>FlashEnergy</u>	rational64u	ExifIFD	
0xa20c	<u>SpatialFrequencyResponse</u>	no	-	
0xa20d	Noise	no	-	
0xa20e	<u>FocalPlaneXResolution</u>	rational64u	ExifIFD	
0xa20f	<u>FocalPlaneYResolution</u>	rational64u	ExifIFD	
0xa210	<u>FocalPlaneResolutionUnit</u>	int16u	ExifIFD	(values 1, 4 and 5 are not standard EXIF) 1 = None 2 = inches 3 = cm 4 = mm 5 = um

0xa211	ImageNumber	no	-	
0xa212	SecurityClassification	no	-	
0xa213	ImageHistory	no	-	
0xa214	<u>SubjectLocation</u>	int16u[2]	ExifIFD	
0xa215	<u>ExposureIndex</u>	rational64u	ExifIFD	
0xa216	TIFF-EPStandardID	no	-	
0xa217	<u>SensingMethod</u>	int16u	ExifIFD	1 = Not defined 2 = One-chip color area 3 = Two-chip color area 4 = Three-chip color area 5 = Color sequential area 7 = Trilinear 8 = Color sequential linear
0xa300	<u>FileSource</u>	undef	ExifIFD	1 = Film Scanner 2 = Reflection Print Scanner 3 = Digital Camera "\x03\x00\x00\x00" = Sigma Digital Camera
0xa301	<u>SceneType</u>	undef	ExifIFD	1 = Directly photographed
0xa302	<u>CFAPattern</u>	undef	ExifIFD	
0xa401	<u>CustomRendered</u>	int16u	ExifIFD	(only 0 and 1 are standard EXIF, but other values are used by Apple iOS devices) 0 = Normal 1 = Custom 2 = HDR (no original saved) 3 = HDR (original saved) 4 = Original (for HDR) 6 = Panorama 7 = Portrait HDR 8 = Portrait
0xa402	<u>ExposureMode</u>	int16u	ExifIFD	0 = Auto 1 = Manual 2 = Auto bracket
0xa403	<u>WhiteBalance</u>	int16u	ExifIFD	0 = Auto 1 = Manual
0xa404	<u>DigitalZoomRatio</u>	rational64u	ExifIFD	
0xa405	<u>FocalLengthIn35mmFormat</u>	int16u	ExifIFD	(called FocalLengthIn35mmFilm by the EXIF spec.)
0xa406	<u>SceneCaptureType</u>	int16u	ExifIFD	(the value of 4 is non-standard, and used by some Samsung models) 0 = Standard 1 = Landscape 2 = Portrait 3 = Night 4 = Other
0xa407	<u>GainControl</u>	int16u	ExifIFD	0 = None 1 = Low gain up 2 = High gain up 3 = Low gain down 4 = High gain down
0xa408	<u>Contrast</u>	int16u	ExifIFD	0 = Normal 1 = Low 2 = High
0xa409	<u>Saturation</u>	int16u	ExifIFD	0 = Normal 1 = Low 2 = High
0xa40a	<u>Sharpness</u>	int16u	ExifIFD	0 = Normal 1 = Soft 2 = Hard
0xa40b	<u>DeviceSettingDescription</u>	no	-	
0xa40c	<u>SubjectDistanceRange</u>	int16u	ExifIFD	0 = Unknown 1 = Macro 2 = Close 3 = Distant
0xa420	<u>ImageUniqueId</u>	string	ExifIFD	
0xa430	<u>OwnerName</u>	string	ExifIFD	(called CameraOwnerName by the EXIF spec.)
0xa431	<u>SerialNumber</u>	string	ExifIFD	(called BodySerialNumber by the EXIF spec.)

0xa432	<a href="#">LensInfo</a>	rational64u[4]	ExifIFD	(4 rational values giving focal and aperture ranges, called LensSpecification by the EXIF spec.)
0xa433	<a href="#">LensMake</a>	string	ExifIFD	
0xa434	<a href="#">LensModel</a>	string	ExifIFD	
0xa435	<a href="#">LensSerialNumber</a>	string	ExifIFD	
0xa436	<a href="#">ImageTitle</a>	string	ExifIFD	
0xa437	<a href="#">Photographer</a>	string	ExifIFD	
0xa438	<a href="#">ImageEditor</a>	string	ExifIFD	
0xa439	<a href="#">CameraFirmware</a>	string	ExifIFD	
0xa43a	<a href="#">RAWDevelopingSoftware</a>	string	ExifIFD	
0xa43b	<a href="#">ImageEditingSoftware</a>	string	ExifIFD	
0xa43c	<a href="#">MetadataEditingSoftware</a>	string	ExifIFD	
0xa460	<a href="#">CompositelImage</a>	int16u	ExifIFD	0 = Unknown 1 = Not a Composite Image 2 = General Composite Image 3 = Composite Image Captured While Shooting
0xa461	<a href="#">CompositeImageCount</a>	int16u[2]	ExifIFD	(2 values: 1. Number of source images, 2. Number of images used. Called SourceImageNumberOfCompositelImage by the EXIF spec.)
0xa462	<a href="#">CompositelImageExposureTimes</a>	undef	ExifIFD	(11 or more values: 1. Total exposure time period, 2. Total exposure of all source images, 3. Total exposure of all used images, 4. Max exposure time of source images, 5. Max exposure time of used images, 6. Min exposure time of source images, 7. Min exposure of used images, 8. Number of sequences, 9. Number of source images in sequence. 10-N. Exposure times of each source image. Called SourceExposureTimesOfCompositelImage by the EXIF spec.)
0xa480	<a href="#">GDALMetadata</a>	string	IFD0	
0xa481	<a href="#">GDALNoData</a>	string	IFD0	
0xa500	<a href="#">Gamma</a>	rational64u	ExifIFD	
0xafc0	<a href="#">ExpandSoftware</a>	no	-	
0xafc1	<a href="#">ExpandLens</a>	no	-	
0xafc2	<a href="#">ExpandFilm</a>	no	-	
0xafc3	<a href="#">ExpandFilterLens</a>	no	-	
0xafc4	<a href="#">ExpandScanner</a>	no	-	
0afc5	<a href="#">ExpandFlashLamp</a>	no	-	
0xb4c3	<a href="#">HasselbladRawImage</a>	no	-	
0xbc01	<a href="#">PixelFormat</a>	no	-	(tags 0xbc** are used in Windows HD Photo (HDP and WDP) images. The actual PixelFormat values are 16-byte GUID's but the leading 15 bytes, '6fddc324-4e03-4bfe-b1853-d77768dc9', have been removed below to avoid unnecessary clutter)  0x5 = Black & White 0x8 = 8-bit Gray 0x9 = 16-bit BGR555 0xa = 16-bit BGR565 0xb = 16-bit Gray 0xc = 24-bit BGR 0xd = 24-bit RGB 0xe = 32-bit BGR 0xf = 32-bit BGRA 0x10 = 32-bit PBGRA 0x11 = 32-bit Gray Float 0x12 = 48-bit RGB Fixed Point 0x13 = 32-bit BGR101010 0x15 = 48-bit RGB 0x16 = 64-bit RGBA 0x17 = 64-bit PRGBA 0x18 = 96-bit RGB Fixed Point 0x19 = 128-bit RGBA Float

0x1a = 128-bit PRGBA Float  
 0x1b = 128-bit RGB Float  
 0x1c = 32-bit CMYK  
 0x1d = 64-bit RGBA Fixed Point  
 0x1e = 128-bit RGBA Fixed Point  
 0x1f = 64-bit CMYK  
 0x20 = 24-bit 3 Channels  
 0x21 = 32-bit 4 Channels  
 0x22 = 40-bit 5 Channels  
 0x23 = 48-bit 6 Channels  
 0x24 = 56-bit 7 Channels  
 0x25 = 64-bit 8 Channels  
 0x26 = 48-bit 3 Channels  
 0x27 = 64-bit 4 Channels  
 0x28 = 80-bit 5 Channels  
 0x29 = 96-bit 6 Channels  
 0x2a = 112-bit 7 Channels  
 0x2b = 128-bit 8 Channels  
 0x2c = 40-bit CMYK Alpha  
 0x2d = 80-bit CMYK Alpha  
 0x2e = 32-bit 3 Channels Alpha  
 0x2f = 40-bit 4 Channels Alpha  
 0x30 = 48-bit 5 Channels Alpha  
 0x31 = 56-bit 6 Channels Alpha  
 0x32 = 64-bit 7 Channels Alpha  
 0x33 = 72-bit 8 Channels Alpha  
 0x34 = 64-bit 3 Channels Alpha  
 0x35 = 80-bit 4 Channels Alpha  
 0x36 = 96-bit 5 Channels Alpha  
 0x37 = 112-bit 6 Channels Alpha  
 0x38 = 128-bit 7 Channels Alpha  
 0x39 = 144-bit 8 Channels Alpha  
 0x3a = 64-bit RGBA Half  
 0x3b = 48-bit RGB Half  
 0x3d = 32-bit RGBe  
 0x3e = 16-bit Gray Half  
 0x3f = 32-bit Gray Fixed Point

0xbc02	Transformation	no	-	0 = Horizontal (normal) 1 = Mirror vertical 2 = Mirror horizontal 3 = Rotate 180 4 = Rotate 90 CW 5 = Mirror horizontal and rotate 90 CW 6 = Mirror horizontal and rotate 270 CW 7 = Rotate 270 CW
0xbc03	Uncompressed	no	-	0 = No 1 = Yes
0xbc04	ImageType	no	-	Bit 0 = Preview Bit 1 = Page
0xbc80	ImageWidth	no	-	
0xbc81	ImageHeight	no	-	
0xbc82	WidthResolution	no	-	
0xbc83	HeightResolution	no	-	
0xbcc0	ImageOffset	no	-	
0xbcc1	ImageByteCount	no	-	
0xbcc2	AlphaOffset	no	-	
0xbcc3	AlphaByteCount	no	-	
0xbcc4	ImageDataDiscard	no	-	0 = Full Resolution 1 = Flexbits Discarded 2 = HighPass Frequency Data Discarded 3 = Highpass and LowPass Frequency Data Discarded
0xbcc5	AlphaDataDiscard	no	-	0 = Full Resolution 1 = Flexbits Discarded 2 = HighPass Frequency Data Discarded 3 = Highpass and LowPass Frequency Data Discarded
0xc427	OceScanjobDesc	no	-	
0xc428	OceApplicationSelector	no	-	
0xc429	OceIDNumber	no	-	
0xc42a	OceImageLogic	no	-	

0xc44f	Annotations	no	-	
0xc4a5	PrintIM	undef	IFD0	--> <a href="#">PrintIM Tags</a>
0xc519	HasselbladXML	-	-	--> <a href="#">PLIST Tags</a>
0xc51b	HasselbladExif	-	-	--> <a href="#">EXIF Tags</a>
0xc573	OriginalFileName	no	-	(used by some obscure software)
0xc580	USPTOOriginalContentType	no	-	0 = Text or Drawing 1 = Grayscale 2 = Color
0xc5e0	CR2CFAPattern	no	-	1 => '0 1 1 2' = [Red,Green][Green,Blue] 4 => '1 0 2 1' = [Green,Red][Blue,Green] 3 => '1 2 0 1' = [Green,Blue][Red,Green] 2 => '2 1 1 0' = [Blue,Green][Green,Red]
0xc612	DNGVersion	int8u[4]!	IFD0	(tags 0xc612-0xcd48 are defined by the DNG specification unless otherwise noted. See <a href="https://helpx.adobe.com/photoshop/digital-negative.html">https://helpx.adobe.com/photoshop/digital-negative.html</a> for the specification)
0xc613	DNGBackwardVersion	int8u[4]!	IFD0	
0xc614	UniqueCameraModel	string	IFD0	
0xc615	LocalizedCameraModel	string	IFD0	
0xc616	CFAPlaneColor	no	SubIFD	
0xc617	CFALayout	no	SubIFD	1 = Rectangular 2 = Even columns offset down 1/2 row 3 = Even columns offset up 1/2 row 4 = Even rows offset right 1/2 column 5 = Even rows offset left 1/2 column 6 = Even rows offset up by 1/2 row, even columns offset left by 1/2 column 7 = Even rows offset up by 1/2 row, even columns offset right by 1/2 column 8 = Even rows offset down by 1/2 row, even columns offset left by 1/2 column 9 = Even rows offset down by 1/2 row, even columns offset right by 1/2 column
0xc618	LinearizationTable	int16u[n]!	SubIFD	
0xc619	BlackLevelRepeatDim	int16u[2]!	SubIFD	
0xc61a	BlackLevel	rational64u[n]!	SubIFD	
0xc61b	BlackLevelDeltaH	rational64s[n]!	SubIFD	
0xc61c	BlackLevelDeltaV	rational64s[n]!	SubIFD	
0xc61d	WhiteLevel	int32u[n]!	SubIFD	
0xc61e	DefaultScale	rational64u[2]!	SubIFD	
0xc61f	DefaultCropOrigin	int32u[2]!	SubIFD	
0xc620	DefaultCropSize	int32u[2]!	SubIFD	
0xc621	ColorMatrix1	rational64s[n]!	IFD0	
0xc622	ColorMatrix2	rational64s[n]!	IFD0	
0xc623	CameraCalibration1	rational64s[n]!	IFD0	
0xc624	CameraCalibration2	rational64s[n]!	IFD0	
0xc625	ReductionMatrix1	rational64s[n]!	IFD0	
0xc626	ReductionMatrix2	rational64s[n]!	IFD0	
0xc627	AnalogBalance	rational64u[n]!	IFD0	
0xc628	AsShotNeutral	rational64u[n]!	IFD0	
0xc629	AsShotWhiteXY	rational64u[2]!	IFD0	
0xc62a	BaselineExposure	rational64s!	IFD0	
0xc62b	BaselineNoise	rational64u!	IFD0	
0xc62c	BaselineSharpness	rational64u!	IFD0	
0xc62d	BayerGreenSplit	int32u!	SubIFD	
0xc62e	LinearResponseLimit	rational64u!	IFD0	
0xc62f	CameraSerialNumber	string	IFD0	
0xc630	DNGLensInfo	rational64u[4]	IFD0	
0xc631	ChromaBlurRadius	rational64u!	SubIFD	
0xc632	AntiAliasStrength	rational64u!	SubIFD	

0xc633	ShadowScale	rational64u!	IFD0	
0xc634	SR2Private DNGAdobeData MakerNotePentax MakerNotePentax5 MakerNoteRicohPentax MakerNoteDJIInfo DNGPrivateData	- undef! - - - - int8u!	IFD0 IFD0 IFD0 IFD0 IFD0 IFD0 IFD0	--> <a href="#">Sony SR2Private Tags</a> --> <a href="#">DNG AdobeData Tags</a> --> <a href="#">Pentax Tags</a> --> <a href="#">Pentax Tags</a> --> <a href="#">Pentax Tags</a> --> <a href="#">DJI Info Tags</a>
0xc635	MakerNoteSafety	int16u	IFD0	0 = Unsafe 1 = Safe
0xc640	RawImageSegmentation	no	-	(used in segmented Canon CR2 images. 3 numbers: 1. Number of segments minus one; 2. Pixel width of segments except last; 3. Pixel width of last segment)
0xc65a	CalibrationIlluminant1	int16u!	IFD0	--> <a href="#">EXIF LightSource Values</a>
0xc65b	CalibrationIlluminant2	int16u!	IFD0	--> <a href="#">EXIF LightSource Values</a>
0xc65c	BestQualityScale	rational64u!	SubIFD	
0xc65d	RawDataUniqueId	int8u[16]!	IFD0	
0xc660	AliasLayerMetadata	no	-	(used by Alias Sketchbook Pro)
0xc68b	OriginalRawFileName	string!	IFD0	
0xc68c	OriginalRawFileData	undef!	IFD0	--> <a href="#">DNG OriginalRaw Tags</a>
0xc68d	ActiveArea	int32u[4]!	SubIFD	
0xc68e	MaskedAreas	int32u[n]!	SubIFD	
0xc68f	AsShotICCProfile	undef!	IFD0	--> <a href="#">ICC Profile Tags</a>
0xc690	AsShotPreProfileMatrix	rational64s[n]!	IFD0	
0xc691	CurrentICCProfile	undef!	IFD0	--> <a href="#">ICC Profile Tags</a>
0xc692	CurrentPreProfileMatrix	rational64s[n]!	IFD0	
0xc6bf	ColorimetricReference	int16u!	IFD0	0 = Scene-referred 1 = Output-referred (ICC Profile Dynamic Range) 2 = Output-referred (High Dyanmic Range)
0xc6c5	SRawType	no	IFD0	
0xc6d2	PanasonicTitle	undef	IFD0	(proprietary Panasonic tag used for baby/pet name, etc)
0xc6d3	PanasonicTitle2	undef	IFD0	(proprietary Panasonic tag used for baby/pet name with age)
0xc6f3	CameraCalibrationSig	string!	IFD0	
0xc6f4	ProfileCalibrationSig	string!	IFD0	
0xc6f5	ProfileIFD	-	IFD0	--> <a href="#">EXIF Tags</a>
0xc6f6	AsShotProfileName	string!	IFD0	
0xc6f7	NoiseReductionApplied	rational64u!	SubIFD	
0xc6f8	ProfileName	string!	IFD0	
0xc6f9	ProfileHueSatMapDims	int32u[3]!	IFD0	
0xc6fa	ProfileHueSatMapData1	float[n]!	IFD0	
0xc6fb	ProfileHueSatMapData2	float[n]!	IFD0	
0xc6fc	ProfileToneCurve	float[n]!	IFD0	
0xc6fd	ProfileEmbedPolicy	int32u!	IFD0	0 = Allow Copying 1 = Embed if Used 2 = Never Embed 3 = No Restrictions
0xc6fe	ProfileCopyright	string!	IFD0	
0xc714	ForwardMatrix1	rational64s[n]!	IFD0	
0xc715	ForwardMatrix2	rational64s[n]!	IFD0	
0xc716	PreviewApplicationName	string!	IFD0	
0xc717	PreviewApplicationVersion	string!	IFD0	
0xc718	PreviewSettingsName	string!	IFD0	
0xc719	PreviewSettingsDigest	int8u!	IFD0	
0xc71a	PreviewColorSpace	int32u!	IFD0	0 = Unknown 1 = Gray Gamma 2.2 2 = sRGB

3 = Adobe RGB  
4 = ProPhoto RGB

0xc71b	PreviewDateTime	string!	IFD0		
0xc71c	RawImageDigest	int8u[16]!	IFD0		
0xc71d	OriginalRawFileDigest	int8u[16]!	IFD0		
0xc71e	SubTileBlockSize	no	-		
0xc71f	RowInterleaveFactor	no	-		
0xc725	ProfileLookTableDims	int32u[3]!	IFD0		
0xc726	ProfileLookTableData	float[n]!	IFD0		
0xc740	OpcodeList1	undef~!	SubIFD	1 = WarpRectilinear 2 = WarpFisheye 3 = FixVignetteRadial 4 = FixBadPixelsConstant 5 = FixBadPixelsList 6 = TrimBounds 7 = MapTable	8 = MapPolynomial 9 = GainMap 10 = DeltaPerRow 11 = DeltaPerColumn 12 = ScalePerRow 13 = ScalePerColumn 14 = WarpRectilinear2
0xc741	OpcodeList2	undef~!	SubIFD	1 = WarpRectilinear 2 = WarpFisheye 3 = FixVignetteRadial 4 = FixBadPixelsConstant 5 = FixBadPixelsList 6 = TrimBounds 7 = MapTable	8 = MapPolynomial 9 = GainMap 10 = DeltaPerRow 11 = DeltaPerColumn 12 = ScalePerRow 13 = ScalePerColumn 14 = WarpRectilinear2
0xc74e	OpcodeList3	undef~!	SubIFD	1 = WarpRectilinear 2 = WarpFisheye 3 = FixVignetteRadial 4 = FixBadPixelsConstant 5 = FixBadPixelsList 6 = TrimBounds 7 = MapTable	8 = MapPolynomial 9 = GainMap 10 = DeltaPerRow 11 = DeltaPerColumn 12 = ScalePerRow 13 = ScalePerColumn 14 = WarpRectilinear2
0xc761	NoiseProfile	double[n]!	SubIFD		
0xc763	TimeCodes	int8u[n]	IFD0		
0xc764	FrameRate	rational64s	IFD0		
0xc772	TStop	rational64u[n]	IFD0		
0xc789	ReelName	string	IFD0		
0xc791	OriginalDefaultFinalSize	int32u[2]!	IFD0		
0xc792	OriginalBestQualitySize	int32u[2]!	IFD0	(called OriginalBestQualityFinalSize by the DNG spec)	
0xc793	OriginalDefaultCropSize	rational64u[2]!	IFD0		
0xc7a1	CameraLabel	string	IFD0		
0xc7a3	ProfileHueSatMapEncoding	int32u!	IFD0	0 = Linear 1 = sRGB	
0xc7a4	ProfileLookTableEncoding	int32u!	IFD0	0 = Linear 1 = sRGB	
0xc7a5	BaselineExposureOffset	rational64s!	IFD0		
0xc7a6	DefaultBlackRender	int32u!	IFD0	0 = Auto 1 = None	
0xc7a7	NewRawImageDigest	int8u[16]!	IFD0		
0xc7a8	RawToPreviewGain	double!	IFD0		
0xc7aa	CacheVersion	int32u!	SubIFD2		
0xc7b5	DefaultUserCrop	rational64u[4]!	SubIFD		
0xc7d5	NikonNEFInfo	-	-	--> <a href="#">Nikon NEFInfo Tags</a>	
0xc7d7	ZIFMetadata	no	-		
0xc7d8	ZIFAnnotations	no	-		
0xc7e9	DepthFormat	int16u!	IFD0	(tags 0xc7e9-0xc7ee added by DNG 1.5.0.0) 0 = Unknown	

1 = Linear  
2 = Inverse

0xc7ea	DepthNear	rational64u!	IFD0	
0xc7eb	DepthFar	rational64u!	IFD0	
0xc7ec	DepthUnits	int16u!	IFD0	0 = Unknown 1 = Meters
0xc7ed	DepthMeasureType	int16u!	IFD0	0 = Unknown 1 = Optical Axis 2 = Optical Ray
0xc7ee	EnhanceParams	string!	IFD0	
0xcd2d	ProfileGainTableMap	undef!	SubIFD	
0xcd2e	SemanticName	no	SubIFD	
0xcd30	SemanticInstanceID	no	SubIFD	
0xcd31	CalibrationIlluminant3	int16u!	IFD0	--> <a href="#">EXIF LightSource Values</a>
0xcd32	CameraCalibration3	rational64s[n]!	IFD0	
0xcd33	ColorMatrix3	rational64s[n]!	IFD0	
0xcd34	ForwardMatrix3	rational64s[n]!	IFD0	
0xcd35	IlluminantData1	undef!	IFD0	
0xcd36	IlluminantData2	undef!	IFD0	
0xcd37	IlluminantData3	undef!	IFD0	
0xcd38	MaskSubArea	no	SubIFD	
0xcd39	ProfileHueSatMapData3	float[n]!	IFD0	
0xcd3a	ReductionMatrix3	rational64s[n]!	IFD0	
0xcd3f	RGBTables	undef!	IFD0	
0xcd40	ProfileGainTableMap2	undef!	IFD0	
0xcd41	JUMBF	-	-	--> <a href="#">Jpeg2000 Tags</a>
0xcd43	ColumnInterleaveFactor	int32u!	SubIFD	
0xcd44	ImageSequenceInfo	undef	IFD0	--> <a href="#">DNG ImageSeq Tags</a>
0xcd46	ImageStats	undef!	IFD0	
0xcd47	ProfileDynamicRange	undef	IFD0	--> <a href="#">DNG ProfileDynamicRange Tags</a>
0xcd48	ProfileGroupName	string!	IFD0	
0xcd49	JXLDistance	float	IFD0	
0xcd4a	JXLEffort	int32u	IFD0	(values range from 1=low to 9=high)
0xcd4b	JXLDecodeSpeed	int32u	IFD0	(values range from 1=slow to 4=fast)
0cea1	SEAL	string	IFD0	--> <a href="#">XMP SEAL Tags</a>
0xea1c	Padding	undef!	ExifIFD	
0xea1d	OffsetSchema	int32s!	ExifIFD	(Microsoft's ill-conceived maker note offset difference)
0xfd8	OwnerName	string/	ExifIFD	(tags 0xfd8-0xfea and 0xfe4c-0xfe58 are generated by Photoshop Camera RAW. Some names are the same as other EXIF tags, but ExifTool will avoid writing these unless they already exist in the file)
0xfd9	SerialNumber	string/	ExifIFD	
0xfea	Lens	string/	ExifIFD	
0xfe00	KDC_IFD	-	-	--> <a href="#">Kodak KDC_IFD Tags</a> (used in some Kodak KDC images)
0xfe4c	RawFile	string/	ExifIFD	
0xfe4d	Converter	string/	ExifIFD	
0xfe4e	WhiteBalance	string/	ExifIFD	
0xfe51	Exposure	string/	ExifIFD	
0xfe52	Shadows	string/	ExifIFD	
0xfe53	Brightness	string/	ExifIFD	
0xfe54	Contrast	string/	ExifIFD	
0xfe55	Saturation	string/	ExifIFD	
0xfe56	Sharpness	string/	ExifIFD	
0xfe57	Smoothness	string/	ExifIFD	

## EXIF Compression Values

Value	Compression
1	= Uncompressed
2	= CCITT 1D
3	= T4/Group 3 Fax
4	= T6/Group 4 Fax
5	= LZW
6	= JPEG (old-style)
7	= JPEG
8	= Adobe Deflate
9	= JBIG B&W
10	= JBIG Color
99	= JPEG
262	= Kodak 262
32766	= Next
32767	= Sony ARW Compressed
32769	= Packed RAW
32770	= Samsung SRW Compressed
32771	= CCIRLEW
32772	= Samsung SRW Compressed 2
32773	= PackBits
32809	= Thunderscan
32867	= Kodak KDC Compressed
32895	= IT8CTPAD
32896	= IT8LW
32897	= IT8MP
32898	= IT8BL
32908	= PixarFilm
32909	= PixarLog
32946	= Deflate
32947	= DCS
33003	= Aperio JPEG 2000 YCbCr
33005	= Aperio JPEG 2000 RGB
34661	= JBIG
34676	= SGILog
34677	= SGILog24
34712	= JPEG 2000
34713	= Nikon NEF Compressed
34715	= JBIG2 TIFF FX
34718	= Microsoft Document Imaging (MDI) Binary Level Codec
34719	= Microsoft Document Imaging (MDI) Progressive Transform Codec
34720	= Microsoft Document Imaging (MDI) Vector
34887	= ESRI Lerc
34892	= Lossy JPEG
34925	= LZMA2
34926	= Zstd (old)
34927	= WebP (old)
34933	= PNG
34934	= JPEG XR
50000	= Zstd
50001	= WebP
50002	= JPEG XL (old)
52546	= JPEG XL
65000	= Kodak DCR Compressed
65535	= Pentax PEF Compressed

## EXIF LightSource Values

Value	LightSource	Value	LightSource	Value	LightSource
0	= Unknown	12	= Daylight Fluorescent	20	= D55
1	= Daylight	13	= Day White Fluorescent	21	= D65
2	= Fluorescent	14	= Cool White Fluorescent	22	= D75
3	= Tungsten (Incandescent)	15	= White Fluorescent	23	= D50
4	= Flash	16	= Warm White Fluorescent	24	= ISO Studio Tungsten
9	= Fine Weather	17	= Standard Light A	255	= Other
10	= Cloudy	18	= Standard Light B		
11	= Shade	19	= Standard Light C		

# EXIF Flash Values

Value	Flash
0x0	= No Flash
0x1	= Fired
0x5	= Fired, Return not detected
0x7	= Fired, Return detected
0x8	= On, Did not fire
0x9	= On, Fired
0xd	= On, Return not detected
0xf	= On, Return detected
0x10	= Off, Did not fire
0x14	= Off, Did not fire, Return not detected
0x18	= Auto, Did not fire
0x19	= Auto, Fired
0x1d	= Auto, Fired, Return not detected
0x1f	= Auto, Fired, Return detected
0x20	= No flash function
0x30	= Off, No flash function
0x41	= Fired, Red-eye reduction
0x45	= Fired, Red-eye reduction, Return not detected
0x47	= Fired, Red-eye reduction, Return detected
0x49	= On, Red-eye reduction
0x4d	= On, Red-eye reduction, Return not detected
0x4f	= On, Red-eye reduction, Return detected
0x50	= Off, Red-eye reduction
0x58	= Auto, Did not fire, Red-eye reduction
0x59	= Auto, Fired, Red-eye reduction
0x5d	= Auto, Fired, Red-eye reduction, Return not detected
0x5f	= Auto, Fired, Red-eye reduction, Return detected

(This document generated automatically by Image::ExifTool::BuildTagLookup)

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[-- ExifTool Tag Names](#)

# Extra Tags

The extra tags provide extra features or extra information extracted or generated by ExifTool that is not directly associated with another tag group. The **Group** column lists the family 1 group name when reading. Tags with a "-" in this column are write-only.

Tags in the family 1 "System" group are referred to as "pseudo" tags because they don't represent real metadata in the file. Instead, this information is stored in the directory structure of the filesystem. The **Writable** System "pseudo" tags in this table may be written without modifying the file itself. The TestName tag is used for dry-run testing before writing FileName.

Tag Name	Writable	Group	Values / Notes
Adobe	yes!	Adobe	(the JPEG APP14 Adobe segment. Extracted only if specified. See the <a href="#">JPEG Adobe Tags</a> for more information)
BaseName	no	System	(file name without extension. Not generated unless specifically requested or the API <a href="#">RequestAll</a> option is set)
CanonDR4	yes!^	CanonVRD	(the full Canon DPP version 4 DR4 block. This tag is generated only if specifically requested)
CanonVRD	yes!^	CanonVRD	(the full Canon DPP VRD trailer block. This tag is generated only if specifically requested)
Comment	yes	File	(comment embedded in JPEG, GIF89a or PPM/PGM/PBM image)
CurrentIPTCDigest	no	File	(MD5 digest of existing IPTC data. All zeros if IPTC exists but Digest::MD5 is not installed. Only calculated for IPTC in the standard location as specified by the <a href="#">MWG</a> . ExifTool automates the handling of this tag in the MWG module -- see the <a href="#">MWG Composite Tags</a> for details)
Directory	yes!	System	(the directory of the file as specified in the call to ExifTool, or "." if no directory was specified. May be written to move the file to another directory that will be created if doesn't already exist)
EXIF	yes!	EXIF	(the full EXIF data block from JPEG, PNG, JP2, MIE and MIFF images. This tag is generated only if specifically requested)
EmbeddedVideo	no	File	
Error	no	ExifTool	(returns errors that may have occurred while reading or writing a file. Any Error will prevent the file from being processed. Minor errors may be downgraded to warnings with the -m or <a href="#">IgnoreMinorErrors</a> option)
ExifByteOrder	yes	File	(represents the byte order of EXIF information. May be written to set the byte order only for newly created EXIF segments) 'II' = Little-endian (Intel, II) 'MM' = Big-endian (Motorola, MM)
ExifToolVersion	no	ExifTool	(the version of ExifTool currently running)
ExifUnicodeByteOrder	yes	-	(specifies the byte order to use when writing EXIF Unicode text. The EXIF specification is particularly vague about this byte ordering, and different applications use different conventions. By default ExifTool writes Unicode text in EXIF byte order, but this write-only tag may be used to force a specific order. Applies to the EXIF UserComment tag when writing special characters) 'II' = Little-endian (Intel, II) 'MM' = Big-endian (Motorola, MM)
FileAccessDate	no	System	(the date/time of last access of the file. Note that this access time is updated whenever any software, including ExifTool, reads the file)
FileAttributes	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set. 2 or 3 values: 0. File type, 1. Attribute bits, 2. Windows attribute bits if Win32API::File is available)
		[Value 0]	0x0 = Unknown      0x8000 = Regular 0x1000 = FIFO      0x9000 = VxFS Compressed 0x2000 = Character      0xa000 = Symbolic Link 0x3000 = Mux Character      0xb000 = Solaris Shadow Inode 0x4000 = Directory      0xc000 = Socket 0x5000 = XENIX Named      0xd000 = Solaris Door 0x6000 = Block      0xe000 = BSD Whiteout 0x7000 = Mux Block
		[Value 1]	Bit 9 = Sticky      Bit 11 = Set User ID Bit 10 = Set Group ID
		[Value 2]	Bit 0 = Read Only      Bit 8 = Temporary Bit 1 = Hidden      Bit 9 = Sparse File Bit 2 = System      Bit 10 = Reparse Point Bit 3 = Volume Label      Bit 11 = Compressed

			Bit 4 = Directory Bit 5 = Archive Bit 6 = Device Bit 7 = Normal	Bit 12 = Offline Bit 13 = Not Content Indexed Bit 14 = Encrypted
FileBlockCount	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set)	
FileBlockSize	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set)	
FileCreateDate	yes!	System	(the filesystem creation date/time. Windows/Mac only. In Windows, the file creation date/time is preserved by default when writing if Win32API::File and Win32::API are available. On Mac, this tag is extracted only if it or the MacOS group is specifically requested or the API <a href="#">RequestAll</a> option is set to 2 or higher. Requires "setfile" for writing on Mac, which may be installed by typing <code>xcode-select --install</code> in the Terminal)	
FileDeviceID	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set)	
FileDeviceNumber	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set)	
FileGroupID	yes!	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set. Returns group ID number with the -n option, or name otherwise. May be written with either group name or number)	
FileHardLinks	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set)	
FileInodeChangeDate	no	System	(the date/time when the file's directory information was last changed. Non-Windows systems only)	
FileInodeNumber	no	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set)	
FileModifyDate	yes!	System	(the filesystem modification date/time. Note that ExifTool may not be able to handle filesystem dates before 1970 depending on the limitations of the system's standard libraries)	
FileName	yes!	System	(may be written with a full path name to set FileName and Directory in one operation. This is such a powerful feature that a TestName tag is provided to allow dry-run tests before actually writing the file name. See <a href="#">filename.html</a> for more information on writing the FileName, Directory and TestName tags)	
FilePath	no	System	(absolute path of source file. Not generated unless specifically requested or the API <a href="#">RequestAll</a> option is set. Does not support Windows Unicode file names)	
FilePermissions	yes!	System	(r=read, w=write and x=execute permissions for the file owner, group and others. The ValueConv value is an octal number so bit test operations on this value should be done in octal, eg. 'oct(\$filePermissions#) & 0200')	
FileSequence	no	ExifTool	(sequence number for each source file when extracting or copying information, including files that fail the -if condition of the command-line application, beginning at 0 for the first file. Not generated unless specifically requested or the API <a href="#">RequestAll</a> option is set)	
FileSize	no	System	(note that the print conversion for this tag uses SI prefixes by default: 1 kB = 1000 bytes, etc. Set the API ByteUnit option to "Binary" to use binary prefixes instead: 1 KiB = 1024 bytes, etc.)	
FileType	no	File	(a short description of the file type. For many file types this is the just the uppercase file extension)	
FileTypeExtension	no	File	(a common lowercase extension for this file type, or uppercase with the -n option)	
FileUserID	yes!	System	(extracted only if specifically requested or the API <a href="#">SystemTags</a> or <a href="#">RequestAll</a> option is set. Returns user ID number with the -n option, or name otherwise. May be written with either user name or number)	
ForceWrite	yes	-	(write-only tag used to force metadata in a file to be rewritten even if no tag values are changed. May be set to "EXIF", "IPTC", "XMP" or "PNG" to force the corresponding metadata type to be rewritten, "FixBase" to cause EXIF to be rewritten only if the MakerNotes offset base was fixed, or "All" to rewrite all of these metadata types. Values are case insensitive, and multiple values may be separated with commas, eg. <code>-ForceWrite=exif,xmp</code> )	
Geolocate	yes	-	(this write-only tag may be used to write geolocation city, region, country code and country based in input GPS coordinates, or to write GPS coordinates based on geolocation name. See the <a href="#">Writing section of the Geolocation page</a> for details. This tag is writable regardless of the API <a href="#">Geolocation</a> option setting)	
GeolocationBearing	no	ExifTool	(compass bearing to GeolocationCity center. Geolocation tags are generated only if API <a href="#">Geolocation</a> option is set)	
GeolocationCity	no	ExifTool	(name of city nearest to the current GPS coordinates)	

GeolocationCountry	no	ExifTool	(geolocation country name)
GeolocationCountryCode	no	ExifTool	(geolocation country code)
GeolocationDistance	no	ExifTool	(distance in km from current GPS to city)
GeolocationFeatureCode	no	ExifTool	(geolocation feature code, see <a href="http://www.geonames.org/export/codes.html#P">http://www.geonames.org/export/codes.html#P</a> )
GeolocationFeatureType	no	ExifTool	(geolocation feature type)
GeolocationPopulation	no	ExifTool	(city population rounded to 2 significant digits)
GeolocationPosition	no	ExifTool	(approximate GPS coordinates of city)
GeolocationRegion	no	ExifTool	(geolocation state, province or region)
GeolocationSubregion	no	ExifTool	(geolocation county or subregion)
GeolocationTimeZone	no	ExifTool	(geolocation time zone ID)
GeolocationWarning	no	ExifTool	
Geosync	yes	-	(this write-only tag specifies a time difference to add to Geotime for synchronization with the GPS clock. For example, set this to "-12" if the camera clock is 12 seconds faster than GPS time. Input format is "[+/-] [[DD ]HH:]MM[:SS[.ss]]". Additional features allow calculation of time differences and time drifts, and extraction of synchronization times from image files. See the <a href="#">geotagging documentation</a> for details)
Geotag	yes	-	(this write-only tag is used to define the GPS track log data or track log file name. Currently supported track log formats are GPX, NMEA RMC/GGA/GLL, KML, IGC, Garmin XML and TCX, Magellan PMGNTRK, Honeywell PTNTHPR, Winplus Beacon text, Bramor gEO, Google Takeout JSON, and CSV log files. May be set to the special value of "DATETIMEONLY" (all caps) to set GPS date/time tags if no input track points are available. See <a href="#">geotag.html</a> for details)
Geotime	yes	-	(this write-only tag is used to define a date/time for interpolating a position in the GPS track specified by the Geotag tag. Writing this tag causes GPS information to be written into the EXIF or XMP of the target files. The local system timezone is assumed if the date/time value does not contain a timezone. May be deleted to delete associated GPS tags. A group name of "EXIF" or "XMP" may be specified to write or delete only EXIF or XMP GPS tags)
HardLink	yes!	-	(this write-only tag is used to create a hard link with the specified name to the source file. If the source file is edited, copied, renamed or moved in the same operation as writing HardLink, then the link is made to the updated file. Note that subsequent editing of either hard-linked file by exiftool will break the link unless the -overwrite_original_in_place option is used)
ICC_Profile	yes!	ICC_Profile	(the full ICC_Profile data block. This tag is generated only if specifically requested)
ID3Size	no	File	(size of the ID3 data block)
IPTC	yes!	IPTC	(the full IPTC data block. This tag is generated only if specifically requested)
ImageDataHash	no	File	(Hash of image data. Generated only if specifically requested for JPEG, TIFF, PNG, CRW, CR3, MRW, RAF, X3F, IIQ, JP2, JXL, HEIC and AVIF images, MOV/MP4 videos, and some RIFF-based files such as AVI, WAV and WEBP. The hash algorithm is set by the API <a href="#">ImageHashType</a> option, and is 'MD5' by default. The hash includes the main image data, plus JpgFromRaw/OtherImage for some formats, but does not include ThumbnailImage or PreviewImage. Includes video and audio data for MOV/MP4. The <a href="#">XMP-ct:OriginalImageHash and XMP-ct:OriginalImageHashType tags</a> provide a way to store the this hash value and the hash type in the file.)
ImageHeight	no	File	(the height of the image in number of pixels)
ImageWidth	no	File	(the width of the image in number of pixels)
JPEGDigest	no	File	(an MD5 digest of the JPEG quantization tables is combined with the component sub-sampling values to generate the value of this tag. The result is compared to known values in an attempt to deduce the originating software based only on the JPEG image data. For performance reasons, this tag is generated only if specifically requested or the API <a href="#">RequestAll</a> option is set to 3 or higher)
JPEGImageLength	no	File	(byte length of JPEG image without metadata. For performance reasons, this tag is generated only if specifically requested or the API <a href="#">RequestAll</a> option is set to 3 or higher)
JPEGQualityEstimate	no	File	(an estimate of the IJG JPEG quality setting for the image, calculated from the quantization tables. For performance reasons, this tag is generated only if specifically requested or the API <a href="#">RequestAll</a> option is set to 3 or higher)
JUMBF	no	JUMBF	(the C2PA JUMBF data block, extracted only if specifically requested)

MIMETYPE	no	File	(the MIME type of the source file)
MaxVal	no	File	(maximum pixel value in PPM or PGM image)
NewGUID	no	ExifTool	(generates a new, random GUID with format YYYYmmdd-HHMM-SSNN-PPPP-RRRRRRRRRR, where Y=year, m=month, d=day, H=hour, M=minute, S=second, N=file sequence number in hex, P=process ID in hex, and R=random hex number; without dashes with the -n option. Not generated unless specifically requested or the API <a href="#">RequestAll</a> option is set)
Now	no	ExifTool	(the current date/time. Useful when setting the tag values, eg. "-modifydate<now". Not generated unless specifically requested or the API <a href="#">RequestAll</a> option is set)
NumPlanes	no	File	(number of color planes)
OtherImage	no	File	(other JPEG-format embedded image)
PageCount	no	File	(the number of pages in a multi-page TIFF document)
PreviewImage	yes	File	(JPEG-format embedded preview image)
PreviewJXL	no	File	(JXL-format embedded preview image)
PreviewPDF	no	File	(PDF-format embedded preview image)
PreviewPNG	no	File	(PNG-format embedded preview image)
PreviewTIFF	no	File	(TIFF-format embedded preview image)
PreviewWMF	no	File	(WMF-format embedded preview image)
ProcessingTime	no	ExifTool	(the clock time in seconds taken by ExifTool to extract information from this file. Not generated unless specifically requested or the API <a href="#">RequestAll</a> option is set. Requires Time::HiRes)
RAFCompression	no	File	0 = Uncompressed 2 = Compressed
RAFVersion	no	File	(RAF file version number)
ResourceForkSize	no	System	(size of the file's resource fork if it contains data. Mac OS only. If this tag is generated the <a href="#">ExtractEmbedded</a> option may be used to extract resource-fork information as a sub-document. When writing, the resource fork is preserved by default, but it may be deleted with <code>-rsrc:all=</code> on the command line)
SphericalVideoXML	yes!	GSpherical	(the SphericalVideoXML block from MP4/MOV videos. This tag is generated only if specifically requested)
Symlink	yes!	-	(this write-only tag is used to create a symbolic link with the specified name to the source file. If the source file is edited, copied, renamed or moved in the same operation as writing Symlink, then the link is made to the updated file. The link uses an absolute path unless it is created in the current working directory. Valid only for file systems that support symbolic links. Note that subsequent editing of the file via the symbolic link by exiftool will cause the link to be replaced by the edited file without changing the original unless the <code>-overwrite_original_in_place</code> option is used)
TestName	yes!	-	(this write-only tag may be used instead of FileName for dry-run tests of the file renaming feature. Writing this tag prints the old and new file names to the console, but does not affect the file itself)
ThumbnailImage	no	File	(JPEG-format embedded thumbnail image)
Trailer	yes!	File	(the full JPEG trailer data block. Extracted only if specifically requested or the API <a href="#">RequestAll</a> option is set to 3 or higher)
Validate	no	ExifTool	(generated only if specifically requested. Requesting this tag automatically enables the API <a href="#">Validate</a> option, imposing additional validation checks when extracting metadata. Returns the number of errors, warnings and minor warnings encountered. Note that the Validate feature focuses mainly on validation of EXIF/TIFF metadata) <code>'0 0 0' = OK</code>
Warning	no	ExifTool	(returns warnings that may have occurred while reading or writing a file. Use the <code>-a</code> or <a href="#">Duplicates</a> option to see all warnings if more than one occurred. Minor warnings may be ignored with the <code>-m</code> or <a href="#">IgnoreMinorErrors</a> option. Minor warnings with a capital "M" in the "[Minor]" designation indicate that the processing is affected by ignoring the warning. Multiple identical warnings are indicated by a count after the warning message, eg. "[x2]" if the same warning occurred twice)
XML	no	XML	(the XML data block, extracted for some file types)
XMP	yes!	XMP	(the XMP data block, but note that extended XMP in JPEG images may be split into multiple blocks. This tag is generated only if specifically requested)
XResolution	no	File	(the horizontal pixel resolution)
YResolution	no	File	(the vertical pixel resolution)

ZonelIdentifier	yes!	System	(Windows only. Existence indicates that the file has a Zone.Identifier alternate data stream, which is used by some Windows browsers to mark downloaded files as possibly unsafe to run. May be deleted to remove this stream. Requires Win32API::File)
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(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Dec 12, 2024

[<-- ExifTool Tag Names](#)

# FITS Tags

This table lists some standard Flexible Image Transport System (FITS) tags, but ExifTool will extract any other tags found. See [https://fits.gsfc.nasa.gov/fits\\_standard.html](https://fits.gsfc.nasa.gov/fits_standard.html) for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'AUTHOR'	Author	no	
'BACKGRND'	Background	no	
'COMMENT'	Comment	no	(leading spaces are removed if <a href="#">PrintConv</a> is enabled)
'DATE'	CreateDate	no	
'DATE-END'	ObservationDateEnd	no	
'DATE-OBS'	ObservationDate	no	
'HISTORY'	History	no	(leading spaces are removed if <a href="#">PrintConv</a> is enabled)
'INSTRUME'	Instrument	no	
'OBJECT'	Object	no	
'OBSERVER'	Observer	no	
'REFERENC'	Reference	no	
'TELESCOP'	Telescope	no	
'TIME-END'	ObservationTimeEnd	no	
'TIME-OBS'	ObservationTime	no	

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Last revised Feb 23, 2021

[-- ExifTool Tag Names](#)

# FLAC Tags

Free Lossless Audio Codec (FLAC) meta information. ExifTool also extracts ID3 information from these files.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	StreamInfo	-	--> <a href="#">FLAC StreamInfo Tags</a>
0x0001	Padding?	no	
0x0002	Application_riff ApplicationUnknown?	- no	--> <a href="#">RIFF Tags</a>
0x0003	SeekTable?	no	
0x0004	VorbisComment	-	--> <a href="#">Vorbis Comments Tags</a>
0x0005	CueSheet?	no	
0x0006	Picture	-	--> <a href="#">FLAC Picture Tags</a>

## FLAC StreamInfo Tags

FLAC is big-endian, so bit 0 is the high-order bit in this table.

Tag ID	Tag Name	Writable	Values / Notes
'Bit000-015'	BlockSizeMin	no	
'Bit016-031'	BlockSizeMax	no	
'Bit032-055'	FrameSizeMin	no	
'Bit056-079'	FrameSizeMax	no	
'Bit080-099'	SampleRate	no	
'Bit100-102'	Channels	no	
'Bit103-107'	BitsPerSample	no	
'Bit108-143'	TotalSamples	no	
'Bit144-271'	MD5Signature	no	

## FLAC Picture Tags

Index4	Tag Name	Writable	Values / Notes
0	PictureType	no	0 = Other 1 = 32x32 PNG Icon 2 = Other Icon 3 = Front Cover 4 = Back Cover 5 = Leaflet 6 = Media 7 = Lead Artist 8 = Artist 9 = Conductor 10 = Band 11 = Composer 12 = Lyricist 13 = Recording Studio or Location 14 = Recording Session 15 = Performance 16 = Capture from Movie or Video 17 = Bright(ly) Colored Fish 18 = Illustration 19 = Band Logo 20 = Publisher Logo
1	PictureMIMETYPE	no	
2	PictureDescription	no	
3	PictureWidth	no	
4	PictureHeight	no	
5	PictureBitsPerPixel	no	
6	PictureIndexedColors	no	
7	PictureLength	no	
8	Picture	no	

[<-- ExifTool Tag Names](#)

# FLIF Tags

Information extracted from Free Lossless Image Format files. See <http://flif.info/> for more information.

Tag ID	Tag Name	Writable	Values / Notes
0	ImageType	no	1 = Grayscale (non-interlaced) 3 = RGB (non-interlaced) 4 = RGBA (non-interlaced) 'A' = Grayscale (interlaced) 'C' = RGB (interlaced) 'D' = RGBA (interlaced) 'Q' = Grayscale Animation (non-interlaced) 'S' = RGB Animation (non-interlaced) 'T' = RGBA Animation (non-interlaced) 'a' = Grayscale Animation (interlaced) 'c' = RGB Animation (interlaced) 'd' = RGBA Animation (interlaced)
1	BitDepth	no	0 = Custom 1 = 8 2 = 16
2	ImageWidth	no	
3	ImageHeight	no	
4	AnimationFrames	no	
5	Encoding	no	0 = FLIF16
'eXif'	EXIF	-	--> <a href="#">EXIF Tags</a>
'eXmp'	XMP	-	--> <a href="#">XMP Tags</a>
'iCCP'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Nov 2, 2016

[<- ExifTool Tag Names](#)

# FLIR Tags

Information extracted from the maker notes of JPEG images from thermal imaging cameras by FLIR Systems Inc.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	ImageTemperatureMax	rational64u	(these temperatures may be in Celsius, Kelvin or Fahrenheit, but there is no way to tell which)
0x0002	ImageTemperatureMin	rational64u	
0x0003	Emissivity	rational64u	
0x0004	UnknownTemperature?	rational64u	
0x0005	CameraTemperatureRangeMax?	rational64u	
0x0006	CameraTemperatureRangeMin?	rational64u	

## FLIR FFF Tags

Information extracted from FLIR FFF images and the APP1 FLIR segment of JPEG images. These tags may also be extracted from the first frame of an FLIR SEQ file, or all frames if the ExtractEmbedded option is used. Setting ExtractEmbedded to 2 also the raw thermal data from all frames.

Tag ID	Tag Name	Writable	Values / Notes
'_header'	FFFHeader	-	--> <a href="#">FLIR Header Tags</a>
0x0001	RawData	-	--> <a href="#">FLIR RawData Tags</a>
0x0005	GainDeadData	-	--> <a href="#">FLIR GainDeadData Tags</a>
0x0006	CoarseData	-	--> <a href="#">FLIR CoarseData Tags</a>
0x000e	EmbeddedImage	-	--> <a href="#">FLIR EmbeddedImage Tags</a>
0x0020	CameraInfo	-	--> <a href="#">FLIR CameraInfo Tags</a>
0x0021	MeasurementInfo	-	--> <a href="#">FLIR MeasInfo Tags</a>
0x0022	PalettesInfo	-	--> <a href="#">FLIR PalettesInfo Tags</a>
0x0023	TextInfo	-	--> <a href="#">FLIR TextInfo Tags</a>
0x0024	EmbeddedAudioFile	no	
0x0028	PaintData	-	--> <a href="#">FLIR PaintData Tags</a>
0x002a	PiP	-	--> <a href="#">FLIR PiP Tags</a>
0x002b	GPSInfo	-	--> <a href="#">FLIR GPSInfo Tags</a>
0x002c	MeterLink	-	--> <a href="#">FLIR MeterLink Tags</a>
0x002e	ParameterInfo	-	--> <a href="#">FLIR ParamInfo Tags</a>

## FLIR Header Tags

Tags extracted from the FLIR FFF/AFF header.

Index1	Tag Name	Writable	Values / Notes
4	CreatorSoftware	no	

## FLIR RawData Tags

The thermal image data may be stored either as raw data, or in PNG format. If stored as raw data, ExifTool adds a TIFF header to allow the data to be viewed as a TIFF image. If stored in PNG format, the PNG image is extracted as-is. Note that most FLIR cameras using the PNG format seem to write the 16-bit raw image data in the wrong byte order.

Index2	Tag Name	Writable	Values / Notes
1	RawThermalImageWidth	no	
2	RawThermalImageHeight	no	
16	RawThermalImageType	no	
16.1	RawThermalImage	no	

## FLIR GainDeadData Tags

Index2	Tag Name	Writable	Values / Notes
1	GainDeadMapImageWidth	no	
2	GainDeadMapImageHeight	no	
16	GainDeadMapImageType	no	
16.1	GainDeadMapImage	no	

## FLIR CoarseData Tags

Information found in FFF-format .CRS correction image files.

Index2	Tag Name	Writable	Values / Notes
1	CoarseMapImageWidth	no	
2	CoarseMapImageHeight	no	
16	CoarseMapImageType	no	
16.1	CoarseMapImage	no	

## FLIR EmbeddedImage Tags

Index2	Tag Name	Writable	Values / Notes
1	EmbeddedImageWidth	no	
2	EmbeddedImageHeight	no	
16	EmbeddedImageType	no	("PNG" for PNG image in Y Cb Cr colors, "JPG" for a JPEG image, or "DAT" for other image data)
16.1	EmbeddedImage	no	

## FLIR CameraInfo Tags

FLIR camera information. The Planck tags are variables used in the temperature calculation. See [forum/index.php?topic=4898.msg23972#msg23972](http://forum/index.php?topic=4898.msg23972#msg23972) for details.

Index1	Tag Name	Writable	Values / Notes
32	Emissivity	no	
36	ObjectDistance	no	
40	ReflectedApparentTemperature	no	
44	AtmosphericTemperature	no	
48	IRWindowTemperature	no	
52	IRWindowTransmission	no	
60	RelativeHumidity	no	
88	PlanckR1	no	
92	PlanckB	no	
96	PlanckF	no	
112	AtmosphericTransAlpha1	no	
116	AtmosphericTransAlpha2	no	
120	AtmosphericTransBeta1	no	
124	AtmosphericTransBeta2	no	
128	AtmosphericTransX	no	
144	CameraTemperatureRangeMax	no	
148	CameraTemperatureRangeMin	no	
152	CameraTemperatureMaxClip	no	
156	CameraTemperatureMinClip	no	
160	CameraTemperatureMaxWarn	no	
164	CameraTemperatureMinWarn	no	
168	CameraTemperatureMaxSaturated	no	
172	CameraTemperatureMinSaturated	no	

212	CameraModel	no
244	CameraPartNumber	no
260	CameraSerialNumber	no
276	CameraSoftware	no
368	LensModel	no
400	LensPartNumber	no
416	LensSerialNumber	no
436	FieldOfView	no
492	FilterModel	no
508	FilterPartNumber	no
540	FilterSerialNumber	no
776	PlanckO	no
780	PlanckR2	no
784	RawValueRangeMin	no
786	RawValueRangeMax	no
824	RawValueMedian	no
828	RawValueRange	no
900	DateTimeOriginal	no
912	FocusStepCount	no
1116	FocusDistance	no
1124	FrameRate	no

## FLIR MeasInfo Tags

Tags listed below are only for the first measurement tool, however multiple measurements may be added, and information is extracted for all of them. Tags for subsequent measurements are generated as required with the prefixes "Meas2", "Meas3", etc.

Tag Name	Writable	Values / Notes
Meas1Label	no	
Meas1Params	no	(Spot=X,Y; Area=X1,Y1,W,H; Ellipse=XC,YC,X1,Y1,X2,Y2; Line=X1,Y1,X2,Y2)
Meas1Type	no	1 = Spot    5 = Endpoint 2 = Area    6 = Alarm 3 = Ellipse    7 = Unused 4 = Line    8 = Difference

## FLIR PalettelInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	PaletteColors	no	
6	AboveColor	no	(Y Cr Cb color components)
9	BelowColor	no	
12	OverflowColor	no	
15	UnderflowColor	no	
18	Isotherm1Color	no	
21	Isotherm2Color	no	
26	PaletteMethod	no	
27	PaletteStretch	no	
48	PaletteFileName	no	
80	PaletteName	no	
112	Palette	no	(Y Cr Cb byte values for each palette color)

## FLIR TextInfo Tags

Tag Name	Writable	Values / Notes

Label0	no
Label1	no
Label2	no
Label3	no
Value0	no
Value1	no
Value2	no
Value3	no

## FLIR PaintData Tags

Information generated by FLIR Tools "Paint colors" tool.

Index2	Tag Name	Writable	Values / Notes
5	PaintImageWidth	no	
6	PaintImageHeight	no	
20	PaintImageType	no	
20.1	PaintImage	no	

## FLIR PiP Tags

FLIR Picture in Picture tags.

Index2	Tag Name	Writable	Values / Notes
0	Real2IR	no	
2	OffsetX	no	(offset from center)
3	OffsetY	no	
4	PiPX1	no	(crop size for radiometric image)
5	PiPX2	no	
6	PiPY1	no	
7	PiPY2	no	

## FLIR GPSInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	GPSValid	no	0 = No 1 = Yes
4	GPSVersionID	no	
8	GPSLatitudeRef	no	'N' = North 'S' = South
10	GPSLongitudeRef	no	'E' = East 'W' = West
16	GPSLatitude	no	
24	GPSLongitude	no	
32	GPSAltitude	no	
64	GPSDOP	no	
68	GPSSpeedRef	no	'K' = km/h 'M' = mph 'N' = knots
70	GPSTrackRef	no	'M' = Magnetic North 'T' = True North
72	GPSImgDirectionRef	no	'M' = Magnetic North 'T' = True North
76	GPSSpeed	no	
80	GPSTrack	no	
84	GPSImgDirection	no	
88	GPSMapDatum	no	

# FLIR MeterLink Tags

Tags containing Meterlink humidity meter information.

Index1	Tag Name	Writable	Values / Notes
26	Reading1Units	no	0xd = C 0xb = % 0xd = Relative 0x24 = g/kg
28	Reading1Description	no	0 = Humidity 3 = Moisture 7 = Dew Point 8 = Air Temperature 9 = IR Temperature 11 = Difference Temperature
32	Reading1Device	no	
96	Reading1Value	no	
126	Reading2Units	no	0xd = C 0xb = % 0xd = rel 0x24 = g/kg
128	Reading2Description	no	0 = Humidity 3 = Moisture 7 = Dew Point 8 = Air Temperature 9 = IR Temperature 11 = Difference Temperature
132	Reading2Device	no	
196	Reading2Value	no	
226	Reading3Units	no	0xd = C 0xb = % 0xd = rel 0x24 = g/kg
228	Reading3Description	no	0 = Humidity 3 = Moisture 7 = Dew Point 8 = Air Temperature 9 = IR Temperature 11 = Difference Temperature
232	Reading3Device	no	
296	Reading3Value	no	
326	Reading4Units	no	0xd = C 0xb = % 0xd = rel 0x24 = g/kg
328	Reading4Description	no	0 = Humidity 3 = Moisture 7 = Dew Point 8 = Air Temperature 9 = IR Temperature 11 = Difference Temperature
332	Reading4Device	no	
396	Reading4Value	no	

# FLIR ParamInfo Tags

Tag Name	Writable	Values / Notes
DateTimeGenerated	no	
Param0	no	
Param1	no	
Param2	no	
Param3	no	

# FLIR UserData Tags

Tags written by some FLIR cameras in a top-level (!) "udta" atom of MP4 videos.

Tag ID	Tag Name	Writable	Values / Notes
'uuid'	FLIR_Parts	-	--> <a href="#">FLIR Parts Tags</a>
	FLIR_Serial	-	--> <a href="#">FLIR SerialNums Tags</a>
	FLIR_Params	-	--> <a href="#">FLIR Params Tags</a>
	FLIR_UnknownUUID	-	--> <a href="#">FLIR UnknownUUID Tags</a>
	FLIR_GPS	-	--> <a href="#">FLIR GPS UUID Tags</a>
	FLIR_MoreInfo	-	--> <a href="#">FLIR MoreInfo Tags</a>
	SoftwareComponents?	no	
	FLIR_Uncertain?	no	
	Units	no+	
	ThumbnailImage	no	

## FLIR Parts Tags

Tags extracted from the "uuid" box with ID 43c3993b0f94424b82056b66513f485d in FLIR MP4 videos.

Index1	Tag Name	Writable	Values / Notes
4	BHPVer	no	
	BALPVer	no	
	Battery	no	
	BAVPVer	no	
	CamCore	no	
	DetectorBoard	no	
	Detector	no	
	GIDCVer	no	
	GIDPVer	no	
	GIPC_CPLD	no	
	GIPCVer	no	
	GIXIVer	no	
	MainBoard	no	
	Optics	no	
	PartNumber	no	

## FLIR SerialNums Tags

Tags extracted from the "uuid" box with ID 57f5b93e51e448afa0d9c3ef1b37f712 in FLIR MP4 videos.

Index1	Tag Name	Writable	Values / Notes
12	UnknownSerial1?	no	
45	UnknownSerial2?	no	
78	UnknownSerial3?	no	
111	UnknownSerial4?	no	
123	UnknownNumber?	no	
126	CameraSerialNumber	no	

## FLIR Params Tags

Tags extracted from the "uuid" box with ID 41e5dcf9e80a41ceadfe7f0c58082c19 in FLIR MP4 videos.

Index4	Tag Name	Writable	Values / Notes
1	ReflectedApparentTemperature	no	
2	AtmosphericTemperature	no	
3	Emissivity	no	
4	ObjectDistance	no	
5	RelativeHumidity	no	
6	EstimatedAtmosphericTrans	no	
7	IRWindowTemperature	no	
8	IRWindowTransmission	no	

# FLIR UnknownUUID Tags

Tags extracted from the "uuid" box with ID 574520502cbb44adae5415e9b839d903 in FLIR MP4 videos.

Index4	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## FLIR GPS\_UUID Tags

Tags extracted from the "uuid" box with ID 7f2e21008b464918afb1de709a74f6f5 in FLIR MP4 videos.

Index4	Tag Name	Writable	Values / Notes
1	GPSLatitude	no	
2	GPSLongitude	no	
3	GPSAltitude	no	

## FLIR MoreInfo Tags

Tags extracted from the "uuid" box with ID 2b452fdc74354094baee22a6b23a7cf8 in FLIR MP4 videos.

Index1	Tag Name	Writable	Values / Notes
5	LensModel	no	
11	UnknownTemperature1?	no	
15	UnknownTemperature2?	no	

## FLIR AFF Tags

Tags extracted from FLIR "AFF" SEQ images.

Tag ID	Tag Name	Writable	Values / Notes
'_header'	AFFHeader	-	--> <a href="#">FLIR Header Tags</a>
0x0001	AFF1	-	--> <a href="#">FLIR AFF1 Tags</a>
0x0005	AFF5	-	--> <a href="#">FLIR AFF5 Tags</a>

## FLIR AFF1 Tags

Index2	Tag Name	Writable	Values / Notes
1	SensorWidth	no	
2	SensorHeight	no	

## FLIR AFF5 Tags

Index2	Tag Name	Writable	Values / Notes
19	SensorWidth	no	
20	SensorHeight	no	

## FLIR FPF Tags

Tags extracted from FLIR Public image Format (FPF) files.

Index1	Tag Name	Writable	Values / Notes
32	FPFVersion	no	
36	ImageDataOffset	no	
40	ImageType	no	0 = Temperature 1 = Temperature Difference 2 = Object Signal 3 = Object Signal Difference

42	ImagePixelFormat	no	0 = 2-byte short integer 1 = 4-byte long integer 2 = 4-byte float 3 = 8-byte double
44	ImageWidth	no	
46	ImageHeight	no	
48	ExternalTriggerCount	no	
52	SequenceFrameNumber	no	
120	CameraModel	no	
152	CameraPartNumber	no	
184	CameraSerialNumber	no	
216	CameraTemperatureRangeMin	no	
220	CameraTemperatureRangeMax	no	
224	LensModel	no	
256	LensPartNumber	no	
288	LensSerialNumber	no	
320	FilterModel	no	
336	FilterPartNumber	no	
384	FilterSerialNumber	no	
480	Emissivity	no	
484	ObjectDistance	no	
488	ReflectedApparentTemperature	no	
492	AtmosphericTemperature	no	
496	RelativeHumidity	no	
500	ComputedAtmosphericTrans	no	
504	EstimatedAtmosphericTrans	no	
508	ReferenceTemperature	no	
512	IRWindowTemperature	no	
516	IRWindowTransmission	no	
584	DateTimeOriginal	no	
676	CameraScaleMin	no	
680	CameraScaleMax	no	
684	CalculatedScaleMin	no	
688	CalculatedScaleMax	no	
692	ActualScaleMin	no	
696	ActualScaleMax	no	

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*Last revised Mar 24, 2025*

[--> ExifTool Tag Names](#)

# Flash Tags

The information below is extracted from SWF (Shockwave Flash) files. Tags with string ID's represent information extracted from the file header.

Tag ID	Tag Name	Writable	Values / Notes
'Compressed'	Compressed	no	0 = False 1 = True
'Duration'	Duration	no	(calculated from FrameRate and FrameCount)
'FlashVersion'	FlashVersion	no	
'FrameCount'	FrameCount	no	
'FrameRate'	FrameRate	no	
'ImageHeight'	ImageHeight	no	
'ImageWidth'	ImageWidth	no	
0x0045	FlashAttributes	no	Bit 0 = UseNetwork Bit 3 = ActionScript3 Bit 4 = HasMetadata
0x004d	XMP	-	--> <a href="#">XMP Tags</a>

# Flash FLV Tags

Information is extracted from the following packets in FLV (Flash Video) files.

Tag ID	Tag Name	Writable	Values / Notes
0x0008	Audio	-	--> <a href="#">Flash Audio Tags</a>
0x0009	Video	-	--> <a href="#">Flash Video Tags</a>
0x0012	Meta	-	--> <a href="#">Flash Meta Tags</a>

# Flash Audio Tags

Information extracted from the Flash Audio header.

Tag ID	Tag Name	Writable	Values / Notes
'Bit0-3'	AudioEncoding	no	0 = PCM-BE (uncompressed) 1 = ADPCM 2 = MP3 3 = PCM-LE (uncompressed) 4 = Nellymoser 16kHz Mono 5 = Nellymoser 8kHz Mono 6 = Nellymoser 7 = G.711 A-law logarithmic PCM 8 = G.711 mu-law logarithmic PCM 10 = AAC 11 = Speex 13 = MP3 8-Khz 15 = Device-specific sound
'Bit4-5'	AudioSampleRate	no	
'Bit6'	AudioBitsPerSample	no	
'Bit7'	AudioChannels	no	1 = 1 (mono) 2 = 2 (stereo)

# Flash Video Tags

Information extracted from the Flash Video header.

Tag ID	Tag Name	Writable	Values / Notes
'Bit4-7'	VideoEncoding	no	1 = JPEG 2 = Sorenson H.263 3 = Screen Video 4 = On2 VP6 5 = On2 VP6 Alpha 6 = Screen Video 2 7 = H.264

# Flash Meta Tags

Below are a few observed FLV Meta tags, but ExifTool will attempt to extract information from any tag found.

Tag ID	Tag Name	Writable	Values / Notes
'audiocodecid'	AudioCodecID	no	
'audiodatarate'	AudioBitrate	no	
'audiodelay'	AudioDelay	no	
'audiosamplerate'	AudioSampleRate	no	
'audiosamplesize'	AudioSampleSize	no	
'audiosize'	AudioSize	no	
'bytelength'	ByteLength	no	
'canSeekToEnd'	CanSeekToEnd	no	
'canseekontime'	CanSeekOnTime	no	
'createdby'	CreatedBy	no	
'creationdate'	CreateDate	no	
'cuePoints'	CuePoint	-	--> <a href="#">Flash CuePoint Tags</a>
'datasize'	DataSize	no	
'duration'	Duration	no	
'filesize'	FileSizeBytes	no	
'framerate'	FrameRate	no	
'hasAudio'	HasAudio	no	
'hasCuePoints'	HasCuePoints	no	
'hasKeyframes'	HasKeyFrames	no	
'hasMetadata'	HasMetadata	no	
'hasVideo'	HasVideo	no	
'height'	ImageHeight	no	
'httphostheader'	HTTPHostHeader	no	
'keyframesFilepositions'	KeyFramePositions	no	
'keyframesTimes'	KeyFramesTimes	no	
'lastkeyframetimestamp'	LastKeyFrameTime	no	
'lasttimestamp'	LastTimeStamp	no	
'liveXML'	XMP	-	--> <a href="#">XMP Tags</a>
'metadatacreator'	MetadataCreator	no	
'metadatadate'	MetadataDate	no	
'pmsg'	Message	no	
'purl'	URL	no	
'sourcedata'	SourceData	no	
'starttime'	StartTime	no	
'stereo'	Stereo	no	
'totaldatarate'	TotalDataRate	no	
'totalduration'	TotalDuration	no	
'videocodecid'	VideoCodecID	no	
'videodatarate'	VideoBitrate	no	
'videosize'	VideoSize	no	
'width'	ImageWidth	no	

## Flash CuePoint Tags

These tag names are added to the CuePoint name to generate complete tag names like "CuePoint0Name".

Tag ID	Tag Name	Writable	Values / Notes
'name'	Name	no	
'parameters'	Parameter	-	--> <a href="#">Flash Parameter Tags</a>
'time'	Time	no	
'type'	Type	no	

# Flash Parameter Tags

There are no pre-defined parameter tags, but ExifTool will extract any existing parameters, with tag names like "CuePoint0ParameterXxx".

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

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Last revised Jul 9, 2015

[<-- ExifTool Tag Names](#)

# FlashPix Tags

The FlashPix file format, introduced in 1996, was developed by Kodak, Hewlett-Packard and Microsoft. Internally the FPX file structure mimics that of an old DOS disk with fixed-sized "sectors" (usually 512 bytes) and a "file allocation table" (FAT). No wonder this image format never became popular. However, some of the structures used in FlashPix streams are part of the EXIF specification, and are still being used in the APP2 FPXR segment of JPEG images by some digital cameras from manufacturers such as FujiFilm, Hewlett-Packard, Kodak and Sanyo.

ExifTool extracts FlashPix information from both FPX images and the APP2 FPXR segment of JPEG images. As well, FlashPix information is extracted from DOC, PPT, XLS (Microsoft Word, PowerPoint and Excel) documents, VSD (Microsoft Visio) drawings, and FLA (Macromedia/Adobe Flash project) files since these are based on the same file format as FlashPix (the Windows Compound Binary File format). Note that ExifTool identifies any unrecognized Windows Compound Binary file as a FlashPix (FPX) file. See <http://graphcomp.com/info/specs/livepicture/fpx.pdf> for the FlashPix specification.

Note that Microsoft is not consistent with the time zone used for some date/time tags, and it may be either UTC or local time depending on the software used to create the file.

Tag ID	Tag Name	Writable	Values / Notes
"\x01CompObj"	CompObj	-	--> <a href="#">FlashPix CompObj Tags</a>
"\x05Audio Info"	AudioInfo	-	--> <a href="#">FlashPix AudioInfo Tags</a>
"\x05Data Object"	DataObject	-	--> <a href="#">FlashPix DataObject Tags</a>
"\x05DocumentSummaryInformation"	DocumentInfo	-	--> <a href="#">FlashPix DocumentInfo Tags</a>
"\x05Extension List"	Extensions	-	--> <a href="#">FlashPix Extensions Tags</a>
"\x05Global Info"	GlobalInfo	-	--> <a href="#">FlashPix GlobalInfo Tags</a>
"\x05Image Contents"	Image	-	--> <a href="#">FlashPix Image Tags</a>
"\x05Image Info"	ImageInfo	-	--> <a href="#">FlashPix ImageInfo Tags</a>
"\x05Operation"	Operation	-	--> <a href="#">FlashPix Operation Tags</a>
"\x05Screen Nail"	ScreenNail	no	
"\x05SummaryInformation"	SummaryInfo	-	--> <a href="#">FlashPix SummaryInfo Tags</a>
"\x05Transform"	Transform	-	--> <a href="#">FlashPix Transform Tags</a>
'Audio Stream'	AudioStream	no	
'BasicFileInfo'	BasicFileInfo	no	
'Contents'	Contents	-	--> <a href="#">XMP Tags</a> (found in FLA files; may contain XMP)
'Current User'	CurrentUser	no	
'ICC Profile 0001'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a>
'leImg'	EmbeddedImage	no	(embedded images in Scene7 vignette VNT files. The EmbeddedImage Class and Rectangle are also extracted for applicable images, and may be associated with the corresponding EmbeddedImage via the family 3 group name)
'leImg_class'	EmbeddedImageClass	no	(not a real tag. This information is extracted if available for the corresponding EmbeddedImage from the Contents of a VNT file)
'leImg_rect'	EmbeddedImageRectangle	no	(not a real tag. This information is extracted if available for the corresponding EmbeddedImage from the Contents of a VNT file)
'Preview'	PreviewImage	no	(written by some FujiFilm models)
'Property'	PreviewInfo	-	--> <a href="#">FlashPix PreviewInfo Tags</a>
'Subimage 0000 Header'	SubimageHdr	-	--> <a href="#">FlashPix SubimageHdr Tags</a>
'WordDocument'	WordDocument	-	--> <a href="#">FlashPix WordDocument Tags</a>
'_eeJPG'	EmbeddedImage	no	(Not a real tag. Extracted from stream content when the ExtractEmbedded option is used)
'_eeLink'	LinkedFileName	no	(Not a real tag. Extracted from stream content when the ExtractEmbedded option is used)

## FlashPix CompObj Tags

Index4	Tag Name	Writable	Values / Notes
0	CompObjUserTypeLen	no	
1	CompObjUserType	no	

## FlashPix AudioInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## FlashPix DataObject Tags

Tag ID	Tag Name	Writable	Values / Notes
0x10000	DataObjectID	no	
0x10002	LockedPropertyList	no	
0x10003	DataObjectTitle	no	
0x10004	LastModifier	no	
0x10005	RevisionNumber	no	
0x10006	DataCreateDate	no	
0x10007	DataModifyDate	no	
0x10008	CreatingApplication	no	
0x10100	DataObjectStatus	no	
0x10101	CreatingTransform	no	
0x10102	UsingTransforms	no	
0x10000000	CachedImageHeight	no	
0x10000001	CachedImageWidth	no	

## FlashPix DocumentInfo Tags

The DocumentSummaryInformation property set includes a UserDefined property set for which only the Hyperlinks and HyperlinkBase tags are pre-defined. However, ExifTool will also extract any other information found in the UserDefined properties.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	Category	no	
0x0003	PresentationTarget	no	
0x0004	Bytes	no	
0x0005	Lines	no	
0x0006	Paragraphs	no	
0x0007	Slides	no	
0x0008	Notes	no	
0x0009	HiddenSlides	no	
0x000a	MMCclips	no	
0x000b	ScaleCrop	no	0 = No 1 = Yes
0x000c	HeadingPairs	no	
0x000d	TitleOfParts	no	
0x000e	Manager	no	
0x000f	Company	no	
0x0010	LinksUpToDate	no	0 = No 1 = Yes

0x0011	CharCountWithSpaces	no	
0x0013	SharedDoc	no	0 = No 1 = Yes
0x0016	HyperlinksChanged	no	0 = No 1 = Yes
0x0017	AppVersion	no	
0x001a	ContentType	no	
0x001b	ContentStatus	no	
0x001c	Language	no	
0x001d	DocVersion	no	
'_PID_HLINKS'	Hyperlinks	no	
'_PID_LINKBASE'	HyperlinkBase	no	

## FlashPix Extensions Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	ExtensionName	no	
0x0002	ExtensionClassID	no	
0x0003	ExtensionPersistence	no	0 = Always Valid 1 = Invalidated By Modification 2 = Potentially Invalidated By Modification
0x0004	ExtensionCreateDate	no	
0x0005	ExtensionModifyDate	no	
0x0006	CreatingApplication	no	
0x0007	ExtensionDescription	no	
0x1000	Storage-StreamPathname	no	
0x2000	FlashPixStreamPathname	no	
0x2001	FlashPixStreamFieldOffset	no	
0x3000	PropertySetPathname	no	
0x3001	PropertySetIDCodes	no	
0x3002	PropertyVectorElements	no	
0x4000	SubimageResolutions	no	
0x10000000	UsedExtensionNumbers	no	

## FlashPix GlobalInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
0x10002	LockedPropertyList	no	
0x10003	TransformedImageTitle	no	
0x10004	LastModifier	no	
0x10100	VisibleOutputs	no	
0x10101	MaximumImageIndex	no	
0x10102	MaximumTransformIndex	no	
0x10103	MaximumOperationIndex	no	

## FlashPix Image Tags

Tag ID	Tag Name	Writable	Values / Notes
0x1000000	NumberOfResolutions	no	
0x1000002	ImageWidth	no	
0x1000003	ImageHeight	no	
0x1000004	DefaultDisplayHeight	no	
0x1000005	DefaultDisplayWidth	no	
0x1000006	DisplayUnits	no	0 = inches 1 = meters

			2 = cm 3 = mm
0x2000000 SubimageWidth	no		
0x2000001 SubimageHeight	no		
0x2000002 SubimageColor	no	'01 0000' = Opacity Only '01 0001' = Monochrome '01 8000' = Opacity Only (uncalibrated) '01 8001' = Monochrome (uncalibrated) '03 0002' = YCbCr '03 0003' = RGB '03 8002' = YCbCr (uncalibrated) '03 8003' = RGB (uncalibrated) '04 0002' = YCbCr with Opacity '04 0003' = RGB with Opacity '04 8002' = YCbCr with Opacity (uncalibrated) '04 8003' = RGB with Opacity (uncalibrated)	
0x2000003 SubimageNumericalFormat	no	17 = 8-bit, Unsigned 18 = 16-bit, Unsigned 19 = 32-bit, Unsigned	
0x2000004 DecimationMethod	no	0 = None (Full-sized Image) 8 = 8-point Prefilter	
0x2000005 DecimationPrefilterWidth	no		
0x2000007 SubimageICC_Profile	no		
0x3000001 JPEGTables	no		
0x3000002 MaxJPEGTableIndex	no		

## FlashPix ImageInfo Tags

Tag ID	Tag Name	Writable	Values / Notes			
0x21000000 FileSource		no	1 = Film Scanner 2 = Reflection Print Scanner 3 = Digital Camera 4 = Video Capture 5 = Computer Graphics			
0x21000001 SceneType	SceneType	no	1 = Original Scene 2 = Second Generation Scene 3 = Digital Scene Generation			
0x21000002 CreationPathVector		no				
0x21000003 SoftwareRelease		no				
0x21000004 UserDefinedID		no				
0x21000005 SharpnessApproximation		no				
0x22000000 Copyright		no				
0x22000001 OriginalImageBroker		no				
0x22000002 DigitalImageBroker		no				
0x22000003 Authorship		no				
0x22000004 IntellectualPropertyNotes		no				
0x23000000 TestTarget	TestTarget	no	1 = Color Chart 2 = Gray Card 3 = Grayscale 4 = Resolution Chart	5 = Inch Scale 6 = Centimeter Scale 7 = Millimeter Scale 8 = Micrometer Scale		
0x23000002 GroupCaption		no				
0x23000003 CaptionText		no				
0x23000004 People		no				
0x23000007 Things		no				
0x2300000a DateTimeOriginal		no				
0x2300000b Events	Events	no				
0x2300000c Places		no				
0x2300000f ContentDescriptionNotes		no				
0x24000000 Make		no				
0x24000001 Model		no				
0x24000002 SerialNumber		no				
0x25000000 CreateDate		no				

0x25000001	ExposureTime	no	
0x25000002	FNumber	no	
0x25000003	ExposureProgram	no	0 = Not Defined 1 = Manual 2 = Program AE 3 = Aperture-priority AE 4 = Shutter speed priority AE 5 = Creative (Slow speed) 6 = Action (High speed) 7 = Portrait 8 = Landscape 9 = Bulb
0x25000004	BrightnessValue	no	
0x25000005	ExposureCompensation	no	
0x25000006	SubjectDistance	no	
0x25000007	MeteringMode	no	0 = Unknown 1 = Average 2 = Center-weighted average 3 = Spot 4 = Multi-spot 5 = Multi-segment 6 = Partial 255 = Other
0x25000008	LightSource	no	0 = Unknown 1 = Daylight 2 = Fluorescent 3 = Tungsten (Incandescent) 4 = Flash 9 = Fine Weather 10 = Cloudy 11 = Shade 12 = Daylight Fluorescent 13 = Day White Fluorescent 14 = Cool White Fluorescent 15 = White Fluorescent 16 = Warm White Fluorescent 17 = Standard Light A 18 = Standard Light B 19 = Standard Light C 20 = D55 21 = D65 22 = D75 23 = D50 24 = ISO Studio Tungsten 255 = Other
0x25000009	FocalLength	no	
0x2500000a	MaxApertureValue	no	
0x2500000b	Flash	no	1 = No Flash 2 = Flash Fired
0x2500000c	FlashEnergy	no	
0x2500000d	FlashReturn	no	1 = Subject Outside Flash Range 2 = Subject Inside Flash Range
0x2500000e	BackLight	no	1 = Front Lit 2 = Back Lit 1 3 = Back Lit 2
0x2500000f	SubjectLocation	no	
0x25000010	ExposureIndex	no	
0x25000011	SpecialEffectsOpticalFilter	no	1 = None            5 = Polarizing 2 = Colored        6 = Split-field 3 = Diffusion      7 = Star 4 = Multi-image
0x25000012	PerPictureNotes	no	
0x26000000	SensingMethod	no	1 = Monochrome area 2 = One-chip color area 3 = Two-chip color area 4 = Three-chip color area 5 = Color sequential area 6 = Monochrome linear 7 = Trilinear 8 = Color sequential linear

0x26000001	FocalPlaneXResolution	no	
0x26000002	FocalPlaneYResolution	no	
0x26000003	FocalPlaneResolutionUnit	no	1 = None 2 = inches 3 = cm 4 = mm 5 = um
0x26000004	SpatialFrequencyResponse	no	
0x26000005	CFAPattern	no	
0x26000007	ISO	no	
0x26000008	Opto-ElectricConvFactor	no	
0x27000000	FilmBrand	no	
0x27000001	FilmCategory	no	
0x27000002	FilmSize	no	
0x27000003	FilmRollNumber	no	
0x27000004	FilmFrameNumber	no	
0x28000000	ScannerMake	no	
0x28000001	ScannerModel	no	
0x28000002	ScannerSerialNumber	no	
0x28000003	ScanSoftware	no	
0x28000004	ScanSoftwareRevisionDate	no	
0x28000005	ServiceOrganizationName	no	
0x28000006	ScanOperatorID	no	
0x28000008	ScanDate	no	
0x28000009	ModifyDate	no	
0x2800000a	ScannerPixelSize	no	
0x29000000	OriginalScannedImageSize	no	
0x29000001	OriginalDocumentSize	no	
0x29000002	OriginalMedium	no	1 = Continuous Tone Image 2 = Halftone Image 3 = Line Art
0x29000003	TypeOfOriginal	no	1 = B&W Print 2 = Color Print 3 = B&W Document 4 = Color Document

## FlashPix Operation Tags

Tag ID	Tag Name	Writable	Values / Notes
0x10000	OperationID	no	

## FlashPix SummaryInfo Tags

The Dictionary, CodePage and LocalIndicator tags are common to all FlashPix property tables, even though they are only listed in the SummaryInfo table.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Dictionary	no	
0x0001	CodePage	no	--> <a href="#">Microsoft CodePage Values</a>
0x0002	Title	no	
0x0003	Subject	no	
0x0004	Author	no	
0x0005	Keywords	no	
0x0006	Comments	no	
0x0007	Template	no	
0x0008	LastModifiedBy	no	
0x0009	RevisionNumber	no	

0x000a	TotalEditTime	no	
0x000b	LastPrinted	no	
0x000c	CreateDate	no	
0x000d	ModifyDate	no	
0x000e	Pages	no	
0x000f	Words	no	
0x0010	Characters	no	
0x0011	ThumbnailClip	no	
0x0012	Software	no	
0x0013	Security	no	0x0 = None Bit 0 = Password protected Bit 1 = Read-only recommended Bit 2 = Read-only enforced Bit 3 = Locked for annotations
0x0022	CreatedBy	no	
0x0023	DocumentID	no	
0x80000000	LocaleIndicator	no	

## FlashPix Transform Tags

Tag ID	Tag Name	Writable	Values / Notes
0x10000	TransformNodeID	no	
0x10001	OperationClassID	no	
0x10002	LockedPropertyList	no	
0x10003	TransformTitle	no	
0x10004	LastModifier	no	
0x10005	RevisionNumber	no	
0x10006	TransformCreateDate	no	
0x10007	TransformModifyDate	no	
0x10008	CreatingApplication	no	
0x10100	InputDataObjectList	no	
0x10101	OutputDataObjectList	no	
0x10102	OperationNumber	no	
0x10000000	ResultAspectRatio	no	
0x10000001	RectangleOfInterest	no	
0x10000002	Filtering	no	
0x10000003	SpatialOrientation	no	
0x10000004	ColorTwistMatrix	no	
0x10000005	ContrastAdjustment	no	

## FlashPix PreviewInfo Tags

Preview information written by some FujiFilm models.

Index1	Tag Name	Writable	Values / Notes
13	PreviewImageWidth	no	
23	PreviewImageHeight	no	

## FlashPix SubimageHdr Tags

Index4	Tag Name	Writable	Values / Notes
1	SubimageWidth	no	
2	SubimageHeight	no	
3	SubimageTileCount	no	
4	SubimageTileWidth	no	
5	SubimageTileHeight	no	

# FlashPix WordDocument Tags

Tags extracted from the Microsoft Word document stream.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Identification	no	0x626a = Word 98 Mac 0x6a62 = MS Word 97 0xa5dc = Word 6.0/7.0 0xa5ec = Word 8.0
0x0003	LanguageCode	no	0x400 = None 0x401 = Arabic 0x402 = Bulgarian 0x403 = Catalan 0x404 = Traditional Chinese 0x405 = Czech 0x406 = Danish 0x407 = German 0x408 = Greek 0x409 = English (US) 0x40a = Spanish (Castilian) 0x40b = Finnish 0x40c = French 0x40d = Hebrew 0x40e = Hungarian 0x40f = Icelandic 0x410 = Italian 0x411 = Japanese 0x412 = Korean 0x413 = Dutch 0x414 = Norwegian (Bokmal) 0x415 = Polish 0x416 = Portuguese (Brazilian) 0x417 = Rhaeto-Romanic 0x418 = Romanian 0x419 = Russian 0x41a = Croato-Serbian (Latin) 0x41b = Slovak 0x41c = Albanian 0x41d = Swedish 0x41e = Thai 0x41f = Turkish 0x420 = Urdu 0x421 = Bahasa 0x422 = Ukrainian 0x423 = Byelorussian 0x424 = Slovenian 0x425 = Estonian 0x426 = Latvian 0x427 = Lithuanian 0x429 = Farsi 0x42d = Basque 0x42f = Macedonian 0x436 = Afrikaans 0x43e = Malaysian 0x804 = Simplified Chinese 0x807 = German (Swiss) 0x809 = English (British) 0x80a = Spanish (Mexican) 0x80c = French (Belgian) 0x810 = Italian (Swiss) 0x813 = Dutch (Belgian) 0x814 = Norwegian (Nynorsk) 0x816 = Portuguese 0x81a = Serbo-Croatian (Cyrillic) 0xc09 = English (Australian) 0xc0c = French (Canadian) 0x100c = French (Swiss)
0x0005	DocFlags	no	[val & 0xff0f] Bit 0 = Template      Bit 10 = Read only Bit 1 = AutoText only      Bit 11 = Passworded Bit 2 = Complex      Bit 12 = ExtChar Bit 3 = Has picture      Bit 13 = Load override Bit 8 = Encrypted      Bit 14 = Far east Bit 9 = 1Table      Bit 15 = Obfuscated

9.1 System	no	[val & 0x1] 0 = Windows 1 = Macintosh
9.2 Word97	no	[val >> 4 & 0x1] 0 = No 1 = Yes

## FlashPix DocTable Tags

Tags extracted from the Microsoft Word document table.

Tag Name	Writable	Values / Notes
CommentBy	no	(enable <a href="#">Duplicates</a> option to extract all entries)
DOP	-	--> <a href="#">FlashPix DOP Tags</a>
LastSavedBy	no	(enable <a href="#">Duplicates</a> option to extract history of up to 10 entries)
ModifyDate	no	

## FlashPix DOP Tags

Microsoft office document properties.

Index1	Tag Name	Writable	Values / Notes
20	CreateDate	no	
24	ModifyDate	no	
28	LastPrinted	no	
32	RevisionNumber	no	
34	TotalEditTime	no	
38	Words	no	
42	Characters	no	
46	Pages	no	
48	Paragraphs	no	
56	Lines	no	

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*Last revised Jul 8, 2025*

[<- ExifTool Tag Names](#)

# Font Tags

This table contains a collection of tags found in font files of various formats. ExifTool current recognizes OTF, TTF, TTC, DFONT, PFA, PFB, PFM, AFM, ACFM, AMFM, WOFF and WOFF2 font files.

Tag ID	Tag Name	Writable	Values / Notes
'AFM'	AFM	-	--> <a href="#">Font AFM Tags</a>
'C2PA'	C2PA	-	--> <a href="#">Jpeg2000 Tags</a>
'PFM'	PFMHeader	-	--> <a href="#">Font PFM Tags</a>
'PSInfo'	PSFontInfo	-	--> <a href="#">Font PSInfo Tags</a>
'WOFFVersion'	WOFFVersion	no	
'XML'	XML	-	--> <a href="#">Font XML Tags</a>
'fontname'	FontName	no	
'name'	Name	-	--> <a href="#">Font Name Tags</a>
'numfonts'	NumFonts	no	
'postfont'	PostScriptFontName	no	

## Font AFM Tags

Tags extracted from Adobe Font Metrics files (AFM, ACFM and AMFM).

Tag ID	Tag Name	Writable	Values / Notes
'Ascender'	Ascender	no	
'CapHeight'	CapHeight	no	
'CharacterSet'	CharacterSet	no	
'Characters'	Characters	no	
'Creation Date'	CreateDate	no	
'Descender'	Descender	no	
'EncodingScheme'	EncodingScheme	no	
'EscChar'	EscChar	no	
'FamilyName'	FontFamily	no	
'FontName'	FontName	no	
'FullName'	FullName	no	
'IsBaseFont'	IsBaseFont	no	
'IsFixedV'	IsFixedV	no	
'MappingScheme'	MappingScheme	no	
'Notice'	Notice	no	
'Version'	Version	no	
'Weight'	Weight	no	
'XHeight'	XHeight	no	

## Font PFM Tags

Tags extracted from the PFM file header.

Index1	Tag Name	Writable	Values / Notes
0	PFMVersion	no	
6	Copyright	no	
66	FontType	no	
68	PointSize	no	
70	YResolution	no	
72	XResolution	no	
74	Ascent	no	
76	InternalLeading	no	
78	ExternalLeading	no	

80	Italic	no
81	Underline	no
82	Strikeout	no
83	Weight	no
85	CharacterSet	no
86	PixWidth	no
88	PixHeight	no
90	PitchAndFamily	no
91	AvgWidth	no
93	MaxWidth	no
95	FirstChar	no
96	LastChar	no
97	DefaultChar	no
98	BreakChar	no
99	WidthBytes	no

## Font PSInfo Tags

Tags extracted from PostScript font files (PFA and PFB).

Tag ID	Tag Name	Writable	Values / Notes
'Copyright'	Copyright	no	
'FSType'	FSType	no	
'FamilyName'	FontFamily	no	
'FontName'	FontName	no	
'FontType'	FontType	no	
'FullName'	FullName	no	
'ItalicAngle'	ItalicAngle	no	
'Notice'	Notice	no	
'UnderlinePosition'	UnderlinePosition	no	
'UnderlineThickness'	UnderlineThickness	no	
'Weight'	Weight	no	
'isFixedPitch'	IsFixedPitch	no	
'version'	Version	no	

## Font XML Tags

Tags found in WOFF and WOFF2 XML metadata.

Tag ID	Tag Name	Writable	Values / Notes
'copyrightText'	Copyright	no	
'creditsCreditClass'	CreditClass	no	
'creditsCreditDir'	CreditDir	no	
'creditsCreditName'	CreditName	no	
'creditsCreditRole'	CreditRole	no	
'creditsCreditUrl'	CreditURL	no	
'descriptionText'	Description	no	
'descriptionUrl'	DescriptionUrl	no	
'extensionId'	ExtensionID	no	
'extensionItemId'	ExtensionItemID	no	
'extensionItemName'	ExtensionItemName	no	
'extensionItemValue'	ExtensionItemValue	no	
'extensionName'	ExtensionName	no	
'licenseId'	LicenseID	no	

'licenseText'	License	no	
'licenseUrl'	LicenseURL	no	
'licenseeClass'	LicenseeClass	no	
'licenseeDir'	LicenseeDir	no	
'licenseeName'	LicenseeName	no	
'trademarkText'	Trademark	no	
'uniqueId'	UniqueID	no	
'vendorClass'	VendorClass	no	
'vendorDir'	VendorDir	no	
'vendorName'	VendorName	no	
'vendorUrl'	VendorURL	no	
'version'	Version	no	

## Font Name Tags

The following tags are extracted from the TrueType font "name" table found in OTF, TTF, TTC, DFONT, WOFF and WOFF2 files. These tags support localized languages by adding a hyphen followed by a language code to the end of the tag name (eg. "Copyright-fr" or "License-en-US"). Tags with no language code use the default language of "en".

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Copyright	no	
0x0001	FontFamily	no	
0x0002	FontSubfamily	no	
0x0003	FontSubfamilyID	no	
0x0004	FontName	no	
0x0005	NameTableVersion	no	
0x0006	PostScriptFontName	no	
0x0007	Trademark	no	
0x0008	Manufacturer	no	
0x0009	Designer	no	
0x000a	Description	no	
0x000b	VendorURL	no	
0x000c	DesignerURL	no	
0x000d	License	no	
0x000e	LicenseInfoURL	no	
0x0010	PreferredFamily	no	
0x0011	PreferredSubfamily	no	
0x0012	CompatibleFontName	no	
0x0013	SampleText	no	
0x0014	PostScriptFontName	no	
0x0015	WWSFamilyName	no	
0x0016	WWSSubfamilyName	no	

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*Last revised Oct 24, 2025*

[--> ExifTool Tag Names](#)

# FotoStation Tags

The following tables define information found in the FotoWare FotoStation trailer.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	IPTC	-	--> <a href="#">IPTC Tags</a>
0x0002	SoftEdit	-	--> <a href="#">FotoStation SoftEdit Tags</a>
0x0003	ThumbnailImage	yes	
0x0004	PreviewImage	yes	

## FotoStation SoftEdit Tags

Index4	Tag Name	Writable	Values / Notes
0	OriginalImageWidth	int32s	
1	OriginalImageHeight	int32s	
2	ColorPlanes	int32s	
3	XYResolution	int32s	
4	Rotation	int32s	(rotations are stored as degrees CCW * 100, but converted to degrees CW by ExifTool)
6	CropLeft	int32s	
7	CropTop	int32s	
8	CropRight	int32s	
9	CropBottom	int32s	
11	CropRotation	int32s	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Oct 20, 2006

[-- ExifTool Tag Names](#)

# FujiFilm Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Version	undef	
0x0010	InternalSerialNumber	string	(this number is unique for most models, and contains the camera model ID and the date of manufacture)
0x1000	Quality	string	
0x1001	Sharpness	int16u	0x0 = -4 (softest) 0x1 = -3 (very soft) 0x2 = -2 (soft) 0x3 = 0 (normal) 0x4 = +2 (hard) 0x5 = +3 (very hard) 0x6 = +4 (hardest) 0x82 = -1 (medium soft) 0x84 = +1 (medium hard) 0x8000 = Film Simulation 0xffff = n/a
0x1002	WhiteBalance	int16u	0x0 = Auto 0x1 = Auto (white priority) 0x2 = Auto (ambiance priority) 0x100 = Daylight 0x200 = Cloudy 0x300 = Daylight Fluorescent 0x301 = Day White Fluorescent 0x302 = White Fluorescent 0x303 = Warm White Fluorescent 0x304 = Living Room Warm White Fluorescent 0x400 = Incandescent 0x500 = Flash 0x600 = Underwater 0xf00 = Custom 0xf01 = Custom2 0xf02 = Custom3 0xf03 = Custom4 0xf04 = Custom5 0xff0 = Kelvin
0x1003	Saturation	int16u	0x0 = 0 (normal) 0x80 = +1 (medium high) 0xc0 = +3 (very high) 0xe0 = +4 (highest) 0x100 = +2 (high) 0x180 = -1 (medium low) 0x200 = Low 0x300 = None (B&W) 0x301 = B&W Red Filter 0x302 = B&W Yellow Filter 0x303 = B&W Green Filter 0x310 = B&W Sepia 0x400 = -2 (low) 0x4c0 = -3 (very low) 0x4e0 = -4 (lowest) 0x500 = Acros 0x501 = Acros Red Filter 0x502 = Acros Yellow Filter 0x503 = Acros Green Filter 0x8000 = Film Simulation
0x1004	Contrast	int16u	0x0 = Normal 0x80 = Medium High 0x100 = High 0x180 = Medium Low 0x200 = Low 0x8000 = Film Simulation
0x1005	ColorTemperature	int16u	
0x1006	Contrast	int16u	0x0 = Normal 0x100 = High 0x300 = Low
0x100a	WhiteBalanceFineTune	int32s[2]	(newer cameras should divide these values by 20)
0x100b	NoiseReduction	int16u	0x40 = Low 0x80 = Normal 0x100 = n/a

0x100e	NoiseReduction	int16u	0x0 = 0 (normal) 0x100 = +2 (strong) 0x180 = +1 (medium strong) 0x1c0 = +3 (very strong) 0x1e0 = +4 (strongest) 0x200 = -2 (weak) 0x280 = -1 (medium weak) 0x2c0 = -3 (very weak) 0x2e0 = -4 (weakest)
0x100f	Clarity	int32s	-5000 = -5   -1000 = -1   3000 = 3 -4000 = -4   0 = 0   4000 = 4 -3000 = -3   1000 = 1   5000 = 5 -2000 = -2   2000 = 2
0x1010	FujiFlashMode	int16u	0x0 = Auto 0x1 = On 0x2 = Off 0x3 = Red-eye reduction 0x4 = External 0x10 = Commander 0x8000 = Not Attached 0x8120 = TTL 0x8320 = TTL Auto - Did not fire 0x9840 = Manual 0x9860 = Flash Commander 0x9880 = Multi-flash 0xa920 = 1st Curtain (front) 0xaa20 = TTL Slow - 1st Curtain (front) 0xab20 = TTL Auto - 1st Curtain (front) 0xad20 = TTL - Red-eye Flash - 1st Curtain (front) 0xae20 = TTL Slow - Red-eye Flash - 1st Curtain (front) 0xaf20 = TTL Auto - Red-eye Flash - 1st Curtain (front) 0xc920 = 2nd Curtain (rear) 0xca20 = TTL Slow - 2nd Curtain (rear) 0xcb20 = TTL Auto - 2nd Curtain (rear) 0xcd20 = TTL - Red-eye Flash - 2nd Curtain (rear) 0xce20 = TTL Slow - Red-eye Flash - 2nd Curtain (rear) 0xcf20 = TTL Auto - Red-eye Flash - 2nd Curtain (rear) 0xe920 = High Speed Sync (HSS)
0x1011	FlashExposureComp	rational64s	
0x1020	Macro	int16u	0 = Off 1 = On
0x1021	FocusMode	int16u	0 = Auto 1 = Manual 65535 = Movie
0x1022	AFMode	int16u	("No" for manual and some AF-multi focus modes) 0 = No 1 = Single Point 256 = Zone 512 = Wide/Tracking
0x1023	FocusPixel	int16u[2]	
0x102b	PrioritySettings	-	--> <a href="#">FujiFilm PrioritySettings Tags</a>
0x102d	FocusSettings	-	--> <a href="#">FujiFilm FocusSettings Tags</a>
0x102e	AFCSettings	-	--> <a href="#">FujiFilm AFCSettings Tags</a>
0x1030	SlowSync	int16u	0 = Off 1 = On
0x1031	PictureMode	int16u	0x0 = Auto 0x1 = Portrait 0x2 = Landscape 0x3 = Macro 0x4 = Sports 0x5 = Night Scene 0x6 = Program AE 0x7 = Natural Light 0x8 = Anti-blur 0x9 = Beach & Snow 0xa = Sunset 0xb = Museum 0xc = Party 0xd = Flower 0xe = Text 0xf = Natural Light & Flash 0x10 = Beach 0x11 = Snow 0x12 = Fireworks

			0x13 = Underwater 0x14 = Portrait with Skin Correction 0x16 = Panorama 0x17 = Night (tripod) 0x18 = Pro Low-light 0x19 = Pro Focus 0x1a = Portrait 2 0x1b = Dog Face Detection 0x1c = Cat Face Detection 0x30 = HDR 0x40 = Advanced Filter 0x100 = Aperture-priority AE 0x200 = Shutter speed priority AE 0x300 = Manual
0x1032	ExposureCount	int16u	(number of exposures used for this image)
0x1033	EXRAuto	int16u	0 = Auto 1 = Manual
0x1034	EXRMode	int16u	0x100 = HR (High Resolution) 0x200 = SN (Signal to Noise priority) 0x300 = DR (Dynamic Range priority)
0x1037	MultipleExposure	int16u	1 = Additive 2 = Average 3 = Light 4 = Dark
0x1040	ShadowTone	int32s	-64 = +4 (hardest)      0 = 0 (normal) -48 = +3 (very hard)      16 = -1 (medium soft) -32 = +2 (hard)      32 = -2 (soft) -16 = +1 (medium hard)
0x1041	HighlightTone	int32s	-64 = +4 (hardest)      0 = 0 (normal) -48 = +3 (very hard)      16 = -1 (medium soft) -32 = +2 (hard)      32 = -2 (soft) -16 = +1 (medium hard)
0x1044	DigitalZoom	int32u	
0x1045	LensModulationOptimizer	int32u	0 = Off 1 = On
0x1047	GrainEffectRoughness	int32s	0 = Off 32 = Weak 64 = Strong
0x1048	ColorChromeEffect	int32s	0 = Off 32 = Weak 64 = Strong
0x1049	BWAdjustment	int8s	(positive values are warm, negative values are cool)
0x104b	BWMagentaGreen	int8s	(positive values are green, negative values are magenta)
0x104c	GrainEffectSize	int16u	0 = Off 16 = Small 32 = Large
0x104d	CropMode	int16u	0 = n/a 1 = Full-frame on GFX 2 = Sports Finder Mode 4 = Electronic Shutter 1.25x Crop 8 = Digital Tele-Conv
0x104e	ColorChromeFXBlue	int32s	0 = Off 32 = Weak 64 = Strong
0x1050	ShutterType	int16u	0 = Mechanical 1 = Electronic 2 = Electronic (long shutter speed) 3 = Electronic Front Curtain
0x1051	CropFlag	int8u	(this tag exists only if the image was cropped, and is 0 for cropped JPG image or 1 for a cropped RAF)
0x1052	CropTopLeft	int32u	
0x1053	CropSize	int32u	
0x1100	AutoBracketing	int16u	(X-T3 only) 0 = Off 1 = On 2 = Pre-shot (other models) 0 = Off 1 = On 2 = No flash & flash 6 = Pixel Shift

0x1101	SequenceNumber	int16u	
0x1102	WhiteBalanceBracketing	int16u	0x1ff = +/- 1 0x2ff = +/- 2 0x3ff = +/- 3
0x1103	DriveSettings	-	--> <a href="#">FujiFilm DriveSettings Tags</a>
0x1105	PixelShiftShots	int16u	
0x1106	PixelShiftOffset	rational64s[2]	
0x1150	CompositeImageMode	int32u	0 = n/a            32 = Panorama 1 = Pro Low-light    128 = HDR 2 = Pro Focus        1024 = Multi-exposure
0x1151	CompositeImageCount1	int16u	
0x1152	CompositeImageCount2	int16u	
0x1153	PanoramaAngle	int16u	
0x1154	PanoramaDirection	int16u	1 = Right 2 = Left 3 = Up 4 = Down
0x1201	AdvancedFilter	int32u	0x10000 = Pop Color 0x20000 = Hi Key 0x30000 = Toy Camera 0x40000 = Miniature 0x50000 = Dynamic Tone 0x60001 = Partial Color Red 0x60002 = Partial Color Yellow 0x60003 = Partial Color Green 0x60004 = Partial Color Blue 0x60005 = Partial Color Orange 0x60006 = Partial Color Purple 0x70000 = Soft Focus 0x90000 = Low Key 0x100000 = Light Leak 0x130000 = Expired Film Green 0x130001 = Expired Film Red 0x130002 = Expired Film Neutral
0x1210	ColorMode	int16u	0x0 = Standard 0x10 = Chrome 0x30 = B & W
0x1300	BlurWarning	int16u	0 = None 1 = Blur Warning
0x1301	FocusWarning	int16u	0 = Good 1 = Out of focus
0x1302	ExposureWarning	int16u	0 = Good 1 = Bad exposure
0x1304	GEImageSize	string	(GE models only)
0x1400	DynamicRange	int16u	1 = Standard 3 = Wide
0x1401	FilmMode	int16u	0x0 = F0/Standard (Provia) 0x100 = F1/Studio Portrait 0x110 = F1a/Studio Portrait Enhanced Saturation 0x120 = F1b/Studio Portrait Smooth Skin Tone (Astia) 0x130 = F1c/Studio Portrait Increased Sharpness 0x200 = F2/Fujichrome (Velvia) 0x300 = F3/Studio Portrait Ex 0x400 = F4/Velvia 0x500 = Pro Neg. Std 0x501 = Pro Neg. Hi 0x600 = Classic Chrome 0x700 = Eterna 0x800 = Classic Negative 0x900 = Bleach Bypass 0xa00 = Nostalgic Neg 0xb00 = Realia ACE
0x1402	DynamicRangeSetting	int16u	0x0 = Auto 0x1 = Manual 0x100 = Standard (100%) 0x200 = Wide1 (230%) 0x201 = Wide2 (400%) 0x8000 = Film Simulation
0x1403	DevelopmentDynamicRange	int16u	
0x1404	MinFocalLength	rational64s	

0x1405	MaxFocalLength	rational64s																					
0x1406	MaxApertureAtMinFocal	rational64s																					
0x1407	MaxApertureAtMaxFocal	rational64s																					
0x140b	AutoDynamicRange	int16u																					
0x1422	ImageStabilization	int16u[3]	<p>[Value 0]            0 = None            3 = OIS Lens            1 = Optical        258 = IBIS/OIS + DIS            2 = Sensor-shift   512 = Digital</p> <p>[Value 1]            0 = Off            1 = On (mode 1, continuous)            2 = On (mode 2, shooting only)</p>																				
0x1425	SceneRecognition	int16u	<p>0x0 = Unrecognized            0x100 = Portrait Image            0x103 = Night Portrait            0x105 = Backlit Portrait            0x200 = Landscape Image            0x300 = Night Scene            0x400 = Macro</p>																				
0x1431	Rating	int32u																					
0x1436	ImageGeneration	int16u	<p>0 = Original Image            1 = Re-developed from RAW</p>																				
0x1438	ImageCount	int16u	(may reset to 0 when new firmware is installed)																				
0x1443	DRangePriority	int16u	<p>0 = Auto            1 = Fixed</p>																				
0x1444	DRangePriorityAuto	int16u	<p>1 = Weak            2 = Strong            3 = Plus</p>																				
0x1445	DRangePriorityFixed	int16u	<p>1 = Weak            2 = Strong</p>																				
0x1446	FlickerReduction	int32u																					
0x1447	FujiModel	string																					
0x1448	FujiModel2	string																					
0x144a	WBRed	int16u																					
0x144b	WBGreen	int16u																					
0x144c	WBBlue	int16u																					
0x144d	RollAngle	rational64s																					
0x3803	VideoRecordingMode	int32u	<p>0x0 = Normal            0x10 = F-log            0x20 = HLG            0x30 = F-log2</p>																				
0x3804	PeripheralLighting	int16u	<p>0 = Off            1 = On</p>																				
0x3806	VideoCompression	int16u	<p>1 = Log GOP            2 = All Intra</p>																				
0x3820	FrameRate	int16u																					
0x3821	FrameWidth	int16u																					
0x3822	FrameHeight	int16u																					
0x3824	FullHDHighSpeedRec	int32u	<p>1 = Off            2 = On</p>																				
0x4005	FaceElementSelected	int16u[4]																					
0x4100	FacesDetected	int16u																					
0x4103	FacePositions	int16u[n]	(left, top, right and bottom coordinates in full-sized image for each face detected)																				
0x4200	NumFaceElements	int16u																					
0x4201	FaceElementTypes	int8u[n]	<p>[Values 0-N]</p> <table> <tbody> <tr><td>1 = Face</td><td>17 = Animal Left Eye</td></tr> <tr><td>2 = Left Eye</td><td>18 = Animal Right Eye</td></tr> <tr><td>3 = Right Eye</td><td>19 = Bird Body</td></tr> <tr><td>7 = Body</td><td>20 = Bird Head</td></tr> <tr><td>8 = Head</td><td>21 = Bird Left Eye</td></tr> <tr><td>9 = Both Eyes</td><td>22 = Bird Right Eye</td></tr> <tr><td>11 = Bike</td><td>23 = Aircraft Body</td></tr> <tr><td>12 = Body of Car</td><td>25 = Aircraft Cockpit</td></tr> <tr><td>13 = Front of Car</td><td>26 = Train Front</td></tr> <tr><td>14 = Animal Body</td><td>27 = Train Cockpit</td></tr> </tbody> </table>	1 = Face	17 = Animal Left Eye	2 = Left Eye	18 = Animal Right Eye	3 = Right Eye	19 = Bird Body	7 = Body	20 = Bird Head	8 = Head	21 = Bird Left Eye	9 = Both Eyes	22 = Bird Right Eye	11 = Bike	23 = Aircraft Body	12 = Body of Car	25 = Aircraft Cockpit	13 = Front of Car	26 = Train Front	14 = Animal Body	27 = Train Cockpit
1 = Face	17 = Animal Left Eye																						
2 = Left Eye	18 = Animal Right Eye																						
3 = Right Eye	19 = Bird Body																						
7 = Body	20 = Bird Head																						
8 = Head	21 = Bird Left Eye																						
9 = Both Eyes	22 = Bird Right Eye																						
11 = Bike	23 = Aircraft Body																						
12 = Body of Car	25 = Aircraft Cockpit																						
13 = Front of Car	26 = Train Front																						
14 = Animal Body	27 = Train Cockpit																						

15 = Animal Head 28 = Animal Head (28)  
16 = Animal Face 29 = Animal Body (29)

0x4203	FaceElementPositions	int16u[n]	(left, top, right and bottom coordinates in full-sized image for each face element)
0x4282	FaceReclInfo	-	--> <a href="#">FujiFilm FaceReclInfo Tags</a>
0x8000	FileSource	string	
0x8002	OrderNumber	int32u	
0x8003	FrameNumber	int16u	
0xb211	Parallax	rational64s	(only found in MPImage2 of .MPO images)

## FujiFilm PrioritySettings Tags

Index2	Tag Name	Writable	Values / Notes
0.1	AF-SPriority	int16u	[val & 0xf] 1 = Release 2 = Focus
0.2	AF-CPriority	int16u	[val >> 4 & 0xf] 1 = Release 2 = Focus

## FujiFilm FocusSettings Tags

Index4	Tag Name	Writable	Values / Notes
0.1	FocusMode2	int32u	[val & 0xf] 0 = AF-M 1 = AF-S 2 = AF-C
0.2	PreAF	int32u	[val >> 4 & 0xf] 0 = Off 1 = On
0.3	AFAreaMode	int32u	[val >> 8 & 0xf] 0 = Single Point 1 = Zone 2 = Wide/Tracking
0.4	AFAreaPointSize	int32u	[val >> 12 & 0xf] 0 = n/a
0.5	AFAreaZoneSize	int32u	[val >> 16 & 0xff] 0 = n/a

## FujiFilm AFCSettings Tags

Index4	Tag Name	Writable	Values / Notes
0	AF-CSetting	int32u	0x102 = Set 1 (multi-purpose) 0x203 = Set 2 (ignore obstacles) 0x122 = Set 3 (accelerating subject) 0x010 = Set 4 (suddenly appearing subject) 0x123 = Set 5 (erratic motion)
0.1	AF-CTrackingSensitivity	int32u	[val & 0xf]
0.2	AF-CSpeedTrackingSensitivity	int32u	[val >> 4 & 0xf]
0.3	AF-CZoneAreaSwitching	int32u	[val >> 8 & 0xf] 0 = Front 1 = Auto 2 = Center

## FujiFilm DriveSettings Tags

Index4	Tag Name	Writable	Values / Notes
0.1	DriveMode	int32u	[val & 0xff] 0 = Single 1 = Continuous Low 2 = Continuous High
0.2	DriveSpeed	int32u	[val >> 24 & 0xff] 0 = n/a

# FujiFilm FaceReclInfo Tags

Face recognition information.

Tag Name	Writable	Values / Notes
Face1Birthday	no	
Face1Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face1Name	no	
Face2Birthday	no	
Face2Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face2Name	no	
Face3Birthday	no	
Face3Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face3Name	no	
Face4Birthday	no	
Face4Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face4Name	no	
Face5Birthday	no	
Face5Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face5Name	no	
Face6Birthday	no	
Face6Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face6Name	no	
Face7Birthday	no	
Face7Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face7Name	no	
Face8Birthday	no	
Face8Category	no	Bit 1 = Partner Bit 2 = Family Bit 3 = Friend
Face8Name	no	

# FujiFilm RAFHeader Tags

Tags extracted from the header of RAF images.

Index1	Tag Name	Writable	Values / Notes
60	RAFVersion	no	
108	RAFCompression	no	0 = Uncompressed 2 = Lossless 3 = Lossy

# FujiFilm RAF Tags

FujiFilm RAF images contain meta information stored in a proprietary FujiFilm RAF format, as well as EXIF information stored inside an embedded JPEG preview image. The table below lists tags currently decoded from the RAF-format information.

Tag ID	Tag Name	Writable	Values / Notes
0x0100	RawImageFullSize	no	(including borders)
0x0110	RawImageCropTopLeft	no	(top margin first, then left margin)
0x0111	RawImageCroppedSize	no	(including borders)
0x0115	RawImageAspectRatio	no	
0x0117	RawZoomActive	no	0 = No 1 = Yes
0x0118	RawZoomTopLeft	no	(relative to RawCroppedImageSize)
0x0119	RawZoomSize	no	(relative to RawCroppedImageSize)
0x0121	RawImageSize	no	
0x0130	FujiLayout	no	
0x0131	XTransLayout	no	
0x2000	WB_GRGBLevelsAuto	no	
0x2100	WB_GRGBLevelsDaylight	no	
0x2200	WB_GRGBLevelsCloudy	no	
0x2300	WB_GRGBLevelsDaylightFluor	no	
0x2301	WB_GRGBLevelsDayWhiteFluor	no	
0x2302	WB_GRGBLevelsWhiteFluorescent	no	
0x2310	WB_GRGBLevelsWarmWhiteFluor	no	
0x2311	WB_GRGBLevelsLivingRoomWarmWhiteFluor	no	
0x2400	WB_GRGBLevelsTungsten	no	
0x2ff0	WB_GRGBLevels	no	
0x9200	RelativeExposure	no	
0x9650	RawExposureBias	no	
0xc000	RAFData	-	--> <a href="#">FujiFilm RAFData Tags</a>

## FujiFilm RAFData Tags

Index1	Tag Name	Writable	Values / Notes
0	RawImageWidth	no	
4	RawImageWidth	no	
	RawImageHeight	no	
8	RawImageWidth	no	
	RawImageHeight	no	
12	RawImageHeight	no	

## FujiFilm IFD Tags

Tags found in the FujiIFD information of RAF images from some models.

Tag ID	Tag Name	Writable	Values / Notes
0xf000	FujiIFD	-	--> <a href="#">FujiFilm IFD Tags</a>
0xf001	RawImageFullWidth	no	
0xf002	RawImageFullHeight	no	
0xf003	BitsPerSample	no	
0xf007	StripOffsets	no	
0xf008	StripByteCounts	no	
0xf00a	BlackLevel	no	
0xf00b	GeometricDistortionParams	no	
0xf00c	WB_GRBLevelsStandard	no	
0xf00d	WB_GRBLevelsAuto	no	
0xf00e	WB_GRBLevels	no	
0xf00f	ChromaticAberrationParams	no	
0xf010	VignettingParams	no	

# FujiFilm MRAW Tags

Tags extracted from the M-RAW header of multi-image RAF files. The family 1 group name for these tags is "M-RAW". Additional metadata may be extracted from the embedded RAW images with the ExtractEmbedded option.

Tag ID	Tag Name	Writable	Values / Notes
0x2001	RawImageNumber	no	
0x2005	ExposureTime	no	
0x2006	FNumber	no	
0x2007	ISO	no	

# FujiFilm FFMV Tags

Information found in the FFMV atom of MOV videos.

Index1	Tag Name	Writable	Values / Notes
0	MovieStreamName	no	

# FujiFilm MOV Tags

This information is found in MOV videos from some FujiFilm cameras.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	
46	ExposureTime	no	
50	FNumber	no	
58	ExposureCompensation	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Sep 20, 2025

[--> ExifTool Tag Names](#)

# GE Tags

This table lists tags found in the maker notes of some General Imaging camera models.

Tag ID	Tag Name	Writable	Values / Notes
0x0202	Macro	int16u	0 = Off 1 = On
0x0207	GEModel	string	
0x0300	GEMake	string	

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Last revised Dec 15, 2010

[<-- ExifTool Tag Names](#)

# GIF Tags

This table lists information extracted from GIF images. See <http://www.w3.org/Graphics/GIF/spec-gif89a.txt> for the official GIF89a specification.

Tag Name	Writable	Values / Notes
Comment	yes	
Duration	no	(duration of a single animation iteration)
Extensions	-	--> <a href="#">GIF Extensions Tags</a>
FrameCount	no	(number of animated images)
GIFVersion	no	
ScreenDescriptor	-	--> <a href="#">GIF Screen Tags</a>
Text	no	(text displayed in image)
TransparentColor	no	

## GIF Extensions Tags

Tags extracted from GIF89a application extensions.

Tag ID	Tag Name	Writable	Values / Notes
'C2PA_GIF/'	JUMBF	-	--> <a href="#">Jpeg2000 Tags</a>
'ICCRGBG1/012'	ICC_Profile	yes	--> <a href="#">ICC Profile Tags</a>
'MIDICTRL/Jon'	MIDIControl	-	--> <a href="#">GIF MIDIControl Tags</a>
'MIDISONG/Dm7'	MIDISong	no	
'NETSCAPE/2.0'	Animation	-	--> <a href="#">GIF Animation Tags</a>
'XMP Data/XMP'	XMP	yes	--> <a href="#">XMP Tags</a>

## GIF MIDIControl Tags

Information extracted from the MIDI control block extension.

Index1	Tag Name	Writable	Values / Notes
0	MIDIControlVersion	no	
1	SequenceNumber	no	
2	MelodicPolyphony	no	
3	PercussivePolyphony	no	
4	ChannelUsage	no	
6	DelayTime	no	

## GIF Animation Tags

Information extracted from the "NETSCAPE2.0" animation extension.

Index1	Tag Name	Writable	Values / Notes
1	AnimationIterations	no	

## GIF Screen Tags

Information extracted from the GIF logical screen descriptor.

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
2	ImageHeight	no	
4.1	HasColorMap	no	[val >> 7 & 0x1] 0 = No 1 = Yes
4.2	ColorResolutionDepth	no	[val >> 4 & 0x7]

4.3 BitsPerPixel	no	[val & 0x7]
5 BackgroundColor	no	
6 PixelAspectRatio	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Nov 8, 2024*

[<- ExifTool Tag Names](#)

# GIMP Tags

The GNU Image Manipulation Program (GIMP) writes these tags in its native XCF (eXperimental Computing Facility) images.

Tag ID	Tag Name	Writable	Values / Notes
'header'	Header	-	--> <a href="#">GIMP Header Tags</a>
0x0011	Compression	no	0 = None 1 = RLE Encoding 2 = Zlib 3 = Fractal
0x0013	Resolution	-	--> <a href="#">GIMP Resolution Tags</a>
0x0014	Tattoo	no	
0x0015	Parasites	-	--> <a href="#">GIMP Parasite Tags</a>
0x0016	Units	no	1 = Inches 2 = mm 3 = Points 4 = Picas

## GIMP Header Tags

Index1	Tag Name	Writable	Values / Notes
9	XCFVersion	no	'file' = 0 'v001' = 1 'v002' = 2
14	ImageWidth	no	
18	ImageHeight	no	
22	ColorMode	no	0 = RGB Color 1 = Grayscale 2 = Indexed Color

## GIMP Resolution Tags

Index4	Tag Name	Writable	Values / Notes
0	XResolution	no	
1	YResolution	no	

## GIMP Parasite Tags

Tag ID	Tag Name	Writable	Values / Notes
'exif-data'	ExifData	-	--> <a href="#">EXIF Tags</a>
'gimp-comment'	Comment	no	
'gimp-image-metadata'	XML	-	--> <a href="#">XMP XML Tags</a>
'gimp-metadata'	XMP	-	--> <a href="#">XMP Tags</a>
'icc-profile'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a>
'icc-profile-name'	ICCPProfileName	no	
'iptc-data'	IPTCData	-	--> <a href="#">IPTC Tags</a>
'jpeg-exif-data'	JPEGExifData	-	--> <a href="#">EXIF Tags</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup  
Last revised Aug 21, 2018)

[--> ExifTool Tag Names](#)

# GM Tags

These tags are extracted from GM/Cosworth PDR (Performance Data Recorder) information found in videos from General Motors cars such as Corvette and Camero.

Use the API [PrintCSV](#) option to output all timed PDR data in CSV format at greatly increased speed and with much lower memory usage. This option prints the numerical values for each channel in CSV format, suitable for import into RaceRender. In this output, the gear numbers for Neutral and Reverse are changed to -1 and -100 respectively for compatibility with RaceRender.

## GM marl Tags

Tags extracted from the 'ctbx' 'marl' (Marlin) box of timed PDR metadata from GM cars. Use the -ee ([API ExtractEmbedded](#)) option to extract this information, or the [API PrintCSV](#) option to output in CSV format.

Tag Name	Writable	Values / Notes
ABSActive	no	
AccelPos	no	
BatteryVoltage	no	
Beacon	no	
BoostPressureInd	no	
BrakePos	no	
CPUFree	no	
CPUIO	no	
CPUIRQ	no	
CPUSystem	no	
CPUUser	no	
ClutchPos	no	
CoolantTemp	no	
CornerExitSetting	no	
DiskReadOperations	no	
DiskReadRate	no	
DiskReadTime	no	
DiskWriteOperations	no	
DiskWriteRate	no	
DiskWriteTime	no	
Distance	no	
DriverPerformanceMode	no	
EngineSpeedRequest	no	
EngineTorqueReq	no	
FuelCapacity	no	
FuelLevel	no	
GPSAltitude	no	
GPSTime	no	(generated from the TimeStamp only if specifically requested)
GPSFix	no	
GPSLatitude	no	
GPSLongitude	no	
GPSTrack	no	
Gear	no	(in the PrintCSV output, the value for Neutral is set to -1, and Reverse to -100 for compatibility with RaceRender) 1 = 1 5 = 5 2 = 2 6 = 6 3 = 3 13 = N 4 = 4 14 = R
InfotainOpMode	no	
IntakeAirTemperature	no	
IntakeBoostPressure	no	

LFTyrePressure	no	
LFTyreTemp	no	
LRTyrePressure	no	
LRTyreTemp	no	
LateralAcceleration	no	
LongitudinalAcceleration	no	
OilPressure	no	
OilTemp	no	
OutsideAirTemperature	no	
RFTyrePressure	no	
RFTyreTemp	no	
RPM	no	
RRTyrePressure	no	
RRTyreTemp	no	
RecordingEventOdometer	no	
Speed	no	
SpeedControlResponse	no	
SpeedRequestIntervention	no	
Steering1Switch	no	
Steering2Switch	no	
SteeringAngle	no	
SuspensionDisplacementLeftFront	no	
SuspensionDisplacementLeftRear	no	
SuspensionDisplacementRightFront	no	
SuspensionDisplacementRightRear	no	
SystemBackupPowerEnabled	no	
SystemBackupPowerMode	no	
SystemPowerMode	no	
TimeStamp	no	(the numerical value is seconds since start of video, but the print conversion adds StartTime to provide a date/time value. Extracted as GPSDateTime if requested)
TractionControlActive	no	
TransOilTemp	no	
TransportStorageMode	no	
ValetMode	no	
VehicleStabilityActive	no	
VerticalAcceleration	no	
WheelspeedLeftDriven	no	
WheelspeedLeftNon-Driven	no	
WheelspeedRightDriven	no	
WheelspeedRightNon-Driven	no	
YawRate	no	

## GM mrId Tags

The Marlin dictionary. Only one channel is listed but all available channels are extracted. Use the -struct ([API Struct](#)) option to extract the channel information as structures.

Tag Name	Writable	Values / Notes
Channel01	struct	--> <a href="#">GM Channel Struct</a>
Channel01Description	no_	(channel description)
Channel01DispMax	no_	(displayed value maximum)
Channel01DispMin	no_	(displayed value minimum)
Channel01Flags	no_	(channel flags)
Channel01ID	no_	(channel ID number)

Channel01Interval	no_	(measurement interval)
Channel01Max	no_	(raw value maximum)
Channel01Min	no_	(raw value minimum)
Channel01Multiplier	no_	(multiplier for raw value)
Channel01Name	no_	(channel name)
Channel01Num	no_	(units ID number)
Channel01Offset	no_	(offset for scaled value)
Channel01Type	no_	(measurement type)
Channel01Units	no_	(units string)

## GM Channel Struct

Information stored for each channel in the Marlin dictionary.

Field Name	Writable	Values / Notes
ID	no	(channel ID number)
Type	no	(measurement type)
Num	no	(units ID number)
Units	no	(units string)
Flags	no	(channel flags)
Interval	no	(measurement interval)
Min	no	(raw value minimum)
Max	no	(raw value maximum)
DispMin	no	(displayed value minimum)
DispMax	no	(displayed value maximum)
Multiplier	no	(multiplier for raw value)
Offset	no	(offset for scaled value)
Name	no	(channel name)
Description	no	(channel description)

## GM mrlh Tags

The Marlin PDR header.

Index1	Tag Name	Writable	Values / Notes
0	MarlinDataVersion	no	

## GM mrlv Tags

Tags found in the 'mrlv' (Marlin values) box.

Tag ID	Tag Name	Writable	Values / Notes
'date'	Date1	no	
'lang'	Language	no	
'Idat'	Date2	no	
'Itim'	Time2	no	
'swvs'	SoftwareVersion	no	
'time'	Time1	no	
'tstm'	StartTime	no	
'unit'	Units	no	'usim' = U.S. Imperial
'zone'	TimeZone	no	

# GPS Tags

These GPS tags are part of the EXIF standard, and are stored in a separate IFD within the EXIF information.

ExifTool is very flexible about the input format when writing lat/long coordinates, and will accept from 1 to 3 floating point numbers (for decimal degrees, degrees and minutes, or degrees, minutes and seconds) separated by just about anything, and will format them properly according to the EXIF specification.

Some GPS tags have values which are fixed-length strings. For these, the indicated string lengths include a null terminator which is added automatically by ExifTool. Remember that the descriptive values are used when writing (eg. 'Above Sea Level', not '0') unless the print conversion is disabled (with '-n' on the command line or the [PrintConv](#) option in the API, or by suffixing the tag name with a # character).

When adding GPS information to an image, it is important to set all of the following tags: GPSLatitude, GPSLatitudeRef, GPSLongitude, GPSLongitudeRef, and GPSAltitude and GPSAltitudeRef if the altitude is known. ExifTool will write the required GPSVersionID tag automatically if new a GPS IFD is added to an image.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	GPSVersionID	int8u[4]:	
0x0001	GPSLatitudeRef	string[2]	(tags 0x0001-0x0006 used for camera location according to MWG 2.0. ExifTool will also accept a number when writing GPSLatitudeRef, positive for north latitudes or negative for south, or a string containing N, North, S or South) 'N' = North 'S' = South
0x0002	GPSLatitude	rational64u[3]	
0x0003	GPSLongitudeRef	string[2]	(ExifTool will also accept a number when writing this tag, positive for east longitudes or negative for west, or a string containing E, East, W or West) 'E' = East 'W' = West
0x0004	GPSLongitude	rational64u[3]	
0x0005	GPSAltitudeRef	int8u	(ExifTool will also accept number when writing this tag, with negative numbers indicating below sea level) 0 = Above Sea Level 1 = Below Sea Level 2 = Positive Sea Level (sea-level ref) 3 = Negative Sea Level (sea-level ref)
0x0006	GPSAltitude	rational64u	
0x0007	GPSTimeStamp	rational64u[3]	(UTC time of GPS fix. When writing, date is stripped off if present, and time is adjusted to UTC if it includes a timezone)
0x0008	GPSSatellites	string	
0x0009	GPSStatus	string[2]	'A' = Measurement Active 'V' = Measurement Void
0x000a	GPSMeasureMode	string[2]	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
0x000b	GPSDOP	rational64u	
0x000c	GPSSpeedRef	string[2]	'K' = km/h 'M' = mph 'N' = knots
0x000d	GPSSpeed	rational64u	
0x000e	GPSTrackRef	string[2]	'M' = Magnetic North 'T' = True North
0x000f	GPSTrack	rational64u	
0x0010	GPSImgDirectionRef	string[2]	'M' = Magnetic North 'T' = True North
0x0011	GPSImgDirection	rational64u	
0x0012	GPSMapDatum	string	
0x0013	GPSDestLatitudeRef	string[2]	(tags 0x0013-0x001a used for subject location according to MWG 2.0) 'N' = North 'S' = South
0x0014	GPSDestLatitude	rational64u[3]	
0x0015	GPSDestLongitudeRef	string[2]	'E' = East 'W' = West
0x0016	GPSDestLongitude	rational64u[3]	
0x0017	GPSDestBearingRef	string[2]	'M' = Magnetic North 'T' = True North

0x0018	GPSDestBearing	rational64u	
0x0019	GPSDestDistanceRef	string[2]	'K' = Kilometers 'M' = Miles 'N' = Nautical Miles
0x001a	GPSDestDistance	rational64u	
0x001b	GPSProcessingMethod	undef	(values of "GPS", "CELLID", "WLAN" or "MANUAL" by the EXIF spec.)
0x001c	GPSAreaInformation	undef	
0x001d	GPSDateStamp	string[11]	(when writing, time is stripped off if present, after adjusting date/time to UTC if time includes a timezone. Format is YYYY:mm:dd)
0x001e	GPSDifferential	int16u	0 = No Correction 1 = Differential Corrected
0x001f	GPSHPositioningError	rational64u	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Mar 3, 2025

[--> ExifTool Tag Names](#)

# GeoTiff Tags

ExifTool extracts the following tags from GeoTIFF images. See <https://web.archive.org/web/20070820121549/http://www.remotesensing.org/geotiff/spec/geotiffhome.html> for the complete GeoTIFF specification. Also included in the table below are ChartTIFF tags (see <https://web.archive.org/web/20020828193928/http://www.charttiff.com/whitepapers.shtml>). GeoTIFF tags are not writable individually, but they may be copied en masse via the block tags GeoTiffDirectory, GeoTiffDoubleParams and GeoTiffAsciiParams.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	GeoTiffVersion	no	
0x0400	GTModelType	no	1 = Projected 2 = Geographic 3 = Geocentric 32767 = User Defined
0x0401	GTRasterType	no	1 = Pixel Is Area 2 = Pixel Is Point 32767 = User Defined
0x0402	GTCitation	no	
0x0800	GeographicType	no	4001 = Airy 1830 4002 = Airy Modified 1849 4003 = Australian National Spheroid 4004 = Bessel 1841 4005 = Bessel Modified 4006 = Bessel Namibia 4007 = Clarke 1858 4008 = Clarke 1866 4009 = Clarke 1866 Michigan 4010 = Clarke 1880 Benoit 4011 = Clarke 1880 IGN 4012 = Clarke 1880 RGS 4013 = Clarke 1880 Arc 4014 = Clarke 1880 SGA 1922 4015 = Everest 1830 1937 Adjustment 4016 = Everest 1830 1967 Definition 4017 = Everest 1830 1975 Definition 4018 = Everest 1830 Modified 4019 = GRS 1980 4020 = Helmert 1906 4021 = Indonesian National Spheroid 4022 = International 1924 4023 = International 1967 4024 = Krassowsky 1940 4025 = NWL9D 4026 = NWL10D 4027 = Plessis 1817 4028 = Struve 1860 4029 = War Office 4030 = WGS84 4031 = GEM10C 4032 = OSU86F 4033 = OSU91A 4034 = Clarke 1880 4035 = Sphere 4120 = Greek 4121 = GGRS87 4123 = KKJ 4124 = RT90 4133 = EST92 4201 = Adindan 4202 = AGD66 4203 = AGD84 4204 = Ain el Abd 4205 = Afgooye 4206 = Agadez 4207 = Lisbon 4208 = Aratu 4209 = Arc 1950 4210 = Arc 1960 4211 = Batavia 4212 = Barbados 4213 = Beduaram 4214 = Beijing 1954 4215 = Belge 1950 4216 = Bermuda 1957

4217 = Bern 1898  
4218 = Bogota  
4219 = Bukit Rimpah  
4220 = Camacupa  
4221 = Campo Inchauspe  
4222 = Cape  
4223 = Carthage  
4224 = Chua  
4225 = Corrego Alegre  
4226 = Cote d Ivoire  
4227 = Deir ez Zor  
4228 = Douala  
4229 = Egypt 1907  
4230 = ED50  
4231 = ED87  
4232 = Fahud  
4233 = Gandajika 1970  
4234 = Garoua  
4235 = Guyane Francaise  
4236 = Hu Tzu Shan  
4237 = HD72  
4238 = ID74  
4239 = Indian 1954  
4240 = Indian 1975  
4241 = Jamaica 1875  
4242 = JAD69  
4243 = Kalianpur  
4244 = Kandawala  
4245 = Kertau  
4246 = KOC  
4247 = La Canoa  
4248 = PSAD56  
4249 = Lake  
4250 = Leigon  
4251 = Liberia 1964  
4252 = Lome  
4253 = Luzon 1911  
4254 = Hito XVIII 1963  
4255 = Herat North  
4256 = Mahe 1971  
4257 = Makassar  
4258 = EUREF89  
4259 = Malongo 1987  
4260 = Manoca  
4261 = Merchich  
4262 = Massawa  
4263 = Minna  
4264 = Mhast  
4265 = Monte Mario  
4266 = M poraloko  
4267 = NAD27  
4268 = NAD Michigan  
4269 = NAD83  
4270 = Nahrwan 1967  
4271 = Naparima 1972  
4272 = GD49  
4273 = NGO 1948  
4274 = 73  
4275 = NTF  
4276 = NSWC 9Z 2  
4277 = OSGB 1936  
4278 = OSGB70  
4279 = OS SN80  
4280 = Padang  
4281 = Palestine 1923  
4282 = Pointe Noire  
4283 = GDA94  
4284 = Pulkovo 1942  
4285 = Qatar  
4286 = Qatar 1948  
4287 = Qornoq  
4288 = Loma Quintana  
4289 = Amersfoort  
4290 = RT38  
4291 = SAD69  
4292 = Sapper Hill 1943  
4293 = Schwarzeck  
4294 = Segora  
4295 = Serindung  
4296 = Sudan

4297 = Tananarive  
 4298 = Timbalai 1948  
 4299 = TM65  
 4300 = TM75  
 4301 = Tokyo  
 4302 = Trinidad 1903  
 4303 = TC 1948  
 4304 = Voirol 1875  
 4305 = Voirol Unifie  
 4306 = Bern 1938  
 4307 = Nord Sahara 1959  
 4308 = Stockholm 1938  
 4309 = Yacare  
 4310 = Yoff  
 4311 = Zanderij  
 4312 = MGI  
 4313 = Belge 1972  
 4314 = DHDN  
 4315 = Conakry 1905  
 4317 = Dealul Piscului 1970  
 4322 = WGS 72  
 4324 = WGS 72BE  
 4326 = WGS 84  
 4801 = Bern 1898 Bern  
 4802 = Bogota Bogota  
 4803 = Lisbon Lisbon  
 4804 = Makassar Jakarta  
 4805 = MGI Ferro  
 4806 = Monte Mario Rome  
 4807 = NTF Paris  
 4808 = Padang Jakarta  
 4809 = Belge 1950 Brussels  
 4810 = Tananarive Paris  
 4811 = Voirol 1875 Paris  
 4812 = Voirol Unifie Paris  
 4813 = Batavia Jakarta  
 4815 = Greek Athens  
 4901 = ATF Paris  
 4902 = NDG Paris  
 32767 = User Defined

0x0801	GeogCitation	no	
0x0802	GeogGeodeticDatum	no	6001 = Airy 1830 6002 = Airy Modified 1849 6003 = Australian National Spheroid 6004 = Bessel 1841 6005 = Bessel Modified 6006 = Bessel Namibia 6007 = Clarke 1858 6008 = Clarke 1866 6009 = Clarke 1866 Michigan 6010 = Clarke 1880 Benoit 6011 = Clarke 1880 IGN 6012 = Clarke 1880 RGS 6013 = Clarke 1880 Arc 6014 = Clarke 1880 SGA 1922 6015 = Everest 1830 1937 Adjustment 6016 = Everest 1830 1967 Definition 6017 = Everest 1830 1975 Definition 6018 = Everest 1830 Modified 6019 = GRS 1980 6020 = Helmert 1906 6021 = Indonesian National Spheroid 6022 = International 1924 6023 = International 1967 6024 = Krassowsky 1960 6025 = NWL9D 6026 = NWL10D 6027 = Plessis 1817 6028 = Struve 1860 6029 = War Office 6030 = WGS84 6031 = GEM10C 6032 = OSU86F 6033 = OSU91A 6034 = Clarke 1880 6035 = Sphere 6201 = Adindan 6202 = Australian Geodetic Datum 1966 6203 = Australian Geodetic Datum 1984

6204 = Ain el Abd 1970  
6205 = Afgooye  
6206 = Agadez  
6207 = Lisbon  
6208 = Aratu  
6209 = Arc 1950  
6210 = Arc 1960  
6211 = Batavia  
6212 = Barbados  
6213 = Beduaram  
6214 = Beijing 1954  
6215 = Reseau National Belge 1950  
6216 = Bermuda 1957  
6217 = Bern 1898  
6218 = Bogota  
6219 = Bukit Rimpah  
6220 = Camacupa  
6221 = Campo Inchauspe  
6222 = Cape  
6223 = Carthage  
6224 = Chua  
6225 = Corrego Alegre  
6226 = Cote d Ivoire  
6227 = Deir ez Zor  
6228 = Douala  
6229 = Egypt 1907  
6230 = European Datum 1950  
6231 = European Datum 1987  
6232 = Fahud  
6233 = Gandajika 1970  
6234 = Garoua  
6235 = Guyane Francaise  
6236 = Hu Tzu Shan  
6237 = Hungarian Datum 1972  
6238 = Indonesian Datum 1974  
6239 = Indian 1954  
6240 = Indian 1975  
6241 = Jamaica 1875  
6242 = Jamaica 1969  
6243 = Kalianpur  
6244 = Kandawala  
6245 = Kertau  
6246 = Kuwait Oil Company  
6247 = La Canoa  
6248 = Provisional S American Datum 1956  
6249 = Lake  
6250 = Leigon  
6251 = Liberia 1964  
6252 = Lome  
6253 = Luzon 1911  
6254 = Hito XVIII 1963  
6255 = Herat North  
6256 = Mahe 1971  
6257 = Makassar  
6258 = European Reference System 1989  
6259 = Malongo 1987  
6260 = Manoca  
6261 = Merchich  
6262 = Massawa  
6263 = Minna  
6264 = Mhast  
6265 = Monte Mario  
6266 = M poraloko  
6267 = North American Datum 1927  
6268 = NAD Michigan  
6269 = North American Datum 1983  
6270 = Nahrwan 1967  
6271 = Naparima 1972  
6272 = New Zealand Geodetic Datum 1949  
6273 = NGO 1948  
6274 = Datum 73  
6275 = Nouvelle Triangulation Francaise  
6276 = NSWG 9Z 2  
6277 = OSGB 1936  
6278 = OSGB 1970 SN  
6279 = OS SN 1980  
6280 = Padang 1884  
6281 = Palestine 1923  
6282 = Pointe Noire  
6283 = Geocentric Datum of Australia 1994

6284 = Pulkovo 1942  
 6285 = Qatar  
 6286 = Qatar 1948  
 6287 = Qornoq  
 6288 = Loma Quintana  
 6289 = Amersfoort  
 6290 = RT38  
 6291 = South American Datum 1969  
 6292 = Sapper Hill 1943  
 6293 = Schwarzeck  
 6294 = Segora  
 6295 = Serindung  
 6296 = Sudan  
 6297 = Tananarive 1925  
 6298 = Timbalai 1948  
 6299 = TM65  
 6300 = TM75  
 6301 = Tokyo  
 6302 = Trinidad 1903  
 6303 = Trucial Coast 1948  
 6304 = Voirol 1875  
 6305 = Voirol Unifie 1960  
 6306 = Bern 1938  
 6307 = Nord Sahara 1959  
 6308 = Stockholm 1938  
 6309 = Yacare  
 6310 = Yoff  
 6311 = Zanderij  
 6312 = Militair Geographische Institut  
 6313 = Reseau National Belge 1972  
 6314 = Deutsche Hauptdreiecksnetz  
 6315 = Conakry 1905  
 6317 = Dealul Piscului 1970  
 6322 = WGS72  
 6324 = WGS72 Transit Broadcast Ephemeris  
 6326 = WGS84  
 6901 = Ancienne Triangulation Francaise  
 6902 = Nord de Guerre  
 32767 = User Defined

0x0803	GeogPrimeMeridian	no	8901 = Greenwich    8907 = Bern 8902 = Lisbon        8908 = Jakarta 8903 = Paris         8909 = Ferro 8904 = Bogota        8910 = Brussels 8905 = Madrid       8911 = Stockholm 8906 = Rome          32767 = User Defined
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0x0804	GeogLinearUnits	no	--> <a href="#">GeoTiff Units Values</a>
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0x0805	GeogLinearUnitSize	no	
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0x0806	GeogAngularUnits	no	--> <a href="#">GeoTiff Units Values</a>
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0x0807	GeogAngularUnitSize	no	
0x0808	GeogEllipsoid	no	7001 = Airy 1830 7002 = Airy Modified 1849 7003 = Australian National Spheroid 7004 = Bessel 1841 7005 = Bessel Modified 7006 = Bessel Namibia 7007 = Clarke 1858 7008 = Clarke 1866 7009 = Clarke 1866 Michigan 7010 = Clarke 1880 Benoit 7011 = Clarke 1880 IGN 7012 = Clarke 1880 RGS 7013 = Clarke 1880 Arc 7014 = Clarke 1880 SGA 1922 7015 = Everest 1830 1937 Adjustment 7016 = Everest 1830 1967 Definition 7017 = Everest 1830 1975 Definition 7018 = Everest 1830 Modified 7019 = GRS 1980 7020 = Helmert 1906 7021 = Indonesian National Spheroid 7022 = International 1924 7023 = International 1967 7024 = Krassowsky 1940 7025 = NWL 9D 7026 = NWL 10D 7027 = Plessis 1817 7028 = Struve 1860

7029 = War Office  
 7030 = WGS 84  
 7031 = GEM 10C  
 7032 = OSU86F  
 7033 = OSU91A  
 7034 = Clarke 1880  
 7035 = Sphere  
 32767 = User Defined

0x0809	GeogSemiMajorAxis	no	
0x080a	GeogSemiMinorAxis	no	
0x080b	GeogInvFlattening	no	
0x080c	GeogAzimuthUnits	no	--> <a href="#">GeoTiff Units Values</a>
0x080d	GeogPrimeMeridianLong	no	
0x080e	GeogToWGS84	no	
0x0c00	ProjectedCSType	no	2100 = GGRS87 Greek Grid 2176 = ETRS89 Poland CS2000 zone 5 2177 = ETRS89 Poland CS2000 zone 7 2178 = ETRS89 Poland CS2000 zone 8 2180 = ETRS89 Poland CS92 2204 = NAD27 Tennessee 2205 = NAD83 Kentucky North 2391 = KKJ Finland zone 1 2392 = KKJ Finland zone 2 2393 = KKJ Finland zone 3 2394 = KKJ Finland zone 4 2400 = RT90 2 5 gon W 2600 = Lietuvos Koordinatų Sistema 1994 3053 = Hjorsey 1955 Lambert 3057 = ISN93 Lambert 1993 3300 = Estonian Coordinate System of 1992 3786 = Popular Visualisation CRS / Mercator 3857 = WGS 84 / Pseudo-Mercator 20137 = Adindan UTM zone 37N 20138 = Adindan UTM zone 38N 20248 = AGD66 AMG zone 48 20249 = AGD66 AMG zone 49 20250 = AGD66 AMG zone 50 20251 = AGD66 AMG zone 51 20252 = AGD66 AMG zone 52 20253 = AGD66 AMG zone 53 20254 = AGD66 AMG zone 54 20255 = AGD66 AMG zone 55 20256 = AGD66 AMG zone 56 20257 = AGD66 AMG zone 57 20258 = AGD66 AMG zone 58 20348 = AGD84 AMG zone 48 20349 = AGD84 AMG zone 49 20350 = AGD84 AMG zone 50 20351 = AGD84 AMG zone 51 20352 = AGD84 AMG zone 52 20353 = AGD84 AMG zone 53 20354 = AGD84 AMG zone 54 20355 = AGD84 AMG zone 55 20356 = AGD84 AMG zone 56 20357 = AGD84 AMG zone 57 20358 = AGD84 AMG zone 58 20437 = Ain el Abd UTM zone 37N 20438 = Ain el Abd UTM zone 38N 20439 = Ain el Abd UTM zone 39N 20499 = Ain el Abd Bahrain Grid 20538 = Afgooye UTM zone 38N 20539 = Afgooye UTM zone 39N 20700 = Lisbon Portuguese Grid 20822 = Aratu UTM zone 22S 20823 = Aratu UTM zone 23S 20824 = Aratu UTM zone 24S 20973 = Arc 1950 Lo13 20975 = Arc 1950 Lo15 20977 = Arc 1950 Lo17 20979 = Arc 1950 Lo19 20981 = Arc 1950 Lo21 20983 = Arc 1950 Lo23 20985 = Arc 1950 Lo25 20987 = Arc 1950 Lo27 20989 = Arc 1950 Lo29 20991 = Arc 1950 Lo31

20993 = Arc 1950 Lo33  
20995 = Arc 1950 Lo35  
21100 = Batavia NEIEZ  
21148 = Batavia UTM zone 48S  
21149 = Batavia UTM zone 49S  
21150 = Batavia UTM zone 50S  
21413 = Beijing Gauss zone 13  
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21476 = Beijing Gauss 16N  
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21479 = Beijing Gauss 19N  
21480 = Beijing Gauss 20N  
21481 = Beijing Gauss 21N  
21482 = Beijing Gauss 22N  
21483 = Beijing Gauss 23N  
21500 = Belge Lambert 50  
21790 = Bern 1898 Swiss Old  
21817 = Bogota UTM zone 17N  
21818 = Bogota UTM zone 18N  
21891 = Bogota Colombia 3W  
21892 = Bogota Colombia Bogota  
21893 = Bogota Colombia 3E  
21894 = Bogota Colombia 6E  
22032 = Camacupa UTM 32S  
22033 = Camacupa UTM 33S  
22191 = C Inchauspe Argentina 1  
22192 = C Inchauspe Argentina 2  
22193 = C Inchauspe Argentina 3  
22194 = C Inchauspe Argentina 4  
22195 = C Inchauspe Argentina 5  
22196 = C Inchauspe Argentina 6  
22197 = C Inchauspe Argentina 7  
22332 = Carthage UTM zone 32N  
22391 = Carthage Nord Tunisie  
22392 = Carthage Sud Tunisie  
22523 = Corrego Alegre UTM 23S  
22524 = Corrego Alegre UTM 24S  
22832 = Douala UTM zone 32N  
22992 = Egypt 1907 Red Belt  
22993 = Egypt 1907 Purple Belt  
22994 = Egypt 1907 Ext Purple  
23028 = ED50 UTM zone 28N  
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23030 = ED50 UTM zone 30N  
23031 = ED50 UTM zone 31N  
23032 = ED50 UTM zone 32N  
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23036 = ED50 UTM zone 36N  
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23038 = ED50 UTM zone 38N  
23239 = Fahud UTM zone 39N  
23240 = Fahud UTM zone 40N  
23433 = Garoua UTM zone 33N  
23700 = HD72 EOV  
23846 = ID74 UTM zone 46N  
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23848 = ID74 UTM zone 48N  
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23886 = ID74 UTM zone 46S  
23887 = ID74 UTM zone 47S  
23888 = ID74 UTM zone 48S

23889 = ID74 UTM zone 49S  
23890 = ID74 UTM zone 50S  
23891 = ID74 UTM zone 51S  
23892 = ID74 UTM zone 52S  
23893 = ID74 UTM zone 53S  
23894 = ID74 UTM zone 54S  
23947 = Indian 1954 UTM 47N  
23948 = Indian 1954 UTM 48N  
24047 = Indian 1975 UTM 47N  
24048 = Indian 1975 UTM 48N  
24100 = Jamaica 1875 Old Grid  
24200 = JAD69 Jamaica Grid  
24370 = Kalianpur India 0  
24371 = Kalianpur India I  
24372 = Kalianpur India IIa  
24373 = Kalianpur India IIIa  
24374 = Kalianpur India IVa  
24382 = Kalianpur India IIb  
24383 = Kalianpur India IIIb  
24384 = Kalianpur India IVb  
24500 = Kertau Singapore Grid  
24547 = Kertau UTM zone 47N  
24548 = Kertau UTM zone 48N  
24720 = La Canoa UTM zone 20N  
24721 = La Canoa UTM zone 21N  
24818 = PSAD56 UTM zone 18N  
24819 = PSAD56 UTM zone 19N  
24820 = PSAD56 UTM zone 20N  
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24877 = PSAD56 UTM zone 17S  
24878 = PSAD56 UTM zone 18S  
24879 = PSAD56 UTM zone 19S  
24880 = PSAD56 UTM zone 20S  
24891 = PSAD56 Peru west zone  
24892 = PSAD56 Peru central  
24893 = PSAD56 Peru east zone  
25000 = Leigon Ghana Grid  
25231 = Lome UTM zone 31N  
25391 = Luzon Philippines I  
25392 = Luzon Philippines II  
25393 = Luzon Philippines III  
25394 = Luzon Philippines IV  
25395 = Luzon Philippines V  
25700 = Makassar NEIEZ  
25932 = Malongo 1987 UTM 32S  
26191 = Merchich Nord Maroc  
26192 = Merchich Sud Maroc  
26193 = Merchich Sahara  
26237 = Massawa UTM zone 37N  
26331 = Minna UTM zone 31N  
26332 = Minna UTM zone 32N  
26391 = Minna Nigeria West  
26392 = Minna Nigeria Mid Belt  
26393 = Minna Nigeria East  
26432 = Mhast UTM zone 32S  
26591 = Monte Mario Italy 1  
26592 = Monte Mario Italy 2  
26632 = M poraloko UTM 32N  
26692 = M poraloko UTM 32S  
26703 = NAD27 UTM zone 3N  
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26739 = NAD27 Alaska zone 9  
26740 = NAD27 Alaska zone 10  
26741 = NAD27 California I  
26742 = NAD27 California II  
26743 = NAD27 California III  
26744 = NAD27 California IV  
26745 = NAD27 California V  
26746 = NAD27 California VI  
26747 = NAD27 California VII  
26748 = NAD27 Arizona East  
26749 = NAD27 Arizona Central  
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26751 = NAD27 Arkansas North  
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26756 = NAD27 Connecticut  
26757 = NAD27 Delaware  
26758 = NAD27 Florida East  
26759 = NAD27 Florida West  
26760 = NAD27 Florida North  
26761 = NAD27 Hawaii zone 1  
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26764 = NAD27 Hawaii zone 4  
26765 = NAD27 Hawaii zone 5  
26766 = NAD27 Georgia East  
26767 = NAD27 Georgia West  
26768 = NAD27 Idaho East  
26769 = NAD27 Idaho Central  
26770 = NAD27 Idaho West  
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26775 = NAD27 Iowa North  
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26993 = NAD83 Minnesota South  
26994 = NAD83 Mississippi East  
26995 = NAD83 Mississippi West  
26996 = NAD83 Missouri East

26997 = NAD83 Missouri Central  
26998 = NAD83 Missouri West  
27038 = Nahrwan 1967 UTM 38N  
27039 = Nahrwan 1967 UTM 39N  
27040 = Nahrwan 1967 UTM 40N  
27120 = Naparima UTM 20N  
27200 = GD49 NZ Map Grid  
27291 = GD49 North Island Grid  
27292 = GD49 South Island Grid  
27429 = Datum 73 UTM zone 29N  
27500 = ATF Nord de Guerre  
27581 = NTF France I  
27582 = NTF France II  
27583 = NTF France III  
27591 = NTF Nord France  
27592 = NTF Centre France  
27593 = NTF Sud France  
27700 = British National Grid  
28232 = Point Noire UTM 32S  
28348 = GDA94 MGA zone 48  
28349 = GDA94 MGA zone 49  
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28351 = GDA94 MGA zone 51  
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28465 = Pulkovo Gauss 5N  
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28484 = Pulkovo Gauss 24N

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28489 = Pulkovo Gauss 29N  
28490 = Pulkovo Gauss 30N  
28491 = Pulkovo Gauss 31N  
28492 = Pulkovo Gauss 32N  
28600 = Qatar National Grid  
28991 = RD Netherlands Old  
28992 = RD Netherlands New  
29118 = SAD69 UTM zone 18N  
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29120 = SAD69 UTM zone 20N  
29121 = SAD69 UTM zone 21N  
29122 = SAD69 UTM zone 22N  
29177 = SAD69 UTM zone 17S  
29178 = SAD69 UTM zone 18S  
29179 = SAD69 UTM zone 19S  
29180 = SAD69 UTM zone 20S  
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29182 = SAD69 UTM zone 22S  
29183 = SAD69 UTM zone 23S  
29184 = SAD69 UTM zone 24S  
29185 = SAD69 UTM zone 25S  
29220 = Sapper Hill UTM 20S  
29221 = Sapper Hill UTM 21S  
29333 = Schwarzeck UTM 33S  
29635 = Sudan UTM zone 35N  
29636 = Sudan UTM zone 36N  
29700 = Tananarive Laborde  
29738 = Tananarive UTM 38S  
29739 = Tananarive UTM 39S  
29800 = Timbalai 1948 Borneo  
29849 = Timbalai 1948 UTM 49N  
29850 = Timbalai 1948 UTM 50N  
29900 = TM65 Irish Nat Grid  
30200 = Trinidad 1903 Trinidad  
30339 = TC 1948 UTM zone 39N  
30340 = TC 1948 UTM zone 40N  
30491 = Voirol N Algerie ancien  
30492 = Voirol S Algerie ancien  
30591 = Voirol Unifie N Algerie  
30592 = Voirol Unifie S Algerie  
30600 = Bern 1938 Swiss New  
30729 = Nord Sahara UTM 29N  
30730 = Nord Sahara UTM 30N  
30731 = Nord Sahara UTM 31N  
30732 = Nord Sahara UTM 32N  
31028 = Yoff UTM zone 28N  
31121 = Zanderij UTM zone 21N  
31291 = MGI Austria West  
31292 = MGI Austria Central  
31293 = MGI Austria East  
31300 = Belge Lambert 72  
31491 = DHDN Germany zone 1  
31492 = DHDN Germany zone 2  
31493 = DHDN Germany zone 3  
31494 = DHDN Germany zone 4  
31495 = DHDN Germany zone 5  
31700 = Dealul Piscului 1970 Stereo 70  
32001 = NAD27 Montana North  
32002 = NAD27 Montana Central  
32003 = NAD27 Montana South  
32005 = NAD27 Nebraska North  
32006 = NAD27 Nebraska South  
32007 = NAD27 Nevada East  
32008 = NAD27 Nevada Central  
32009 = NAD27 Nevada West  
32010 = NAD27 New Hampshire  
32011 = NAD27 New Jersey  
32012 = NAD27 New Mexico East  
32013 = NAD27 New Mexico Cent  
32014 = NAD27 New Mexico West  
32015 = NAD27 New York East  
32016 = NAD27 New York Central  
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32018 = NAD27 New York Long Is  
32019 = NAD27 North Carolina  
32020 = NAD27 North Dakota N

32021 = NAD27 North Dakota S  
32022 = NAD27 Ohio North  
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32024 = NAD27 Oklahoma North  
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32027 = NAD27 Oregon South  
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32030 = NAD27 Rhode Island  
32031 = NAD27 South Carolina N  
32033 = NAD27 South Carolina S  
32034 = NAD27 South Dakota N  
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32036 = NAD27 Tennessee  
32037 = NAD27 Texas North  
32038 = NAD27 Texas North Cen  
32039 = NAD27 Texas Central  
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32045 = NAD27 Vermont  
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32047 = NAD27 Virginia South  
32048 = NAD27 Washington North  
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32053 = NAD27 Wisconsin Cen  
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32056 = NAD27 Wyoming E Cen  
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32157 = NAD83 Wyoming W Cen  
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32202 = WGS72 UTM zone 2N  
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16136 = UTM zone 36S  
16137 = UTM zone 37S  
16138 = UTM zone 38S  
16139 = UTM zone 39S  
16140 = UTM zone 40S  
16141 = UTM zone 41S  
16142 = UTM zone 42S  
16143 = UTM zone 43S  
16144 = UTM zone 44S  
16145 = UTM zone 45S  
16146 = UTM zone 46S  
16147 = UTM zone 47S  
16148 = UTM zone 48S  
16149 = UTM zone 49S  
16150 = UTM zone 50S  
16151 = UTM zone 51S  
16152 = UTM zone 52S  
16153 = UTM zone 53S  
16154 = UTM zone 54S  
16155 = UTM zone 55S  
16156 = UTM zone 56S  
16157 = UTM zone 57S  
16158 = UTM zone 58S  
16159 = UTM zone 59S  
16160 = UTM zone 60S  
16200 = Gauss Kruger zone 0  
16201 = Gauss Kruger zone 1  
16202 = Gauss Kruger zone 2  
16203 = Gauss Kruger zone 3  
16204 = Gauss Kruger zone 4  
16205 = Gauss Kruger zone 5  
17348 = Map Grid of Australia 48  
17349 = Map Grid of Australia 49  
17350 = Map Grid of Australia 50  
17351 = Map Grid of Australia 51  
17352 = Map Grid of Australia 52  
17353 = Map Grid of Australia 53  
17354 = Map Grid of Australia 54  
17355 = Map Grid of Australia 55  
17356 = Map Grid of Australia 56  
17357 = Map Grid of Australia 57  
17358 = Map Grid of Australia 58  
17448 = Australian Map Grid 48  
17449 = Australian Map Grid 49  
17450 = Australian Map Grid 50  
17451 = Australian Map Grid 51  
17452 = Australian Map Grid 52  
17453 = Australian Map Grid 53  
17454 = Australian Map Grid 54  
17455 = Australian Map Grid 55  
17456 = Australian Map Grid 56  
17457 = Australian Map Grid 57  
17458 = Australian Map Grid 58  
18031 = Argentina 1  
18032 = Argentina 2  
18033 = Argentina 3  
18034 = Argentina 4  
18035 = Argentina 5  
18036 = Argentina 6  
18037 = Argentina 7  
18051 = Colombia 3W  
18052 = Colombia Bogota  
18053 = Colombia 3E  
18054 = Colombia 6E  
18072 = Egypt Red Belt  
18073 = Egypt Purple Belt  
18074 = Extended Purple Belt  
18141 = New Zealand North Island Nat Grid  
18142 = New Zealand South Island Nat Grid  
19900 = Bahrain Grid  
19905 = Netherlands E Indies Equatorial

			19912 = RSO Borneo 19926 = Stereo 70 32767 = User Defined
0x0c03	ProjCoordTrans	no	1 = Transverse Mercator 2 = Transverse Mercator Modified Alaska 3 = Oblique Mercator 4 = Oblique Mercator Laborde 5 = Oblique Mercator Rosenmund 6 = Oblique Mercator Spherical 7 = Mercator 8 = Lambert Conf Conic 2SP 9 = Lambert Conf Conic 1SP 10 = Lambert Azim Equal Area 11 = Albers Equal Area 12 = Azimuthal Equidistant 13 = Equidistant Conic 14 = Stereographic 15 = Polar Stereographic 16 = Oblique Stereographic 17 = Equirectangular 18 = Cassini Soldner 19 = Gnomonic 20 = Miller Cylindrical 21 = Orthographic 22 = Polyconic 23 = Robinson 24 = Sinusoidal 25 = VanDerGrinten 26 = New Zealand Map Grid 27 = Transverse Mercator South Orientated 28 = Cylindrical Equal Area 32767 = User Defined
0x0c04	ProjLinearUnits	no	--> <a href="#">GeoTiff Units Values</a>
0x0c05	ProjLinearUnitSize	no	
0x0c06	ProjStdParallel1	no	
0x0c07	ProjStdParallel2	no	
0x0c08	ProjNatOriginLong	no	
0x0c09	ProjNatOriginLat	no	
0x0c0a	ProjFalseEasting	no	
0x0c0b	ProjFalseNorthing	no	
0x0c0c	ProjFalseOriginLong	no	
0x0c0d	ProjFalseOriginLat	no	
0x0c0e	ProjFalseOriginEasting	no	
0x0c0f	ProjFalseOriginNorthing	no	
0x0c10	ProjCenterLong	no	
0x0c11	ProjCenterLat	no	
0x0c12	ProjCenterEasting	no	
0x0c13	ProjCenterNorthing	no	
0x0c14	ProjScaleAtNatOrigin	no	
0x0c15	ProjScaleAtCenter	no	
0x0c16	ProjAzimuthAngle	no	
0x0c17	ProjStraightVertPoleLong	no	
0x0c18	ProjRectifiedGridAngle	no	
0x1000	VerticalCSType	no	--> <a href="#">GeoTiff VerticalCS Values</a>
0x1001	VerticalCitation	no	
0x1002	VerticalDatum	no	--> <a href="#">GeoTiff VerticalCS Values</a>
0x1003	VerticalUnits	no	--> <a href="#">GeoTiff Units Values</a>
0xb799	ChartFormat	no	47500 = General 47501 = Coastal 47502 = Harbor 47503 = SailingInternational 47504 = SmallCraft Route 47505 = SmallCraftArea 47506 = SmallCraftFolio 47507 = Topographic 47508 = Recreation

0xb79a	ChartSource	no	
0xb79b	ChartSourceEdition	no	
0xb79c	ChartSourceDate	no	
0xb79d	ChartCorrDate	no	
0xb79e	ChartCountryOrigin	no	
0xb79f	ChartRasterEdition	no	
0xb7a0	ChartSoundingDatum	no	47600 = Equatorial Spring Low Water 47601 = Indian Spring Low Water 47602 = Lowest Astronomical Tide 47603 = Lowest Low Water 47604 = Lowest Normal Low Water 47605 = Mean Higher High Water 47606 = Mean High Water 47607 = Mean High Water Springs 47608 = Mean Lower Low Water 47609 = Mean Lower Low Water Springs 47610 = Mean Low Water 47611 = Mean Sea Level 47612 = Tropic Higher High Water 47613 = Tropic Lower Low Water
0xb7a1	ChartDepthUnits	no	--> <a href="#">GeoTiff Units Values</a>
0xb7a2	ChartMagVar	no	
0xb7a3	ChartMagVarYear	no	
0xb7a4	ChartMagVarAnnChange	no	
0xb7a5	ChartWGNSNSShift	no	
0xb7a7	InsetNWPixelX	no	
0xb7a8	InsetNWPixelY	no	
0xb7a9	ChartContourInterval	no	

## GeoTiff Units Values

Value	Units	Value	Units
9001	= Linear Meter	9013	= Linear Yard Indian
9002	= Linear Foot	9014	= Linear Fathom
9003	= Linear Foot US Survey	9015	= Linear Mile International Nautical
9004	= Linear Foot Modified American	9101	= Angular Radian
9005	= Linear Foot Clarke	9102	= Angular Degree
9006	= Linear Foot Indian	9103	= Angular Arc Minute
9007	= Linear Link	9104	= Angular Arc Second
9008	= Linear Link Benoit	9105	= Angular Grad
9009	= Linear Link Sears	9106	= Angular Gon
9010	= Linear Chain Benoit	9107	= Angular DMS
9011	= Linear Chain Sears	9108	= Angular DMS Hemisphere
9012	= Linear Yard Sears	32767	= User Defined

## GeoTiff VerticalCS Values

Value	VerticalCS	Value	VerticalCS
0	= Undefined	5021	= INS ellipsoid
5001	= Airy 1830 ellipsoid	5022	= International 1924 ellipsoid
5002	= Airy Modified 1849 ellipsoid	5023	= International 1967 ellipsoid
5003	= ANS ellipsoid	5024	= Krassowsky 1940 ellipsoid
5004	= Bessel 1841 ellipsoid	5025	= NWL 9D ellipsoid
5005	= Bessel Modified ellipsoid	5026	= NWL 10D ellipsoid
5006	= Bessel Namibia ellipsoid	5027	= Plessis 1817 ellipsoid
5007	= Clarke 1858 ellipsoid	5028	= Struve 1860 ellipsoid
5008	= Clarke 1866 ellipsoid	5029	= War Office ellipsoid
5010	= Clarke 1880 Benoit ellipsoid	5030	= WGS 84 ellipsoid
5011	= Clarke 1880 IGN ellipsoid	5031	= GEM 10C ellipsoid
5012	= Clarke 1880 RGS ellipsoid	5032	= OSU86F ellipsoid
5013	= Clarke 1880 Arc ellipsoid	5033	= OSU91A ellipsoid
5014	= Clarke 1880 SGA 1922 ellipsoid	5101	= Newlyn
5015	= Everest 1830 1937 Adjustment ellipsoid	5102	= North American Vertical Datum 1929
5016	= Everest 1830 1967 Definition ellipsoid	5103	= North American Vertical Datum 1988

5017 = Everest 1830 1975 Definition ellipsoid  
5018 = Everest 1830 Modified ellipsoid  
5019 = GRS 1980 ellipsoid  
5020 = Helmert 1906 ellipsoid

5104 = Yellow Sea 1956  
5105 = Baltic Sea  
5106 = Caspian Sea  
32767 = User Defined

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Oct 1, 2022*

[<-- ExifTool Tag Names](#)

# GoPro GPMF Tags

Tags extracted from the GPMF box of GoPro MP4 videos, the APP6 "GoPro" segment of JPEG files, and from the "gpmf" timed metadata if the [ExtractEmbedded](#) (-ee) option is enabled. Many more tags exist, but are currently unknown and extracted only with the [Unknown](#) (-u) option. Please let me know if you discover the meaning of any of these unknown tags. See <https://github.com/gopro/gpmf-parser> for details about this format.

Tag ID	Tag Name	Writable	Values / Notes
'AALP'	AudioLevel	no	(dBFS)
'ABSC'	AutoBoostScore	no	
'ACCL'	Accelerometer	no	(accelerator readings in m/s <sup>2</sup> )
'ALLD'	AutoLowLightDuration	no	
'APTO'	AudioProtuneOption	no	
'ARUW'	AspectRatioUnwarped	no	
'ARWA'	AspectRatioWarped	no	
'ATTD'	Attitude	no	
'ATTR'	AttitudeTarget	no	
'AUBT'	AudioBlueTooth	no	'N' = No 'Y' = Yes
'AUDIO'	AudioSetting	no	
'AUPT'	AutoProtune	no	'N' = No 'Y' = Yes
'BITR'	BitrateSetting	no	
'BPOS'	Controller?	no	
'CASN'	CameraSerialNumber	no	
'CDAT'	CreationDate	no	
'CDTM'	CaptureDelayTimer	no	
'CLDP'	ClassificationDataPresent	no	'N' = No 'Y' = Yes
'CORI'	CameraOrientation	no	(quaternions 0-1)
'CPIN'	ChapterNumber	no	
'CSEN'	CoyoteSense	no	
'CTRL'	ControlLevel	no	
'CYTS'	CoyoteStatus	no	
'DEVC'	DeviceContainer	-	--> <a href="#">GoPro GPMF Tags</a>
'DUST'	DurationSetting	no	
'DVID'	DeviceID?	no	
'DVNM'	DeviceName	no	
'DZMX'	DigitalZoomAmount	no	
'DZOM'	DigitalZoomOn	no	'N' = No 'Y' = Yes
'DZST'	DigitalZoom	no	
'EISA'	ElectronicImageStabilization	no	
'EISE'	ElectronicStabilizationOn	no	'N' = No 'Y' = Yes
'EMPT'	Empty?	no	
'ESCS'	EscapeStatus?	no	
'EXPT'	ExposureType	no	
'FACE'	FaceDetected	no	
'FCNM'	FaceNumbers	no	
'FMWR'	FirmwareVersion	no	
'FWVS'	OtherFirmware	no	
'GLPI'	GPSPos	-	--> <a href="#">GoPro GLPI Tags</a>
'GPRI'	GPSRaw?	-	--> <a href="#">GoPro GPRI Tags</a>
'GPS5'	GPSInfo	-	--> <a href="#">GoPro GPS5 Tags</a>
'GPS9'	GPSInfo9	-	--> <a href="#">GoPro GPS9 Tags</a>

'GPSA'	GPSAltitudeSystem	no	
'GPSF'	GPSMeasureMode	no	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
'GPSP'	GPSPositioningError	no	
'GPSU'	GPSDateTime	no	
'GRAV'	GravityVector	no	
'GYRO'	Gyroscope	no	(gyroscope readings in rad/s)
'HCTL'	HorizonControl	no	
'HDRV'	HDRVideo	no	'N' = No 'Y' = Yes
'HSGT'	HindsightSettings	no	
'HUES'	PredominantHue	no	
'IORI'	ImageOrientation	no	(quaternions 0-1)
'ISOE'	ISOSpeeds	no	
'ISOG'	ImageSensorGain	no	
'KBAT'	BatteryStatus	-	--> <a href="#">GoPro KBAT Tags</a>
'LNED'	LocalPositionNED	no	
'LOGS'	HealthLogs	no	
'MAGN'	Magnetometer	no	
'MAPX'	MappingXCoefficients	no	
'MAPY'	MappingYCoefficients	no	
'MINF'	Model	no	
'MMOD'	MediaMode	no	
'MTRX'	AccelerometerMatrix	no	
'MUID'	MediaUniqueId	no	
'MWET'	MicrophoneWet	no	
'MXCF'	MappingXMode	no	
'MYCF'	MappingYMode	no	
'ORDP'	OrientationDataPresent	no	'N' = No 'Y' = Yes
'OREN'	AutoRotation	no	'A' = Auto 'D' = Down 'U' = Up
'ORIN'	InputOrientation	no	
'ORIO'	OutputOrientation	no	
'PHDR'	HDRSetting	no	
'PIMD'	ProtuneISOMode	no	
'PIMN'	AutoISOMin	no	
'PIMX'	AutoISOMax	no	
'POLY'	PolynomialCoefficients	no	
'PRES'	PhotoResolution	no	
'PRJT'	LensProjection	no	
'PRTN'	Protune	no	'N' = Off 'Y' = On
'PTCL'	ColorMode	no	
'PTEV'	ExposureCompensation	no	
'PTSH'	Sharpness	no	
'PTWB'	WhiteBalance	no	
'PWPR'	PowerProfile	no	
'PYCF'	PolynomialPower	no	
'RAMP'	SpeedRampSetting	no	
'RATE'	Rate	no	
'RMRK'	Comments	no	
'SCAL'	ScaleFactor?	no	
'SCAP'	ScheduleCapture	no	'N' = No 'Y' = Yes

'SCEN'	SceneClassification	no	
'SCPR'	ScaledPressure	no	
'SCTM'	ScheduleCaptureTime	no	
'SHUT'	ExposureTimes	no	
'SIMU'	ScaledIMU	no	
'SIUN'	SIUnits?	no	
'SMTR'	SpotMeter	no	'N' = No 'Y' = Yes
'SROT'	SensorReadoutTime	no	
'STMP'	TimeStamp	no	
'STNM'	StreamName?	no	
'STRM'	NestedSignalStream	-	--> <a href="#">GoPro GPMF Tags</a>
'SYST'	SystemTime	no	
'TIMO'	TimeOffset	no	
'TMPC'	CameraTemperature	no	
'TSMP'	TotalSamples?	no	
'TYPE'	StructureType?	no	
'TZON'	TimeZone	no	
'UNIF'	InputUniformity	no	
'UNIT'	Units?	no	
'VERS'	MetadataVersion	no	
'VFOV'	FieldOfView	no	'L' = Linear 'S' = Super View 'W' = Wide
'VFPS'	VideoFrameRate	no	
'VFRH'	VisualFlightRulesHUD	no	
'VRES'	VideoFrameSize	no	
'WBAL'	ColorTemperatures	no	
'WNDM'	WindProcessing	no	
'WRGB'	WhiteBalanceRGB	no	
'YAVG'	LumaAverage	no	
'ZFOV'	DiagonalFieldOfView	no	
'ZMPL'	ZoomScaleNormalization	no	

## GoPro GLPI Tags

Index	Tag Name	Writable	Values / Notes
0	GPSDateTime	no	
1	GPSLatitude	no	
2	GPSLongitude	no	
3	GPSAltitude	no	
5	GPSSpeedX	no	
6	GPSSpeedY	no	
7	GPSSpeedZ	no	
8	GPSTrack	no	

## GoPro GPRI Tags

Index	Tag Name	Writable	Values / Notes
0	GPSDateTimeRaw	no	
1	GPSLatitudeRaw	no	
2	GPSLongitudeRaw	no	
3	GPSAltitudeRaw	no	
6	GPSSpeedRaw	no	
7	GPSTrackRaw	no	

# GoPro GPS5 Tags

Index	Tag Name	Writable	Values / Notes
0	GPSLatitude	no	
1	GPSLongitude	no	
2	GPSAltitude	no	
3	GPSSpeed	no	(stored as m/s but converted to km/h when extracted)
4	GPSSpeed3D	no	(stored as m/s but converted to km/h when extracted)

# GoPro GPS9 Tags

Index	Tag Name	Writable	Values / Notes
0	GPSLatitude	no	
1	GPSLongitude	no	
2	GPSAltitude	no	
3	GPSSpeed	no	(stored as m/s but converted to km/h when extracted)
4	GPSSpeed3D	no	(stored as m/s but converted to km/h when extracted)
6	GPSDateTime	no	
7	GPSDOP	no	
8	GPSMeasureMode	no	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement

# GoPro KBAT Tags

Battery status information found in GoPro Karma videos.

Index	Tag Name	Writable	Values / Notes
0	BatteryCurrent	no	
1	BatteryCapacity	no	
3	BatteryTemperature	no	
4	BatteryVoltage1	no	
5	BatteryVoltage2	no	
6	BatteryVoltage3	no	
7	BatteryVoltage4	no	
8	BatteryTime	no	
14	BatteryLevel	no	

# GoPro fdsc Tags

Tags extracted from the MP4 "fdsc" timed metadata when the [ExtractEmbedded](#) (-ee) option is used.

Index1	Tag Name	Writable	Values / Notes
8	FirmwareVersion	no	
23	SerialNumber	no	
87	OtherSerialNumber	no	
102	Model	no	

(This document generated automatically by `Image::ExifTool::BuildTagLookup`)

Last revised Sep 26, 2025

[-- ExifTool Tag Names](#)

# Google Device Tags

Google depth-map Device tags. See <https://developer.android.com/training/camera2/Dynamic-depth-v1.0.pdf> for the specification.

These tags belong to the ExifTool XMP-Device family 1 group.

Tag Name	Writable	Values / Notes
AppInfo	struct	--> <a href="#">Google AppInfo Struct</a>
AppInfoApplication	string_	
AppInfoItemURI	string_	
AppInfoVersion	string_	
Cameras	struct+	--> <a href="#">Google DeviceCameras Struct</a>
Camera	struct_+	--> <a href="#">Google DeviceCamera Struct</a> (CamerasCamera)
CameraAppInfo	struct_+	--> <a href="#">Google AppInfo Struct</a> (CamerasCameraAppInfo)
CameraAppInfoApplication	string_+	(CamerasCameraAppInfoApplication)
CameraAppInfoItemURI	string_+	(CamerasCameraAppInfoItemURI)
CameraAppInfoVersion	string_+	(CamerasCameraAppInfoVersion)
CameraDepthMap	struct_+	--> <a href="#">Google DeviceDepthMap Struct</a> (CamerasCameraDepthMap)
CameraDepthMapConfidenceURI	string_+	(CamerasCameraDepthMapConfidenceURI)
CameraDepthMapDepthURI	string_+	(CamerasCameraDepthMapDepthURI)
CameraDepthMapFar	real_+	(CamerasCameraDepthMapFar)
CameraDepthMapFocalTable	string_+	(CamerasCameraDepthMapFocalTable)
CameraDepthMapFocalTableEntryCount	integer_+	(CamerasCameraDepthMapFocalTableEntryCount)
CameraDepthMapFormat	string_+	(CamerasCameraDepthMapFormat)
CameraDepthMapItemSemantic	string_+	(CamerasCameraDepthMapItemSemantic)
CameraDepthMapMeasureType	string_+	(CamerasCameraDepthMapMeasureType)
CameraDepthMapNear	real_+	(CamerasCameraDepthMapNear)
CameraDepthMapSoftware	string_+	(CamerasCameraDepthMapSoftware)
CameraDepthMapUnits	string_+	(CamerasCameraDepthMapUnits)
CameralImage	struct_+	--> <a href="#">Google DeviceImage Struct</a> (CamerasCameralImage)
CameralImageItemSemantic	string_+	(CamerasCameralImageItemSemantic)
CameralImageItemURI	string_+	(CamerasCameralImageItemURI)
CameralImagingModel	struct_+	--> <a href="#">Google DeviceImagingModel Struct</a> (CamerasCameralImagingModel)
CameralImagingModelDistortion	string_+	(CamerasCameralImagingModelDistortion)
CameralImagingModelDistortionCount	integer_+	(CamerasCameralImagingModelDistortionCount)
CameralImagingModelFocalLengthX	real_+	(CamerasCameralImagingModelFocalLengthX)
CameralImagingModelFocalLengthY	real_+	(CamerasCameralImagingModelFocalLengthY)
CameralImagingModellImageHeight	integer_+	(CamerasCameralImagingModellImageHeight)
CameralImagingModellImageWidth	integer_+	(CamerasCameralImagingModellImageWidth)
CameralImagingModelPixelAspectRatio	real_+	(CamerasCameralImagingModelPixelAspectRatio)
CameralImagingModelPrincipalPointX	real_+	(CamerasCameralImagingModelPrincipalPointX)
CameralImagingModelPrincipalPointY	real_+	(CamerasCameralImagingModelPrincipalPointY)
CameralImagingModelSkew	real_+	(CamerasCameralImagingModelSkew)
CameraLightEstimate	struct_+	--> <a href="#">Google DeviceLightEstimate Struct</a> (CamerasCameraLightEstimate)
CameraLightEstimateColorCorrectionB	real_+	(CamerasCameraLightEstimateColorCorrectionB)
CameraLightEstimateColorCorrectionG	real_+	(CamerasCameraLightEstimateColorCorrectionG)
CameraLightEstimateColorCorrectionR	real_+	(CamerasCameraLightEstimateColorCorrectionR)
CameraLightEstimatePixelIntensity	real_+	(CamerasCameraLightEstimatePixelIntensity)

CameraPointCloud	struct_+	--> <a href="#">Google DevicePointCloud Struct</a> (CamerasCameraPointCloud)
CameraPointCloudMetric	boolean_+	(CamerasCameraPointCloudMetric)
CameraPointCloudPointCloud	integer_+	(CamerasCameraPointCloudPointCloud)
CameraPointCloudPoints	string_+	(CamerasCameraPointCloudPoints)
CameraPose	struct_+	--> <a href="#">Google Pose Struct</a> (CamerasCameraPose)
CameraPosePositionX	real_+	(CamerasCameraPosePositionX)
CameraPosePositionY	real_+	(CamerasCameraPosePositionY)
CameraPosePositionZ	real_+	(CamerasCameraPosePositionZ)
CameraPoseRotationW	real_+	(CamerasCameraPoseRotationW)
CameraPoseRotationX	real_+	(CamerasCameraPoseRotationX)
CameraPoseRotationY	real_+	(CamerasCameraPoseRotationY)
CameraPoseRotationZ	real_+	(CamerasCameraPoseRotationZ)
CameraPoseTimestamp	integer_+	(CamerasCameraPoseTimestamp)
CameraTrait	string_+	(CamerasCameraTrait)
CameraVendorInfo	struct_+	--> <a href="#">Google VendorInfo Struct</a> (CamerasCameraVendorInfo)
CameraVendorInfoManufacturer	string_+	(CamerasCameraVendorInfoManufacturer)
CameraVendorInfoModel	string_+	(CamerasCameraVendorInfoModel)
CameraVendorInfoNotes	string_+	(CamerasCameraVendorInfoNotes)
Container	struct	--> <a href="#">Google DeviceContainer Struct</a>
ContainerDirectory	struct_+	--> <a href="#">Google DeviceDirectory Struct</a>
ContainerDirectoryItem	struct_+	--> <a href="#">Google DeviceItem Struct</a>
ContainerDirectoryItemDataURI	string_+	
ContainerDirectoryItemLength	integer_+	
ContainerDirectoryItemMimeType	string_+	
ContainerDirectoryItemPadding	integer_+	
EarthPos	struct	--> <a href="#">Google EarthPose Struct</a>
EarthPosAltitude	real_	
EarthPosLatitude	real_	
EarthPosLongitude	real_	
EarthPosRotationW	real_	
EarthPosRotationX	real_	
EarthPosRotationY	real_	
EarthPosRotationZ	real_	
EarthPosTimestamp	integer_	
Planes	struct+	--> <a href="#">Google DevicePlanes Struct</a>
Plane	struct_+	--> <a href="#">Google DevicePlane Struct</a> (PlanesPlane)
PlaneBoundary	string_+	(PlanesPlaneBoundary)
PlaneBoundaryVertexCount	integer_+	(PlanesPlaneBoundaryVertexCount)
PlaneExtentX	real_+	(PlanesPlaneExtentX)
PlaneExtentZ	real_+	(PlanesPlaneExtentZ)
PlanePose	struct_+	--> <a href="#">Google Pose Struct</a> (PlanesPlanePose)
PlanePosePositionX	real_+	(PlanesPlanePosePositionX)
PlanePosePositionY	real_+	(PlanesPlanePosePositionY)
PlanePosePositionZ	real_+	(PlanesPlanePosePositionZ)
PlanePoseRotationW	real_+	(PlanesPlanePoseRotationW)
PlanePoseRotationX	real_+	(PlanesPlanePoseRotationX)
PlanePoseRotationY	real_+	(PlanesPlanePoseRotationY)
PlanePoseRotationZ	real_+	(PlanesPlanePoseRotationZ)
PlanePoseTimestamp	integer_+	(PlanesPlanePoseTimestamp)
Pose	struct	--> <a href="#">Google Pose Struct</a>

PosePositionX	real_	
PosePositionY	real_	
PosePositionZ	real_	
PoseRotationW	real_	
PoseRotationX	real_	
PoseRotationY	real_	
PoseRotationZ	real_	
PoseTimestamp	integer_	
Profiles	struct+	--> <a href="#">Google DeviceProfiles Struct</a>
Profile	struct_+	--> <a href="#">Google DeviceProfile Struct</a> (ProfilesProfile)
ProfileCameraIndices	integer_+	(ProfilesProfileCameraIndices)
ProfileType	string_+	(ProfilesProfileType)
VendorInfo	struct	--> <a href="#">Google VendorInfo Struct</a>
VendorInfoManufacturer	string_	
VendorInfoModel	string_	
VendorInfoNotes	string_	

## Google AppInfo Struct

Field Name	Writable	Values / Notes
Application	string	
ItemURI	string	
Version	string	

## Google DeviceCameras Struct

Field Name	Writable	Values / Notes
Camera	Google DeviceCamera	--> <a href="#">Google DeviceCamera Struct</a>

## Google DeviceCamera Struct

Field Name	Writable	Values / Notes
AppInfo	Google AppInfo	--> <a href="#">Google AppInfo Struct</a>
DepthMap	Google DeviceDepthMap	--> <a href="#">Google DeviceDepthMap Struct</a>
Image	Google DeviceImage	--> <a href="#">Google DeviceImage Struct</a>
ImagingModel	Google DeviceImagingModel	--> <a href="#">Google DeviceImagingModel Struct</a>
LightEstimate	Google DeviceLightEstimate	--> <a href="#">Google DeviceLightEstimate Struct</a>
PointCloud	Google DevicePointCloud	--> <a href="#">Google DevicePointCloud Struct</a>
Pose	Google Pose	--> <a href="#">Google Pose Struct</a>
Trait	string	
VendorInfo	Google VendorInfo	--> <a href="#">Google VendorInfo Struct</a>

## Google DeviceDepthMap Struct

Field Name	Writable	Values / Notes
ConfidenceURI	string	
DepthURI	string	
Far	real	
FocalTable	string	
FocalTableEntryCount	integer	
Format	string	
ItemSemantic	string	
MeasureType	string	

Near	real
Software	string
Units	string

## Google DeviceImage Struct

Field Name	Writable	Values / Notes
ItemSemantic	string	
ItemURI	string	

## Google DeviceImagingModel Struct

Field Name	Writable	Values / Notes
Distortion	string	
DistortionCount	integer	
FocalLengthX	real	
FocalLengthY	real	
ImageHeight	integer	
ImageWidth	integer	
PixelAspectRatio	real	
PrincipalPointX	real	
PrincipalPointY	real	
Skew	real	

## Google DeviceLightEstimate Struct

Field Name	Writable	Values / Notes
ColorCorrectionB	real	
ColorCorrectionG	real	
ColorCorrectionR	real	
PixelIntensity	real	

## Google DevicePointCloud Struct

Field Name	Writable	Values / Notes
Metric	boolean	
PointCloud	integer	
Points	string	

## Google Pose Struct

Field Name	Writable	Values / Notes
PositionX	real	
PositionY	real	
PositionZ	real	
RotationW	real	
RotationX	real	
RotationY	real	
RotationZ	real	
Timestamp	integer	

## Google VendorInfo Struct

Field Name	Writable	Values / Notes

Manufacturer	string
Model	string
Notes	string

## Google DeviceContainer Struct

Field Name	Writable	Values / Notes
Directory	Google DeviceDirectory+ --> <a href="#">Google DeviceDirectory Struct</a>	

## Google DeviceDirectory Struct

Field Name	Writable	Values / Notes
Item	Google DeviceItem --> <a href="#">Google DeviceItem Struct</a>	

## Google DeviceItem Struct

Field Name	Writable	Values / Notes
DataURI	string	
Length	integer	
Mime	string	
Padding	integer	

## Google EarthPose Struct

Field Name	Writable	Values / Notes
Altitude	real	
Latitude	real	
Longitude	real	
RotationW	real	
RotationX	real	
RotationY	real	
RotationZ	real	
Timestamp	integer	

## Google DevicePlanes Struct

Field Name	Writable	Values / Notes
Plane	Google DevicePlane --> <a href="#">Google DevicePlane Struct</a>	

## Google DevicePlane Struct

Field Name	Writable	Values / Notes
Boundary	string	
BoundaryVertexCount	integer	
ExtentX	real	
ExtentZ	real	
Pose	Google Pose --> <a href="#">Google Pose Struct</a>	

## Google DeviceProfiles Struct

Field Name	Writable	Values / Notes
Profile	Google DeviceProfile --> <a href="#">Google DeviceProfile Struct</a>	

## Google DeviceProfile Struct

Field Name	Writable	Values / Notes
CameralIndices	integer+	
Type	string	

## Google GAudio Tags

These tags belong to the ExifTool XMP-GAudio family 1 group.

Tag Name	Writable	Values / Notes
AudioData	string	(tag ID is 'Data')
AudioMimeType	string	(tag ID is 'Mime')

## Google GCamera Tags

Camera information found in Google panorama images.

These tags belong to the ExifTool XMP-GCamera family 1 group.

Tag Name	Writable	Values / Notes
BurstID	string	
BurstPrimary	string	
DisableAutoCreation	string+	
DisableSuggestedAction	string+	
HDRPMakerNote	string	--> <a href="#">Google HDRPMakerNote Tags</a> (tag ID is 'hdrp_makernote')
HDRPlusMakerNote	string	--> <a href="#">Google HDRPlusMakerNote Tags</a>
MicroVideo	integer	
MicroVideoOffset	integer	
MicroVideoPresentationTimestampUs	integer	
MicroVideoVersion	integer	
MotionPhoto	integer	
MotionPhotoPresentationTimestampUs	integer	
MotionPhotoVersion	integer	
PortraitNote	string	
PortraitRequest	string	--> <a href="#">Google HDRPMakerNote Tags</a>
PortraitVersion	string	
ShotLogData	string	--> <a href="#">Google ShotLogData Tags</a> (tag ID is 'shot_log_data')
SpecialTypeID	string+	

## Google HDRPMakerNote Tags

Google text-based HDRP maker note tags. Stored as base64-encoded, encrypted and gzipped text.

Tag ID	Tag Name	Writable	Values / Notes
'Finished image'	FinishedImage	no	
'GoudaRequest'	GoudaRequestText	no	
'InitParams'	InitParamsText	no	
'Logging metadata'	LoggingMetadataText	no	
'Merged image'	MergedImage	no	
'Payload frame'	PayloadFrame	no	
'Payload metadata'	PayloadMetadataText	no	
'ProcessingNotes'	ProcessingNotes	no	
'Rectiface'	RectifaceText	no	
'ShotLogData'	ShotLogDataText	no	
'ShotParams'	ShotParamsText	no	

'StaticMetadata'	StaticMetadataText	no
'Summary'	SummaryText	no
'Time log'	TimeLogText	no
'Unused logging metadata'	UnusedLoggingMetadata	no

## Google HDRPlusMakerNote Tags

Google protobuf-format HDR-Plus maker notes. Tag ID's are hierarchical protobuf field numbers. Stored as base64-encoded, encrypted and gzipped Protobuf data. Much of this metadata is still unknown, but is extracted using the Unknown option.

Tag ID	Tag Name	Writable	Values / Notes
'1-1'	ImageName	no	
'1-2'	ImageData	no	
'2'	TimeLogText	no	
'3'	SummaryText	no	
'9-3'	FrameCount	no	
'9-36-1'	CreateDate	no	
'12-1'	DeviceMake	no	
'12-2'	DeviceModel	no	
'12-3'	DeviceCodename	no	
'12-4'	DeviceHardwareRevision	no	
'12-6'	HDRPSoftware	no	
'12-7'	AndroidRelease	no	
'12-8'	SoftwareDate	no	
'12-9'	Application	no	
'12-10'	AppVersion	no	
'12-12-1'	ExposureTimeMin	no	
'12-12-2'	ExposureTimeMax	no	
'12-13-1'	ISOMin	no	
'12-13-2'	ISOMax	no	
'12-14'	MaxAnalogISO	no	

## Google ShotLogData Tags

Stored as base64-encoded, encrypted and gzipped Protobuf data.

Tag ID	Tag Name	Writable	Values / Notes
'2'	MeteringFrameCount	no	
'3'	OriginalPayloadFrameCount	no	

## Google GContainer Tags

Google Container namespace. ExifTool uses the prefix 'GContainer' instead of 'Container' to avoid a conflict with the Google Device Container namespace.

These tags belong to the ExifTool XMP-GContainer family 1 group.

Tag Name	Writable	Values / Notes
ContainerDirectory	struct+	--> <a href="#">Google Directory Struct</a> (tag ID is 'Directory')
DirectoryItem	struct_+	--> <a href="#">Google Item Struct</a>
DirectoryItemLabel	string_+	
DirectoryItemLength	integer_+	
DirectoryItemMime	string_+	
DirectoryItemPadding	integer_+	
DirectoryItemSemantic	string_+	

## Google Directory Struct

Field Name	Writable	Values / Notes
Item	Google Item	--> <a href="#">Google Item Struct</a>

## Google Item Struct

Field Name	Writable	Values / Notes
Label	string	
Length	integer	
Mime	string	
Padding	integer	
Semantic	string	
URI	string	

## Google GCreations Tags

Google creations tags.

These tags belong to the ExifTool XMP-GCreations family 1 group.

Tag Name	Writable	Values / Notes
CameraBurstID	string	
Type	string/	

## Google GDepth Tags

Google depthmap information. See <https://developers.google.com/depthmap-metadata/> for the specification.

These tags belong to the ExifTool XMP-GDepth family 1 group.

Tag Name	Writable	Values / Notes
Confidence	string/	
ConfidenceMime	string/	
DepthImage	string/	(tag ID is 'Data')
Far	real/	
Format	string/	'RangeInverse' = RangeInverse 'RangeLinear' = RangeLinear
ImageHeight	real/	
ImageWidth	real/	
Manufacturer	string/	
MeasureType	string/	'OpticalAxis' = OpticalAxis 'OpticalRay' = OpticalRay
Mime	string/	
Model	string/	
Near	real/	
Software	string/	
Units	string/	

## Google GFocus Tags

Focus information found in Google depthmap images.

These tags belong to the ExifTool XMP-GFocus family 1 group.

Tag Name	Writable	Values / Notes
----------	----------	----------------

BlurAtInfinity	real
FocalDistance	real
FocalPointX	real
FocalPointY	real

## Google GImage Tags

These tags belong to the ExifTool XMP-GImage family 1 group.

Tag Name	Writable	Values / Notes
ImageData	string	(tag ID is 'Data')
ImageMimeType	string	(tag ID is 'Mime')

## Google GPano Tags

Panorama tags written by Google Photosphere. See <https://developers.google.com/panorama/metadata/> for the specification.

These tags belong to the ExifTool XMP-GPano family 1 group.

Tag Name	Writable	Values / Notes
CaptureSoftware	string	
CroppedArealImageHeightPixels	real	
CroppedArealImageWidthPixels	real	
CroppedAreaLeftPixels	real	
CroppedAreaTopPixels	real	
ExposureLockUsed	boolean	
FirstPhotoDate	date	
FullPanoHeightPixels	real	
FullPanoWidthPixels	real	
InitialCameraDolly	real	
InitialHorizontalFOVDegrees	real	
InitialVerticalFOVDegrees	real	
InitialViewHeadingDegrees	real	
InitialViewPitchDegrees	real	
InitialViewRollDegrees	real	
LargestValidInteriorRectHeight	real	
LargestValidInteriorRectLeft	real	
LargestValidInteriorRectTop	real	
LargestValidInteriorRectWidth	real	
LastPhotoDate	date	
PoseHeadingDegrees	real	
PosePitchDegrees	real	
PoseRollDegrees	real	
ProjectionType	string	
SourcePhotosCount	integer	
StitchingSoftware	string	
UsePanoramaViewer	boolean	

## Google GSpherical Tags

Not actually XMP. These RDF/XML tags are used in Google spherical MP4 videos. These tags are written into the video track of MOV/MP4 files, and not at the top level like other XMP tags. See <https://github.com/google/spatial-media/blob/master/docs/spherical-video-rfc.md> for the specification.

These tags belong to the ExifTool XMP-GSpherical family 1 group.

Tag Name	Writable	Values / Notes
CroppedAreaImageHeightPixels	integer/	
CroppedAreaImageWidthPixels	integer/	
CroppedAreaLeftPixels	integer/	
CroppedAreaTopPixels	integer/	
FullPanoHeightPixels	integer/	
FullPanoWidthPixels	integer/	
InitialViewHeadingDegrees	real/	
InitialViewPitchDegrees	real/	
InitialViewRollDegrees	real/	
ProjectionType	string/	
SourceCount	integer/	
Spherical	boolean/	
StereoMode	string/	
Stitched	boolean/	
StitchingSoftware	string/	
TimeStamp	integer/	

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*Last revised Sep 22, 2025*

[<-- ExifTool Tag Names](#)

# H264 Tags

Tags extracted from H.264 video streams. The metadata for AVCHD videos is stored in this stream.

Tag Name	Writable	Values / Notes
ImageHeight	no	
ImageWidth	no	
MDPM	-	--> <a href="#">H264 MDPM Tags</a>

## H264 MDPM Tags

The following tags are decoded from the Modified Digital Video Pack Metadata (MDPM) of the unregistered user data with UUID 17ee8c60f84d11d98cd60800200c9a66 in the H.264 Supplemental Enhancement Information (SEI). [Yes, this description is confusing, but nothing compared to the challenge of actually decoding the data!] This information may exist at regular intervals through the entire video, but only the first occurrence is extracted unless the [ExtractEmbedded](#) (-ee) option is used (in which case subsequent occurrences are extracted as sub-documents).

Tag ID	Tag Name	Writable	Values / Notes
0x0013	TimeCode	no	(hours:minutes:seconds:frames)
0x0018	DateTimeOriginal	no	(combined with tag 0x19)
0x0070	Camera1	-	--> <a href="#">H264 Camera1 Tags</a>
0x0071	Camera2	-	--> <a href="#">H264 Camera2 Tags</a>
0x007f	Shutter	-	--> <a href="#">H264 Shutter Tags</a>
0x00a0	ExposureTime	no	
0x00a1	FNumber	no	
0x00a2	ExposureProgram	no	0 = Not Defined 1 = Manual 2 = Program AE 3 = Aperture-priority AE 4 = Shutter speed priority AE 5 = Creative (Slow speed) 6 = Action (High speed) 7 = Portrait 8 = Landscape
0x00a3	BrightnessValue	no	
0x00a4	ExposureCompensation	no	
0x00a5	MaxApertureValue	no	
0x00a6	Flash	no	--> <a href="#">EXIF Flash Values</a>
0x00a7	CustomRendered	no	0 = Normal 1 = Custom
0x00a8	WhiteBalance	no	0 = Auto 1 = Manual
0x00a9	FocalLengthIn35mmFormat	no	
0x00aa	SceneCaptureType	no	0 = Standard 1 = Landscape 2 = Portrait 3 = Night
0x00b0	GPSVersionID	no	
0x00b1	GPSLatitudeRef	no	'N' = North 'S' = South
0x00b2	GPSLatitude	no	(combined with tags 0xb3 and 0xb4)
0x00b5	GPSLongitudeRef	no	'E' = East 'W' = West
0x00b6	GPSLongitude	no	(combined with tags 0xb7 and 0xb8)
0x00b9	GPSAltitudeRef	no	0 = Above Sea Level 1 = Below Sea Level
0x00ba	GPSAltitude	no	
0x00bb	GPSTimeStamp	no	(combined with tags 0xbc and 0xbd)
0x00be	GPSStatus	no	'A' = Measurement Active 'V' = Measurement Void
0x00bf	GPSMeasureMode	no	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement

0x00c0	GPSDOP	no	
0x00c1	GPSSpeedRef	no	'K' = km/h 'M' = mph 'N' = knots
0x00c2	GPSSpeed	no	
0x00c3	GPSTrackRef	no	'M' = Magnetic North 'T' = True North
0x00c4	GPSTrack	no	
0x00c5	GPSImgDirectionRef	no	'M' = Magnetic North 'T' = True North
0x00c6	GPSImgDirection	no	
0x00c7	GPSMapDatum	no	(combined with tag 0xc8)
0x00ca	GPSDateStamp	no	(combined with tags 0xcb and 0xcc)
0x00e0	MakeModel	-	--> <a href="#">H264 MakeModel Tags</a>
0x00e1	ReclInfo	-	--> <a href="#">H264 ReclInfo Tags</a> (Canon only)
0x00e4	Model	no	(Sony only, combined with tags 0xe5 and 0xe6)
0x00ee	FrameInfo	-	--> <a href="#">H264 FrameInfo Tags</a> (Canon only)

## H264 Camera1 Tags

Index1	Tag Name	Writable	Values / Notes
0	ApertureSetting	no	0xfe = Closed 0xff = Auto
1	Gain	no	[val & 0xf]
1.1	ExposureProgram	no	[val >> 4 & 0xf] 0 = Program AE 1 = Gain 2 = Shutter speed priority AE 3 = Aperture-priority AE 4 = Manual
2.1	WhiteBalance	no	[val >> 5 & 0x7] 0 = Auto 1 = Hold 2 = 1-Push 3 = Daylight
3	Focus	no	

## H264 Camera2 Tags

Index1	Tag Name	Writable	Values / Notes
1	ImageStabilization	no	0x0 = Off 0x3f = On (0x3f) 0xbf = Off (0xbf) 0xff = n/a

## H264 Shutter Tags

Index2	Tag Name	Writable	Values / Notes
1.1	ExposureTime	no	[val & 0x7fff]

## H264 MakeModel Tags

Index2	Tag Name	Writable	Values / Notes
0	Make	no	0x103 = Panasonic 0x108 = Sony 0x1011 = Canon 0x1104 = JVC

## H264 ReclInfo Tags

Recording information stored by some Canon video cameras.

Index1	Tag Name	Writable	Values / Notes
0	RecordingMode	no	2 = XP+ 4 = SP 5 = LP 6 = FXP 7 = MXP

## H264 FrameInfo Tags

Frame rate information stored by some Canon video cameras.

Index1	Tag Name	Writable	Values / Notes
0	CaptureFrameRate	no	
1	VideoFrameRate	no	

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Last revised Feb 3, 2021

[-- ExifTool Tag Names](#)

# HP Tags

These tables list tags found in the maker notes of some Hewlett-Packard camera models.

The first table lists tags found in the EXIF-format maker notes of the PhotoSmart 720 (also used by the Vivitar ViviCam 3705, 3705B and 3715).

Tag ID	Tag Name	Writable	Values / Notes
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>

## HP Type2 Tags

These tags are used by the PhotoSmart E427.

Tag ID	Tag Name	Writable	Values / Notes
'Lens Shading'	LensShading	no	
'PreviewImage'	PreviewImage	no	
'Serial Number'	SerialNumber	no	

## HP Type4 Tags

These tags are used by the PhotoSmart M627.

Index1	Tag Name	Writable	Values / Notes
12	MaxAperture	no	
16	ExposureTime	no	
20	CameraDateTime	no	
52	ISO	no	
92	SerialNumber	no	

## HP Type6 Tags

These tags are used by the PhotoSmart M425, M525 and M527.

Index1	Tag Name	Writable	Values / Notes
12	FNumber	no	
16	ExposureTime	no	
20	CameraDateTime	no	
52	ISO	no	
88	SerialNumber	no	

## HP TDHD Tags

These tags are extracted from the APP6 "TDHD" segment of Photosmart R837 JPEG images. Many other unknown tags exist in this data, and can be seen with the [Unknown](#) (-u) option.

Tag ID	Tag Name	Writable	Values / Notes
'CMSN'	SerialNumber	no	
'FWRV'	FirmwareVersion	no	
'LSLV'	LSLV	-	--> <a href="#">HP TDHD Tags</a>
'TDHD'	TDHD	-	--> <a href="#">HP TDHD Tags</a>

# HTML Tags

Meta information extracted from the header of HTML and XHTML files. This is a mix of information found in the `META` elements, `XML` element, and the `TITLE` element.

Tag ID	Tag Name	Writable	Values / Notes
'abstract'	Abstract	no	
'author'	Author	no	
'classification'	Classification	no	
'content-language'	ContentLanguage	no	
'copyright'	Copyright	no	
'dc'	DC	-	--> <a href="#">HTML dc Tags</a>
'description'	Description	no	
'distribution'	Distribution	no	
'doc-class'	DocClass	no	
'doc-rights'	DocRights	no	
'doc-type'	DocType	no	
'formatter'	Formatter	no	
'generator'	Generator	no	
'generatorversion'	GeneratorVersion	no	
'googlebot'	GoogleBot	no	
'http-equiv'	HTTP-equiv	-	--> <a href="#">HTML equiv Tags</a>
'keywords'	Keywords	no+	
'mssmarttagspreventparsing'	NoMSSmartTags	no	
'ncc'	NCC	-	--> <a href="#">HTML ncc Tags</a>
'o'	Office	-	--> <a href="#">HTML Office Tags</a>
'originator'	Originator	no	
'owner'	Owner	no	
'prod'	Prod	-	--> <a href="#">HTML prod Tags</a>
'progid'	ProgID	no	
'rating'	Rating	no	
'refresh'	Refresh	no	
'resource-type'	ResourceType	no	
'revisit-after'	RevisitAfter	no	
'robots'	Robots	no+	
'title'	Title	no	(the only extracted tag which isn't from an HTML META element)
'vw96'	VW96	-	--> <a href="#">HTML vw96 Tags</a>

## HTML dc Tags

Dublin Core schema tags (also used in XMP).

Tag ID	Tag Name	Writable	Values / Notes
'contributor'	Contributor	no+	
'coverage'	Coverage	no	
'creator'	Creator	no+	
'date'	Date	no+	
'description'	Description	no	
'format'	Format	no	
'identifier'	Identifier	no	
'language'	Language	no+	
'publisher'	Publisher	no+	
'relation'	Relation	no+	
'rights'	Rights	no	

'source'	Source	no
'subject'	Subject	no+
'title'	Title	no
'type'	Type	no+

## HTML equiv Tags

These tags have a family 1 group name of "HTTP-equiv".

Tag ID	Tag Name	Writable	Values / Notes
'cache-control'	CacheControl	no	
'content-disposition'	ContentDisposition	no	
'content-language'	ContentLanguage	no	
'content-script-type'	ContentScriptType	no	
'content-style-type'	ContentStyleType	no	
'content-type'	ContentType	no	
'default-style'	DefaultStyle	no	
'expires'	Expires	no	
'ext-cache'	ExtCache	no	
'imagetoolbar'	ImageToolbar	no	
'lotus'	Lotus	no	
'page-enter'	PageEnter	no	
'page-exit'	PageExit	no	
'pics-label'	PicsLabel	no	
'pragma'	Pragma	no	
'refresh'	Refresh	no	
'reply-to'	ReplyTo	no	
'set-cookie'	SetCookie	no	
'site-enter'	SiteEnter	no	
'site-exit'	SiteExit	no	
'vary'	Vary	no	
'window-target'	WindowTarget	no	

## HTML ncc Tags

Tag ID	Tag Name	Writable	Values / Notes
'charset'	CharacterSet	no	
'depth'	Depth	no	
'files'	Files	no	
'footnotes'	Footnotes	no	
'generator'	Generator	no	
'kbytesize'	KByteSize	no	
'maxpagenormal'	MaxPageNormal	no	
'multimediatype'	MultimediaType	no	
'narrator'	Narrator	no	
'pagefront'	PageFront	no	
'pagenormal'	PageNormal	no	
'pagespecial'	PageSpecial	no	
'prodnotes'	ProdNotes	no	
'produceddate'	ProducedDate	no	
'producer'	Producer	no	
'revision'	Revision	no	
'revisiondate'	RevisionDate	no	
'setinfo'	SetInfo	no	

'sidebars'	Sidebars	no
'sourcedate'	SourceDate	no
'sourceedition'	SourceEdition	no
'sourcepublisher'	SourcePublisher	no
'sourcerights'	SourceRights	no
'sourcetitle'	SourceTitle	no
'tocitems'	TOCItems	no
'totaltime'	Duration	no

## HTML Office Tags

Tags written by Microsoft Office applications.

Tag ID	Tag Name	Writable	Values / Notes
'Author'	Author	no	
'Category'	Category	no	
'Characters'	Characters	no	
'CharactersWithSpaces'	CharactersWithSpaces	no	
'Company'	Company	no	
'Created'	CreateDate	no	
'Description'	Description	no	
'Keywords'	Keywords	no	
'LastAuthor'	LastAuthor	no	
'LastPrinted'	LastPrinted	no	
'LastSaved'	ModifyDate	no	
'Lines'	Lines	no	
'Manager'	Manager	no	
'Pages'	Pages	no	
'Paragraphs'	Paragraphs	no	
'Revision'	RevisionNumber	no	
'Subject'	Subject	no	
'Template'	Template	no	
'TotalTime'	TotalEditTime	no	
'Version'	RevisionNumber	no	
'Words'	Words	no	

## HTML prod Tags

Tag ID	Tag Name	Writable	Values / Notes
'recengineer'	RecEngineer	no	
'reclocation'	RecLocation	no	

## HTML vw96 Tags

Tag ID	Tag Name	Writable	Values / Notes
'objecttype'	ObjectType	no	

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*Last revised Jun 30, 2012*

[-- ExifTool Tag Names](#)

# ICC\_Profile Tags

ICC profile information is used in many different file types including JPEG, TIFF, PDF, PostScript, Photoshop, PNG, MIFF, PICT, QuickTime, XCF and some RAW formats. While the tags listed below are not individually writable, the entire profile itself can be accessed via the extra 'ICC\_Profile' tag, but this tag is neither extracted nor written unless specified explicitly. See [http://www.color.org/icc\\_specs2.xalter](http://www.color.org/icc_specs2.xalter) for the official ICC specification.

Tag ID	Tag Name	Writable	Values / Notes
'A2B0'	AToB0	no	
'A2B1'	AToB1	no	
'A2B2'	AToB2	no	
'A2B3'	AToB3	no	
'A2M0'	AToM0	no	
'B2A0'	BToA0	no	
'B2A1'	BToA1	no	
'B2A2'	BToA2	no	
'B2A3'	BToA3	no	
'B2D0'	BToD0	no	
'B2D1'	BToD1	no	
'B2D2'	BToD2	no	
'B2D3'	BToD3	no	
'CxF '	CXF	no	
'D2B0'	DToB0	no	
'D2B1'	DToB1	no	
'D2B2'	DToB2	no	
'D2B3'	DToB3	no	
'Header'	ProfileHeader	-	--> <a href="#">ICC_Profile Header Tags</a>
'M2A0'	MToA0	no	
'M2B0'	MToB0	no	
'M2B1'	MToB1	no	
'M2B2'	MToB2	no	
'M2B3'	MToB3	no	
'M2S0'	MToS0	no	
'M2S1'	MToS1	no	
'M2S2'	MToS2	no	
'M2S3'	MToS3	no	
'MS00'	WCSPProfiles	no	
'bAB0'	BRDFAToB0	no	
'bAB1'	BRDFAToB1	no	
'bAB2'	BRDFAToB2	no	
'bAB3'	BRDFAToB3	no	
'bBA0'	BRDFBToA0	no	
'bBA1'	BRDFBToA1	no	
'bBA2'	BRDFBToA2	no	
'bBA3'	BRDFBToA3	no	
'bBD0'	BRDFBToD0	no	
'bBD1'	BRDFBToD1	no	
'bBD2'	BRDFBToD2	no	
'bBD3'	BRDFBToD3	no	
'bDB0'	BRDFDToB0	no	
'bDB1'	BRDFDToB1	no	
'bDB2'	BRDFDToB2	no	
'bDB3'	BRDFDToB3	no	
'bMB0'	BRDFMToB0	no	

'bMB1'	BRDFMToB1	no	
'bMB2'	BRDFMToB2	no	
'bMB3'	BRDFMToB3	no	
'bMS0'	BRDFMToS0	no	
'bMS1'	BRDFMToS1	no	
'bMS2'	BRDFMToS2	no	
'bMS3'	BRDFMToS3	no	
'bTRC'	BlueTRC	no	
'bXYZ'	BlueMatrixColumn	no	
'bcp0'	BRDFColorimetricParam0	no	
'bcp1'	BRDFColorimetricParam1	no	
'bcp2'	BRDFColorimetricParam2	no	
'bcp3'	BRDFColorimetricParam3	no	
'bfd '	UCRBG	no	
'bkpt'	MediaBlackPoint	no	
'bsp0'	BRDFSpectralParam0	no	
'bsp1'	BRDFSpectralParam1	no	
'bsp2'	BRDFSpectralParam2	no	
'bsp3'	BRDFSpectralParam3	no	
'c2sp'	CustomToStandardPcc	no	
'calt'	CalibrationDateTime	no	
'cept'	ColorEncodingParams	no	
'chad'	ChromaticAdaptation	no	
'chrm'	Chromaticity	-	--> <a href="#">ICC_Profile Chromaticity Tags</a>
'cicp'	ColorRepresentation	-	--> <a href="#">ICC_Profile ColorRep Tags</a>
'ciis'	ColorimetricIntentImageState	no	
'clio'	ColorantInfoOut	no	
'cloo'	ColorantOrderOut	no	
'clot'	ColorantTableOut	no	
'clro'	ColorantOrder	no	
'clrt'	ColorantTable	-	--> <a href="#">ICC_Profile ColorantTable Tags</a>
'cpri'	ProfileCopyright	no	
'crdi'	CRDInfo	no	
'csnm'	ColorSpaceName	no	
'dAB0'	DirectionalAToB0	no	
'dAB1'	DirectionalAToB1	no	
'dAB2'	DirectionalAToB2	no	
'dAB3'	DirectionalAToB3	no	
'dBA0'	DirectionalBToA0	no	
'dBA1'	DirectionalBToA1	no	
'dBA2'	DirectionalBToA2	no	
'dBA3'	DirectionalBToA3	no	
'dB00'	DirectionalBToD0	no	
'dB11'	DirectionalBToD1	no	
'dB22'	DirectionalBToD2	no	
'dB33'	DirectionalBToD3	no	
'dDB0'	DirectionalIDToB0	no	
'dDB1'	DirectionalIDToB1	no	
'dDB2'	DirectionalIDToB2	no	
'dDB3'	DirectionalIDToB3	no	
'desc'	ProfileDescription	no	
'devs'	DeviceSettings	no	
'dmdd'	DeviceModelDesc	no	

'dmnd'	DeviceMfgDesc	no	
'dscm'	ProfileDescriptionML	no	
'fpce'	FocalPlaneColorimetryEstimates	no	
'gTRC'	GreenTRC	no	
'gXYZ'	GreenMatrixColumn	no	
'gamt'	Gamut	no	
'gdb0'	GamutBoundaryDescription0	no	
'gdb1'	GamutBoundaryDescription1	no	
'gdb2'	GamutBoundaryDescription2	no	
'gdb3'	GamutBoundaryDescription3	no	
'hdgm'	HDGainMapInfo	no	
'kTRC'	GrayTRC	no	
'lumi'	Luminance	no	
'mcta'	MultiplexTypeArray	no	
'mdv '	MultiplexDefaultValues	no	
'meas'	Measurement	-	--> <a href="#">ICC_Profile Measurement Tags</a>
'meta'	Metadata	-	--> <a href="#">ICC_Profile Metadata Tags</a>
'miin'	MeasurementInputInfo	no	
'minf'	MeasurementInfo	no	
'mmod'	MakeAndModel	no	
'ncl2'	NamedColor2	no	
'ncol'	NamedColor	no	
'ndin'	NativeDisplayInfo	no	
'nmcl'	NamedColor	no	
'pre0'	Preview0	no	
'pre1'	Preview1	no	
'pre2'	Preview2	no	
'ps2i'	PS2RenderingIntent	no	
'ps2s'	PostScript2CSA	no	
'psd0'	PostScript2CRD0	no	
'psd1'	PostScript2CRD1	no	
'psd2'	PostScript2CRD2	no	
'psd3'	PostScript2CRD3	no	
'pseq'	ProfileSequenceDesc	no	
'psid'	ProfileSequenceIdentifier	no	
'psin'	ProfileSequenceInfo	no	
'psvm'	PS2CRDVMSize	no	
'rTRC'	RedTRC	no	
'rXYZ'	RedMatrixColumn	no	
'resp'	OutputResponse	no	
'rfnm'	ReferenceName	no	
'rhoc'	ReflectionHardcopyOrigColorimetry	no	
'rig0'	PerceptualRenderingIntentGamut	no	'prmg' = Perceptual Reference Medium Gamut
'rig2'	SaturationRenderingIntentGamut	no	'prmg' = Perceptual Reference Medium Gamut
'rpoc'	ReflectionPrintOutputColorimetry	no	
's2cp'	StandardToCustomPcc	no	
'sape'	SceneAppearanceEstimates	no	
'scoe'	SceneColorimetryEstimates	no	
'scrd'	ScreeningDesc	no	
'scrn'	Screening	no	
'smap'	SurfaceMap	no	
'svcn'	SpectralViewingConditions	no	
'swpt'	SpectralWhitePoint	no	

'targ'	CharTarget	no	
'tech'	Technology	no	<p>'AMD' = Active Matrix Display          'CRT' = Cathode Ray Tube Display          'KPCD' = Photo CD          'PMD' = Passive Matrix Display          'dcam' = Digital Camera          'dcpj' = Digital Cinema Projector          'dmpc' = Digital Motion Picture Camera          'dsub' = Dye Sublimation Printer          'epho' = Electrophotographic Printer          'esta' = Electrostatic Printer          'flex' = Flexography          'fprn' = Film Writer          'fscn' = Film Scanner          'grav' = Gravure          'ijet' = Ink Jet Printer          'imgs' = Photo Image Setter          'mpfr' = Motion Picture Film Recorder          'mpfs' = Motion Picture Film Scanner          'offs' = Offset Lithography          'pjtv' = Projection Television          'rpho' = Photographic Paper Printer          'rscn' = Reflective Scanner          'silk' = Silkscreen          'twax' = Thermal Wax Printer          'vidc' = Video Camera          'vidm' = Video Monitor</p>
'vcgt'	VideoCardGamma	no	
'view'	ViewingConditions	-	--> <a href="#">ICC_Profile ViewingConditions Tags</a>
'vued'	ViewingCondDesc	no	
'wtpt'	MediaWhitePoint	no	

## ICC\_Profile Header Tags

Index1	Tag Name	Writable	Values / Notes
4	ProfileCMMType	no	--> <a href="#">ICC_Profile ManuSig Values</a>
8	ProfileVersion	no	
12	ProfileClass	no	<p>'abst' = Abstract Profile          'cenc' = ColorEncodingSpace Profile          'link' = DeviceLink Profile          'mid' = MultiplexIdentification Profile          'mlnk' = MultiplexLink Profile          'mntr' = Display Device Profile          'mvls' = MultiplexVisualization Profile          'nkpf' = Nikon Input Device Profile (NON-STANDARD!)          'nmcl' = NamedColor Profile          'ptr' = Output Device Profile          'scnr' = Input Device Profile          'spac' = ColorSpace Conversion Profile</p>
16	ColorSpaceData	no	
20	ProfileConnectionSpace	no	
24	ProfileDateTime	no	
36	ProfileFileSignature	no	
40	PrimaryPlatform	no	<p>'APPL' = Apple Computer Inc.          'MSFT' = Microsoft Corporation          'SGI' = Silicon Graphics Inc.          'SUNW' = Sun Microsystems Inc.          'TGNT' = Taligent Inc.</p>
44	CMMFlags	no	
48	DeviceManufacturer	no	--> <a href="#">ICC_Profile ManuSig Values</a>
52	DeviceModel	no	
56	DeviceAttributes	no	
64	RenderingIntent	no	<p>0 = Perceptual          1 = Media-Relative Colorimetric          2 = Saturation          3 = ICC-Absolute Colorimetric</p>
68	ConnectionSpaceIlluminant	no	
80	ProfileCreator	no	--> <a href="#">ICC_Profile ManuSig Values</a>

## ICC\_Profile ManuSig Values

Value	ManuSig
"	=
'4d2p'	= Erdt Systems GmbH & Co KG
'AAMA'	= Aamazing Technologies, Inc.
'ACER'	= Acer Peripherals
'ACLT'	= Acolyte Color Research
'ACTI'	= Actix Systems, Inc.
'ADAR'	= Adara Technology, Inc.
'ADBE'	= Adobe Systems Inc.
'ADI '	= ADI Systems, Inc.
'AGFA'	= Agfa Graphics N.V.
'ALMD'	= Alps Electric USA, Inc.
'ALPS'	= Alps Electric USA, Inc.
'ALWN'	= Alwan Color Expertise
'AMTI'	= Amiable Technologies, Inc.
'AOC '	= AOC International (U.S.A), Ltd.
'APAG'	= Apago
'APPL'	= Apple Computer Inc.
'AST '	= AST
'AT&T'	= AT&T Computer Systems
'BAEL'	= BARBIERI electronic
'BRCO'	= Barco NV
'BRKP'	= Breakpoint Pty Limited
'BROT'	= Brother Industries, LTD
'BULL'	= Bull
'BUS '	= Bus Computer Systems
'C-IT'	= C-Itoh
'CAMR'	= Intel Corporation
'CANO'	= Canon, Inc. (Canon Development Americas, Inc.)
'CARR'	= Carroll Touch
'CASI'	= Casio Computer Co., Ltd.
'CBUS'	= Colorbus PL
'CEL '	= Crossfield
'CELx'	= Crossfield
'CGS '	= CGS Publishing Technologies International GmbH
'CHM '	= Rochester Robotics
'CIGL'	= Colour Imaging Group, London
'CITI'	= Citizen
'CL00'	= Candela, Ltd.
'CLIQ'	= Color IQ
'CMCO'	= Chromaco, Inc.
'CMiX'	= CHROMiX
'COLO'	= Colorgraphic Communications Corporation
'COMP'	= COMPAQ Computer Corporation
'COMp'	= Compeq USA/Focus Technology
'CONR'	= Conrac Display Products
'CORD'	= Cordata Technologies, Inc.
'CPQ '	= Compaq Computer Corporation
'CPRO'	= ColorPro
'CRN '	= Cornerstone
'CTX '	= CTX International, Inc.
'CVIS'	= ColorVision
'CWC '	= Fujitsu Laboratories, Ltd.
'DARI'	= Darius Technology, Ltd.
'DATA'	= Dataproducts
'DCP '	= Dry Creek Photo
'DCRC'	= Digital Contents Resource Center, Chung-Ang University
'DELL'	= Dell Computer Corporation
'DIC '	= Dainippon Ink and Chemicals
'DICO'	= Diconix
'DIGI'	= Digital
'DL&C'	= Digital Light & Color
'DPLG'	= Doppelganger, LLC
'DS '	= Dainippon Screen
'DSOL'	= DOOSOL
'DUPN'	= DuPont
'EPSO'	= Epson
'ESKO'	= Esko-Graphics
'ETRI'	= Electronics and Telecommunications Research Institute

'EVER' = Everex Systems, Inc.  
'EXAC' = ExactCODE GmbH  
'Eizo' = EIZO NANAO CORPORATION  
'FALC' = Falco Data Products, Inc.  
'FF' = Fuji Photo Film Co., LTD  
'FFEI' = FujiFilm Electronic Imaging, Ltd.  
'FNRD' = fnord software  
'FORA' = Fora, Inc.  
'FORE' = Forefront Technology Corporation  
'FP' = Fujitsu  
'FPA' = WayTech Development, Inc.  
'FUJI' = Fujitsu  
'FX' = Fuji Xerox Co., Ltd.  
'GCC' = GCC Technologies, Inc.  
'GGSL' = Global Graphics Software Limited  
'GMB' = Gretagmacbeth  
'GMG' = GMG GmbH & Co. KG  
'GOLD' = GoldStar Technology, Inc.  
'GOOG' = Google  
'GPRT' = Giantprint Pty Ltd  
'GTMB' = Gretagmacbeth  
'GVC' = WayTech Development, Inc.  
'GW2K' = Sony Corporation  
'HCI' = HCI  
'HDM' = Heidelberger Druckmaschinen AG  
'HERM' = Hermes  
'HITA' = Hitachi America, Ltd.  
'HP' = Hewlett-Packard  
'HTC' = Hitachi, Ltd.  
'HiTi' = HiTi Digital, Inc.  
'IBM' = IBM Corporation  
'IDNT' = Scitex Corporation, Ltd.  
'IEC' = Hewlett-Packard  
'IINYA' = Iiyama North America, Inc.  
'IKEG' = Ikegami Electronics, Inc.  
'IMAG' = Image Systems Corporation  
'IMI' = Ingram Micro, Inc.  
'INTC' = Intel Corporation  
'INTL' = N/A (INTL)  
'INTR' = Intra Electronics USA, Inc.  
'IOCO' = Iocomm International Technology Corporation  
'IPS' = InfoPrint Solutions Company  
'IRIS' = Scitex Corporation, Ltd.  
'ISL' = Ichikawa Soft Laboratory  
'ITNL' = N/A (ITNL)  
'IVM' = IVM  
'IWAT' = Iwatsu Electric Co., Ltd.  
'Idnt' = Scitex Corporation, Ltd.  
'Inca' = Inca Digital Printers Ltd.  
'Iris' = Scitex Corporation, Ltd.  
'JPEG' = Joint Photographic Experts Group  
'JSFT' = Jetsoft Development  
'JVC' = JVC Information Products Co.  
'KART' = Scitex Corporation, Ltd.  
'KFC' = KFC Computek Components Corporation  
'KLH' = KLH Computers  
'KMHD' = Konica Minolta Holdings, Inc.  
'KNCA' = Konica Corporation  
'KODA' = Kodak  
'KYOC' = Kyocera  
'Kart' = Scitex Corporation, Ltd.  
'LCAG' = Leica Camera AG  
'LCCD' = Leeds Colour  
'LDAK' = Left Dakota  
'LEAD' = Leading Technology, Inc.  
'LEXM' = Lexmark International, Inc.  
'LINK' = Link Computer, Inc.  
'LINO' = Linotronic  
'LITE' = Lite-On, Inc.  
'Leaf' = Leaf  
'Lino' = Linotronic  
'MAGC' = Mag Computronic (USA) Inc.  
'MAGI' = MAG Innovision, Inc.  
'MANN' = Mannesmann  
'MICN' = Micron Technology, Inc.

'MICR' = Microtek  
'MICV' = Microvitec, Inc.  
'MINO' = Minolta  
'MITS' = Mitsubishi Electronics America, Inc.  
'MITs' = Mitsuba Corporation  
'MNLT' = Minolta  
'MODG' = Modgraph, Inc.  
'MONI' = Monitronix, Inc.  
'MONS' = Monaco Systems Inc.  
'MORS' = Morse Technology, Inc.  
'MOTI' = Motive Systems  
'MSFT' = Microsoft Corporation  
'MUTO' = MUTOH INDUSTRIES LTD.  
'Mits' = Mitsubishi Electric Corporation Kyoto Works  
'NANA' = NANA USA Corporation  
'NEC' = NEC Corporation  
'NEXP' = NexPress Solutions LLC  
'NISS' = Nissei Sangyo America, Ltd.  
'NKON' = Nikon Corporation  
'NONE' = none  
'OCE' = Oce Technologies B.V.  
'OCEC' = OceColor  
'OKI' = Oki  
'OKID' = Okidata  
'OKIP' = Okidata  
'OLIV' = Olivetti  
'OLYM' = OLYMPUS OPTICAL CO., LTD  
'ONYX' = Onyx Graphics  
'OPTI' = Optiquest  
'PACK' = Packard Bell  
'PANA' = Matsushita Electric Industrial Co., Ltd.  
'PANT' = Pantone, Inc.  
'PBN' = Packard Bell  
'PFU' = PFU Limited  
'PHIL' = Philips Consumer Electronics Co.  
'PNTX' = HOYA Corporation PENTAX Imaging Systems Division  
'POne' = Phase One A/S  
'PREM' = Premier Computer Innovations  
'PRIN' = Princeton Graphic Systems  
'PRIP' = Princeton Publishing Labs  
'QLUX' = Hong Kong  
'QMS' = QMS, Inc.  
'QPCD' = QPcard AB  
'QUAD' = QuadLaser  
'QUME' = Qume Corporation  
'RADI' = Radius, Inc.  
'RDDx' = Integrated Color Solutions, Inc.  
'RDG' = Roland DG Corporation  
'REDM' = REDMS Group, Inc.  
'RELI' = Relisys  
'RGMS' = Rolf Gierling Multitools  
'RICO' = Ricoh Corporation  
'RNLD' = Edmund Ronald  
'ROYA' = Royal  
'RPC' = Ricoh Printing Systems,Ltd.  
'RTL' = Royal Information Electronics Co., Ltd.  
'SAMP' = Sampo Corporation of America  
'SAMS' = Samsung, Inc.  
'SANT' = Jaime Santana Pomares  
'SCIT' = Scitex Corporation, Ltd.  
'SCRN' = Dainippon Screen  
'SDP' = Scitex Corporation, Ltd.  
'SEC' = SAMSUNG ELECTRONICS CO.,LTD  
'SEIK' = Seiko Instruments U.S.A., Inc.  
'SEIK' = Seikosha  
'SGUY' = ScanGuy.com  
'SHAR' = Sharp Laboratories  
'SICC' = International Color Consortium  
'SONY' = SONY Corporation  
'SPCL' = SpectraCal  
'STAR' = Star  
'STC' = Sampo Technology Corporation  
'Scit' = Scitex Corporation, Ltd.  
'Sdp' = Scitex Corporation, Ltd.  
'Sony' = Sony Corporation

'TALO' = Talon Technology Corporation  
 'TAND' = Tandy  
 'TATU' = Tatung Co. of America, Inc.  
 'TAXA' = TAXAN America, Inc.  
 'TDS' = Tokyo Denshi Sekei K.K.  
 'TECO' = TECO Information Systems, Inc.  
 'TEGR' = Tegra  
 'TEKT' = Tektronix, Inc.  
 'TI' = Texas Instruments  
 'TMKR' = TypeMaker Ltd.  
 'TOSB' = TOSHIBA corp.  
 'TOSH' = Toshiba, Inc.  
 'TOTK' = TOTOKU ELECTRIC Co., LTD  
 'TRIU' = Triumph  
 'TSBT' = TOSHIBA TEC CORPORATION  
 'TTX' = TTX Computer Products, Inc.  
 'TVM' = TVM Professional Monitor Corporation  
 'TW' = TW Casper Corporation  
 'ULSX' = Ulead Systems  
 'UNIS' = Unisys  
 'UTZF' = Utz Fehlau & Sohn  
 'VARI' = Varityper  
 'VIEW' = Viewsonic  
 'VISL' = Visual communication  
 'VIVO' = Vivo Mobile Communication Co., Ltd  
 'WANG' = Wang  
 'WLBR' = Wilbur Imaging  
 'WTG2' = Ware To Go  
 'WYSE' = WYSE Technology  
 'XERX' = Xerox Corporation  
 'XRIT' = X-Rite  
 'Z123' = Lavanya's test Company  
 'ZRAN' = Zoran Corporation  
 'Zebr' = Zebra Technologies Inc  
 'appl' = Apple Computer Inc.  
 'bICC' = basICColor GmbH  
 'berg' = bergdesign incorporated  
 'ceyd' = Integrated Color Solutions, Inc.  
 'clsp' = MacDermid ColorSpan, Inc.  
 'ds' = Dainippon Screen  
 'dupn' = DuPont  
 'ffei' = FujiFilm Electronic Imaging, Ltd.  
 'flux' = FluxData Corporation  
 'iris' = Scitex Corporation, Ltd.  
 'kart' = Scitex Corporation, Ltd.  
 'lcms' = Little CMS  
 'lino' = Linotronic  
 'none' = none  
 'ob4d' = Erdt Systems GmbH & Co KG  
 'obic' = Medigraph GmbH  
 'quby' = Qubyx Sarl  
 'scit' = Scitex Corporation, Ltd.  
 'scrn' = Dainippon Screen  
 'sdp' = Scitex Corporation, Ltd.  
 'siwi' = SIWI GRAFIKA CORPORATION  
 'yxym' = YxyMaster GmbH

## ICC\_Profile Chromaticity Tags

Index1	Tag Name	Writable	Values / Notes
8	ChromaticityChannels	no	
10	ChromaticityColorant	no	0 = Unknown 1 = ITU-R BT.709 2 = SMPTE RP145-1994 3 = EBU Tech.3213-E 4 = P22
12	ChromaticityChannel1	no	
20	ChromaticityChannel2	no	
28	ChromaticityChannel3	no	
36	ChromaticityChannel4	no	

# ICC\_Profile ColorRep Tags

Index1	Tag Name	Writable	Values / Notes
8	ColorPrimaries	no	1 = BT.709 2 = Unspecified 4 = BT.470 System M (historical) 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 8 = Generic film (color filters using illuminant C) 9 = BT.2020, BT.2100 10 = SMPTE 428 (CIE 1931 XYZ) 11 = SMPTE RP 431-2 12 = SMPTE EG 432-1 22 = EBU Tech. 3213-E
9	TransferCharacteristics	no	0 = For future use (0) 1 = BT.709 2 = Unspecified 3 = For future use (3) 4 = BT.470 System M (historical) 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 M 8 = Linear 9 = Logarithmic (100 : 1 range) 10 = Logarithmic (100 * Sqrt(10) : 1 range) 11 = IEC 61966-2-4 12 = BT.1361 13 = sRGB or sYCC 14 = BT.2020 10-bit systems 15 = BT.2020 12-bit systems 16 = SMPTE ST 2084, ITU BT.2100 PQ 17 = SMPTE ST 428 18 = BT.2100 HLG, ARIB STD-B67
10	MatrixCoefficients	no	0 = Identity matrix 1 = BT.709 2 = Unspecified 3 = For future use (3) 4 = US FCC 73.628 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 M 8 = YCgCo 9 = BT.2020 non-constant luminance, BT.2100 YCbCr 10 = BT.2020 constant luminance 11 = SMPTE ST 2085 YDzDx 12 = Chromaticity-derived non-constant luminance 13 = Chromaticity-derived constant luminance 14 = BT.2100 ICtCp
11	VideoFullRangeFlag	no	0 = Limited 1 = Full

# ICC\_Profile ColorantTable Tags

Index1	Tag Name	Writable	Values / Notes
8	ColorantCount	no	
12	Colorant1Name	no	
44	Colorant1Coordinates	no	
50	Colorant2Name	no	
82	Colorant2Coordinates	no	
88	Colorant3Name	no	
120	Colorant3Coordinates	no	

# ICC\_Profile Measurement Tags

Index1	Tag Name	Writable	Values / Notes
8	MeasurementObserver	no	1 = CIE 1931 2 = CIE 1964
12	MeasurementBacking	no	

24 MeasurementGeometry	no	0 = Unknown 1 = 0/45 or 45/0 2 = 0/d or d/0
28 MeasurementFlare	no	
32 MeasurementIlluminant	no	1 = D50 5 = D55 2 = D65 6 = A 3 = D93 7 = Equi-Power (E) 4 = F2 8 = F8

## ICC\_Profile Metadata Tags

Only these few tags have been pre-defined, but ExifTool will extract any Metadata tags that exist.

Tag Name	Writable	Values / Notes
CreatorApp	no	
ManufacturerName	no	
MediaColor	no	
MediaWeight	no	

## ICC\_Profile ViewingConditions Tags

Index1	Tag Name	Writable	Values / Notes
8	ViewingCondIlluminant	no	
20	ViewingCondSurround	no	
32	ViewingCondIlluminantType	no	1 = D50 5 = D55 2 = D65 6 = A 3 = D93 7 = Equi-Power (E) 4 = F2 8 = F8

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*Last revised Dec 16, 2024*

[-- ExifTool Tag Names](#)

# ICO Tags

Information extracted from Windows ICO (icon) and CUR (cursor) files.

Index1	Tag Name	Writable	Values / Notes
2	ImageType	no	1 = Icon 2 = Cursor
4	ImageCount	no	
6	IconDir	-	--> <a href="#">ICO IconDir Tags</a>

## ICO IconDir Tags

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
1	ImageHeight	no	
2	NumColors	no	
4	ColorPlanes	no	(ICO files)
	HotspotX	no	(CUR files)
6	BitsPerPixel	no	(ICO files)
	HotspotY	no	(CUR files)
8	ImageLength	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

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[--> ExifTool Tag Names](#)

# ID3 Tags

ExifTool extracts ID3 and Lyrics3 information from MP3, MPEG, WAV, WV, AIFF, OGG, FLAC, APE, DSF, MPC and RealAudio files. ID3v2 tags which support multiple languages (eg. Comment and Lyrics) are extracted by specifying the tag name, followed by a dash ('-'), then a 3-character ISO 639-2 language code (eg. "Comment-spa"). See <https://id3.org/> for the official ID3 specification and [http://www.loc.gov/standards/iso639-2/php/code\\_list.php](http://www.loc.gov/standards/iso639-2/php/code_list.php) for a list of ISO 639-2 language codes.

Tag Name	Writable	Values / Notes
ID3v1	-	--> <a href="#">ID3 v1 Tags</a>
ID3v1_Enh	-	--> <a href="#">ID3 v1 Enh Tags</a>
ID3v2_2	-	--> <a href="#">ID3 v2_2 Tags</a>
ID3v2_3	-	--> <a href="#">ID3 v2_3 Tags</a>
ID3v2_4	-	--> <a href="#">ID3 v2_4 Tags</a>

## ID3 v1 Tags

Index1	Tag Name	Writable	Values / Notes
3	Title	no	
33	Artist	no	
63	Album	no	
93	Year	no	
97	Comment	no	
125	Track	no	(v1.1 addition -- last 2 bytes of v1.0 Comment field)
127	Genre	no	(CR and RX are ID3v2 only) 0 = Blues                    65 = Cabaret                    130 = Terror 1 = Classic Rock            66 = New Wave                131 = Indie 2 = Country                67 = Psychedelic            132 = BritPop 3 = Dance                  68 = Rave                      133 = Afro-Punk 4 = Disco                  69 = Showtunes             134 = Polsk Punk 5 = Funk                    70 = Trailer                 135 = Beat 6 = Grunge                71 = Lo-Fi                    136 = Christian Gangsta Rap 7 = Hip-Hop                72 = Tribal                  137 = Heavy Metal 8 = Jazz                    73 = Acid Punk            138 = Black Metal 9 = Metal                  74 = Acid Jazz            139 = Crossover 10 = New Age              75 = Polka                    140 = Contemporary Christian 11 = Oldies                76 = Retro                    141 = Christian Rock 12 = Other                77 = Musical                142 = Merengue 13 = Pop                    78 = Rock & Roll        143 = Salsa 14 = R&B                  79 = Hard Rock            144 = Thrash Metal 15 = Rap                    80 = Folk                    145 = Anime 16 = Reggae                81 = Folk-Rock            146 = JPop 17 = Rock                  82 = National Folk    147 = Synthpop 18 = Techno                83 = Swing                    148 = Abstract 19 = Industrial            84 = Fast-Fusion        149 = Art Rock 20 = Alternative          85 = Bebop                 150 = Baroque 21 = Ska                    86 = Latin                    151 = Bhangra 22 = Death Metal          87 = Revival                152 = Big Beat 23 = Pranks                88 = Celtic                153 = Breakbeat 24 = Soundtrack            89 = Bluegrass            154 = Chillout 25 = Euro-Techno          90 = Avantgarde            155 = Downtempo 26 = Ambient                91 = Gothic Rock        156 = Dub 27 = Trip-Hop              92 = Progressive Rock    157 = EBM 28 = Vocal                  93 = Psychedelic Rock    158 = Eclectic 29 = Jazz+Funk            94 = Symphonic Rock    159 = Electro 30 = Fusion                95 = Slow Rock            160 = Electroclash 31 = Trance                96 = Big Band             161 = Emo 32 = Classical            97 = Chorus                162 = Experimental 33 = Instrumental        98 = Easy Listening    163 = Garage 34 = Acid                    99 = Acoustic            164 = Global 35 = House                100 = Humour             165 = IDM 36 = Game                    101 = Speech            166 = Illbient 37 = Sound Clip            102 = Chanson            167 = Industro-Goth 38 = Gospel                103 = Opera                168 = Jam Band 39 = Noise                104 = Chamber Music    169 = Krautrock 40 = Alt. Rock            105 = Sonata             170 = Leftfield 41 = Bass                    106 = Symphony            171 = Lounge 42 = Soul                    107 = Booty Bass        172 = Math Rock 43 = Punk                    108 = Primus             173 = New Romantic

44 = Space	109 = Porn Groove	174 = Nu-Breakz
45 = Meditative	110 = Satire	175 = Post-Punk
46 = Instrumental Pop	111 = Slow Jam	176 = Post-Rock
47 = Instrumental Rock	112 = Club	177 = Psytrance
48 = Ethnic	113 = Tango	178 = Shoegaze
49 = Gothic	114 = Samba	179 = Space Rock
50 = Darkwave	115 = Folklore	180 = Trop Rock
51 = Techno-Industrial	116 = Ballad	181 = World Music
52 = Electronic	117 = Power Ballad	182 = Neoclassical
53 = Pop-Folk	118 = Rhythmic Soul	183 = Audiobook
54 = Eurodance	119 = Freestyle	184 = Audio Theatre
55 = Dream	120 = Duet	185 = Neue Deutsche Welle
56 = Southern Rock	121 = Punk Rock	186 = Podcast
57 = Comedy	122 = Drum Solo	187 = Indie Rock
58 = Cult	123 = A Cappella	188 = G-Funk
59 = Gangsta Rap	124 = Euro-House	189 = Dubstep
60 = Top 40	125 = Dance Hall	190 = Garage Rock
61 = Christian Rap	126 = Goa	191 = Psybient
62 = Pop/Funk	127 = Drum & Bass	255 = None
63 = Jungle	128 = Club-House	'CR' = Cover
64 = Native American	129 = Hardcore	'RX' = Remix

## ID3 v1\_Enh Tags

ID3 version 1 "Enhanced TAG" information (not part of the official spec).

Index1	Tag Name	Writable	Values / Notes
4	Title2	no	
64	Artist2	no	
124	Album2	no	
184	Speed	no	1 = Slow 2 = Medium 3 = Fast 4 = Hardcore
185	Genre	no	
215	StartTime	no	
221	EndTime	no	

## ID3 v2\_2 Tags

ExifTool extracts mainly text-based tags from ID3v2 information. The tags in the tables below are those extracted by ExifTool, and don't represent a complete list of available ID3v2 tags.

ID3 version 2.2 tags. (These are the tags written by iTunes 5.0.)

Tag ID	Tag Name	Writable	Values / Notes
'CNT'	PlayCounter	no	
'COM'	Comment	no	
'GP1'	Grouping	no	
'IPL'	InvolvedPeople	no	
'ITU'	iTunesU?	no	
'MVI'	MovementNumber	no	
'MVN'	MovementName	no	
'PCS'	Podcast?	no	
'PIC'	Picture	no	(the 3 tags below are also extracted from this PIC frame)
'PIC-1'	PictureFormat	no	
'PIC-2'	PictureType	no	--> <a href="#">ID3 PictureType Values</a>
'PIC-3'	PictureDescription	no	
'POP'	Popularimeter	no	
'RVA'	RelativeVolumeAdjustment	no	
'SLT'	SynLyrics	-	--> <a href="#">ID3 SynLyrics Tags</a>
'TAL'	Album	no	
'TBP'	BeatsPerMinute	no	

'TCM'	Composer	no	
'TCO'	Genre	no	(uses same lookup table as ID3v1 Genre)
'TCP'	Compilation	no	0 = No 1 = Yes
'TCR'	Copyright	no	
'TDA'	Date	no	
'TDY'	PlaylistDelay	no	
'TEN'	EncodedBy	no	
'TFT'	FileType	no	
'TIM'	Time	no	
'TKE'	InitialKey	no	
'TLA'	Language	no	
'TLE'	Length	no	
'TMT'	Media	no	
'TOA'	OriginalArtist	no	
'TOF'	OriginalFileName	no	
'TOL'	OriginalLyricist	no	
'TOR'	OriginalReleaseYear	no	
'TOT'	OriginalAlbum	no	
'TP1'	Artist	no	
'TP2'	Band	no	
'TP3'	Conductor	no	
'TP4'	InterpretedBy	no	
'TPA'	PartOfSet	no	
'TPB'	Publisher	no	
'TRC'	ISRC	no	
'TRD'	RecordingDates	no	
'TRK'	Track	no	
'TS2'	AlbumArtistSortOrder	no	
'TSA'	AlbumSortOrder	no	
'TSC'	ComposerSortOrder	no	
'TSI'	Size	no	
'TSP'	PerformerSortOrder	no	
'TSS'	EncoderSettings	no	
'TST'	TitleSortOrder	no	
'TT1'	Grouping	no	
'TT2'	Title	no	
'TT3'	Subtitle	no	
'TXT'	Lyricist	no	
'TXX'	UserDefinedText	no	
'TYE'	Year	no	
'ULT'	Lyrics	no	
'WAF'	FileURL	no	
'WAR'	ArtistURL	no	
'WAS'	SourceURL	no	
'WCM'	CommercialURL	no	
'WCP'	CopyrightURL	no	
'WPB'	PublisherURL	no	
'WXX'	UserDefinedURL	no	

## ID3 PictureType Values

Value	PictureType	Value	PictureType	Value	PictureType
0 = Other		7 = Lead Artist		14 = Recording Session	

1 = 32x32 PNG Icon	8 = Artist	15 = Performance
2 = Other Icon	9 = Conductor	16 = Capture from Movie or Video
3 = Front Cover	10 = Band	17 = Bright(ly) Colored Fish
4 = Back Cover	11 = Composer	18 = Illustration
5 = Leaflet	12 = Lyricist	19 = Band Logo
6 = Media	13 = Recording Studio or Location	20 = Publisher Logo

## ID3 SynLyrics Tags

The following tags are extracted from synchronized lyrics/text frames.

Tag Name	Writable	Values / Notes
SynchronizedLyricsDescription	no	
SynchronizedLyricsText	no+	(each list item has a leading time stamp in square brackets. Time stamps may be in seconds with format [MM:SS.ss], or MPEG frames with format [FFFF], depending on how this information was stored)
SynchronizedLyricsType	no	0 = Other 1 = Lyrics 2 = Text Transcription 3 = Movement/part Name 4 = Events 5 = Chord 6 = Trivia/"pop-up" Information 7 = Web Page URL 8 = Image URL

## ID3 v2\_3 Tags

ID3 version 2.3 tags. Includes some non-standard tags written by other software.

Tag ID	Tag Name	Writable	Values / Notes
'APIC'	Picture	no	(the 3 tags below are also extracted from this APIC frame)
'APIC-1'	PictureMIMEType	no	
'APIC-2'	PictureType	no	--> <a href="#">ID3 PictureType Values</a>
'APIC-3'	PictureDescription	no	
'COMM'	Comment	no	
'GEOB'	GeneralEncapsulatedObject	-	--> <a href="#">ID3 GEOB Tags</a>
'GRP1'	Grouping	no	
'IPLS'	InvolvedPeople	no	
'ITNU'	iTunesU?	no	
'MCDI'	MusicCDIdentifier	no	
'MVIN'	MovementNumber	no	
'MVNM'	MovementName	no	
'OWNE'	Ownership	no	
'PCNT'	PlayCounter	no	
'PCST'	Podcast?	no	
'POPM'	Popularimeter	no	
'PRIV'	Private	-	--> <a href="#">ID3 Private Tags</a>
'SYLT'	SynLyrics	-	--> <a href="#">ID3 SynLyrics Tags</a>
'TALB'	Album	no	
'TBPM'	BeatsPerMinute	no	
'TCAT'	PodcastCategory	no	
'TCMP'	Compilation	no	0 = No 1 = Yes
'TCOM'	Composer	no	
'TCON'	Genre	no	(uses same lookup table as ID3v1 Genre)
'TCOP'	Copyright	no	
'TDAT'	Date	no	
'TDES'	PodcastDescription	no	
'TDLY'	PlaylistDelay	no	

'TENC'	EncodedBy	no	
'TEXT'	Lyricist	no	
'TFLT'	FileType	no	
'TGID'	PodcastID	no	
'TIME'	Time	no	
'TIT1'	Grouping	no	
'TIT2'	Title	no	
'TIT3'	Subtitle	no	
'TKEY'	InitialKey	no	
'TKWD'	PodcastKeywords	no	
'TLAN'	Language	no	
'TLEN'	Length	no	
'TMED'	Media	no	
'TOAL'	OriginalAlbum	no	
'TOFN'	OriginalFileName	no	
'TOLY'	OriginalLyricist	no	
'TOPE'	OriginalArtist	no	
'TORY'	OriginalReleaseYear	no	
'TOWN'	FileOwner	no	
'TPE1'	Artist	no	
'TPE2'	Band	no	
'TPE3'	Conductor	no	
'TPE4'	InterpretedBy	no	
'TPOS'	PartOfSet	no	
'TPUB'	Publisher	no	
'TRCK'	Track	no	
'TRDA'	RecordingDates	no	
'TRSN'	InternetRadioStationName	no	
'TRSO'	InternetRadioStationOwner	no	
'TSIZ'	Size	no	
'TSO2'	AlbumArtistSortOrder	no	
'TSOC'	ComposerSortOrder	no	
'TSRC'	ISRC	no	
'TSSE'	EncoderSettings	no	
'TXXX'	UserDefinedText	no	
'TYER'	Year	no	
'USER'	TermsOfUse	no	
'USLT'	Lyrics	no	
'WCOM'	CommercialURL	no	
'WCOP'	CopyrightURL	no	
'WFED'	PodcastURL	no	
'WOAF'	FileURL	no	
'WOAR'	ArtistURL	no	
'WOAS'	SourceURL	no	
'WORS'	InternetRadioStationURL	no	
'WPAY'	PaymentURL	no	
'WPUB'	PublisherURL	no	
'WXXX'	UserDefinedURL	no	
'XDOR'	OriginalReleaseTime	no	
'XOLY'	OlympusDSS	-	--> <a href="#">Olympus DSS Tags</a>
'XSOA'	AlbumSortOrder	no	
'XSOP'	PerformerSortOrder	no	
'XSOT'	TitleSortOrder	no	

# ID3 GEOB Tags

Tag ID	Tag Name	Writable	Values / Notes
'GEOB-Data'	GEOB-Data	no	
'GEOB-Desc'	GEOB-Desc	no	
'GEOB-File'	GEOB-File	no	
'GEOB-Mime'	GEOB-Mime	no	
'application/x-c2pa-manifest-store'	JUMBF	-	--> <a href="#">Jpeg2000 Tags</a>

## ID3 Private Tags

ID3 private (PRIV) tags. ExifTool will decode any private tags found, even if they do not appear in this table.

Tag Name	Writable	Values / Notes
AverageLevel	no	
PeakValue	no	
WM_CollectionGroupID	no	
WM_CollectionID	no	
WM_ContentID	no	
WM_MediaClassPrimaryID	no	
WM_MediaClassSecondaryID	no	
WM_Provider	no	
XMP	-	--> <a href="#">XMP Tags</a>

## ID3 v2\_4 Tags

ID3 version 2.4 tags. Includes some non-standard tags written by other software.

Tag ID	Tag Name	Writable	Values / Notes
'APIC'	Picture	no	(the 3 tags below are also extracted from this APIC frame)
'APIC-1'	PictureMIMEType	no	
'APIC-2'	PictureType	no	--> <a href="#">ID3 PictureType Values</a>
'APIC-3'	PictureDescription	no	
'COMM'	Comment	no	
'GEOB'	GeneralEncapsulatedObject	-	--> <a href="#">ID3 GEOB Tags</a>
'GRP1'	Grouping	no	
'ITNU'	iTunesU?	no	
'MCDI'	MusicCDIdentifier	no	
'MVIN'	MovementNumber	no	
'MVNM'	MovementName	no	
'OWNE'	Ownership	no	
'PCNT'	PlayCounter	no	
'PCST'	Podcast?	no	
'POPM'	Popularimeter	no	
'PRIV'	Private	-	--> <a href="#">ID3 Private Tags</a>
'RVA2'	RelativeVolumeAdjustment	no	
'SYLT'	SynLyrics	-	--> <a href="#">ID3 SynLyrics Tags</a>
'TALB'	Album	no	
'TBPM'	BeatsPerMinute	no	
'TCAT'	PodcastCategory	no	
'TCMP'	Compilation	no	0 = No 1 = Yes
'TCOM'	Composer	no	
'TCON'	Genre	no	(uses same lookup table as ID3v1 Genre)
'TCOP'	Copyright	no	

'TDEN'	EncodingTime	no
'TDES'	PodcastDescription	no
'TDLY'	PlaylistDelay	no
'TDOR'	OriginalReleaseTime	no
'TDRC'	RecordingTime	no
'TDRL'	ReleaseTime	no
'TDTG'	TaggingTime	no
'TENC'	EncodedBy	no
'TEXT'	Lyricist	no
'TFLT'	FileType	no
'TGID'	PodcastID	no
'TIPL'	InvolvedPeople	no
'TIT1'	Grouping	no
'TIT2'	Title	no
'TIT3'	Subtitle	no
'TKEY'	InitialKey	no
'TKWD'	PodcastKeywords	no
'TLAN'	Language	no
'TLEN'	Length	no
'TMCL'	MusicianCredits	no
'TMED'	Media	no
'TMOO'	Mood	no
'TOAL'	OriginalAlbum	no
'TOFN'	OriginalFileName	no
'TOLY'	OriginalLyricist	no
'TOPE'	OriginalArtist	no
'TOWN'	FileOwner	no
'TPE1'	Artist	no
'TPE2'	Band	no
'TPE3'	Conductor	no
'TPE4'	InterpretedBy	no
'TPOS'	PartOfSet	no
'TPRO'	ProducedNotice	no
'TPUB'	Publisher	no
'TRCK'	Track	no
'TRSN'	InternetRadioStationName	no
'TRSO'	InternetRadioStationOwner	no
'TSO2'	AlbumArtistSortOrder	no
'TSOA'	AlbumSortOrder	no
'TSOC'	ComposerSortOrder	no
'TSOP'	PerformerSortOrder	no
'TSOT'	TitleSortOrder	no
'TSRC'	ISRC	no
'TSSE'	EncoderSettings	no
'TSST'	SetSubtitle	no
'TXXX'	UserDefinedText	no
'USER'	TermsOfUse	no
'USLT'	Lyrics	no
'WCOM'	CommercialURL	no
'WCOP'	CopyrightURL	no
'WFED'	PodcastURL	no
'WOAF'	FileURL	no
'WOAR'	ArtistURL	no

'WOAS'	SourceURL	no
'WORS'	InternetRadioStationURL	no
'WPAY'	PaymentURL	no
'WPUB'	PublisherURL	no
'WXXX'	UserDefinedURL	no
'XDOR'	OriginalReleaseTime	no
'XOLY'	OlympusDSS	- --> <a href="#">Olympus DSS Tags</a>
'XSOA'	AlbumSortOrder	no
'XSOP'	PerformerSortOrder	no
'XSOT'	TitleSortOrder	no

## ID3 Lyrics3 Tags

ExifTool extracts Lyrics3 version 1.00 and 2.00 tags from any file that supports ID3. See <https://id3.org/Lyrics3> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'AUT'	Author	no	
'CRC'	CRC	no	
'EAL'	ExtendedAlbumName	no	
'EAR'	ExtendedArtistName	no	
'ETT'	ExtendedTrackTitle	no	
'IMG'	AssociatedImageFile	no	
'IND'	Indications	no	
'INF'	AdditionalInfo	no	
'LYR'	Lyrics	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

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[<- ExifTool Tag Names](#)

# IPTC Tags

The tags listed below are part of the International Press Telecommunications Council (IPTC) and the Newspaper Association of America (NAA) Information Interchange Model (IIM). This is an older meta information format, slowly being phased out in favor of XMP -- the newer IPTCCore specification uses XMP format. IPTC information may be found in JPG, TIFF, PNG, MIFF, PS, PDF, PSD, XCF and DNG images.

IPTC information is separated into different records, each of which has its own set of tags. See <http://www.ietf.org/std/IIM/4.1/specification/IIMV4.1.pdf> for the official IPTC IIM specification.

This specification dictates a length for ASCII ([string](#) or [digits](#)) and binary ([undef](#)) values. These lengths are given in square brackets after the **Writable** format name. For tags where a range of lengths is allowed, the minimum and maximum lengths are separated by a comma within the brackets. When writing, ExifTool issues a minor warning and truncates the value if it is longer than allowed by the IPTC specification. Minor errors may be ignored with the [IgnoreMinorErrors](#) (-m) option, allowing longer values to be written, but beware that values like this may cause problems for some other IPTC readers. ExifTool will happily read IPTC values of any length.

Separate IPTC date and time tags may be written with a combined date/time value and ExifTool automagically takes the appropriate part of the date/time string depending on whether a date or time tag is being written. This is very useful when copying date/time values to IPTC from other metadata formats.

IPTC time values include a timezone offset. If written with a value which doesn't include a timezone then the current local timezone offset is used (unless written with a combined date/time, in which case the local timezone offset at the specified date/time is used, which may be different due to changes in daylight savings time).

Note that it is not uncommon for IPTC to be found in non-standard locations in JPEG and TIFF-based images. When reading, the family 1 group name has a number added for non-standard IPTC ("IPTC2", "IPTC3", etc), but when writing only "IPTC" may be specified as the group. To keep the IPTC consistent, ExifTool updates tags in all existing IPTC locations, but will create a new IPTC group only in the standard location.

Record	Tag Name	Writable	Values / Notes
1	IPTCEvelope	-	--> <a href="#">IPTC EnvelopeRecord Tags</a>
2	IPTCAplication	-	--> <a href="#">IPTC ApplicationRecord Tags</a>
3	IPTCNewsPhoto	-	--> <a href="#">IPTC NewsPhoto Tags</a>
7	IPTCPREObjectData	-	--> <a href="#">IPTC PreObjectData Tags</a>
8	IPTCObjectData	-	--> <a href="#">IPTC ObjectData Tags</a>
9	IPTCPPostObjectData	-	--> <a href="#">IPTC PostObjectData Tags</a>
240	IPTCFotoStation	-	--> <a href="#">IPTC FotoStation Tags</a>

## IPTC EnvelopeRecord Tags

Tag ID	Tag Name	Writable	Values / Notes
0	EnvelopeRecordVersion	int16u:	
5	Destination	string[0,1024]+	
20	FileFormat	int16u	0 = No ObjectData 1 = IPTC-NAA Digital Newsphoto Parameter Record 2 = IPTC7901 Recommended Message Format 3 = Tagged Image File Format (Adobe/Aldus Image data) 4 = Illustrator (Adobe Graphics data) 5 = AppleSingle (Apple Computer Inc) 6 = NAA 89-3 (ANPA 1312) 7 = MacBinary II 8 = IPTC Unstructured Character Oriented File Format (UCOFF) 9 = United Press International ANPA 1312 variant 10 = United Press International Down-Load Message 11 = JPEG File Interchange (JFIF) 12 = Photo-CD Image-Pac (Eastman Kodak) 13 = Bit Mapped Graphics File [.BMP] (Microsoft) 14 = Digital Audio File [.WAV] (Microsoft & Creative Labs) 15 = Audio plus Moving Video [.AVI] (Microsoft) 16 = PC DOS/Windows Executable Files [.COM][.EXE] 17 = Compressed Binary File [.ZIP] (PKWare Inc) 18 = Audio Interchange File Format AIFF (Apple Computer Inc) 19 = RIFF Wave (Microsoft Corporation) 20 = Freehand (Macromedia/Aldus) 21 = Hypertext Markup Language [.HTML] (The Internet Society) 22 = MPEG 2 Audio Layer 2 (Musicom), ISO/IEC 23 = MPEG 2 Audio Layer 3, ISO/IEC

24 = Portable Document File [.PDF] Adobe  
 25 = News Industry Text Format (NITF)  
 26 = Tape Archive [.TAR]  
 27 = Tidningarnas Telegrambyra NITF version (TTNITF DTD)  
 28 = Ritzaus Bureau NITF version (RBNITF DTD)  
 29 = Corel Draw [.CDR]

22	FileVersion	int16u	
30	ServicelIdentifier	string[0,10]	
40	EnvelopeNumber	digits[8]	
50	ProductID	string[0,32]+	
60	EnvelopePriority	digits[1]	0 = 0 (reserved) 1 = 1 (most urgent) 2 = 2 3 = 3 4 = 4 5 = 5 (normal urgency) 6 = 6 7 = 7 8 = 8 (least urgent) 9 = 9 (user-defined priority)
70	DateSent	digits[8]	
80	TimeSent	string[11]	
90	CodedCharacterSet	string[0,32]!	(values are entered in the form "ESC X Y[, ...]". The escape sequence for UTF-8 character coding is "ESC % G", but this is displayed as "UTF8" for convenience. Either string may be used when writing. The value of this tag affects the decoding of string values in the Application and NewsPhoto records. This tag is marked as "unsafe" to prevent it from being copied by default in a group operation because existing tags in the destination image may use a different encoding. When creating a new IPTC record from scratch, it is suggested that this be set to "UTF8" if special characters are a possibility)
100	UniqueObjectName	string[14,80]	
120	ARMIdentifier	int16u	
122	ARMVersion	int16u	

## IPTC ApplicationRecord Tags

Tag ID	Tag Name	Writable	Values / Notes
0	ApplicationRecordVersion	int16u:	
3	ObjectTypeReference	string[3,67]	
4	ObjectAttributeReference	string[4,68]+	
5	ObjectName	string[0,64]	
7	EditStatus	string[0,64]	
8	EditorialUpdate	digits[2]	01 = Additional language
10	Urgency	digits[1]	0 = 0 (reserved) 1 = 1 (most urgent) 2 = 2 3 = 3 4 = 4 5 = 5 (normal urgency) 6 = 6 7 = 7 8 = 8 (least urgent) 9 = 9 (user-defined priority)
12	SubjectReference	string[13,236]+	
15	Category	string[0,3]	
20	SupplementalCategories	string[0,32]+	
22	FixtureIdentifier	string[0,32]	
25	Keywords	string[0,64]+	
26	ContentLocationCode	string[3]+	
27	ContentLocationName	string[0,64]+	
30	ReleaseDate	digits[8]	
35	ReleaseTime	string[11]	
37	ExpirationDate	digits[8]	

38	ExpirationTime	string[11]	
40	SpecialInstructions	string[0,256]	
42	ActionAdvised	digits[2]	01 = Object Kill 02 = Object Replace 03 = Object Append 04 = Object Reference
45	ReferenceService	string[0,10]+	
47	ReferenceDate	digits[8]+	
50	ReferenceNumber	digits[8]+	
55	DateCreated	digits[8]	
60	TimeCreated	string[11]	
62	DigitalCreationDate	digits[8]	
63	DigitalCreationTime	string[11]	
65	OriginatingProgram	string[0,32]	
70	ProgramVersion	string[0,10]	
75	ObjectCycle	string[1]	'a' = Morning 'b' = Both Morning and Evening 'p' = Evening
80	By-line	string[0,32]+	
85	By-lineTitle	string[0,32]+	
90	City	string[0,32]	
92	Sub-location	string[0,32]	
95	Province-State	string[0,32]	
100	Country-PrimaryLocationCode	string[3]	
101	Country-PrimaryLocationName	string[0,64]	
103	OriginalTransmissionReference	string[0,32]	(now used as a job identifier)
105	Headline	string[0,256]	
110	Credit	string[0,32]	
115	Source	string[0,32]	
116	CopyrightNotice	string[0,128]	
118	Contact	string[0,128]+	
120	Caption-Abstract	string[0,2000]	
121	LocalCaption	string[0,256]	(I haven't found a reference for the format of tags 121, 184-188 and 225-232, so I have just make them writable as strings with reasonable length. Beware that if this is wrong, other utilities may not be able to read these tags as written by ExifTool)
122	Writer-Editor	string[0,32]+	
125	RasterizedCaption	undef[7360]	
130	ImageType	string[2]	
131	ImageOrientation	string[1]	'L' = Landscape 'P' = Portrait 'S' = Square
135	LanguageIdentifier	string[2,3]	
150	AudioType	string[2]	'0T' = Text Only '1A' = Mono Actuality '1C' = Mono Question and Answer Session '1M' = Mono Music '1Q' = Mono Response to a Question '1R' = Mono Raw Sound '1S' = Mono Scener '1V' = Mono Voicer '1W' = Mono Wrap '2A' = Stereo Actuality '2C' = Stereo Question and Answer Session '2M' = Stereo Music '2Q' = Stereo Response to a Question '2R' = Stereo Raw Sound '2S' = Stereo Scener '2V' = Stereo Voicer '2W' = Stereo Wrap
151	AudioSamplingRate	digits[6]	

152	AudioSamplingResolution		digits[2]	
153	AudioDuration		digits[6]	
154	AudioOutcue		string[0,64]	
184	JobID		string[0,64]	
185	MasterDocumentID		string[0,256]	
186	ShortDocumentID		string[0,64]	
187	UniqueDocumentID		string[0,128]	
188	OwnerId		string[0,128]	
200	ObjectPreviewFileFormat	int16u	0 = No ObjectData 1 = IPTC-NAA Digital Newsphoto Parameter Record 2 = IPTC7901 Recommended Message Format 3 = Tagged Image File Format (Adobe/Aldus Image data) 4 = Illustrator (Adobe Graphics data) 5 = AppleSingle (Apple Computer Inc) 6 = NAA 89-3 (ANPA 1312) 7 = MacBinary II 8 = IPTC Unstructured Character Oriented File Format (UCOFF) 9 = United Press International ANPA 1312 variant 10 = United Press International Down-Load Message 11 = JPEG File Interchange (JFIF) 12 = Photo-CD Image-Pac (Eastman Kodak) 13 = Bit Mapped Graphics File [.BMP] (Microsoft) 14 = Digital Audio File [.WAV] (Microsoft & Creative Labs) 15 = Audio plus Moving Video [.AVI] (Microsoft) 16 = PC DOS/Windows Executable Files [.COM][.EXE] 17 = Compressed Binary File [.ZIP] (PKWare Inc) 18 = Audio Interchange File Format AIFF (Apple Computer Inc) 19 = RIFF Wave (Microsoft Corporation) 20 = Freehand (Macromedia/Aldus) 21 = Hypertext Markup Language [.HTML] (The Internet Society) 22 = MPEG 2 Audio Layer 2 (Musicom), ISO/IEC 23 = MPEG 2 Audio Layer 3, ISO/IEC 24 = Portable Document File [.PDF] Adobe 25 = News Industry Text Format (NITF) 26 = Tape Archive [.TAR] 27 = Tidningarnas Telegrambyra NITF version (TTNITF DTD) 28 = Ritzaus Bureau NITF version (RBNITF DTD) 29 = Corel Draw [.CDR]	
201	ObjectPreviewFileVersion	int16u		
202	ObjectPreviewData		undef[0,256000]	
221	Prefs		string[0,64]	(PhotoMechanic preferences)
225	ClassifyState		string[0,64]	
228	SimilarityIndex		string[0,32]	
230	DocumentNotes		string[0,1024]	
231	DocumentHistory		string[0,256]	
232	ExifCameralInfo		string[0,4096]	
255	CatalogSets		string[0,256]+	(written by iView MediaPro)

## IPTC NewsPhoto Tags

Tag ID	Tag Name	Writable	Values / Notes	
0	NewsPhotoVersion	int16u:		
10	IPTCPictureNumber	string[16]	(4 numbers: 1-Manufacturer ID, 2-Equipment ID, 3-Date, 4-Sequence)	
20	IPTCImageWidth	int16u		
30	IPTCImageHeight	int16u		
40	IPTCPixelWidth	int16u		
50	IPTCPixelHeight	int16u		
55	SupplementalType	int8u	0 = Main Image 1 = Reduced Resolution Image 2 = Logo 3 = Rasterized Caption	
60	ColorRepresentation	int16u	0x0 = No Image, Single Frame 0x100 = Monochrome, Single Frame	

			0x300 = 3 Components, Single Frame 0x301 = 3 Components, Frame Sequential in Multiple Objects 0x302 = 3 Components, Frame Sequential in One Object 0x303 = 3 Components, Line Sequential 0x304 = 3 Components, Pixel Sequential 0x305 = 3 Components, Special Interleaving 0x400 = 4 Components, Single Frame 0x401 = 4 Components, Frame Sequential in Multiple Objects 0x402 = 4 Components, Frame Sequential in One Object 0x403 = 4 Components, Line Sequential 0x404 = 4 Components, Pixel Sequential 0x405 = 4 Components, Special Interleaving
64	InterchangeColorSpace	int8u	1 = X,Y,Z CIE 2 = RGB SMPTE 3 = Y,U,V (K) (D65) 4 = RGB Device Dependent 5 = CMY (K) Device Dependent 6 = Lab (K) CIE 7 = YCbCr 8 = sRGB
65	ColorSequence	int8u	
66	ICC_Profile	no	
70	ColorCalibrationMatrix	no	
80	LookupTable	no	
84	NumIndexEntries	int16u	
85	ColorPalette	no	
86	IPTCBitsPerSample	int8u	
90	SampleStructure	int8u	0 = OrthogonalConstangSampling 1 = Orthogonal4-2-2Sampling 2 = CompressionDependent
100	ScanningDirection	int8u	0 = L-R, Top-Bottom 4 = Top-Bottom, L-R 1 = R-L, Top-Bottom 5 = Bottom-Top, L-R 2 = L-R, Bottom-Top 6 = Top-Bottom, R-L 3 = R-L, Bottom-Top 7 = Bottom-Top, R-L
102	IPTCImageRotation	int8u	0 = 0 1 = 90 2 = 180 3 = 270
110	DataCompressionMethod	int32u	
120	QuantizationMethod	int8u	0 = Linear Reflectance/Transmittance 1 = Linear Density 2 = IPTC Ref B 3 = Linear Dot Percent 4 = AP Domestic Analogue 5 = Compression Method Specific 6 = Color Space Specific 7 = Gamma Compensated
125	EndPoints	no	
130	ExcursionTolerance	int8u	0 = Not Allowed 1 = Allowed
135	BitsPerComponent	int8u	
140	MaximumDensityRange	int16u	
145	GammaCompensatedValue	int16u	

## IPTC PreObjectData Tags

Tag ID	Tag Name	Writable	Values / Notes
10	SizeMode	no	0 = Size Not Known 1 = Size Known
20	MaxSubfileSize	no	
90	ObjectSizeAnnounced	no	
95	MaximumObjectSize	no	

## IPTC ObjectData Tags

Tag ID	Tag Name	Writable	Values / Notes
10	SubFile	no+	

## IPTC PostObjectData Tags

Tag ID	Tag Name	Writable	Values / Notes
10	ConfirmedObjectSize	no	

## IPTC FotoStation Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

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*Last revised Oct 2, 2020*

[-- ExifTool Tag Names](#)

# ISO Tags

Tags extracted from ISO 9660 disk images.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	BootRecord	-	--> <a href="#">ISO BootRecord Tags</a>
0x0001	PrimaryVolume	-	--> <a href="#">ISO PrimaryVolume Tags</a>

## ISO BootRecord Tags

Index1	Tag Name	Writable	Values / Notes
7	BootSystem	no	
39	BootIdentifier	no	

## ISO PrimaryVolume Tags

Index1	Tag Name	Writable	Values / Notes
8	System	no	
40	VolumeName	no	
80	VolumeBlockCount	no	
120	VolumeSetDiskCount?	no	
124	VolumeSetDiskNumber?	no	
128	VolumeBlockSize	no	
132	PathTableSize?	no	
140	PathTableLocation?	no	
174	RootDirectoryCreateDate	no	
190	VolumeSetName	no	
318	Publisher	no	
446	DataPreparer	no	
574	Software	no	
702	CopyrightFileName	no	
740	AbstractFileName	no	
776	BibliographicFileName	no	
813	VolumeCreateDate	no	
830	VolumeModifyDate	no	
847	VolumeExpirationDate	no	
864	VolumeEffectiveDate	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Apr 12, 2016

[<-- ExifTool Tag Names](#)

# ITC Tags

This information is found in iTunes Cover Flow data files.

Tag ID	Tag Name	Writable	Values / Notes
'data'	ImageData	no	(embedded JPEG or PNG image, depending on ImageType)
'itch'	Itch	-	--> <a href="#">ITC Header Tags</a>
'item'	Item	-	--> <a href="#">ITC Item Tags</a>

## ITC Header Tags

Index1	Tag Name	Writable	Values / Notes
16	DataType	no	'artw' = Artwork

## ITC Item Tags

Index4	Tag Name	Writable	Values / Notes
0	LibraryID	no	
2	TrackID	no	
4	DataLocation	no	'down' = Downloaded Separately 'locl' = Local Music File
5	ImageType	no	
7	ImageWidth	no	
8	ImageHeight	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Nov 9, 2011

[--> ExifTool Tag Names](#)

# InfiRay Version Tags

This table lists tags found in the InfiRay APP2 JPEG version header, found in JPEGs taken with the P2 Pro camera app.

Index1	Tag Name	Writable	Values / Notes
0	IJPEGVersion	no	
12	IJPEGOrgType	no	
13	IJPEGDispType	no	
14	IJPEGRotate	no	
15	IPEGGMirrorFlip	no	
16	ImageColorSwitchable	no	
17	ThermalColorPalette	no	
32	IRDataSize	no	
40	IRDataFormat	no	
42	IRImageWidth	no	
44	IRImageHeight	no	
46	IRImageBpp	no	
48	TempDataSize	no	
56	TempDataFormat	no	
58	TemplImageWidth	no	
60	TemplImageHeight	no	
62	TemplImageBpp	no	
64	VisibleDataSize	no	
72	VisibleDataFormat	no	
74	VisibleImageWidth	no	
76	VisibleImageHeight	no	
78	VisibleImageBpp	no	

# InfiRay Factory Tags

This table lists tags found in the InfiRay APP4 JPEG camera factory defaults and calibration data.

Index1	Tag Name	Writable	Values / Notes
0	IJPEGTempVersion	no	
4	FactDefEmissivity	no	
5	FactDefTau	no	
6	FactDefTa	no	
8	FactDefTu	no	
10	FactDefDist	no	
12	FactDefA0	no	
16	FactDefB0	no	
20	FactDefA1	no	
24	FactDefB1	no	
28	FactDefP0	no	
32	FactDefP1	no	
36	FactDefP2	no	
68	FactRelSensorTemp	no	
70	FactRelShutterTemp	no	
72	FactRelLensTemp	no	
100	FactStatusGain	no	
101	FactStatusEnvOK	no	
102	FactStatusDistOK	no	
103	FactStatusTempMap	no	

# InfiRay Picture Tags

This table lists tags found in the InfiRay APP5 JPEG picture temperature information.

Index1	Tag Name	Writable	Values / Notes
0	EnvironmentTemp	no	
4	Distance	no	
8	Emissivity	no	
12	Humidity	no	
16	ReferenceTemp	no	
32	TempUnit	no	
33	ShowCenterTemp	no	
34	ShowMaxTemp	no	
35	ShowMinTemp	no	
36	TempMeasureCount	no	

# InfiRay MixMode Tags

This table lists tags found in the InfiRay APP6 JPEG visual-infrared mixing mode section.

Index1	Tag Name	Writable	Values / Notes
0	MixMode	no	
1	FusionIntensity	no	
5	OffsetAdjustment	no	
9	CorrectionAsix	no	

# InfiRay OpMode Tags

This table lists tags found in the InfiRay APP7 JPEG camera operation mode section.

Index1	Tag Name	Writable	Values / Notes
0	WorkingMode	no	
1	IntegralTime	no	
5	IntegratTimeHdr	no	
9	GainStable	no	
10	TempControlEnable	no	
11	DeviceTemp	no	

# InfiRay Isothermal Tags

This table lists tags found in the InfiRay APP8 JPEG picture isothermal information.

Index1	Tag Name	Writable	Values / Notes
0	IsothermalMax	no	
4	IsothermalMin	no	
8	ChromaBarMax	no	
12	ChromaBarMin	no	

# InfiRay Sensor Tags

This table lists tags found in the InfiRay APP9 JPEG sensor information chunk.

Index1	Tag Name	Writable	Values / Notes
0	IRSensorManufacturer	no	
64	IRSensorName	no	
128	IRSensorPartNumber	no	

192	IRSensorSerialNumber	no
256	IRSensorFirmware	no
320	IRSensorAperture	no
324	IRFocalLength	no
384	VisibleSensorManufacturer	no
448	VisibleSensorName	no
512	VisibleSensorPartNumber	no
576	VisibleSensorSerialNumber	no
640	VisibleSensorFirmware	no
704	VisibleSensorAperture	no
708	VisibleFocalLength	no

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Feb 9, 2023*

[<-- ExifTool Tag Names](#)

# JFIF Tags

The following information is extracted from the JPEG JFIF header. See <https://www.w3.org/Graphics/JPEG/jfif3.pdf> for the JFIF 1.02 specification.

Index	Tag Name	Writable	Values / Notes
0	JFIFVersion	no:	
2	ResolutionUnit	int8u:	0 = None 1 = inches 2 = cm
3	XResolution	int16u:	
5	YResolution	int16u:	
7	ThumbnailWidth	no	
8	ThumbnailHeight	no	
9	ThumbnailTIFF	no	(raw RGB thumbnail data, extracted as a TIFF image)

## JFIF Extension Tags

Thumbnail images extracted from the JFXX segment.

Tag ID	Tag Name	Writable	Values / Notes
0x0010	ThumbnailImage	no	(JPEG-format thumbnail image)
0x0011	ThumbnailTIFF	no	(raw palette-color thumbnail data, extracted as a TIFF image)
0x0013	ThumbnailTIFF	no	(raw RGB thumbnail data, extracted as a TIFF image)

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Last revised Jul 21, 2017

[-- ExifTool Tag Names](#)

# JPEG Tags

This table lists information extracted by ExifTool from JPEG images. See <https://www.w3.org/Graphics/JPEG/jfif3.pdf> for the JPEG specification.

Tag ID	Tag Name	Writable	Values / Notes
'APP0'	JFIF JFFX CIFF AVI1 Ocad	-	--> <a href="#">JFIF Tags</a> --> <a href="#">JFIF Extension Tags</a> --> <a href="#">CanonRaw Tags</a> --> <a href="#">JPEG AVI1 Tags</a> --> <a href="#">JPEG Ocad Tags</a>
'APP1'	EXIF ExtendedXMP XMP QVCI FLIR RawThermalImage	-	--> <a href="#">EXIF Tags</a> --> <a href="#">XMP Tags</a> --> <a href="#">XMP Tags</a> --> <a href="#">Casio QVCI Tags</a> --> <a href="#">FLIR FFF Tags</a>
'APP2'	ICC_Profile FPXR MPF InfiRayVersion UniformResourceName PreviewImage	- no no	--> <a href="#">ICC Profile Tags</a> --> <a href="#">FlashPix Tags</a> --> <a href="#">MPF Tags</a> --> <a href="#">InfiRay Version Tags</a> (used in Apple HDR images) (Samsung APP2 preview image)
'APP3'	Meta Stim JPS ThermalData ImagingData PreviewImage	- - - no no no	--> <a href="#">Kodak Meta Tags</a> --> <a href="#">Stim Tags</a> --> <a href="#">JPEG JPS Tags</a> (DJI raw thermal data) (InfiRay IR+thermal+visible data) (Samsung/HP preview image)
'APP4'	Scalado FPXR QualcommDualCamera InfiRayFactory ThermalParams ThermalParams2 ThermalParams3 PreviewImage	- - - - - - - no	--> <a href="#">Scalado Tags</a> --> <a href="#">FlashPix Tags</a> --> <a href="#">Qualcomm DualCamera Tags</a> --> <a href="#">InfiRay Factory Tags</a> --> <a href="#">DJI ThermalParams Tags</a> --> <a href="#">DJI ThermalParams2 Tags</a> --> <a href="#">DJI ThermalParams3 Tags</a> (continued from APP3)
'APP5'	RMETA SamsungUniqueID InfiRayPicture ThermalCalibration PreviewImage	- - - no no	--> <a href="#">Ricoh RMETA Tags</a> --> <a href="#">Samsung APP5 Tags</a> --> <a href="#">InfiRay Picture Tags</a> (DJI thermal calibration data) (continued from APP4)
'APP6'	EPPIM NITF HP_TDHD GoPro InfiRayMixMode DJI_DTAT	- - - - - - no	--> <a href="#">JPEG EPPIM Tags</a> --> <a href="#">JPEG NITF Tags</a> --> <a href="#">HP TDHD Tags</a> --> <a href="#">GoPro GPMF Tags</a> --> <a href="#">InfiRay MixMode Tags</a> (DJI Thermal Analysis Tool record)
'APP7'	Pentax Huawei Qualcomm InfiRayOpMode DJI-DBG	- - - - - -	--> <a href="#">Pentax Tags</a> --> <a href="#">Unknown Tags</a> --> <a href="#">Qualcomm Tags</a> --> <a href="#">InfiRay OpMode Tags</a> --> <a href="#">DJI Info Tags</a>
'APP8'	SPIFF InfiRayIsothermal SEAL	- - - -	--> <a href="#">JPEG SPIFF Tags</a> --> <a href="#">InfiRay Isothermal Tags</a> --> <a href="#">XMP SEAL Tags</a>
'APP9'	MediaJukebox InfiRaySensor SEAL	- - - -	--> <a href="#">JPEG MediaJukebox Tags</a> --> <a href="#">InfiRay Sensor Tags</a> --> <a href="#">XMP SEAL Tags</a>
'APP10'	Comment HDRGainInfo	no -	(PhotoStudio Unicode comment) JPEG HDRGainInfo
'APP11'	JPEG-HDR JUMBF	- -	--> <a href="#">JPEG HDR Tags</a> --> <a href="#">Jpeg2000 Tags</a>

'APP12'	PictureInfo Ducky	-	--> <a href="#">APP12 PictureInfo Tags</a> --> <a href="#">APP12 Ducky Tags</a>
'APP13'	Photoshop Adobe_CM	-	--> <a href="#">Photoshop Tags</a> --> <a href="#">JPEG AdobeCM Tags</a>
'APP14'	Adobe	yes	--> <a href="#">JPEG Adobe Tags</a>
'APP15'	GraphicConverter	-	--> <a href="#">JPEG GraphConv Tags</a>
'COM'	Comment	yes	
'DQT'	DefineQuantizationTable	no	(used to calculate the Extra JPEGDigest tag value)
'SOF'	StartOfFrame	-	--> <a href="#">JPEG SOF Tags</a>
'Trailer'	AFCP CanonVRD FotoStation PhotoMechanic MIE MPF Samsung Vivo OnePlus Google EmbeddedVideo Insta360 NikonApp SonyHiddenData PreviewImage	- - - - - - - - - - no no no no yes	--> <a href="#">AFCP Tags</a> --> <a href="#">CanonVRD Tags</a> --> <a href="#">FotoStation Tags</a> --> <a href="#">PhotoMechanic Tags</a> --> <a href="#">MIE Tags</a> --> <a href="#">MPF Tags</a> --> <a href="#">Samsung Trailer Tags</a> --> <a href="#">Trailer Vivo Tags</a> --> <a href="#">Trailer OnePlus Tags</a> --> <a href="#">Trailer Google Tags</a> (extracted only when ExtractEmbedded option is used) (contains editing information in XMP format)

## JPEG AVI1 Tags

This information may be found in APP0 of JPEG image data from AVI videos.

Index1	Tag Name	Writable	Values / Notes
0	InterleavedField	no	0 = Not Interleaved 1 = Odd 2 = Even

## JPEG Ocad Tags

Tags extracted from the JPEG APP0 "Ocad" segment (found in Photobucket images).

Tag ID	Tag Name	Writable	Values / Notes
'Rev'	OcadRevision	no	

## JPEG JPS Tags

Tags found in JPEG Stereo (JPS) images.

Index1	Tag Name	Writable	Values / Notes
10	JPSeparation	no	(stereo only)
11	JPSFlags	no	Bit 0 = Half height Bit 1 = Half width Bit 2 = Left field first
12	JPSLayout	no	(mono) 0 = Both Eyes 1 = Left Eye 2 = Right Eye (stereo) 1 = Interleaved 2 = Side By Side 3 = Over Under 4 = Anaglyph
13	JPSType	no	0 = Mono 1 = Stereo
16	JPSComment	no	

## JPEG EPPIM Tags

Tag ID	Tag Name	Writable	Values / Notes
0xc4a5	PrintIM	-	--> <a href="#">PrintIM Tags</a>

## JPEG NITF Tags

Information in APP6 used by the National Imagery Transmission Format. See <http://www.gwg.nga.mil/ntb/baseline/docs/n010697/bwcguide25aug98.pdf> for the official specification.

Index1	Tag Name	Writable	Values / Notes
0	NITFVersion	no	
2	ImageFormat	no	'B' = IMode B
3	BlocksPerRow	no	
5	BlocksPerColumn	no	
7	ImageColor	no	0 = Monochrome
8	BitDepth	no	
9	ImageClass	no	0 = General Purpose 4 = Tactical Imagery
10	JPEGProcess	no	1 = Baseline sequential DCT, Huffman coding, 8-bit samples 4 = Extended sequential DCT, Huffman coding, 12-bit samples
11	Quality	no	
12	StreamColor	no	0 = Monochrome
13	StreamBitDepth	no	
14	Flags	no	

## JPEG SPIFF Tags

This information is found in APP8 of SPIFF-style JPEG images (the "official" yet rarely used JPEG file format standard: Still Picture Interchange File Format). See <http://www.jpeg.org/public/spiff.pdf> for the official specification.

Index1	Tag Name	Writable	Values / Notes
0	SPIFFVersion	no	
2	ProfileID	no	0 = Not Specified 1 = Continuous-tone Base 2 = Continuous-tone Progressive 3 = Bi-level Facsimile 4 = Continuous-tone Facsimile
3	ColorComponents	no	
6	ImageHeight	no	(at index 4 in specification, but there are 2 extra bytes here in my only SPIFF sample, version 1.2)
10	ImageWidth	no	
14	ColorSpace	no	0 = Bi-level 1 = YCbCr, ITU-R BT 709, video 2 = No color space specified 3 = YCbCr, ITU-R BT 601-1, RGB 4 = YCbCr, ITU-R BT 601-1, video 8 = Gray-scale 9 = PhotoYCC 10 = RGB 11 = CMY 12 = CMYK 13 = YCCK 14 = CIELab
15	BitsPerSample	no	
16	Compression	no	0 = Uncompressed, interleaved, 8 bits per sample 1 = Modified Huffman 2 = Modified READ 3 = Modified Modified READ 4 =JBIG 5 = JPEG
17	ResolutionUnit	no	0 = None 1 = inches 2 = cm

18	YResolution	no
22	XResolution	no

## JPEG MediaJukebox Tags

Tags found in the XML metadata of the APP9 "Media Jukebox" segment.

Tag Name	Writable	Values / Notes
Album	no	
Caption	no	
Date	no	
Keywords	no	
Name	no	
People	no	
Places	no	
Tool_Name	no	
Tool_Version	no	

## JPEG HDRGainInfo Tags

Index1	Tag Name	Writable	Values / Notes
6	HDRGainCurveSize	no	
10	HDRGainCurve	no	

## JPEG HDR Tags

Information extracted from APP11 of a JPEG-HDR image.

Tag ID	Tag Name	Writable	Values / Notes
'RatiolImage'	RatiolImage	no	(the embedded JPEG-compressed ratio image)
'alp'	Alpha	no	
'bet'	Beta	no	
'cor'	CorrectionMethod	no	
'ln0'	Ln0	no	
'ln1'	Ln1	no	
's2n'	S2n	no	
'ver'	JPEG-HDRVersion	no	

## JPEG AdobeCM Tags

The APP13 "Adobe\_CM" segment presumably contains color management information, but the meaning of the data is currently unknown. If anyone has an idea about what this means, please let me know.

Index2	Tag Name	Writable	Values / Notes
0	AdobeCMType	no	

## JPEG Adobe Tags

The APP14 "Adobe" segment stores image encoding information for DCT filters. This segment may be copied or deleted as a block using the Extra "Adobe" tag, but note that it is not deleted by default when deleting all metadata because it may affect the appearance of the image.

Index2	Tag Name	Writable	Values / Notes
0	DCTEncodeVersion	no	
1	APP14Flags0	no	0x0 = (none) Bit 15 = Encoded with Blend=1 downsampling
2	APP14Flags1	no	0x0 = (none)

## JPEG GraphConv Tags

APP15 is used by GraphicConverter to store JPEG quality.

Tag ID	Tag Name	Writable	Values / Notes
'Q'	Quality	no	

## JPEG SOF Tags

This information is extracted from the JPEG Start Of Frame segment.

Tag Name	Writable	Values / Notes
BitsPerSample	no	
ColorComponents	no	
EncodingProcess	no	0x0 = Baseline DCT, Huffman coding 0x1 = Extended sequential DCT, Huffman coding 0x2 = Progressive DCT, Huffman coding 0x3 = Lossless, Huffman coding 0x5 = Sequential DCT, differential Huffman coding 0x6 = Progressive DCT, differential Huffman coding 0x7 = Lossless, Differential Huffman coding 0x9 = Extended sequential DCT, arithmetic coding 0xa = Progressive DCT, arithmetic coding 0xb = Lossless, arithmetic coding 0xd = Sequential DCT, differential arithmetic coding 0xe = Progressive DCT, differential arithmetic coding 0xf = Lossless, differential arithmetic coding
ImageHeight	no	
ImageWidth	no	
YCbcCrSubSampling	no	(calculated from components table) '1 1' = YCbCr4:4:4 (1 1) '1 2' = YCbCr4:4:0 (1 2) '1 4' = YCbCr4:4:1 (1 4) '2 1' = YCbCr4:2:2 (2 1) '2 2' = YCbCr4:2:0 (2 2) '2 4' = YCbCr4:2:1 (2 4) '4 1' = YCbCr4:1:1 (4 1) '4 2' = YCbCr4:1:0 (4 2)

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Last revised Jun 27, 2025

[-- ExifTool Tag Names](#)

# JSON Tags

Other than a few tags in the table below, JSON tags have not been pre-defined. However, ExifTool will read any existing tags from basic JSON-formatted files.

Tag Name	Writable	Values / Notes
AdjustmentsSettingsStatisticsLightMap	no	
ON1_SettingsData	-	--> <a href="#">PLIST Tags</a>
ON1_SettingsMetadataCreated	no	
ON1_SettingsMetadataModified	no	
ON1_SettingsMetadataName	no	
ON1_SettingsMetadataPluginID	no	
ON1_SettingsMetadataTimestamp	no	
ON1_SettingsMetadataUsage	no	
ON1_SettingsMetadataVisibleToUser	no	

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*Last revised Feb 12, 2025*

[<- ExifTool Tag Names](#)

# JVC Tags

JVC EXIF maker note tags.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	CPUVersions	no	
0x0003	Quality	no	0 = Low 1 = Normal 2 = Fine

## JVC Text Tags

JVC/Victor text-based maker note tags.

Tag ID	Tag Name	Writable	Values / Notes
'QTY'	Quality	no	'FINE' = Fine 'STD' = Normal 'STND' = Normal
'VER'	MakerNoteVersion	no	

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*Last revised Dec 22, 2005*

[-- ExifTool Tag Names](#)

# Jpeg2000 Tags

The tags below are found in JPEG 2000 images and the C2PA CAI JUMBF metadata in various file types (see below). Note that ExifTool currently writes only EXIF, IPTC and XMP tags in Jpeg2000 images, and EXIF and XMP in JXL images. ExifTool will read/write Brotli-compressed EXIF and XMP in JXL images, but the API [Compress](#) option must be set to create new EXIF and XMP in compressed format.

C2PA (Coalition for Content Provenance and Authenticity) CAI (Content Authenticity Initiative) JUMBF (JPEG Universal Metadata Box Format) metadata is currently extracted from JPEG, PNG, TIFF-based (eg. TIFF, DNG), QuickTime-based (eg. MP4, MOV, HEIF, AVIF), RIFF-based (eg. WAV, AVI, WebP), PDF, SVG and GIF files, and ID3v2 metadata. The suggested ExifTool command-line arguments for reading C2PA metadata are

`-jumbf:all -G3 -b -j -u -struct`. This metadata may be deleted from writable JPEG, PNG, WebP, TIFF-based, and QuickTime-based files by deleting the JUMBF group with `-jumbf:all=`. The C2PA JUMBF metadata may be extracted as a block via the JUMBF tag. See <https://c2pa.org/specifications/> for the C2PA specification.

Tag ID	Tag Name	Writable	Values / Notes
'Exif'	EXIF	-	--> <a href="#">EXIF Tags</a>
'asoc'	Association	-	--> <a href="#">Jpeg2000 Tags</a>
'bfdb'	BinaryDataType	no	(JUMBF, MIME type and optional file name)
'bfil'	BinaryFilter	no	
'bidb'	BinaryData	no	(JUMBF)
'bpcc'	BitsPerComponent	no	
'brob'	BrotliXMP	-	--> <a href="#">XMP Tags</a>
	BrotliEXIF	-	--> <a href="#">EXIF Tags</a>
	BrotliJUMB	-	--> <a href="#">Jpeg2000 Tags</a>
'c2sh'	C2PASaltHash	no	
'cbor'	CBORData	-	--> <a href="#">CBOR Tags</a>
'cdef'	ComponentDefinition	no	
'cgrp'	ColorGroup	no	
'chck'	DigitalSignature	no	
'cmap'	ComponentMapping	no	
'colr'	ColorSpecification	-	--> <a href="#">Jpeg2000 ColorSpec Tags</a>
'comp'	Composition	no	
'copt'	CompositionOptions	no	
'cref'	Cross-Reference	no	
'creg'	CodestreamRegistration	no	
'drep'	DesiredReproductions	no	
'dtbl'	DataReference	no	
'flst'	FragmentList	no	
'free'	Free	no	
'ftbl'	FragmentTable	no	
'ftyp'	FileType	-	--> <a href="#">Jpeg2000 FileType Tags</a>
'gtso'	GraphicsTechnologyStandardOutput	no	
'hrgm'	GainMapImage	no	
'ihdr'	ImageHeader	-	--> <a href="#">Jpeg2000 ImageHeader Tags</a>
'inst'	InstructionSet	no	
'jp '	JP2Signature	no	
'jp2c'	ContiguousCodestream	no	
	PreviewImage	no	
'jp2h'	JP2Header	-	--> <a href="#">Jpeg2000 Tags</a>
'jp2i'	IntellectualProperty	-	--> <a href="#">XMP Tags</a>
'jpch'	CodestreamHeader	-	--> <a href="#">Jpeg2000 Tags</a>
'jplh'	CompositingLayerHeader	-	--> <a href="#">Jpeg2000 Tags</a>
'json'	JSONData	-	--> <a href="#">JSON Tags</a> (by default, data in this tag is parsed using the ExifTool JSON module to allow individual tags to be accessed when reading, but it may also be extracted as a block via the "JSONData" tag or by setting the API BlockExtract option)

'jumb'	JUMBFFBox	-	--> <a href="#">Jpeg2000 Tags</a>
'jumd'	JUMBFDescr	-	--> <a href="#">Jpeg2000 JUMD Tags</a>
'jxlC'	JXLCodestream	no	(Codestream in JPEG XL image. Currently processed only to determine ImageSize)
'jxlp'	PartialJXLCodestream	no	(Partial codestreams in JPEG XL image. Currently processed only to determine ImageSize)
'lbl '	Label	no	
'mdat'	MediaData	no	
'mp7b'	MPEG7Binary	no	
'nlst'	NumberList	no	
'opct'	Opacity	no	
'pclr'	Palette	no	
'prfl'	Profile	no	
'res '	Resolution	-	--> <a href="#">Jpeg2000 Tags</a>
'resc'	CaptureResolution	-	--> <a href="#">Jpeg2000 CaptureResolution Tags</a>
'resd'	DisplayResolution	-	--> <a href="#">Jpeg2000 DisplayResolution Tags</a>
'roid'	ROIDescription	no	
'rreq'	ReaderRequirements	no	
'uinf'	UUIDInfo	-	--> <a href="#">Jpeg2000 Tags</a>
'ulst'	UUIDList	no	
'url '	URL	no	
'uuid'	UUID-EXIF UUID-EXIF2 UUID-EXIF_bad UUID-IPTC UUID-IPTC2 UUID-XMP UUID-GeoJP2 UUID-Photoshop UUID-C2PAClaimSignature UUID-Signature UUID-Unknown	- - - - - - - - - - no no	--> <a href="#">EXIF Tags</a> --> <a href="#">EXIF Tags</a> --> <a href="#">EXIF Tags</a> --> <a href="#">IPTC Tags</a> --> <a href="#">IPTC Tags</a> --> <a href="#">IPTC Tags</a> --> <a href="#">XMP Tags</a> --> <a href="#">EXIF Tags</a> --> <a href="#">Photoshop Tags</a> --> <a href="#">CBOR Tags</a>
'xml '	XML XMP	undef!+	(by default, the XML data in this tag is parsed using the ExifTool XMP module to allow individual tags to be accessed when reading, but it may also be extracted as a block via the "XML" tag, which is also how this tag is written and copied. It may also be extracted as a block by setting the API BlockExtract option. This is a List-type tag because multiple XML blocks may exist) --> <a href="#">XMP XML Tags</a> (used for XMP in JPEG XL files) --> <a href="#">XMP Tags</a>

## Jpeg2000 ColorSpec Tags

The table below contains tags in the color specification (colr) box. This box may be rewritten by writing either ICC\_Profile, ColorSpace or ColorSpecData. When writing, any existing colr boxes are replaced with the newly created colr box.

**NOTE:** Care must be taken when writing this color specification because writing a specification that is incompatible with the image data may make the image undisplayable.

Index1	Tag Name	Writable	Values / Notes
0	ColorSpecMethod	int8s!	(default for writing is 2 when writing ICC_Profile, 1 when writing ColorSpace, or 4 when writing ColorSpecData) 1 = Enumerated 2 = Restricted ICC 3 = Any ICC 4 = Vendor Color
1	ColorSpecPrecedence	int8s!	(default for writing is 0)
2	ColorSpecApproximation	int8s!	(default for writing is 0) 0 = Not Specified

1 = Accurate  
 2 = Exceptional Quality  
 3 = Reasonable Quality  
 4 = Poor Quality

3	ICC_Profile ColorSpace ColorSpecData	- int32u! undef[\$size- 3]!	--> <a href="#">ICC_Profile Tags</a> 0 = Bi-level      16 = sRGB 1 = YCbCr(1)    17 = Grayscale 3 = YCbCr(2)    18 = sYCC 4 = YCbCr(3)    19 = CIEJab 9 = PhotoYCC    20 = e-sRGB 11 = CMY        21 = ROMM-RGB 12 = CMYK       22 = YPbPr(1125/60) 13 = YCCK       23 = YPbPr(1250/50) 14 = CIELab      24 = e-sYCC 15 = Bi-level(2)
---	--	--------------------------------------	---

## Jpeg2000 FileType Tags

Index	Tag Name	Writable	Values / Notes
0	MajorBrand	no	'jp2' = JPEG 2000 Image (.JP2) 'jph' = High-throughput JPEG 2000 (.JPH) 'jpm' = JPEG 2000 Compound Image (.JPM) 'jpx' = JPEG 2000 with extensions (.JPX) 'jxl' = JPEG XL Image (.JXL)
1	MinorVersion	no	
2	CompatibleBrands	no+	

## Jpeg2000 ImageHeader Tags

Index	Tag Name	Writable	Values / Notes
0	ImageHeight	no	
4	ImageWidth	no	
8	NumberOfComponents	no	
10	BitsPerComponent	no	
11	Compression	no	0 = Uncompressed 1 = Modified Huffman 2 = Modified READ 3 = Modified Modified READ 4 =JBIG 5 = JPEG 6 = JPEG-LS 7 = JPEG 2000 8 = JBIG2

## Jpeg2000 JUMD Tags

Information extracted from the JUMBF description box.

Tag ID	Tag Name	Writable	Values / Notes
'id'	JUMDID	no	
'label'	JUMDLabel	no	
'sig'	JUMDSignature	no	
'toggles'	JUMDToggles?	no	Bit 0 = Requestable Bit 1 = Label Bit 2 = ID Bit 3 = Signature
'type'	JUMDType	no	

## Jpeg2000 CaptureResolution Tags

Index	Tag Name	Writable	Values / Notes
0	CaptureYResolution	no	
4	CaptureXResolution	no	
8	CaptureYResolutionUnit	no	--> <a href="#">Jpeg2000 ResolutionUnit Values</a>

## Jpeg2000 ResolutionUnit Values

Value	ResolutionUnit	Value	ResolutionUnit	Value	ResolutionUnit
-3	= km	1	= 10 cm	5	= 0.01 mm
-2	= 100 m	2	= cm	6	= um
-1	= 10 m	3	= mm		
0	= m	4	= 0.1 mm		

## Jpeg2000 DisplayResolution Tags

Index1	Tag Name	Writable	Values / Notes
0	DisplayYResolution	no	
4	DisplayXResolution	no	
8	DisplayYResolutionUnit	no	--> <a href="#">Jpeg2000 ResolutionUnit Values</a>
9	DisplayXResolutionUnit	no	--> <a href="#">Jpeg2000 ResolutionUnit Values</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup)

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[-- ExifTool Tag Names](#)

# Kodak Tags

Many Kodak models don't store the maker notes in standard IFD format, and these formats vary with different models. Some information has been decoded, but much of the Kodak information remains unknown.

The table below contains the most common set of Kodak tags. The following Kodak camera models have been tested and found to use these tags: C360, C663, C875, CX6330, CX6445, CX7330, CX7430, CX7525, CX7530, DC4800, DC4900, DX3500, DX3600, DX3900, DX4330, DX4530, DX4900, DX6340, DX6440, DX6490, DX7440, DX7590, DX7630, EasyShare-One, LS420, LS443, LS633, LS743, LS753, V530, V550, V570, V603, V610, V705, Z650, Z700, Z710, Z730, Z740, Z760 and Z7590.

Index1	Tag Name	Writable	Values / Notes	
0	KodakModel	string[8]		
9	Quality	int8u	1 = Fine 2 = Normal	
10	BurstMode	int8u	0 = Off 1 = On	
12	KodakImageWidth	int16u		
14	KodakImageHeight	int16u		
16	YearCreated	int16u		
18	MonthDayCreated	int8u[2]		
20	TimeCreated	int8u[4]		
24	BurstMode2?	int16u		
27	ShutterMode	int8u	0 = Auto 8 = Aperture Priority 32 = Manual?	
28	MeteringMode	int8u	0 = Multi-segment 1 = Center-weighted average 2 = Spot	
29	SequenceNumber	int8u		
30	FNumber	int16u		
32	ExposureTime	int32u		
36	ExposureCompensation	int16s		
38	VariousModes?	int16u		
40	Distance1?	int32u		
44	Distance2?	int32u		
48	Distance3?	int32u		
52	Distance4?	int32u		
56	FocusMode	int8u	0 = Normal 2 = Macro	
58	VariousModes2?	int16u		
60	PanoramaMode?	int16u		
62	SubjectDistance?	int16u		
64	WhiteBalance	int8u	0 = Auto 1 = Flash? 2 = Tungsten 3 = Daylight	
92	FlashMode	int8u	0x0 = Auto 0x1 = Fill Flash 0x2 = Off 0x3 = Red-Eye	0x10 = Fill Flash 0x20 = Off 0x40 = Red-Eye?
93	FlashFired	int8u	0 = No 1 = Yes	
94	ISOSetting	int16u		
96	ISO	int16u		
98	TotalZoom	int16u		
100	DateTimeStamp	int16u		

102	ColorMode	int16u	0x1 = B&W 0x2 = Sepia 0x3 = B&W Yellow Filter 0x4 = B&W Red Filter 0x20 = Saturated Color	0x40 = Neutral Color 0x100 = Saturated Color 0x200 = Neutral Color 0x2000 = B&W 0x4000 = Sepia
104	DigitalZoom	int16u		
107	Sharpness	int8s	0 = Normal	

## Kodak IFD Tags

These tags are found in a separate IFD of JPEG, TIFF, DCR and KDC images from some older Kodak models such as the DC50, DC120, DCS760C, DCS Pro 14N, 14nx, SLR/n, Pro Back and Canon EOS D2000.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	KodakVersion	int8u[4]	
0x0001	UnknownEV?	rational64u	
0x0003	ExposureValue	rational64u	
0x03e9	OriginalFileName	string	
0x03ea	KodakTag	int32u	
0x03eb	SensorLeftBorder	int16u	
0x03ec	SensorTopBorder	int16u	
0x03ed	SensorImageWidth	int16u	
0x03ee	SensorImageHeight	int16u	
0x03ef	BlackLevelTop	int16u	
0x03f0	BlackLevelBottom	int16u	
0x03f1	TextualInfo	-	--> <a href="#">Kodak TextualInfo Tags</a>
0x03f2	FlashMode?	int16u	
0x03f3	FlashCompensation	rational64s	
0x03f4	WindMode?	int16u	
0x03f5	FocusMode?	int16u	
0x03f8	MinAperture	rational64u	
0x03f9	MaxAperture	rational64u	
0x03fa	WhiteBalanceMode?	int16u	
0x03fb	WhiteBalanceDetected?	int16u	
0x03fc	WhiteBalance	int16u	
0x03fd	Processing ProcessingParameters	- no	--> <a href="#">Kodak Processing Tags</a>
0x03fe	ImageAbsoluteX	int16s	
0x03ff	ImageAbsoluteY	int16s	
0x0400	ApplicationKeyString	string	
0x0401	Time	string	
0x0402	GPSString	string	
0x0403	EventLogCapture?	no	
0x0404	ComponentTable?	no	
0x0405	CustomIlluminant?	int16u	
0x0406	CameraTemperature CameraTemperature	rational64s no	
0x0407	AdapterVoltage	rational64u	
0x0408	BatteryVoltage	rational64u	
0x0409	DacVoltages	no	
0x040a	IlluminantDetectorData?	no	
0x040b	PixelClockFrequency	int32u	
0x040c	CenterPixel	int16u[3]	
0x040d	BurstCount	int16u	
0x040e	BlackLevelRough	int16u	
0x040f	OffsetMapHorizontal?	no	

0x0410	OffsetMapVertical?	no
0x0411	Histogram?	no
0x0412	VerticalClockOverlaps	int16u[2]
0x0413	SensorTemperature	no
0x0414	XilinxVersion	string
0x0415	FirmwareVersion	int32u
0x0416	BlackLevelRoughAfter	int16u
0x0417	BrightRowsTop	no
0x0418	EventLogProcess	no
0x0419	DacVoltagesFlush	no
0x041a	FlashUsed	no
0x041b	FlashType	no
0x041c	SelfTimer	no
0x041d	AFMode	no
0x041e	LensType	no
0x041f	ImageCropX	int16s
0x0420	ImageCropY	int16s
0x0421	AdjustedTbnImageWidth	no
0x0422	AdjustedTbnImageHeight	no
0x0423	IntegrationTime	int32u
0x0424	BracketingMode	no
0x0425	BracketingStep	no
0x0426	BracketingCounter	no
0x042e	HuffmanTableLength	no
0x042f	HuffmanTableValue	no
0x0438	MainBoardVersion	int32u
0x0439	ImagerBoardVersion	int32u
0x044c	FocusEdgeMap	no
0x05e6	IdleTiming	no
0x05e7	FlushTiming	no
0x05e8	IntegrateTiming	no
0x05e9	RegisterReadTiming	no
0x05ea	FirstLineTransferTiming	no
0x05eb	ShiftTiming	no
0x05ec	NormalLineTransferTiming	no
0x05ed	TestTransferTiming	no
0x05fa	MinimumFlushRows	no
0x05fd	ImagerPowerOnDelayMsec	int32u
0x05fe	ImagerInitialTimingCode	no
0x05ff	ImagerLogicProgram	no
0x0600	ImagerBiasSettlingDelayMsec	int32u
0x0604	IdleSequence	no
0x0605	FirstFlushSequence	no
0x0606	FinalFlushSequence	no
0x0607	SampleBlackSequence	no
0x0608	TransferSequence	no
0x060e	DacCountsPerVolt	no
0x060f	BlackDacChannel	no
0x0610	BlackAdCountsPerDacVolt	no
0x0611	BlackTarget	no
0x0612	BlackDacSettlingMsec	no
0x07d0	StandardMatrixDaylight	rational64s[9]
0x07d1	StandardMatrixTungsten	rational64s[9]

0x07d2	StandardMatrixFluorescent	rational64s[9]
0x07d3	StandardMatrixFlash	rational64s[9]
0x07d4	StandardMatrixCustom	rational64s[9]
0x07da	DeviantMatrixDaylight	rational64s[9]
0x07db	DeviantMatrixTungsten	rational64s[9]
0x07dc	DeviantMatrixFluorescent	rational64s[9]
0x07dd	DeviantMatrixFlash	rational64s[9]
0x07de	DeviantMatrixCustom	rational64s[9]
0x07e4	UniqueMatrixDaylight	rational64s[9]
0x07e5	UniqueMatrixTungsten	rational64s[9]
0x07e6	UniqueMatrixFluorescent	rational64s[9]
0x07e7	UniqueMatrixFlash	rational64s[9]
0x07e8	UniqueMatrixCustom	rational64s[9]
0x07e9	UniqueMatrixAuto	rational64s[9]
0x0834	StandardWhiteDaylight	rational64s[3]
0x0835	StandardWhiteTungsten	rational64s[3]
0x0836	StandardWhiteFluorescent	rational64s[3]
0x0837	StandardWhiteFlash	rational64s[3]
0x0838	StandardWhiteCustom	rational64s[3]
0x083e	DeviantWhiteDaylight	rational64s[3]
0x083f	DeviantWhiteTungsten	rational64s[3]
0x0840	DeviantWhiteFluorescent	rational64s[3]
0x0841	DeviantWhiteFlash	rational64s[3]
0x0842	DeviantWhiteCustom	rational64s[3]
0x0846	ColorTemperature	int16u
0x0847	WB_RGBLevelsAsShot	no
0x0848	WB_RGBLevelsDaylight	no
0x0849	WB_RGBLevelsTungsten	no
0x084a	WB_RGBLevelsFluorescent	no
0x084b	WB_RGBLevelsFlash	no
0x084c	WB_RGBLevelsCustom	no
0x084d	WB_RGBLevelsAuto	no
0x0852	WB_RGBMulDaylight	rational64u[3]
0x0853	WB_RGBMulTungsten	rational64u[3]
0x0854	WB_RGBMulFluorescent	rational64u[3]
0x0855	WB_RGBMulFlash	rational64u[3]
0x085c	WB_RGBCoeffsDaylight	no
0x085d	WB_RGBCoeffsTungsten	no
0x085e	WB_RGBCoeffsFluorescent	no
0x085f	WB_RGBCoeffsFlash	no
0x0898	ExposureGainDaylight	rational64s
0x0899	ExposureGainTungsten	rational64s
0x089a	ExposureGainFluorescent	rational64s
0x089b	ExposureGainFlash	rational64s
0x089c	ExposureGainCustom	rational64s
0x089d	AnalogISOTable	rational64u[3]
0x089e	AnalogCaptureISO	int32u
0x089f	ISOCalibrationGain	rational64u
0x08a0	ISOCalibrationGainTable	no
0x08a1	ExposureHeadroomFactor	no
0x08ab	LinearitySplineTags	no
0x08fc	MonitorMatrix	rational64s[9]
0x08fd	TonScaleTable	no

0x08fe	Gamma	rational64u
0x08ff	LogLinTable	no
0x0900	LinLogTable	no
0x0901	GammaTable	no
0x0902	LogScale	rational64u
0x0903	BaseISO	rational64u
0x0904	LinLogCoring	int16u
0x0905	PatternGainConversionTable	no
0x0906	DefectCount	no
0x0907	DefectList	no
0x0908	DefectListPacked	no
0x0909	ImageSpace	int16u
0x090a	ThumbnailCompressionTable	no
0x090b	ThumbnailExpansionTable	no
0x090c	ImageCompressionTable	no
0x090d	ImageExpansionTable	no
0x090e	EighteenPercentPoint	no
0x090f	DefectIsoCode	int16u
0x0910	BaseISODaylight	rational64u
0x0911	BaseISOTungsten	rational64u
0x0912	BaseISOFluorescent	rational64u
0x0913	BaseISOFlash	rational64u
0x091a	MatrixSelectThreshold	int16s
0x091b	MatrixSelectK	rational64u
0x091c	IlluminantDetectTable	no
0x091d	RGTable	no
0x091e	MatrixSelectThreshold1	int16s
0x091f	MatrixSelectThreshold2	int16s
0x0924	PortraitMatrix	no
0x0925	PortraitToneScaleTable	no
0x092e	EnableSharpening	int16u
0x092f	SharpeningKernel	int16s[25]
0x0930	EdgeMapSlope	int16u
0x0931	EdgeMapX1	int16u
0x0932	EdgeMapX2	int16u
0x0933	KernelDenominators	int16u[3]
0x0934	EdgeMapX3	int16u
0x0935	EdgeMapX4	int16u
0x0936	SharpenForThumbnail	no
0x0937	EdgeSpline	no
0x0938	DownSampleBy2Hor	no
0x0939	DownSampleBy2Ver	no
0x093a	DownSampleBy4Hor	no
0x093b	DownSampleBy4Ver	no
0x093c	DownSampleBy3Hor	no
0x093d	DownSampleBy3Ver	no
0x093e	DownSampleBy6Hor	no
0x093f	DownSampleBy6Ver	no
0x0940	DownSampleBy2Hor3MPdcr	no
0x0941	DownSampleBy2Ver3MPdcr	no
0x0942	ThumbnailResizeRatio	no
0x0943	AtCaptureUserCrop	int32u[4]
0x0944	ImageResolution	int32u

0x0945	ImageResolutionJpg	int32u
0x094c	USMParametersLow	no
0x094d	USMParametersMed	no
0x094e	USMParametersHigh	no
0x094f	USMParametersHost	no
0x0950	EdgeSplineLow	no
0x0951	EdgeSplineMed	no
0x0952	EdgeSplineHigh	no
0x0953	USMParametersHost6MP	no
0x0954	USMParametersHost3MP	no
0x0960	PatternImagerWidth	int16u
0x0961	PatternImagerHeight	int16u
0x0962	PatternAreaWidth	int16u
0x0963	PatternAreaHeight	int16u
0x0964	PatternCorrectionGains	no
0x0965	PatternCorrectionOffsets	no
0x0966	PatternX	int16u
0x0967	PatternY	int16u
0x0968	PatternCorrectionFactors	no
0x0969	PatternCorrectionFactorScale	int16u
0x096a	PatternCropRows1	int16u
0x096b	PatternCropRows2	int16u
0x096c	PatternCropCols1	int16u
0x096d	PatternCropCols2	int16u
0x096e	PixelCorrectionGains	no
0x096f	StitchRows	no
0x0970	StitchColumns	no
0x0971	PixelCorrectionScale	int16u
0x0972	PixelCorrectionOffset	int16u
0x0988	LensTableIndex	no
0x0992	DiffTileGains602832	no
0x0993	DiffTileGains24t852822	no
0x099c	TileGainDeterminationTable	no
0x099d	NemoBlurKernel	no
0x099e	NemoTileSize	no
0x099f	NemoGainFactors	no
0x09a0	NemoDarkLimit	no
0x09a1	NemoHighlight12Limit	no
0x09c4	ImagerFileProductionLevel	int16u
0x09c5	ImagerFileDateCreated	int32u
0x09c6	CalibrationVersion	string
0x09c7	ImagerFileTagsVersionStandard	int16u
0x09c8	IFCameraModel	string
0x09c9	CalibrationHistory	string
0x09ca	CalibrationLog	no
0x09ce	SensorSerialNumber	string
0x09f6	DefectConcealArtCorrectThres	no
0x09f7	SglColIDCACThres1	no
0x09f8	SglColIDCACThres2	no
0x09f9	SglColIDCACThres3	no
0x0a01	DblColIDCACThres1	no
0x0a02	DblColIDCACThres2	no
0x0a0a	DefectConcealThresTable	no

0x0a28	MonoUniqueMatrix	no
0x0a29	MonoMonitorMatrix	no
0x0a2a	MonoToneScaleTable	no
0x0a5a	OmenInitialScaling	no
0x0a5b	OmenInitialRows	no
0x0a5c	OmenInitialColumns	no
0x0a5d	OmenInitialIPFStrength	int32s[4]
0x0a5e	OmenEarlyStrength	int32s[4]
0x0a5f	OmenAutoStrength	int32s[4]
0x0a60	OmenAtCaptureStrength	int32s[4]
0x0a61	OmenAtCaptureMode	no
0x0a62	OmenFocalLengthLimit	int16s
0x0a64	OmenSurfaceIndex	int16s
0x0a65	OmenPercentToRationalLimitsRed	no
0x0a66	OmenPercentToRationalLimitsGoR	no
0x0a67	OmenPercentToRationalLimitsBlue	no
0x0a68	OmenPercentToRationalLimitsGoB	no
0x0a6e	OmenEarlyGoBSurface	no
0x0a6f	OmenEarlyGoBRows	no
0x0a70	OmenEarlyGoBColumns	no
0x0a73	OmenSmoothingKernel	no
0x0a74	OmenGradientOffset	no
0x0a75	OmenGradientKernel	no
0x0a76	OmenGradientKernelTaps	no
0x0a77	OmenRatioClipFactors	no
0x0a78	OmenRatioExclusionFactors	no
0x0a79	OmenGradientExclusionLimits	no
0x0a7a	OmenROICoordinates	no
0x0a7b	OmenROICoefficients	no
0x0a7c	OmenRangeWeighting	no
0x0a7d	OmenMeanToStrength	no
0x0bb8	FactoryWhiteGainsDaylight	no
0x0bb9	FactoryWhiteOffsetsDaylight	no
0xbba	DacGainsCoarse	no
0xbbb	DacGainsFine	no
0xbbc	DigitalExposureGains	no
0xbbd	DigitalExposureBiases	no
0xbbe	BlackClamp	no
0xbbf	ChannelCoarseGainAdjust	no
0xbc0	BlackClampOffset	no
0xbf4	DMPixelThresholdFactor	no
0xbf5	DMWindowThresholdFactor	no
0xbf6	DMTrimFraction	no
0xbf7	DMSmoothRejThresh	no
0xbf8	DMFillRejThresh	no
0xbf9	VMWsize	no
0xbfa	DMErodeRadius	no
0xbfb	DMNumPatches	no
0xbfc	DMNoiseScale	no
0xbfe	BrightDefectThreshold	no
0xbff	BrightDefectIntegrationMS	no
0xc00	BrightDefectIsoCode	no
0xc03	TopDarkRow1	no

0x0c04	TopDarkRow2		no	
0x0c05	BottomDarkRow1		no	
0x0c06	BottomDarkRow2		no	
0x0c07	LeftDarkCol1		no	
0x0c08	LeftDarkCol2		no	
0x0c09	RightDarkCol1		no	
0x0c0a	RightDarkCol2		no	
0x0c0b	HMPixThresh		no	
0x0c0c	HMCollThresh		no	
0x0c0d	HMWsize		no	
0x0c0e	HMCollRejThresh		no	
0x0c0f	VMPixThresh		no	
0x0c10	VMCollThresh		no	
0x0c11	VMNbands		no	
0x0c12	VMCollDropThresh		no	
0x0c13	VMPatchResLimit		no	
0x0c14	MapScale		no	
0x0c1c	Klut		no	
0x0c1d	RimNonlinearity		no	
0x0c1e	InverseRimNonlinearity		no	
0x0c1f	RembrandtToneScale		no	
0x0c20	RimToNifColorTransform		no	
0x0c21	RimToNifScaleFactor		no	
0x0c22	NifNonlinearity		no	
0x0c23	SBALogTransform		no	
0x0c24	InverseSBALogTransform		no	
0x0c25	SBABlack	int16u		
0x0c26	SBAGray	int16u		
0x0c27	SBAWhite	int16u		
0x0c28	GaussianWeights		no	
0x0c29	SfsBoundary		no	
0x0c2a	CoringTableBest		no	
0x0c2b	CoringTableBetter		no	
0x0c2c	CoringTableGood		no	
0x0c2d	ExposureReferenceGain		no	
0x0c2e	ExposureReferenceOffset		no	
0x0c2f	SBARedBalanceLut		no	
0x0c30	SBAGreenBalanceLut		no	
0x0c31	SBABlueBalanceLut		no	
0x0c32	SBANeutralBAL	int32s		
0x0c33	SBAGreenMagentaBAL	int32s		
0x0c34	SBAIlluminantBAL	int32s		
0x0c35	SBAAnalysisComplete	int8u		
0x0c36	JPEGQTableBest		no	
0x0c37	JPEGQTableBetter		no	
0x0c38	JPEGQTableGood		no	
0x0c39	RembrandtPortraitToneScale		no	
0x0c3a	RembrandtConsumerToneScale		no	
0x0c3b	CFAGreenThreshold1		no	
0x0c3c	CFAGreenThreshold2		no	
0x0c3d	QTableLarge50Pct		no	
0x0c3e	QTableLarge67Pct		no	
0x0c3f	QTableLarge100Pct		no	

0x0c40	QTableMedium50Pct	no
0x0c41	QTableMedium67Pct	no
0x0c42	QTableMedium100Pct	no
0x0c43	QTableSmall50Pct	no
0x0c44	QTableSmall67Pct	no
0x0c45	QTableSmall100Pct	no
0x0c46	SBAHighGray	int16u
0x0c47	SBALowGray	int16u
0x0c48	CaptureLook	int16u
0x0c49	SBAIIOffset	int16s
0x0c4a	SBAGmOffset	int16s
0x0c4b	NifNonlinearity12Bit	no
0x0c4c	SharpeningOn	no
0x0c4d	NifNonlinearity16Bit	no
0x0c4e	RawHistogram	no
0x0c4f	RawCFAComponentAverages	no
0x0c50	DisableFlagsPresent	no
0x0c51	DelayCols	no
0x0c52	DummyColsLeft	no
0x0c53	TrashColsRight	no
0x0c54	BlackColsRight	no
0x0c55	DummyColsRight	no
0x0c56	OverClockColsRight	no
0x0c57	UnusedBlackRowsTopOut	no
0x0c58	TrashRowsBottom	no
0x0c59	BlackRowsBottom	no
0x0c5a	OverClockRowsBottom	no
0x0c5b	BlackColsLeft	no
0x0c5c	BlackRowsTop	no
0x0c5d	PartialActiveColsLeft	no
0x0c5e	PartialActiveColsRight	no
0x0c5f	PartialActiveRowsTop	no
0x0c60	PartialActiveRowsBottom	no
0x0c61	ProcessBorderColsLeft	int16u
0x0c62	ProcessBorderColsRight	int16u
0x0c63	ProcessBorderRowsTop	int16u
0x0c64	ProcessBorderRowsBottom	int16u
0x0c65	ActiveCols	no
0x0c66	ActiveRows	no
0x0c67	FirstLines	no
0x0c68	UnusedBlackRowsTopIn	no
0x0c69	UnusedBlackRowsBottomIn	no
0x0c6a	UnusedBlackRowsBottomOut	no
0x0c6b	UnusedBlackColsLeftOut	no
0x0c6c	UnusedBlackColsLeftIn	no
0x0c6d	UnusedBlackColsRightIn	no
0x0c6e	UnusedBlackColsRightOut	no
0x0c6f	CFAOffsetRows	int32u
0x0c70	ShiftCols	int16s
0x0c71	CFAOffsetCols	int32u
0x0c76	DarkMapScale	no
0x0c77	HMapHandling	no
0x0c78	VMapHandling	no

0x0c79	DarkThreshold	no	
0x0c7a	DMDitherMatrix	int16u	
0x0c7b	DMDitherMatrixWidth	int16u	
0x0c7c	DMDitherMatrixHeight	int16u	
0x0c7d	MaxPixelValueThreshold	int16u	
0x0c7e	HoleFillDeltaThreshold	int16u	
0x0c7f	DarkPedestal	int16u	
0x0c80	ImageProcessingFileTagsVersionNumber	int16u	
0x0c81	ImageProcessingFileDateCreated	string	
0x0c82	DoublingMicrovolts	int32s	
0x0c83	DarkFrameShortExposure	int32u	
0x0c84	DarkFrameLongExposure	int32u	
0x0c85	DarkFrameCountFactor	rational64u	
0x0c88	HoleFillDarkDeltaThreshold	int16u	
0x0c89	FarkleWhiteThreshold	no	
0x0c8a	ColumnResetOffsets	no	
0x0c8b	ColumnGainFactors	no	
0x0c8c	Channel0LagKernel	no	
0x0c8d	Channel1LagKernel	no	
0x0c8e	Channel2LagKernel	no	
0x0c8f	Channel3LagKernel	no	
0x0c90	BluegrassTable	no	
0x0c91	BluegrassScale1	no	
0x0c92	BluegrassScale2	no	
0x0ce4	FinishedFileProcessingRequest	no	
0x0ce5	FirmwareVersion	string	
0x0ce6	HostSoftwareExportVersion	no	
0x0ce7	HostSoftwareRendering	int32u	0 = Normal (sRGB) 1 = Linear (camera RGB) 2 = Pro Photo RGB 3 = Unknown 4 = Other Profile
0xdac	DCS3XXProcessingInfoIFD	no	
0x0dad	DCS3XXProcessingInfo	no	
0x0dae	IPAVersion	int32u	
0x0db6	FinishIPAVersion	no	
0x0db7	FinishIPFVersion	no	
0x0db8	FinishFileType	int32u	0 = JPEG Best 1 = JPEG Better 2 = JPEG Good 3 = TIFF RGB
0x0db9	FinishResolution	int32u	0 = 100% 1 = 67% 2 = 50% 3 = 25%
0x0dba	FinishNoise	int32u	0 = Normal 1 = Strong 2 = Low
0x0dbb	FinishSharpening	int32u	0 = None 1 = High 2 = Medium 3 = Low
0x0dbc	FinishLook	int32u	0 = Product 1 = Portrait 2 = Product Reduced 3 = Portrait Reduced 4 = Monochrome Product 5 = Monochrome Portrait 6 = Wedding 7 = Event 8 = Product Hi Color 9 = Portrait Hi Color

10 = Product Hi Color Hold  
 11 = Portrait Hi Color Hold  
 13 = DCS BW Normal  
 14 = DCS BW Wratten 8  
 15 = DCS BW Wratten 25  
 16 = DCS Sepia 1  
 17 = DCS Sepia 2

0x0dbd	FinishExposure	int32u	0 = Yes 1 = No
0x0e0b	SigmaScalingFactorLowRes	rational64u	
0x0e0c	SigmaScalingFactorCamera	rational64u	
0x0e0d	SigmaImpulseParameters	int16u[n]	
0x0e0e	SigmaNoiseThreshTableV2	no	
0x0e0f	SigmaSizeTable	int16u[n]	
0x0e10	DacGainsCoarseAdjPreIF41	no	
0x0e11	SigmaNoiseFilterCalTableV1	no	
0x0e12	SigmaNoiseFilterTableV1	no	
0x0e13	Lin12ToKlut8	no	
0x0e14	SigmaNoiseFilterTableV1Version	no	
0x0e15	Lin12ToKlut12	no	
0x0e16	Klut12ToLin12	no	
0x0e17	NifNonlinearity12To16	no	
0x0e18	SBALog12Transform	no	
0x0e19	InverseSBALog12Transform	no	
0x0e1a	ToneScale0	no	
0x0e1b	ToneScale1	no	
0x0e1c	ToneScale2	no	
0x0e1d	ToneScale3	no	
0x0e1e	ToneScale4	no	
0x0e1f	ToneScale5	no	
0x0e20	ToneScale6	no	
0x0e21	ToneScale7	no	
0x0e22	ToneScale8	no	
0x0e23	ToneScale9	no	
0x0e24	DayMat0	no	
0x0e25	DayMat1	no	
0x0e26	DayMat2	no	
0x0e27	DayMat3	no	
0x0e28	DayMat4	no	
0x0e29	DayMat5	no	
0x0e2a	DayMat6	no	
0x0e2b	DayMat7	no	
0x0e2c	DayMat8	no	
0x0e2d	DayMat9	no	
0x0e2e	TungMat0	no	
0x0e2f	TungMat1	no	
0x0e30	TungMat2	no	
0x0e31	TungMat3	no	
0x0e32	TungMat4	no	
0x0e33	TungMat5	no	
0x0e34	TungMat6	no	
0x0e35	TungMat7	no	
0x0e36	TungMat8	no	
0x0e37	TungMat9	no	
0x0e38	FluorMat0	no	
0x0e39	FluorMat1	no	

0x0e3a	FluorMat2	no	
0x0e3b	FluorMat3	no	
0x0e3c	FluorMat4	no	
0x0e3d	FluorMat5	no	
0x0e3e	FluorMat6	no	
0x0e3f	FluorMat7	no	
0x0e40	FluorMat8	no	
0x0e41	FluorMat9	no	
0x0e42	FlashMat0	no	
0x0e43	FlashMat1	no	
0x0e44	FlashMat2	no	
0x0e45	FlashMat3	no	
0x0e46	FlashMat4	no	
0x0e47	FlashMat5	no	
0x0e48	FlashMat6	no	
0x0e49	FlashMat7	no	
0x0e4a	FlashMat8	no	
0x0e4b	FlashMat9	no	
0x0e4c	KodakLook	string	
0x0e4d	IPFCameraModel	string	
0x0e4e	AH2GreenInterpolationThreshold	int16u	
0x0e4f	ResamplingKernelDenominators067	int16u[3]	
0x0e50	ResamplingKernelDenominators050	int16u[3]	
0x0e51	ResamplingKernelDenominators100	int16u[3]	
0x0e56	LookMat0	no	
0x0e57	LookMat1	no	
0x0e58	LookMat2	no	
0x0e59	LookMat3	no	
0x0e5a	LookMat4	no	
0x0e5b	LookMat5	no	
0x0e5c	LookMat6	no	
0x0e5d	LookMat7	no	
0x0e5e	LookMat8	no	
0x0e5f	LookMat9	no	
0x0e60	CFAInterpolationAlgorithm	int16u	0 = AH2 1 = Karnak
0x0e61	CFAInterpolationMetric	int16u	0 = Linear12 1 = KLUT12
0x0e62	CFAZipperFixThreshold	int16u	
0x0e63	NoiseReductionParametersKhufuRGB	int16u[9]	
0x0e64	NoiseReductionParametersKhufu6MP	int16u[9]	
0x0e65	NoiseReductionParametersKhufu3MP	int16u[9]	
0x0e6a	ChromaNoiseHighFThresh	int32u[2]	
0x0e6b	ChromaNoiseLowFThresh	int32u[2]	
0x0e6c	ChromaNoiseEdgeMapThresh	int32u	
0x0e6d	ChromaNoiseColorSpace	int32u	
0x0e6e	EnableChromaNoiseReduction	int16u	
0x0e6f	NoiseReductionParametersHostRGB	int16u[9]	
0x0e70	NoiseReductionParametersHost6MP	int16u[9]	
0x0e71	NoiseReductionParametersHost3MP	int16u[9]	
0x0e72	NoiseReductionParametersCamera	int16u[6]	
0x0e73	NoiseReductionParametersAtCapture	int16u[6]	
0x0e74	LCDMatrix	rational64s[9]	
0x0e75	LCDMatrixChickFix	rational64s[9]	

0x0e76	LCDMatrixMarvin	rational64s[9]
0x0e7c	LCDGammaTableChickFix	no
0x0e7d	LCDGammaTableMarvin	no
0x0e7e	LCDGammaTable	no
0x0e7f	LCDSharpeningF1	no
0x0e80	LCDSharpeningF2	no
0x0e81	LCDSharpeningF3	no
0x0e82	LCDSharpeningF4	no
0x0e83	LCDEdgeMapX1	no
0x0e84	LCDEdgeMapX2	no
0x0e85	LCDEdgeMapX3	no
0x0e86	LCDEdgeMapX4	no
0x0e87	LCDEdgeMapSlope	no
0x0e88	YCrCbMatrix	no
0x0e89	LCDEdgeSpline	no
0x0e92	Fac18Per	int16u
0x0e93	Fac170Per	int16u
0x0e94	Fac100Per	int16u
0x0e9b	ExtraTickLocations	no
0x0e9c	RGBtoeV0	no
0x0e9d	RGBtoeV1	no
0x0e9e	RGBtoeV2	no
0x0e9f	RGBtoeV3	no
0x0ea0	RGBtoeV4	no
0x0ea1	RGBtoeV5	no
0x0ea2	RGBtoeV6	no
0x0ea3	RGBtoeV7	no
0x0ea4	RGBtoeV8	no
0x0ea5	RGBtoeV9	no
0x0ea6	LCDHistLUT0	no
0x0ea7	LCDHistLUT1	no
0x0ea8	LCDHistLUT2	no
0x0ea9	LCDHistLUT3	no
0x0eaa	LCDHistLUT4	no
0x0eab	LCDHistLUT5	no
0x0eac	LCDHistLUT6	no
0x0ead	LCDHistLUT7	no
0x0eae	LCDHistLUT8	no
0x0eaf	LCDHistLUT9	no
0x0eb0	LCDLinearClipValue	no
0x0ece	LCDStepYvalues	no
0x0ecf	LCDStepYvaluesChickFix	no
0x0ed0	LCDStepYvaluesMarvin	no
0x0ed8	InterpolationCoefficients	no
0x0ed9	InterpolationCoefficients6MP	no
0x0eda	InterpolationCoefficients3MP	no
0x0f00	NoiseReductionParametersHostNormal	no
0x0f01	NoiseReductionParametersHostStrong	no
0x0f02	NoiseReductionParametersHostLow	no
0x0f0a	MariahTextureThreshold	int16u
0x0f0b	MariahMapLoThreshold	int16u
0x0f0c	MariahMapHiThreshold	int16u
0x0f0d	MariahChromaBlurSize	int16u

0x0f0e	MariahSigmaThreshold	int16u
0x0f0f	MariahThresholds	no
0x0f10	MariahThresholdsNormal	no
0x0f11	MariahThresholdsStrong	no
0x0f12	MariahThresholdsLow	no
0x0f14	KhufuLinearRedMixingCoefficient	no
0x0f15	KhufuLinearGreenMixingCoefficient	no
0x0f16	KhufuLinearBlueMixingCoefficient	no
0x0f17	KhufuUSpaceC2MixingCoefficient	no
0x0f18	KhufuSigmaGaussianWeights	no
0x0f19	KhufuSigmaScalingFactors6MP	no
0x0f1a	KhufuSigmaScalingFactors3MP	no
0x0f1b	KhufuSigmaScalingFactors14MP	no
0x0f32	Khufu0Thresholds	no
0x0f33	Khufu1Thresholds	no
0x0f34	Khufu2Thresholds	no
0x0f35	Khufu3Thresholds	no
0x0f36	Khufu4Thresholds	no
0x0f37	Khufu5Thresholds	no
0x0f3c	CondadoDayBVThresh	int16u
0x0f3d	CondadoNeuRange	int16u
0x0f3e	CondadoBVFactor	int16s
0x0f3f	CondadolIIIFactor	int16s
0x0f40	CondadoTunThresh	int16s
0x0f41	CondadoFluThresh	int16s
0x0f42	CondadoDayOffsets	int16s[2]
0x0f43	CondadoTunOffsets	int16s[2]
0x0f44	CondadoFluOffsets	int16s[2]
0x0f5a	ERIMMToCRGB0Spline	no
0x0f5b	ERIMMToCRGB1Spline	no
0x0f5c	ERIMMToCRGB2Spline	no
0x0f5d	ERIMMToCRGB3Spline	no
0x0f5e	ERIMMToCRGB4Spline	no
0x0f5f	ERIMMToCRGB5Spline	no
0x0f60	ERIMMToCRGB6Spline	no
0x0f61	ERIMMToCRGB7Spline	no
0x0f62	ERIMMToCRGB8Spline	no
0x0f63	ERIMMToCRGB9Spline	no
0x0f64	CRGBToERIMM0Spline	no
0x0f65	CRGBToERIMM1Spline	no
0x0f66	CRGBToERIMM2Spline	no
0x0f67	CRGBToERIMM3Spline	no
0x0f68	CRGBToERIMM4Spline	no
0x0f69	CRGBToERIMM5Spline	no
0x0f6a	CRGBToERIMM6Spline	no
0x0f6b	CRGBToERIMM7Spline	no
0x0f6c	CRGBToERIMM8Spline	no
0x0f6d	CRGBToERIMM9Spline	no
0x0f6e	ERIMMNonLinearitySpline	no
0x0f6f	Delta12To8Spline	no
0x0f70	Delta8To12Spline	no
0x0f71	InverseMonitorMatrix	no
0x0f72	NifNonlinearityExt	no

0x0f73	InvNifNonLinearity	no	
0x0f74	RIMM13ToERIMM12Spline	no	
0x0f78	ToneScale0Spline	no	
0x0f79	ToneScale1Spline	no	
0x0f7a	ToneScale2Spline	no	
0x0f7b	ToneScale3Spline	no	
0x0f7c	ToneScale4Spline	no	
0x0f7d	ToneScale5Spline	no	
0x0f7e	ToneScale6Spline	no	
0x0f7f	ToneScale7Spline	no	
0x0f80	ToneScale8Spline	no	
0x0f81	ToneScale9Spline	no	
0x0f82	ERIMMToneScale0Spline	no	
0x0f83	ERIMMToneScale1Spline	no	
0x0f84	ERIMMToneScale2Spline	no	
0x0f85	ERIMMToneScale3Spline	no	
0x0f86	ERIMMToneScale4Spline	no	
0x0f87	ERIMMToneScale5Spline	no	
0x0f88	ERIMMToneScale6Spline	no	
0x0f89	ERIMMToneScale7Spline	no	
0x0f8a	ERIMMToneScale8Spline	no	
0x0f8b	ERIMMToneScale9Spline	no	
0x0f8c	RIMMToCRGB0Spline	no	
0x0f8d	RIMMToCRGB1Spline	no	
0x0f8e	RIMMToCRGB2Spline	no	
0x0f8f	RIMMToCRGB3Spline	no	
0x0f90	RIMMToCRGB4Spline	no	
0x0f91	RIMMToCRGB5Spline	no	
0x0f92	RIMMToCRGB6Spline	no	
0x0f93	RIMMToCRGB7Spline	no	
0x0f94	RIMMToCRGB8Spline	no	
0x0f95	RIMMToCRGB9Spline	no	
0x0fa0	QTableLarge25Pct	no	
0x0fa1	QTableMedium25Pct	no	
0x0fa2	QTableSmall25Pct	no	
0x1130	NoiseReductionKernel	no	
0x1388	UserMetaData	no	
0x1389	InputProfile	undef	
0x138a	KodakLookProfile	undef	
0x138b	OutputProfile	undef	
0x1390	SourceProfilePrefix	string	
0x1391	ToneCurveProfileName	string	
0x1392	InputProfile	-	--> <a href="#">ICC_Profile_Tags</a>
0x1393	ProcessParametersV2	no	
0x1394	ReservedBlob2	no	
0x1395	ReservedBlob3	no	
0x1396	ReservedBlob4	no	
0x1397	ReservedBlob5	no	
0x1398	ReservedBlob6	no	
0x1399	ReservedBlob7	no	
0x139a	ReservedBlob8	no	
0x139b	ReservedBlob9	no	
0x1770	ScriptVersion	int32u	

0x177a	ImagerTimingData	no
0x1784	ISO	int32u
0x17a2	Scav11Cols	no
0x17a3	Scav12Cols	no
0x17a4	Scav21Cols	no
0x17a5	Scav22Cols	no
0x17a6	ActiveCTEMonitor1Cols	no
0x17a7	ActiveCTEMonitor2Cols	no
0x17a8	ActiveCTEMonitorRows	no
0x17a9	ActiveBuf1Cols	no
0x17aa	ActiveBuf2Cols	no
0x17ab	ActiveBuf1Rows	no
0x17ac	ActiveBuf2Rows	no
0x17c0	HRNoiseLines	no
0x17c1	RNoiseLines	no
0x17c2	ANoiseLines	no
0x17d4	ImagerCols	int16u
0x17de	ImagerRows	int16u
0x17e8	PartialActiveCols1	int32u
0x17f2	PartialActiveCols2	int32u
0x17fc	PartialActiveRows1	int32u
0x1806	PartialActiveRows2	int32u
0x1810	ElectricalBlackColumns	int32u
0x181a	ResetBlackSegRows	int32u
0x1838	CaptureWidthNormal	int32u
0x1839	CaptureHeightNormal	int32u
0x183a	CaptureWidthResetBlackSegNormal	no
0x183b	CaptureHeightResetBlackSegNormal	no
0x183c	DarkRefOffsetNormal	no
0x1842	CaptureWidthTest	int32u
0x1843	CaptureHeightTest	no
0x1844	CaptureWidthResetBlackSegTest	no
0x1845	CaptureHeightResetBlackSegTest	no
0x1846	DarkRefOffsetTest	no
0x184c	ImageSegmentStartLine	int32u
0x184d	ImageSegmentLines	int32u
0x184e	SkipLineTime	int32u
0x1860	FastResetLineTime	int32u
0x186a	NormalLineTime	int32u
0x1874	MinIntegrationRows	int32u
0x187e	PreReadFastResetCount	int32u
0x1888	TransferTimeNormal	int32u
0x1889	TransferTimeTest	int32u
0x188a	QuietTime	int32u
0x189c	OverClockCols	int16u
0x18a6	H2ResetBlackPixels	int32u
0x18b0	H3ResetBlackPixels	int32u
0x18ba	BlackAcquireRows	int32u
0x18c4	OverClockRows	int16u
0x18ce	H3ResetBlackColumns	int32u
0x18d8	DarkBlackSegRows	int32u
0x1900	CrossbarEnable	no
0x1901	FifoenOnePixelDelay	int32u

0x1902	ReadoutTypeRequested	int32u
0x1903	ReadoutTypeActual	int32u
0x190a	OffsetDacValue	int32u
0x1914	TempAmpGainX100	int32u
0x191e	VarrayDacNominalValues	int32u[3]
0x1928	VddimDacNominalValues	no
0x1964	C14Configuration	int32u
0x196e	TDA1Offset	int32u[3]
0x196f	TDA1Bandwidth	int32u
0x1970	TDA1Gain	int32u[3]
0x1971	TDA1EdgePolarity	int32u
0x1978	TDA2Offset	int32u[3]
0x1979	TDA2Bandwidth	int32u
0x197a	TDA2Gain	int32u[3]
0x197b	TDA2EdgePolarity	int32u
0x1982	TDA3Offset	int32u[3]
0x1983	TDA3Bandwidth	int32u
0x1984	TDA3Gain	int32u[3]
0x1985	TDA3EdgePolarity	int32u
0x198c	TDA4Offset	int32u[3]
0x198d	TDA4Bandwidth	int32u
0x198e	TDA4Gain	int32u[3]
0x198f	TDA4EdgePolarity	int32u
0xfd8	ComLenBlkSize	int16u

## Kodak TextualInfo Tags

Below is a list of tags which have been observed in the Kodak TextualInfo data, however ExifTool will extract information from any tags found here.

Tag ID	Tag Name	Writable	Values / Notes
'AF Function'	AFMode	no	
'Actual Compensation'	ActualCompensation	no	
'Aperture'	Aperture	no	
'Auto Bracket'	AutoBracket	no	
'Brightness Value'	BrightnessValue	no	
'Camera'	CameraModel	no	
'Camera body'	CameraBody	no	
'Compensation'	ExposureCompensation	no	
'Date'	Date	no	
'Exposure Bias'	ExposureBias	no	
'Exposure Mode'	ExposureMode	no	'A' = Aperture Priority 'B' = Bulb 'M' = Manual 'P' = Program 'S' = Shutter Priority
'Firmware Version'	FirmwareVersion	no	
'Flash Compensation'	FlashExposureComp	no	
'Flash Fired'	FlashFired	no	
'Flash Sync Mode'	FlashSyncMode	no	
'Focal Length'	FocalLength	no	
'Height'	KodakImageHeight	no	
'ISO'	ISO	no	
'ISO Speed'	ISO	no	
'Image Number'	ImageNumber	no	

'Lens'	Lens	no	
'Max Aperture'	MaxAperture	no	
'Meter Mode'	MeterMode	no	
'Min Aperture'	MinAperture	no	
'Popup Flash'	PopupFlash	no	
'Serial Number'	SerialNumber	no	
'Shooting Mode'	ShootingMode	no	
'Shutter'	ShutterSpeed	no	
'Temperature'	Temperature	no	
'Time'	Time	no	
'White balance'	WhiteBalance	no	
'Width'	KodakImageWidth	no	
'_other_info'	OtherInfo	no	(any other information without a tag name)

## Kodak Processing Tags

Index2	Tag Name	Writable	Values / Notes
20	WB_RGBLevels	no	

## Kodak Type2 Tags

These tags are used by the Kodak DC220, DC260, DC265 and DC290, Hewlett-Packard PhotoSmart 618, C500 and C912, Pentax EI-200 and EI-2000, and Minolta EX1500Z.

Index1	Tag Name	Writable	Values / Notes
8	KodakMaker	string[32]	
40	KodakModel	string[32]	
108	KodakImageWidth	int32u	
112	KodakImageHeight	int32u	

## Kodak Type3 Tags

These tags are used by the DC240, DC280, DC3400 and DC5000.

Index1	Tag Name	Writable	Values / Notes
12	YearCreated	int16u	
14	MonthDayCreated	int8u[2]	
16	TimeCreated	int8u[4]	
30	OpticalZoom	int16u	
55	Sharpness	int8s	0 = Normal
56	ExposureTime	int32u	
60	FNumber	int16u	
78	ISO	int16u	

## Kodak Type4 Tags

These tags are used by the DC200 and DC215.

Index1	Tag Name	Writable	Values / Notes
32	OriginalFileName	string[12]	

## Kodak Type5 Tags

These tags are used by the CX4200, CX4210, CX4230, CX4300, CX4310, CX6200 and CX6230.

Index1	Tag Name	Writable	Values / Notes

20	ExposureTime	int32u	
26	WhiteBalance	int8u	1 = Daylight 2 = Flash 3 = Tungsten
28	FNumber	int16u	
30	ISO	int16u	
32	OpticalZoom	int16u	
34	DigitalZoom	int16u	
39	FlashMode	int8u	0 = Auto 1 = On 2 = Off 3 = Red-Eye
42	ImageRotated	int8u	0 = No 1 = Yes
43	Macro	int8u	0 = On 1 = Off

## Kodak Type6 Tags

These tags are used by the DX3215 and DX3700.

Index1	Tag Name	Writable	Values / Notes
16	ExposureTime	int32u	
20	ISOSetting?	int32u	
24	FNumber	int16u	
26	ISO	int16u	
28	OpticalZoom	int16u	
30	DigitalZoom	int16u	
34	Flash	int16u	0 = No Flash 1 = Fired

## Kodak Type7 Tags

The maker notes of models such as the C340, C433, CC533, LS755, V803 and V1003 seem to start with the camera serial number. The C310, C315, C330, C643, C743, CD33, CD43, CX7220 and CX7300 maker notes are also decoded using this table, although the strings for these cameras don't conform to the usual Kodak serial number format, and instead have the model name followed by 8 digits.

Index1	Tag Name	Writable	Values / Notes
0	SerialNumber	string[16]	

## Kodak Type8 Tags

Kodak models such as the ZD710, P712, P850, P880, V1233, V1253, V1275, V1285, Z612, Z712, Z812, Z885 use standard TIFF IFD format for the maker notes. In keeping with Kodak's strategy of inconsistent makernotes, models such as the M380, M1033, M1093, V1073, V1273, Z1012, Z1085 and Z8612 also use these tags, but these makernotes begin with a TIFF header instead of an IFD entry count and use relative instead of absolute offsets. There is a large amount of information stored in these maker notes (apparently with much duplication), but relatively few tags have so far been decoded.

Tag ID	Tag Name	Writable	Values / Notes
0xfc00	SubIFD0	-	--> <a href="#">Kodak SubIFD0 Tags</a> --> <a href="#">Kodak SubIFD0 Tags</a>
0xfc01	SubIFD1	-	--> <a href="#">Kodak SubIFD1 Tags</a> --> <a href="#">Kodak SubIFD1 Tags</a>
0xfc02	SubIFD2	-	--> <a href="#">Kodak SubIFD2 Tags</a> --> <a href="#">Kodak SubIFD2 Tags</a>
0xfc03	SubIFD3	-	--> <a href="#">Kodak SubIFD3 Tags</a> --> <a href="#">Kodak SubIFD3 Tags</a>
0xfc04	SubIFD4	-	--> <a href="#">Kodak SubIFD4 Tags</a> --> <a href="#">Kodak SubIFD4 Tags</a>

0xfc05	SubIFD5	-	--> <a href="#">Kodak SubIFD5 Tags</a> --> <a href="#">Kodak SubIFD5 Tags</a>
0xfc06	SubIFD6	-	--> <a href="#">Kodak SubIFD6 Tags</a> --> <a href="#">Kodak SubIFD6 Tags</a>
0xfcff	SubIFD255	-	--> <a href="#">Kodak SubIFD0 Tags</a>
0xff00	CameraInfo	-	--> <a href="#">Kodak CameraInfo Tags</a>

## Kodak SubIFD0 Tags

SubIFD0 through SubIFD5 tags are written a number of newer Kodak models.

Tag ID	Tag Name	Writable	Values / Notes
0xfa02	SceneMode	int16u	(may not be valid for some models) 1 = Sport                    17 = Program 3 = Portrait                18 = Aperture Priority 4 = Landscape              19 = Shutter Priority 6 = Beach                   20 = Manual 7 = Night Portrait        25 = Back Light 8 = Night Landscape      28 = Candlelight 9 = Snow                    29 = Sunset 10 = Text                   31 = Panorama Left-right 11 = Fireworks             32 = Panorama Right-left 12 = Macro                  33 = Smart Scene 13 = Museum                34 = High ISO 16 = Children
0xfa19	SerialNumber	string	
0xfa1d	KodakImageWidth	int16u	
0xfa1e	KodakImageHeight	int16u	
0xfa20	SensorWidth	int16u	
0xfa21	SensorHeight	int16u	
0xfa23	FNumber	int16u	
0xfa24	ExposureTime	int32u	
0xfa2e	ISO	int16u	
0xfa3d	OpticalZoom	int16u	
0xfa46	ISO	int16u	
0xfa51	KodakImageWidth	int16u	
0xfa52	KodakImageHeight	int16u	
0xfa54	ThumbnailWidth	int16u	
0xfa55	ThumbnailHeight	int16u	
0xfa57	PreviewImageWidth	int16u	
0xfa58	PreviewImageHeight	int16u	

## Kodak SubIFD1 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0027	ISO	int16u	
0x0028	ISO	int16u	

## Kodak SubIFD2 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x6002	SceneModeUsed	int32u	0 = Program                    13 = Back Light 2 = Aperture Priority        16 = Landscape 3 = Shutter Priority        17 = Night Landscape 4 = Manual                   18 = Night Portrait 5 = Portrait                19 = Snow 6 = Sport                    20 = Beach 7 = Children                21 = Fireworks 8 = Museum                  22 = Sunset 10 = High ISO               23 = Candlelight 11 = Text                    28 = Panorama 12 = Macro

0x6006	OpticalZoom	int32u		
0x6103	MaxAperture	int32u		
0xf002	SceneModeUsed	int32u	0 = Program 2 = Aperture Priority 3 = Shutter Priority 4 = Manual 5 = Portrait 6 = Sport 7 = Children 8 = Museum 10 = High ISO 11 = Text 12 = Macro	13 = Back Light 16 = Landscape 17 = Night Landscape 18 = Night Portrait 19 = Snow 20 = Beach 21 = Fireworks 22 = Sunset 23 = Candlelight 28 = Panorama
0xf006	OpticalZoom	int32u		
0xf103	FNumber	int32u		
0xf104	ExposureTime	int32u		
0xf105	ISO	int32u		

## Kodak SubIFD3 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x1000	OpticalZoom	int16u	

## Kodak SubIFD4 Tags

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## Kodak SubIFD5 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x000f	OpticalZoom	int16u	

## Kodak SubIFD6 Tags

SubIFD6 is written by the M580.

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## Kodak CameraInfo Tags

These tags are used by the P712, P850 and P880.

Tag ID	Tag Name	Writable	Values / Notes
0xf900	SensorWidth	int16u	(effective sensor size)
0xf901	SensorHeight	int16u	
0xf902	BayerPattern	string	
0xf903	SensorFullWidth	int16u	(includes black border?)
0xf904	SensorFullHeight	int16u	
0xf907	KodakImageWidth	int16u	
0xf908	KodakImageHeight	int16u	
0xfa00	KodakInfoType	string	
0xfa04	SerialNumber	string	
0xfd04	FNumber	int16u	
0xfd05	ExposureTime	int32u	
0xfd06	ISO	int16u	

# Kodak Type9 Tags

These tags are used by the Kodak C140, C180, C913, C1013, M320, M340 and M550, as well as various cameras marketed by other manufacturers.

Index1	Tag Name	Writable	Values / Notes
12	FNumber	int16u	
16	ExposureTime	int32u	
20	DateTimeOriginal	string[20]	
52	ISO	int16u	
87	FirmwareVersion	string[16]	(Kodak only)
168	UnknownNumber	no	(Kodak only)
196	UnknownNumber	no	(Kodak only)

# Kodak Type10 Tags

Another variation of the IFD-format type, this time with just a byte order indicator instead of a full TIFF header. These tags are used by the Z980.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	PreviewImageSize	int16u[2]	
0x0012	ExposureTime	int32u	
0x0013	FNumber	int16u	
0x0014	ISO	int16u	
0x001d	FocalLength	int32u	

# Kodak Type11 Tags

These tags are found in models such as the PixPro S-1. They are not writable because the inconsistency of Kodak maker notes is beginning to get on my nerves.

Tag ID	Tag Name	Writable	Values / Notes
0x0104	FirmwareVersion	no	
0x0203	PictureEffect	no	0 = None 3 = Monochrome 9 = Kodachrome
0x0207	KodakModel	no	
0x0300	KodakMake	no	
0x0308	LensSerialNumber	no	
0x0309	LensModel	no	
0x030d	LevelMeter?	no	
0x0311	Pitch	no	
0x0312	Yaw	no	
0x0313	Roll	no	
0x0314	CX?	no	
0x0315	CY?	no	
0x0316	Rads?	no	

# Kodak Unknown Tags

Index1	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

# Kodak Meta Tags

These tags are found in the APP3 "Meta" segment of JPEG images from Kodak cameras such as the DC280, DC3400, DC5000, MC3, M580, Z950 and Z981. The structure of this segment is similar to the APP1 "Exif" segment, but a different set of tags is used.

Tag ID	Tag Name	Writable	Values / Notes
0xc350	FilmProductCode	no	
0xc351	ImageSourceEK	no	
0xc352	CaptureConditionsPAR	no	
0xc353	CameraOwner	undef	
0xc354	SerialNumber	undef	
0xc355	UserSelectGroupTitle	no	
0xc356	DealerIDNumber	no	
0xc357	CaptureDeviceFID	no	
0xc358	EnvelopeNumber	no	
0xc359	FrameNumber	no	
0xc35a	FilmCategory	no	
0xc35b	FilmGencode	no	
0xc35c	ModelAndVersion	no	
0xc35d	FilmSize	no	
0xc35e	SBA_RGBShifts	no	
0xc35f	SBAInputImageColorspace	no	
0xc360	SBAInputImageBitDepth	no	
0xc361	SBAExposureRecord	no	
0xc362	UserAdjSBA_RGBShifts	no	
0xc363	ImageRotationStatus	no	
0xc364	RollGuidElements	no	
0xc365	MetadataNumber	no	
0xc366	EditTagArray	no	
0xc367	Magnification	no	
0xc36c	NativeXResolution	no	
0xc36d	NativeYResolution	no	
0xc36e	KodakEffectsIFD	-	--> <a href="#">Kodak SpecialEffects Tags</a>
0xc36f	KodakBordersIFD	-	--> <a href="#">Kodak Borders Tags</a>
0xc37a	NativeResolutionUnit	no	
0xc418	SourceImageDirectory	no	
0xc419	SourceImageFileName	no	
0xc41a	SourceImageVolumeName	no	
0xc46c	PrintQuality	no	
0xc46e	ImagePrintStatus	no	

## Kodak SpecialEffects Tags

The Kodak SpecialEffects and Borders tags are found in sub-IFD's within the Kodak JPEG APP3 "Meta" segment.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	DigitalEffectsVersion	no	
0x0001	DigitalEffectsName	no	
0x0002	DigitalEffectsType	no	

## Kodak Borders Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	BordersVersion	no	
0x0001	BorderName	no	
0x0002	BorderID	no	
0x0003	BorderLocation	no	
0x0004	BorderType	no	
0x0008	WatermarkType	no	

# Kodak KDC\_IFD Tags

These tags are found in a separate IFD of KDC images from some newer Kodak models such as the P880 and Z1015IS.

Tag ID	Tag Name	Writable	Values / Notes
0xfa00	SerialNumber		string
0xfa0d	WhiteBalance	int8u	0 = Auto 1 = Fluorescent 2 = Tungsten 3 = Daylight 6 = Shade
0xfa25	WB_RGBLevelsAuto	no	
0xfa27	WB_RGBLevelsTungsten	no	
0xfa28	WB_RGBLevelsFluorescent	no	
0xfa29	WB_RGBLevelsDaylight	no	
0xfa2a	WB_RGBLevelsShade	no	

## Kodak frea Tags

Information stored in the "frea" atom of Kodak PixPro SP360 MP4 videos.

Tag ID	Tag Name	Writable	Values / Notes
'scra'	PreviewImage	no	
'thma'	ThumbnailImage	no	
'tima'	Duration	no	
'ver '	KodakVersion	no	

## Kodak Free Tags

Information stored in the "free" atom of Kodak MP4 videos. (VERY bad form for Kodak to store useful information in an atom intended for unused space!)

Tag ID	Tag Name	Writable	Values / Notes
'AprV'	ApertureValue	no	
'BrtV'	BrightnessValue	no	
'Expc'	ExposureCompensation	no	
'Expo'	ExposureTime	no	
'FL35'	FocalLengthIn35mmFormat	no	
'FNum'	FNumber	no	
'FoLn'	FocalLength	no	
'ISOS'	ISO	no	
'SVer'	FirmwareVersion	no	
'Scrn'	PreviewInfo	-	--> <a href="#">Kodak Scrn Tags</a>
'Seri'	SerialNumber	no	
'StSV'	ShutterSpeedValue	no	

## Kodak Scrn Tags

Index2	Tag Name	Writable	Values / Notes
0	PreviewImageWidth	no	
1	PreviewImageHeight	no	
2	PreviewImageLength	no	
4	PreviewImage	no	

## Kodak DcMD Tags

Metadata directory found in MOV and MP4 videos from some Kodak cameras.

Tag ID	Tag Name	Writable	Values / Notes
'CMbo'	CameraByteOrder	no	'II' = Little-endian (Intel, II) 'MM' = Big-endian (Motorola, MM)
'Cmbo'	CameraByteOrder	no	'II' = Little-endian (Intel, II) 'MM' = Big-endian (Motorola, MM)
'DcEM'	DcEM	-	--> <a href="#">Kodak DcEM Tags</a>
'DcME'	DcME	-	--> <a href="#">Kodak DcME Tags</a>

## Kodak DcEM Tags

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## Kodak DcME Tags

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## Kodak MOV Tags

This information is found in the TAGS atom of MOV videos from Kodak models such as the P880.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
22	Model	no	
64	ModelType	no	
78	ExposureTime	no	
82	FNumber	no	
90	ExposureCompensation	no	
112	FocalLength	no	

## Kodak pose Tags

Streamed orientation information from the PixPro 4KVR360, extracted as sub-documents when the [Duplicates](#) option is used.

Tag ID	Tag Name	Writable	Values / Notes
'Accelerometer'	Accelerometer	no	
'AngularVelocity'	AngularVelocity	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Mar 24, 2025*

[-- ExifTool Tag Names](#)

# KyoceraRaw Tags

Tags for Kyocera Contax N Digital RAW images.

Index1	Tag Name	Writable	Values / Notes					
1	FirmwareVersion	no						
12	Model	no						
25	Make	no						
33	DateTimeOriginal	no						
52	ISO	no	7 = 25	11 = 64	15 = 160	19 = 400		
			8 = 32	12 = 80	16 = 200			
			9 = 40	13 = 100	17 = 250			
			10 = 50	14 = 125	18 = 320			
56	ExposureTime	no						
60	WB_RGGBLevels	no						
88	FNumber	no						
104	MaxAperture	no						
112	FocalLength	no						
124	Lens	no						

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Feb 17, 2006

[-- ExifTool Tag Names](#)

# LIF Tags

Tags extracted from Leica Image Format (LIF) imaging files. As well as the tags listed below, all available information is extracted from the XML-format metadata in the LIF header.

Tag Name	Writable	Values / Notes
TimeStampList	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Jun 22, 2021*

[<-- ExifTool Tag Names](#)

# LNK Tags

Information extracted from MS Shell Link (Windows shortcut) files.

Index1	Tag Name	Writable	Values / Notes	
0x0014	Flags	no	Bit 0 = IDList Bit 1 = LinkInfo Bit 2 = Description Bit 3 = RelativePath Bit 4 = WorkingDir Bit 5 = CommandArgs Bit 6 = IconFile Bit 7 = Unicode Bit 8 = NoLinkInfo Bit 9 = ExpString Bit 10 = SeparateProc Bit 12 = DarwinID Bit 13 = RunAsUser Bit 14 = ExplIcon Bit 15 = NoPidAlias Bit 17 = RunWithShim Bit 18 = NoLinkTrack Bit 19 = TargetMetadata Bit 20 = NoLinkPathTracking Bit 21 = NoKnownFolderTracking Bit 22 = NoKnownFolderAlias Bit 23 = LinkToLink Bit 24 = UnaliasOnSave Bit 25 = PreferEnvPath Bit 26 = KeepLocalIDList	
0x0018	FileAttributes	no	Bit 0 = Read-only Bit 1 = Hidden Bit 2 = System Bit 3 = Volume Bit 4 = Directory Bit 5 = Archive Bit 6 = Encrypted? Bit 7 = Normal	Bit 8 = Temporary Bit 9 = Sparse Bit 10 = Reparse point Bit 11 = Compressed Bit 12 = Offline Bit 13 = Not indexed Bit 14 = Encrypted
0x001c	CreateDate	no		
0x0024	AccessDate	no		
0x002c	ModifyDate	no		
0x0034	TargetFileSize	no		
0x0038	IconIndex	no		
0x003c	RunWindow	no	0 = Hide 1 = Normal 2 = Show Minimized 3 = Show Maximized 4 = Show No Activate 5 = Show 6 = Minimized 7 = Show Minimized No Activate 8 = Show NA 9 = Restore 10 = Show Default	
0x0040	HotKey	no	0x0 = (none) 0x90 = Num Lock 0x91 = Scroll Lock 0x100 = Shift 0x200 = Control	0x400 = Alt '0x30'-'0x39' = 0-9 '0x41'-'0x5a' = A-Z '0x70'-'0x87' = F1-F24
0x10000	ItemID	-	--> <a href="#">LNK ItemID Tags</a>	
0x20000	LinkInfo	-	--> <a href="#">LNK LinkInfo Tags</a>	
0x30004	Description	no		
0x30008	RelativePath	no		
0x30010	WorkingDirectory	no		
0x30020	CommandLineArguments	no		
0x30040	IconFileName	no		
0xa0000000	UnknownData	-	--> <a href="#">LNK UnknownData Tags</a>	
0xa0000001	EnvVarData	-	--> <a href="#">LNK UnknownData Tags</a>	

0xa0000002	ConsoleData	-	--> <a href="#">LNK ConsoleData Tags</a>
0xa0000003	TrackerData	-	--> <a href="#">LNK TrackerData Tags</a>
0xa0000004	ConsoleFEData	-	--> <a href="#">LNK ConsoleFEData Tags</a>
0xa0000005	SpecialFolderData	-	--> <a href="#">LNK UnknownData Tags</a>
0xa0000006	DarwinData	-	--> <a href="#">LNK UnknownData Tags</a>
0xa0000007	IconEnvData	-	--> <a href="#">LNK UnknownData Tags</a>
0xa0000008	ShimData	-	--> <a href="#">LNK UnknownData Tags</a>
0xa0000009	PropertyStoreData	-	--> <a href="#">LNK UnknownData Tags</a>
0xa000000b	KnownFolderData	-	--> <a href="#">LNK UnknownData Tags</a>
0xa000000c	VistaIDListData	-	--> <a href="#">LNK UnknownData Tags</a>

## LNK ItemID Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0032	Item0032	-	--> <a href="#">LNK Item0032 Tags</a>

## LNK Item0032 Tags

Index1	Tag Name	Writable	Values / Notes
14	TargetFileDOSName	no	

## LNK LinkInfo Tags

Tag Name	Writable	Values / Notes	
CommonNetworkRelLink	no		
CommonPathSuffix	no		
DeviceName	no		
DriveSerialNumber	no		
DriveType	no	0 = Unknown 1 = Invalid Root Path 2 = Removable Media 3 = Fixed Disk	4 = Remote Drive 5 = CD-ROM 6 = Ram Disk
LocalBasePath	no		
NetName	no		
NetProviderType	no	0x1a0000 = AVID 0x1b0000 = DOCUSPACE 0x1c0000 = MANGOSOFT 0x1d0000 = SERNET 0x1e0000 = RIVERFRONT1 0x1f0000 = RIVERFRONT2 0x200000 = DECORB 0x210000 = PROTSTOR 0x220000 = FJ_REDIR 0x230000 = DISTINCT 0x240000 = TWINS 0x250000 = RDR2SAMPLE 0x260000 = CSC 0x270000 = 3IN1 0x290000 = EXTENDNET 0x2a0000 = STAC 0x2b0000 = FOXBAT	0x2c0000 = YAHOO 0x2d0000 = EXIFS 0x2e0000 = DAV 0x2f0000 = KNOWARE 0x300000 = OBJECT_DIRE 0x310000 = MASFAX 0x320000 = HOB_NFS 0x330000 = SHIVA 0x340000 = IBMAL 0x350000 = LOCK 0x360000 = TERMSRV 0x370000 = SRT 0x380000 = QUINCY 0x390000 = OPENAFS 0x3a0000 = AVID1 0x3b0000 = DFS
VolumelD	no		
VolumeLabel	no		

## LNK UnknownData Tags

Index1	Tag Name	Writable	Values / Notes
[no tags known]			

## LNK ConsoleData Tags

Index1	Tag Name	Writable	Values / Notes		
8	FillAttributes	no			
10	PopupFillAttributes	no			
12	ScreenBufferSize	no			
16	WindowSize	no			
20	WindowOrigin	no			
32	FontSize	no			
36	FontFamily	no	0x0 = Don't Care	0x30 = Modern	
			0x10 = Roman	0x40 = Script	
			0x20 = Swiss	0x50 = Decorative	
40	FontWeight	no			
44	FontName	no			
108	CursorSize	no			
112	FullScreen	no			
116	QuickEdit	no			
120	InsertMode	no			
124	WindowOriginAuto	no			
128	HistoryBufferSize	no			
132	NumHistoryBuffers	no			
136	RemoveHistoryDuplicates	no			

## LNK TrackerData Tags

Index1	Tag Name	Writable	Values / Notes
16	MachineID	no	

## LNK ConsoleFEData Tags

Index1	Tag Name	Writable	Values / Notes
8	CodePage	no	--> <a href="#">Microsoft CodePage Values</a>

## LNK INI Tags

Tags found in INI-format Windows .URL files.

Tag Name	Writable	Values / Notes
Author	no	
Comment	no	
Desc	no	
HotKey	no	
IDList	no	
IconFile	no	
IconIndex	no	
Modified	no	
Roamed	no	(1 if synced across multiple devices)
ShowCommand	no	1 = Normal 2 = Minimized 3 = Maximized
URL	no	
WhatsNew	no	
WorkingDirectory	no	

# Leaf Tags

These tags are found in .MOS images from Leaf digital camera backs as written by Creo Leaf Capture. They exist within the Leaf-specific directory structure of EXIF tag 0x8606. The tables below list observed Leaf tags, however ExifTool will extract any tags found in the Leaf directories even if they don't appear in these tables.

Tag ID	Tag Name	Writable	Values / Notes
'JPEG_preview_data'	PreviewImage	no	
'JPEG_preview_info'	PreviewInfo	no	
'PDA_histogram_data'	PDAHistogram	no	
'back_serial_number'	BackSerial	no	
'camera_profile'	CameraProfile	-	--> <a href="#">Leaf CameraProfile Tags</a>
'icc_camera_profile'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a>
'icc_camera_to_tone_matrix'	ToneMatrix	no	
'icc_camera_to_tone_space_flow'	ToneSpaceFlow	no	
'icc_rgb_ws_profile'	RGB_Profile	-	--> <a href="#">ICC Profile Tags</a>
'image_offset'	ImageOffset	no	
'pattern_ratation_angle'	PatternAngle	no	("ratation" is not a typo)

## Leaf CameraProfile Tags

All Tag ID's in the following table have a leading 'CamProf\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	CameraBackType	no	
'capture_profile'	CaptureProfile	-	--> <a href="#">Leaf CaptureProfile Tags</a>
'image_profile'	ImageProfile	-	--> <a href="#">Leaf ImageProfile Tags</a>
'name'	CameraName	no	
'type'	CameraType	no	
'version'	CameraProfileVersion	no	

## Leaf CaptureProfile Tags

All Tag ID's in the following table have a leading 'CaptProf\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'CCD_rect'	CCDRect	no	
'CCD_valid_rect'	CCDValidRect	no	
'CCD_video_rect'	CCDVideoRect	no	
'back_type'	CaptProfBackType	no	
'center_dark_rect'	CenterDarkRect	no	
'color_averages'	ColorAverages	no	
'color_matrix'	ColorMatrix	no	
'dark_correction_type'	DarkCorrectionType	no	
'image_bounds'	ImageBounds	no	
'image_fields'	ImageFields	no	
'image_offset'	ImageOffset	no	
'left_dark_rect'	LeftDarkRect	no	
'luminance_consts'	LuminanceConsts	no	
'mosaic_pattern'	MosaicPattern	no	
'name'	CaptProfName	no	
'number_of_planes'	NumberOfPlanes	no	
'raw_data_rotation'	RawDataRotation	no	
'reconstruction_type'	ReconstructionType	no	
'right_dark_rect'	RightDarkRect	no	

'serial_number'	CaptureSerial	no
'type'	CaptProfType	no
'version'	CaptProfVersion	no
'xy_offset_info'	XYOffsetInfo	no

## Leaf ImageProfile Tags

All Tag ID's in the following table have a leading 'ImgProf\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	ImgProfBackType	no	
'image_status'	ImageStatus	no	
'name'	ImgProfName	no	
'rotation_angle'	RotationAngle	no	
'shoot_setup'	ShootSetup	-	--> <a href="#">Leaf ShootSetup Tags</a>
'type'	ImgProfType	no	
'version'	ImgProfVersion	no	

## Leaf ShootSetup Tags

All Tag ID's in the following table have a leading 'ShootObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	ShootObjBackType	no	
'camera_setup'	CameraSetup	-	--> <a href="#">Leaf CameraSetup Tags</a>
'capture_setup'	CaptureSetup	-	--> <a href="#">Leaf CaptureSetup Tags</a>
'color_setup'	ColorSetup	-	--> <a href="#">Leaf ColorSetup Tags</a>
'look_header'	LookHeader	-	--> <a href="#">Leaf LookHeader Tags</a>
'name'	ShootObjName	no	
'save_setup'	SaveSetup	-	--> <a href="#">Leaf SaveSetup Tags</a>
'type'	ShootObjType	no	
'version'	ShootObjVersion	no	

## Leaf CameraSetup Tags

All Tag ID's in the following table have a leading 'CameraObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'ISO_speed'	ISOSpeed	no	
'back_type'	CameraObjBackType	no	
'camera_type'	CameraType	no	
'lens_ID'	LensID	no	
'lens_type'	LensType	no	
'name'	CameraObjName	no	
'strobe'	Strobe	no	
'type'	CameraObjType	no	
'version'	CameraObjVersion	no	

## Leaf CaptureSetup Tags

All Tag ID's in the following table have a leading 'CaptureObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'Multi_quality'	MultiQuality	no	
'back_type'	CaptureObjBackType	no	
'name'	CaptureObjName	no	

'neutrals'	Neutrals	-	--> <a href="#">Leaf Neutrals Tags</a>
'selection'	Selection	-	--> <a href="#">Leaf Selection Tags</a>
'sharpness'	Sharpness	-	--> <a href="#">Leaf Sharpness Tags</a>
'single_quality'	SingleQuality	no	
'tone_curve'	ToneCurve	-	--> <a href="#">Leaf ToneCurve Tags</a>
'type'	CaptureObjType	no	
'version'	CaptureObjVersion	no	

## Leaf Neutrals Tags

All Tag ID's in the following table have a leading 'NeutObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	NeutObjBackType	no	
'color_casts'	ColorCasts	no	
'highlight_end_points'	HighlightEndPoints	no	
'name'	NeutObjName	no	
'neutrals'	Neutrals	no	
'shadow_end_points'	ShadowEndPoints	no	
'type'	NeutObjType	no	
'version'	NeutObjVersion	no	

## Leaf Selection Tags

All Tag ID's in the following table have a leading 'SelObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	SelObjBackType	no	
'locks'	Locks	no	
'name'	SelObjName	no	
'orientation'	Orientation	no	
'rect'	Rect	no	
'resolution'	Resolution	no	
'scale'	Scale	no	
'type'	SelObjType	no	
'version'	SelObjVersion	no	

## Leaf Sharpness Tags

All Tag ID's in the following table have a leading 'SharpObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	SharpObjBackType	no	
'data_len'	DataLen	no	
'name'	SharpObjName	no	
'sharp_info'	SharpInfo	no	
'sharp_method'	SharpMethod	no	
'type'	SharpObjType	no	
'version'	SharpObjVersion	no	

## Leaf ToneCurve Tags

All Tag ID's in the following table have a leading 'ToneObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	ToneObjBackType	no	

'gamma'	Gamma	no	
'name'	ToneObjName	no	
'npts'	Npts	no	
'tones'	Tones	no	
'type'	ToneObjType	no	
'version'	ToneObjVersion	no	

## Leaf ColorSetup Tags

All Tag ID's in the following table have a leading 'ColorObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	ColorObjBackType	no	
'color_mode'	ColorMode	no	
'color_type'	ColorType	no	
'has_ICC'	HasICC	no	
'input_profile'	InputProfile	no	
'name'	ColorObjName	no	
'output_profile'	OutputProfile	no	
'type'	ColorObjType	no	
'version'	ColorObjVersion	no	

## Leaf LookHeader Tags

All Tag ID's in the following table have a leading 'LookHead\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	LookHeadBackType	no	
'name'	LookHeadName	no	
'type'	LookHeadType	no	
'version'	LookHeadVersion	no	

## Leaf SaveSetup Tags

All Tag ID's in the following table have a leading 'SaveObj\_' which has been removed.

Tag ID	Tag Name	Writable	Values / Notes
'back_type'	SaveObjBackType	no	
'leaf_auto_active'	LeafAutoActive	no	
'leaf_auto_base_name'	LeafAutoBaseName	no	
'leaf_hot_folder'	LeafHotFolder	no	
'leaf_open_proc_HDR'	LeafOpenProcHDR	no	
'leaf_output_file_type'	LeafOutputFileType	no	
'leaf_save_selection'	LeafSaveSelection	no	
'name'	SaveObjName	no	
'std_auto_active'	StdAutoActive	no	
'std_base_name'	StdBaseName	no	
'std_hot_folder'	StdHotFolder	no	
'std_open_in_photoshop'	StdOpenInPhotoshop	no	
'std_output_bit_depth'	StdOutputBitDepth	no	
'std_output_color_mode'	StdOutputColorMode	no	
'std_output_file_type'	StdOutputFileType	no	
'std_oxygen'	StdOxygen	no	
'std_save_selection'	StdSaveSelection	no	
'std_scaled_output'	StdScaledOutput	no	

'std_sharpen_output'	StdSharpenOutput	no
'type'	SaveObjType	no
'version'	SaveObjVersion	no

## Leaf SubIFD Tags

Leaf writes a TIFF-format sub-IFD inside IFD0 of a MOS image. No tags in this sub-IFD are currently known, except for tags 0x8602 and 0x8606 which really shouldn't be here anyway (so they don't appear in the table below) because they duplicate references to the same data from tags with the same ID in IFD0.

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

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[--> ExifTool Tag Names](#)

# Lytro Tags

Tag definitions for Lytro Light Field Picture (LFP) files. ExifTool extracts the full JSON metadata blocks, as well as breaking them down into individual tags. All available tags are extracted from the JSON metadata, even if they don't appear in the table below.

Tag Name	Writable	Values / Notes
AccelerometerTime	no	
AccelerometerX	no	
AccelerometerY	no	
AccelerometerZ	no	
CameraType	no	
DateTimeOriginal	no	
EmbeddedImage	no	(JPEG image embedded in LFP files written by Lytro Desktop)
ExposureTime	no	
FNumber	no	
FirmwareVersion	no	
FocalLength	no	
FocalPlaneXResolution	no	(Y resolution is the same as X resolution)
FrameExposureTime	no	
ISO	no	
ImageLimitExposureBias	no	
ImageModulationExposureBias	no	
JSONMetadata	no+	(the full JSON-format metadata blocks)
LensTemperature	no	
Make	no	
Model	no	
Orientation	no	1 = Horizontal (normal)
SensorSerialNumber	no	
SerialNumber	no	
SocTemperature	no	

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[--> ExifTool Tag Names](#)

# M2TS Tags

The MPEG-2 transport stream is used as a container for many different audio/video formats (including AVCHD). This table lists information extracted from M2TS files.

Tag Name	Writable	Values / Notes
AudioStreamType	no	--> <a href="#">M2TS StreamType Values</a>
Duration	no	(the -fast option may be used to avoid scanning to the end of file to calculate the Duration)
VideoStreamType	no	--> <a href="#">M2TS StreamType Values</a>
_AC3	-	--> <a href="#">M2TS AC3 Tags</a>
_H264	-	--> <a href="#">H264 Tags</a>
_MISB	-	--> <a href="#">MISB Tags</a>

## M2TS StreamType Values

Value	StreamType
0x0 = Reserved	
0x1 = MPEG-1 Video	
0x2 = MPEG-2 Video	
0x3 = MPEG-1 Audio	
0x4 = MPEG-2 Audio	
0x5 = ISO 13818-1 private sections	
0x6 = ISO 13818-1 PES private data	
0x7 = ISO 13522 MHEG	
0x8 = ISO 13818-1 DSM-CC	
0x9 = ISO 13818-1 auxiliary	
0xa = ISO 13818-6 multi-protocol encapsulation	
0xb = ISO 13818-6 DSM-CC U-N msgs	
0xc = ISO 13818-6 stream descriptors	
0xd = ISO 13818-6 sections	
0xe = ISO 13818-1 auxiliary	
0xf = MPEG-2 AAC Audio	
0x10 = MPEG-4 Video	
0x11 = MPEG-4 LATM AAC Audio	
0x12 = MPEG-4 generic	
0x13 = ISO 14496-1 SL-packetized	
0x14 = ISO 13818-6 Synchronized Download Protocol	
0x15 = Packetized metadata	
0x16 = Sectioned metadata	
0x17 = ISO/IEC 13818-6 DSM CC Data Carousel metadata	
0x18 = ISO/IEC 13818-6 DSM CC Object Carousel metadata	
0x19 = ISO/IEC 13818-6 Synchronized Download Protocol metadata	
0x1a = ISO/IEC 13818-11 IPMP	
0x1b = H.264 (AVC) Video	
0x1c = ISO/IEC 14496-3 (MPEG-4 raw audio)	
0x1d = ISO/IEC 14496-17 (MPEG-4 text)	
0x1e = ISO/IEC 23002-3 (MPEG-4 auxiliary video)	
0x1f = ISO/IEC 14496-10 SVC (MPEG-4 AVC sub-bitstream)	
0x20 = ISO/IEC 14496-10 MVC (MPEG-4 AVC sub-bitstream)	
0x21 = ITU-T Rec. T.800 and ISO/IEC 15444 (JPEG 2000 video)	
0x24 = H.265 (HEVC) Video	
0x42 = Chinese Video Standard	
0x7f = ISO/IEC 13818-11 IPMP (DRM)	
0x80 = DigiCipher II Video	
0x81 = A52/AC-3 Audio	
0x82 = HDMI DTS Audio	
0x83 = LPCM Audio	
0x84 = SDDS Audio	
0x85 = ATSC Program ID	
0x86 = DTS-HD Audio	
0x87 = E-AC-3 Audio	
0x8a = DTS Audio	
0x90 = Presentation Graphic Stream (subtitle)	
0x91 = A52b/AC-3 Audio	
0x92 = DVD_SPU vls Subtitle	
0x94 = SDDS Audio	
0xa0 = MSCODEC Video	
0xea = Private ES (VC-1)	

# M2TS AC3 Tags

Tags extracted from AC-3 audio streams.

Tag Name	Writable	Values / Notes
AudioBitrate	no	
AudioChannels	no	0 = 1 + 1    7 = 3/2 1 = 1            8 = 1 2 = 2            9 = 2 max 3 = 3            10 = 3 max 4 = 2/1          11 = 4 max 5 = 3/1          12 = 5 max 6 = 2/2          13 = 6 max
AudioSampleRate	no	0 = 48000 1 = 44100 2 = 32000
SurroundMode	no	0 = Not indicated 1 = Not Dolby surround 2 = Dolby surround

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[-- ExifTool Tag Names](#)

# MIE Tags

MIE is a flexible format which may be used as a stand-alone meta information format, for encapsulation of other files and information, or as a trailer appended to other file formats. The tables below represent currently defined MIE tags, however ExifTool will also extract any other information present in a MIE file.

When writing MIE information, some special features are supported:

- 1) String values may be written as ASCII (ISO 8859-1) or UTF-8. ExifTool automatically detects the presence of wide characters and treats the string appropriately. Internally, UTF-8 text may be converted to UTF-16 or UTF-32 and stored in this format in the file if it is more compact.
- 2) All MIE string-value tags support localized text. Localized values are written by adding a language/country code to the tag name in the form **TAG-xx\_YY**, where **TAG** is the tag name, **xx** is a 2-character lower case ISO 639-1 language code, and **YY** is a 2-character upper case ISO 3166-1 alpha 2 country code (eg. **Title-en\_US**). But as usual, the user interface is case-insensitive, and ExifTool will write the correct case to the file.
- 3) Some numerical MIE tags allow units of measurement to be specified. For these tags, units may be added in brackets immediately following the value (eg. **55(mi/h)**). If no units are specified, the default units are written.
- 4) ExifTool writes compressed metadata to MIE files if the [Compress](#) (-z) option is used and Compress::Zlib is available.

See [MIE1.1-20070121.pdf](#) for the official MIE specification.

Tag ID	Tag Name	Writable	Values / Notes
'0Type'	SubfileType	string	(the capitalized common extension for this type of file. If the extension has a dot-3 abbreviation, then the longer version is used here. For instance, JPEG and TIFF are used, not JPG and TIF)
'0Vers'	MIEVersion	string	(version 1.1 is assumed if not specified)
'1Directory'	SubfileDirectory	string	(original directory for the file)
'1Name'	SubfileName	string	(the file name, including extension if it exists)
'2MIME'	SubfileMIMEType	string	
'Meta'	Meta	-	--> <a href="#">MIE Meta Tags</a>
'data'	SubfileData	undef	(the subfile data)
'rsrc'	SubfileResource	undef	(subfile resource fork if it exists)
'zmd5'	MD5Digest	string	(16-byte MD5 digest written in binary form or as a 32-character hex-encoded ASCII string. Value is an MD5 digest of the entire 0MIE group as it would be with the digest value itself set to all null bytes)
'zmie'	TrailerSignature	undef	(used as the last element in the main "0MIE" group to identify a MIE trailer when appended to another type of file. ExifTool will create this tag if set to any value, but always with an empty data block)

## MIE Meta Tags

Tag ID	Tag Name	Writable	Values / Notes
'Audio'	Audio	-	--> <a href="#">MIE Audio Tags</a>
'Camera'	Camera	-	--> <a href="#">MIE Camera Tags</a>
'Document'	Document	-	--> <a href="#">MIE Doc Tags</a>
'EXIF'	EXIF	-	--> <a href="#">EXIF Tags</a>
'Geo'	Geo	-	--> <a href="#">MIE Geo Tags</a>
'ICCProfile'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a>
'ID3'	ID3	-	--> <a href="#">ID3 Tags</a>
'IPTC'	IPTC	-	--> <a href="#">IPTC Tags</a>
'Image'	Image	-	--> <a href="#">MIE Image Tags</a>
'MakerNotes'	MakerNotes	-	--> <a href="#">MIE MakerNotes Tags</a>
'Preview'	Preview	-	--> <a href="#">MIE Preview Tags</a>
'Thumbnail'	Thumbnail	-	--> <a href="#">MIE Thumbnail Tags</a>
'Video'	Video	-	--> <a href="#">MIE Video Tags</a>
'XMP'	XMP	-	--> <a href="#">XMP Tags</a>

# MIE Audio Tags

For the Audio group (and any other group containing a 'data' element), tags refer to the contained data if present, otherwise they refer to the main SubfileData. The `0Type` and `1Name` elements should exist only if `data` is present.

Tag ID	Tag Name	Writable	Values / Notes
'0Type'	RelatedAudioFileType	string	(MP3 if not specified)
'1Name'	RelatedAudioFileName	string	
'Channels'	Channels	int8u	
'Compression'	AudioCompression	string	
'Duration'	Duration	rational64u~	
'SampleBits'	SampleBits	int16u	
'SampleRate'	SampleRate	int32u	
'data'	RelatedAudioFile	undef	

# MIE Camera Tags

Tag ID	Tag Name	Writable	Values / Notes
'Brightness'	Brightness	int8s	
'ColorBalance'	ColorBalance	rational64u[3]	(RGB scaling factors)
'ColorTemperature'	ColorTemperature	int32u	
'Contrast'	Contrast	int8s	
'DigitalZoom'	DigitalZoom	rational64u	
'ExposureComp'	ExposureCompensation	rational64s	
'ExposureMode'	ExposureMode	string	
'ExposureTime'	ExposureTime	rational64u	
'FirmwareVersion'	FirmwareVersion	string	
'Flash'	Flash	-	--> <a href="#">MIE Flash Tags</a>
'FocusMode'	FocusMode	string	
'ISO'	ISO	int16u	
'ISOSetting'	ISOSetting	int16u	(0 = Auto, otherwise manual ISO speed setting)
'ImageNumber'	ImageNumber	int32u	
'ImageQuality'	ImageQuality	string	(Economy, Normal, Fine, Super Fine or Raw)
'ImageStabilization'	ImageStabilization	int8u	
'Lens'	Lens	-	--> <a href="#">MIE Lens Tags</a>
'Make'	Make	string	
'MeasuredEV'	MeasuredEV	rational64s	
'Model'	Model	string	
'Orientation'	Orientation	-	--> <a href="#">MIE Orient Tags</a>
'OwnerName'	OwnerName	string	
'Saturation'	Saturation	int8s	
'SensorSize'	SensorSize	rational64u[2]	(width and height of active sensor area in mm)
'SerialNumber'	SerialNumber	string	
'Sharpness'	Sharpness	int8s	
'ShootingMode'	ShootingMode	string	

# MIE Flash Tags

Tag ID	Tag Name	Writable	Values / Notes
'ExposureComp'	FlashExposureComp	rational64s	
'Fired'	FlashFired	int8u	0 = No 1 = Yes
'GuideNumber'	FlashGuideNumber	string	
'Make'	FlashMake	string	
'Mode'	FlashMode	string	

'Model'	FlashModel	string
'SerialNumber'	FlashSerialNumber	string
'Type'	FlashType	string ("Internal" or "External")

## MIE Lens Tags

All recorded lens parameters (focal length, aperture, etc) include the effects of the extender if present.

Tag ID	Tag Name	Writable	Values / Notes
'Extender'	Extender	-	--> <a href="#">MIE Extender Tags</a>
'FNumber'	FNumber	rational64u	
'FocalLength'	FocalLength	rational64u	(all focal lengths in mm)
'FocusDistance'	FocusDistance	rational64u	('m' unless 'ft' specified)
'Make'	LensMake	string	
'MaxAperture'	MaxAperture	rational64u	
'MaxApertureAtMaxFocal'	MaxApertureAtMaxFocal	rational64u	
'MaxFocalLength'	MaxFocalLength	rational64u	
'MinAperture'	MinAperture	rational64u	
'MinFocalLength'	MinFocalLength	rational64u	
'Model'	LensModel	string	
'OpticalZoom'	OpticalZoom	rational64u	
'SerialNumber'	LensSerialNumber	string	

## MIE Extender Tags

Tag ID	Tag Name	Writable	Values / Notes
'Magnification'	ExtenderMagnification	rational64s	
'Make'	ExtenderMake	string	
'Model'	ExtenderModel	string	
'SerialNumber'	ExtenderSerialNumber	string	

## MIE Orient Tags

These tags describe the camera orientation.

Tag ID	Tag Name	Writable	Values / Notes
'Azimuth'	Azimuth	rational64s	('deg' CW from true north unless 'deg{mag}' specified)
'Declination'	Declination	rational64s	
'Elevation'	Elevation	rational64s	
'RightAscension'	RightAscension	rational64s	
'Rotation'	Rotation	rational64s	(CW rotation angle of camera about lens axis)

## MIE Doc Tags

Information describing the main document, image or file.

Tag ID	Tag Name	Writable	Values / Notes
'Author'	Author	string	
'Comment'	Comment	string	
'Contributors'	Contributors	string+	
'Copyright'	Copyright	string	
'CreateDate'	CreateDate	string	
'EMail'	Email	string	
'Keywords'	Keywords	string+	
'ModifyDate'	ModifyDate	string	

'OriginalDate'	DateTimeOriginal	string
'Phone'	PhoneNumber	string
'References'	References	string+
'Software'	Software	string
'Title'	Title	string
'URL'	URL	string

## MIE Geo Tags

Information related to geographic location.

Tag ID	Tag Name	Writable	Values / Notes
'Address'	Address	string	
'City'	City	string	
'Country'	Country	string	
'GPS'	GPS	-	--> <a href="#">MIE GPS Tags</a>
'PostalCode'	PostalCode	string	
'State'	State	string	(state or province)
'UTM'	UTM	-	--> <a href="#">MIE UTM Tags</a>

## MIE GPS Tags

Tag ID	Tag Name	Writable	Values / Notes
'Altitude'	GPSAltitude	rational64s	('m' above sea level unless 'ft' specified)
'Bearing'	GPSDestBearing	rational64s	('deg' CW from true north unless 'deg{mag}' specified)
'DateTime'	GPSDateTime	string	
'Datum'	GPSMapDatum	string	(WGS-84 assumed if not specified)
'Differential'	GPSDifferential	int8u	0 = No Correction 1 = Differential Corrected
'Distance'	GPSDestDistance	rational64s	('km' unless 'mi' or 'nmi' specified)
'Heading'	GPSTrack	rational64s	('deg' CW from true north unless 'deg{mag}' specified)
'Latitude'	GPSLatitude	rational64s[n]	(1 to 3 numbers: degrees, minutes then seconds. South latitudes are stored as all negative numbers, but may be entered as positive numbers with a trailing 'S' for convenience. For example, these are all equivalent: "-40 -30", "-40.5", "40 30 0.00 S")
'Longitude'	GPSLongitude	rational64s[n]	(1 to 3 numbers: degrees, minutes then seconds. West longitudes are negative, but may be entered as positive numbers with a trailing 'W')
'MeasureMode'	GPSMeasureMode	int8u	2 = 2-D 3 = 3-D
'Satellites'	GPSSatellites	string	
'Speed'	GPSSpeed	rational64s	('km/h' unless 'mi/h', 'm/s' or 'kn' specified)

## MIE UTM Tags

Tag ID	Tag Name	Writable	Values / Notes
'Datum'	UTMMMapDatum	string	(WGS-84 assumed if not specified)
'Easting'	UTMEasting	string	
'Northing'	UTMNorthing	string	
'Zone'	UTMZone	int8s	

## MIE Image Tags

Tag ID	Tag Name	Writable	Values / Notes
'0Type'	FullSizeImageType	string	(JPEG if not specified)
'1Name'	FullSizeImageName	string	
'BitDepth'	BitDepth	int16u	

'ColorSpace'	ColorSpace	string	(standard ColorSpace values are "sRGB" and "Adobe RGB")
'Components'	ComponentsConfiguration	string	(string composed of R, G, B, Y, Cb and Cr)
'Compression'	CompressionRatio	rational32u	
'ImageSize'	ImageSize	int16u[n]	(2 or 3 values, for number of XY or XYZ pixels)
'OriginalImageSize'	OriginalImageSize	int16u[n]	(size of original image before cropping)
'Resolution'	Resolution	rational64u[n]	(1 to 3 values. A single value for equal resolution in all directions, or separate X, Y and Z values if necessary. Units are '/in' unless '/cm', '/deg', '/arcmin', '/arcsec' or '' specified)
'data'	FullSizeImage	undef	

## MIE MakerNotes Tags

MIE maker notes are contained within separate groups for each manufacturer to avoid name conflicts.

Tag ID	Tag Name	Writable	Values / Notes
'Canon'	Canon	-	--> <a href="#">MIE Canon Tags</a>
'Casio'	Casio	-	--> <a href="#">MIE Unknown Tags</a>
'FujiFilm'	FujiFilm	-	--> <a href="#">MIE Unknown Tags</a>
'Kodak'	Kodak	-	--> <a href="#">MIE Unknown Tags</a>
'KonicaMinolta'	KonicaMinolta	-	--> <a href="#">MIE Unknown Tags</a>
'Nikon'	Nikon	-	--> <a href="#">MIE Unknown Tags</a>
'Olympus'	Olympus	-	--> <a href="#">MIE Unknown Tags</a>
'Panasonic'	Panasonic	-	--> <a href="#">MIE Unknown Tags</a>
'Pentax'	Pentax	-	--> <a href="#">MIE Unknown Tags</a>
'Ricoh'	Ricoh	-	--> <a href="#">MIE Unknown Tags</a>
'Sigma'	Sigma	-	--> <a href="#">MIE Unknown Tags</a>
'Sony'	Sony	-	--> <a href="#">MIE Unknown Tags</a>

## MIE Canon Tags

Tag ID	Tag Name	Writable	Values / Notes
'VRD'	CanonVRD	-	--> <a href="#">CanonVRD Tags</a>

## MIE Unknown Tags

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## MIE Preview Tags

Tag ID	Tag Name	Writable	Values / Notes
'0Type'	PreviewImageType	string	(JPEG if not specified)
'1Name'	PreviewImageName	string	
'ImageSize'	PreviewImageSize	int16u[n]	(2 or 3 values, for number of XY or XYZ pixels)
'data'	PreviewImage	undef	

## MIE Thumbnail Tags

Tag ID	Tag Name	Writable	Values / Notes
'0Type'	ThumbnailImageType	string	(JPEG if not specified)
'1Name'	ThumbnailImageName	string	
'ImageSize'	ThumbnailImageSize	int16u[n]	(2 or 3 values, for number of XY or XYZ pixels)
'data'	ThumbnailImage	undef	

# MIE Video Tags

Tag ID	Tag Name	Writable	Values / Notes
'0Type'	RelatedVideoFileType	string	(MOV if not specified)
'1Name'	RelatedVideoFileName	string	
'Codec'	Codec	string	
'Duration'	Duration	rational64u~	
'data'	RelatedVideoFile	undef	

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*Last revised Oct 1, 2022*

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# MIFF Tags

The MIFF (Magick Image File Format) format allows arbitrary tag names to be used. Only the standard tag names are listed below, however ExifTool will decode any tags found in the image.

Tag ID	Tag Name	Writable	Values / Notes
'background-color'	BackgroundColor	no	
'blue-primary'	BluePrimary	no	
'border-color'	BorderColor	no	
'class'	Class	no	
'colors'	Colors	no	
'colorspace'	ColorSpace	no	
'columns'	ImageWidth	no	
'compression'	Compression	no	
'delay'	Delay	no	
'depth'	Depth	no	
'dispose'	Dispose	no	
'gamma'	Gamma	no	
'green-primary'	GreenPrimary	no	
'id'	ID	no	
'iterations'	Iterations	no	
'label'	Label	no	
'matt-color'	MattColor	no	
'matte'	Matte	no	
'montage'	Montage	no	
'packets'	Packets	no	
'page'	Page	no	
'profile-APP1'	APP1_Profile	-	--> <a href="#">EXIF Tags</a> --> <a href="#">XMP Tags</a>
'profile-exif'	EXIF_Profile	-	--> <a href="#">EXIF Tags</a>
'profile-icc'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a>
'profile-iptc'	IPTC_Profile	-	--> <a href="#">Photoshop Tags</a>
'profile-xmp'	XMP_Profile	-	--> <a href="#">XMP Tags</a>
'red-primary'	RedPrimary	no	
'rendering-intent'	RenderingIntent	no	
'resolution'	Resolution	no	
'rows'	ImageHeight	no	
'scene'	Scene	no	
'signature'	Signature	no	
'units'	Units	no	
'white-point'	WhitePoint	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
Last revised Aug 21, 2011

[-- ExifTool Tag Names](#)

# MISB Tags

These tags are extracted from STANAG-4609 MISB (Motion Industry Standards Board) KLV-format metadata in M2TS videos.

Tag ID	Tag Name	Writable	Values / Notes
'060E2B34030101010E01030302000000'	Security	-	--> <a href="#">MISB Security Tags</a>
'060e2b3402030101434e415644494147'	ChurchillNav	-	--> <a href="#">MISB ChurchillNav Tags</a>
'060e2b34020b01010e01030101000000'	UASDataLink	-	--> <a href="#">MISB UASDatalink Tags</a>
'<other>'	Unknown	-	--> <a href="#">MISB Unknown Tags</a>

## MISB Security Tags

Tags extracted from the MISB ST 0102.11 Security Metadata local set.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	SecurityClassification	no	1 = Unclassified 2 = Restricted 3 = Confidential 4 = Secret 5 = Top Secret
0x0002	ClassifyingCountryCodeMethod	no	1 = ISO-3166 Two Letter 2 = ISO-3166 Three Letter 3 = FIPS 10-4 Two Letter 4 = FIPS 10-4 Four Letter 5 = ISO-3166 Numeric 6 = 1059 Two Letter 7 = 1059 Three Letter 10 = FIPS 10-4 Mixed 11 = ISO 3166 Mixed 12 = STANAG 1059 Mixed 13 = GENC Two Letter 14 = GENC Three Letter 15 = GENC Numeric 16 = GENC Mixed
0x0003	ClassifyingCountry	no	
0x0004	SecuritySCI-SHIInformation	no	
0x0005	Caveats	no	
0x0006	ReleasingInstructions	no	
0x0007	ClassifiedBy	no	
0x0008	DerivedFrom	no	
0x0009	ClassificationReason	no	
0x000a	DeclassificationDate	no	
0x000b	ClassificationAndMarkingSystem	no	
0x000c	ObjectCountryCodingMethod	no	1 = ISO-3166 Two Letter 2 = ISO-3166 Three Letter 3 = ISO-3166 Numeric 4 = FIPS 10-4 Two Letter 5 = FIPS 10-4 Four Letter 6 = 1059 Two Letter 7 = 1059 Three Letter 13 = GENC Two Letter 14 = GENC Three Letter 15 = GENC Numeric 64 = GENC AdminSub
0x000d	ObjectCountryCodes	no	
0x000e	ClassificationComments	no	
0x000f	UMID	no	
0x0010	StreamID	no	
0x0011	TransportStreamID	no	
0x0015	ItemDesignatorID	no	
0x0016	SecurityVersion	no	
0x0017	ClassifyingCountryCodingMethodDate	no	

## MISB ChurchillNav Tags

Proprietary tags used by Churchill Navigation units. These tags are all currently unknown, but extracted with the Unknown option.

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## MISB UASDatalink Tags

Tags extracted from the MISB ST 0601.11 UAS Datalink local set.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Checksum	no	
0x0002	GPSDateTime	no	
0x0003	MissionID	no	
0x0004	TailNumber	no	
0x0005	GPSTrack	no	
0x0006	PitchAngle	no	
0x0007	RollAngle	no	
0x0008	TrueAirspeed	no	
0x0009	IndicatedAirspeed	no	
0x000a	ProjectIDCode	no	
0x000b	SensorName	no	
0x000c	ImageCoordinateSystem	no	
0x000d	GPSLatitude	no	
0x000e	GPSLongitude	no	
0x000f	GPSAltitude	no	
0x0010	HorizontalFieldOfView	no	
0x0011	VerticalFieldOfView	no	
0x0012	SensorRelativeAzimuthAngle	no	
0x0013	SensorRelativeElevationAngle	no	
0x0014	SensorRelativeRollAngle	no	
0x0015	SlantRange	no	
0x0016	TargetWidth	no	
0x0017	FrameCenterLatitude	no	
0x0018	FrameCenterLongitude	no	
0x0019	FrameCenterElevation	no	
0x001a	OffsetCornerLatitude1	no	
0x001b	OffsetCornerLongitude1	no	
0x001c	OffsetCornerLatitude2	no	
0x001d	OffsetCornerLongitude2	no	
0x001e	OffsetCornerLatitude3	no	
0x001f	OffsetCornerLongitude3	no	
0x0020	OffsetCornerLatitude4	no	
0x0021	OffsetCornerLongitude4	no	
0x0022	IcingDetected	no	0 = n/a 1 = No 2 = Yes
0x0023	WindDirection	no	
0x0024	WindSpeed	no	(m/s)
0x0025	StaticPressure	no	(mbar)
0x0026	DensityAltitude	no	

0x0027	AirTemperature	no	
0x0028	TargetLocationLatitude	no	
0x0029	TargetLocationLongitude	no	
0x002a	TargetLocationElevation	no	
0x002b	TargetTrackGateWidth	no	
0x002c	TargetTrackGateHeight	no	
0x002d	TargetErrorEstimateCE90	no	
0x002e	TargetErrorEstimateLE90	no	
0x002f	GenericFlagData01	no	Bit 0 = Laser range Bit 1 = Auto-track Bit 2 = IR polarity black Bit 3 = Icing detected Bit 4 = Slant range measured Bit 5 = Image invalid
0x0030	SecurityLocalMetadataSet	-	--> <a href="#">MISB Security Tags</a>
0x0031	DifferentialPressure	no	
0x0032	AngleOfAttack	no	
0x0033	VerticalSpeed	no	(m/s)
0x0034	SideslipAngle	no	
0x0035	AirfieldBarometricPressure	no	
0x0036	AirfieldElevation	no	
0x0037	RelativeHumidity	no	
0x0038	GPSSpeed	no	(m/s)
0x0039	GroundRange	no	
0x003a	FuelRemaining	no	(kg)
0x003b	CallSign	no	
0x003c	WeaponLoad	no	
0x003d	WeaponFired	no	
0x003e	LaserPRFCode	no	
0x003f	SensorFieldOfViewName	no	0 = Ultranarrow    4 = Ultrawide 1 = Narrow        5 = Narrow Medium 2 = Medium       6 = 2x Ultranarrow 3 = Wide          7 = 4x Ultranarrow
0x0040	MagneticHeading	no	
0x0041	UAS_LSVersionNumber	no	
0x0042	TargetLocationCovarianceMatrix	no	
0x0043	AlternateLatitude	no	
0x0044	AlternateLongitude	no	
0x0045	AlternateAltitude	no	
0x0046	AlternateName	no	
0x0047	AlternateHeading	no	
0x0048	EventStartTime	no	
0x0049	RVTLocalSet	-	--> <a href="#">MISB Unknown Tags</a>
0x004a	VMTIDataSet	-	--> <a href="#">MISB Unknown Tags</a>
0x004b	SensorEllipsoidHeight	no	
0x004c	AlternateEllipsoidHeight	no	
0x004d	OperationalMode	no	0 = Other 1 = Operational 2 = Training 3 = Exercise 4 = Maintenance
0x004e	FrameCenterHeightAboveEllipsoid	no	
0x004f	SensorVelocityNorth	no	
0x0050	SensorVelocityEast	no	
0x0051	ImageHorizonPixelPack	no	
0x0052	CornerLatitude1	no	
0x0053	CornerLongitude1	no	

0x0054	CornerLatitude2	no
0x0055	CornerLongitude2	no
0x0056	CornerLatitude3	no
0x0057	CornerLongitude3	no
0x0058	CornerLatitude4	no
0x0059	CornerLongitude4	no
0x005a	FullPitchAngle	no
0x005b	FullRollAngle	no
0x005c	FullAngleOfAttack	no
0x005d	FullSideslipAngle	no
0x005e	MIISCoreIdentifier	no
0x005f	SARMotionImageryData	- --> <a href="#">MISB Unknown Tags</a>
0x0060	TargetWidthExtended	no
0x0061	RangelImageLocalSet	- --> <a href="#">MISB Unknown Tags</a>
0x0062	GeoregistrationLocalSet	- --> <a href="#">MISB Unknown Tags</a>
0x0063	CompositeImagingLocalSet	- --> <a href="#">MISB Unknown Tags</a>
0x0064	SegmentLocalSet	- --> <a href="#">MISB Unknown Tags</a>
0x0065	AmendLocalSet	- --> <a href="#">MISB Unknown Tags</a>
0x0066	SDCC-FLP	no
0x0067	DensityAltitudeExtended	no
0x0068	SensorEllipsoidHeightExtended	no
0x0069	AlternateEllipsoidHeightExtended	no

## MISB Unknown Tags

Other tags are extracted with the Unknown option.

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

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Last revised Oct 13, 2022

[-- ExifTool Tag Names](#)

# MNG Tags

This table contains definitions for tags found in MNG and JNG images. MNG is a superset of PNG and JNG, so a MNG image may contain any of these tags as well as any PNG tags. Conversely, only some of these tags are valid for JNG images.

Tag ID	Tag Name	Writable	Values / Notes
'BACK'	Background	-	--> <a href="#">MNG Background Tags</a>
'BASI'	BasisObject	-	--> <a href="#">MNG BasisObject Tags</a>
'CLIP'	ClipObjects	-	--> <a href="#">MNG ClipObjects Tags</a>
'CLON'	CloneObject	-	--> <a href="#">MNG CloneObject Tags</a>
'DBYK'	DropByKeyword	no	
'DEFI'	DefineObject	-	--> <a href="#">MNG DefineObject Tags</a>
'DHDR'	DeltaPNGHeader	-	--> <a href="#">MNG DeltaPNGHeader Tags</a>
'DISC'	DiscardObjects	no	
'DROP'	DropChunks	no	
'FRAM'	Frame	no	
'JHDR'	JNGHeader	-	--> <a href="#">MNG JNGHeader Tags</a>
'LOOP'	Loop	-	--> <a href="#">MNG Loop Tags</a>
'MAGN'	MagnifyObject	-	--> <a href="#">MNG MagnifyObject Tags</a>
'MHDR'	MNGHeader	-	--> <a href="#">MNG MNGHeader Tags</a>
'MOVE'	MoveObjects	-	--> <a href="#">MNG MoveObjects Tags</a>
'ORDR'	OrderingRestrictions	no	
'PAST'	PastelImage	-	--> <a href="#">MNG PastelImage Tags</a>
'PPLT'	PartialPalette	no	
'PROM'	PromoteParent	-	--> <a href="#">MNG PromoteParent Tags</a>
'SAVE'	SaveObjects	no	
'SEEK'	SeekPoint	no	
'SHOW'	ShowObjects	-	--> <a href="#">MNG ShowObjects Tags</a>
'TERM'	TerminationAction	-	--> <a href="#">MNG TerminationAction Tags</a>
'eXPI'	ExportImage	-	--> <a href="#">MNG ExportImage Tags</a>
'fPRI'	FramePriority	-	--> <a href="#">MNG FramePriority Tags</a>
'nEED'	ResourcesNeeded	no	
'pHYg'	GlobalPixelSize	-	--> <a href="#">PNG PhysicalPixel Tags</a>

## MNG Background Tags

Index1	Tag Name	Writable	Values / Notes
0	BackgroundColor	no	
6	MandatoryBackground	no	0 = Color and Image Advisory 1 = Color Mandatory, Image Advisory 2 = Color Advisory, Image Mandatory 3 = Color and Image Mandatory
7	BackgroundImageID	no	
9	BackgroundTiling	no	0 = No 1 = Yes

## MNG BasisObject Tags

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
4	ImageHeight	no	
8	BitDepth	no	
9	ColorType	no	0 = Grayscale 2 = RGB 3 = Palette

			4 = Grayscale with Alpha 6 = RGB with Alpha
10	Compression	no	0 = Deflate/Inflate
11	Filter	no	0 = Adaptive
12	Interlace	no	0 = Noninterlaced 1 = Adam7 Interlace
13	RedSample	no	
17	GreenSample	no	
21	BlueSample	no	
25	AlphaSample	no	
26	Viewable	no	

## MNG ClipObjects Tags

Index1	Tag Name	Writable	Values / Notes
0	FirstObject	no	
2	LastObject	no	
4	DeltaType	no	0 = Absolute 1 = Relative
5	ClipBoundary	no	

## MNG CloneObject Tags

Index1	Tag Name	Writable	Values / Notes
0	SourceID	no	
2	CloneID	no	
4	CloneType	no	0 = Full 1 = Parital 2 = Renumber object
5	DoNotShow	no	
6	ConcreteFlag	no	
7	LocalDeltaType	no	0 = Absolute 1 = Relative
8	DeltaXY	no	

## MNG DefineObject Tags

Index1	Tag Name	Writable	Values / Notes
0	ObjectID	no	
2	DoNotShow	no	
3	ConcreteFlag	no	
4	XYLocation	no	
12	ClippingBoundary	no	

## MNG DeltaPNGHeader Tags

Index1	Tag Name	Writable	Values / Notes			
0	ObjectID	no				
2	ImageType	no	0 = Unspecified 1 = PNG 2 = JNG			
3	DeltaType	no	0 = Full Replacement 1 = Pixel Addition 2 = Alpha Addition 3 = Color Addition	4 = Pixel Replacement 5 = Alpha Replacement 6 = Color Replacement 7 = No Change		
4	BlockSize	no				
12	BlockLocation	no				

# MNG JNGHeader Tags

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
4	ImageHeight	no	
8	ColorType	no	8 = Gray 10 = Color 12 = Gray Alpha 14 = Color Alpha
9	BitDepth	no	
10	Compression	no	8 = Huffman-coded baseline JPEG
11	Interlace	no	0 = Sequential 8 = Progressive
12	AlphaBitDepth	no	
13	AlphaCompression	no	0 = MNG Grayscale IDAT 8 = JNG 8-bit Grayscale JDAA
14	AlphaFilter	no	0 = Adaptive MNG (N/A for JPEG)
15	AlphaInterlace	no	0 = Noninterlaced

# MNG Loop Tags

Index1	Tag Name	Writable	Values / Notes
0	NestLevel	no	
1	IterationCount	no	
5	TerminationCondition	no	0 = Deterministic, not cacheable 1 = Decoder discretion, not cacheable 2 = User discretion, not cacheable 3 = External signal, not cacheable 4 = Deterministic, cacheable 5 = Decoder discretion, cacheable 6 = User discretion, cacheable 7 = External signal, cacheable
6	IterationMinMax	no	
14	SignalNumber	no	

# MNG MagnifyObject Tags

Index1	Tag Name	Writable	Values / Notes
0	FirstObjectID	no	
2	LastObjectID	no	
4	XMethod	no	0 = No Magnification 1 = Pixel Replication 2 = Linear Interpolation 3 = Closest Pixel 4 = Color Linear Interpolation and Alpha Closest Pixel 5 = Color Closest Pixel and Alpha Linear Interpolation
5	XMag	no	
7	YMag	no	
9	LeftMag	no	
11	RightMag	no	
13	TopMag	no	
15	BottomMag	no	
17	YMethod	no	0 = No Magnification 1 = Pixel Replication 2 = Linear Interpolation 3 = Closest Pixel 4 = Color Linear Interpolation and Alpha Closest Pixel 5 = Color Closest Pixel and Alpha Linear Interpolation

# MNG MNGHeader Tags

Index4	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
1	ImageHeight	no	
2	TicksPerSecond	no	
3	NominalLayerCount	no	
4	NominalFrameCount	no	
5	NominalPlayTime	no	
6	SimplicityProfile	no	

## MNG MoveObjects Tags

Index1	Tag Name	Writable	Values / Notes
0	FirstObject	no	
2	LastObject	no	
4	DeltaType	no	0 = Absolute 1 = Relative
5	DeltaXY	no	

## MNG PasteImage Tags

Index1	Tag Name	Writable	Values / Notes
0	DestinationID	no	
2	TargetDeltaType	no	0 = Absolute 1 = Relative
3	TargetXY	no	
11	SourceID	no	
13	CompositionMode	no	0 = Over 1 = Replace 2 = Under
14	Orientation	no	0 = Same as source 2 = Flipped left-right, then up-down 4 = Flipped left-right 6 = Flipped up-down 8 = Tiled
15	OffsetOrigin	no	0 = Destination Origin 1 = Target Origin
16	OffsetXY	no	
24	BoundaryOrigin	no	0 = Destination Origin 1 = Target Origin
25	PastClippingBoundary	no	

## MNG PromoteParent Tags

Index1	Tag Name	Writable	Values / Notes
0	NewColorType	no	
1	NewBitDepth	no	
2	FillMethod	no	0 = Bit Replication 1 = Zero Fill

## MNG ShowObjects Tags

Index1	Tag Name	Writable	Values / Notes
0	FirstObject	no	
2	LastObject	no	
4	ShowMode	no	

## MNG TerminationAction Tags

Index1	Tag Name	Writable	Values / Notes
0	TerminationAction	no	0 = Show Last Frame 1 = Display Nothing 2 = Show First Frame 3 = Repeat Sequence
1	IterationEndAction	no	0 = Show Last Frame 1 = Display Nothing 2 = Show First Frame
2	Delay	no	
6	IterationMax	no	

## MNG ExportImage Tags

Index1	Tag Name	Writable	Values / Notes
0	SnapshotID	no	
2	SnapshotName	no	

## MNG FramePriority Tags

Index1	Tag Name	Writable	Values / Notes
0	DeltaType	no	0 = Absolute 1 = Relative
2	Priority	no	

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*Last revised Oct 25, 2006*

[-- ExifTool Tag Names](#)

# MOI Tags

MOI files store information about associated MOD or TOD files, and are written by some JVC, Canon and Panasonic camcorders.

Index1	Tag Name	Writable	Values / Notes
0	MOIVersion	no	
6	DateTimeOriginal	no	
14	Duration	no	
128	AspectRatio	no	
132	AudioCodec	no	0xc1 = AC3 0x4001 = MPEG
134	AudioBitrate	no	
218	VideoBitrate	no	

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*Last revised Dec 15, 2014*

[<-- ExifTool Tag Names](#)

# MPC Tags

Tags used in Musepack (MPC) audio files. ExifTool also extracts ID3 and APE information from these files.

Tag ID	Tag Name	Writable	Values / Notes
'Bit032-063'	TotalFrames	no	
'Bit080-081'	SampleRate	no	0 = 44100 1 = 48000 2 = 37800 3 = 32000
'Bit084-087'	Quality	no	1 = Unstable/Experimental 5 = 0 6 = 1 7 = 2 (Telephone) 8 = 3 (Thumb) 9 = 4 (Radio) 10 = 5 (Standard) 11 = 6 (Xtreme) 12 = 7 (Insane) 13 = 8 (BrainDead) 14 = 9 15 = 10
'Bit088-093'	MaxBand	no	
'Bit096-111'	ReplayGainTrackPeak	no	
'Bit112-127'	ReplayGainTrackGain	no	
'Bit128-143'	ReplayGainAlbumPeak	no	
'Bit144-159'	ReplayGainAlbumGain	no	
'Bit179'	FastSeek	no	0 = No 1 = Yes
'Bit191'	Gapless	no	0 = No 1 = Yes
'Bit216-223'	EncoderVersion	no	

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Last revised Nov 20, 2006

[-- ExifTool Tag Names](#)

# MPEG Tags

The MPEG format doesn't specify any file-level meta information. In lieu of this, information is extracted from the first audio and video frame headers in the file.

## MPEG Audio Tags

Tag ID	Tag Name	Writable	Values / Notes
'Bit11-12'	MPEGAudioVersion	no	0 = 2.5 2 = 2 3 = 1
'Bit13-14'	AudioLayer	no	1 = 3 2 = 2 3 = 1
'Bit16-19'	AudioBitrate	no	(version 1, layer 1) (version 1, layer 2) (version 1, layer 3) (version 2 or 2.5, layer 1) (version 2 or 2.5, layer 2 or 3)
'Bit20-21'	SampleRate	no	(version 1) 0 = 44100 1 = 48000 2 = 32000 (version 2) 0 = 22050 1 = 24000 2 = 16000 (version 2.5) 0 = 11025 1 = 12000 2 = 8000
'Bit24-25'	ChannelMode	no	0 = Stereo 1 = Joint Stereo 2 = Dual Channel 3 = Single Channel
'Bit26'	MSStereo	no	(layer 3) 0 = Off 1 = On
'Bit26-27'	ModeExtension	no	(layer 1 or 2) 0 = Bands 4-31 1 = Bands 8-31 2 = Bands 12-31 3 = Bands 16-31
'Bit27'	IntensityStereo	no	(layer 3) 0 = Off 1 = On
'Bit28'	CopyrightFlag	no	0 = False 1 = True
'Bit29'	OriginalMedia	no	0 = False 1 = True
'Bit30-31'	Emphasis	no	0 = None 1 = 50/15 ms 2 = reserved 3 = CCIT J.17

## MPEG Video Tags

Tag ID	Tag Name	Writable	Values / Notes
'Bit00-11'	ImageWidth	no	
'Bit12-23'	ImageHeight	no	
'Bit24-27'	AspectRatio	no	2 => 0.6735 = 0.6735 3 => 0.7031 = 16:9, 625 line, PAL 4 => 0.7615 = 0.7615 5 => 0.8055 = 0.8055 6 => 0.8437 = 16:9, 525 line, NTSC 7 => 0.8935 = 0.8935 8 => 0.9157 = 4:3, 625 line, PAL, CCIR601 9 => 0.9815 = 0.9815 1 => 1 = 1:1 12 => 1.095 = 4:3, 525 line, NTSC, CCIR601

10 => 1.0255 = 1.0255  
 11 => 1.0695 = 1.0695  
 13 => 1.1575 = 1.1575  
 14 => 1.2015 = 1.2015

'Bit28-31'	FrameRate	no
'Bit32-49'	VideoBitrate	no

## MPEG Xing Tags

These tags are extracted from the Xing/Info frame.

Tag Name	Writable	Values / Notes
Encoder	no	
LameHeader	-	--> <a href="#">MPEG Lame Tags</a>
LameQuality	no	
LameVBRQuality	no	
VBRBytes	no	
VBRFrames	no	
VBRScale	no	

## MPEG Lame Tags

Tags extracted from Lame 3.90 or later header.

Index1	Tag Name	Writable	Values / Notes
9	LameMethod	no	[val & 0xf] 1 = CBR                    5 = VBR (old/rh) 2 = ABR                    6 = VBR 3 = VBR (old/rh)        8 = CBR (2-pass) 4 = VBR (new/mtrh)     9 = ABR (2-pass)
10	LameLowPassFilter	no	
20	LameBitrate	no	
24	LameStereoMode	no	[val >> 2 & 0x7] 0 = Mono                4 = Forced Joint Stereo 1 = Stereo              6 = Auto 2 = Dual Channels     7 = Intensity Stereo 3 = Joint Stereo

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Last revised Oct 24, 2018

[--> ExifTool Tag Names](#)

# MPF Tags

These tags are part of the CIPA Multi-Picture Format specification, and are found in the APP2 "MPF" segment of JPEG images. MPImage data referenced from this segment is stored as a JPEG trailer. The MPF tags are not writable, however the MPF segment may be deleted as a group (with "MPF>All") but then the JPEG trailer should also be deleted (with "Trailer>All"). See [https://web.archive.org/web/20190713230858/http://www.cipa.jp/std/documents/e/DC-007\\_E.pdf](https://web.archive.org/web/20190713230858/http://www.cipa.jp/std/documents/e/DC-007_E.pdf) for the official specification.

Tag ID	Tag Name	Writable	Values / Notes
0xb000	MPFVersion	no	
0xb001	NumberOfImages	no	
0xb002	MPImageList	-	--> <a href="#">MPF MPImage Tags</a>
0xb003	ImageUIDList	no	
0xb004	TotalFrames	no	
0xb101	MPIndividualNum	no	
0xb201	PanOrientation	no	(long integer is split into 4 bytes) [Value 2] 0x0 = [unused] 0x1 = Start at top right 0x2 = Start at top left 0x3 = Start at bottom left 0x4 = Start at bottom right [Value 3] 0x1 = Left to right 0x2 = Right to left 0x3 = Top to bottom 0x4 = Bottom to top 0x10 = Clockwise 0x20 = Counter clockwise 0x30 = Zigzag (row start) 0x40 = Zigzag (column start)
0xb202	PanOverlapH	no	
0xb203	PanOverlapV	no	
0xb204	BaseViewpointNum	no	
0xb205	ConvergenceAngle	no	
0xb206	BaselineLength	no	
0xb207	VerticalDivergence	no	
0xb208	AxisDistanceX	no	
0xb209	AxisDistanceY	no	
0xb20a	AxisDistanceZ	no	
0xb20b	YawAngle	no	
0xb20c	PitchAngle	no	
0xb20d	RollAngle	no	

## MPF MPImage Tags

The first MPF "Large Thumbnail" image is extracted as PreviewImage, and the rest of the embedded MPF images are extracted as MPImage#. The [ExtractEmbedded](#) (-ee) option may be used to extract information from these embedded images.

Index1	Tag Name	Writable	Values / Notes
0.1	MPImageFlags	no	[val >> 27 & 0x1f] Bit 2 = Representative image Bit 3 = Dependent child image Bit 4 = Dependent parent image
0.2	MPImageFormat	no	[val >> 24 & 0x7] 0 = JPEG
0.3	MPImageType	no	[val & 0xffff] 0x0 = Undefined 0x10001 = Large Thumbnail (VGA equivalent) 0x10002 = Large Thumbnail (full HD equivalent) 0x10003 = Large Thumbnail (4K equivalent) 0x10004 = Large Thumbnail (8K equivalent)

0x10005 = Large Thumbnail (16K equivalent)  
0x20001 = Multi-frame Panorama  
0x20002 = Multi-frame Disparity  
0x20003 = Multi-angle  
0x30000 = Baseline MP Primary Image  
0x40000 = Original Preservation Image  
0x50000 = Gain Map Image

4	MPIImageLength	no
8	MPIImageStart	no
12	DependentImage1EntryNumber	no
14	DependentImage2EntryNumber	no

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*Last revised Apr 13, 2025*

[<-- ExifTool Tag Names](#)

# MRC Tags

Tags extracted from Medical Research Council (MRC) format imaging files. See [https://www CCPem.ac.uk/mrc\\_format/mrc2014.php](https://www CCPem.ac.uk/mrc_format/mrc2014.php) for the specification.

Index4	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
1	ImageHeight	no	
2	ImageDepth	no	(number of sections. Use ExtractEmbedded option to extract metadata for all sections)
3	ImageMode	no	0 = 8-bit signed integer 1 = 16-bit signed integer 2 = 32-bit signed real 3 = complex 16-bit integer 4 = complex 32-bit real 6 = 16-bit unsigned integer
4	StartPoint	no	
7	GridSize	no	
10	CellWidth	no	(cell size in angstroms)
11	CellHeight	no	
12	CellDepth	no	
13	CellAlpha	no	
14	CellBeta	no	
15	CellGamma	no	
16	ImageWidthAxis	no	1 = X 2 = Y 3 = Z
17	ImageHeightAxis	no	1 = X 2 = Y 3 = Z
18	ImageDepthAxis	no	1 = X 2 = Y 3 = Z
19	DensityMin	no	
20	DensityMax	no	
21	DensityMean	no	
22	SpaceGroupNumber	no	
23	ExtendedHeaderSize	no	
26	ExtendedHeaderType	no	
27	MRCVersion	no	
49	Origin	no	
53	MachineStamp	no	
54	RMSDeviation	no	
55	NumberOfLabels	no	
56	Label0	no	
76	Label1	no	
96	Label2	no	
116	Label3	no	
136	Label4	no	
156	Label5	no	
176	Label6	no	
196	Label7	no	
216	Label8	no	
236	Label9	no	

# MRC FEI12 Tags

Tags extracted from FEI1 and FEI2 extended headers.

Index1	Tag Name	Writable	Values / Notes
0	MetadataSize	no	
4	MetadataVersion	no	
8	Bitmask1	no	
12	TimeStamp	no	
20	MicroscopeType	no	
36	MicroscopeID	no	
52	Application	no	
68	AppVersion	no	
84	HighTension	no	(volts)
92	Dose	no	(electrons/m2)
100	AlphaTilt	no	
108	BetaTilt	no	
116	XStage	no	
124	YStage	no	
132	ZStage	no	
140	TiltAxisAngle	no	
148	DualAxisRot	no	
156	PixelSizeX	no	
164	PixelSizeY	no	
220	Defocus	no	
228	STEMDefocus	no	
236	AppliedDefocus	no	
244	InstrumentMode	no	1 = TEM 2 = STEM
248	ProjectionMode	no	1 = Diffraction 2 = Imaging
252	ObjectiveLens	no	
268	HighMagnificationMode	no	
284	ProbeMode	no	1 = Nano 2 = Micro
288	EFTEMOn	no	0 = No 1 = Yes
289	Magnification	no	
297	Bitmask2	no	
301	CameraLength	no	
309	SpotIndex	no	
313	IlluminationArea	no	
321	Intensity	no	
329	ConvergenceAngle	no	
337	IlluminationMode	no	
353	WideConvergenceAngleRange	no	0 = No 1 = Yes
354	SlitInserted	no	0 = No 1 = Yes
355	SlitWidth	no	
363	AccelVoltOffset	no	
371	DriftTubeVolt	no	
379	EnergyShift	no	
387	ShiftOffsetX	no	
395	ShiftOffsetY	no	
403	ShiftX	no	
411	ShiftY	no	
419	IntegrationTime	no	
427	BinningWidth	no	
431	BinningHeight	no	

435	CameraName	no	
451	ReadoutAreaLeft	no	
455	ReadoutAreaTop	no	
459	ReadoutAreaRight	no	
463	ReadoutAreaBottom	no	
467	CetaNoiseReduct	no	0 = No 1 = Yes
468	CetaFramesSummed	no	
472	DirectDetElectronCounting	no	0 = No 1 = Yes
473	DirectDetAlignFrames	no	0 = No 1 = Yes
490	Bitmask3	no	
518	PhasePlate	no	0 = No 1 = Yes
519	STEMDetectorName	no	
535	Gain	no	
543	Offset	no	
571	DwellTime	no	
579	FrameTime	no	
587	ScanSizeLeft	no	
591	ScanSizeTop	no	
595	ScanSizeRight	no	
599	ScanSizeBottom	no	
603	FullScanFOV_X	no	
611	FullScanFOV_Y	no	
619	Element	no	
635	EnergyIntervalLower	no	
643	EnergyIntervalHigher	no	
651	Method	no	
655	IsDoseFraction	no	0 = No 1 = Yes
656	FractionNumber	no	
660	StartFrame	no	
664	EndFrame	no	
668	InputStackFilename	no	
748	Bitmask4	no	
752	AlphaTiltMin	no	
760	AlphaTiltMax	no	
768	ScanRotation	no	
776	DiffractionPatternRotation	no	
784	ImageRotation	no	
792	ScanModeEnumeration	no	0 = Other 1 = Raster 2 = Serpentine
796	AcquisitionTimeStamp	no	
804	DetectorCommercialName	no	
820	StartTiltAngle	no	
828	EndTiltAngle	no	
836	TiltPerImage	no	
844	TitlSpeed	no	
852	BeamCenterX	no	
856	BeamCenterY	no	
860	CFEGFlashTimeStamp	no	
868	PhasePlatePosition	no	
872	ObjectiveAperture	no	

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# MWG Tags

The Metadata Working Group (MWG) recommends techniques to allow certain overlapping EXIF, IPTC and XMP tags to be reconciled when reading, and synchronized when writing. The MWG Composite tags below are designed to aid in the implementation of these recommendations. As well, the MWG defines new XMP tags which are listed in the subsequent tables below. See [https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg\\_guidance.pdf](https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg_guidance.pdf) for the official MWG specification.

## MWG Composite Tags

The table below lists special Composite tags which are used to access other tags based on the MWG 2.0 recommendations. These tags are only accessible when explicitly loaded, but this is done automatically by the exiftool application if MWG is specified as a group for any tag on the command line, or manually with the `-use MWG` option. Via the API, the MWG Composite tags are loaded by calling "`Image::ExifTool::MWG::Load()`".

When reading, the value of each MWG tag is **Derived From** the specified tags based on the MWG guidelines. When writing, the appropriate associated tags are written. The value of the IPTCDigest tag is updated automatically when the IPTC is changed if either the IPTCDigest tag didn't exist beforehand or its value agreed with the original IPTC digest (indicating that the XMP is synchronized with the IPTC). IPTC information is written only if the original file contained IPTC.

Loading the MWG module activates "strict MWG conformance mode", which has the effect of causing EXIF, IPTC and XMP in non-standard locations to be ignored when reading, as per the MWG recommendations. Instead, a "Warning" tag is generated when non-standard metadata is encountered. This feature may be disabled by setting `$Image::ExifTool::MWG::strict = 0` in the [ExifTool config file](#) (or from your Perl script when using the API). Note that the behaviour when writing is not changed: ExifTool always creates new records only in the standard location, but writes new tags to any EXIF/IPTC/XMP records that exist.

Contrary to the EXIF specification, the MWG recommends that EXIF "ASCII" string values be stored as UTF-8. To honour this, the exiftool application sets the default internal EXIF string encoding to "UTF8" when the MWG module is loaded, but via the API this must be done manually by setting the [CharsetEXIF](#) option.

A complication of the MWG specification is that although the MWG:Creator property may consist of multiple values, the associated EXIF tag (EXIF:Artist) is only a simple string. To resolve this discrepancy the MWG recommends a technique which allows a list of values to be stored in a string by using a semicolon-space separator (with quotes around values if necessary). When the MWG module is loaded, ExifTool automatically implements this policy and changes EXIF:Artist to a list-type tag.

Tag Name	Writable	Derived From	Values / Notes
City	yes	IPTC:City XMP-photoshop:City XMP-iptcExt:LocationShownCity CurrentIPTCDigest IPTCDigest	
Copyright	yes	EXIF:Copyright IPTC:CopyrightNotice XMP-dc:Rights CurrentIPTCDigest IPTCDigest	
Country	yes	IPTC:Country-PrimaryLocationName XMP-photoshop:Country XMP-iptcExt:LocationShownCountryName CurrentIPTCDigest IPTCDigest	
CreateDate	yes	Composite:SubSecCreateDate EXIF:CreateDate IPTC:DigitalCreationDate IPTC:DigitalCreationTime XMP-xmp:CreateDate CurrentIPTCDigest IPTCDigest	("specifies when an image was digitized" - MWG)
Creator	yes+	EXIF:Artist IPTC:By-line XMP-dc:Creator CurrentIPTCDigest IPTCDigest	

DateTimeOriginal	yes	Composite:SubSecDateTimeOriginal EXIF:DateTimeOriginal IPTC:DateCreated IPTC:TimeCreated XMP-photoshop:DateCreated CurrentIPTCDigest IPTCDigest	("specifies when a photo was taken" - MWG)
Description	yes	EXIF:ImageDescription IPTC:Caption-Abstract XMP-dc:Description CurrentIPTCDigest IPTCDigest	
Keywords	yes+	IPTC:Keywords XMP-dc:Subject CurrentIPTCDigest IPTCDigest	
Location	yes	IPTC:Sub-location XMP-iptcCore:Location XMP-iptcExt:LocationShownSublocation CurrentIPTCDigest IPTCDigest	
ModifyDate	yes	Composite:SubSecModifyDate EXIF:ModifyDate XMP-xmp:ModifyDate CurrentIPTCDigest IPTCDigest	("specifies when a file was modified by the user" - MWG)
Orientation	yes	EXIF:Orientation	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical 5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
Rating	yes	XMP-xmp:Rating	
State	yes	IPTC:Province-State XMP-photoshop:State XMP-iptcExt:LocationShownProvinceState CurrentIPTCDigest IPTCDigest	

## MWG Collections Tags

Collections metadata defined by the MWG 2.0 specification. See

[https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg\\_guidance.pdf](https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg_guidance.pdf) for the official specification.

These tags belong to the ExifTool XMP-mwg-coll family 1 group.

Tag Name	Writable	Values / Notes
Collections	struct+	--> <a href="#">MWG CollectionInfo Struct</a>
CollectionName	string_+	(CollectionsCollectionName)
CollectionURI	string_+	(CollectionsCollectionURI)

## MWG CollectionInfo Struct

Field Name	Writable	Values / Notes
CollectionName	string	
CollectionURI	string	

## MWG Keywords Tags

Hierarchical keywords metadata defined by the MWG 2.0 specification. ExifTool unrolls keyword structures to an arbitrary depth of 6 to allow individual levels to be accessed with different tag names, and to avoid infinite recursion.

See [https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg\\_guidance.pdf](https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg_guidance.pdf) for the official specification.

These tags belong to the ExifTool XMP-mwg-kw family 1 group.

Tag Name	Writable	Values / Notes
KeywordInfo	struct	--> <a href="#">MWG KeywordInfo Struct</a> (tag ID is 'Keywords')
HierarchicalKeywords	struct_+	--> <a href="#">MWG KeywordStruct Struct</a> (KeywordsHierarchy)
HierarchicalKeywords1Applied	boolean_+	(KeywordsHierarchyApplied)
HierarchicalKeywords1Children	struct_+	--> <a href="#">MWG KeywordStruct Struct</a> (KeywordsHierarchyChildren)
HierarchicalKeywords2Applied	boolean_+	(KeywordsHierarchyChildrenApplied)
HierarchicalKeywords2Children	struct_+	--> <a href="#">MWG KeywordStruct Struct</a> (KeywordsHierarchyChildrenChildren)
HierarchicalKeywords3Applied	boolean_+	(KeywordsHierarchyChildrenChildrenApplied)
HierarchicalKeywords3Children	struct_+	--> <a href="#">MWG KeywordStruct Struct</a> (KeywordsHierarchyChildrenChildrenChildren)
HierarchicalKeywords4Applied	boolean_+	(KeywordsHierarchyChildrenChildrenChildrenApplied)
HierarchicalKeywords4Children	struct_+	--> <a href="#">MWG KeywordStruct Struct</a> (KeywordsHierarchyChildrenChildrenChildrenChildren)
HierarchicalKeywords5Applied	boolean_+	(KeywordsHierarchyChildrenChildrenChildrenChildrenApplied)
HierarchicalKeywords5Children	struct_+	--> <a href="#">MWG KeywordStruct Struct</a> (KeywordsHierarchyChildrenChildrenChildrenChildrenChildren)
HierarchicalKeywords6Applied	boolean_+	(KeywordsHierarchyChildrenChildrenChildrenChildrenChildrenApplied)
HierarchicalKeywords6	string_+	(KeywordsHierarchyChildrenChildrenChildrenChildrenChildrenKeyword)
HierarchicalKeywords5	string_+	(KeywordsHierarchyChildrenChildrenChildrenChildrenKeyword)
HierarchicalKeywords4	string_+	(KeywordsHierarchyChildrenChildrenChildrenKeyword)
HierarchicalKeywords3	string_+	(KeywordsHierarchyChildrenChildrenKeyword)
HierarchicalKeywords2	string_+	(KeywordsHierarchyChildrenKeyword)
HierarchicalKeywords1	string_+	(KeywordsHierarchyKeyword)

## MWG KeywordInfo Struct

Field Name	Writable	Values / Notes
Hierarchy	MWG KeywordStruct+	--> <a href="#">MWG KeywordStruct Struct</a>

## MWG KeywordStruct Struct

Field Name	Writable	Values / Notes
Applied	boolean	
Children	MWG KeywordStruct+	--> <a href="#">MWG KeywordStruct Struct</a>
Keyword	string	

## MWG Regions Tags

Image region metadata defined by the MWG 2.0 specification. These tags may be accessed without the need to load the MWG Composite tags above. See

[https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg\\_guidance.pdf](https://web.archive.org/web/20180919181934/http://www.metadataworkinggroup.org/pdf/mwg_guidance.pdf) for the official specification.

These tags belong to the ExifTool XMP-mwg-rs family 1 group.

Tag Name	Writable	Values / Notes
RegionInfo	struct	--> <a href="#">MWG RegionInfo Struct</a> (tag ID is 'Regions')
RegionAppliedToDimensions	struct_	--> <a href="#">Dimensions Struct</a> (RegionsAppliedToDimensions)
RegionAppliedToDimensionsH	real_	(RegionsAppliedToDimensionsH)

RegionAppliedToDimensionsUnit	string_	(RegionsAppliedToDimensionsUnit)
RegionAppliedToDimensionsW	real_	(RegionsAppliedToDimensionsW)
RegionList	struct_ +	--> <a href="#">MWG RegionStruct Struct</a> (RegionsRegionList)
RegionArea	struct_ +	--> <a href="#">Area Struct</a> (RegionsRegionListArea)
RegionAreaD	real_ +	(RegionsRegionListAreaD)
RegionAreaH	real_ +	(RegionsRegionListAreaH)
RegionAreaUnit	string_ +	(RegionsRegionListAreaUnit)
RegionAreaW	real_ +	(RegionsRegionListAreaW)
RegionAreaX	real_ +	(RegionsRegionListAreaX)
RegionAreaY	real_ +	(RegionsRegionListAreaY)
RegionBarCodeValue	string_ +	(RegionsRegionListBarCodeValue)
RegionDescription	string_ +	(RegionsRegionListDescription)
RegionExtensions	struct_ +	--> <a href="#">MWG Extensions Struct</a> (RegionsRegionListExtensions)
RegionFocusUsage	string_ +	(RegionsRegionListFocusUsage) 'EvaluatedNotUsed' = Evaluated, Not Used 'EvaluatedUsed' = Evaluated, Used 'NotEvaluatedNotUsed' = Not Evaluated, Not Used
RegionName	string_ +	(RegionsRegionListName)
RegionRotation	real_ +	(RegionsRegionListRotation; not part of MWG 2.0 spec)
RegionSeeAlso	string_ +	(RegionsRegionListSeeAlso)
RegionType	string_ +	(RegionsRegionListType) 'BarCode' = BarCode 'Face' = Face 'Focus' = Focus 'Pet' = Pet

## MWG RegionInfo Struct

Field Name	Writable	Values / Notes
AppliedToDimensions	Dimensions	--> <a href="#">Dimensions Struct</a>
RegionList	MWG RegionStruct+	--> <a href="#">MWG RegionStruct Struct</a>

## MWG RegionStruct Struct

Field Name	Writable	Values / Notes
Area	Area	--> <a href="#">Area Struct</a>
BarCodeValue	string	
Description	string	
Extensions	MWG Extensions	--> <a href="#">MWG Extensions Struct</a>
FocusUsage	string	EvaluatedNotUsed = Evaluated, Not Used EvaluatedUsed = Evaluated, Used NotEvaluatedNotUsed = Not Evaluated, Not Used
Name	string	
Rotation	real	(not part of MWG 2.0 spec)
Type	string	BarCode = BarCode Face = Face Focus = Focus Pet = Pet
SeeAlso	string	

## MWG Extensions Struct

This structure may contain any top-level XMP tags, but none have been pre-defined in ExifTool. Since no flattened tags have been pre-defined, RegionExtensions is writable only as a structure (eg. `{xmp-dc:creator=me, rating=5}`). Fields for this structure are identified using the standard ExifTool tag name (with optional leading group name, and/or trailing language code, and/or trailing # symbol to disable print conversion).

Field Name	Writable	Values / Notes
<i>[no tags known]</i>		

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(This document generated automatically by Image::ExifTool::BuildTagLookup)  
Last revised Sep 22, 2025

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# MXF Tags

Tags extracted from Material Exchange Format files. Tag ID's are not listed because they are bulky 16-byte binary values.

Tag Name	Writable	Values / Notes
AAFManufacturerID?	no	
AES3PCMDescriptor	-	--> <a href="#">MXF Tags</a>
AFDAndBarData?	no	
AGICOAID?	no	
AICI?	no	
AIFCSummary?	no	
ANCPacketCount	no	
ANCPayloadByteArray	no	
ANCPayloadSampleCoding	no	
ANCPayloadSampleCount	no	
ANCWrappingType	no	
Abstract	no	
Abstract	no	
AccountingReferenceNumber	no	
ActiveFormatDescriptor	no	
ActiveLinesperFrame	no	
ActiveSamplesperLine	no	
ActiveState	no	
Ad-ID?	no	
Address	-	--> <a href="#">MXF Tags</a>
AddressLine	no	
AddressLine	no	
AddressNameValueSets?	no	
AddressSets?	no	
AdvertisingMaterialReference	no	
AestheticValue	no	
AlphaMaximumRef	no	
AlphaMinimumRef	no	
AlphaSampleDepth	no	
AlphaTransparency	no	0 = Not Inverted 1 = Inverted
AlternateName	no	
AlternateName	no	
Alternates?	no	
AnalogDataCodingKind	no	
AnalogMetadataCarrier	no	
AnalogMonitoringAndControlCodingKind	no	
AnalogSystem	no	
AnalogVideoSystemName	no	
AnalogVideoSystemName?	no	
AnamorphicLensCharacteristic	no	
AnchorOffset	no	
AncillaryResourceID?	no	
AngleToNorth	no	
AngularUnitKind	no	
Annotation?	no	
Annotation	-	--> <a href="#">MXF Tags</a>
AnnotationCueWordsSet?	no	

AnnotationDescription	no
AnnotationDescription	no
AnnotationKind	no
AnnotationKind	no
AnnotationParticipantSets?	no
AnnotationSets?	no
AnnotationSynopsis	no
AnnotationSynopsis	no
ApplicationEnvironmentID	no
ApplicationInformationArray?	no
ApplicationName	no
ApplicationName	no
ApplicationPlatform	no
ApplicationPlatform	no
ApplicationPlug-InBatch?	no
ApplicationPlug-InInstanceID?	no
ApplicationProductID?	no
ApplicationScheme?	no
ApplicationSchemeBatch?	no
ApplicationSupplierName	no
ApplicationSupplierName	no
ApplicationVersionNumber	no
ApplicationVersionString	no
ApplicationVersionString	no
ApproximateImageContainerSize	no
ArchiveID	no
AssetValue	no
AssignedCategoryName	no
AssignedCategoryName	no
AssignedCategoryValue	no
AssignedCategoryValue	no
AssociatedMetadataDefinition?	no
AstronomicalBodyName	no
AstronomicalBodyName	no
AudienceAppreciation	no
AudienceRating	no
AudienceReach	no
AudienceShare	no
AudioAverageBitrate	no
AudioCodingSchemeCode	no
AudioCodingSchemeID?	no
AudioCodingSchemeName	no
AudioCompressionAlgorithm	no
AudioDeviceKind	no
AudioDeviceParameter	no
AudioDeviceParameterSetting	no
AudioEnhancementOrModificationDescription	no
AudioFirstMix-DownProcess	no
AudioFixedBitrateFlag	no
AudioMonoChannelCount	no
AudioNoiseReductionAlgorithm	no
AudioReferenceLevel	no
AudioReferenceLevel	no

AudioSampleRate	no	
AudioSampleRate	no	
AudioStereoChannelCount	no	
AudioWatermarkKind	no	
AuthenticationFlag	no	
AuxiliaryBitsMode	no	
AvailableRepresentations?	no	
AverageBytesPerSecond	no	
Award	-	--> <a href="#">MXF Tags</a>
AwardCategory	no	
AwardCategory	no	
AwardName	no	
AwardName	no	
AwardParticipantSets?	no	
AwardSets?	no	
BICI?	no	
BackgroundMusicFlag	no	
BankDetailsSet?	no	
BeginAnchor	no	
BeginAnchor	no	
BextCodingHistory	no	
BextCodingHistory	no	
Bitrate	no	
BitsPerAudioSample	no	
BitsPerPixel	no	
BitsPerPixel	no	
BitsPerSample	no	
BlackReferenceLevel	no	
BlockAlign	no	
BlockContinuityCount	no	
BlockStartOffset	no	
BoundingRectangle?	no	
BrandMainTitle	no	
BrandMainTitle	no	
BrandOriginalTitle	no	
BrandOriginalTitle	no	
Branding	-	--> <a href="#">MXF Tags</a>
BrandingSets?	no	
BroadcastChannel	no	
BroadcastDate	no	
BroadcastMediumCode	no	
BroadcastMediumKind	no	
BroadcastOrganizationName	no	
BroadcastOrganizationName	no	
BroadcastRegion	no	
BroadcastRegion	no	
BroadcastServiceName	no	
BroadcastTime	no	
BroadcasterRightsToCopy	no	
BufferDelay?	no	
BuildingName	no	
BuildingName	no	
Bypass	no	

BypassOverride	no	
ByteOffset	no	
ByteOrder	no	'II' = Little-endian (Intel, II) 'MM' = Big-endian (Motorola, MM)
CBEStrtOffset	no	
CDCIEssenceDescriptor	-	--> <a href="#">MXF Tags</a>
CISACLegalEntityID?	no	
CaptionDescription	-	--> <a href="#">MXF Tags</a>
CaptionDescriptionSets?	no	
CaptionKind	no	
CaptionKind	no	
CaptionTitles	no	
CaptionsDescriptionParticipantSets?	no	
CaptionsViaTeletext	no	
CaptureAspectRatio	no	
CaptureFilmFrameRate	no	
CaptureGammaEquation	no	
CaptureGammaEquation	no	
CaptureGammaEquation?	no	
CatalogDataStatus	no	
CatalogDataStatus	no	
CatalogPrefixNumber	no	
CatalogingSystemName	no	
CentralTelephoneNumber	no	
ChannelAssignment?	no	
ChannelCount	no	
ChannelHandle	no	
ChannelID	no	
ChannelIDs	no	
ChannelStatusMode	no	[Value 0] 0 = No Channel Status Data 1 = AES3 Minimum 2 = AES3 Standard 3 = Fixed 24 Bytes in FixedChannelStatusData 4 = Stream of Data in MXF Header Metadata 5 = Stream of Data Multiplexed within MXF Body
CipherAlgorithm?	no	
CipherAlgorithmAES128CBC?	no	
Citizenship	no	
Citizenship	no	
CityName	no	
CityName	no	
ClassDefinitions?	no	
Classification	-	--> <a href="#">MXF Tags</a>
ClassificationAndMarkingSystem	no	
ClassificationComment	no	
ClassificationComment	no	
ClassificationNameValueSets?	no	
ClassificationReason	no	
ClassificationSets?	no	
ClassifiedBy	no	
ClassifyingCountryCode	no	
ClipCreationDateTime	no	
ClipFramework	-	--> <a href="#">MXF Tags</a>
ClipID	no	

ClipIDArray?	no	
ClipKind	no	
ClipNumber	no	
ClipNumber	no	
ClipShotSets?	no	
CloneCount	no	
ClosedBodyPartition?	no	
ClosedCaptionSubtitlesFlag	no	
ClosedCompleteBodyPartition?	no	
ClosedCompleteHeader	-	--> <a href="#">MXF Header Tags</a>
ClosedGOPIndicator	no	
ClosedHeader	-	--> <a href="#">MXF Header Tags</a>
CodecDefinition?	no	
CodecDefinition?	no	
CodecDefinitions?	no	
CodecEssenceDescriptor?	no	
CodecEssenceKinds?	no	
CodedContentScanningKind	no	0 = Unknown 1 = Progressive 2 = Interlaced 3 = Mixed
CodingLawKind	no	
CodingLawName	no	
CodingStyleDefault?	no	
CollectionName	no	
CollectionName	no	
ColorDescriptor	no	
ColorDescriptor	no	
ColorFieldCode	no	
ColorPrimaries	no	
ColorPrimaries?	no	
ColorRangeLevels	no	
ColorSiting	no	
ColorimetryCode	no	
ColorimetryCode?	no	
CommunicationSets?	no	
Communications	-	--> <a href="#">MXF Tags</a>
CompleteFooter?	no	
ComponentAttributes?	no	
ComponentDataDefinition	no	'060e2b34.0401.0101.01030201.01000000' = SMPTE 12M Timecode Track '060e2b34.0401.0101.01030201.02000000' = SMPTE 12M Timecode Track with active user bits '060e2b34.0401.0101.01030201.03000000' = SMPTE 309M Timecode Track '060e2b34.0401.0101.01030201.10000000' = Descriptive Metadata Track '060e2b34.0401.0101.01030202.01000000' = Picture Essence Track '060e2b34.0401.0101.01030202.02000000' = Sound Essence Track '060e2b34.0401.0101.01030202.03000000' = Data Essence Track
ComponentDepth	no	
ComponentKLVData?	no	
ComponentMaximumRef	no	
ComponentMinimumRef	no	
ComponentUserComments?	no	
ComponentsInSequence?	no	

CompositionRendering?	no	
ComputedKeyData	no	
ComputedKeyFrames	no	
ComputedKeySounds	no	
ComputedKeywords	no	
ComputedObjectKind	no	
ComputedObjectKind	no	
ComputedStratumKind	no	
ConstantBPictureFlag	no	
ConsumerRightsToCopy	no	
ContactDepartmentName	no	
ContactDepartmentName	no	
ContactID?	no	
ContactKind	no	
ContactKind	no	
ContactNameValueSets?	no	
ContactsList	-	--> <a href="#">MXF Tags</a>
ContactsListSet?	no	
ContainerDefinitions?	no	
ContainerLastModifyDate	no	
ContainerVersion	no	
ContentClassification	no	
ContentClassification	no	
ContentCodingSystem	no	
ContentMaturityDescription	no	
ContentMaturityGraphic	no	
ContentMaturityRating	no	
ContentPackageIndexArray?	no	
ContentPackageMetadataLink	no	
ContentStorage?	no	
ContentStorageSet	-	--> <a href="#">MXF Tags</a>
ContentValue	no	
ContextDescription	no	
ContiguousDataFlag	no	
Contract	-	--> <a href="#">MXF Tags</a>
ContractClauseDescription	no	
ContractClauseDescription	no	
ContractDateTime	no	
ContractEntity	no	
ContractInstallmentPercentage	no	
ContractLineCode	no	
ContractLineName	no	
ContractLineName	no	
ContractParticipantSets?	no	
ContractSets?	no	
ContractTermsOfBusiness	no	
ContractTermsOfBusiness	no	
ContractType	no	
ContractType	no	
ContractTypeCode	no	
ContractTypeLink	no	
ContributionStatus	no	

ContributionStatus	no	
ControlPointList?	no	
ControlPointTime	no	
CopyCount	no	
CopyrightLicenseCountryCode	no	
CopyrightLicenseRegionCode	no	
CopyrightLicenseRegionName	no	
CopyrightOwnerName	no	
CopyrightOwnerName	no	
CopyrightStatus	no	
CopyrightStatus	no	
CornerLatitudePoint1	no	
CornerLatitudePoint1	no	
CornerLatitudePoint2	no	
CornerLatitudePoint2	no	
CornerLatitudePoint3	no	
CornerLatitudePoint3	no	
CornerLatitudePoint4	no	
CornerLatitudePoint4	no	
CornerLongitudePoint1	no	
CornerLongitudePoint1	no	
CornerLongitudePoint2	no	
CornerLongitudePoint2	no	
CornerLongitudePoint3	no	
CornerLongitudePoint3	no	
CornerLongitudePoint4	no	
CornerLongitudePoint4	no	
CountryCodeMethod	no	
CountryCodeMethod	no	
CountryName	no	
CreateDate	no	
CryptographicContext	-	--> <a href="#">MXF Tags</a>
CryptographicContextID?	no	
CryptographicContextLink?	no	
CryptographicContextObject?	no	
CryptographicFramework	-	--> <a href="#">MXF Tags</a>
CryptographicFrameworkLabel?	no	
CryptographicKeyID?	no	
Csiz	no	
Cue-InWords	no	
Cue-InWords	no	
Cue-OutWords	no	
Cue-OutWords	no	
CueWords	-	--> <a href="#">MXF Tags</a>
CulturalValue	no	
CurrencyCode	no	
CurrencyName	no	
CurrentNumberInSequence	no	
CurrentNumberInSequence	no	
CurrentRepeatNumber	no	

CutPoint	no	
DMFramework	-	--> <a href="#">MXF Tags</a>
DMSegment	-	--> <a href="#">MXF Tags</a>
DMSet	-	--> <a href="#">MXF Tags</a>
DMSourceClip	-	--> <a href="#">MXF Tags</a>
DOI?	no	
DVBParentalRating	no	
DataDefinition?	no	
DataDefinitions?	no	
DataDeviceKind	no	
DataDeviceParameterName	no	
DataDeviceParameterSetting	no	
DataEnhancementOrModificationDescription	no	
DataEssenceCoding	no	
DataEssenceCodingID?	no	
DateDropFrameFlag	no	
DateTimeEmbeddedFlag	no	
DateTimeKind?	no	
DateTimeRate	no	
DeclassificationDate	no	
DefaultDataValue?	no	
DefaultFadeDuration	no	
DefaultFadeEditRate	no	
DefaultFadeType?	no	
DefaultNamespaceURI	no	
DefaultNamespaceURI	no	
DefaultObject?	no	
DefinedName	no	
DefinedName	no	
DefinitionObjectID?	no	
DefinitionObjectName	no	
DefinitionObjectName	no	
DegradedEffects?	no	
DeltaEntryArray?	no	
DerivedFrom	no	
Description	no	
Description	no	
DescriptionKind	no	
DescriptionKind	no	
DescriptiveComment	no	
DescriptiveComment	no	
DescriptiveMetadataApplicationEnvironmentID	no	
DescriptiveMetadataFramework?	no	
DescriptiveMetadataPlug-InID?	no	
DescriptiveMetadataScheme?	no	
DescriptiveMetadataSchemes?	no	
DescriptiveMetadataSetReferences?	no	
DescriptiveMetadataSets?	no	
DescriptiveMetadataTrackIDs	no	
DeviceAbsoluteHeading	no	
DeviceAbsolutePositionalAccuracy	no	
DeviceAbsoluteSpeed	no	
DeviceAltitude	no	

DeviceAltitude	no	
DeviceAssetNumber	no	
DeviceDesignation	no	
DeviceIDKind	no	
DeviceKind	no	
DeviceKindCode	no	
DeviceLatitude	no	
DeviceLatitude	no	
DeviceLatitude	no	
DeviceLongitude	no	
DeviceLongitude	no	
DeviceLongitude	no	
DeviceManufacturerName	no	
DeviceManufacturerName	no	
DeviceModel	no	
DeviceParameterNameValueSets?	no	
DeviceParameters	-	--> <a href="#">MXF Tags</a>
DeviceParametersSets?	no	
DeviceRelativeHeading	no	
DeviceRelativePositionX	no	
DeviceRelativePositionY	no	
DeviceRelativePositionZ	no	
DeviceRelativePositionalAccuracy	no	
DeviceRelativeSpeed	no	
DeviceSerialNumber	no	
DeviceUsageDescription	no	
DeviceUsageDescription	no	
DeviceXDimension	no	
DeviceYDimension	no	
DialNorm	no	
Dictionary?	no	
DictionaryDescription	no	
DictionaryDescription	no	
DictionaryIdentifier?	no	
DigitalEncodingBitrate	no	
DigitalMetadataCarrier	no	
DigitalOrAnalogOrigination	no	
DigitalVideoFileFormat	no	
DirectorName	no	
DiscPartitionCapacity	no	
DisplayF2Offset	no	
DisplayHeight	no	
DisplayUnits	no	
DisplayUnits	no	
DisplayWidth	no	
DisplayXOffset	no	
DisplayYOffset	no	
Dither	no	
DropFrame	no	
Duration	no	
DynamicSourcePackageID?	no	
DynamicSourceTrackIDs	no	

E-mailAddress	no	
E-mailAddress	no	
EPGProgramSynopsis	no	
EdgeCode	no	
EdgeCodeFilmGauge?	no	
EdgeCodeFormat?	no	
EdgeCodeHeader?	no	
EdgeCodeStart	no	
EditHint?	no	
EditRate	no	
EditUnitFlags	no	
EditUnitLength	no	
EditingEventComment	no	
EditingEventComment	no	
EffectRendering?	no	
ElectrospatialFormulation	no	
ElementCount	no	
ElementDelta	no	
ElementLength	no	
ElementNameList	no	
Emphasis	no	
EncryptedContainerLabel?	no	
EncryptedSourceValue?	no	
EncryptedTrackFileID?	no	
EndAnchor	no	
EndAnchor	no	
EnhancementOrModificationDescription	no	
EnumerationUnderlyingIntegerType?	no	
EpisodeEndNumber	no	
EpisodeNumber	no	
EpisodeNumber	no	
EpisodeStartNumber	no	
EpisodicItemSets?	no	
EssenceContainerArray?	no	
EssenceContainerDataSet	-	--> <a href="#">MXF Tags</a>
EssenceContainerFormat?	no	
EssenceContainerFormat?	no	
EssenceContainers?	no	
EssenceData?	no	
EssenceDescription?	no	
EssencelsIdentified	no	
EssenceLength	no	
EssenceLocators?	no	
EssenceStreamID	no	
Event	-	--> <a href="#">MXF Tags</a>
EventAbsoluteDuration	no	
EventAbsoluteDuration?	no	
EventAbsoluteDurationFrameCount	no	
EventAnnotationSets?	no	
EventElapsed Time To End	no	
EventElapsed Time To Start	no	
EventEndTimeOffset	no	
EventEndTimecodeOffset?	no	

EventIndication	no	
EventIndication	no	
EventOrigin	no	
EventSets?	no	
EventStart	no	
EventStartTimeOffset	no	
EventStartTimecodeOffset?	no	
EventTrack	-	--> <a href="#">MXF Tags</a>
EventTrackEditRate	no	
ExCCIData?	no	
ExposedAspectRatio	no	
ExtendedCaptionsLanguageCode	no	
ExtendedClipID	no	
ExtendedClipIDArray?	no	
ExtendedTextLanguageCode	no	
ExtendibleElementNameList	no	
FNumber	no	
Fade-InDuration	no	
Fade-InType?	no	
Fade-OutDuration	no	
Fade-OutType?	no	
FamilyName	no	
FamilyName	no	
FaxNumber	no	
FaxNumber	no	
FemaleLeadActressName	no	
FestivalName	no	
FestivalName	no	
FieldDominance	no	
FieldFrameTypeCode	no	
FieldOfViewHorizontal	no	
FieldOfViewHorizontal	no	
FieldOfViewVertical	no	
FieldOfViewVerticalFP	no	
FieldRate	no	
FileDescriptor	-	--> <a href="#">MXF Tags</a>
FileDescriptors?	no	
FileSecurityReport	no	
FileSecurityWave	no	
FillerData?	no	
FilmBatchNumber	no	
FilmBatchNumber	no	
FilmCaptureAperture	no	
FilmColorProcess	no	
FilmFormatName	no	
FilmFormatName	no	
FilmFormatName?	no	
FilmGauge?	no	
FilmStockKind	no	
FilmStockKind	no	
FilmStockManufacturerName	no	
FilmStockManufacturerName	no	
FilmTestParameter	no	

FilmTestResult	no	
FilmTestResult?	no	
FilmToVideoTransferDirection?	no	
FilmToVideoTransferKind?	no	
FilmToVideoTransferPhase?	no	
FilteringApplied	no	
FilteringCode	no	
FirstBroadcastFlag	no	
FirstGivenName	no	
FirstGivenName	no	
FirstNumberInSequence	no	
FirstNumberInSequence	no	
FirstTransmissionInfo	no	
FixedArrayElementType?	no	
FixedChannelStatusData?	no	
FixedUserData?	no	
FocalLength	no	
FocalLength	no	
Footer?	no	
FormatDescriptor	no	
FormatDescriptor	no	
FormerFamilyName	no	
FormerFamilyName	no	
FrameCenterElevation	no	
FrameCenterLatitude	no	
FrameCenterLatitude	no	
FrameCenterLatitude	no	
FrameCenterLatitudeLongitude	no	
FrameCenterLongitude	no	
FrameCenterLongitude	no	
FrameCenterLongitude	no	
FrameCode	no	
FrameCount	no	
FrameCountOffset	no	
FrameLayout	no	
FramePositionalAccuracy	no	
FrameRate	no	
FrameworkExtendedTextLanguageCode	no	
FrameworkTextLanguageCode	no	
FrameworkThesaurusName	no	
FrameworkThesaurusName	no	
FrameworkTitle	no	
FrameworkTitle	no	
GenerationCloneNumber	no	
GenerationCopyNumber	no	
GenerationID?	no	
GenericDataEssenceDescriptor	-	--> <a href="#">MXF Tags</a>
GenericPackage	-	--> <a href="#">MXF Tags</a>
GenericPayloads?	no	
GenericPictureEssenceDescriptor	-	--> <a href="#">MXF Tags</a>
GenericSoundEssenceDescriptor	-	--> <a href="#">MXF Tags</a>
GenericTrack	-	--> <a href="#">MXF Tags</a>
Genre	no	

Genre	no	
GeographicAreaNorthwest?	no	
GeographicAreaSourceDatum	no	
GeographicAreaSoutheast?	no	
GeographicLocation?	no	
GeographicPolygonCoordinates?	no	
GeographicPolygonSourceDatum	no	
GeographicalCoordinates?	no	
GlobalNumber	no	
GraphicKind	no	
GraphicUsageKind	no	
GraphicUsageKind	no	
GroupRelationship	-	--> <a href="#">MXF Tags</a>
GroupSet?	no	
GroupSets?	no	
GroupSynopsis	no	
GroupSynopsis	no	
HMACAlgorithmSHA1128?	no	
HTMLDOCTYPE	no	
HTMLDOCTYPE	no	
HTMLMetaDescription	no	
HTMLMetaDescription	no	
HardwareAcceleratorFlag	no	
HasAudioWatermark	no	
HasVideoWatermark	no	
HeaderByteCount	no	
HistoricalValue	no	
HonorsAndQualifications	no	
HonorsAndQualifications	no	
HorizontalActionSafePercentage	no	
HorizontalDatum	no	
HorizontalGraphicsSafePercentage	no	
HorizontalSubsampling	no	
IBTN?	no	
IEEEDeviceID	no	
IEEEManufacturerID	no	
ISAN?	no	
ISBD?	no	
ISBN?	no	
ISCI?	no	
ISMN?	no	
ISO3166CountryCode	no	
ISO639-1LanguageCode	no	
ISO639-1LanguageCode	no	
ISO639CaptionsLanguageCode	no	
ISO639TextLanguageCode	no	
ISRC?	no	
ISRN?	no	
ISSN?	no	
ISTC?	no	
ISWC?	no	
IdenticalGOPIndicator	no	
Identification	-	--> <a href="#">MXF Tags</a>

Identification	-	--> <a href="#">MXF Tags</a>
IdentificationList?	no	
IdentificationSets?	no	
IdentificationUL?	no	
IdentifierIssuingAuthority	no	
IdentifierIssuingAuthority	no	
IdentifierKind	no	
IdentifierValue	no	
ImageAlignmentOffset	no	
ImageCategory	no	
ImageCoordinateSystem	no	
ImageEndOffset	no	
ImageFormatSet?	no	
ImageHeight	no	
ImageSourceDeviceKind	no	
ImageSourceDeviceKind	no	
ImageStartOffset	no	
ImageWidth	no	
IncludeSync	no	
IndexByteCount	no	
IndexDuration	no	
IndexEditRate	no	
IndexEntryArray?	no	
IndexStreamID	no	
IndexTableSegment?	no	
IndexingStartPosition	no	
IndividualAwardName	no	
InkNumber	no	
InputSegment?	no	
InputSegmentCount	no	
InputSegments?	no	
InsertMusicFlag	no	
InstallmentNumber	no	
InstanceUID?	no	
IntegrationIndication	no	
IntegrationIndication	no	
IntellectualPropertyDescription	no	
IntellectualPropertyDescription	no	
IntellectualPropertyLicenseCountryCode	no	
IntellectualPropertyLicenseRegionCode	no	
IntellectualPropertyLicenseRegionName	no	
IntellectualPropertyRights	no	
IntellectualPropertyRights	no	
IntendedAFD	no	
IntentDescriptor	no	
IntentDescriptor	no	
InterestedPartyName	no	
Interpolation?	no	
InterpolationDefinitions?	no	
IsConcrete	no	
IsDubbed	no	
IsLiveProduction	no	
IsLiveTransmission	no	

IsOptional	no	
IsRecording	no	
IsRepeat	no	
IsSearchable	no	
IsSigned	no	
IsUniqueIdentifier	no	
IsVoiceover	no	
ItemDesignatorID?	no	
ItemID	no	
ItemName	no	
ItemName	no	
ItemValue	no	
ItemValue	no	
JFIFMarkerDescription	no	
JFIFMarkerDescription	no	
JPEG2000PictureSubDescriptor	-	--> <a href="#">MXF Tags</a>
JPEGTableID?	no	
JobFunctionCode	no	
JobFunctionName	no	
JobFunctionName	no	
JobTitle	no	
JobTitle	no	
Jurisdiction	no	
Jurisdiction	no	
KAGSize	no	
KLVDataDefinitions?	no	
KLVDataParentProperties?	no	
KLVDataType?	no	
KLVDataValue?	no	
KLVMetadataSequence?	no	
KeyCode?	no	
KeyData	no	
KeyDataOrProgram	no	
KeyFrame	no	
KeyFrameSampleCount	no	
KeyFrames	no	
KeyPoint	-	--> <a href="#">MXF Tags</a>
KeyPointSets?	no	
KeySound	no	
KeySounds	no	
KeyText	no	
KeyTimePoint	no	
KeypointKind	no	
KeypointKind	no	
KeypointValue	no	
KeypointValue	no	
Keywords	no	
Keywords	no	
LUID	no	
LanguageName	no	
LanguageName	no	
LastNumberInSequence	no	
LastNumberInSequence	no	

LayerNumber	no	
LeadingLines	no	
LengthSystemName	no	
LengthUnitKind	no	
LicenseOptionsDescription	no	
LineNumber	no	
LinkedApplicationPlug-InInstanceID?	no	
LinkedDescriptiveFrameworkPlug-InID?	no	
LinkedDescriptiveObjectPlug-InID?	no	
LinkedGenerationID?	no	
LinkedPackageID?	no	
LinkedTimecodeTrackID?	no	
LinkedTrackID	no	
LinkingName	no	
LinkingName	no	
LocalCreationDateTime	no	
LocalDatumAbsolutePositionAccuracy	no	
LocalDatumRelativePositionAccuracy	no	
LocalEndDateTime	no	
LocalEventEndDateTime	no	
LocalEventEndDateTime	no	
LocalEventStartTime	no	
LocalEventStartTime	no	
LocalFestivalDateTime	no	
LocalFilePath	no	
LocalFilePath	no	
LocalID	no	
LocalLastModifyDate	no	
LocalModifyDate	no	
LocalStartTime	no	
LocalTagEntries?	no	
LocalTagUniqueID?	no	
LocalTagValue	no	
LocalTapeNumber	no	
LocalTargetID	no	
LocalTargetID	no	
LocalUserDateTime	no	
Location	-	--> <a href="#">MXF Tags</a>
LocationDescription	no	
LocationDescription	no	
LocationKind	no	
LocationKind	no	
LocationSets?	no	
LockedIndicator	no	
LogoFlag	no	
LowDelayIndicator	no	
LumaEquation	no	
LuminanceSampleRate	no	
MIC?	no	
MICAlgorithm?	no	
MIMECharSet	no	
MIMECharSet	no	
MIMEEncoding	no	

MIMEEncoding	no	
MIMEMediaType	no	
MIMEMediaType	no	
MPEG2VideoDescriptor	-	--> <a href="#">MXF Tags</a>
MPEG7BiMAccessUnitFrame1?	no	
MPEG7BiMAccessUnitFrame2?	no	
MPEG7BiMAccessUnitFrame3?	no	
MPEG7BiMAccessUnitFrame4?	no	
MPEG7BiMAccessUnitFrame5?	no	
MPEG7BiMAccessUnitFrame6?	no	
MPEG7BiMAccessUnitFrame7?	no	
MPEG7BiMAccessUnitFrame8?	no	
MPEG7BiMDecoderInitFrame1?	no	
MPEG7BiMDecoderInitFrame2?	no	
MPEG7BiMDecoderInitFrame3?	no	
MPEG7BiMDecoderInitFrame4?	no	
MPEG7BiMDecoderInitFrame5?	no	
MPEG7BiMDecoderInitFrame6?	no	
MPEG7BiMDecoderInitFrame7?	no	
MPEG7BiMDecoderInitFrame8?	no	
MPEGAudioBitrate	no	
MPEGAudioRecodingDataset?	no	
MPEGVideoRecodingDataset?	no	
MagneticDiskNumber	no	
MagneticTrack	no	
MainCatalogNumber	no	
MainName	no	
MainName	no	
MainSponsorName	no	
MainTitle	no	
MainTitle	no	
MajorVersion	no	
MaleLeadActorName	no	
ManufacturerID?	no	
ManufacturerInformationObject?	no	
MapDatumUsed	no	
MarkIn	no	
MarkOut	no	
MaterialAbsoluteDuration	no	
MaterialAbsoluteDuration?	no	
MaterialEndTimeOffset	no	
MaterialEndTimecodeOffset?	no	
MaterialPackage	-	--> <a href="#">MXF Tags</a>
MaximumAPIVersion	no	
MaximumBPictureCount	no	
MaximumGOPSize	no	
MaximumSupportedEngineVersion	no	
MaximumSupportedPlatformVersion	no	
MaximumUseCount	no	
MediaLocation	no	
MemberNameList	no	
MemberTypes?	no	
MetadataEncodingSchemeCode	no	

MetadataItemName	no	
MetadataItemName	no	
MetadataServerLocators?	no	
MicrophonePlacementTechniques	no	
MinimumAPIVersion	no	
MinimumSupportedEngineVersion	no	
MinimumSupportedPlatformVersion	no	
MinorVersion	no	
MissionID	no	
MissionID	no	
MobileTelephoneNumber	no	
ModifyDate	no	
MonoSourceTrackIDs	no	
MultipleDescriptor	-	--> <a href="#">MXF Tags</a>
NITFLayerTargetID	no	
NITFLayerTargetID	no	
NMEADocumentText	no	
NOLACode	no	
NameSuffix	no	
NameSuffix	no	
NameValue	-	--> <a href="#">MXF Tags</a>
NamespacePrefix	no	
NamespacePrefix	no	
NamespacePrefixes	no	
NamespacePrefixes	no	
NamespaceURI	no	
NamespaceURI	no	
NamespaceURIs	no	
NamespaceURIs	no	
Nationality	no	
Nationality	no	
NatureOfPersonality	no	
NatureOfPersonality	no	
NetworkLocator	-	--> <a href="#">MXF Tags</a>
NextNumberInSequence	no	
NextNumberInSequence	no	
NielsenStreamIdentifier	no	
NominationCategory	no	
NominationCategory	no	
Non-USClassifyingCountryCode	no	
ObjectAreaDimension	no	
ObjectClass?	no	
ObjectClassDefinition?	no	
ObjectCountryCode	no	
ObjectCountryCode	no	
ObjectCountryCodeMethod	no	
ObjectDescription	no	
ObjectDescription	no	
ObjectDescriptionCode	no	
ObjectHorizontalAverageDimension	no	
ObjectIdentificationConfidence	no	
ObjectKind	no	
ObjectKind	no	

ObjectModelVersion	no	
ObjectName	no	
ObjectRegionCode	no	
ObjectRegionName	no	
ObjectVerticalAverageDimension	no	
ObliquityAngle	no	
OffsetToIndexTable	no	
OffsetToIndexTable	no	
OffsetToMetadata	no	
OffsetToMetadata	no	
OpenBodyPartition?	no	
OpenCompleteBodyPartition?	no	
OpenCompleteHeader	-	--> <a href="#">MXF Header Tags</a>
OpenHeader	-	--> <a href="#">MXF Header Tags</a>
OperatingSystemInterpretations	no	
OperationCategory?	no	
OperationDataDefinition?	no	
OperationDefinitionID?	no	
OperationDefinitions?	no	
OperationParameters?	no	
OperationalPatternUL?	no	
OpticalDiscNumber	no	
OpticalTestParameterName	no	
OpticalTestResult	no	
OpticalTestResult	no	
OpticalTrack	no	
Organisation	-	--> <a href="#">MXF Tags</a>
OrganizationCode	no	
OrganizationCode	no	
OrganizationID	no	
OrganizationID	no	
OrganizationIDKind	no	
OrganizationIDKind	no	
OrganizationKind	no	
OrganizationKind	no	
OrganizationMainName	no	
OrganizationMainName	no	
OrganizationSets?	no	
OrganizationalProgramNumber	no	
OrganizationalProgramNumber	no	
Origin	no	
OriginCode	no	
OriginalExtendedSpokenPrimaryLanguageCode	no	
OriginalProducerName	no	
OriginalProducerName	no	
OriginalTitle	no	
OriginalTitle	no	
OtherGivenNames	no	
OtherGivenNames	no	
OtherValues	no	
PII?	no	
POSIXMicroseconds	no	
PURL	no	

PackLength	no	
PackageAttributes?	no	
PackagID?	no	
PackageKLVData?	no	
PackageLastModifyDate	no	
PackageMarkInPosition	no	
PackageMarkOutPosition	no	
PackageMarker?	no	
PackageName	no	
PackageName	no	
PackageTimelineMarkerRef?	no	
PackageTracks?	no	
PackageUsageKind?	no	
PackageUserComments?	no	
Packages?	no	
PaddingBits	no	
Palette?	no	
PaletteLayout?	no	
PanScanInformation?	no	
ParameterDataType?	no	
ParameterDefinition?	no	
ParameterDefinitions?	no	
Parameters?	no	
ParentClass?	no	
Participant	-	--> <a href="#">MXF Tags</a>
ParticipantID?	no	
ParticipantOrganizationSets?	no	
PartitionMetadata?	no	
Password	no	
Password	no	
PayeeAccountName	no	
PayeeAccountNumber	no	
PayeeAccountSortCode	no	
PayerAccountName	no	
PayerAccountNumber	no	
PayerAccountSortCode	no	
PaymentDueDateTime	no	
PaymentsSets?	no	
PeakChannelCount	no	
PeakEnvelope	no	
PeakEnvelopeBlockSize	no	
PeakEnvelopeData?	no	
PeakEnvelopeData?	no	
PeakEnvelopeFormat	no	
PeakEnvelopeTimestamp	no	
PeakEnvelopeVersion	no	
PeakFrameCount	no	
PeakOfPeaksPosition	no	
PerceivedDisplayFormatCode	no	
PerceivedDisplayFormatName	no	
PerforationsPerFrame	no	
PerforationsPerFrame	no	
Person	-	--> <a href="#">MXF Tags</a>

PersonDescription	no	
PersonDescription	no	
PersonOrganizationSets?	no	
PersonSets?	no	
PhysicalInstanceKind	no	
PhysicalMediaLength?	no	
PhysicalMediaLocation	no	
PictureComponentSizing?	no	
PictureDisplayRate	no	
PictureFormat	-	--> <a href="#">MXF Tags</a>
PixelLayout?	no	
PlaceKeyword	no	
PlaceKeyword	no	
PlaceName	no	
PlaceName	no	
PlaintextOffset	no	
PlatformDesignation	no	
PlatformDesignation	no	
PlatformHeadingAngle	no	
PlatformModel	no	
PlatformPitchAngle	no	
PlatformRollAngle	no	
PlatformSerialNumber	no	
Plug-InAPIID?	no	
Plug-InCategoryID?	no	
Plug-InDefinitions?	no	
Plug-InEngineID?	no	
Plug-InLocatorSet?	no	
Plug-InPlatformID?	no	
PointsPerPeakValue	no	
PolarCharacteristic	no	
PosTableArray?	no	
PositionInSequence	no	
PositionTable?	no	
PositionTableCount	no	
PositionTableIndexing	no	
PositionWithinViewportImageXCoordinate	no	
PositionWithinViewportImageYCoordinate	no	
PostCodeForPostbox	no	
PostalCode	no	
PostalCode	no	
PostalTown	no	
PostalTown	no	
PostboxNumber	no	
Preface	-	--> <a href="#">MXF Tags</a>
PresentationAspectRatio	no	
PresentationGammaEquation	no	
PresentationGammaEquation?	no	
PresenterName	no	
PreviousNumberInSequence	no	
PreviousNumberInSequence	no	
PreviousRepeatNumber	no	
PrimaryExtendedSpokenLanguageCode	no	

PrimaryOriginalLanguageCode	no	
PrimaryPackage?	no	
PrimarySpokenLanguageCode	no	
Primer	-	--> <a href="#">MXF Tags</a>
Processing	-	--> <a href="#">MXF Tags</a>
ProcessingSet?	no	
ProducerName	no	
ProductFormat	no	
ProductFormat	no	
ProductionFramework	-	--> <a href="#">MXF Tags</a>
ProductionOrganizationRole	no	
ProductionOrganizationRole	no	
ProductionScriptReference	no	
ProductionScriptReference	no	
ProductionSettingPeriodSets?	no	
ProfileAndLevel	no	
ProgramAwardName	no	
ProgramCommercialMaterialReference	no	
ProgramIdentifier	no	
ProgramIdentifierString	no	
ProgramKind	no	
ProgramMaterialClassificationCode	no	
ProgramNumber	no	
ProgramSupportMaterialReference	no	
ProgrammingGroupKind	no	
ProgrammingGroupKind	no	
ProgrammingGroupTitle	no	
ProgrammingGroupTitle	no	
ProjectName	no	
ProjectName	no	
ProjectNumber	no	
ProjectSet?	no	
Projects	-	--> <a href="#">MXF Tags</a>
Properties?	no	
PropertyType?	no	
Publication	-	--> <a href="#">MXF Tags</a>
PublicationSets?	no	
PublishingMediumName	no	
PublishingMediumName	no	
PublishingOrganizationName	no	
PublishingOrganizationName	no	
PublishingRegionName	no	
PublishingRegionName	no	
PublishingServiceName	no	
PublishingServiceName	no	
PulldownFieldDominance	no	
PulldownSequence?	no	
PurchaserAccountName	no	
PurchaserAccountName	no	
PurchaserAccountNumber	no	
PurchaserIdentificationKind	no	
PurchaserIdentificationValue	no	
PurchasingDepartment	no	

PurchasingOrganizationName	no	
Purpose	no	
Purpose	no	
QltyBasicData	no	
QltyBasicData	no	
QltyCueSheet	no	
QltyCueSheet	no	
QltyEndOfModulation	no	
QltyEndOfModulation	no	
QltyOperatorComment	no	
QltyOperatorComment	no	
QltyQualityEvent	no	
QltyQualityEvent	no	
QltyQualityParameter	no	
QltyQualityParameter	no	
QltyStartOfModulation	no	
QltyStartOfModulation	no	
QualityFlag	no	
QuantizationDefault?	no	
RGBAEssenceDescriptor	-	--> <a href="#">MXF Tags</a>
RIFFChunkData?	no	
RIFFChunkID	no	
RIFFChunkLength	no	
RP217DataStreamPID	no	
RP217VideoStreamPID	no	
RandomIndexMetadata?	no	
RandomIndexMetadataV10?	no	
Rating	no	
RecordedFormat	no	
RecordedFormat	no	
RecordedTrackNumber	no	
RecordingLabelName	no	
RecordingLabelName	no	
ReelOrRollNumber	no	
RegionCode	no	
RegionName	no	
RegionName	no	
RegisterAction	no	
RegisterAdministrationArray?	no	
RegisterAdministrationNotes	no	
RegisterAdministrationObject?	no	
RegisterApproverName	no	
RegisterChildEntryArray?	no	
RegisterCreationTime	no	
RegisterEditorName	no	
RegisterEntryAdministrationObject?	no	
RegisterEntryArray?	no	
RegisterEntryStatus?	no	
RegisterItemDefiningDocumentName	no	
RegisterItemDefinition	no	
RegisterItemHierarchyLevel	no	
RegisterItemIntroductionVersion	no	
RegisterItemName	no	

RegisterItemNotes	no	
RegisterItemOriginatorName	no	
RegisterItemStatusChangeDateTime	no	
RegisterItemSymbol?	no	
RegisterItemUL?	no	
RegisterKind?	no	
RegisterReleaseDateTime	no	
RegisterStatusKind?	no	
RegisterUserName	no	
RegisterUserTime	no	
RegisterVersion	no	
RegistrantName	no	
RelatedMaterialDescription	no	
RelatedMaterialDescription	no	
RelatedMaterialLocators?	no	
RelativePositionInSequenceName	no	
RelativePositionInSequenceOffset	no	
RelativeScope	no	
RelativeTrack	no	
ReleasableCountryCode	no	
ReleasableCountryCode	no	
RenamedType?	no	
ResourceID?	no	
RestrictionsOnUse	no	
ReversePlay	no	
ReversedByteOrder	no	
Rights	-	--> <a href="#">MXF Tags</a>
RightsComment	no	
RightsComment	no	
RightsConditionDescription	no	
RightsConditionDescription	no	
RightsManagementAuthority	no	
RightsManagementAuthority	no	
RightsSets?	no	
RightsStartTime	no	
RightsStopTime	no	
Rightsholder	no	
Rightsholder	no	
RoleName	no	
RoleName	no	
RoomNumber	no	
RoomNumber	no	
RoomOrSuiteName	no	
RoomOrSuiteName	no	
RootFormatVersion	no	
RootMetaDictionary?	no	
RootObjectDirectory?	no	
RootPreface?	no	
RoundedCaptureFilmFrameRate	no	
RoundedTimecodeTimebase	no	
RoundingLaw	no	
RoundingMethodCode	no	
RoyaltyIncomeInformation	no	

RoyaltyPaymentInformation	no	
Rsiz	no	
SDKVersion	no	
SICI?	no	
SMPTE12MUserDateTime?	no	
SMPTE309MUserDateTime?	no	
SMPTE337MDataStreamNumber	no	
SMPTEUL?	no	
SalesContractNumber	no	
Salutation	no	
Salutation	no	
SampleIndex?	no	
SampleRate	no	
SampledHeight	no	
SampledWidth	no	
SampledXOffset	no	
SampledYOffset	no	
SamplingHierarchyCode	no	
SamplingStructureCode	no	
ScanningDirection	no	
SceneFramework	-	--> <a href="#">MXF Tags</a>
SceneNumber	no	
SceneNumber	no	
SceneSettingPeriodSets?	no	
SceneShotSets?	no	
ScramblingKeyKind	no	
ScramblingKeyValue	no	
Scripting	-	--> <a href="#">MXF Tags</a>
ScriptingKind	no	
ScriptingKind	no	
ScriptingLocators?	no	
ScriptingSets?	no	
ScriptingText	no	
ScriptingText	no	
SeasonEpisodeNumber	no	
SeasonEpisodeTitle	no	
SecondGivenName	no	
SecondGivenName	no	
SecondaryExtendedSpokenLanguageCode	no	
SecondaryOriginalExtendedSpokenLanguageCode	no	
SecondaryOriginalLanguageCode	no	
SecondarySpokenLanguageCode	no	
SecondaryTitle	no	
SecondaryTitle	no	
SectorSize	no	
SecurityClassification	no	
SecurityClassification	no	
SecurityClassificationCaveats	no	
SecurityClassificationCaveats	no	
Selected?	no	
SensorMode	no	
SensorRollAngle	no	
SensorSize	no	

SensorType	no	
SensorTypeCode	no	
Sequence?	no	
SequenceOffset	no	
SequenceSet	-	--> <a href="#">MXF Tags</a>
SeriesNumber	no	
SeriesNumber	no	
SeriesinaSeriesGroupCount	no	
SetElementType?	no	
SettingCityName	no	
SettingCityName	no	
SettingCountryCode	no	
SettingCountryName	no	
SettingCountryName	no	
SettingDateTime	no	
SettingDescription	no	
SettingDescription	no	
SettingPeriod	-	--> <a href="#">MXF Tags</a>
SettingPeriodDescription	no	
SettingPeriodDescription	no	
SettingPostalCode	no	
SettingPostalCode	no	
SettingRegionCode	no	
SettingRegionName	no	
SettingRoomNumber	no	
SettingRoomNumber	no	
SettingStateOrProvinceOrCountyName	no	
SettingStateOrProvinceOrCountyName	no	
SettingStreetName	no	
SettingStreetName	no	
SettingStreetNumberOrBuildingName	no	
SettingStreetNumberOrBuildingName	no	
SettingTownName	no	
SettingTownName	no	
ShimName	no	
ShootingCountryCode	no	
ShootingRegionCode	no	
ShootingRegionName	no	
Shot	-	--> <a href="#">MXF Tags</a>
ShotComment	no	
ShotComment	no	
ShotCommentKind	no	
ShotCommentKind	no	
ShotCueWordsSet?	no	
ShotDescription	no	
ShotDescription	no	
ShotDuration	no	
ShotList	no	
ShotLocationSets?	no	
ShotParticipantRoleSets?	no	
ShotPersonSets?	no	
ShotStartPosition	no	
ShotTrackIDs	no	

SideNumber	no	
Signal-to-NoiseRatio	no	
SignalFormCode	no	
SignalStandard	no	
SignalStandard	no	
SignatureTuneFlag	no	
SimpleFlaggingCount	no	
SingleSequenceFlag	no	
Size	no	
SlantRange	no	
SlateInformation	no	
SlateTitle	no	
SliceCount	no	
SliceNumber	no	
SliceOffsetList?	no	
Software-OnlySupportFlag	no	
SourceClip?	no	
SourceContainerFormat?	no	
SourceImageCenterXCoordinate	no	
SourceImageCenterYCoordinate	no	
SourceIndex?	no	
SourceKey?	no	
SourceLength	no	
SourceOrganization	no	
SourceOrganization	no	
SourcePackage	-	--> <a href="#">MXF Tags</a>
SourcePackageID?	no	
SourceSpecies?	no	
SourceTrackID	no	
SourceTrackIDs	no	
SourceValue?	no	
SpeedChangeEffectFlag	no	
SplicingMetadata?	no	
StartTimeRelativeToReference	no	
StartTimeRelativeToReference	no	
StartTimecode	no	
StartTimecodeRelativeToReference?	no	
StateOrProvinceOrCountyName	no	
StateOrProvinceOrCountyName	no	
StaticTrack	-	--> <a href="#">MXF Tags</a>
StillFrame?	no	
StorageDeviceKind	no	
StorageKind	no	
StorageKind	no	
StorageKindCode	no	
StorageMediaID	no	
StorageMediaKind	no	
StoredANCLineNumber	no	
StoredF2Offset	no	
StoredVBILineNumber	no	
StratumKind	no	
StreamData?	no	
StreamElementType?	no	

StreamID	no	
StreamOffset	no	
StreamPositionIndicator	no	
StreamPositionIndicator	no	
StreamPositionIndicator	no	
StreetName	no	
StreetName	no	
StreetNumber	no	
StreetNumber	no	
StringElementType?	no	
StructuralComponent	-	--> <a href="#">MXF Tags</a>
Sub-descriptors?	no	
SubDescriptor?	no	
SubDescriptors?	no	
SubjectAbsoluteHeading	no	
SubjectAbsoluteSpeed	no	
SubjectDistance	no	
SubjectName	no	
SubjectName	no	
SubjectRelativeHeading	no	
SubjectRelativePositionalAccuracy	no	
SubjectRelativeSpeed	no	
SubtitleDatafileFlag	no	
SubtitlesPresent	no	
SupplementaryName	no	
SupplementaryName	no	
SupplementaryOrganizationName	no	
SupplementaryOrganizationName	no	
SupplierAccountName	no	
SupplierAccountName	no	
SupplierAccountNumber	no	
SupplierIdentificationKind	no	
SupplierIdentificationValue	no	
SupplyContractNumber	no	
SupplyingDepartmentName	no	
SupportOrAdministrationStatus	no	
SupportOrAdministrationStatus	no	
SupportOrganizationRole	no	
SupportOrganizationRole	no	
SystemNameOrNumber	no	
TIFFSummary?	no	
TaggedValueDefinitions?	no	
TaggedValueParentProperties?	no	
TakeNumber	no	
TapeBatchNumber	no	
TapeBatchNumber	no	
TapeCapacity	no	
TapeFormat?	no	
TapeFormulation	no	
TapeFormulation	no	
TapeManufacturer	no	
TapeManufacturer	no	

TapePartitionCapacity	no	
TapeShellKind	no	
TapeShellKind	no	
TapeStock	no	
TapeStock	no	
TargetAudience	no	
TargetAudience	no	
TargetClassOfStrongReference?	no	
TargetClassOfWeakReference?	no	
TargetSet?	no	
TargetWidth	no	
TechnicalValue	no	
TelephoneNumber	no	
TelephoneNumber	no	
TeletextSubtitlesAvailable	no	
TeletextSubtitlesFlag	no	
TemporalOffset	no	
TerminatingFillerData	no	
TextLocator	-	--> <a href="#">MXF Tags</a>
TextlessBlackDuration	no	
TextlessMaterial	no	
TextualDescriptionKind	no	
TextualDescriptionKind	no	
Theme	no	
Theme	no	
ThemeMusicFlag	no	
ThesaurusName	no	
ThesaurusName	no	
ThirdGivenName	no	
ThirdGivenName	no	
TimePeriodName	no	
TimePeriodName	no	
TimeSystemOffset	no	
TimeUnitKind	no	
TimebaseReferenceTrackID	no	
TimecodeArray?	no	
TimecodeComponent	-	--> <a href="#">MXF Tags</a>
TimecodeCreationDateTime?	no	
TimecodeEndDateTime?	no	
TimecodeEventEndDateTime?	no	
TimecodeEventStartTime?	no	
TimecodeKind	no	
TimecodeLastModifyDate?	no	
TimecodeModifyDate?	no	
TimecodeSourceKind	no	
TimecodeStartTime?	no	
TimecodeStreamData?	no	
TimecodeTimebase	no	
TimecodeTimebase	no	
TimecodeUserBitsFlag	no	
TimepointValue?	no	
TimingBiasCorrection	no	
TimingBiasCorrectionDescription	no	

TitleKind	no	
TitleKind	no	
Titles	-	--> <a href="#">MXF Tags</a>
TitlesSets?	no	
ToleranceInterpolationMethod?	no	
ToleranceMode?	no	
ToleranceWindow?	no	
ToolkitVersion	no	
TotalCurrencyAmount	no	
TotalEpisodeCount	no	
TotalIncome	no	
TotalLinesperFrame	no	
TotalNumberInSequence	no	
TotalPayment	no	
TotalSamplesperLine	no	
Track	-	--> <a href="#">MXF Tags</a>
TrackID	no	
TrackName	no	
TrackName	no	
TrackNumber	no	
TrackNumberBatch	no	
Tracks?	no	
TrafficID	no	
TrailingLines	no	
TranscriptReference	no	
TranscriptReference	no	
TransferFilmFrameRate	no	
TransitionEffect?	no	
TransmissionID	no	
TransportStreamID	no	
TripletSequenceNumber	no	
TypeDefinitionElementValueList	no	
TypeDefinitionExtendibleElementValues?	no	
TypeDefinitions?	no	
UCSEncoding	no	
UPID?	no	
UPN?	no	
URL	no	
URN	no	
UTCEndDateTime	no	
UTCEventEndDateTime	no	
UTCEventEndDateTime	no	
UTCEventStartTime	no	
UTCEventStartTime	no	
UTCInstantDateTime	no	
UTCInstantDateTime	no	
UTCLastModifyDate	no	
UTCLastModifyDate	no	
UTCStartDateTime	no	
UTCStartDateTime	no	

UTCUserDateTime	no	
UniformDataFlag	no	
UnknownBWFChunks?	no	
UpstreamAudioCompressionAlgorithm	no	
UseDefaultValue	no	
UserDataMode?	no	
UserName	no	
UserName	no	
UserPosition	no	
V10IndexTableSegment?	no	
VBEEndOffset	no	
VBIDataDescriptor	-	--> <a href="#">MXF Tags</a>
VBILineCount	no	
VBIPayloadByteArray	no	
VBIPayloadSampleCoding	no	
VBIPayloadSampleCount	no	
VBIWrappingType	no	
VC-1AverageBitrate	no	
VC-1BPictureCount	no	
VC-1CodedContentType	no	
VC-1IdenticalGOP	no	
VC-1InitializationMetadata?	no	
VC-1Level	no	
VC-1MaximumBitrate	no	
VC-1MaximumGOP	no	
VC-1Profile	no	
VC-1SingleSequence	no	
Value?	no	
VariableArrayElementType?	no	
VersionNumber	no	
VersionNumberString	no	
VersionNumberString	no	
VersionTitle	no	
VersionTitle	no	
VerticalActionSafePercentage	no	
VerticalDatum	no	
VerticalGraphicsSafePercentage	no	
VerticalSub-sampling	no	
VideoAndFilmFrameRelationship	no	
VideoAverageBitrate	no	
VideoClipDuration	no	
VideoCodingSchemeID	no	
VideoColorKind	no	
VideoCompressionAlgorithm	no	
VideoDeviceKind	no	
VideoDeviceParameterName	no	
VideoDeviceParameterSetting	no	
VideoFixedBitrate	no	
VideoIndexArray?	no	
VideoLineMap	no	
VideoNoiseReductionAlgorithm	no	
VideoOrImageCompressionAlgorithm	no	
VideoPayloadIdentifier	no	

VideoPayloadIdentifier2002	no	
VideoTestParameter	no	
VideoTestResult	no	
VideoWatermarkKind	no	
ViewportAspectRatio	no	
ViewportHeight	no	
ViewportImageCenterCCoordinate	no	
ViewportImageCenterYCoordinate	no	
ViewportWidth	no	
VoiceTalentName	no	
WAVESummary?	no	
WaveAudioDescriptor	-	--> <a href="#">MXF Tags</a>
Weighting	no	
WhiteReferenceLevel	no	
Work-in-ProgressFlag	no	
WorkingTitle	no	
WorkingTitle	no	
XMDocumentText?	no	
XMDocumentText	no	
XMDocumentText	no	
XMDocumentText?	no	
XOsiz	no	
XTOsiz	no	
XTsiz	no	
Xsiz	no	
YOsiz	no	
YTOSiz	no	
YTsiz	no	
Ysiz	no	

## MXF Header Tags

Index1	Tag Name	Writable	Values / Notes
0	MXFVersion	no	
24	FooterPosition	no	
32	HeaderSize	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Apr 1, 2021

[-- ExifTool Tag Names](#)

# MacOS Tags

On MacOS systems, there are additional MDItem and XAttr Finder tags that may be extracted. These tags are not extracted by default -- they must be specifically requested or enabled via an API option. (Except when reading MacOS ".\_" files directly, see below.)

The tables below list some of the tags that may be extracted, but ExifTool will extract all available information even for tags not listed.

Tags in these tables are referred to as "pseudo" tags because their information is not stored in the file itself. As such, **Writable** tags in these tables may be changed without having to rewrite the file.

Note that on some filesystems, MacOS creates sidecar files with names that begin with ".\_". ExifTool will read these files if specified, and extract the information listed in the following table without the need for extra options, but these files are not writable directly.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	RSRC	-	--> <a href="#">RSRC Tags</a>
0x0009	ATTR	-	--> <a href="#">MacOS XAttr Tags</a>

## MacOS XAttr Tags

XAttr tags are extracted using the "xattr" utility. They are extracted if any "XAttr\*" tag or the MacOS group is specifically requested, or by setting the API [XAttrTags](#) option to 1 or the API [RequestAll](#) option to 2 or higher. And they are extracted by default from MacOS ".\_" files when reading these files directly.

Tag Name	Writable	Values / Notes
XAttrAppleMailDateReceived	no	
XAttrAppleMailDateSent	no	
XAttrAppleMailIsRemoteAttachment	no	
XAttrFinderInfo	no	
XAttrLastUsedDate	no	
XAttrMDItemDownloadedDate	no	
XAttrMDItemFinderComment	no	
XAttrMDItemWhereFroms	yes!	(information about where the file came from. May only be deleted when writing)
XAttrMDLabel	no	
XAttrQuarantine	yes!	(quarantine information for files downloaded from the internet. May only be deleted when writing)
XAttrResourceFork	no	

## MacOS MDItem Tags

MDItem tags are extracted using the "mdls" utility. They are extracted if any "MDItem\*" tag or the MacOS group is specifically requested, or by setting the API [MDItemTags](#) option to 1 or the API [RequestAll](#) option to 2 or higher. Note that these tags do not necessarily reflect the current metadata of a file -- it may take some time for the MacOS mdworker daemon to index the file after a metadata change.

Tag Name	Writable	Values / Notes
AppleMailDateReceived	no	
AppleMailDateSent	no	
AppleMailFlagged	no	
AppleMailIsRemoteAttachment	no	
AppleMailMessageID	no	
AppleMailPriority	no	
AppleMailRead	no	
AppleMailRepliedTo	no	
MDItemAccountHandles	no	
MDItemAccountIdentifier	no	
MDItemAcquisitionMake	no	

MDItemAcquisitionModel	no	
MDItemAltitude	no	
MDItemAperture	no	
MDItemAudioBitRate	no	
MDItemAudioChannelCount	no	
MDItemAuthorEmailAddresses	no	
MDItemAuthors	no	
MDItemBitsPerSample	no	
MDItemBundleIdentifier	no	
MDItemCity	no	
MDItemCodecs	no	
MDItemColorSpace	no	
MDItemComment	no	
MDItemContentCreationDate	no	
MDItemContentCreationDateRanking	no	
MDItemContentCreationDate_Ranking	no	
MDItemContentModificationDate	no	
MDItemContentType	no	
MDItemContentTypeTree	no	
MDItemContributors	no	
MDItemCopyright	no	
MDItemCountry	no	
MDItemCreator	no	
MDItemDateAdded	no	
MDItemDateAdded_Ranking	no	
MDItemDescription	no	
MDItemDisplayName	no	
MDItemDownloadedDate	no	
MDItemDurationSeconds	no	
MDItemEXIFGPSVersion	no	
MDItemEXIFVersion	no	
MDItemEmailConversationID	no	
MDItemEncodingApplications	no	
MDItemExposureMode	no	
MDItemExposureProgram	no	
MDItemExposureTimeSeconds	no	
MDItemFNumber	no	
MDItemFSContentChangeDate	no	
MDItemFSCreationDate	yes!	(file creation date. Requires "setfile" for writing. Note that when reading, it may take a few seconds after writing a file before this value reflects the change. However, <a href="#">FileCreateDate</a> is updated immediately)
MDItemFSCreatorCode	no	
MDItemFSFinderFlags	no	
MDItemFSHasCustomIcon	no	
MDItemFSInvisible	no	
MDItemFSIsExtensionHidden	no	
MDItemFSIsStationery	no	
MDItemFSLabel	yes!	0 = 0 (none)    4 = 4 (Blue) 1 = 1 (Gray)    5 = 5 (Yellow) 2 = 2 (Green)    6 = 6 (Red) 3 = 3 (Purple)    7 = 7 (Orange)
MDItemFSName	no	
MDItemFSNodeCount	no	
MDItemFSOwnerGroupID	no	

MDItemFSOwnerUserID	no	
MDItemFSSize	no	
MDItemFSTypeCode	no	
MDItemFinderComment	yes!	
MDItemFlashOnOff	no	
MDItemFocalLength	no	
MDItemGPSDateStamp	no	
MDItemGPSStatus	no	
MDItemGPSTrack	no	
MDItemHasAlphaChannel	no	
MDItemISOSpeed	no	
MDItemIdentifier	no	
MDItemImageDirection	no	
MDItemInterestingDateRanking	no	
MDItemInterestingDate_Ranking	no	
MDItemIsApplicationManaged	no	
MDItemIsExistingThread	no	
MDItemIsLikelyJunk	no	
MDItemKeywords	no	
MDItemKind	no	
MDItemLastUsedDate	no	
MDItemLastUsedDate_Ranking	no	
MDItemLatitude	no	
MDItemLensModel	no	
MDItemLogicalSize	no	
MDItemLongitude	no	
MDItemMailDateReceived_Ranking	no	
MDItemMailboxes	no	
MDItemMediaTypes	no	
MDItemNumberOfPages	no	
MDItemOrientation	no	
MDItemOriginApplicationIdentifier	no	
MDItemOriginMessageID	no	
MDItemOriginSenderDisplayName	no	
MDItemOriginSenderHandle	no	
MDItemOriginSubject	no	
MDItemPageHeight	no	
MDItemPageWidth	no	
MDItemPhysicalSize	no	
MDItemPixelCount	no	
MDItemPixelHeight	no	
MDItemPixelWidth	no	
MDItemPrimaryRecipientEmailAddresses	no	
MDItemProfileName	no	
MDItemRecipients	no	
MDItemRedEyeOnOff	no	
MDItemResolutionHeightDPI	no	
MDItemResolutionWidthDPI	no	
MDItemSecurityMethod	no	
MDItemSpeed	no	
MDItemStateOrProvince	no	
MDItemStreamable	no	
MDItemSubject	no	

MDItemTimestamp	no	
MDItemTitle	no	
MDItemTotalBitRate	no	
MDItemUseCount	no	
MDItemUsedDates	no	
MDItemUserDownloadedDate	no	
MDItemUserDownloadedUserHandle	no	
MDItemUserSharedReceivedDate	no	
MDItemUserSharedReceivedRecipient	no	
MDItemUserSharedReceivedRecipientHandle	no	
MDItemUserSharedReceivedSender	no	
MDItemUserSharedReceivedSenderHandle	no	
MDItemUserSharedReceivedTransport	no	
MDItemUserTags	yes!+	(requires "tag" utility for writing -- install with "brew install tag". Note that user tags may not contain a comma, and that duplicate user tags will not be written)
MDItemVersion	no	
MDItemVideoBitRate	no	
MDItemWhereFroms	no	
MDItemWhiteBalance	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Feb 16, 2024*

[-- ExifTool Tag Names](#)

# Matroska Tags

The following tags are extracted from Matroska multimedia container files. This container format is used by file types such as MKA, MKV, MKS and WEBM. For speed, by default ExifTool extracts tags only up to the first Cluster unless a Seek element specifies the position of a Tags element after this. However, the [Verbose](#) (-v) and [Unknown](#) = 2 (-U) options force processing of Cluster data, and the [ExtractEmbedded](#) (-ee) option skips over Clusters to read subsequent tags. See <http://www.matroska.org/technical/specs/index.html> for the official Matroska specification.

Tag ID	Tag Name	Writable	Values / Notes	
0x0000	ChapterDisplay	-	<a href="#">--&gt; Matroska Tags</a>	
0x0003	TrackType	no	0x1 = Video 0x2 = Audio 0x3 = Complex 0x10 = Logo	0x11 = Subtitle 0x12 = Buttons 0x20 = Control
0x0005	ChapterString	no		
0x0006	VideoCodecID AudioCodecID CodecID	no no no		
0x0008	TrackDefault	no	0 = No 1 = Yes	
0x0009	ChapterTrackNumber?	no		
0x000e	Slices	-	<a href="#">--&gt; Matroska Tags</a>	
0x000f	ChapterTrack	-	<a href="#">--&gt; Matroska Tags</a>	
0x0011	ChapterTimeStart	no		
0x0012	ChapterTimeEnd	no		
0x0016	CueRefTime?	no		
0x0017	CueRefCluster?	no		
0x0018	ChapterFlagHidden?	no		
0x001a	VideoScanType	no	0 = Undetermined 1 = Interlaced 2 = Progressive	
0x001b	BlockDuration?	no		
0x001c	TrackLacing?	no	0 = No 1 = Yes	
0x001f	AudioChannels	no		
0x0020	BlockGroup	-	<a href="#">--&gt; Matroska Tags</a>	
0x0021	Block?	no		
0x0022	BlockVirtual?	no		
0x0023	SimpleBlock?	no		
0x0024	CodecState?	no		
0x0025	BlockAdditional?	no		
0x0026	BlockMore	-	<a href="#">--&gt; Matroska Tags</a>	
0x0027	Position	no		
0x002a	CodecDecodeAll	no	0 = No 1 = Yes	
0x002b	PrevSize	no		
0x002e	TrackEntry	-	<a href="#">--&gt; Matroska Tags</a>	
0x002f	EncryptedBlock?	no		
0x0030	ImageWidth	no		
0x0033	CueTime?	no		
0x0035	AudioSampleRate	no		
0x0036	ChapterAtom	-	<a href="#">--&gt; Matroska Tags</a>	
0x0037	CueTrackPositions	-	<a href="#">--&gt; Matroska Tags</a>	
0x0039	TrackUsed	no	0 = No 1 = Yes	
0x003a	ImageHeight	no		
0x003b	CuePoint	-	<a href="#">--&gt; Matroska Tags</a>	
0x003f	CRC-32?	no		

0x004b	BlockAdditionalID?	no	
0x004c	LaceNumber?	no	
0x004d	FrameNumber?	no	
0x004e	Delay?	no	
0x004f	ClusterDuration?	no	
0x0057	TrackNumber	no	
0x005b	CueReference	-	--> <a href="#">Matroska Tags</a>
0x0060	Video	-	--> <a href="#">Matroska Tags</a>
0x0061	Audio	-	--> <a href="#">Matroska Tags</a>
0x0067	TimeCode?	no	
0x0068	TimeSlice	-	--> <a href="#">Matroska Tags</a>
0x006a	CueCodecState?	no	
0x006b	CueRefCodecState?	no	
0x006c	Void?	no	
0x006e	BlockAddID?	no	
0x0071	CueClusterPosition?	no	
0x0077	CueTrack?	no	
0x007a	ReferencePriority?	no	
0x007b	ReferenceBlock?	no	
0x007d	ReferenceVirtual?	no	
0x0254	ContentCompressionAlgorithm	no	0 = zlib 1 = bzlib 2 = lzo1x 3 = Header Stripping
0x0255	ContentCompressionSettings?	no	
0x0282	DocType	no	
0x0285	DocTypeReadVersion	no	
0x0286	EBMLVersion	no	
0x0287	DocTypeVersion	no	
0x02f2	EBMLMaxIDLength?	no	
0x02f3	EBMLMaxSizeLength?	no	
0x02f7	EBMLReadVersion	no	
0x037c	ChapterLanguage	no	
0x037e	ChapterCountry	no	
0x0444	SegmentFamily?	no	
0x0461	DateTimeOriginal	no	
0x047a	TagLanguageBCP47	no	
0x0484	TagDefault	no	0 = No 1 = Yes
0x0485	TagBinary	no	
0x0487	TagString	no	
0x0489	Duration	no	
0x050d	ChapterProcessPrivate?	no	
0x0598	ChapterFlagEnabled?	no	
0x05a3	TagName	no	
0x05b9	EditionEntry	-	--> <a href="#">Matroska Tags</a>
0x05bc	EditionUID?	no	
0x05bd	EditionFlagHidden?	no	
0x05db	EditionFlagDefault?	no	
0x05dd	EditionFlagOrdered?	no	
0x065c	AttachedFileData	no	
0x0660	AttachedFileMIMEType	no	
0x066e	AttachedFileName	no	
0x0675	AttachedFileReferral?	no	
0x067e	AttachedFileDescription	no	

0x06ae	AttachedFileUID	no	
0x07e1	ContentEncryptionAlgorithm	no	0 = Not Encrypted 1 = DES 2 = 3DES 3 = Twofish 4 = Blowfish 5 = AES
0x07e2	ContentEncryptionKeyID?	no	
0x07e3	ContentSignature?	no	
0x07e4	ContentSignatureKeyID?	no	
0x07e5	ContentSignatureAlgorithm	no	0 = Not Signed 1 = RSA
0x07e6	ContentSignatureHashAlgorithm	no	0 = Not Signed 1 = SHA1-160 2 = MD5
0x0d80	MuxingApp	no	
0x0dbb	Seek	-	--> <a href="#">Matroska Tags</a>
0x1031	ContentEncodingOrder?	no	
0x1032	ContentEncodingScope?	no	
0x1033	ContentEncodingType	no	0 = Compression 1 = Encryption
0x1034	ContentCompression	-	--> <a href="#">Matroska Tags</a>
0x1035	ContentEncryption	-	--> <a href="#">Matroska Tags</a>
0x135f	CueRefNumber?	no	
0x136e	TrackName	no	
0x1378	CueBlockNumber?	no	
0x137f	TrackOffset?	no	
0x13ab	SeekID?	no	
0x13ac	SeekPosition?	no	
0x13b8	Stereo3DMode	no	
0x14aa	CropBottom	no	
0x14b0	DisplayWidth	no	
0x14b2	DisplayUnit	no	0 = Pixels 1 = cm 2 = inches 3 = Display Aspect Ratio 4 = Unknown
0x14b3	AspectRatioType	no	0 = Free Resizing 1 = Keep Aspect Ratio 2 = Fixed
0x14ba	DisplayHeight	no	
0x14bb	CropTop	no	
0x14cc	CropLeft	no	
0x14dd	CropRight	no	
0x15aa	TrackForced	no	0 = No 1 = Yes
0x15ee	MaxBlockAdditionID?	no	
0x1741	WritingApp	no	
0x1854	SilentTracks	-	--> <a href="#">Matroska Tags</a>
0x18d7	SilentTrackNumber	no	
0x21a7	AttachedFile	-	--> <a href="#">Matroska Tags</a>
0x2240	ContentEncoding	-	--> <a href="#">Matroska Tags</a>
0x2264	AudioBitsPerSample	no	
0x23a2	CodecPrivate?	no	
0x23c0	Targets	-	--> <a href="#">Matroska Tags</a>
0x23c3	ChapterPhysicalEquivalent	no	10 = Index 20 = Track 30 = Session 40 = Layer 50 = Side 60 = CD / DVD 70 = Set / Package
0x23c4	TagChapterUID	no	
0x23c5	TagTrackUID	no	
0x23c6	TagAttachmentUID	no	

0x23c9	TagEditionUID	no	
0x23ca	TargetType	no	
0x2532	SignedElement?	no	
0x2624	TrackTranslate	-	--> <a href="#">Matroska Tags</a>
0x26a5	TrackTranslateTrackID?	no	
0x26bf	TrackTranslateCodec	no	0 = Matroska Script 1 = DVD Menu
0x26fc	TrackTranslateEditionUID?	no	
0x27c8	SimpleTag	-	--> <a href="#">Matroska Tags</a>
0x28ca	TargetTypeValue	no	
0x2911	ChapterProcessCommand	-	--> <a href="#">Matroska Tags</a>
0x2922	ChapterProcessTime?	no	0 = For Duration of Chapter 1 = Before Chapter 2 = After Chapter
0x2924	ChapterTranslate	-	--> <a href="#">Matroska Tags</a>
0x2933	ChapterProcessData?	no	
0x2944	ChapterProcess	-	--> <a href="#">Matroska Tags</a>
0x2955	ChapterProcessCodecID?	no	0 = Matroska 1 = DVD
0x29a5	ChapterTranslateID?	no	
0x29bf	ChapterTranslateCodec	no	0 = Matroska Script 1 = DVD Menu
0x29fc	ChapterTranslateEditionUID?	no	
0x2d80	ContentEncodings	-	--> <a href="#">Matroska Tags</a>
0x2de7	MinCache?	no	
0x2df8	MaxCache?	no	
0x2e67	ChapterSegmentUID?	no	
0x2ebc	ChapterSegmentEditionUID?	no	
0x2fab	TrackOverlay?	no	
0x3373	Tag	-	--> <a href="#">Matroska Tags</a>
0x3384	SegmentFileName	no	
0x33a4	SegmentUID?	no	
0x33c4	ChapterUID?	no	
0x33c5	TrackUID	no	
0x3446	TrackAttachmentUID	no	
0x35a1	BlockAdditions	-	--> <a href="#">Matroska Tags</a>
0x38b5	OutputAudioSampleRate	no	
0x3ba9	Title	no	
0x3d7b	ChannelPositions?	no	
0x3e5b	SignatureElements	-	--> <a href="#">Matroska Tags</a>
0x3e7b	SignatureElementList	-	--> <a href="#">Matroska Tags</a>
0x3e8a	SignatureAlgo	no	
0x3e9a	SignatureHash	no	
0x3ea5	SignaturePublicKey?	no	
0x3eb5	Signature?	no	
0x7670	Projection	-	--> <a href="#">Matroska Projection Tags</a>
0x2b59c	TrackLanguage	no	
0x2b59d	TrackLanguageETF	no	
0x3314f	TrackTimecodeScale	no	
0x383e3	FrameRate	no	
0x3e383	VideoFrameRate DefaultDuration	no no	
0x58688	VideoCodecName AudioCodecName CodecName	no no no	
0x6b240	CodecDownloadURL	no	

0xad7b1	TimecodeScale	no	
0xeb524	ColorSpace?	no	
0xfb523	Gamma	no	
0x1a9697	CodecSettings	no	
0x1b4040	CodecInfoURL	no	
0x1c83ab	PrevFileName	no	
0x1cb923	PrevUID?	no	
0x1e83bb	NextFileName	no	
0x1eb923	NextUID?	no	
0x43a770	Chapters	-	--> <a href="#">Matroska Tags</a>
0x14d9b74	SeekHead	-	--> <a href="#">Matroska Tags</a>
0x254c367	Tags	-	--> <a href="#">Matroska Tags</a>
0x549a966	Info	-	--> <a href="#">Matroska Tags</a>
0x654ae6b	Tracks	-	--> <a href="#">Matroska Tags</a>
0x8538067	SegmentHeader	-	--> <a href="#">Matroska Tags</a>
0x941a469	Attachments	-	--> <a href="#">Matroska Tags</a>
0xa45dfa3	EBMLHeader	-	--> <a href="#">Matroska Tags</a>
0xb538667	SignatureSlot	-	--> <a href="#">Matroska Tags</a>
0xc53bb6b	Cues	-	--> <a href="#">Matroska Tags</a>
0xf43b675	Cluster	-	--> <a href="#">Matroska Tags</a>
0x5345414c	SEAL	-	--> <a href="#">XMP SEAL Tags</a>

## Matroska Projection Tags

Projection tags defined by the Spherical Video V2 specification. See <https://github.com/google/spatial-media/blob/master/docs/spherical-video-v2-rfc.md> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
0x7671	ProjectionType	no	0 = Rectangular 1 = Equirectangular 2 = Cubemap 3 = Mesh
0x7672	EquirectangularProj	-	--> <a href="#">QuickTime equi Tags</a>
	CubemapProj	-	--> <a href="#">QuickTime cbmp Tags</a>
	ProjectionPrivate	no	
0x7673	ProjectionPoseYaw	no	
0x7674	ProjectionPosePitch	no	
0x7675	ProjectionPoseRoll	no	

## Matroska StdTag Tags

Standardized Matroska tags, stored in a SimpleTag structure (see <https://www.matroska.org/technical/tagging.html>).

Tag ID	Tag Name	Writable	Values / Notes
'ACCOMPANIMENT'	Accompaniment	no	
'ACTOR'	Actor	no	
'ADDRESS'	Address	no	
'ARRANGER'	Arranger	no	
'ARTIST'	Artist	no	
'ART_DIRECTOR'	ArtDirector	no	
'ASSISTANT_DIRECTOR'	AssistantDirector	no	
'BARCODE'	Barcode	no	
'BPM'	BPM	no	
'BPS'	BPS	no	
'CATALOG_NUMBER'	CatalogNumber	no	
'CHARACTER'	Character	no	

'CHOREGRAPHER'	Choreographer	no	
'COMMENT'	Comment	no	
'COMPOSER'	Composer	no	
'COMPOSER_NATIONALITY'	ComposerNationality	no	
'COMPOSITION_LOCATION'	CompositionLocation	no	
'CONDUCTOR'	Conductor	no	
'CONTENT_TYPE'	ContentType	no	
'COPRODUCER'	Coproducer	no	
'COPYRIGHT'	Copyright	no	
'COSTUME_DESIGNER'	CostumeDesigner	no	
'COUNTRY'	Country	no	
'DATE_DIGITIZED'	CreateDate	no	
'DATE_ENCODED'	DateEncoded	no	
'DATE_PURCHASED'	DatePurchased	no	
'DATE_RECORDIED'	DateTimeOriginal	no	
'DATE_RELEASED'	DateReleased	no	
'DATE_TAGGED'	DateTagged	no	
'DATE_WRITTEN'	DateWritten	no	
'DESCRIPTION'	Description	no	
'DIRECTOR'	Director	no	
'DIRECTOR_OF_PHOTOGRAPHY'	DirectorOfPhotography	no	
'DISTRIBUTED_BY'	DistributedBy	no	
'EDITED_BY'	EditedBy	no	
'EMAIL'	Email	no	
'ENCODED_BY'	EncodedBy	no	
'ENCODER'	Encoder	no	
'ENCODER_SETTINGS'	EncoderSettings	no	
'EXECUTIVE_PRODUCER'	ExecutiveProducer	no	
'FAX'	FAX	no	
'FPS'	FPS	no	
'GENRE'	Genre	no	
'IMDB'	IMDB	no	
'INITIAL_KEY'	InitialKey	no	
'INSTRUMENTS'	Instruments	no+	
'ISBN'	ISBN	no	
'ISRC'	ISRC	no	
'KEYWORDS'	Keywords	no+	
'LABEL'	Label	no	
'LABEL_CODE'	LabelCode	no	
'LAW_RATING'	LawRating	no	
'LCCN'	Lccn	no	
'LEAD_PERFORMER'	LeadPerformer	no	
'LICENSE'	License	no	
'LYRICIST'	Lyricist	no	
'LYRICS'	Lyrics	no	
'MASTERED_BY'	MasteredBy	no	
'MCDI'	MCDI	no	
'MEASURE'	Measure	no	
'MIXED_BY'	MixedBy	no	
'MOOD'	Mood	no	
'ORIGINAL'	Original	no	
'ORIGINAL_MEDIA_TYPE'	OriginalMediaType	no	
'PART_NUMBER'	PartNumber	no	

'PART_OFFSET'	PartOffset	no	
'PERIOD'	Period	no	
'PHONE'	Phone	no	
'PLAY_COUNTER'	PlayCounter	no	
'PRODUCER'	Producer	no	
'PRODUCTION_COPYRIGHT'	ProductionCopyright	no	
'PRODUCTION_DESIGNER'	ProductionDesigner	no	
'PRODUCTION_STUDIO'	ProductionStudio	no	
'PUBLISHER'	Publisher	no	
'PURCHASE_CURRENCY'	PurchaseCurrency	no	
'PURCHASE_INFO'	PurchaseInfo	no	
'PURCHASE_ITEM'	PurchaseItem	no	
'PURCHASE_OWNER'	PurchaseOwner	no	
'PURCHASE_PRICE'	PurchasePrice	no	
'RATING'	Rating	no	
'RECORDING_LOCATION'	RecordingLocation	no	
'REMIXED_BY'	RemixedBy	no	
'REPLAYGAIN_GAIN'	ReplaygainGain	no	
'REPLAYGAIN_PEAK'	ReplaygainPeak	no	
'SAMPLE'	Sample	no	
'SCREENPLAY_BY'	ScreenplayBy	no	
'SORT_WITH'	SortWith	no	
'SOUND_ENGINEER'	SoundEngineer	no	
'SPHERICAL-VIDEO'	SphericalVideoXML	-	--> <a href="#">XMP Tags</a>
'SUBJECT'	Subject	no	
'SUBTITLE'	Subtitle	no	
'SUMMARY'	Summary	no	
'SYNOPSIS'	Synopsis	no	
'TERMS_OF_USE'	TermsOfUse	no	
'THANKS_TO'	ThanksTo	no	
'TITLE'	Title	no	
'TMDB'	TMDB	no	
'TOTAL_PARTS'	TotalParts	no	
'TUNING'	Tuning	no	
'TVDB'	TVDB	no	
'URL'	URL	no	
'WRITTEN_BY'	WrittenBy	no	
'spherical-video'	SphericalVideoXML	-	--> <a href="#">XMP Tags</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup  
*Last revised Mar 24, 2025*

[-- ExifTool Tag Names](#)

# Microsoft CodePage Values

Value	CodePage
37	= IBM EBCDIC US-Canada
437	= DOS United States
500	= IBM EBCDIC International
708	= Arabic (ASMO 708)
709	= Arabic (ASMO-449+, BCON V4)
710	= Arabic - Transparent Arabic
720	= DOS Arabic (Transparent ASMO)
737	= DOS Greek (formerly 437G)
775	= DOS Baltic
850	= DOS Latin 1 (Western European)
852	= DOS Latin 2 (Central European)
855	= DOS Cyrillic (primarily Russian)
857	= DOS Turkish
858	= DOS Multilingual Latin 1 with Euro
860	= DOS Portuguese
861	= DOS Icelandic
862	= DOS Hebrew
863	= DOS French Canadian
864	= DOS Arabic
865	= DOS Nordic
866	= DOS Russian (Cyrillic)
869	= DOS Modern Greek
870	= IBM EBCDIC Multilingual/ROECE (Latin 2)
874	= Windows Thai (same as 28605, ISO 8859-15)
875	= IBM EBCDIC Greek Modern
932	= Windows Japanese (Shift-JIS)
936	= Windows Simplified Chinese (PRC, Singapore)
949	= Windows Korean (Unified Hangul Code)
950	= Windows Traditional Chinese (Taiwan)
1026	= IBM EBCDIC Turkish (Latin 5)
1047	= IBM EBCDIC Latin 1/Open System
1140	= IBM EBCDIC US-Canada with Euro
1141	= IBM EBCDIC Germany with Euro
1142	= IBM EBCDIC Denmark-Norway with Euro
1143	= IBM EBCDIC Finland-Sweden with Euro
1144	= IBM EBCDIC Italy with Euro
1145	= IBM EBCDIC Latin America-Spain with Euro
1146	= IBM EBCDIC United Kingdom with Euro
1147	= IBM EBCDIC France with Euro
1148	= IBM EBCDIC International with Euro
1149	= IBM EBCDIC Icelandic with Euro
1200	= Unicode UTF-16, little endian
1201	= Unicode UTF-16, big endian
1250	= Windows Latin 2 (Central European)
1251	= Windows Cyrillic
1252	= Windows Latin 1 (Western European)
1253	= Windows Greek
1254	= Windows Turkish
1255	= Windows Hebrew
1256	= Windows Arabic
1257	= Windows Baltic
1258	= Windows Vietnamese
1361	= Korean (Johab)
10000	= Mac Roman (Western European)
10001	= Mac Japanese
10002	= Mac Traditional Chinese
10003	= Mac Korean
10004	= Mac Arabic
10005	= Mac Hebrew
10006	= Mac Greek
10007	= Mac Cyrillic
10008	= Mac Simplified Chinese
10010	= Mac Romanian
10017	= Mac Ukrainian
10021	= Mac Thai
10029	= Mac Latin 2 (Central European)
10079	= Mac Icelandic
10081	= Mac Turkish
10082	= Mac Croatian
12000	= Unicode UTF-32, little endian

12001 = Unicode UTF-32, big endian  
20000 = CNS Taiwan  
20001 = TCA Taiwan  
20002 = Eten Taiwan  
20003 = IBM5550 Taiwan  
20004 = TeleText Taiwan  
20005 = Wang Taiwan  
20105 = IA5 (IRV International Alphabet No. 5, 7-bit)  
20106 = IA5 German (7-bit)  
20107 = IA5 Swedish (7-bit)  
20108 = IA5 Norwegian (7-bit)  
20127 = US-ASCII (7-bit)  
20261 = T.61  
20269 = ISO 6937 Non-Spacing Accent  
20273 = IBM EBCDIC Germany  
20277 = IBM EBCDIC Denmark-Norway  
20278 = IBM EBCDIC Finland-Sweden  
20280 = IBM EBCDIC Italy  
20284 = IBM EBCDIC Latin America-Spain  
20285 = IBM EBCDIC United Kingdom  
20290 = IBM EBCDIC Japanese Katakana Extended  
20297 = IBM EBCDIC France  
20420 = IBM EBCDIC Arabic  
20423 = IBM EBCDIC Greek  
20424 = IBM EBCDIC Hebrew  
20833 = IBM EBCDIC Korean Extended  
20838 = IBM EBCDIC Thai  
20866 = Russian/Cyrillic (KOI8-R)  
20871 = IBM EBCDIC Icelandic  
20880 = IBM EBCDIC Cyrillic Russian  
20905 = IBM EBCDIC Turkish  
20924 = IBM EBCDIC Latin 1/Open System with Euro  
20932 = Japanese (JIS 0208-1990 and 0121-1990)  
20936 = Simplified Chinese (GB2312)  
20949 = Korean Wansung  
21025 = IBM EBCDIC Cyrillic Serbian-Bulgarian  
21027 = Extended Alpha Lowercase (deprecated)  
21866 = Ukrainian/Cyrillic (KOI8-U)  
28591 = ISO 8859-1 Latin 1 (Western European)  
28592 = ISO 8859-2 (Central European)  
28593 = ISO 8859-3 Latin 3  
28594 = ISO 8859-4 Baltic  
28595 = ISO 8859-5 Cyrillic  
28596 = ISO 8859-6 Arabic  
28597 = ISO 8859-7 Greek  
28598 = ISO 8859-8 Hebrew (Visual)  
28599 = ISO 8859-9 Turkish  
28603 = ISO 8859-13 Estonian  
28605 = ISO 8859-15 Latin 9  
29001 = Europa 3  
38598 = ISO 8859-8 Hebrew (Logical)  
50220 = ISO 2022 Japanese with no halfwidth Katakana (JIS)  
50221 = ISO 2022 Japanese with halfwidth Katakana (JIS-Allow 1 byte Kana)  
50222 = ISO 2022 Japanese JIS X 0201-1989 (JIS-Allow 1 byte Kana - SO/SI)  
50225 = ISO 2022 Korean  
50227 = ISO 2022 Simplified Chinese  
50229 = ISO 2022 Traditional Chinese  
50930 = EBCDIC Japanese (Katakana) Extended  
50931 = EBCDIC US-Canada and Japanese  
50933 = EBCDIC Korean Extended and Korean  
50935 = EBCDIC Simplified Chinese Extended and Simplified Chinese  
50936 = EBCDIC Simplified Chinese  
50937 = EBCDIC US-Canada and Traditional Chinese  
50939 = EBCDIC Japanese (Latin) Extended and Japanese  
51932 = EUC Japanese  
51936 = EUC Simplified Chinese  
51949 = EUC Korean  
51950 = EUC Traditional Chinese  
52936 = HZ-GB2312 Simplified Chinese  
54936 = Windows XP and later: GB18030 Simplified Chinese (4 byte)  
57002 = ISCII Devanagari  
57003 = ISCII Bengali  
57004 = ISCII Tamil  
57005 = ISCII Telugu  
57006 = ISCII Assamese

57007 = ISCII Oriya
57008 = ISCII Kannada
57009 = ISCII Malayalam
57010 = ISCII Gujarati
57011 = ISCII Punjabi
65000 = Unicode (UTF-7)
65001 = Unicode (UTF-8)

## Microsoft XMP Tags

Microsoft Photo 1.0 schema XMP tags. This is likely not a complete list, but represents tags which have been observed in sample images. The actual namespace prefix is "MicrosoftPhoto", but ExifTool shortens this in the family 1 group name.

These tags belong to the ExifTool XMP-microsoft family 1 group.

Tag Name	Writable	Values / Notes
CameraSerialNumber	string	
CreatorAppID	string	
CreatorOpenWithUIOptions	string	
DateAcquired	date	
FlashManufacturer	string	
FlashModel	string	
ItemSubType	string	
LastKeywordIPTC	string+	
LastKeywordXMP	string+	
LensManufacturer	string	
LensModel	string/	
RatingPercent	string	(tag ID is 'Rating'; XMP-xmp:Rating values of 1,2,3,4 and 5 stars correspond to RatingPercent values of 1,25,50,75 and 99 respectively)

## Microsoft MP Tags

Microsoft Photo 1.2 schema XMP tags which have been observed.

These tags belong to the ExifTool XMP-MP family 1 group.

Tag Name	Writable	Values / Notes
RegionInfoDateRegionsValid	date_	
RegionInfoMP	struct	--> <a href="#">Microsoft RegionInfo Struct</a> (tag ID is 'RegionInfo')
RegionInfoRegions	struct_+	--> <a href="#">Microsoft Regions Struct</a>
RegionPersonDisplayName	string_+	(RegionInfoRegionsPersonDisplayName)
RegionPersonEmailDigest	string_+	(RegionInfoRegionsPersonEmailDigest)
RegionPersonLiveIdCID	string_+	(RegionInfoRegionsPersonLiveIdCID)
RegionPersonSourceID	string_+	(RegionInfoRegionsPersonSourceID)
RegionRectangle	string_+	(RegionInfoRegionsRectangle)

## Microsoft RegionInfo Struct

Field Name	Writable	Values / Notes
DateRegionsValid	date	
Regions	Microsoft Regions+	--> <a href="#">Microsoft Regions Struct</a>

## Microsoft Regions Struct

Note that PersonLiveIdCID element is called PersonLiveCID according to the Microsoft specification, but in practice their software actually writes PersonLiveIdCID, so ExifTool uses this too.

Field Name	Writable	Values / Notes

PersonDisplayName	string
PersonEmailDigest	string
PersonLiveIDCID	string
PersonSourceID	string
Rectangle	string

## Microsoft MP1 Tags

Microsoft Photo 1.1 schema XMP tags which have been observed.

These tags belong to the ExifTool XMP-MP1 family 1 group.

Tag Name	Writable	Values / Notes
Brightness	string/	
CameraModelID	string/	
Contrast	string/	
ExposureCompensation	string/	
PanoramicStitchCameraMotion	string	'3DRotation' = 3D Rotation 'Affine' = Affine 'Homography' = Homography 'RigidScale' = Rigid Scale
PanoramicStitchMapType	string	'Horizontal-Cylindrical' = Horizontal Cylindrical 'Horizontal-Spherical' = Horizontal Spherical 'Perspective' = Perspective 'Vertical-Cylindrical' = Vertical Cylindrical 'Vertical-Spherical' = Vertical Spherical
PanoramicStitchPhi0	real	
PanoramicStitchPhi1	real	
PanoramicStitchTheta0	real	
PanoramicStitchTheta1	real	
PipelineVersion	string	
StreamType	string	
WhiteBalance0	real	
WhiteBalance1	real	
WhiteBalance2	real	

## Microsoft Stitch Tags

Information found in the Microsoft custom EXIF tag 0x4748, as written by Windows Live Photo Gallery.

Index4	Tag Name	Writable	Values / Notes
0	PanoramicStitchVersion	int32u	
1	PanoramicStitchCameraMotion	int32u	2 = Rigid Scale 3 = Affine 4 = 3D Rotation 5 = Homography
2	PanoramicStitchMapType	int32u	0 = Perspective 1 = Horizontal Cylindrical 2 = Horizontal Spherical 257 = Vertical Cylindrical 258 = Vertical Spherical
3	PanoramicStitchTheta0	float	
4	PanoramicStitchTheta1	float	
5	PanoramicStitchPhi0	float	
6	PanoramicStitchPhi1	float	

## Microsoft Xtra Tags

Tags found in the Microsoft "Xtra" atom of QuickTime videos. Tag ID's are not shown because some are unruly GUID's. Currently most of these tags are not writable because the Microsoft documentation is poor and samples were not available, but more tags may be made writable in the future if samples are provided. Note that writable tags in this

table are flagged to "Avoid", which means that other more common tags will be written instead if possible unless the Microsoft group is specified explicitly.

Tag Name	Writable	Values / Notes
Abstract	no	
AccountName	no	
AcquisitionTime	no	
AcquisitionTimeDay	no	
AcquisitionTimeMonth	no	
AcquisitionTimeYear	no	
AcquisitionTimeYearMonth	no	
AcquisitionTimeYearMonthDay	no	
AlbumArtist	Unicode/	
AlbumArtist	no	
AlbumArtistSortOrder	no	
AlbumCoverURL	Unicode/	
AlbumID	no	
AlbumIDAlbumArtist	no	
AlbumTitle	Unicode/	
AlbumTitle	no	
AlbumTitleSortOrder	no	
AlternateSourceURL	no	
Anniversary	no	
Artist	no	
AssistantsName	no	
AssistantsPhone	no	
Attachments	no	
Attributes	no	
AudioBitrate	no	
AudioFormat	no	
AudioSampleRate	no	
AudioSampleSize	no	
Author	no	
Author	no	
AuthorSortOrder	no	
AuthorURL	Unicode/	
AutoSummary	no	
AverageLevel	no	
BccAddresses	no	
BccNames	no	
Beats-per-minute	no	
BeatsPerMinute	no	
BillingInformation	no	
Birthday	no	
BitDepth	no	
Bitrate	no	
Bitrate	no	
BroadcastDate	no	
BusinessAddress	no	
BusinessCity	no	
BusinessCountry-Region	no	
BusinessFax	no	
BusinessHomePage	no	
BusinessPOBox	no	

BusinessPhone	no	
BusinessPostalCode	no	
BusinessStateOrProvince	no	
BusinessStreet	no	
BuyNow	no	
BuyTickets	no	
CDTrackEnabled	no	
CallLetters	no	
CallbackNumber	no	
CameraMaker	no	
CameraManufacturer	no	
CameraModel	no	
CameraModel	no	
CarPhone	no	
Category	Unicode/+	
Category	no	
CcAddresses	no	
CcNames	no	
CellPhone	no	
ChannelNumber	no	
Channels	no	
Channels	no	
ChapterNum	no	
Children	no	
City	no	
ClientID	no	
ClosedCaptioning	no	
Color	no	
Comment	no	
Comments	no	
Company	no	
CompanyMainPhone	no	
Complete	no	
Composer	Unicode/	
Composers	no	
Computer	no	
Conductor	Unicode/+	
Conductors	no	
ContactNames	no	
ContentDistributor	Unicode/	
ContentDistributorDuration	no	
ContentDistributorType	no	
ContentGroupDescription	no	
ContentType	no	
Contributors	no	
ConversationID	no	
Copyright	no	
Copyright	no	
Count	no	
Country-Region	no	
Creator	no	
CurrentBitrate	no	
DLNAServerUDN	no	

DLNASourceURI	no	
DRMIndividualizedVersion	no	
DRMKeyID	no	
DTCPIPHost	no	
DTCPIPPort	no	
DVDID	no	
DataRate	no	
Date	no	
DateAccessed	no	
DateAcquired	vt_filetime/	
DateArchived	no	
DateCompleted	no	
DateCreated	no	
DateImported	no	
DateLastSaved	no	
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DatePictureTaken	no	
DateReceived	no	
DateReleased	no	
DateSent	no	
DateVisited	no	
Department	no	
Description	Unicode/	
Description	no	
Description	no	
Dimensions	no	
Director	Unicode/+	
Directors	no	
DisplayArtist	no	
Division	no	
DocumentID	no	
DueDate	no	
Duration	no	
Duration	no	
Duration	no	
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E-mail3	no	
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E-mailDisplayName	no	
E-mailList	no	
EncodedBy	Unicode/	
EncodedBy	no	
EncodingTime	date/	
EndDate	no	
EntryType	no	
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Event	no	
ExifVersion	no	
ExposureBias	no	
ExposureProgram	no	
ExposureTime	no	
F-stop	no	

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FileVersion	no	
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FlagStatus	no	
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FocalLength35mm	no	
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FolderPath	no	
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FrameRate	no	
FrameWidth	no	
Free-busyStatus	no	
Frequency	no	
FromAddresses	no	
FromNames	no	
FullName	no	
Gender	no	
Genre	no	
Genre	no	
GenreID	no	
GivenName	no	
HasAttachments	no	
HasFlag	no	
Hobbies	no	
HomeAddress	no	
HomeCity	no	
HomeCountry-Region	no	
HomeFax	no	
HomePOBox	no	
HomePhone	no	
HomePostalCode	no	
HomeStateOrProvince	no	
HomeStreet	no	
HorizontalResolution	no	
IMAddresses	no	
ISOSpeed	no	
Importance	no	
Incomplete	no	
InitialKey	Unicode/	
InitialKey	no	
Initials	no	
IsAttachment	no	
IsCompleted	no	
IsDeleted	no	

IsNetworkFeed	no	
IsOnline	no	
IsProtected	no	
IsRecurring	no	
IsVBR	no	
JobTitle	no	
Keywords	no	
Kinds	no	
Label	no	
Language	no	
Language	no	
LastName	no	
LastPrinted	no	
LeadPerformer	no	
LegalTrademarks	no	
LensMaker	no	
LensModel	no	
LibraryID	no	
LibraryName	no	
LightSource	no	
LinkStatus	no	
LinkTarget	no	
Location	no	
Location	no	
Lyrics	no	
MCDI	no	
MailingAddress	no	
MaxAperture	no	
MediaClassPrimaryID	GUID/	'01CD0F29-DA4E-4157-897B-6275D50C4F11' = Audio (not music) 'D1607DBC-E323-4BE2-86A1-48A42A28441E' = Music 'DB9830BD-3AB3-4FAB-8A37-1A995F7FF74B' = Video 'FCF24A76-9A57-4036-990D-E35DD8B244E1' = Other (not audio or video)
MediaClassSecondaryID	GUID/	'00000000-0000-0000-0000-000000000000' = Unknown Content '00033368-5009-4AC3-A820-5D2D09A4E7C1' = Sound Clip from Game '0B710218-8C0C-475E-AF73-4C41C0C8F8CE' = Home Video from Pictures '1B824A67-3F80-4E3E-9CDE-F7361B0F5F1B' = Talk Show '1FE2E091-4E1E-40CE-B22D-348C732E0B10' = Video News '3A172A13-2BD9-4831-835B-114F6A95943F' = Spoken Word '44051B5B-B103-4B5C-92AB-93060A9463F0' = Corporate Video '6677DB9B-E5A0-4063-A1AD-ACEB52840CF1' = Audio News 'A9B87FC9-BD47-4BF0-AC4F-655B89F7D868' = Feature Film 'B76628F4-300D-443D-9CB5-01C285109DAF' = Home Movie 'BA7F258A-62F7-47A9-B21F-4651C42A000E' = TV Show 'D6DE1D88-C77C-4593-BFBC-9C61E8C373E3' = Web-based Video 'E0236BEB-C281-4EDE-A36D-7AF76A3D45B5' = Audio Book 'E3E689E2-BA8C-4330-96DF-A0EEEFFA6876' = Music Video 'F24FF731-96FC-4D0F-A2F5-5A3483682B1A' = Song from Game
MediaContentTypes	no	
MediaCreated	no	
MediaOriginalBroadcastDateTime	no	
MediaOriginalChannel	no	
MediaStationName	no	
MediaType	no	
MeteringMode	no	
MiddleName	no	
Mileage	no	
ModifiedBy	no	
Mood	Unicode/	

Mood	no	
MoreInfo	no	
Name	no	
Nickname	no	
OfficeLocation	no	
OfflineAvailability	no	
OfflineStatus	no	
OptionalAttendeeAddresses	no	
OptionalAttendees	no	
OrganizerAddress	no	
OrganizerName	no	
Orientation	no	
OriginalAlbumTitle	Unicode/	
OriginalArtist	Unicode/	
OriginalLyricist	Unicode/	
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OtherCity	no	
OtherCountry-Region	no	
OtherPOBox	no	
OtherPostalCode	no	
OtherStateOrProvince	no	
OtherStreet	no	
Owner	no	
POBox	no	
Pager	no	
Pages	no	
ParentalRating	Unicode/	
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Participants	no	
Path	no	
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PerceivedType	no	
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Period	no	
PersonalTitle	no	
PixelAspectRatioX	no	
PixelAspectRatioY	no	
PlaylistIndex	no	
PostalCode	no	
PrimaryE-mail	no	
PrimaryPhone	no	
Priority	no	
Producer	Unicode/+	
Producers	no	
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ProductVersion	no	
Profession	no	
ProgramDescription	no	
ProgramMode	no	

ProgramName	no	
Project	no	
PromotionURL	Unicode/	
Protected	no	
ProtectionType	no	
Provider	no	
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ProviderLogoURL	no	
ProviderRating	no	
ProviderStyle	no	
ProviderURL	no	
Publisher	Unicode/	
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RatingOrg	no	
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RecordingTimeMonth	no	
RecordingTimeYear	no	
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ReleaseDateYearMonth	no	
ReleaseDateYearMonthDay	no	
ReminderTime	no	
RequestState	no	
RequiredAttendeeAddresses	no	
RequiredAttendees	no	
Rerun	no	
Resources	no	
SAP	no	
Saturation	no	
SearchRanking	no	
SenderAddress	no	
SenderName	no	
Sensitivity	no	
ShadowFilePath	no	
Shared	no	
SharedUserRating	int64u/	
SharedWith	no	
Size	no	
Slides	no	
Source	no	
SourceURL	no	
SpaceFree	no	
SpaceUsed	no	

Spouse	no	
StartDate	no	
StateOrProvince	no	
StationCallSign	no	
StationName	no	
Status	no	
Status	no	
Store	no	
Street	no	
Subject	no	
Subject	no	
SubjectDistance	no	
SubscriptionContentID	no	
Subtitle	Unicode/	
Subtitle	no	
SubtitleDescription	no	
Suffix	no	
Summary	no	
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Sync16	no	
SyncOnly	no	
SyncState	no	
TTY-TTDPhone	no	
TaskOwner	no	
Telex	no	
Temporary	no	
Title	no	
Title	no	
TitleNum	no	
TitleSortOrder	no	
ToAddresses	no	
ToDoTitle	no	
ToNames	no	
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TotalDuration	no	
TotalEditingTime	no	
TotalFileSize	no	
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TrackingID	no	
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Type	no	
URL	no	
UniqueFileIdentifier	no	
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Untitled1	no	
Untitled2	no	
UserCustom1	no	
UserCustom2	no	
UserEffectiveRating	no	
UserLastPlayedTime	no	
UserPlayCount	no	
UserPlaycountAfternoon	no	
UserPlaycountEvening	no	
UserPlaycountMorning	no	
UserPlaycountNight	no	
UserPlaycountWeekday	no	
UserPlaycountWeekend	no	
UserRating	no	
UserServiceRating	no	
UserWebURL	no	
VerticalResolution	no	
VideoBitrate	no	
VideoCompression	no	
VideoFormat	no	
VideoFrameRate	no	
VideoHeight	no	
VideoWidth	no	
WMCollectionGroupID	no	
WMCollectionID	no	
WMContentID	no	
WMShadowFileSourceDRMType	no	
WMShadowFileSourceFileType	no	
Webpage	no	
WhiteBalance	no	
WindowsFileName	no	
WordCount	no	
Writer	Unicode/	
Writers	no	
Year	no	
Year	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Sep 22, 2025*

[-- ExifTool Tag Names](#)

# Minolta Tags

These tags are used by Minolta, Konica/Minolta as well as some Sony cameras. Minolta doesn't make things easy for decoders because the meaning of some tags and the location where some information is stored is different for different camera models. (Take MinoltaQuality for example, which may be located in 5 different places.)

Tag ID	Tag Name	Writable	Values / Notes	
0x0000	MakerNoteVersion	undef[4]		
0x0001	MinoltaCameraSettingsOld	-	<a href="#">Minolta CameraSettings Tags</a>	
0x0003	MinoltaCameraSettings	-	<a href="#">Minolta CameraSettings Tags</a>	
0x0004	MinoltaCameraSettings7D	-	<a href="#">Minolta CameraSettings7D Tags</a>	
0x0010	CameralInfoA100	-	<a href="#">Minolta CameralInfoA100 Tags</a>	
0x0018	ISInfoA100 ImageStabilization	- no	<a href="#">Minolta ISInfoA100 Tags</a> (a block of binary data which exists in DiMAGE A2 (and A1/X1?) images only if image stabilization is enabled)	
0x0020	WBInfoA100	-	<a href="#">Minolta WBInfoA100 Tags</a> (currently decoded only for the Sony A100)	
0x0040	CompressedImageSize	int32u		
0x0081	PreviewImage	undef		
0x0088	PreviewImageStart	int32u*		
0x0089	PreviewImageLength	int32u*		
0x0100	SceneMode	int32u	0 = Standard 1 = Portrait 2 = Text 3 = Night Scene 4 = Sunset 5 = Sports 6 = Landscape 7 = Night Portrait 8 = Macro 9 = Super Macro 16 = Auto 17 = Night View/Portrait 18 = Sweep Panorama 19 = Handheld Night Shot 20 = Anti Motion Blur 21 = Cont. Priority AE 22 = Auto+ 23 = 3D Sweep Panorama 24 = Superior Auto 25 = High Sensitivity 26 = Fireworks 27 = Food 28 = Pet 33 = HDR 65535 = n/a	
0x0101	ColorMode	int32u	0 = Natural color 1 = Black & White 2 = Vivid color 3 = Solarization 4 = Adobe RGB 5 = Sepia 9 = Natural 12 = Portrait  (Sony models) 0 = Standard 1 = Vivid 2 = Portrait 3 = Landscape 4 = Sunset 5 = Night View/Portrait 6 = B&W 7 = Adobe RGB 12 = Neutral 13 = Clear 14 = Deep 15 = Light 16 = Autumn Leaves 17 = Sepia 18 = FL 19 = Vivid 2 20 = IN 21 = SH 22 = FL2 23 = FL3 100 = Neutral 101 = Clear 102 = Deep 103 = Light 104 = Night View 105 = Autumn Leaves 255 = Off 4294967295 = n/a	

0x0102	MinoltaQuality	int32u	0 = Raw 1 = Super Fine 2 = Fine	3 = Standard 4 = Economy 5 = Extra fine
0x0103	MinoltaQuality MinoltaImageSize	int32u int32u	(quality for DiMAGE A2/7Hi) 0 = Raw 1 = Super Fine 2 = Fine	3 = Standard 4 = Economy 5 = Extra fine (image size for other models except A200) 1 = 1600x1200 2 = 1280x960 3 = 640x480
1				5 = 2560x1920 6 = 2272x1704 7 = 2048x1536
0x0104	FlashExposureComp	rational64s		
0x0105	Teleconverter	int32u	0x0 = None 0x4 = Minolta/Sony AF 1.4x APO (D) (0x04) 0x5 = Minolta/Sony AF 2x APO (D) (0x05) 0x48 = Minolta/Sony AF 2x APO (D) 0x50 = Minolta AF 2x APO II 0x60 = Minolta AF 2x APO 0x88 = Minolta/Sony AF 1.4x APO (D) 0x90 = Minolta AF 1.4x APO II 0xa0 = Minolta AF 1.4x APO	
0x0107	ImageStabilization	int32u	1 = Off 5 = On	
0x0109	RawAndJpgRecording	int32u	0 = Off 1 = On	
0x010a	ZoneMatching	int32u	0 = ISO Setting Used 1 = High Key 2 = Low Key	
0x010b	ColorTemperature	int32u		
0x010c	LensType	int32u	--> <a href="#">Minolta LensType Values</a>	
0x0111	ColorCompensationFilter	int32s	(ranges from -2 for green to +2 for magenta)	
0x0112	WhiteBalanceFineTune	int32u		
0x0113	ImageStabilization	int32u	(valid for Sony A100 only) 0 = Off 1 = On	
0x0114	MinoltaCameraSettings5D CameraSettingsA100	- -	--> <a href="#">Minolta CameraSettings5D Tags</a> --> <a href="#">Minolta CameraSettingsA100 Tags</a>	
0x0115	WhiteBalance	int32u	0x0 = Auto 0x1 = Color Temperature/Color Filter 0x10 = Daylight 0x20 = Cloudy 0x30 = Shade 0x40 = Tungsten 0x50 = Flash 0x60 = Fluorescent 0x70 = Custom	
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>	
0x0f00	MinoltaCameraSettings2	no		

## Minolta LensType Values

"New" or "II" appear in brackets if the original version of the lens has the same LensType. Special logic is employed to identify the attached lens when a Metabones Canon EF adapter is used.

Value	LensType
0	= Minolta AF 28-85mm F3.5-4.5 New
1	= Minolta AF 80-200mm F2.8 HS-APO G
2	= Minolta AF 28-70mm F2.8 G
3	= Minolta AF 28-80mm F4-5.6
4	= Minolta AF 85mm F1.4G
5	= Minolta AF 35-70mm F3.5-4.5 [II]
6	= Minolta AF 24-85mm F3.5-4.5 [New]
7	= Minolta AF 100-300mm F4.5-5.6 APO [New] or 100-400mm or Sigma Lens
7	= Minolta AF 100-400mm F4.5-6.7 APO
7	= Sigma AF 100-300mm F4 EX DG IF
8	= Minolta AF 70-210mm F4.5-5.6 [II]
9	= Minolta AF 50mm F3.5 Macro
10	= Minolta AF 28-105mm F3.5-4.5 [New]

11 = Minolta AF 300mm F4 HS-APO G  
12 = Minolta AF 100mm F2.8 Soft Focus  
13 = Minolta AF 75-300mm F4.5-5.6 (New or II)  
14 = Minolta AF 100-400mm F4.5-6.7 APO  
15 = Minolta AF 400mm F4.5 HS-APO G  
16 = Minolta AF 17-35mm F3.5 G  
17 = Minolta AF 20-35mm F3.5-4.5  
18 = Minolta AF 28-80mm F3.5-5.6 II  
19 = Minolta AF 35mm F1.4 G  
20 = Minolta/Sony 135mm F2.8 [T4.5] STF  
22 = Minolta AF 35-80mm F4-5.6 II  
23 = Minolta AF 200mm F4 Macro APO G  
24 = Minolta/Sony AF 24-105mm F3.5-4.5 (D) or Sigma or Tamron Lens  
24 = Sigma 18-50mm F2.8  
24 = Sigma 17-70mm F2.8-4.5 DC Macro  
24 = Sigma 20-40mm F2.8 EX DG Aspherical IF  
24 = Sigma 18-200mm F3.5-6.3 DC  
24 = Sigma DC 18-125mm F4-5.6 D  
24 = Tamron SP AF 28-75mm F2.8 XR Di LD Aspherical [IF] Macro  
24 = Sigma 15-30mm F3.5-4.5 EX DG Aspherical  
25 = Minolta AF 100-300mm F4.5-5.6 APO (D) or Sigma Lens  
25 = Sigma 100-300mm F4 EX (APO (D) or D IF)  
25 = Sigma 70mm F2.8 EX DG Macro  
25 = Sigma 20mm F1.8 EX DG Aspherical RF  
25 = Sigma 30mm F1.4 EX DC  
25 = Sigma 24mm F1.8 EX DG ASP Macro  
27 = Minolta AF 85mm F1.4 G (D)  
28 = Minolta/Sony AF 100mm F2.8 Macro (D) or Tamron Lens  
28 = Tamron SP AF 90mm F2.8 Di Macro  
28 = Tamron SP AF 180mm F3.5 Di LD [IF] Macro  
29 = Minolta/Sony AF 75-300mm F4.5-5.6 (D)  
30 = Minolta AF 28-80mm F3.5-5.6 (D) or Sigma Lens  
30 = Sigma AF 10-20mm F4-5.6 EX DC  
30 = Sigma AF 12-24mm F4.5-5.6 EX DG  
30 = Sigma 28-70mm EX DG F2.8  
30 = Sigma 55-200mm F4-5.6 DC  
31 = Minolta/Sony AF 50mm F2.8 Macro (D) or F3.5  
31 = Minolta/Sony AF 50mm F3.5 Macro  
32 = Minolta/Sony AF 300mm F2.8 G or 1.5x Teleconverter  
33 = Minolta/Sony AF 70-200mm F2.8 G  
35 = Minolta AF 85mm F1.4 G (D) Limited  
36 = Minolta AF 28-100mm F3.5-5.6 (D)  
38 = Minolta AF 17-35mm F2.8-4 (D)  
39 = Minolta AF 28-75mm F2.8 (D)  
40 = Minolta/Sony AF DT 18-70mm F3.5-5.6 (D)  
41 = Minolta/Sony AF DT 11-18mm F4.5-5.6 (D) or Tamron Lens  
41 = Tamron SP AF 11-18mm F4.5-5.6 Di II LD Aspherical IF  
42 = Minolta/Sony AF DT 18-200mm F3.5-6.3 (D)  
43 = Sony 35mm F1.4 G (SAL35F14G)  
44 = Sony 50mm F1.4 (SAL50F14)  
45 = Carl Zeiss Planar T\* 85mm F1.4 ZA (SAL85F14Z)  
46 = Carl Zeiss Vario-Sonnar T\* DT 16-80mm F3.5-4.5 ZA (SAL1680Z)  
47 = Carl Zeiss Sonnar T\* 135mm F1.8 ZA (SAL135F18Z)  
48 = Carl Zeiss Vario-Sonnar T\* 24-70mm F2.8 ZA SSM (SAL2470Z) or Other Lens  
48 = Carl Zeiss Vario-Sonnar T\* 24-70mm F2.8 ZA SSM II (SAL2470Z2)  
48 = Tamron SP 24-70mm F2.8 Di USD  
49 = Sony DT 55-200mm F4-5.6 (SAL55200)  
50 = Sony DT 18-250mm F3.5-6.3 (SAL18250)  
51 = Sony DT 16-105mm F3.5-5.6 (SAL16105)  
52 = Sony 70-300mm F4.5-5.6 G SSM (SAL70300G) or G SSM II or Tamron Lens  
52 = Sony 70-300mm F4.5-5.6 G SSM II (SAL70300G2)  
52 = Tamron SP 70-300mm F4-5.6 Di USD  
53 = Sony 70-400mm F4-5.6 G SSM (SAL70400G)  
54 = Carl Zeiss Vario-Sonnar T\* 16-35mm F2.8 ZA SSM (SAL1635Z) or ZA SSM II  
54 = Carl Zeiss Vario-Sonnar T\* 16-35mm F2.8 ZA SSM II (SAL1635Z2)  
55 = Sony DT 18-55mm F3.5-5.6 SAM (SAL1855) or SAM II  
55 = Sony DT 18-55mm F3.5-5.6 SAM II (SAL18552)  
56 = Sony DT 55-200mm F4-5.6 SAM (SAL55200-2)  
57 = Sony DT 50mm F1.8 SAM (SAL50F18) or Tamron Lens or Commlite CM-EF-NEX adapter  
57 = Tamron SP AF 60mm F2 Di II LD [IF] Macro 1:1  
57 = Tamron 18-270mm F3.5-6.3 Di II PZD  
58 = Sony DT 30mm F2.8 Macro SAM (SAL30M28)  
59 = Sony 28-75mm F2.8 SAM (SAL2875)  
60 = Carl Zeiss Distagon T\* 24mm F2 ZA SSM (SAL24F20Z)  
61 = Sony 85mm F2.8 SAM (SAL85F28)

62 = Sony DT 35mm F1.8 SAM (SAL35F18)  
63 = Sony DT 16-50mm F2.8 SSM (SAL1650)  
64 = Sony 500mm F4 G SSM (SAL500F40G)  
65 = Sony DT 18-135mm F3.5-5.6 SAM (SAL18135)  
66 = Sony 300mm F2.8 G SSM II (SAL300F28G2)  
67 = Sony 70-200mm F2.8 G SSM II (SAL70200G2)  
68 = Sony DT 55-300mm F4.5-5.6 SAM (SAL55300)  
69 = Sony 70-400mm F4-5.6 G SSM II (SAL70400G2)  
70 = Carl Zeiss Planar T\* 50mm F1.4 ZA SSM (SAL50F14Z)  
128 = Tamron or Sigma Lens (128)  
128 = Tamron AF 18-200mm F3.5-6.3 XR Di II LD Aspherical [IF] Macro  
128 = Tamron AF 28-300mm F3.5-6.3 XR Di LD Aspherical [IF] Macro  
128 = Tamron AF 28-200mm F3.8-5.6 XR Di Aspherical [IF] Macro  
128 = Tamron SP AF 17-35mm F2.8-4 Di LD Aspherical IF  
128 = Sigma AF 50-150mm F2.8 EX DC APO HSM II  
128 = Sigma 10-20mm F3.5 EX DC HSM  
128 = Sigma 70-200mm F2.8 II EX DG APO MACRO HSM  
128 = Sigma 10mm F2.8 EX DC HSM Fisheye  
128 = Sigma 50mm F1.4 EX DG HSM  
128 = Sigma 85mm F1.4 EX DG HSM  
128 = Sigma 24-70mm F2.8 IF EX DG HSM  
128 = Sigma 18-250mm F3.5-6.3 DC OS HSM  
128 = Sigma 17-50mm F2.8 EX DC HSM  
128 = Sigma 17-70mm F2.8-4 DC Macro HSM  
128 = Sigma 150mm F2.8 EX DG OS HSM APO Macro  
128 = Sigma 150-500mm F5-6.3 APO DG OS HSM  
128 = Tamron AF 28-105mm F4-5.6 [IF]  
128 = Sigma 35mm F1.4 DG HSM  
128 = Sigma 18-35mm F1.8 DC HSM  
128 = Sigma 50-500mm F4.5-6.3 APO DG OS HSM  
128 = Sigma 24-105mm F4 DG HSM | A  
128 = Sigma 30mm F1.4  
128 = Sigma 35mm F1.4 DG HSM | A  
128 = Sigma 105mm F2.8 EX DG OS HSM Macro  
128 = Sigma 180mm F2.8 EX DG OS HSM APO Macro  
128 = Sigma 18-300mm F3.5-6.3 DC Macro HSM | C  
128 = Sigma 18-50mm F2.8-4.5 DC HSM  
129 = Tamron Lens (129)  
129 = Tamron 200-400mm F5.6 LD  
129 = Tamron 70-300mm F4-5.6 LD  
131 = Tamron 20-40mm F2.7-3.5 SP Aspherical IF  
135 = Vivitar 28-210mm F3.5-5.6  
136 = Tokina EMZ M100 AF 100mm F3.5  
137 = Cosina 70-210mm F2.8-4 AF  
138 = Soligor 19-35mm F3.5-4.5  
139 = Tokina AF 28-300mm F4-6.3  
142 = Cosina AF 70-300mm F4.5-5.6 MC  
146 = Voigtlander Macro APO-Lanthar 125mm F2.5 SL  
194 = Tamron SP AF 17-50mm F2.8 XR Di II LD Aspherical [IF]  
202 = Tamron SP AF 70-200mm F2.8 Di LD [IF] Macro  
203 = Tamron SP 70-200mm F2.8 Di USD  
204 = Tamron SP 24-70mm F2.8 Di USD  
212 = Tamron 28-300mm F3.5-6.3 Di PZD  
213 = Tamron 16-300mm F3.5-6.3 Di II PZD Macro  
214 = Tamron SP 150-600mm F5-6.3 Di USD  
215 = Tamron SP 15-30mm F2.8 Di USD  
216 = Tamron SP 45mm F1.8 Di USD  
217 = Tamron SP 35mm F1.8 Di USD  
218 = Tamron SP 90mm F2.8 Di Macro 1:1 USD (F017)  
220 = Tamron SP 150-600mm F5-6.3 Di USD G2  
224 = Tamron SP 90mm F2.8 Di Macro 1:1 USD (F004)  
255 = Tamron Lens (255)  
255 = Tamron SP AF 17-50mm F2.8 XR Di II LD Aspherical  
255 = Tamron AF 18-250mm F3.5-6.3 XR Di II LD  
255 = Tamron AF 55-200mm F4-5.6 Di II LD Macro  
255 = Tamron AF 70-300mm F4-5.6 Di LD Macro 1:2  
255 = Tamron SP AF 200-500mm F5.0-6.3 Di LD IF  
255 = Tamron SP AF 10-24mm F3.5-4.5 Di II LD Aspherical IF  
255 = Tamron SP AF 70-200mm F2.8 Di LD IF Macro  
255 = Tamron SP AF 28-75mm F2.8 XR Di LD Aspherical IF  
255 = Tamron AF 90-300mm F4.5-5.6 Telemacro  
18688 = Sigma MC-11 SA-E Mount Converter with not-supported Sigma lens  
25501 = Minolta AF 50mm F1.7  
25511 = Minolta AF 35-70mm F4 or Other Lens  
25511 = Sigma UC AF 28-70mm F3.5-4.5

25511 = Sigma AF 28-70mm F2.8  
25511 = Sigma M-AF 70-200mm F2.8 EX Aspherical  
25511 = Quantaray M-AF 35-80mm F4-5.6  
25511 = Tokina 28-70mm F2.8-4.5 AF  
25521 = Minolta AF 28-85mm F3.5-4.5 or Other Lens  
25521 = Tokina 19-35mm F3.5-4.5  
25521 = Tokina 28-70mm F2.8 AT-X  
25521 = Tokina 80-400mm F4.5-5.6 AT-X AF II 840  
25521 = Tokina AF PRO 28-80mm F2.8 AT-X 280  
25521 = Tokina AT-X PRO [II] AF 28-70mm F2.6-2.8 270  
25521 = Tamron AF 19-35mm F3.5-4.5  
25521 = Angenieux AF 28-70mm F2.6  
25521 = Tokina AT-X 17 AF 17mm F3.5  
25521 = Tokina 20-35mm F3.5-4.5 II AF  
25531 = Minolta AF 28-135mm F4-4.5 or Other Lens  
25531 = Sigma ZOOM-alpha 35-135mm F3.5-4.5  
25531 = Sigma 28-105mm F2.8-4 Aspherical  
25531 = Sigma 28-105mm F4-5.6 UC  
25531 = Tokina AT-X 242 AF 24-200mm F3.5-5.6  
25541 = Minolta AF 35-105mm F3.5-4.5  
25551 = Minolta AF 70-210mm F4 Macro or Sigma Lens  
25551 = Sigma 70-210mm F4-5.6 APO  
25551 = Sigma M-AF 70-200mm F2.8 EX APO  
25551 = Sigma 75-200mm F2.8-3.5  
25561 = Minolta AF 135mm F2.8  
25571 = Minolta/Sony AF 28mm F2.8  
25581 = Minolta AF 24-50mm F4  
25601 = Minolta AF 100-200mm F4.5  
25611 = Minolta AF 75-300mm F4.5-5.6 or Sigma Lens  
25611 = Sigma 70-300mm F4-5.6 DL Macro  
25611 = Sigma 300mm F4 APO Macro  
25611 = Sigma AF 500mm F4.5 APO  
25611 = Sigma AF 170-500mm F5-6.3 APO Aspherical  
25611 = Tokina AT-X AF 300mm F4  
25611 = Tokina AT-X AF 400mm F5.6 SD  
25611 = Tokina AF 730 II 75-300mm F4.5-5.6  
25611 = Sigma 800mm F5.6 APO  
25611 = Sigma AF 400mm F5.6 APO Macro  
25611 = Sigma 1000mm F8 APO  
25621 = Minolta AF 50mm F1.4 [New]  
25631 = Minolta AF 300mm F2.8 APO or Sigma Lens  
25631 = Sigma AF 50-500mm F4-6.3 EX DG APO  
25631 = Sigma AF 170-500mm F5-6.3 APO Aspherical  
25631 = Sigma AF 500mm F4.5 EX DG APO  
25631 = Sigma 400mm F5.6 APO  
25641 = Minolta AF 50mm F2.8 Macro or Sigma Lens  
25641 = Sigma 50mm F2.8 EX Macro  
25651 = Minolta AF 600mm F4 APO  
25661 = Minolta AF 24mm F2.8 or Sigma Lens  
25661 = Sigma 17-35mm F2.8-4 EX Aspherical  
25721 = Minolta/Sony AF 500mm F8 Reflex  
25781 = Minolta/Sony AF 16mm F2.8 Fisheye or Sigma Lens  
25781 = Sigma 8mm F4 EX [DG] Fisheye  
25781 = Sigma 14mm F3.5  
25781 = Sigma 15mm F2.8 Fisheye  
25791 = Minolta/Sony AF 20mm F2.8 or Tokina Lens  
25791 = Tokina AT-X Pro DX 11-16mm F2.8  
25811 = Minolta AF 100mm F2.8 Macro [New] or Sigma or Tamron Lens  
25811 = Sigma AF 90mm F2.8 Macro  
25811 = Sigma AF 105mm F2.8 EX [DG] Macro  
25811 = Sigma 180mm F5.6 Macro  
25811 = Sigma 180mm F3.5 EX DG Macro  
25811 = Tamron 90mm F2.8 Macro  
25851 = Beroflex 35-135mm F3.5-4.5  
25858 = Minolta AF 35-105mm F3.5-4.5 New or Tamron Lens  
25858 = Tamron 24-135mm F3.5-5.6  
25881 = Minolta AF 70-210mm F3.5-4.5  
25891 = Minolta AF 80-200mm F2.8 APO or Tokina Lens  
25891 = Tokina 80-200mm F2.8  
25901 = Minolta AF 200mm F2.8 G APO + Minolta AF 1.4x APO or Other Lens + 1.4x  
25901 = Minolta AF 600mm F4 HS-APO G + Minolta AF 1.4x APO  
25911 = Minolta AF 35mm F1.4  
25921 = Minolta AF 85mm F1.4 G (D)  
25931 = Minolta AF 200mm F2.8 APO  
25941 = Minolta AF 3x-1x F1.7-2.8 Macro

25961 = Minolta AF 28mm F2  
 25971 = Minolta AF 35mm F2 [New]  
 25981 = Minolta AF 100mm F2  
 26011 = Minolta AF 200mm F2.8 G APO + Minolta AF 2x APO or Other Lens + 2x  
 26011 = Minolta AF 600mm F4 HS-APO G + Minolta AF 2x APO  
 26041 = Minolta AF 80-200mm F4.5-5.6  
 26051 = Minolta AF 35-80mm F4-5.6  
 26061 = Minolta AF 100-300mm F4.5-5.6  
 26071 = Minolta AF 35-80mm F4-5.6  
 26081 = Minolta AF 300mm F2.8 HS-APO G  
 26091 = Minolta AF 600mm F4 HS-APO G  
 26121 = Minolta AF 200mm F2.8 HS-APO G  
 26131 = Minolta AF 50mm F1.7 New  
 26151 = Minolta AF 28-105mm F3.5-4.5 xi  
 26161 = Minolta AF 35-200mm F4.5-5.6 xi  
 26181 = Minolta AF 28-80mm F4-5.6 xi  
 26191 = Minolta AF 80-200mm F4.5-5.6 xi  
 26201 = Minolta AF 28-70mm F2.8 G  
 26211 = Minolta AF 100-300mm F4.5-5.6 xi  
 26241 = Minolta AF 35-80mm F4-5.6 Power Zoom  
 26281 = Minolta AF 80-200mm F2.8 HS-APO G  
 26291 = Minolta AF 85mm F1.4 New  
 26311 = Minolta AF 100-300mm F4.5-5.6 APO  
 26321 = Minolta AF 24-50mm F4 New  
 26381 = Minolta AF 50mm F2.8 Macro New  
 26391 = Minolta AF 100mm F2.8 Macro  
 26411 = Minolta/Sony AF 20mm F2.8 New  
 26421 = Minolta AF 24mm F2.8 New  
 26441 = Minolta AF 100-400mm F4.5-6.7 APO  
 26621 = Minolta AF 50mm F1.4 New  
 26671 = Minolta AF 35mm F2 New  
 26681 = Minolta AF 28mm F2 New  
 26721 = Minolta AF 24-105mm F3.5-4.5 (D)  
 30464 = Metabones Canon EF Speed Booster  
 45671 = Tokina 70-210mm F4-5.6  
 45681 = Tokina AF 35-200mm F4-5.6 Zoom SD  
 45701 = Tamron AF 35-135mm F3.5-4.5  
 45711 = Vivitar 70-210mm F4.5-5.6  
 45741 = 2x Teleconverter or Tamron or Tokina Lens  
 45741 = Tamron SP AF 90mm F2.5  
 45741 = Tokina RF 500mm F8.0 x2  
 45741 = Tokina 300mm F2.8 x2  
 45751 = 1.4x Teleconverter  
 45851 = Tamron SP AF 300mm F2.8 LD IF  
 45861 = Tamron SP AF 35-105mm F2.8 LD Aspherical IF  
 45871 = Tamron AF 70-210mm F2.8 SP LD  
 48128 = Metabones Canon EF Speed Booster Ultra  
 61184 = Canon EF Adapter  
 65280 = Sigma 16mm F2.8 Filtermatic Fisheye  
 65535 = E-Mount, T-Mount, Other Lens or no lens  
 65535 = Arax MC 35mm F2.8 Tilt+Shift  
 65535 = Arax MC 80mm F2.8 Tilt+Shift  
 65535 = Zenitar MF 16mm F2.8 Fisheye M42  
 65535 = Samyang 500mm Mirror F8.0  
 65535 = Pentacon Auto 135mm F2.8  
 65535 = Pentacon Auto 29mm F2.8  
 65535 = Helios 44-2 58mm F2.0

## Minolta CameraSettings Tags

There is some variability in CameraSettings information between different models (and sometimes even between different firmware versions), so this information may not be as reliable as it should be. Because of this, tags in the following tables are set to lower priority to prevent them from superseding the values of same-named tags in other locations when duplicate tags are disabled.

Index4	Tag Name	Writable	Values / Notes
1	ExposureMode	int32u	0 = Program 1 = Aperture Priority 2 = Shutter Priority 3 = Manual
2	FlashMode	int32u	0 = Fill flash 1 = Red-eye reduction 2 = Rear flash sync

			3 = Wireless 4 = Off?
3	WhiteBalance	int32u~	
4	MinoltaImageSize	int32u	0 = Full 1 = 1600x1200 2 = 1280x960 3 = 640x480 6 = 2080x1560 7 = 2560x1920 8 = 3264x2176
5	MinoltaQuality	int32u	0 = Raw 1 = Super Fine 2 = Fine 3 = Standard 4 = Economy 5 = Extra Fine
6	DriveMode	int32u	0 = Single 1 = Continuous 2 = Self-timer 3 = Bracketing 5 = Interval 6 = UHS continuous 7 = HS continuous
7	MeteringMode	int32u	0 = Multi-segment 1 = Center-weighted average 2 = Spot
8	ISO	int32u	
9	ExposureTime	int32u	
10	FNumber	int32u	
11	MacroMode	int32u	0 = Off 1 = On
12	DigitalZoom	int32u	0 = Off 1 = Electronic magnification 2 = 2x
13	ExposureCompensation	int32u	
14	BracketStep	int32u	0 = 1/3 EV 1 = 2/3 EV 2 = 1 EV
16	IntervalLength	int32u	
17	IntervalNumber	int32u	
18	FocalLength	int32u	
19	FocusDistance	int32u	
20	FlashFired	int32u	0 = No 1 = Yes
21	MinoltaDate	int32u	
22	MinoltaTime	int32u	
23	MaxAperture	int32u	
26	FileNumberMemory	int32u	0 = Off 1 = On
27	LastFileNumber	int32u	
28	ColorBalanceRed	int32u	
29	ColorBalanceGreen	int32u	
30	ColorBalanceBlue	int32u	
31	Saturation	int32u	0 = Normal
32	Contrast	int32u	0 = Normal
33	Sharpness	int32u	0 = Hard 1 = Normal 2 = Soft
34	SubjectProgram	int32u	0 = None 1 = Portrait 2 = Text 3 = Night portrait 4 = Sunset 5 = Sports action
35	FlashExposureComp	int32u	
36	ISOSetting	int32u	0 = 100 1 = 200 2 = 400 3 = 800 4 = Auto 5 = 64
37	MinoltaModelID	int32u	0 = DiMAGE 7, X1, X21 or X31 1 = DiMAGE 5 2 = DiMAGE S304 3 = DiMAGE S404 4 = DiMAGE 7i 5 = DiMAGE 7Hi 6 = DiMAGE A1 7 = DiMAGE A2 or S414

38	IntervalMode	int32u	0 = Still Image 1 = Time-lapse Movie
39	FolderName	int32u	0 = Standard Form 1 = Data Form
40	ColorMode	int32u	0 = Natural color 1 = Black & White 2 = Vivid color 3 = Solarization 4 = Adobe RGB
41	ColorFilter	int32u	
42	BWFilter	int32u	
43	InternalFlash	int32u	0 = No 1 = Fired
44	Brightness	int32u	
45	SpotFocusPointX	int32u	
46	SpotFocusPointY	int32u	
47	WideFocusZone	int32u	0 = No zone 1 = Center zone (horizontal orientation) 2 = Center zone (vertical orientation) 3 = Left zone 4 = Right zone
48	FocusMode	int32u	0 = AF 1 = MF
49	FocusArea	int32u	0 = Wide Focus (normal) 1 = Spot Focus
50	DECPosition	int32u	0 = Exposure 1 = Contrast 2 = Saturation 3 = Filter
51	ColorProfile	int32u	(DiMAGE 7Hi only) 0 = Not Embedded 1 = Embedded
52	DataImprint	int32u	(DiMAGE 7Hi only) 0 = None 1 = YYYY/MM/DD 2 = MM/DD/HH:MM 3 = Text 4 = Text + ID#
63	FlashMetering	int32u	0 = ADI (Advanced Distance Integration) 1 = Pre-flash TTL 2 = Manual flash control

## Minolta CameraSettings7D Tags

Index2	Tag Name	Writable	Values / Notes			
0	ExposureMode	int16u	0 = Program	4 = Auto		
			1 = Aperture Priority	5 = Program-shift A		
			2 = Shutter Priority	6 = Program-shift S		
			3 = Manual			
2	MinoltaImageSize	int16u	0 = Large			
			1 = Medium			
			2 = Small			
3	MinoltaQuality	int16u	0 = RAW			
			16 = Fine			
			32 = Normal			
			34 = RAW+JPEG			
			48 = Economy			
4	WhiteBalance	int16u	0 = Auto	4 = Tungsten		
			1 = Daylight	5 = Fluorescent		
			2 = Shade	256 = Kelvin		
			3 = Cloudy	512 = Manual		
14	FocusMode	int16u	0 = AF-S			
			1 = AF-C			
			3 = Manual			
			4 = AF-A			
16	AFPoints	int16u	0x0 = (none)	Bit 4 = Bottom-right		
			Bit 0 = Center	Bit 5 = Bottom		
			Bit 1 = Top	Bit 6 = Bottom-left		

			Bit 2 = Top-right Bit 3 = Right	Bit 7 = Left Bit 8 = Top-left
21	Flash	int16u	0 = Off 1 = On	
22	FlashMode	int16u	0 = Normal 1 = Red-eye reduction 2 = Rear flash sync	
28	ISOSetting	int16u	0 = Auto 5 = 800 1 = 100 6 = 1600 3 = 200 7 = 3200 4 = 400	
30	ExposureCompensation	int16s		
37	ColorSpace	int16u	0 = Natural sRGB 1 = Natural+ sRGB 4 = Adobe RGB	
38	Sharpness	int16u		
39	Contrast	int16u		
40	Saturation	int16u		
45	FreeMemoryCardImages	int16u		
63	ColorTemperature	int16s		
64	HueAdjustment	int16u		
70	Rotation	int16u	72 = Horizontal (normal) 76 = Rotate 90 CW 82 = Rotate 270 CW	
71	FNumber	int16u		
72	ExposureTime	int16u		
74	FreeMemoryCardImages	int16u		
94	ImageNumber	int16u	(this information may appear at index 98 (0x62), depending on firmware version)	
96	NoiseReduction	int16u	0 = Off 1 = On	
98	ImageNumber2	int16u		
113	ImageStabilization	int16u	0 = Off 1 = On	
117	ZoneMatchingOn	int16u	0 = Off 1 = On	

## Minolta CameraInfoA100 Tags

Camera information for the Sony DSLR-A100.

Index1	Tag Name	Writable	Values / Notes	
1	AFSensorActive	int8u	0 = Top-right 1 = Bottom-right 2 = Bottom 3 = Middle Horizontal	4 = Center Vertical 5 = Top 6 = Top-left 7 = Bottom-left
2	AFStatusActiveSensor	int16s	(the focus status at shutter release. May not reflect the status after focusing if the image is focused then recomposed) -32768 = Out of Focus	0 = In Focus
4	AFStatusTop-right	int16s	-32768 = Out of Focus	0 = In Focus
6	AFStatusBottom-right	int16s	-32768 = Out of Focus	0 = In Focus
8	AFStatusBottom	int16s	-32768 = Out of Focus	0 = In Focus
10	AFStatusMiddleHorizontal	int16s	(any of the three horizontal sensors at the middle of the focus frame: Left, Center or Right) -32768 = Out of Focus	0 = In Focus
12	AFStatusCenterVertical	int16s	-32768 = Out of Focus	0 = In Focus
14	AFStatusTop	int16s	-32768 = Out of Focus	0 = In Focus
16	AFStatusTop-left	int16s	-32768 = Out of Focus	0 = In Focus
18	AFStatusBottom-left	int16s	-32768 = Out of Focus	0 = In Focus
20	FocusLocked	int8u	0 = Manual Focus 4 = No	

			16 = Continuous Focus 64 = Yes
21	AFPoint	int8u	0 = Auto      5 = Bottom-right 1 = Center    6 = Bottom 2 = Top        7 = Bottom-left 3 = Top-right   8 = Left 4 = Right      9 = Top-left
22	AFMode	int8u	0 = DMF 1 = AF-S 2 = AF-C 3 = AF-A
45	AFStatusLeft	int16s	-32768 = Out of Focus   0 = In Focus
47	AFStatusCenterHorizontal	int16s	-32768 = Out of Focus   0 = In Focus
49	AFStatusRight	int16s	-32768 = Out of Focus   0 = In Focus
51	AFAreaMode	int8u	0 = Wide 1 = Local 2 = Spot

## Minolta ISInfoA100 Tags

Image stabilization information for the Sony DSLR-A100.

Index1	Tag Name	Writable	Values / Notes
0	ImageStabilization	int16u	0x0 = Off 0x2784 = On

## Minolta WBInfoA100 Tags

White balance information for the Sony DSLR-A100.

Index1	Tag Name	Writable	Values / Notes
14	DriveMode	int8u	0 = Self-timer 10 sec 1 = Continuous 2 = Single-frame Exposure Bracketing 3 = Continuous Exposure Bracketing 4 = Self-Timer 2 sec 5 = Single Frame 8 = White Balance Bracketing Low 9 = White Balance Bracketing High
16	Rotation	int8u	0 = Horizontal (normal) 1 = Rotate 270 CW 2 = Rotate 90 CW
20	ImageStabilizationSetting	int8u	0 = Off 1 = On
21	DynamicRangeOptimizerMode	int8u	0 = Off 1 = Standard 2 = Advanced
42	ExposureCompensationMode	int8u	0 = Ambient and Flash 1 = Ambient Only
43	WBBracketShotNumber	int8u	
44	WhiteBalanceBracketing	int8u	0 = Off 1 = Low 2 = High
45	ExposureBracketShotNumber	int8u	
49	FlashFunction	int16u	0x0 = No flash 0x300 = Built-in flash 0x1205 = Manual 0x120e = Strobe 0x128e = Fill flash, Pre-flash TTL 0x12ae = Bounce flash 0x140e = Rear sync, ADI 0x148e = Fill flash, ADI 0x1580 = Wireless 0x178e = HSS
52	ExposureMode	int16u	0x0 = Program      0x1013 = Portrait 0x1 = Aperture Priority   0x1023 = Sports 0x2 = Shutter Priority   0x1033 = Sunset 0x3 = Manual           0x1043 = Night View/Portrait

			0x4 = Auto 0x5 = Program Shift A 0x6 = Program Shift S	0x1053 = Landscape 0x1083 = Macro
54	ColorMode	int16u	0 = Standard 1 = Vivid 2 = Portrait 3 = Landscape	4 = Sunset 5 = Night View 7 = B&W 8 = Adobe RGB
56	AverageLV	int16u	(arithmetic mean of the readings from the 40 honeycomb segments)	
60	FrameNumber	int8u		
150	WB_RGBLevels	int16u[3]		
174	WB_GBRGLevels	int16u[4]		
192	WB_RedLevelsTungsten	int16u[7]	(7 values for adjustments of -3 through +3)	
206	WB_BlueLevelsTungsten	int16u[7]		
220	WB_RedLevelsDaylight	int16u[7]		
234	WB_BlueLevelsDaylight	int16u[7]		
248	WB_RedLevelsCloudy	int16u[7]		
262	WB_BlueLevelsCloudy	int16u[7]		
276	WB_RedLevelsFlash	int16u[7]		
290	WB_BlueLevelsFlash	int16u[7]		
332	WB_RedLevelsFluorescent	int16u[7]	(white balance red presets for fluorescent -2 through +4: -2=Fluorescent, -1=WhiteFluorescent, 0=CoolWhiteFluorescent, +1=DayWhiteFluorescent and +3=DaylightFluorescent)	
346	WB_BlueLevelsFluorescent	int16u[7]		
360	WB_RedLevelsShade	int16u[7]		
374	WB_BlueLevelsShade	int16u[7]		
392	WB_RedLevel6500K	int16u		
394	WB_BlueLevel6500K	int16u		
396	WB_RedLevelCustom	int16u		
398	WB_BlueLevelCustom	int16u		
408	WB_RedLevel3500K	int16u		
410	WB_BlueLevel3500K	int16u		
446	WB_RedLevelsKelvin	int16u[75]	(values for 2500-9900 K, in increments of 100 K)	
596	WB_BlueLevelsKelvin	int16u[75]		
772	WB_RBLevelsFlash	int16u[2]		
776	WB_RBLevelsCoolWhiteF	int16u[2]		
1000	WB_RBLevelsTungsten	int16u[2]		
1004	WB_RBLevelsDaylight	int16u[2]		
1008	WB_RBLevelsCloudy	int16u[2]		
1012	WB_RBLevelsFlash	int16u[2]		
1020	WB_RedLevelsFluorescent	int16u[7]		
1034	WB_BlueLevelsFluorescent	int16u[7]		
1048	WB_RBLevelsShade	int16u[2]		
1056	WB_RBLevels6500K	int16u[2]		
1060	WB_RBLevelsCustom	int16u[2]		
1072	WB_RBLevels3500K	int16u[2]		
1320	WB_RBLevelsDaylight	int16u[2]		
1350	WB_RGBLevels	int16u[3]		
1576	AEMeteringSegments	int8u[40]	(metering values from the 40 honeycomb segments, converted to LV. The first value is for the outer cell, then the values are given row by row, from top to bottom, with each row scanned left-to-right. The 21st value is the middle cell, which gives the spot metering)	
1680	MeasuredLV	int8u	(measured light value based on MeteringMode)	
1681	BrightnessValue	int8u		
4172	TiffMeteringImage	no	(13-bit RBGG (?) 40x30 pixels, presumably metering info, converted to a 16-bit TIFF image;)	
18872	ExposureTime	int8u		
18874	ISO	int8u		

18875	FocusDistance		int8u	
18877	LensType		int16uRev --> <a href="#">Minolta LensType Values</a>	
18880	ExposureCompensation		int8s	
18881	FlashExposureComp		int8s	
18882	ImageStabilization		int8u	0 = Off 1 = On
18883	BrightnessValue		int8u	
18885	MaxAperture		int8u	
18887	FNumber		int8u	
18908	InternalSerialNumber		string[12]	

## Minolta CameraSettings5D Tags

Index2	Tag Name	Writable	Values / Notes	
10	ExposureMode	int16u	0 = Program 1 = Aperture Priority 2 = Shutter Priority 3 = Manual 4 = Auto? 4131 = Connected Copying?	
12	MinoltaImageSize	int16u	0 = Large 1 = Medium 2 = Small	
13	MinoltaQuality	int16u	0 = RAW 16 = Fine 32 = Normal 34 = RAW+JPEG 48 = Economy	
14	WhiteBalance	int16u	0 = Auto      5 = Fluorescent 1 = Daylight    6 = Flash 2 = Cloudy     256 = Kelvin 3 = Shade      512 = Manual 4 = Tungsten	
31	Flash	int16u	0 = Did not fire 1 = Fired	
32	FlashMode	int16u	0 = Normal 1 = Red-eye reduction 2 = Rear flash sync	
37	MeteringMode	int16u	0 = Multi-segment 1 = Center-weighted average 2 = Spot	
38	ISOSetting	int16u	0 = Auto 1 = 100 3 = 200 4 = 400 5 = 800 6 = 1600 7 = 3200 8 = 200 (Zone Matching High) 10 = 80 (Zone Matching Low)	
47	ColorSpace	int16u	0 = Natural sRGB 1 = Natural+ sRGB 2 = Monochrome 4 = Adobe RGB (ICC) 5 = Adobe RGB	
48	Sharpness	int16u		
49	Contrast	int16u		
50	Saturation	int16u		
53	ExposureTime	int16u		
54	FNumber	int16u		
55	FreeMemoryCardImages	int16u		
73	ColorTemperature	int16s		
74	HueAdjustment	int16u		
80	Rotation	int16u	72 = Horizontal (normal) 76 = Rotate 90 CW	

			82 = Rotate 270 CW
83	ExposureCompensation	int16u	
84	FreeMemoryCardImages	int16u	
101	Rotation	int16u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
110	ColorTemperature	int16s	
113	PictureFinish	int16u	0 = Natural            5 = Night Scene 1 = Natural+        6 = Night Portrait 2 = Portrait          7 = Monochrome 3 = Wind Scene      8 = Adobe RGB 4 = Evening Scene   9 = Adobe RGB (ICC)
174	ImageNumber	int16u	
176	NoiseReduction	int16u	0 = Off 1 = On
189	ImageStabilization	int16u	0 = Off 1 = On

## Minolta CameraSettingsA100 Tags

Camera settings information for the Sony DSLR-A100.

Index2	Tag Name	Writable	Values / Notes
0	ExposureMode	int16u	0x0 = Program 0x1 = Aperture Priority 0x2 = Shutter Priority 0x3 = Manual 0x4 = Auto 0x5 = Program Shift A 0x6 = Program Shift S 0x1013 = Portrait 0x1023 = Sports 0x1033 = Sunset 0x1043 = Night View/Portrait 0x1053 = Landscape 0x1083 = Macro
1	ExposureCompensationSetting	int16u	
5	HighSpeedSync	int16u	0 = Off 1 = On
6	ShutterSpeedSetting	int16u	(used only in M and S exposure modes)
7	ApertureSetting	int16u	(used only in M and A exposure modes)
8	ExposureTime	int16u	
9	FNumber	int16u	
10	DriveMode2	int16u	0x0 = Self-timer 10 sec 0x1 = Continuous 0x4 = Self-timer 2 sec 0x5 = Single Frame 0x8 = White Balance Bracketing Low 0x9 = White Balance Bracketing High 0x302 = Single-frame Bracketing Low 0x303 = Continous Bracketing Low 0x702 = Single-frame Bracketing High 0x703 = Continuous Bracketing High
11	WhiteBalance	int16u	0x0 = Auto            0x5 = Fluorescent 0x1 = Daylight       0x6 = Flash 0x2 = Cloudy         0x100 = Kelvin 0x3 = Shade          0x200 = Manual 0x4 = Tungsten
12	FocusMode	int16u	0 = AF-S 1 = AF-C 4 = AF-A 5 = Manual 6 = DMF
13	AFPointSelected	int16u	1 = Center          6 = Bottom 2 = Top              7 = Bottom-left 3 = Top-right       8 = Left 4 = Right            9 = Top-left 5 = Bottom-right

14	AFAreaMode	int16u	0 = Wide 1 = Local 2 = Spot
15	FlashMode	int16u	0 = Auto 2 = Rear Sync 3 = Wireless 4 = Fill Flash
16	FlashExposureCompSet	int16u	
18	MeteringMode	int16u	0 = Multi-segment 1 = Center-weighted average 2 = Spot
19	ISOSetting	int16u	0 = Auto 48 = 100 56 = 200 64 = 400 72 = 800 80 = 1600 174 = 80 (Zone Matching Low) 184 = 200 (Zone Matching High)
20	ZoneMatchingMode	int16u	0 = Off 1 = Standard 2 = Advanced
21	DynamicRangeOptimizer	int16u	(as applied to image) 0 = Off 1 = Standard 2 = Advanced
22	ColorMode	int16u	0 = Standard      4 = Sunset 1 = Vivid        5 = Night Scene 2 = Portrait     7 = B&W 3 = Landscape    8 = Adobe RGB
23	ColorSpace	int16u	0 = sRGB 2 = B&W 5 = Adobe RGB
24	Sharpness	int16u	0 = Normal
25	Contrast	int16u	0 = Normal
26	Saturation	int16u	0 = Normal
28	FlashMetering	int16u	0 = ADI (Advanced Distance Integration) 1 = Pre-flash TTL
29	PrioritySetupShutterRelease	int16u	0 = AF 1 = Release
30	DriveMode	int16u	0 = Single Frame 1 = Continuous 2 = Self-timer 3 = Continuous Bracketing 4 = Single-Frame Bracketing 5 = White Balance Bracketing
31	SelfTimerTime	int16u	0 = 10 s 4 = 2 s
32	ContinuousBracketing	int16u	0x303 = Low 0x703 = High
33	SingleFrameBracketing	int16u	0x302 = Low 0x702 = High
34	WhiteBalanceBracketing	int16u	0x8 = Low 0x9 = High
35	WhiteBalanceSetting	int16u	0x0 = Auto 0x1 = Preset 0x2 = Custom 0x3 = Color Temperature/Color Filter 0x8001 = Preset 0x8002 = Custom 0x8003 = Color Temperature/Color Filter
36	PresetWhiteBalance	int16u	1 = Daylight    4 = Tungsten 2 = Cloudy      5 = Fluorescent 3 = Shade       6 = Flash
37	ColorTemperatureSetting	int16u	0 = Temperature 2 = Color Filter
38	CustomWBSetting	int16u	0 = Setup 1 = Recall

39	DynamicRangeOptimizerSetting	int16u	(as set in camera) 0 = Off 1 = Standard 2 = Advanced
50	FreeMemoryCardImages	int16u	
52	CustomWBRedLevel	int16u	
53	CustomWBGreenLevel	int16u	
54	CustomWBBlueLevel	int16u	
55	CustomWBError	int16u	0 = OK 1 = Error
56	WhiteBalanceFineTune	int16s	
57	ColorTemperature	int16u	
58	ColorCompensationFilter	int16s	(ranges from -2 for green to +2 for magenta)
59	SonyImageSize	int16u	0 = Standard 1 = Medium 2 = Small
60	SonyQuality	int16u	0 = RAW 32 = Fine 34 = RAW + JPEG 48 = Standard
61	InstantPlaybackTime	int16u	
62	InstantPlaybackSetup	int16u	0 = Image and Information 1 = Image Only 3 = Image and Histogram
63	NoiseReduction	int16u	0 = Off 1 = On
64	EyeStartAF	int16u	0 = On 1 = Off
65	RedEyeReduction	int16u	0 = Off 1 = On
66	FlashDefault	int16u	0 = Auto 1 = Fill Flash
67	AutoBracketOrder	int16u	0 = 0 - + 1 = - 0 +
68	FocusHoldButton	int16u	0 = Focus Hold 1 = DOF Preview
69	AELButton	int16u	0 = Hold 1 = Toggle 2 = Spot Hold 3 = Spot Toggle
70	ControlDialSet	int16u	0 = Shutter Speed 1 = Aperture
71	ExposureCompensationMode	int16u	0 = Ambient and Flash 1 = Ambient Only
72	AFAssist	int16u	0 = On 1 = Off
73	CardShutterLock	int16u	0 = On 1 = Off
74	LensShutterLock	int16u	0 = On 1 = Off
75	AFAreaIllumination	int16u	0 = 0.3 s 1 = 0.6 s 2 = Off
76	MonitorDisplayOff	int16u	0 = Automatic 1 = Manual
77	RecordDisplay	int16u	0 = Auto Rotate 1 = Horizontal
78	PlayDisplay	int16u	0 = Auto Rotate 1 = Manual Rotate
80	ExposureIndicator	int16u	--> <a href="#">Minolta ExposureIndicator Values</a>
81	AELEExposureIndicator	int16u	--> <a href="#">Minolta ExposureIndicator Values</a> (also indicates exposure for next shot when bracketing)
82	ExposureBracketingIndicatorLast	int16u	--> <a href="#">Minolta ExposureIndicator Values</a> (indicator for last shot when bracketing)
83	MeteringOffScaleIndicator	int16u	(two flashing triangles when under or over metering scale) 0 = Within Range

				1 = Under/Over Range 255 = Out of Range
84	FlashExposureIndicator	int16u	--> <a href="#">Minolta ExposureIndicator Values</a>	
85	FlashExposureIndicatorNext	int16u	--> <a href="#">Minolta ExposureIndicator Values</a> (indicator for next shot when bracketing)	
86	FlashExposureIndicatorLast	int16u	--> <a href="#">Minolta ExposureIndicator Values</a> (indicator for last shot when bracketing)	
87	ImageStabilization	int16u	0 = Off 1 = On	
88	FocusModeSwitch	int16u	0 = AF 1 = MF	
89	FlashType	int16u	0 = Off 1 = Built-in 2 = External	
90	Rotation	int16u	0 = Horizontal (normal) 1 = Rotate 270 CW 2 = Rotate 90 CW	
91	AELock	int16u	0 = Off 1 = On	
94	ColorTemperature	int16u		
95	ColorCompensationFilter	int16s	(ranges from -2 for green to +2 for magenta)	
96	BatteryState	int16u	3 = Very Low 4 = Low 5 = Half Full 6 = Sufficient Power Remaining	

## Minolta ExposureIndicator Values

Value	ExposureIndicator	Value	ExposureIndicator	Value	ExposureIndicator
0	= Not Indicated	125	= -0.7	133	= +1.3
1	= Under Scale	126	= -0.5	134	= +1.5
119	= Bottom of Scale	127	= -0.3	135	= +1.7
120	= -2.0	128	= 0	136	= +2.0
121	= -1.7	129	= +0.3	253	= Top of Scale
122	= -1.5	130	= +0.5	254	= Over Scale
123	= -1.3	131	= +0.7		
124	= -1.0	132	= +1.0		

## Minolta MMA Tags

This information is found in MOV videos from Minolta models such as the DiMAGE A2, S414 and 7Hi.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
20	SoftwareVersion	no	

## Minolta MOV1 Tags

This information is found in MOV videos from some Konica Minolta models such as the DiMage Z10 and X50.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
32	ModelType	no	
46	ExposureTime	no	
50	FNumber	no	
58	ExposureCompensation	no	
80	FocalLength	no	

## Minolta MOV2 Tags

This information is found in MOV videos from some Minolta models such as the DiMAGE X and Xt.

Index1	Tag Name	Writable	Values / Notes

0	Make	no
24	ModelType	no
38	ExposureTime	no
42	FNumber	no
50	ExposureCompensation	no
72	FocalLength	no

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*Last revised Jul 30, 2025*

[<-- ExifTool Tag Names](#)

# MinoltaRaw Tags

These tags are used in Minolta RAW format (MRW) images.

Tag ID	Tag Name	Writable	Values / Notes
"\OPRD"	MinoltaPRD	-	--> <a href="#">MinoltaRaw PRD Tags</a>
"\ORIF"	MinoltaRIF	-	--> <a href="#">MinoltaRaw RIF Tags</a>
"\OTTW"	MinoltaTTW	-	--> <a href="#">EXIF Tags</a>
"\OWBG"	MinoltaWBG	-	--> <a href="#">MinoltaRaw WBG Tags</a>

## MinoltaRaw PRD Tags

Index1	Tag Name	Writable	Values / Notes
0	FirmwareID	string[8]	
8	SensorHeight	int16u	
10	SensorWidth	int16u	
12	ImageHeight	int16u	
14	ImageWidth	int16u	
16	RawDepth	int8u	
17	BitDepth	int8u	
18	StorageMethod	int8u	82 = Padded 89 = Linear
23	BayerPattern	int8u	1 = RGGB 4 = GBRG

## MinoltaRaw RIF Tags

Index1	Tag Name	Writable	Values / Notes
1	Saturation	int8s	
2	Contrast	int8s	
3	Sharpness	int8s	
4	WBMode	int8u~	
5	ProgramMode	int8u	0 = None    3 = Night Portrait 1 = Portrait    4 = Sunset 2 = Text    5 = Sports
6	ISOSetting	int8u	0 = Auto 48 = 100 56 = 200 64 = 400 72 = 800 80 = 1600 174 = 80 (Zone Matching Low) 184 = 200 (Zone Matching High)

7	ColorMode	int8u	0 = Natural color    13 = Natural sRGB 1 = Black & White    14 = Natural+ sRGB 2 = Vivid color    15 = Landscape 3 = Solarization    16 = Evening 4 = Adobe RGB    17 = Night Scene 5 = Sepia    18 = Night Portrait 9 = Natural    132 = Embed Adobe RGB 12 = Portrait (Sony A100) 0x0 = Standard 0x1 = Vivid 0x2 = Portrait 0x3 = Landscape 0x4 = Sunset 0x5 = Night View/Portrait 0x6 = B&W 0x7 = Adobe RGB 0xc = Neutral 0xd = Clear 0xe = Deep 0xf = Light
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0x10 = Autumn Leaves  
 0x11 = Sepia  
 0x12 = FL  
 0x13 = Vivid 2  
 0x14 = IN  
 0x15 = SH  
 0x16 = FL2  
 0x17 = FL3  
 0x64 = Neutral  
 0x65 = Clear  
 0x66 = Deep  
 0x67 = Light  
 0x68 = Night View  
 0x69 = Autumn Leaves  
 0xff = Off  
 0xffffffff = n/a

8	WB_RBLevelsTungsten	int16u[2]	(these WB_RBLevels currently decoded only for the Sony A100)
12	WB_RBLevelsDaylight	int16u[2]	
16	WB_RBLevelsCloudy	int16u[2]	
20	WB_RBLevelsCoolWhiteF	int16u[2]	
24	WB_RBLevelsFlash	int16u[2]	
28	WB_RBLevelsCustom	int16u[2]	
32	WB_RBLevelsShade	int16u[2]	
36	WB_RBLevelsDaylightF	int16u[2]	
40	WB_RBLevelsDayWhiteF	int16u[2]	
44	WB_RBLevelsWhiteF	int16u[2]	
56	ColorFilter	int8s	(Minolta models)
57	BWFilter	int8u	
58	ZoneMatching	int8u	(Minolta models) 0 = ISO Setting Used 1 = High Key 2 = Low Key
59	Hue	int8s	
60	ColorTemperature	int8u	(Minolta models)
74	ZoneMatching	int8u	(Sony models) 0 = ISO Setting Used 1 = High Key 2 = Low Key
76	ColorTemperature	int8u	(A100)
77	ColorFilter	int8u	(A100)
78	ColorTemperature	int8u	(A200 and A700)
79	ColorFilter	int8u	(A200 and A700)
80	RawDataLength	no	(A100)

## MinoltaRaw WBG Tags

Index1	Tag Name	Writable	Values / Notes
0	WBScale	int8u[4]	
4	WB_GBRGLevels	int16u[4]	(DiMAGE A200)
	WB_RGGBLevels	int16u[4]	(other models)

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*Last revised Jul 30, 2025*

[-- ExifTool Tag Names](#)

# Motorola Tags

Tag ID	Tag Name	Writable	Values / Notes
0x5500	BuildNumber	string	
0x5501	SerialNumber	string	
0x6420	CustomRendered	string	
0x64d0	DriveMode	string	
0x665e	Sensor	string	
0x6705	ManufactureDate	string	

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[<-- ExifTool Tag Names](#)

# Nikon Tags

Tag ID	Tag Name	Writable	Values / Notes	
0x0001	MakerNoteVersion	undef[4]		
0x0002	ISO	int16u[2]		
0x0003	ColorMode	string		
0x0004	Quality	string		
0x0005	WhiteBalance	string		
0x0006	Sharpness	string		
0x0007	FocusMode	string		
0x0008	FlashSetting	string		
0x0009	FlashType	string		
0x000b	WhiteBalanceFineTune	int16s[n]		
0x000c	WB_RBLevels	rational64u[4]		
0x000d	ProgramShift	undef[4]		
0x000e	ExposureDifference	undef[4]		
0x000f	ISOSelection	string		
0x0010	DataDump	no		
0x0011	PreviewIFD	-	--> <a href="#">Nikon PreviewIFD Tags</a>	
0x0012	FlashExposureComp	undef[4]	(may be set even if flash does not fire. Does not include the effect of flash bracketing.)	
0x0013	ISOSetting	int16u[2]		
0x0014	ColorBalanceA NRWData	- -	--> <a href="#">Nikon ColorBalanceA Tags</a> --> <a href="#">Nikon ColorBalanceB Tags</a> --> <a href="#">Nikon ColorBalanceC Tags</a>	
0x0016	ImageBoundary	int16u[4]		
0x0017	ExternalFlashExposureComp	undef[4]		
0x0018	FlashExposureBracketValue	undef[4]		
0x0019	ExposureBracketValue	rational64s		
0x001a	ImageProcessing	string		
0x001b	CropHiSpeed	int16u[7]	0 = Off 1 = 1.3x Crop 2 = DX Crop 3 = 5:4 Crop 4 = 3:2 Crop 6 = 16:9 Crop 8 = 2.7x Crop 9 = DX Movie 16:9 Crop	10 = 1.3x Movie Crop 11 = FX Uncropped 12 = DX Uncropped 13 = 2.8x Movie Crop 14 = 1.4x Movie Crop 15 = 1.5x Movie Crop 17 = FX 1:1 Crop 18 = DX 1:1 Crop
0x001c	ExposureTuning	undef[3]		
0x001d	SerialNumber	string!	(this value is used as a key to decrypt other information -- writing this tag causes the other information to be re-encrypted with the new key)	
0x001e	ColorSpace	int16u	1 = sRGB 2 = Adobe RGB 4 = BT.2100	
0x001f	VRInfo	-	--> <a href="#">Nikon VRInfo Tags</a>	
0x0020	ImageAuthentication	int8u	0 = Off 1 = On	
0x0021	FaceDetect	-	--> <a href="#">Nikon FaceDetect Tags</a>	
0x0022	ActiveD-Lighting	int16u	0 = Off 1 = Low 3 = Normal 5 = High 7 = Extra High	8 = Extra High 1 9 = Extra High 2 10 = Extra High 3 11 = Extra High 4 65535 = Auto
0x0023	PictureControlData	undef!^	--> <a href="#">Nikon PictureControl Tags</a> --> <a href="#">Nikon PictureControl2 Tags</a> --> <a href="#">Nikon PictureControl3 Tags</a> --> <a href="#">Nikon PictureControlUnknown Tags</a>	
0x0024	WorldTime	-	--> <a href="#">Nikon WorldTime Tags</a>	
0x0025	ISOInfo	-	--> <a href="#">Nikon ISOInfo Tags</a>	

0x002a	VignetteControl	int16u	0 = Off 1 = Low 3 = Normal 5 = High
0x002b	DistortInfo	-	--> <a href="#">Nikon DistortInfo Tags</a>
0x002c	UnknownInfo	-	--> <a href="#">Nikon UnknownInfo Tags</a>
0x0032	UnknownInfo2	-	--> <a href="#">Nikon UnknownInfo2 Tags</a>
0x0034	ShutterMode	int16u	0 = Mechanical 16 = Electronic 48 = Electronic Front Curtain 64 = Electronic (Movie) 80 = Auto (Mechanical) 81 = Auto (Electronic Front Curtain) 96 = Electronic (High Speed)
0x0035	HDRInfo	-	--> <a href="#">Nikon HDRInfo Tags</a>
	HDRInfo2	-	--> <a href="#">Nikon HDRInfo2 Tags</a>
0x0037	MechanicalShutterCount	int32u	
0x0039	LocationInfo	-	--> <a href="#">Nikon LocationInfo Tags</a>
0x003d	BlackLevel	int16u[4]	
0x003e	ImageSizeRAW	yes	1 = Large 2 = Medium 3 = Small
0x003f	WhiteBalanceFineTune	rational64s[2]	
0x0044	JPGCompression	yes	1 = Size Priority 3 = Optimal Quality
0x0045	CropArea	int16u[4]	(left, top, width, height)
0x004e	NikonSettings	undef!^	--> <a href="#">NikonSettings Tags</a>
0x004f	ColorTemperatureAuto	int16u	
0x0080	ImageAdjustment	string	
0x0081	ToneComp	string	
0x0082	AuxiliaryLens	string	
0x0083	LensType	int8u	Bit 0 = MF Bit 1 = D Bit 2 = G Bit 3 = VR Bit 4 = 1 Bit 5 = FT-1 Bit 6 = E Bit 7 = AF-P
0x0084	Lens	rational64u[4]	
0x0085	ManualFocusDistance	rational64u	
0x0086	DigitalZoom	rational64u	
0x0087	FlashMode	int8u	0 = Did Not Fire 1 = Fired, Manual 3 = Not Ready 7 = Fired, External 8 = Fired, Commander Mode 9 = Fired, TTL Mode 18 = LED Light
0x0088	AFInfo	-	--> <a href="#">Nikon AFInfo Tags</a> --> <a href="#">Nikon AFInfo Tags</a>
0x0089	ShootingMode	int16u~	(for the D70, Bit 5 = Unused LE-NR Slowdown) Bit 0 = Continuous Bit 1 = Delay Bit 2 = PC Control Bit 3 = Self-timer Bit 4 = Exposure Bracketing Bit 5 = Auto ISO Bit 6 = White-Balance Bracketing Bit 7 = IR Control Bit 8 = D-Lighting Bracketing Bit 11 = Pre-capture
0x008b	LensFStops	undef[4]	
0x008c	ContrastCurve	undef!	
0x008d	ColorHue	string	
0x008f	SceneMode	string	

0x0090	LightSource	string	
0x0091	ShotInfoD40 ShotInfoD80 ShotInfoD90 ShotInfoD3a ShotInfoD3b ShotInfoD3X ShotInfoD3S ShotInfoD300a ShotInfoD300b ShotInfoD300S ShotInfoD700 ShotInfoD780 ShotInfoD7500 ShotInfoD800 ShotInfoD810 ShotInfoD850 ShotInfoD5000 ShotInfoD5100 ShotInfoD5200 ShotInfoD7000 ShotInfoD4 ShotInfoD4S ShotInfoD500 ShotInfoD6 ShotInfoD610 ShotInfoZ6III ShotInfoZ7II ShotInfoZ8 ShotInfoZ9 ShotInfo02xx ShotInfoUnknown	-	--> <a href="#">Nikon ShotInfoD40 Tags</a> --> <a href="#">Nikon ShotInfoD80 Tags</a> --> <a href="#">Nikon ShotInfoD90 Tags</a> --> <a href="#">Nikon ShotInfoD3a Tags</a> --> <a href="#">Nikon ShotInfoD3b Tags</a> --> <a href="#">Nikon ShotInfoD3X Tags</a> --> <a href="#">Nikon ShotInfoD3S Tags</a> --> <a href="#">Nikon ShotInfoD300a Tags</a> --> <a href="#">Nikon ShotInfoD300b Tags</a> --> <a href="#">Nikon ShotInfoD300S Tags</a> --> <a href="#">Nikon ShotInfoD700 Tags</a> --> <a href="#">Nikon ShotInfoD780 Tags</a> --> <a href="#">Nikon ShotInfoD7500 Tags</a> --> <a href="#">Nikon ShotInfoD800 Tags</a> --> <a href="#">Nikon ShotInfoD810 Tags</a> --> <a href="#">Nikon ShotInfoD850 Tags</a> --> <a href="#">Nikon ShotInfoD5000 Tags</a> --> <a href="#">Nikon ShotInfoD5100 Tags</a> --> <a href="#">Nikon ShotInfoD5200 Tags</a> --> <a href="#">Nikon ShotInfoD7000 Tags</a> --> <a href="#">Nikon ShotInfoD4 Tags</a> --> <a href="#">Nikon ShotInfoD4S Tags</a> --> <a href="#">Nikon ShotInfoD500 Tags</a> --> <a href="#">Nikon ShotInfoD6 Tags</a> --> <a href="#">Nikon ShotInfoD610 Tags</a> --> <a href="#">Nikon ShotInfoZ6III Tags</a> --> <a href="#">Nikon ShotInfoZ7II Tags</a> --> <a href="#">Nikon ShotInfoZ8 Tags</a> --> <a href="#">Nikon ShotInfoZ9 Tags</a> --> <a href="#">Nikon ShotInfo Tags</a> --> <a href="#">Nikon ShotInfo Tags</a>
0x0092	HueAdjustment	int16s	
0x0093	NEFCompression	int16u	--> <a href="#">Nikon NEFCompression Values</a>
0x0094	SaturationAdj	int16s	
0x0095	NoiseReduction	string	
0x0096	NEFLinearizationTable	undef!	
0x0097	ColorBalance0100 ColorBalance0102 ColorBalance0103 ColorBalance0205 ColorBalance0209 ColorBalance02 ColorBalance0211 ColorBalance0213 ColorBalance0215 ColorBalance0219 ColorBalanceUnknown1 ColorBalanceUnknown2 ColorBalanceUnknown	-	--> <a href="#">Nikon ColorBalance1 Tags</a> --> <a href="#">Nikon ColorBalance2 Tags</a> --> <a href="#">Nikon ColorBalance3 Tags</a> --> <a href="#">Nikon ColorBalance2 Tags</a> --> <a href="#">Nikon ColorBalance4 Tags</a> --> <a href="#">Nikon ColorBalance2 Tags</a> --> <a href="#">Nikon ColorBalance4 Tags</a> --> <a href="#">Nikon ColorBalance2 Tags</a> --> <a href="#">Nikon ColorBalance4 Tags</a> --> <a href="#">Nikon ColorBalance2 Tags</a> --> <a href="#">Nikon ColorBalanceUnknown Tags</a> --> <a href="#">Nikon ColorBalanceUnknown2 Tags</a> --> <a href="#">Nikon ColorBalanceUnknown Tags</a>
0x0098	LensData0100 LensData0101 LensData0201 LensData0204 LensData0400 LensData0402 LensData0403 LensData0800 LensDataUnknown	-	--> <a href="#">Nikon LensData00 Tags</a> --> <a href="#">Nikon LensData01 Tags</a> --> <a href="#">Nikon LensData01 Tags</a> --> <a href="#">Nikon LensData0204 Tags</a> --> <a href="#">Nikon LensData0400 Tags</a> --> <a href="#">Nikon LensData0402 Tags</a> --> <a href="#">Nikon LensData0403 Tags</a> --> <a href="#">Nikon LensData0800 Tags</a> --> <a href="#">Nikon LensDataUnknown Tags</a>
0x0099	RawImageCenter	int16u[2]	
0x009a	SensorPixelSize	rational64u[2]	
0x009c	SceneAssist	string	

0x009d	DateStampMode	int16u	(feature to imprint date/time on image) 0 = Off 1 = Date & Time 2 = Date 3 = Date Counter
0x009e	RetouchHistory	int16u[10]	[Values 0-9] 0 = None 3 = B & W 4 = Sepia 5 = Trim 6 = Small Picture 7 = D-Lighting 8 = Red Eye 9 = Cyanotype 10 = Sky Light 11 = Warm Tone 12 = Color Custom 13 = Image Overlay 14 = Red Intensifier 15 = Green Intensifier 16 = Blue Intensifier 17 = Cross Screen 18 = Quick Retouch 19 = NEF Processing 23 = Distortion Control 25 = Fisheye 26 = Straighten 29 = Perspective Control 30 = Color Outline 31 = Soft Filter 32 = Resize 33 = Miniature Effect 34 = Skin Softening 35 = Selected Frame 37 = Color Sketch 38 = Selective Color 39 = Glamour 40 = Drawing 44 = Pop 45 = Toy Camera Effect 1 46 = Toy Camera Effect 2 47 = Cross Process (red) 48 = Cross Process (blue) 49 = Cross Process (green) 50 = Cross Process (yellow) 51 = Super Vivid 52 = High-contrast Monochrome 53 = High Key 54 = Low Key
0x00a0	SerialNumber	string	
0x00a2	ImageDataSize	int32u	
0x00a5	ImageCount	int32u	
0x00a6	DeletedImageCount	int32u	
0x00a7	ShutterCount	int32u!	(includes both mechanical and electronic shutter activations for models with this feature. This value is used as a key to decrypt other information, and writing this tag causes the other information to be re-encrypted with the new key)
0x00a8	FlashInfo0100	-	--> <a href="#">Nikon FlashInfo0100 Tags</a>
	FlashInfo0102	-	--> <a href="#">Nikon FlashInfo0102 Tags</a>
	FlashInfo0103	-	--> <a href="#">Nikon FlashInfo0103 Tags</a>
	FlashInfo0106	-	--> <a href="#">Nikon FlashInfo0106 Tags</a>
	FlashInfo0107	-	--> <a href="#">Nikon FlashInfo0107 Tags</a>
	FlashInfo0300	-	--> <a href="#">Nikon FlashInfo0300 Tags</a>
	FlashInfoUnknown	-	--> <a href="#">Nikon FlashInfoUnknown Tags</a>
0x00a9	ImageOptimization	string	
0x00aa	Saturation	string	
0x00ab	VariProgram	string	
0x00ac	ImageStabilization	string	
0x00ad	AFResponse	string	
0x00b0	MultiExposure	-	--> <a href="#">Nikon MultiExposure Tags</a>
	MultiExposure2	-	--> <a href="#">Nikon MultiExposure Tags</a> --> <a href="#">Nikon MultiExposure2 Tags</a>
0x00b1	HighISONoiseReduction	int16u	0 = Off 1 = Minimal 2 = Low 3 = Medium Low 4 = Normal 5 = Medium High 6 = High
0x00b3	ToningEffect	string	
0x00b6	PowerUpTime	undef	(date/time when camera was last powered up)
0x00b7	AFInfo2	-	--> <a href="#">Nikon AFInfo2V0100 Tags</a> --> <a href="#">Nikon AFInfo2V0101 Tags</a> --> <a href="#">Nikon AFInfo2V0200 Tags</a> --> <a href="#">Nikon AFInfo2V0300 Tags</a> --> <a href="#">Nikon AFInfo2V0400 Tags</a>
0x00b8	FileInfo	-	--> <a href="#">Nikon FileInfo Tags</a> --> <a href="#">Nikon FileInfo Tags</a>
0x00b9	AFTune	-	--> <a href="#">Nikon AFTune Tags</a>
0x00bb	RetouchInfo	-	--> <a href="#">Nikon RetouchInfo Tags</a>
0x00bd	PictureControlData	undef!	--> <a href="#">Nikon PictureControl Tags</a>

0x00bf	SilentPhotography	yes	0 = Off 1 = On
0x00c3	BarometerInfo	-	--> <a href="#">Nikon BarometerInfo Tags</a>
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>
0x0e01	NikonCaptureData	undef!^	--> <a href="#">NikonCapture Tags</a> (this data is dropped when copying Nikon MakerNotes since it may be too large to fit in the EXIF segment of a JPEG image, but it may be copied as a block into existing Nikon MakerNotes later if desired)
0x0e09	NikonCaptureVersion	string^	
0x0e0e	NikonCaptureOffsets	undef^	--> <a href="#">Nikon CaptureOffsets Tags</a>
0x0e10	NikonScanIFD	-	--> <a href="#">Nikon Scan Tags</a>
0x0e13	NikonCaptureEditVersions NikonCaptureEditVersions	undef^ undef!^	(the <a href="#">ExtractEmbedded</a> option may be used to decode settings from the stored edit versions, otherwise this is extracted as a binary data block) --> <a href="#">NikonCapture Tags</a>
0x0e1d	NikonICCProfile	undef!	--> <a href="#">ICC Profile Tags</a>
0x0e1e	NikonCaptureOutput	undef!^	--> <a href="#">Nikon CaptureOutput Tags</a>
0x0e22	NEFBitDepth	int16u[4]!	'0 0 0 0' = n/a (JPEG) '8 8 8 0' = 8 x 3 '12 0 0 0' = 12 '14 0 0 0' = 14 '16 16 16 0' = 16 x 3

## Nikon NEFCompression Values

Value	NEFCompression	Value	NEFCompression
1	= Lossy (type 1)	7	= Unpacked 12 bits
2	= Uncompressed	8	= Small
3	= Lossless	9	= Packed 12 bits
4	= Lossy (type 2)	10	= Packed 14 bits
5	= Striped packed 12 bits	13	= High Efficiency
6	= Uncompressed (reduced to 12 bit)	14	= High Efficiency*

## Nikon ast Tags

Tags used by Nikon NX Studio in Nikon NKSC sidecar files and trailers.

These tags belong to the ExifTool XMP-ast family 1 group.

Tag Name	Writable	Values / Notes
About	no	
GPSAltitude	no	
GPSAltitudeRef	no	0 = Above Sea Level 1 = Below Sea Level
GPSImgDirection	no	
GPSImgDirectionRef	no	'M' = Magnetic North 'T' = True North
GPSLatitude	no	
GPSLatitudeRef	no	0 = North 1 = South
GPSLongitude	no	
GPSLongitudeRef	no	2 = East 3 = West
GPSMapDatum	no	
GPSVersionID	no	
IPTC	-	--> <a href="#">IPTC Tags</a>
Version	no	
XMLPackets	-	--> <a href="#">XMP Tags</a>

## Nikon nine Tags

These tags belong to the ExifTool XMP-nine family 1 group.

Tag Name	Writable	Values / Notes
About	no	
Label	no	
NineEdits	-	--> <a href="#">Nikon NineEdits Tags</a>
Rating	no	
Trim	no	
Version	no	

## Nikon NineEdits Tags

XML-based tags used to store editing information.

Tag Name	Writable	Values / Notes
FilterParametersBinary		no
FilterParametersCustomCustomData		no
FilterParametersExportExportData		no

## Nikon sdc Tags

These tags belong to the ExifTool XMP-sdc family 1 group.

Tag Name	Writable	Values / Notes
About	no	
AppName	no	
AppVersion	no	
Version	no	

## Nikon PreviewIFD Tags

Tag ID	Tag Name	Writable	Values / Notes
0x00fe	SubfileType	no	0x0 = Full-resolution image 0x1 = Reduced-resolution image 0x2 = Single page of multi-page image 0x3 = Single page of multi-page reduced-resolution image 0x4 = Transparency mask 0x5 = Transparency mask of reduced-resolution image 0x6 = Transparency mask of multi-page image 0x7 = Transparency mask of reduced-resolution multi-page image 0x8 = Depth map 0x9 = Depth map of reduced-resolution image 0x10 = Enhanced image data 0x10001 = Alternate reduced-resolution image 0x10004 = Semantic Mask 0xffffffff = invalid Bit 0 = Reduced resolution Bit 1 = Single page Bit 2 = Transparency mask Bit 3 = TIFF/IT final page Bit 4 = TIFF-FX mixed raster content
0x0103	Compression	no	--> <a href="#">EXIF Compression Values</a>
0x011a	XResolution	no	
0x011b	YResolution	no	
0x0128	ResolutionUnit	no	1 = None 2 = inches 3 = cm
0x0201	PreviewImageStart	int32u*	
0x0202	PreviewImageLength	int32u*	
0x0213	YCbCrPositioning	no	1 = Centered 2 = Co-sited

## Nikon ColorBalanceA Tags

Index2	Tag Name	Writable	Values / Notes
624	WB_RBLevels	int16u[2]!	(as shot)
626	WB_RBLevelsAuto	int16u[2]!	
628	WB_RBLevelsDaylight	int16u[14]!	(red/blue levels for 0,+3,+2,+1,-1,-2,-3)
642	WB_RBLevelsIncandescent	int16u[14]!	
656	WB_RBLevelsFluorescent	int16u[6]!	(red/blue levels for fluorescent W,N,D)
662	WB_RBLevelsCloudy	int16u[14]!	
676	WB_RBLevelsFlash	int16u[14]!	
690	WB_RBLevelsShade	int16u[14]!	(not valid for E8700)

## Nikon ColorBalanceB Tags

Color balance tags used by the P6000.

Index1	Tag Name	Writable	Values / Notes
4	ColorBalanceVersion	undef[4]	
5096	WB_RGGBLevels	int32u[4]!	
5112	WB_RGGBLevelsDaylight	int32u[4]!	
5128	WB_RGGBLevelsCloudy	int32u[4]!	
5160	WB_RGGBLevelsTungsten	int32u[4]!	
5176	WB_RGGBLevelsFluorescentW	int32u[4]!	
5192	WB_RGGBLevelsFlash	int32u[4]!	
5224	WB_RGGBLevelsCustom	int32u[4]!	(all zero if preset WB not used)
5240	WB_RGGBLevelsAuto	int32u[4]!	

## Nikon ColorBalanceC Tags

Color balance tags used by the P1000, P7000, P7100 and B700.

Index1	Tag Name	Writable	Values / Notes
4	ColorBalanceVersion	undef[4]	
32	BlackLevel	int16u	
56	WB_RGGBLevels	int32u[4]!	
76	WB_RGGBLevelsDaylight	int32u[4]!	
96	WB_RGGBLevelsCloudy	int32u[4]!	
116	WB_RGGBLevelsShade	int32u[4]!	(valid only for some models)
136	WB_RGGBLevelsTungsten	int32u[4]!	
156	WB_RGGBLevelsFluorescentW	int32u[4]!	
176	WB_RGGBLevelsFluorescentN	int32u[4]!	
196	WB_RGGBLevelsFluorescentD	int32u[4]!	
216	WB_RGGBLevelsHTMercury	int32u[4]!	
256	WB_RGGBLevelsCustom	int32u[4]!	(all zero if preset WB not used)
276	WB_RGGBLevelsAuto	int32u[4]!	

## Nikon VRInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	VRInfoVersion	no	
4	VibrationReduction	int8u	0 = n/a 1 = On 2 = Off
6	VRMode	int8u	(Z Series cameras thru July 2025) 0 = Off 1 = Normal 3 = Sport

0 = Normal  
 1 = On (1)  
 2 = Active  
 3 = Sport

8	VRType	int8u	2 = In-body 3 = In-body + Lens
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## Nikon FaceDetect Tags

Index2	Tag Name	Writable	Values / Notes
1	FaceDetectFrameSize	int16u[2]	
3	FacesDetected	int16u	
4	Face1Position	int16u[4]	(top, left, width and height of face detect area in coordinates of FaceDetectFrameSize)
8	Face2Position	int16u[4]	
12	Face3Position	int16u[4]	
16	Face4Position	int16u[4]	
20	Face5Position	int16u[4]	
24	Face6Position	int16u[4]	
28	Face7Position	int16u[4]	
32	Face8Position	int16u[4]	
36	Face9Position	int16u[4]	
40	Face10Position	int16u[4]	
44	Face11Position	int16u[4]	
48	Face12Position	int16u[4]	

## Nikon PictureControl Tags

Index1	Tag Name	Writable	Values / Notes
0	PictureControlVersion	no	
4	PictureControlName	string[20]	
24	PictureControlBase	string[20]	
48	PictureControlAdjust	int8u	0 = Default Settings 1 = Quick Adjust 2 = Full Control
49	PictureControlQuickAdjust	int8u	
50	Sharpness	int8u	
51	Contrast	int8u	
52	Brightness	int8u	
53	Saturation	int8u	
54	HueAdjustment	int8u	
55	FilterEffect	int8u	0x80 = Off      0x83 = Red 0x81 = Yellow    0x84 = Green 0x82 = Orange   0xff = n/a
56	ToningEffect	int8u	0x80 = B&W      0x86 = Blue-green 0x81 = Sepia      0x87 = Blue 0x82 = Cyanotype   0x88 = Purple-blue 0x83 = Red        0x89 = Red-purple 0x84 = Yellow     0xff = n/a 0x85 = Green
57	ToningSaturation	int8u	

## Nikon PictureControl2 Tags

Index1	Tag Name	Writable	Values / Notes
0	PictureControlVersion	no	
4	PictureControlName	string[20]	
24	PictureControlBase	string[20]	

48	PictureControlAdjust	int8u	0 = Default Settings 1 = Quick Adjust 2 = Full Control
49	PictureControlQuickAdjust	int8u	
51	Sharpness	int8u	
53	Clarity	int8u	
55	Contrast	int8u	
57	Brightness	int8u	
59	Saturation	int8u	
61	Hue	int8u	
63	FilterEffect	int8u	0x80 = Off      0x83 = Red 0x81 = Yellow    0x84 = Green 0x82 = Orange    0xff = n/a
64	ToningEffect	int8u	0x80 = B&W      0x86 = Blue-green 0x81 = Sepia      0x87 = Blue 0x82 = Cyanotype    0x88 = Purple-blue 0x83 = Red          0x89 = Red-purple 0x84 = Yellow      0xff = n/a 0x85 = Green
65	ToningSaturation	int8u	

## Nikon PictureControl3 Tags

Index1	Tag Name	Writable	Values / Notes
0	PictureControlVersion	no	
8	PictureControlName	string[20]	
28	PictureControlBase	string[20]	
54	PictureControlAdjust	int8u	0 = Default Settings 1 = Quick Adjust 2 = Full Control
55	PictureControlQuickAdjust	int8u	
57	Sharpness	int8u	
59	MidRangeSharpness	int8u	
61	Clarity	int8u	
63	Contrast	int8u	
65	Brightness	int8u	
67	Saturation	int8u	
69	Hue	int8u	
71	FilterEffect	int8u	0x80 = Off      0x83 = Red 0x81 = Yellow    0x84 = Green 0x82 = Orange    0xff = n/a
72	ToningEffect	int8u	0x80 = B&W      0x86 = Blue-green 0x81 = Sepia      0x87 = Blue 0x82 = Cyanotype    0x88 = Purple-blue 0x83 = Red          0x89 = Red-purple 0x84 = Yellow      0xff = n/a 0x85 = Green
73	ToningSaturation	int8u	

## Nikon PictureControlUnknown Tags

Index1	Tag Name	Writable	Values / Notes
0	PictureControlVersion	no	

## Nikon WorldTime Tags

Index1	Tag Name	Writable	Values / Notes
0	TimeZone	int16s	
2	DaylightSavings	int8u	0 = No 1 = Yes

3	DateDisplayFormat	int8u	0 = Y/M/D 1 = M/D/Y 2 = D/M/Y
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## Nikon ISOInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	ISO	int8u	(val = 100 * 2**((raw/12)-5))
4	ISOExpansion	int16u	0x0 = Off 0x10d = Hi 3.3 0x101 = Hi 0.3 0x10e = Hi 3.5 0x102 = Hi 0.5 0x10f = Hi 3.7 0x103 = Hi 0.7 0x110 = Hi 4.0 0x104 = Hi 1.0 0x111 = Hi 4.3 0x105 = Hi 1.3 0x112 = Hi 4.5 0x106 = Hi 1.5 0x113 = Hi 4.7 0x107 = Hi 1.7 0x114 = Hi 5.0 0x108 = Hi 2.0 0x201 = Lo 0.3 0x109 = Hi 2.3 0x202 = Lo 0.5 0x10a = Hi 2.5 0x203 = Lo 0.7 0x10b = Hi 2.7 0x204 = Lo 1.0 0x10c = Hi 3.0
6	ISO2	int8u	(val = 100 * 2**((raw/12)-5))
10	ISOExpansion2	int16u	0x0 = Off 0x107 = Hi 1.7 0x101 = Hi 0.3 0x108 = Hi 2.0 0x102 = Hi 0.5 0x201 = Lo 0.3 0x103 = Hi 0.7 0x202 = Lo 0.5 0x104 = Hi 1.0 0x203 = Lo 0.7 0x105 = Hi 1.3 0x204 = Lo 1.0 0x106 = Hi 1.5

## Nikon DistortInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	DistortionVersion?	no	
4	AutoDistortionControl	int8u	0 = Off 1 = On 2 = On (underwater)

## Nikon UnknownInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	UnknownInfoVersion?	no	

## Nikon UnknownInfo2 Tags

Index4	Tag Name	Writable	Values / Notes
0	UnknownInfo2Version?	no	

## Nikon HDRInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	HDRInfoVersion	no	
4	HDR	int8u	0 = Off 1 = On (normal) 48 = Auto
5	HDRLevel	int8u	0 = Auto 1 = 1 EV 2 = 2 EV 3 = 3 EV 255 = n/a
6	HDRSmoothing	int8u	0 = Off 3 = High 1 = Normal 48 = Auto 2 = Low 255 = n/a

7 HDRLevel2	int8u	0 = Auto 1 = 1 EV 2 = 2 EV 3 = 3 EV 255 = n/a
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## Nikon HDRInfo2 Tags

Index1	Tag Name	Writable	Values / Notes
0	HDRInfoVersion	no	
4	HDR	int8u	0 = Off 1 = On (normal)
5	HDRLevel	int8u	0 = n/a      3 = High 1 = Normal    4 = High+ 2 = Low       5 = Auto

## Nikon LocationInfo Tags

Tags written by some Nikon GPS-equipped cameras like the AW100.

Index1	Tag Name	Writable	Values / Notes
0	LocationInfoVersion	undef[4]	
4	TextEncoding	int8u	0 = n/a 1 = UTF8 2 = UTF16
5	CountryCode	undef[3]	
8	POILevel	int8u	
9	Location	undef[70]	

## Nikon MakerNotes0x51 Tags

Index1	Tag Name	Writable	Values / Notes
0	FirmwareVersion51	no	
10	NEFCompression	int16u	--> <a href="#">Nikon NEFCompression Values</a>

## Nikon MakerNotes0x56 Tags

Index1	Tag Name	Writable	Values / Notes
0	FirmwareVersion56	no	
4	BurstGroupID	int16u	

## Nikon AFInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	AFAreaMode	int8u	0 = Single Area 1 = Dynamic Area 2 = Dynamic Area (closest subject) 3 = Group Dynamic 4 = Single Area (wide) 5 = Dynamic Area (wide)
1	AFPoint	int8u	(in some focus modes this value is not meaningful) 0 = Center      6 = Upper-right 1 = Top          7 = Lower-left 2 = Bottom       8 = Lower-right 3 = Mid-left     9 = Far Left 4 = Mid-right    10 = Far Right 5 = Upper-left
2	AFPointsInFocus	int16u	0x0 = (none)      Bit 5 = Upper-left 0x7ff = All 11 Points Bit 6 = Upper-right Bit 0 = Center       Bit 7 = Lower-left Bit 1 = Top          Bit 8 = Lower-right Bit 2 = Bottom      Bit 9 = Far Left Bit 10 = Far Right

## Nikon ShotInfoD40 Tags

These tags are extracted from encrypted data in D40 and D40X images.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
582	ShutterCount	int32u	
586.1	VibrationReduction	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
729	CustomSettingsD40	-	--> <a href="#">NikonCustom SettingsD40 Tags</a>

## Nikon ShotInfoD80 Tags

These tags are extracted from encrypted data in D80 images.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
586	ShutterCount	int32u	
590.1	Rotation	int8u	[val & 0x7] 0 = Horizontal 1 = Rotate 270 CW 2 = Rotate 90 CW 3 = Rotate 180
590.2	VibrationReduction	int8u	[val >> 3 & 0x3] 0 = Off 3 = On
590.3	FlashFired	int8u	[val >> 5 & 0x7] Bit 1 = Internal Bit 2 = External
708	NikonImageSize	int8u	[val >> 4 & 0xf] 0 = Large (10.0 M) 1 = Medium (5.6 M) 2 = Small (2.5 M)
708.1	ImageQuality	int8u	[val & 0xf] 0 = NEF (RAW) 1 = JPEG Fine 2 = JPEG Normal 3 = JPEG Basic 4 = NEF (RAW) + JPEG Fine 5 = NEF (RAW) + JPEG Normal 6 = NEF (RAW) + JPEG Basic
748	CustomSettingsD80	-	--> <a href="#">NikonCustom SettingsD80 Tags</a>

## Nikon ShotInfoD90 Tags

These tags are extracted from encrypted data in images from the D90 with firmware 1.00.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
693	ISO2	int8u	
725	ShutterCount	int32u	
884	CustomSettingsD90	-	--> <a href="#">NikonCustom SettingsD90 Tags</a>

## Nikon ShotInfoD3a Tags

These tags are extracted from encrypted data in images from the D3 with firmware 1.00 and earlier.

Index	Tag Name	Writable	Values / Notes

0	ShotInfoVersion	no	
598	ISO2	int8u	
630	ShutterCount	int32u	
723.1	NikonImageSize	int8u	[val >> 3 & 0x3] 0 = Large 1 = Medium 2 = Small
723.2	ImageQuality	int8u	[val & 0x7] 0 = NEF (RAW) + JPEG Fine 1 = NEF (RAW) + JPEG Norm 2 = NEF (RAW) + JPEG Basic 3 = NEF (RAW) 4 = TIF (RGB) 5 = JPEG Fine 6 = JPEG Normal 7 = JPEG Basic
769	CustomSettingsD3	-	--> <a href="#">NikonCustom SettingsD3 Tags</a>

## Nikon ShotInfoD3b Tags

These tags are extracted from encrypted data in images from the D3 with firmware 1.10, 2.00, 2.01 and 2.02.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
16	ImageArea	int8u	0 = FX (36x24) 1 = DX (24x16) 2 = 5:4 (30x24)
605	ISO2	int8u	
637	ShutterCount	int32u	(firmware 1.10)
639	ShutterCount	int32u	(firmware 2.00, 2.01 and 2.02)
650	PreFlashReturnStrength	int8u	(valid in TTL and TTL-BL flash control modes)
732.1	NikonImageSize	int8u	[val >> 3 & 0x3] 0 = Large 1 = Medium 2 = Small
732.2	ImageQuality	int8u	[val & 0x7] 0 = NEF (RAW) + JPEG Fine 1 = NEF (RAW) + JPEG Norm 2 = NEF (RAW) + JPEG Basic 3 = NEF (RAW) 4 = TIF (RGB) 5 = JPEG Fine 6 = JPEG Normal 7 = JPEG Basic
778	CustomSettingsD3	-	--> <a href="#">NikonCustom SettingsD3 Tags</a>

## Nikon ShotInfoD3X Tags

These tags are extracted from encrypted data in images from the D3X with firmware 1.00.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
605	ISO2	int8u	
640	ShutterCount	int32u	
779	CustomSettingsD3X	-	--> <a href="#">NikonCustom SettingsD3 Tags</a>

## Nikon ShotInfoD3S Tags

These tags are extracted from encrypted data in images from the D3S with firmware 1.00 and earlier.

Index	Tag Name	Writable	Values / Notes

0	ShotInfoVersion	no
4	FirmwareVersion	no
16	ImageArea	int8u 0 = FX (36x24) 1 = DX (24x16) 2 = 5:4 (30x24) 3 = 1.2x (30x20)
545	ISO2	int8u
578	ShutterCount	int32u
671.1	JPGCompression	int8u [val >> 6 & 0x1] 0 = Size Priority 1 = Optimal Quality
718	CustomSettingsD3S	-

--> [NikonCustom SettingsD3 Tags](#)

## Nikon ShotInfoD300a Tags

These tags are extracted from encrypted data in images from the D300 with firmware 1.00 and earlier.

Index	Tag Name	Writable	Values / Notes		
0	ShotInfoVersion	no			
604	ISO2	int8u			
633	ShutterCount	int32u			
721	AFFineTuneAdj	int16u	0x0 = 0 0x3a = +1 0x3b = +2 0x3c = +4 0x3d = +8 0x3e = +16 0xc2 = -16 0xc3 = -8 0xc4 = -4 0xc5 = -2 0xc6 = -1 0x103e = +17 0x10c2 = -17 0x203d = +9	0x203e = +18 0x20c2 = -18 0x20c3 = -9 0x303e = +19 0x30c2 = -19 0x403c = +5 0x403d = +10 0x403e = +20 0x40c2 = -20 0x40c3 = -10 0x40c4 = -5 0x603d = +11 0x60c3 = -11 0x803b = +3	0x803c = +6 0x803d = +12 0x80c3 = -12 0x80c4 = -6 0x80c5 = -3 0xa03d = +13 0xa0c3 = -13 0xc03c = +7 0xc03d = +14 0xc0c3 = -14 0xc0c4 = -7 0xe03d = +15 0xe0c3 = -15
790	CustomSettingsD300	-	--> <a href="#">NikonCustom SettingsD3 Tags</a>		

## Nikon ShotInfoD300b Tags

These tags are extracted from encrypted data in images from the D300 with firmware 1.10.

Index	Tag Name	Writable	Values / Notes		
0	ShotInfoVersion	no			
4	FirmwareVersion	no			
613	ISO2	int8u			
644	ShutterCount	int32u			
732	AFFineTuneAdj	int16u	(firmware version 1.10B) 0x0 = 0 0x83e = +11 0x8c2 = -11 0x203c = +3 0x203d = +6 0x203e = +12 0x20c2 = -12 0x20c3 = -6 0x20c4 = -3 0x383e = +13 0x38c2 = -13 0x503d = +7 0x503e = +14 0x50c2 = -14  (other versions) 0x0 = 0 0x43e = +13 0x4c2 = -13 0x183d = +7 0x183e = +14	0x50c3 = -7 0x683e = +15 0x68c2 = -15 0x803a = +1 0x803b = +2 0x803c = +4 0x803d = +8 0x803e = +16 0x80c2 = -16 0x80c3 = -8 0x80c4 = -4 0x80c5 = -2 0x80c6 = -1 0x40c2 = -16 0x40c3 = -8 0x40c4 = -4 0x40c5 = -2 0x40c6 = -1	0x98c2 = -17 0xb03d = +9 0xb03e = +18 0xb0c2 = -18 0xb0c3 = -9 0xc83e = +19 0xc8c2 = -19 0xe03c = +5 0xe03d = +10 0xe0c2 = -20 0xe0c3 = -10 0xe0c4 = -5 0x903d = +10 0x903e = +20 0x90c2 = -20 0x90c3 = -10 0x90c4 = -5

0x18c2 = -14	0x543e = +17	0xb83d = +11
0x18c3 = -7	0x54c2 = -17	0xb8c3 = -11
0x2c3e = +15	0x683d = +9	0xe03b = +3
0x2cc2 = -15	0x683e = +18	0xe03c = +6
0x403a = +1	0x68c2 = -18	0xe03d = +12
0x403b = +2	0x68c3 = -9	0xe0c3 = -12
0x403c = +4	0x7c3e = +19	0xe0c4 = -6
0x403d = +8	0x7cc2 = -19	0xe0c5 = -3
0x403e = +16	0x903c = +5	

802	CustomSettingsD300	-	--> <a href="#">Nikon Custom SettingsD3 Tags</a>
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## Nikon ShotInfoD300S Tags

These tags are extracted from encrypted data in images from the D300S with firmware 1.00.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
613	ISO2	int8u	
646	ShutterCount	int32u	
804	CustomSettingsD300S	-	--> <a href="#">Nikon Custom SettingsD3 Tags</a>

## Nikon ShotInfoD700 Tags

These tags are extracted from encrypted data in images from the D700 with firmware 1.02f.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
613	ISO2	int8u	
647	ShutterCount	int32u	
804	CustomSettingsD700	-	--> <a href="#">Nikon Custom SettingsD700 Tags</a>

## Nikon ShotInfoD780 Tags

These tags are extracted from encrypted data in images from the D780.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
156	OrientOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>

## Nikon OrientationInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	RollAngle	fixed32u	(converted to degrees of clockwise camera roll)
4	PitchAngle	fixed32u	(converted to degrees of upward camera tilt)
8	YawAngle	fixed32u	(the camera yaw angle when shooting in portrait orientation)

## Nikon ShotInfoD7500 Tags

These tags are extracted from encrypted data in images from the D7500.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
160	OrientOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>

## Nikon ShotInfoD800 Tags

These tags are extracted from encrypted data in images from the D800.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
1216	RepeatingFlashOutputExternal	int8u	
1218	RepeatingFlashRateExternal	int8u	
1219	RepeatingFlashCountExternal	int8u	
1234	FlashExposureComp2	int8s	(includes the effect of flash bracketing)
1242	RepeatingFlashRateBuilt-in	int8u	
1243	RepeatingFlashCountBuilt-in	int8u	
1308	SequenceNumber	int8u	
1531	ShutterCount	int32u	
1772	CustomSettingsD800	-	--> <a href="#">Nikon Custom Settings D800 Tags</a>

## Nikon ShotInfoD810 Tags

These tags are extracted from encrypted data in images from the D810.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
16	SettingsOffset	-	--> <a href="#">Nikon SettingsInfoD810 Tags</a>
36	BracketingOffset	-	--> <a href="#">Nikon BracketingInfoD810 Tags</a>
56	ISOAutoOffset	-	--> <a href="#">Nikon ISOAutoInfoD810 Tags</a>
64	CustomSettingsOffset	-	--> <a href="#">NikonCustom SettingsD810 Tags</a>
132	OrientationOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>

# Nikon SettingsInfoD810 Tags

Index1	Tag Name	Writable	Values / Notes
316	SecondarySlotFunction	int8u	[val & 0x3] 0 = Overflow 2 = Backup 3 = NEF Primary + JPG Secondary

# Nikon BracketingInfoD810 Tags

Index1	Tag Name	Writable	Values / Notes	
15	AEBackettingSteps	int8u	[val & 0xff]	
			0x0 = AE Bracketing Disabled	0xa5 = 3F0.7
			0x20 = AE Bracketing Disabled	0xa6 = 5F0.7
			0x30 = AE Bracketing Disabled	0xa7 = 7F0.7
			0x40 = AE Bracketing Disabled	0xa8 = 9F0.7
			0x50 = AE Bracketing Disabled	0xb1 = +3F1
			0x81 = +3F0.3	0xb2 = -3F1
			0x82 = -3F0.3	0xb3 = +2F1
			0x83 = +2F0.3	0xb4 = -2F1
			0x84 = -2F0.3	0xb5 = 3F1
			0x85 = 3F0.3	0xb6 = 5F1
			0x86 = 5F0.3	0xb7 = 7F1
			0x87 = 7F0.3	0xb8 = 9F1
			0x88 = 9F0.3	0xc1 = +3F2
			0x91 = +3F0.5	0xc2 = -3F2
			0x92 = -3F0.5	0xc3 = +2F2
			0x93 = +2F0.5	0xc4 = -2F2
			0x94 = -2F0.5	0xc5 = 3F2
			0x95 = 3F0.5	0xc6 = 5F2
			0x96 = 5F0.5	0xd1 = +3F3
			0x97 = 7F0.5	0xd2 = -3F3
			0x98 = 9F0.5	0xd3 = +2F3
			0xa1 = +3F0.7	0xd4 = -2F3
			0xa2 = -3F0.7	0xd5 = 3F3
				0xd6 = 5E3

			0xa3 = +2F0.7 0xa4 = -2F0.7
16	WBBracketingSteps	int8u	[val & 0xff] 0x0 = WB Bracketing Disabled 0x15 = 3F 2 0x1 = b3F 1 0x16 = 5F 2 0x2 = A3F 1 0x17 = 7F 2 0x3 = b2F 1 0x18 = 9F 2 0x4 = A2F 1 0x20 = 0F 3 0x5 = 3F 1 0x21 = b3F 3 0x6 = 5F 1 0x22 = A3F 3 0x7 = 7F 1 0x23 = b2F 3 0x8 = 9F 1 0x24 = A2F 3 0x10 = 0F 2 0x25 = 3F 3 0x11 = b3F 2 0x26 = 5F 3 0x12 = A3F 2 0x27 = 7F 3 0x13 = b2F 2 0x28 = 9F 3 0x14 = A2F 2
23	NikonMeteringMode	int8u	[val & 0x3] 0 = Matrix 1 = Center 2 = Spot 3 = Highlight

## Nikon ISOAutoInfoD810 Tags

Index	Tag Name	Writable	Values / Notes
4	ISOAutoShutterTime	int8u	[val & 0x3f] 0 = 1/4000 s 19 = 1/50 s 1 = 1/3200 s 20 = 1/40 s 2 = 1/2500 s 21 = 1/30 s 3 = 1/2000 s 22 = 1/15 s 4 = 1/1600 s 23 = 1/8 s 5 = 1/1250 s 24 = 1/4 s 6 = 1/1000 s 25 = 1/2 s 7 = 1/800 s 26 = 1 s 8 = 1/640 s 27 = 2 s 9 = 1/500 s 28 = 4 s 10 = 1/400 s 29 = 8 s 11 = 1/320 s 30 = 15 s 12 = 1/250 s 31 = 30 s 13 = 1/200 s 32 = Auto (Slowest) 14 = 1/160 s 33 = Auto (Slower) 15 = 1/125 s 34 = Auto 16 = 1/100 s 35 = Auto (Faster) 17 = 1/80 s 36 = Auto (Fastest) 18 = 1/60 s
5	ISOAutoHiLimit	int8u	[val & 0xff] 0x24 = ISO 200 0x44 = ISO 8000 0x26 = ISO 250 0x45 = ISO 9000 0x27 = ISO 280 0x46 = ISO 10000 0x28 = ISO 320 0x48 = ISO 12800 0x2a = ISO 400 0x4a = ISO 16000 0x2c = ISO 500 0x4b = ISO 18000 0x2d = ISO 560 0x4c = ISO 20000 0x2e = ISO 640 0x4e = ISO 25600 0x30 = ISO 800 0x50 = ISO 32000 0x32 = ISO 1000 0x51 = ISO 36000 0x33 = ISO 1100 0x52 = ISO 40000 0x34 = ISO 1250 0x54 = ISO 51200 0x36 = ISO 1600 0x56 = ISO Hi 0.3 0x38 = ISO 2000 0x57 = ISO Hi 0.5 0x39 = ISO 2200 0x58 = ISO Hi 0.7 0x3a = ISO 2500 0x5a = ISO Hi 1.0 0x3c = ISO 3200 0x60 = ISO Hi 2.0 0x3e = ISO 4000 0x66 = ISO Hi 3.0 0x3f = ISO 4500 0x6c = ISO Hi 4.0 0x40 = ISO 5000 0x72 = ISO Hi 5.0 0x42 = ISO 6400

## Nikon ShotInfoD850 Tags

These tags are extracted from encrypted data in images from the D850.

Index	Tag Name	Writable	Values / Notes
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0	ShotInfoVersion	no
4	FirmwareVersion	no
16	MenuSettingsOffset	- --> <a href="#">Nikon MenuSettingsD850 Tags</a>
76	MoreSettingsOffset	- --> <a href="#">Nikon MoreSettingsD850 Tags</a>
88	CustomSettingsOffset	- --> <a href="#">NikonCustom SettingsD850 Tags</a>
160	OrientationOffset	- --> <a href="#">Nikon OrientationInfo Tags</a>

## Nikon MenuSettingsD850 Tags

Index	Tag Name	Writable	Values / Notes
1757	PhotoShootingMenuBankImageArea	int8u	[val & 0x7] 0 = FX (36x24) 1 = DX (24x16) 2 = 5:4 (30x24) 3 = 1.2x (30x20) 4 = 1:1 (24x24)

## Nikon MoreSettingsD850 Tags

Index	Tag Name	Writable	Values / Notes
36	PhotoShootingMenuBank	int8u	(valid for JPEG images only) [val & 0x3] 0 = A 1 = B 2 = C 3 = D
37	PrimarySlot	int8u	[val >> 7 & 0x1] 0 = XQD Card 1 = SD Card

## Nikon ShotInfoD5000 Tags

These tags are extracted from encrypted data in images from the D5000 with firmware 1.00.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
693	ISO2	int8u	
726	ShutterCount	int32u	
888	CustomSettingsD5000	-	--> <a href="#">NikonCustom SettingsD5000 Tags</a>

## Nikon ShotInfoD5100 Tags

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
801	ShutterCount	int32u	
1031	CustomSettingsD5100	-	--> <a href="#">NikonCustom SettingsD5100 Tags</a>

## Nikon ShotInfoD5200 Tags

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
3032	ShutterCount	int32u	
3285	CustomSettingsD5200	-	--> <a href="#">NikonCustom SettingsD5200 Tags</a>

## Nikon ShotInfoD7000 Tags

These tags are extracted from encrypted data in images from the D7000 with firmware 1.01b.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
800	ShutterCount	int32u	
1028	CustomSettingsD7000	-	--> <a href="#">NikonCustom SettingsD7000 Tags</a>

## Nikon ShotInfoD4 Tags

These tags are extracted from encrypted data in images from the D4.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
1873	CustomSettingsD4	-	--> <a href="#">NikonCustom SettingsD4 Tags</a>

## Nikon ShotInfoD4S Tags

These tags are extracted from encrypted data in images from the D4S.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
464	SecondarySlotFunction	int8u	[val & 0x3] 0 = Overflow 2 = Backup 3 = NEF Primary + JPG Secondary
5964	AEBacketingSteps	int8u	[val & 0xff] 0x0 = AE Bracketing Disabled 0xa5 = 3F0.7 0x20 = AE Bracketing Disabled 0xa6 = 5F0.7 0x30 = AE Bracketing Disabled 0xa7 = 7F0.7 0x40 = AE Bracketing Disabled 0xa8 = 9F0.7 0x50 = AE Bracketing Disabled 0xb1 = +3F1 0x81 = +3F0.3 0xb2 = -3F1 0x82 = -3F0.3 0xb3 = +2F1 0x83 = +2F0.3 0xb4 = -2F1 0x84 = -2F0.3 0xb5 = 3F1 0x85 = 3F0.3 0xb6 = 5F1 0x86 = 5F0.3 0xb7 = 7F1 0x87 = 7F0.3 0xb8 = 9F1 0x88 = 9F0.3 0xc1 = +3F2 0x91 = +3F0.5 0xc2 = -3F2 0x92 = -3F0.5 0xc3 = +2F2 0x93 = +2F0.5 0xc4 = -2F2 0x94 = -2F0.5 0xc5 = 3F2 0x95 = 3F0.5 0xc6 = 5F2 0x96 = 5F0.5 0xd1 = +3F3 0x97 = 7F0.5 0xd2 = -3F3 0x98 = 9F0.5 0xd3 = +2F3 0xa1 = +3F0.7 0xd4 = -2F3 0xa2 = -3F0.7 0xd5 = 3F3 0xa3 = +2F0.7 0xd6 = 5F3 0xa4 = -2F0.7
5965	WBBracketingSteps	int8u	[val & 0xff] 0x0 = WB Bracketing Disabled 0x15 = 3F 2 0x1 = b3F 1 0x16 = 5F 2 0x2 = A3F 1 0x17 = 7F 2 0x3 = b2F 1 0x18 = 9F 2 0x4 = A2F 1 0x20 = 0F 3 0x5 = 3F 1 0x21 = b3F 3 0x6 = 5F 1 0x22 = A3F 3 0x7 = 7F 1 0x23 = b2F 3 0x8 = 9F 1 0x24 = A2F 3 0x10 = 0F 2 0x25 = 3F 3 0x11 = b3F 2 0x26 = 5F 3 0x12 = A3F 2 0x27 = 7F 3 0x13 = b2F 2 0x28 = 9F 3 0x14 = A2F 2

6221	ReleaseMode	int8u	[val & 0xff] 0 = Single Frame 1 = Continuous High Speed 3 = Continuous Low Speed 4 = Timer 32 = Mirror-Up 64 = Quiet
6301	CustomSettingsD4S	-	--> <a href="#">NikonCustom SettingsD4 Tags</a> (firmware version 1.00)
6338	MultiSelectorLiveViewMode	int8u	[val >> 6 & 0x3] 0 = Reset 1 = Zoom 3 = None
6378	ISOAutoShutterTime	int8u	[val & 0x3f] 0 = 1/4000 s 19 = 1/50 s 1 = 1/3200 s 20 = 1/40 s 2 = 1/2500 s 21 = 1/30 s 3 = 1/2000 s 22 = 1/15 s 4 = 1/1600 s 23 = 1/8 s 5 = 1/1250 s 24 = 1/4 s 6 = 1/1000 s 25 = 1/2 s 7 = 1/800 s 26 = 1 s 8 = 1/640 s 27 = 2 s 9 = 1/500 s 28 = 4 s 10 = 1/400 s 29 = 8 s 11 = 1/320 s 30 = 15 s 12 = 1/250 s 31 = 30 s 13 = 1/200 s 32 = Auto (Slowest) 14 = 1/160 s 33 = Auto (Slower) 15 = 1/125 s 34 = Auto 16 = 1/100 s 35 = Auto (Faster) 17 = 1/80 s 36 = Auto (Fastest) 18 = 1/60 s
6379	ISOAutoHiLimit	int8u	[val & 0xff] 0x24 = ISO 200 0x44 = ISO 8000 0x26 = ISO 250 0x45 = ISO 9000 0x27 = ISO 280 0x46 = ISO 10000 0x28 = ISO 320 0x48 = ISO 12800 0x2a = ISO 400 0x4a = ISO 16000 0x2c = ISO 500 0x4b = ISO 18000 0x2d = ISO 560 0x4c = ISO 20000 0x2e = ISO 640 0x4e = ISO 25600 0x30 = ISO 800 0x50 = ISO 32000 0x32 = ISO 1000 0x51 = ISO 36000 0x33 = ISO 1100 0x52 = ISO 40000 0x34 = ISO 1250 0x54 = ISO 51200 0x36 = ISO 1600 0x56 = ISO Hi 0.3 0x38 = ISO 2000 0x57 = ISO Hi 0.5 0x39 = ISO 2200 0x58 = ISO Hi 0.7 0x3a = ISO 2500 0x5a = ISO Hi 1.0 0x3c = ISO 3200 0x60 = ISO Hi 2.0 0x3e = ISO 4000 0x66 = ISO Hi 3.0 0x3f = ISO 4500 0x6c = ISO Hi 4.0 0x40 = ISO 5000 0x72 = ISO Hi 5.0 0x42 = ISO 6400
6461	CustomSettingsD4S	-	--> <a href="#">NikonCustom SettingsD4 Tags</a> (firmware version 1.01)
13579	OrientationInfo	-	--> <a href="#">Nikon OrientationInfo Tags</a>
13971	Rotation	int8u	[val >> 4 & 0x3] 0 = Horizontal 1 = Rotate 270 CW 2 = Rotate 90 CW 3 = Rotate 180

## Nikon ShotInfoD500 Tags

These tags are extracted from encrypted data in images from the D5 and D500.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
16	RotationInfoOffset	-	--> <a href="#">Nikon RotationInfoD500 Tags</a>

20	JPGInfoOffset	-	--> <a href="#">Nikon JPGInfoD500 Tags</a>
44	BracketingOffset	-	--> <a href="#">Nikon BracketingInfoD500 Tags</a>
80	ShootingMenuOffset	-	--> <a href="#">Nikon ShootingMenuD500 Tags</a>
88	CustomSettingsOffset	-	--> <a href="#">Nikon CustomSettingsD500 Tags</a>
160	OrientationOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
168	OtherOffset	-	--> <a href="#">Nikon OtherInfoD500 Tags</a>

## Nikon RotationInfoD500 Tags

Index1	Tag Name	Writable	Values / Notes
26	Rotation	int8u	[val & 0x3] 0 = Horizontal 1 = Rotate 270 CW 2 = Rotate 90 CW 3 = Rotate 180
32	Interval	int8u~	
36	IntervalFrame	int8u~	
1330	FlickerReductionIndicator	int8u	[val & 0x1] 0 = On 1 = Off

## Nikon JPGInfoD500 Tags

Index1	Tag Name	Writable	Values / Notes
36	JPGCompression	int8u	[val & 0x1] 0 = Size Priority 1 = Optimal Quality

## Nikon BracketingInfoD500 Tags

Index1	Tag Name	Writable	Values / Notes
15	AEBacketingSteps	int8u	[val & 0xff] 0x0 = AE Bracketing Disabled 0xa5 = 3F0.7 0x20 = AE Bracketing Disabled 0xa6 = 5F0.7 0x30 = AE Bracketing Disabled 0xa7 = 7F0.7 0x40 = AE Bracketing Disabled 0xa8 = 9F0.7 0x50 = AE Bracketing Disabled 0xb1 = +3F1 0x81 = +3F0.3 0xb2 = -3F1 0x82 = -3F0.3 0xb3 = +2F1 0x83 = +2F0.3 0xb4 = -2F1 0x84 = -2F0.3 0xb5 = 3F1 0x85 = 3F0.3 0xb6 = 5F1 0x86 = 5F0.3 0xb7 = 7F1 0x87 = 7F0.3 0xb8 = 9F1 0x88 = 9F0.3 0xc1 = +3F2 0x91 = +3F0.5 0xc2 = -3F2 0x92 = -3F0.5 0xc3 = +2F2 0x93 = +2F0.5 0xc4 = -2F2 0x94 = -2F0.5 0xc5 = 3F2 0x95 = 3F0.5 0xc6 = 5F2 0x96 = 5F0.5 0xd1 = +3F3 0x97 = 7F0.5 0xd2 = -3F3 0x98 = 9F0.5 0xd3 = +2F3 0xa1 = +3F0.7 0xd4 = -2F3 0xa2 = -3F0.7 0xd5 = 3F3 0xa3 = +2F0.7 0xd6 = 5F3 0xa4 = -2F0.7
16	WBBracketingSteps	int8u	[val & 0xff] 0x0 = WB Bracketing Disabled 0x15 = 3F 2 0x1 = b3F 1 0x16 = 5F 2 0x2 = A3F 1 0x17 = 7F 2 0x3 = b2F 1 0x18 = 9F 2 0x4 = A2F 1 0x20 = 0F 3 0x5 = 3F 1 0x21 = b3F 3 0x6 = 5F 1 0x22 = A3F 3 0x7 = 7F 1 0x23 = b2F 3 0x8 = 9F 1 0x24 = A2F 3 0x10 = 0F 2 0x25 = 3F 3

			0x11 = b3F 2 0x12 = A3F 2 0x13 = b2F 2 0x14 = A2F 2	0x26 = 5F 3 0x27 = 7F 3 0x28 = 9F 3
23	ADLBracketingStep	int8u	[val >> 4 & 0xf] 0 = Off      3 = High 1 = Low     4 = Extra High 2 = Normal    8 = Auto	
24	ADLBracketingType	int8u	[val & 0xf] 0 = Off 1 = 2 Shots 2 = 3 Shots 3 = 4 Shots 4 = 5 Shots	

## Nikon ShootingMenuD500 Tags

Index1	Tag Name	Writable	Values / Notes
0	PhotoShootingMenuBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
2	PrimarySlot	int8u	(D500 only) [val >> 7 & 0x1] 0 = XQD Card 1 = SD Card
4	ISOAutoShutterTime	int8u	[val & 0x3f] 0 = 1/4000 s   19 = 1/50 s 1 = 1/3200 s   20 = 1/40 s 2 = 1/2500 s   21 = 1/30 s 3 = 1/2000 s   22 = 1/15 s 4 = 1/1600 s   23 = 1/8 s 5 = 1/1250 s   24 = 1/4 s 6 = 1/1000 s   25 = 1/2 s 7 = 1/800 s   26 = 1 s 8 = 1/640 s   27 = 2 s 9 = 1/500 s   28 = 4 s 10 = 1/400 s   29 = 8 s 11 = 1/320 s   30 = 15 s 12 = 1/250 s   31 = 30 s 13 = 1/200 s   32 = Auto (Slowest) 14 = 1/160 s   33 = Auto (Slower) 15 = 1/125 s   34 = Auto 16 = 1/100 s   35 = Auto (Faster) 17 = 1/80 s   36 = Auto (Fastest) 18 = 1/60 s
5	ISOAutoHiLimit	int8u	[val & 0xff] 0x24 = ISO 200   0x44 = ISO 8000 0x26 = ISO 250   0x45 = ISO 9000 0x27 = ISO 280   0x46 = ISO 10000 0x28 = ISO 320   0x48 = ISO 12800 0x2a = ISO 400   0x4a = ISO 16000 0x2c = ISO 500   0x4b = ISO 18000 0x2d = ISO 560   0x4c = ISO 20000 0x2e = ISO 640   0x4e = ISO 25600 0x30 = ISO 800   0x50 = ISO 32000 0x32 = ISO 1000   0x51 = ISO 36000 0x33 = ISO 1100   0x52 = ISO 40000 0x34 = ISO 1250   0x54 = ISO 51200 0x36 = ISO 1600   0x56 = ISO Hi 0.3 0x38 = ISO 2000   0x57 = ISO Hi 0.5 0x39 = ISO 2200   0x58 = ISO Hi 0.7 0x3a = ISO 2500   0x5a = ISO Hi 1.0 0x3c = ISO 3200   0x60 = ISO Hi 2.0 0x3e = ISO 4000   0x66 = ISO Hi 3.0 0x3f = ISO 4500   0x6c = ISO Hi 4.0 0x40 = ISO 5000   0x72 = ISO Hi 5.0 0x42 = ISO 6400
7	FlickerReduction	int8u	[val >> 5 & 0x1] 0 = Enable 1 = Disable
7.1	PhotoShootingMenuBankImageArea	int8u	[val & 0x7] 0 = FX (36x24)

1 = DX (24x16)  
 2 = 5:4 (30x24)  
 3 = 1.2x (30x20)  
 4 = 1.3x (18x12)

## Nikon CustomSettingsD500 Tags

Index1	Tag Name	Writable	Values / Notes
0	CustomSettingsD5	-	--> <a href="#">NikonCustom SettingsD5 Tags</a>
	CustomSettingsD500	-	--> <a href="#">NikonCustom SettingsD500 Tags</a>

## Nikon OtherInfoD500 Tags

Index1	Tag Name	Writable	Values / Notes
532	NikonMeteringMode	int8u	(D500 only) [val & 0x3] 0 = Matrix 1 = Center 2 = Spot 3 = Highlight

## Nikon ShotInfoD6 Tags

These tags are extracted from encrypted data in images from the D6.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
48	SequenceOffset	-	--> <a href="#">Nikon SeqInfoD6 Tags</a>
156	OrientationOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
164	IntervalOffset	-	--> <a href="#">Nikon IntervalInfoD6 Tags</a>

## Nikon SeqInfoD6 Tags

Index1	Tag Name	Writable	Values / Notes
36	IntervalShooting	int16u~	
43	ImageArea	int8u	0 = FX (36x24) 3 = 1.2x (30x20) 1 = DX (24x16) 4 = 1:1 (24x24) 2 = 5:4 (30x24) 6 = 16:9

## Nikon IntervalInfoD6 Tags

Index1	Tag Name	Writable	Values / Notes
380	Intervals	int32u	
384	ShotsPerInterval	int32u	
388	IntervalExposureSmoothing	int8u	0 = Off 1 = On
390	IntervalPriority	int8u	0 = Off 1 = On
424	FocusShiftNumberShots	int8u	
428	FocusShiftStepWidth	int8u	
432	FocusShiftInterval	int8u~	
436	FocusShiftExposureLock	int8u	0 = Off 1 = On
526	DiffractionCompensation	int8u	0 = Off 1 = On
532	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash

538	FlashGNDistance?	no	0 = 0 1 = 0.1 m 2 = 0.2 m 3 = 0.3 m 4 = 0.4 m 5 = 0.5 m 6 = 0.6 m 7 = 0.7 m 8 = 0.8 m 9 = 0.9 m 10 = 1.0 m 11 = 1.1 m 12 = 1.3 m	13 = 1.4 m 14 = 1.6 m 15 = 1.8 m 16 = 2.0 m 17 = 2.2 m 18 = 2.5 m 19 = 2.8 m 20 = 3.2 m 21 = 3.6 m 22 = 4.0 m 23 = 4.5 m 24 = 5.0 m 25 = 5.6 m	26 = 6.3 m 27 = 7.1 m 28 = 8.0 m 29 = 9.0 m 30 = 10.0 m 31 = 11.0 m 32 = 13.0 m 33 = 14.0 m 34 = 16.0 m 35 = 18.0 m 36 = 20.0 m 255 = n/a
542	FlashOutput?	int8u			
552	FlashRemoteControl?	int8u	0 = Group 1 = Quick Wireless 2 = Remote Repeating		
556	FlashMasterControlMode	int8u	0 = TTL 1 = Manual 2 = Auto 3 = Off		
558	FlashMasterCompensation?	int8s			
562	FlashMasterOutput?	int8u			
564	FlashWirelessOption?	int8u	0 = Optical AWL 1 = Off		
714	MovieType?	int8u	0 = MOV 1 = MP4		

## Nikon ShotInfoD610 Tags

These tags are extracted from encrypted data in images from the D610.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
1999	CustomSettingsD610	-	--> <a href="#">NikonCustom SettingsD610 Tags</a>

## Nikon ShotInfoZ6III Tags

These tags are extracted from encrypted data in images from the Z6III.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
136	OrientationOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
144	MenuOffset	-	--> <a href="#">Nikon MenuSettingsZ6III Tags</a>

## Nikon MenuSettingsZ6III Tags

These tags are used by the Z6III.

Index1	Tag Name	Writable	Values / Notes
364	HighFrameRate	int8u	0 = Off 1 = CH 2 = CH* 3 = C30 4 = C120 5 = C60 6 = C15
444	MultipleExposureMode	int8u	0 = Off 1 = On 2 = On (Series)
446	MultiExposureShots	int8u	
476	IntervalDurationHours	int32u	
480	IntervalDurationMinutes	int32u	
484	IntervalDurationSeconds	int32u	

492	Intervals	int32u	
496	ShotsPerInterval	int32u	
500	IntervalExposureSmoothing	int8u	0 = Off 1 = On
502	IntervalPriority	int8u	0 = Off 1 = On
536	FocusShiftNumberShots	int8u	
540	FocusShiftStepWidth	int8u	
544	FocusShiftInterval	int8u~	
548	FocusShiftExposureLock	int8u	0 = Off 1 = On
648	AutoISO	int8u	0 = Off 1 = On
650	ISOAutoHiLimit?	int16u	5 = ISO 200      20 = ISO 6400 6 = ISO 250      21 = ISO 8000 7 = ISO 320      22 = ISO 10000 8 = ISO 400      23 = ISO 12800 9 = ISO 500      24 = ISO 16000 10 = ISO 640      25 = ISO 20000 11 = ISO 800      26 = ISO 25600 12 = ISO 1000      27 = ISO 32000 13 = ISO 1250      28 = ISO 40000 14 = ISO 1600      29 = ISO 51200 15 = ISO 2000      30 = ISO 64000 16 = ISO 2500      31 = ISO Hi 0.3 17 = ISO 3200      32 = ISO Hi 0.7 18 = ISO 4000      33 = ISO Hi 1.0 19 = ISO 5000      35 = ISO Hi 1.7
718	DiffractionCompensation	int8u	0 = Off 1 = On
719	AutoDistortionControl	int8u	0 = Off 1 = On
720	FlickerReductionShooting	int8u	0 = Off 1 = On
722	NikonMeteringMode	int8u	0 = Matrix 1 = Center 2 = Spot 3 = Highlight
724	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash
730	FlashGNDistance?	no	0 = 0      13 = 1.4 m      26 = 6.3 m 1 = 0.1 m      14 = 1.6 m      27 = 7.1 m 2 = 0.2 m      15 = 1.8 m      28 = 8.0 m 3 = 0.3 m      16 = 2.0 m      29 = 9.0 m 4 = 0.4 m      17 = 2.2 m      30 = 10.0 m 5 = 0.5 m      18 = 2.5 m      31 = 11.0 m 6 = 0.6 m      19 = 2.8 m      32 = 13.0 m 7 = 0.7 m      20 = 3.2 m      33 = 14.0 m 8 = 0.8 m      21 = 3.6 m      34 = 16.0 m 9 = 0.9 m      22 = 4.0 m      35 = 18.0 m 10 = 1.0 m      23 = 4.5 m      36 = 20.0 m 11 = 1.1 m      24 = 5.0 m      255 = n/a 12 = 1.3 m      25 = 5.6 m
734	FlashOutput?	int8u	
742	FlashWirelessOption?	int8u	0 = Off 1 = Optical AWL 2 = Optical/Radio AWL 3 = Radio AWL
744	FlashRemoteControl?	int8u	0 = Group 1 = Quick Wireless 2 = Remote Repeating
748	FlashMasterControlMode	int8u	0 = TTL 1 = Manual 2 = Auto 3 = Off
750	FlashMasterCompensation?	int8s	
754	FlashMasterOutput?	int8u	

	832 AFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single    6 = Auto 2 = Dynamic    11 = Subject Tracking 3 = Wide (S)    12 = Wide (C1) 4 = Wide (L)    13 = Wide (C2)
834	VRMode	int8u	0 = Off 1 = Normal 2 = Sport
838	BracketSet	int8u	0 = AE/Flash 1 = AE 2 = Flash 3 = White Balance 4 = Active-D Lighting
840	BracketProgram	int8u	(AE and/or Flash Bracketing) 0 = Disabled    5 = 5F 2 = 2F            7 = 7F 3 = 3F            9 = 9F 4 = 4F
842	BracketIncrement	int8u	(AE and/or Flash Bracketing) 0 = 0.3    3 = 1.0    6 = 1.3    9 = 2.3 1 = 0.5    4 = 2.0    7 = 1.5    10 = 2.5 2 = 0.7    5 = 3.0    8 = 1.7    11 = 2.7
852	HDR	int8u	0 = Off 1 = On 2 = On (Series)
858	SecondarySlotFunction	int8u	0 = Overflow 1 = Backup 2 = NEF Primary + JPG Secondary 3 = JPG Primary + JPG Secondary
864	HDRLevel	int8u	0 = Auto 1 = Extra High 2 = High 3 = Normal 4 = Low
868	Slot2JpgSize?	int8u	0 = Large (6048x4032) 1 = Medium (4528x3024) 2 = Small (3024x2016)
878	SubjectDetection	int8u	0 = Off        4 = Vehicles 1 = Auto       5 = Birds 2 = People      6 = Airplanes 3 = Animals
880	DynamicAFAreaSize	int8u	0 = Small 1 = Medium 2 = Large
884	ToneMap?	int8u	0 = SDR 1 = HLG
888	PortraitImpressionBalance	int8u	0 = Off 1 = Mode 1 2 = Mode 2 3 = Mode 3
902	HighFrequencyFlickerReduction?	int8u	0 = Off 1 = On
904	PixelShiftShooting	int8u	0 = Off 1 = On 2 = On (Series)
906	PixelShiftNumberShots	int8u	0 = 4 1 = 8 2 = 16 3 = 32
908	PixelShiftDelay	int8u~	
910	PixelShiftInterval	int8u~	
1002	SubjectDetectionAreaMF	int8u	0 = Off 1 = All 2 = Wide (L) 3 = Wide (S)
1004	LinkVRToFocusPoint?	int8u	0 = Off 1 = On
1046	MovieSlowMotion?	int8u	0 = Off 1 = On (4x) 2 = On (5x)

1050	MovieType	int8u	1 = H.264 8-bit (MP4) 2 = H.265 8-bit (MOV) 3 = H.265 10-bit (MOV) 4 = ProRes 422 HQ 10-bit (MOV) 5 = ProRes RAW HQ 12-bit (MOV) 6 = NRAW 12-bit (NEV)
1162	MovieFrameSize?	int8u	1 = 1920x1080 2 = 3840x2160 3 = 7680x4320 7 = 5376x3024
1164	MovieFrameRate?	int8u	0 = 240p 3 = 100p 6 = 30p 1 = 200p 4 = 60p 7 = 25p 2 = 120p 5 = 50p 8 = 24p
1255	CustomSettingsZ6III	-	--> <a href="#">NikonCustom SettingsZ6III Tags</a>
2300	Language?	int8u	4 = English 5 = Spanish 7 = French 15 = Portuguese
2302	TimeZone	int8u	--> <a href="#">Nikon TimeZone Values</a>
2308	MonitorBrightness?	int8u	0 = -5 3 = -2 6 = 1 9 = 4 15 = Hi2 1 = -4 4 = -1 7 = 2 10 = 5 16 = Lo2 2 = -3 5 = 0 8 = 3 14 = Hi1 17 = Lo1
2444	EmptySlotRelease?	int8u	0 = Disable Release 1 = Enable Release
2450	EnergySavingMode?	int8u	0 = Off 1 = On
2476	USBPowerDelivery?	int8u	0 = Off 1 = On
2480	SaveFocusPosition?	int8u	0 = Off 1 = On
2487	SilentPhotography?	int8u	0 = Off 1 = On
2496	AirplaneMode?	int8u	0 = Off 1 = On

## Nikon TimeZone Values

Value	TimeZone	Value	TimeZone
3 = +10:00 (Sydney)		19 = +00:00 (London)	
5 = +09:00 (Tokyo)		20 = -01:00 (Azores)	
6 = +08:00 (Beijing, Honk Kong, Singapore)		21 = -02:00 (Fernando de Noronha)	
10 = +05:45 (Kathmandu)		22 = -03:00 (Buenos Aires, Sao Paulo)	
11 = +05:30 (New Dehli)		23 = -03:30 (Newfoundland)	
12 = +05:00 (Islamabad)		24 = -04:00 (Manaus, Caracas)	
13 = +04:30 (Kabul)		25 = -05:00 (New York, Toronto, Lima)	
14 = +04:00 (Abu Dhabi)		26 = -06:00 (Chicago, Mexico City)	
15 = +03:30 (Tehran)		27 = -07:00 (Denver)	
16 = +03:00 (Moscow, Nairobi)		28 = -08:00 (Los Angeles, Vancouver)	
17 = +02:00 (Athens, Helsinki)		29 = -09:00 (Anchorage)	
18 = +01:00 (Madrid, Paris, Berlin)		30 = -10:00 (Hawaii)	

## Nikon ShotInfoZ7II Tags

These tags are extracted from encrypted data in images from the Z7II.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
48	IntervalOffset	-	--> <a href="#">Nikon IntervallInfoZ7II Tags</a>
56	PortraitOffset	-	--> <a href="#">Nikon PortraitInfoZ7II Tags</a>
136	OrientationOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
152	OrientationOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
160	MenuOffset	-	--> <a href="#">Nikon MenuInfoZ7II Tags</a>

## Nikon IntervallInfoZ7II Tags

Index1	Tag Name	Writable	Values / Notes
36	IntervalShooting	int16u~	
43	ImageArea	int8u	0 = FX (36x24) 3 = 1.2x (30x20) 1 = DX (24x16) 4 = 1:1 (24x24) 2 = 5:4 (30x24) 6 = 16:9

## Nikon PortraitInfoZ7II Tags

Index1	Tag Name	Writable	Values / Notes
160	PortraitImpressionBalance	int8u[2]~	

## Nikon MenuInfoZ7II Tags

Index1	Tag Name	Writable	Values / Notes
16	MenuSettingsOffsetZ7II	-	--> <a href="#">Nikon MenuSettingsZ7II Tags</a>

## Nikon MenuSettingsZ7II Tags

These tags are used by the Z5, Z6, Z7, Z6II, Z7II, Z50, Zfc and Zf.

Index1	Tag Name	Writable	Values / Notes
92	ReleaseMode	no	0 = Continuous Low 1 = Continuous High 2 = Continuous High (Extended) 4 = Timer 5 = Single Frame
160	IntervalDurationHours	int32u	
164	IntervalDurationMinutes	int32u	
168	IntervalDurationSeconds	int32u	
176	Intervals	int32u	
180	ShotsPerInterval	int32u	
184	IntervalExposureSmoothing	int8u	0 = Off 1 = On
186	IntervalPriority	int8u	0 = Off 1 = On
220	FocusShiftNumberShots	int8u	
224	FocusShiftStepWidth	int8u	
228	FocusShiftInterval	int8u~	
232	FocusShiftExposureLock	int8u	0 = Off 1 = On
322	DiffractionCompensation	int8u	0 = Off 1 = On
323	AutoDistortionControl	int8u	0 = Off 1 = On
326	NikonMeteringMode	int8u	0 = Matrix 1 = Center 2 = Spot 3 = Highlight
328	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash
334	FlashGNDistance?	no	0 = 0 13 = 1.4 m 26 = 6.3 m 1 = 0.1 m 14 = 1.6 m 27 = 7.1 m 2 = 0.2 m 15 = 1.8 m 28 = 8.0 m 3 = 0.3 m 16 = 2.0 m 29 = 9.0 m 4 = 0.4 m 17 = 2.2 m 30 = 10.0 m 5 = 0.5 m 18 = 2.5 m 31 = 11.0 m 6 = 0.6 m 19 = 2.8 m 32 = 13.0 m 7 = 0.7 m 20 = 3.2 m 33 = 14.0 m 8 = 0.8 m 21 = 3.6 m 34 = 16.0 m 9 = 0.9 m 22 = 4.0 m 35 = 18.0 m 10 = 1.0 m 23 = 4.5 m

11 = 1.1 m 24 = 5.0 m 36 = 20.0 m  
 12 = 1.3 m 25 = 5.6 m 255 = n/a

338	FlashOutput?	int8u	
346	FlashWirelessOption?	int8u	0 = Off 1 = Optical AWL 2 = Optical/Radio AWL 3 = Radio AWL
348	FlashRemoteControl?	int8u	0 = Group 1 = Quick Wireless 2 = Remote Repeating
352	FlashMasterControlMode	int8u	0 = TTL 1 = Manual 2 = Auto 3 = Off
354	FlashMasterCompensation?	int8s	
358	FlashMasterOutput?	int8u	
502	MovieFrameSize?	int8u	1 = 1920x1080 2 = 3840x2160 3 = 7680x4320 7 = 5376x3024
504	MovieFrameRate?	int8u	0 = 120p 4 = 30p 1 = 100p 5 = 25p 2 = 60p 6 = 24p 3 = 50p
506	MovieSlowMotion?	int8u	0 = Off 1 = On (4x) 2 = On (5x)
510	MovieType?	int8u	0 = MOV 1 = MP4
516	MovieISOAutoManualMode?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
568	MovieActiveD-Lighting?	int8u	0 = Off 2 = Low 3 = Normal 4 = High 5 = Extra High
572	MovieHighISONoiseReduction?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
574	MovieVignetteControl?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
576	MovieVignetteControlSameAsPhoto?	int8u	0 = No 1 = Yes
577	MovieDiffractionCompensation?	int8u	0 = Off 1 = On
578	MovieAutoDistortionControl?	int8u	0 = Off 1 = On
584	MovieFocusMode?	int8u	0 = Manual 1 = AF-S 2 = AF-C 4 = AF-F
590	MovieVibrationReduction?	int8u	0 = Off 1 = On (Normal) 2 = On (Sport)
591	MovieVibrationReductionSameAsPhoto?	int8u	0 = No 1 = Yes
858	HDMIOutputN-Log?	int8u	0 = Off 1 = On

## Nikon ISOAutoHiLimitZ7 Values

Value	ISOAutoHiLimitZ7	Value	ISOAutoHiLimitZ7	Value	ISOAutoHiLimitZ7
0 = ISO 64		11 = ISO 800		22 = ISO 10000	
1 = ISO 80		12 = ISO 1000		23 = ISO 12800	
2 = ISO 100		13 = ISO 1250		24 = ISO 16000	
3 = ISO 125		14 = ISO 1600		25 = ISO 20000	
4 = ISO 160		15 = ISO 2000		26 = ISO 25600	

5 = ISO 200	16 = ISO 2500	27 = ISO Hi 0.3
6 = ISO 250	17 = ISO 3200	28 = ISO Hi 0.7
7 = ISO 320	18 = ISO 4000	29 = ISO Hi 1.0
8 = ISO 400	19 = ISO 5000	32 = ISO Hi 2.0
9 = ISO 500	20 = ISO 6400	
10 = ISO 640	21 = ISO 8000	

## Nikon ShotInfoZ8 Tags

These tags are extracted from encrypted data in images from the Z8.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
48	SequenceOffset	-	--> <a href="#">Nikon SeqInfoZ9 Tags</a>
128	AutoCaptureOffset	-	--> <a href="#">Nikon AutoCaptureInfo Tags</a>
132	OrientOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
140	MenuOffset	-	--> <a href="#">Nikon MenuInfoZ8 Tags</a>

## Nikon SeqInfoZ9 Tags

Index1	Tag Name	Writable	Values / Notes
32	FocusShiftShooting	int8u~	
40	IntervalShooting	int16u~	

## Nikon AutoCaptureInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	AutoCapturedFrame	int8u	0 = No 5 = Yes
1	AutoCaptureCriteria	int8u~	Bit 0 = Distance Bit 1 = Motion Bit 2 = Subject Detection
55	AutoCaptureRecordingTime	int8u	0 = 1 Sec      6 = 2 Sec      11 = 5 Min 1 = 3 Sec      7 = 10 Sec      12 = 10 Min 2 = 5 Sec      8 = 20 Sec      13 = 30 Min 4 = 30 Sec      9 = 1 Min 5 = No Limit      10 = 3 Min
56	AutoCaptureWaitTime	int8u	0 = No Wait      5 = 10 Min      10 = 5 Sec 1 = 10 Sec      6 = 30 Min      11 = 20 Sec 2 = 30 Sec      7 = 1 Sec      12 = 3 Min 3 = 1 Min      8 = 2 Sec 4 = 5 Min      9 = 3 Sec
74	AutoCaptureDistanceFar	int8u~	
78	AutoCaptureDistanceNear	int8u~	
95	AutoCaptureCriteriaMotionDirection	int8u~	Bit 0 = Top Left Bit 1 = Top Right Bit 2 = Bottom Left Bit 3 = Bottom Right Bit 4 = Left Bit 5 = Right Bit 6 = Top Center Bit 7 = Bottom Center
99	AutoCaptureCriteriaMotionSpeed	int8u	
100	AutoCaptureCriteriaMotionSize	int8u	
105	AutoCaptureCriteriaSubjectSize	int8u	
106	AutoCaptureCriteriaSubjectType	int8u	0 = Auto (all) 1 = People 2 = Animals 3 = Vehicle

## Nikon MenuInfoZ8 Tags

Index1	Tag Name	Writable	Values / Notes
16	MenuSettingsOffsetZ8v1	-	(Firmware versions 1.00 and 1.10) --> <a href="#">Nikon MenuSettingsZ8v1 Tags</a>
	MenuSettingsOffsetZ8v2	-	(Firmware version 2.00 and 2.10) --> <a href="#">Nikon MenuSettingsZ8v2 Tags</a>

## Nikon MenuSettingsZ8v1 Tags

These tags are used by the Z8 firmware 1.00 and 1.10.

Index1	Tag Name	Writable	Values / Notes
0	MenuSettingsZ8	-	--> <a href="#">Nikon MenuSettingsZ8 Tags</a>
943	CustomSettingsZ8	-	--> <a href="#">NikonCustom SettingsZ8 Tags</a>
1684	TimeZone	int8u	--> <a href="#">Nikon TimeZone Values</a>
1690	MonitorBrightness?	int8u	0 = -5 3 = -2 6 = 1 9 = 4 15 = Hi2 1 = -4 4 = -1 7 = 2 10 = 5 16 = Lo2 2 = -3 5 = 0 8 = 3 14 = Hi1 17 = Lo1
1698	Language?	int8u	4 = English 5 = Spanish 7 = French 15 = Portuguese
1712	AFFineTune?	int8u	0 = Off 1 = On
1716	NonCPULens1FocalLength?	int16u~	
1718	NonCPULens2FocalLength?	int16u~	
1720	NonCPULens3FocalLength?	int16u~	
1722	NonCPULens4FocalLength?	int16u~	
1724	NonCPULens5FocalLength?	int16u~	
1726	NonCPULens6FocalLength?	int16u~	
1728	NonCPULens7FocalLength?	int16u~	
1730	NonCPULens8FocalLength?	int16u~	
1732	NonCPULens9FocalLength?	int16u~	
1734	NonCPULens10FocalLength?	int16u~	
1736	NonCPULens11FocalLength?	int16u~	
1738	NonCPULens12FocalLength?	int16u~	
1740	NonCPULens13FocalLength?	int16u~	
1742	NonCPULens14FocalLength?	int16u~	
1744	NonCPULens15FocalLength?	int16u~	
1746	NonCPULens16FocalLength?	int16u~	
1748	NonCPULens17FocalLength?	int16u~	
1750	NonCPULens18FocalLength?	int16u~	
1752	NonCPULens19FocalLength?	int16u~	
1754	NonCPULens20FocalLength?	int16u~	
1756	NonCPULens1MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1758	NonCPULens2MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1760	NonCPULens3MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1762	NonCPULens4MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1764	NonCPULens5MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1766	NonCPULens6MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1768	NonCPULens7MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1770	NonCPULens8MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1772	NonCPULens9MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1774	NonCPULens10MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1776	NonCPULens11MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1778	NonCPULens12MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1780	NonCPULens13MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>

1782	NonCPULens14MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1784	NonCPULens15MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1786	NonCPULens16MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1788	NonCPULens17MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1790	NonCPULens18MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1792	NonCPULens19MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1794	NonCPULens20MaxAperture?	int16u	--> <a href="#">Nikon NonCPULensApertureZ8 Values</a>
1808	HDMIOutputResolution	int8u	0 = Auto    3 = 1080p 1 = 4320p    4 = 1080i 2 = 2160p    5 = 720p
1826	AirplaneMode?	int8u	0 = Off 1 = On
1827	EmptySlotRelease?	int8u	0 = Disable Release 1 = Enable Release
1862	EnergySavingMode?	int8u	0 = Off 1 = On
1890	USBPowerDelivery?	int8u	0 = Off 1 = On
1899	SensorShield?	int8u	0 = Stays Open 1 = Closes

## Nikon NonCPULensApertureZ8 Values

Value	NonCPULensApertureZ8	Value	NonCPULensApertureZ8
12	= f/1.2	128	= f/6.3
24	= f/1.4	136	= f/7.1
40	= f/1.8	144	= f/8
48	= f/2.0	156	= f/9.5
64	= f/2.5	168	= f/11
72	= f/2.8	180	= f/13
84	= f/3.3	188	= f/15
88	= f/3.5	192	= f/16
96	= f/4.0	204	= f/19
104	= f/4.5	216	= f/22
112	= f/5.0	313	= N/A
120	= f/5.6		

## Nikon MenuSettingsZ8 Tags

These tags are common to all Z8 firmware versions.

Index1	Tag Name	Writable	Values / Notes
72	HighFrameRate	int8u	0 = Off    4 = C120 1 = CH    5 = C60 2 = CH*    6 = C15 3 = C30
152	MultipleExposureMode	int8u	0 = Off 1 = On 2 = On (Series)
154	MultiExposureShots	int8u	
184	IntervalDurationHours	int32u	
188	IntervalDurationMinutes	int32u	
192	IntervalDurationSeconds	int32u	
200	Intervals	int32u	
204	ShotsPerInterval	int32u	
208	IntervalExposureSmoothing	int8u	0 = Off 1 = On
210	IntervalPriority	int8u	0 = Off 1 = On
244	FocusShiftNumberShots	int8u	
248	FocusShiftStepWidth	int8u	
252	FocusShiftInterval	int8u~	

256	FocusShiftExposureLock?	int8u	0 = Off 1 = On
286	PhotoShootingMenuBank	int8u	0 = A 1 = B 2 = C 3 = D
288	ExtendedMenuBanks	int8u	0 = Off 1 = On
324	PhotoShootingMenuBankImageArea	int8u	0 = FX 1 = DX 4 = 16:9 8 = 1:1
338	AutoISO	int8u	0 = Off 1 = On
340	ISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
342	ISOAutoFlashLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
350	ISOAutoShutterTime	no	-15 = Auto    20 = 1/100 s -12 = 15 s    21 = 1/120 s -9 = 8 s    22 = 1/160 s -6 = 4 s    23 = 1/200 s -3 = 2 s    24 = 1/250 s 0 = 1 s    25 = 1/320 s 1 = 1/1.3 s    26 = 1/400 s 2 = 1/1.6 s    27 = 1/500 s 3 = 1/2 s    28 = 1/640 s 4 = 1/2.5 s    29 = 1/800 s 5 = 1/3 s    30 = 1/1000 s 6 = 1/4 s    31 = 1/1250 s 7 = 1/5 s    32 = 1/1600 s 8 = 1/6 s    33 = 1/2000 s 9 = 1/8 s    34 = 1/2500 s 10 = 1/10 s    35 = 1/3200 s 11 = 1/13 s    36 = 1/4000 s 12 = 1/15 s    37 = 1/5000 s 13 = 1/20 s    37.5 = 1/6000 s 14 = 1/25 s    38 = 1/6400 s 15 = 1/30 s    39 = 1/8000 s 16 = 1/40 s    40 = 1/10000 s 17 = 1/50 s    40.5 = 1/12000 s 18 = 1/60 s    41 = 1/13000 s 19 = 1/80 s    42 = 1/16000 s
432	MovieVignetteControl?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
434	DiffractionCompensation	int8u	0 = Off 1 = On
436	FlickerReductionShooting	int8u	0 = Off 1 = On
440	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash
548	AFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single    6 = Auto 2 = Dynamic    11 = Subject Tracking 3 = Wide (S)    12 = Wide (C1) 4 = Wide (L)    13 = Wide (C2)
550	VRMode	int8u	0 = Off 1 = Normal 2 = Sport
554	BracketSet	int8u	0 = AE/Flash 1 = AE 2 = Flash 3 = White Balance 4 = Active-D Lighting
556	BracketProgram	int8u	(AE and/or Flash Bracketing) 0 = Disabled    5 = 5F 2 = 2F    7 = 7F 3 = 3F    9 = 9F 4 = 4F
558	BracketIncrement	int8u	(AE and/or Flash Bracketing)

			0 = 0.3    3 = 1.0    6 = 1.3    9 = 2.3 1 = 0.5    4 = 2.0    7 = 1.5    10 = 2.5 2 = 0.7    5 = 3.0    8 = 1.7    11 = 2.7
570	HDR	int8u	0 = Off 1 = On 2 = On (Series)
576	SecondarySlotFunction	int8u	0 = Overflow 1 = Backup 2 = NEF Primary + JPG Secondary 3 = JPG Primary + JPG Secondary
582	HDRLevel	int8u	0 = Auto 1 = Extra High 2 = High 3 = Normal 4 = Low
586	Slot2JpgSize?	int8u	0 = Large (8256x5504) 1 = Medium (6192x4128) 2 = Small (4128x2752)
592	DXCropAlert	int8u	0 = Off 1 = On
594	SubjectDetection	int8u	0 = Off                  4 = Vehicles 1 = Auto                 5 = Birds 2 = People               6 = Airplanes 3 = Animals
596	DynamicAFAreaSize	int8u	0 = Small 1 = Medium 2 = Large
618	ToneMap?	int8u	0 = SDR 1 = HLG
622	PortraitImpressionBalance	int8u	0 = Off 1 = Mode 1 2 = Mode 2 3 = Mode 3
636	HighFrequencyFlickerReduction?	int8u	0 = Off 1 = On
730	MovieImageArea?	int8u	[val & 0x1] 0 = FX 1 = DX
740	MovieType?	int8u	1 = H.264 8-bit (MP4) 2 = H.265 8-bit (MOV) 3 = H.265 10-bit (MOV) 4 = ProRes 422 HQ 10-bit (MOV) 5 = ProRes RAW HQ 12-bit (MOV) 6 = NRAW 12-bit (NEV)
742	MovieISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
744	MovieISOAutoControlManualMode?	int8u	0 = Off 1 = On
746	MovieISOAutoManualMode?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
820	MovieActiveD-Lighting?	int8u	0 = Off 2 = Low 3 = Normal 4 = High 5 = Extra High
822	MovieHighISONoiseReduction?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
828	MovieFlickerReduction	int8u	0 = Auto 1 = 50Hz 2 = 60Hz
830	MovieMeteringMode?	int8u	0 = Matrix 1 = Center 2 = Spot 3 = Highlight
832	MovieFocusMode?	int8u	0 = Manual 1 = AF-S 2 = AF-C 4 = AF-F
834	MovieAFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single       6 = Auto 2 = Dynamic      11 = Subject Tracking

3 = Wide (S) 12 = Wide (C1)  
 4 = Wide (L) 13 = Wide (C2)

836	MovieVRMode?	int8u	0 = Off 1 = Normal 2 = Sport
840	MovieElectronicVR?	int8u	0 = Off 1 = On
842	MovieSoundRecording?	int8u	0 = Off 1 = Auto 2 = Manual
844	MicrophoneSensitivity?	int8u	
846	MicrophoneAttenuator?	int8u	0 = Off 1 = On
848	MicrophoneFrequencyResponse?	int8u	0 = Wide Range 1 = Vocal Range
850	WindNoiseReduction?	int8u	0 = Off 1 = On
882	MovieFrameSize?	int8u	1 = 1920x1080 2 = 3840x2160 3 = 7680x4320 7 = 5376x3024
884	MovieFrameRate?	int8u	0 = 120p 4 = 30p 1 = 100p 5 = 25p 2 = 60p 6 = 24p 3 = 50p
886	MicrophoneJackPower?	int8u	0 = Off 1 = On
887	MovieDXCropAlert?	int8u	0 = Off 1 = On
888	MovieSubjectDetection?	int8u	0 = Off 4 = Vehicles 1 = Auto 5 = Birds 2 = People 6 = Airplanes 3 = Animals
896	MovieHighResZoom?	int8u	0 = Off 1 = On

## Nikon MenuSettingsZ8v2 Tags

These tags are used by the Z8 firmware 2.00 and 2.10.

Index1	Tag Name	Writable	Values / Notes
0	MenuSettingsZ8	-	--> <a href="#">Nikon MenuSettingsZ8 Tags</a>
943	CustomSettingsZ8	-	--> <a href="#">NikonCustom SettingsZ8 Tags</a>
1698	Language?	int8u	4 = English 5 = Spanish 7 = French 15 = Portuguese
1700	TimeZone	int8u	--> <a href="#">Nikon TimeZone Values</a>
1706	MonitorBrightness?	int8u	0 = -5 3 = -2 6 = 1 9 = 4 15 = Hi2 1 = -4 4 = -1 7 = 2 10 = 5 16 = Lo2 2 = -3 5 = 0 8 = 3 14 = Hi1 17 = Lo1
1728	AFFineTune?	int8u	0 = Off 1 = On
1732	NonCPU Lens 1 Focal Length?	int16u~	
1734	NonCPU Lens 2 Focal Length?	int16u~	
1736	NonCPU Lens 3 Focal Length?	int16u~	
1738	NonCPU Lens 4 Focal Length?	int16u~	
1740	NonCPU Lens 5 Focal Length?	int16u~	
1742	NonCPU Lens 6 Focal Length?	int16u~	
1744	NonCPU Lens 7 Focal Length?	int16u~	
1746	NonCPU Lens 8 Focal Length?	int16u~	
1748	NonCPU Lens 9 Focal Length?	int16u~	
1750	NonCPU Lens 10 Focal Length?	int16u~	
1752	NonCPU Lens 11 Focal Length?	int16u~	

1754	NonCPULens12FocalLength?	int16u~	
1756	NonCPULens13FocalLength?	int16u~	
1758	NonCPULens14FocalLength?	int16u~	
1760	NonCPULens15FocalLength?	int16u~	
1762	NonCPULens16FocalLength?	int16u~	
1764	NonCPULens17FocalLength?	int16u~	
1766	NonCPULens18FocalLength?	int16u~	
1768	NonCPULens19FocalLength?	int16u~	
1770	NonCPULens20FocalLength?	int16u~	
1812	NonCPULens1MaxAperture?	int32u~	
1816	NonCPULens2MaxAperture?	int32u~	
1820	NonCPULens3MaxAperture?	int32u~	
1824	NonCPULens4MaxAperture?	int32u~	
1828	NonCPULens5MaxAperture?	int32u~	
1832	NonCPULens6MaxAperture?	int32u~	
1836	NonCPULens7MaxAperture?	int32u~	
1840	NonCPULens8MaxAperture?	int32u~	
1844	NonCPULens9MaxAperture?	int32u~	
1848	NonCPULens10MaxAperture?	int32u~	
1852	NonCPULens11MaxAperture?	int32u~	
1856	NonCPULens12MaxAperture?	int32u~	
1860	NonCPULens13MaxAperture?	int32u~	
1864	NonCPULens14MaxAperture?	int32u~	
1868	NonCPULens15MaxAperture?	int32u~	
1872	NonCPULens16MaxAperture?	int32u~	
1876	NonCPULens17MaxAperture?	int32u~	
1880	NonCPULens18MaxAperture?	int32u~	
1884	NonCPULens19MaxAperture?	int32u~	
1888	NonCPULens20MaxAperture?	int32u~	
1904	HDMIOutputResolution	int8u	0 = Auto     3 = 1080p 1 = 4320p    4 = 1080i 2 = 2160p    5 = 720p
1922	AirplaneMode?	int8u	0 = Off 1 = On
1923	EmptySlotRelease?	int8u	0 = Disable Release 1 = Enable Release
1958	EnergySavingMode?	int8u	0 = Off 1 = On
1986	USBPowerDelivery?	int8u	0 = Off 1 = On
1995	SensorShield?	int8u	0 = Stays Open 1 = Closes
2046	PixelShiftShooting	int8u	0 = Off 1 = On 2 = On (Series)
2048	PixelShiftNumberShots	int8u	0 = 4 1 = 8 2 = 16 3 = 32
2050	PixelShiftDelay	int8u	0 = Off   3 = 3 s 1 = 1 s   4 = 5 s 2 = 2 s   5 = 10 s
2052	PlaybackButton	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2054	WBButton	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2056	BracketButton	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2058	LensFunc1ButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2060	LensFunc2ButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2062	PlaybackButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>

2064	BracketButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2206	MaximumApertureLV?	int8u	0 = Off 1 = On
2208	ReleaseModeButton	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>
2216	ReleaseModeButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ8 Values</a>

## Nikon ButtonsZ8 Values

Value	ButtonsZ8	Value	ButtonsZ8
0 = None		72 = Shooting Mode	
1 = Preview		73 = Exposure Compensation	
3 = FV Lock		76 = Silent Mode	
4 = AE/AF Lock		78 = LiveView Information	
5 = AE Lock Only		79 = AWB Lock (hold)	
6 = AE Lock (reset on release)		80 = Grid Display	
7 = AE Lock (hold)		81 = Starlight View	
8 = AF Lock Only		82 = Select To Send (PC)	
9 = AF-On		83 = Select To Send (FTP)	
10 = Flash Disable/Enable		84 = Pattern Tone Range	
11 = Bracketing Burst		85 = Control Lock	
12 = +NEF(RAW)		86 = Save Focus Position	
18 = Virtual Horizon		87 = Recall Focus Position	
19 = Synchronized Release		88 = Recall Shooting Functions (Hold)	
20 = My Menu		89 = Set Picture Control (HLG)	
21 = My Menu Top Item		90 = Skin Softening	
22 = Playback		91 = Portrait Impression Balance	
23 = Rating		92 = Fast AF-On	
24 = Protect		97 = High Frequency Flicker Reduction	
25 = Zoom		98 = Switch FX/DX	
26 = Focus Peaking		99 = View Mode (Photo LV)	
27 = Flash Mode/Compensation		100 = Photo Flicker Reduction	
28 = Image Area		101 = Filtered Playback (Select Criteria)	
30 = Non-CPU Lens		103 = Start Series Playback	
31 = Active-D Lighting		104 = View Assist	
32 = Exposure Delay Mode		105 = Hi-Res Zoom+	
33 = 1 Stop Speed/Aperture		106 = Hi-Res Zoom-	
34 = White Balance		108 = Override Other Cameras	
35 = Metering		109 = DISP - Cycle Information Display (shooting)	
36 = Auto Bracketing		110 = DISP - Cycle Information Display (playback)	
37 = Multiple Exposure		111 = Resume Shooting	
38 = HDR Overlay		112 = Switch Eyes	
39 = Picture Control		113 = Power Zoom +	
40 = Quality		114 = Power Zoom -	
41 = Focus Mode/AF AreaMode		115 = Delete	
42 = Select Center Focus Point		116 = Pixel Shift Shooting	
44 = Record Movie		117 = Cycle AF-area Mode	
45 = Thumbnail On/Off		119 = Focus Limiter	
46 = View Histograms		120 = Jump to Source Image	
47 = Choose Folder		121 = Raw Processing (Current)	
48 = Power Aperture (Open)		122 = Raw Processing (Multiple)	
49 = Power Aperture (Close)		123 = Trim	
52 = Microphone Sensitivity		124 = Resize (Current)	
53 = Release Mode		125 = Resize (Multiple)	
57 = Preset Focus Point		126 = D-Lighting	
58 = AE/AWB Lock (hold)		127 = Straighten	
59 = AF-AreaMode		128 = Distortion Control	
60 = AF-AreaMode + AF-On		129 = Perspective Control	
61 = Recall Shooting Functions		130 = Monochrome	
64 = Filtered Playback		131 = Overlay (Add)	
65 = Same as AF-On		132 = Lighten	
66 = Voice Memo		133 = Darken	
70 = Photo Shooting Bank		134 = Motion Blend	
71 = ISO		135 = Cycle Monitor Mode	

## Nikon ShotInfoZ9 Tags

These tags are extracted from encrypted data in images from the Z9.

Index	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	

4	FirmwareVersion	no	
48	SequenceOffset	-	--> <a href="#">Nikon SeqInfoZ9 Tags</a>
88	Offset13	-	--> <a href="#">Nikon Offset13InfoZ9 Tags</a>
128	AutoCaptureOffset	-	--> <a href="#">Nikon AutoCaptureInfo Tags</a>
132	OrientOffset	-	--> <a href="#">Nikon OrientationInfo Tags</a>
140	MenuOffset	-	--> <a href="#">Nikon MenuInfoZ9 Tags</a>

## Nikon Offset13InfoZ9 Tags

Index1	Tag Name	Writable	Values / Notes
3048	AFArealInitialXPosition	int8s~	
3049	AFArealInitialYPosition	int8s~	
3050	AFArealInitialWidth	int8u	
3051	AFArealInitialHeight	int8u	

## Nikon MenuInfoZ9 Tags

Index1	Tag Name	Writable	Values / Notes
16	MenuSettingsOffsetZ9	-	(Firmware versions 2.11 and earlier)
	MenuSettingsOffsetZ9v3	-	--> <a href="#">Nikon MenuSettingsZ9 Tags</a>
	MenuSettingsOffsetZ9v4	-	(Firmware versions 3.00 and v3.10) --> <a href="#">Nikon MenuSettingsZ9v3 Tags</a> (Firmware versions 4.00 and higher) --> <a href="#">Nikon MenuSettingsZ9v4 Tags</a>

## Nikon MenuSettingsZ9 Tags

These tags are used by the Z9.

Index1	Tag Name	Writable	Values / Notes
140	MultipleExposureMode	int8u	0 = Off 1 = On 2 = On (Series)
142	MultiExposureShots	int8u	
188	Intervals	int32u	
192	ShotsPerInterval	int32u	
232	FocusShiftNumberShots	int8u	
236	FocusShiftStepWidth	int8u	
240	FocusShiftInterval	int8u~	
244	FocusShiftExposureLock?	int8u	0 = Off 1 = On
274	PhotoShootingMenuBank	int8u	0 = A 1 = B 2 = C 3 = D
276	ExtendedMenuBanks	int8u	0 = Off 1 = On
308	PhotoShootingMenuBankImageArea	int8u	0 = FX 1 = DX 4 = 16:9 8 = 1:1
322	AutoISO	int8u	0 = Off 1 = On
324	ISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
326	ISOAutoFlashLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
334	ISOAutoShutterTime	no	-15 = Auto 20 = 1/100 s -12 = 15 s 21 = 1/120 s -9 = 8 s 22 = 1/160 s -6 = 4 s 23 = 1/200 s -3 = 2 s 24 = 1/250 s 0 = 1 s 25 = 1/320 s 1 = 1/1.3 s 26 = 1/400 s

2 = 1/1.6 s	27 = 1/500 s
3 = 1/2 s	28 = 1/640 s
4 = 1/2.5 s	29 = 1/800 s
5 = 1/3 s	30 = 1/1000 s
6 = 1/4 s	31 = 1/1250 s
7 = 1/5 s	32 = 1/1600 s
8 = 1/6 s	33 = 1/2000 s
9 = 1/8 s	34 = 1/2500 s
10 = 1/10 s	35 = 1/3200 s
11 = 1/13 s	36 = 1/4000 s
12 = 1/15 s	37 = 1/5000 s
13 = 1/20 s	37.5 = 1/6000 s
14 = 1/25 s	38 = 1/6400 s
15 = 1/30 s	39 = 1/8000 s
16 = 1/40 s	40 = 1/10000 s
17 = 1/50 s	40.5 = 1/12000 s
18 = 1/60 s	41 = 1/13000 s
19 = 1/80 s	42 = 1/16000 s

416	MovieVignetteControl?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
418	DiffractionCompensation	int8u	0 = Off 1 = On
420	FlickerReductionShooting	int8u	0 = Off 1 = On
424	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash
426	FlashMasterCompensation?	int8s	
430	FlashGNDistance?	no	0 = 0        13 = 1.4 m    26 = 6.3 m 1 = 0.1 m    14 = 1.6 m    27 = 7.1 m 2 = 0.2 m    15 = 1.8 m    28 = 8.0 m 3 = 0.3 m    16 = 2.0 m    29 = 9.0 m 4 = 0.4 m    17 = 2.2 m    30 = 10.0 m 5 = 0.5 m    18 = 2.5 m    31 = 11.0 m 6 = 0.6 m    19 = 2.8 m    32 = 13.0 m 7 = 0.7 m    20 = 3.2 m    33 = 14.0 m 8 = 0.8 m    21 = 3.6 m    34 = 16.0 m 9 = 0.9 m    22 = 4.0 m    35 = 18.0 m 10 = 1.0 m   23 = 4.5 m    36 = 20.0 m 11 = 1.1 m   24 = 5.0 m    255 = n/a 12 = 1.3 m   25 = 5.6 m
434	FlashOutput?	int8u	
444	FlashRemoteControl?	int8u	0 = Group 1 = Quick Wireless 2 = Remote Repeating
456	FlashWirelessOption?	int8u	0 = Off 1 = Optical AWL 2 = Optical/Radio AWL 3 = Radio AWL
528	AFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single      6 = Auto 2 = Dynamic     11 = Subject Tracking 3 = Wide (S)    12 = Wide (C1) 4 = Wide (L)    13 = Wide (C2)
530	VRMode	int8u	0 = Off 1 = Normal 2 = Sport
534	BracketSet	int8u	0 = AE/Flash 1 = AE 2 = Flash 3 = White Balance 4 = Active-D Lighting
536	BracketProgram	int8u	(AE and/or Flash Bracketing) 0 = Disabled    5 = 5F 2 = 2F           7 = 7F 3 = 3F           9 = 9F 4 = 4F
538	BracketIncrement	int8u	(AE and/or Flash Bracketing)

			0 = 0.3    3 = 1.0    6 = 1.3    9 = 2.3 1 = 0.5    4 = 2.0    7 = 1.5    10 = 2.5 2 = 0.7    5 = 3.0    8 = 1.7    11 = 2.7
556	SecondarySlotFunction	int8u	0 = Overflow 1 = Backup 2 = NEF Primary + JPG Secondary 3 = JPG Primary + JPG Secondary
572	DXCropAlert	int8u	0 = Off 1 = On
574	SubjectDetection	int8u	0 = Off                  4 = Vehicles 1 = Auto                 5 = Birds 2 = People               6 = Airplanes 3 = Animals
576	DynamicAFAreaSize	int8u	0 = Small 1 = Medium 2 = Large
604	MovieImageArea?	int8u	[val & 0x1] 0 = FX 1 = DX
614	MovieType?	int8u	1 = H.264 8-bit (MP4) 2 = H.265 8-bit (MOV) 3 = H.265 10-bit (MOV) 4 = ProRes 422 HQ 10-bit (MOV) 5 = ProRes RAW HQ 12-bit (MOV) 6 = NRAW 12-bit (NEV)
616	MovieISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
618	MovieISOAutoControlManualMode?	int8u	0 = Off 1 = On
620	MovieISOAutoManualMode?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
696	MovieActiveD-Lighting?	int8u	0 = Off 2 = Low 3 = Normal 4 = High 5 = Extra High
698	MovieHighISONoiseReduction?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
704	MovieFlickerReduction	int8u	0 = Auto 1 = 50Hz 2 = 60Hz
706	MovieMeteringMode?	int8u	0 = Matrix 1 = Center 2 = Spot 3 = Highlight
708	MovieFocusMode?	int8u	0 = Manual 1 = AF-S 2 = AF-C 4 = AF-F
710	MovieAFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single      6 = Auto 2 = Dynamic     11 = Subject Tracking 3 = Wide (S)    12 = Wide (C1) 4 = Wide (L)    13 = Wide (C2)
712	MovieVRMode?	int8u	0 = Off 1 = Normal 2 = Sport
716	MovieElectronicVR?	int8u	0 = Off 1 = On
718	MovieSoundRecording?	int8u	0 = Off 1 = Auto 2 = Manual
720	MicrophoneSensitivity?	int8u	
722	MicrophoneAttenuator?	int8u	0 = Off 1 = On
724	MicrophoneFrequencyResponse?	int8u	0 = Wide Range 1 = Vocal Range
726	WindNoiseReduction?	int8u	0 = Off 1 = On

748	MovieToneMap?	int8u	0 = SDR 1 = HLG 2 = N-Log
754	MovieFrameSize?	int8u	1 = 1920x1080 2 = 3840x2160 3 = 7680x4320 7 = 5376x3024
756	MovieFrameRate?	int8u	0 = 120p 4 = 30p 1 = 100p 5 = 25p 2 = 60p 6 = 24p 3 = 50p
762	MicrophoneJackPower?	int8u	0 = Off 1 = On
763	MovieDXCropAlert?	int8u	0 = Off 1 = On
764	MovieSubjectDetection?	int8u	0 = Off 4 = Vehicles 1 = Auto 5 = Birds 2 = People 6 = Airplanes 3 = Animals
799	CustomSettingsZ9	-	--> <a href="#">NikonCustom SettingsZ9 Tags</a>
1426	Language?	int8u	4 = English 5 = Spanish 7 = French 15 = Portuguese
1428	TimeZone	int8u	--> <a href="#">Nikon TimeZone Values</a>
1434	MonitorBrightness?		no
1456	AFFineTune?	int8u	0 = Off 1 = On
1552	HDMIOutputResolution	int8u	0 = Auto 3 = 1080p 1 = 4320p 4 = 1080i 2 = 2160p 5 = 720p
1565	SetClockFromLocationData?	int8u	0 = Off 1 = On
1572	AirplaneMode?	int8u	0 = Off 1 = On
1573	EmptySlotRelease?	int8u	0 = Disable Release 1 = Enable Release
1608	EnergySavingMode?	int8u	0 = Off 1 = On
1632	RecordLocationData?	int8u	0 = Off 1 = On
1636	USBPowerDelivery?	int8u	0 = Off 1 = On
1645	SensorShield?	int8u	0 = Stays Open 1 = Closes

## Nikon MenuSettingsZ9v3 Tags

These tags are used by the Z9 firmware 3.00.

Index1	Tag Name	Writable	Values / Notes
72	HighFrameRate	int8u	0 = Off 4 = C120 1 = CH 5 = C60 2 = CH* 6 = C15 3 = C30
154	MultipleExposureMode	int8u	0 = Off 1 = On 2 = On (Series)
156	MultiExposureShots	int8u	
204	Intervals	int32u	
208	ShotsPerInterval	int32u	
248	FocusShiftNumberShots	int8u	
252	FocusShiftStepWidth	int8u	
256	FocusShiftInterval	int8u~	

260	FocusShiftExposureLock?	int8u	0 = Off 1 = On
290	PhotoShootingMenuBank	int8u	0 = A 1 = B 2 = C 3 = D
292	ExtendedMenuBanks	int8u	0 = Off 1 = On
328	PhotoShootingMenuBankImageArea	int8u	0 = FX 1 = DX 4 = 16:9 8 = 1:1
342	AutoISO	int8u	0 = Off 1 = On
344	ISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
346	ISOAutoFlashLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
354	ISOAutoShutterTime	no	-15 = Auto    20 = 1/100 s -12 = 15 s    21 = 1/120 s -9 = 8 s    22 = 1/160 s -6 = 4 s    23 = 1/200 s -3 = 2 s    24 = 1/250 s 0 = 1 s    25 = 1/320 s 1 = 1/1.3 s    26 = 1/400 s 2 = 1/1.6 s    27 = 1/500 s 3 = 1/2 s    28 = 1/640 s 4 = 1/2.5 s    29 = 1/800 s 5 = 1/3 s    30 = 1/1000 s 6 = 1/4 s    31 = 1/1250 s 7 = 1/5 s    32 = 1/1600 s 8 = 1/6 s    33 = 1/2000 s 9 = 1/8 s    34 = 1/2500 s 10 = 1/10 s    35 = 1/3200 s 11 = 1/13 s    36 = 1/4000 s 12 = 1/15 s    37 = 1/5000 s 13 = 1/20 s    37.5 = 1/6000 s 14 = 1/25 s    38 = 1/6400 s 15 = 1/30 s    39 = 1/8000 s 16 = 1/40 s    40 = 1/10000 s 17 = 1/50 s    40.5 = 1/12000 s 18 = 1/60 s    41 = 1/13000 s 19 = 1/80 s    42 = 1/16000 s
436	MovieVignetteControl?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
438	DiffractionCompensation	int8u	0 = Off 1 = On
440	FlickerReductionShooting	int8u	0 = Off 1 = On
444	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash
446	FlashMasterCompensation?	int8s	
450	FlashGNDistance?	no	0 = 0    13 = 1.4 m    26 = 6.3 m 1 = 0.1 m    14 = 1.6 m    27 = 7.1 m 2 = 0.2 m    15 = 1.8 m    28 = 8.0 m 3 = 0.3 m    16 = 2.0 m    29 = 9.0 m 4 = 0.4 m    17 = 2.2 m    30 = 10.0 m 5 = 0.5 m    18 = 2.5 m    31 = 11.0 m 6 = 0.6 m    19 = 2.8 m    32 = 13.0 m 7 = 0.7 m    20 = 3.2 m    33 = 14.0 m 8 = 0.8 m    21 = 3.6 m    34 = 16.0 m 9 = 0.9 m    22 = 4.0 m    35 = 18.0 m 10 = 1.0 m    23 = 4.5 m    36 = 20.0 m 11 = 1.1 m    24 = 5.0 m    255 = n/a 12 = 1.3 m    25 = 5.6 m
454	FlashOutput?	int8u	
548	AFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single    6 = Auto 2 = Dynamic    11 = Subject Tracking

			3 = Wide (S) 12 = Wide (C1) 4 = Wide (L) 13 = Wide (C2)
550	VRMode	int8u	0 = Off 1 = Normal 2 = Sport
554	BracketSet	int8u	0 = AE/Flash 1 = AE 2 = Flash 3 = White Balance 4 = Active-D Lighting
556	BracketProgram	int8u	(AE and/or Flash Bracketing) 0 = Disabled 5 = 5F 2 = 2F 7 = 7F 3 = 3F 9 = 9F 4 = 4F
558	BracketIncrement	int8u	(AE and/or Flash Bracketing) 0 = 0.3 3 = 1.0 6 = 1.3 9 = 2.3 1 = 0.5 4 = 2.0 7 = 1.5 10 = 2.5 2 = 0.7 5 = 3.0 8 = 1.7 11 = 2.7
576	SecondarySlotFunction	int8u	0 = Overflow 1 = Backup 2 = NEF Primary + JPG Secondary 3 = JPG Primary + JPG Secondary
592	DXCropAlert	int8u	0 = Off 1 = On
594	SubjectDetection	int8u	0 = Off 4 = Vehicles 1 = Auto 5 = Birds 2 = People 6 = Airplanes 3 = Animals
596	DynamicAFAreaSize	int8u	0 = Small 1 = Medium 2 = Large
636	HighFrequencyFlickerReduction?	int8u	0 = Off 1 = On
646	MovieImageArea?	int8u	[val & 0x1] 0 = FX 1 = DX
656	MovieType?	int8u	1 = H.264 8-bit (MP4) 2 = H.265 8-bit (MOV) 3 = H.265 10-bit (MOV) 4 = ProRes 422 HQ 10-bit (MOV) 5 = ProRes RAW HQ 12-bit (MOV) 6 = NRAW 12-bit (NEV)
658	MovieISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
660	MovieISOAutoControlManualMode?	int8u	0 = Off 1 = On
662	MovieISOAutoManualMode?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
736	MovieActiveD-Lighting?	int8u	0 = Off 2 = Low 3 = Normal 4 = High 5 = Extra High
738	MovieHighISONoiseReduction?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
744	MovieFlickerReduction	int8u	0 = Auto 1 = 50Hz 2 = 60Hz
746	MovieMeteringMode?	int8u	0 = Matrix 1 = Center 2 = Spot 3 = Highlight
748	MovieFocusMode?	int8u	0 = Manual 1 = AF-S 2 = AF-C 4 = AF-F
750	MovieAFAreaMode	int8u	0 = Pinpoint 5 = 3D 1 = Single 6 = Auto 2 = Dynamic 11 = Subject Tracking

			3 = Wide (S) 12 = Wide (C1) 4 = Wide (L) 13 = Wide (C2)
752	MovieVRMode?	int8u	0 = Off 1 = Normal 2 = Sport
756	MovieElectronicVR?	int8u	0 = Off 1 = On
758	MovieSoundRecording?	int8u	0 = Off 1 = Auto 2 = Manual
760	MicrophoneSensitivity?	int8u	
762	MicrophoneAttenuator?	int8u	0 = Off 1 = On
764	MicrophoneFrequencyResponse?	int8u	0 = Wide Range 1 = Vocal Range
766	WindNoiseReduction?	int8u	0 = Off 1 = On
788	MovieToneMap?	int8u	0 = SDR 1 = HLG 2 = N-Log
794	MovieFrameSize?	int8u	1 = 1920x1080 2 = 3840x2160 3 = 7680x4320 7 = 5376x3024
796	MovieFrameRate?	int8u	0 = 120p 4 = 30p 1 = 100p 5 = 25p 2 = 60p 6 = 24p 3 = 50p
802	MicrophoneJackPower?	int8u	0 = Off 1 = On
803	MovieDXCropAlert?	int8u	0 = Off 1 = On
804	MovieSubjectDetection?	int8u	0 = Off 4 = Vehicles 1 = Auto 5 = Birds 2 = People 6 = Airplanes 3 = Animals
812	MovieHighResZoom?	int8u	0 = Off 1 = On
847	CustomSettingsZ9	-	--> <a href="#">NikonCustom SettingsZ9 Tags</a>
1474	Language?	int8u	4 = English 5 = Spanish 7 = French 15 = Portuguese
1476	TimeZone	int8u	--> <a href="#">Nikon TimeZone Values</a>
1482	MonitorBrightness?	int8u	0 = -5 3 = -2 6 = 1 9 = 4 15 = Hi2 1 = -4 4 = -1 7 = 2 10 = 5 16 = Lo2 2 = -3 5 = 0 8 = 3 14 = Hi1 17 = Lo1
1504	AFFineTune?	int8u	0 = Off 1 = On
1600	HDMIOutputResolution	int8u	0 = Auto 3 = 1080p 1 = 4320p 4 = 1080i 2 = 2160p 5 = 720p
1613	SetClockFromLocationData?	int8u	0 = Off 1 = On
1620	AirplaneMode?	int8u	0 = Off 1 = On
1621	EmptySlotRelease?	int8u	0 = Disable Release 1 = Enable Release
1656	EnergySavingMode?	int8u	0 = Off 1 = On
1680	RecordLocationData?	int8u	0 = Off 1 = On
1684	USBPowerDelivery?	int8u	0 = Off 1 = On
1693	SensorShield?	int8u	0 = Stays Open 1 = Closes
1754	FocusShiftAutoReset?	int8u	0 = Off 1 = On

1810 PreReleaseBurstLength	int8u	0 = None 1 = 0.3 Sec 2 = 0.5 Sec 3 = 1 Sec
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1812 PostReleaseBurstLength	int8u	0 = 1 Sec 1 = 2 Sec 2 = 3 Sec 3 = Max
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## Nikon MenuSettingsZ9v4 Tags

These tags are used by the Z9 firmware 4.00, 4.10, 5.00 and 5.10.

Index1	Tag Name	Writable	Values / Notes
72	HighFrameRate	int8u	0 = Off 4 = C120 1 = CH 5 = C60 2 = CH* 6 = C15 3 = C30
154	MultipleExposureMode	int8u	0 = Off 1 = On 2 = On (Series)
156	MultiExposureShots	int8u	
204	Intervals	int32u	
208	ShotsPerInterval	int32u	
248	FocusShiftNumberShots	int8u	
252	FocusShiftStepWidth	int8u	
256	FocusShiftInterval	int8u~	
260	FocusShiftExposureLock?	int8u	0 = Off 1 = On
290	PhotoShootingMenuBank	int8u	0 = A 1 = B 2 = C 3 = D
292	ExtendedMenuBanks	int8u	0 = Off 1 = On
328	PhotoShootingMenuBankImageArea	int8u	0 = FX 1 = DX 4 = 16:9 8 = 1:1
342	AutoISO	int8u	0 = Off 1 = On
344	ISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
346	ISOAutoFlashLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
354	ISOAutoShutterTime	no	-15 = Auto 20 = 1/100 s -12 = 15 s 21 = 1/120 s -9 = 8 s 22 = 1/160 s -6 = 4 s 23 = 1/200 s -3 = 2 s 24 = 1/250 s 0 = 1 s 25 = 1/320 s 1 = 1/1.3 s 26 = 1/400 s 2 = 1/1.6 s 27 = 1/500 s 3 = 1/2 s 28 = 1/640 s 4 = 1/2.5 s 29 = 1/800 s 5 = 1/3 s 30 = 1/1000 s 6 = 1/4 s 31 = 1/1250 s 7 = 1/5 s 32 = 1/1600 s 8 = 1/6 s 33 = 1/2000 s 9 = 1/8 s 34 = 1/2500 s 10 = 1/10 s 35 = 1/3200 s 11 = 1/13 s 36 = 1/4000 s 12 = 1/15 s 37 = 1/5000 s 13 = 1/20 s 37.5 = 1/6000 s 14 = 1/25 s 38 = 1/6400 s 15 = 1/30 s 39 = 1/8000 s 16 = 1/40 s 40 = 1/10000 s 17 = 1/50 s 40.5 = 1/12000 s 18 = 1/60 s 41 = 1/13000 s 19 = 1/80 s 42 = 1/16000 s
436	MovieVignetteControl?	int8u	0 = Off 1 = Low

			2 = Normal 3 = High
438	DiffractionCompensation	int8u	0 = Off 1 = On
440	FlickerReductionShooting	int8u	0 = Off 1 = On
444	FlashControlMode	int8u	0 = TTL 1 = Auto External Flash 2 = GN (distance priority) 3 = Manual 4 = Repeating Flash
446	FlashMasterCompensation?	int8s	
450	FlashGNDistance?	no	0 = 0      13 = 1.4 m    26 = 6.3 m 1 = 0.1 m    14 = 1.6 m    27 = 7.1 m 2 = 0.2 m    15 = 1.8 m    28 = 8.0 m 3 = 0.3 m    16 = 2.0 m    29 = 9.0 m 4 = 0.4 m    17 = 2.2 m    30 = 10.0 m 5 = 0.5 m    18 = 2.5 m    31 = 11.0 m 6 = 0.6 m    19 = 2.8 m    32 = 13.0 m 7 = 0.7 m    20 = 3.2 m    33 = 14.0 m 8 = 0.8 m    21 = 3.6 m    34 = 16.0 m 9 = 0.9 m    22 = 4.0 m    35 = 18.0 m 10 = 1.0 m   23 = 4.5 m    36 = 20.0 m 11 = 1.1 m   24 = 5.0 m    255 = n/a 12 = 1.3 m   25 = 5.6 m
454	FlashOutput?	int8u	
548	AFAreaMode	int8u	0 = Pinpoint    5 = 3D 1 = Single      6 = Auto 2 = Dynamic     11 = Subject Tracking 3 = Wide (S)    12 = Wide (C1) 4 = Wide (L)    13 = Wide (C2)
550	VRMode	int8u	0 = Off 1 = Normal 2 = Sport
554	BracketSet	int8u	0 = AE/Flash 1 = AE 2 = Flash 3 = White Balance 4 = Active-D Lighting
556	BracketProgram	int8u	(AE and/or Flash Bracketing) 0 = Disabled    5 = 5F 2 = 2F           7 = 7F 3 = 3F           9 = 9F 4 = 4F
558	BracketIncrement	int8u	(AE and/or Flash Bracketing) 0 = 0.3    3 = 1.0    6 = 1.3    9 = 2.3 1 = 0.5    4 = 2.0    7 = 1.5    10 = 2.5 2 = 0.7    5 = 3.0    8 = 1.7    11 = 2.7
570	HDR	int8u	0 = Off 1 = On 2 = On (Series)
576	SecondarySlotFunction	int8u	0 = Overflow 1 = Backup 2 = NEF Primary + JPG Secondary 3 = JPG Primary + JPG Secondary
582	HDRLevel	int8u	0 = Auto 1 = Extra High 2 = High 3 = Normal 4 = Low
586	Slot2JpgSize?	int8u	0 = Large (8256x5504) 1 = Medium (6192x4128) 2 = Small (4128x2752)
592	DXCropAlert	int8u	0 = Off 1 = On
594	SubjectDetection	int8u	0 = Off      4 = Vehicles 1 = Auto     5 = Birds 2 = People    6 = Airplanes 3 = Animals
596	DynamicAFAreaSize	int8u	0 = Small 1 = Medium 2 = Large

636	HighFrequencyFlickerReduction?	int8u	0 = Off 1 = On
646	MovieImageArea?	int8u	[val & 0x1] 0 = FX 1 = DX
656	MovieType?	int8u	1 = H.264 8-bit (MP4) 2 = H.265 8-bit (MOV) 3 = H.265 10-bit (MOV) 4 = ProRes 422 HQ 10-bit (MOV) 5 = ProRes RAW HQ 12-bit (MOV) 6 = NRAW 12-bit (NEV)
658	MovieISOAutoHiLimit?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
660	MovieISOAutoControlManualMode?	int8u	0 = Off 1 = On
662	MovieISOAutoManualMode?	int16u	--> <a href="#">Nikon ISOAutoHiLimitZ7 Values</a>
736	MovieActiveD-Lighting?	int8u	0 = Off 2 = Low 3 = Normal 4 = High 5 = Extra High
738	MovieHighISONoiseReduction?	int8u	0 = Off 1 = Low 2 = Normal 3 = High
744	MovieFlickerReduction	int8u	0 = Auto 1 = 50Hz 2 = 60Hz
746	MovieMeteringMode?	int8u	0 = Matrix 1 = Center 2 = Spot 3 = Highlight
748	MovieFocusMode?	int8u	0 = Manual 1 = AF-S 2 = AF-C 4 = AF-F
750	MovieAFAreaMode	int8u	0 = Pinpoint      5 = 3D 1 = Single      6 = Auto 2 = Dynamic      11 = Subject Tracking 3 = Wide (S)      12 = Wide (C1) 4 = Wide (L)      13 = Wide (C2)
752	MovieVRMode?	int8u	0 = Off 1 = Normal 2 = Sport
756	MovieElectronicVR?	int8u	0 = Off 1 = On
758	MovieSoundRecording?	int8u	0 = Off 1 = Auto 2 = Manual
760	MicrophoneSensitivity?	int8u	
762	MicrophoneAttenuator?	int8u	0 = Off 1 = On
764	MicrophoneFrequencyResponse?	int8u	0 = Wide Range 1 = Vocal Range
766	WindNoiseReduction?	int8u	0 = Off 1 = On
788	MovieToneMap?	int8u	0 = SDR 1 = HLG 2 = N-Log
794	MovieFrameSize?	int8u	1 = 1920x1080 2 = 3840x2160 3 = 7680x4320 7 = 5376x3024
796	MovieFrameRate?	int8u	0 = 120p    4 = 30p 1 = 100p    5 = 25p 2 = 60p    6 = 24p 3 = 50p
802	MicrophoneJackPower?	int8u	0 = Off 1 = On
803	MovieDXCropAlert?	int8u	0 = Off 1 = On

	804 MovieSubjectDetection?	int8u	0 = Off 1 = Auto 2 = People 3 = Animals	4 = Vehicles 5 = Birds 6 = Airplanes
	812 MovieHighResZoom?	int8u	0 = Off 1 = On	
847	CustomSettingsZ9v4	-	--> <a href="#">Nikon Custom Settings Z9v4 Tags</a>	
1498	Language?	int8u	4 = English 5 = Spanish 7 = French 15 = Portuguese	
1500	TimeZone	int8u	--> <a href="#">Nikon TimeZone Values</a>	
1506	MonitorBrightness?	int8u	0 = -5    3 = -2    6 = 1    9 = 4    15 = Hi2 1 = -4    4 = -1    7 = 2    10 = 5    16 = Lo2 2 = -3    5 = 0    8 = 3    14 = Hi1    17 = Lo1	
1528	AFFineTune?	int8u	0 = Off 1 = On	
1532	NonCPULens1FocalLength?	int16s~		
1536	NonCPULens2FocalLength?	int16s~		
1540	NonCPULens3FocalLength?	int16s~		
1544	NonCPULens4FocalLength?	int16s~		
1548	NonCPULens5FocalLength?	int16s~		
1552	NonCPULens6FocalLength?	int16s~		
1556	NonCPULens7FocalLength?	int16s~		
1560	NonCPULens8FocalLength?	int16s~		
1564	NonCPULens9FocalLength?	int16s~		
1568	NonCPULens10FocalLength?	int16s~		
1572	NonCPULens11FocalLength?	int16s~		
1576	NonCPULens12FocalLength?	int16s~		
1580	NonCPULens13FocalLength?	int16s~		
1584	NonCPULens14FocalLength?	int16s~		
1588	NonCPULens15FocalLength?	int16s~		
1592	NonCPULens16FocalLength?	int16s~		
1596	NonCPULens17FocalLength?	int16s~		
1600	NonCPULens18FocalLength?	int16s~		
1604	NonCPULens19FocalLength?	int16s~		
1608	NonCPULens20FocalLength?	int16s~		
1612	NonCPULens1MaxAperture?	int16s~		
1616	NonCPULens2MaxAperture?	int16s~		
1620	NonCPULens3MaxAperture?	int16s~		
1624	NonCPULens4MaxAperture?	int16s~		
1628	NonCPULens5MaxAperture?	int16s~		
1632	NonCPULens6MaxAperture?	int16s~		
1636	NonCPULens7MaxAperture?	int16s~		
1640	NonCPULens8MaxAperture?	int16s~		
1644	NonCPULens9MaxAperture?	int16s~		
1648	NonCPULens10MaxAperture?	int16s~		
1652	NonCPULens11MaxAperture?	int16s~		
1656	NonCPULens12MaxAperture?	int16s~		
1660	NonCPULens13MaxAperture?	int16s~		
1664	NonCPULens14MaxAperture?	int16s~		
1668	NonCPULens15MaxAperture?	int16s~		
1672	NonCPULens16MaxAperture?	int16s~		
1676	NonCPULens17MaxAperture?	int16s~		
1680	NonCPULens18MaxAperture?	int16s~		
1684	NonCPULens19MaxAperture?	int16s~		
1688	NonCPULens20MaxAperture?	int16s~		

1704	HDMIOutputResolution	int8u	0 = Auto 1 = 4320p 2 = 2160p	3 = 1080p 4 = 1080i 5 = 720p
1717	SetClockFromLocationData?	int8u	0 = Off 1 = On	
1724	AirplaneMode?	int8u	0 = Off 1 = On	
1725	EmptySlotRelease?	int8u	0 = Disable Release 1 = Enable Release	
1760	EnergySavingMode?	int8u	0 = Off 1 = On	
1784	RecordLocationData?	int8u	0 = Off 1 = On	
1788	USBPowerDelivery?	int8u	0 = Off 1 = On	
1797	SensorShield?	int8u	0 = Stays Open 1 = Closes	
1862	AutoCapturePreset	int8u	0 = 1 1 = 2 2 = 3 3 = 4 4 = 5	
1864	FocusShiftAutoReset?	int8u	0 = Off 1 = On	
1922	PreReleaseBurstLength	int8u	0 = None 1 = 0.3 Sec 2 = 0.5 Sec 3 = 1 Sec	
1924	PostReleaseBurstLength	int8u	0 = 1 Sec 1 = 2 Sec 2 = 3 Sec 3 = Max	
1938	VerticalISOButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
1940	ExposureCompensationButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
1942	ISOButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2002	ViewModeShowEffectsOfSettings?	int8u	0 = Always 1 = Only When Flash Not Used	
2004	DispButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2048	ExposureDelay	fixed32u~		
2052	CommandDialFrameAdvanceZoom?	int8u	0 = Hold 1 = Focus Point 2 = Face Priority	
2054	SubCommandDialFrameAdvanceZoom?	int8u	0 = Hold 1 = Focus Point 2 = Face Priority	
2056	PlaybackButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2058	WBButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2060	BracketButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2062	FlashModeButton	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2064	LensFunc1ButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2066	LensFunc2ButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2068	PlaybackButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2070	BracketButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	
2072	FlashModeButtonPlaybackMode	int8u	--> <a href="#">Nikon ButtonsZ9 Values</a>	

## Nikon ButtonsZ9 Values

Value	ButtonsZ9	Value	ButtonsZ9
0 = None		71 = ISO	
1 = Preview		72 = Shooting Mode	
3 = FV Lock		73 = Exposure Compensation	
4 = AE/AF Lock		76 = Silent Mode	
5 = AE Lock Only		78 = LiveView Information	
6 = AE Lock (reset on release)		79 = AWB Lock (hold)	
7 = AE Lock (hold)		80 = Grid Display	

8 = AF Lock Only	81 = Starlight View
9 = AF-On	82 = Select To Send (PC)
10 = Flash Disable/Enable	83 = Select To Send (FTP)
11 = Bracketing Burst	84 = Pattern Tone Range
12 = +NEF(RAW)	85 = Control Lock
18 = Virtual Horizon	86 = Save Focus Position
19 = Synchronized Release	87 = Recall Focus Position
20 = My Menu	88 = Recall Shooting Functions (Hold)
21 = My Menu Top Item	89 = Set Picture Control (HLG)
22 = Playback	90 = Skin Softening
23 = Rating	91 = Portrait Impression Balance
24 = Protect	92 = Fast AF-On
25 = Zoom	97 = High Frequency Flicker Reduction
26 = Focus Peaking	98 = Switch FX/DX
27 = Flash Mode/Compensation	99 = View Mode (Photo LV)
28 = Image Area	100 = Photo Flicker Reduction
30 = Non-CPU Lens	101 = Filtered Playback (Select Criteria)
31 = Active-D Lighting	103 = Start Series Playback
32 = Exposure Delay Mode	104 = View Assist
33 = 1 Stop Speed/Aperture	105 = Hi-Res Zoom+
34 = White Balance	106 = Hi-Res Zoom-
35 = Metering	108 = Override Other Cameras
36 = Auto Bracketing	109 = DISP - Cycle Information Display (shooting)
37 = Multiple Exposure	110 = DISP - Cycle Information Display (playback)
38 = HDR Overlay	111 = Resume Shooting
39 = Picture Control	112 = Switch Eyes
40 = Quality	113 = Power Zoom +
41 = Focus Mode/AF AreaMode	114 = Power Zoom -
42 = Select Center Focus Point	115 = Delete
44 = Record Movie	116 = Save and Load Power Zoom Position
45 = Thumbnail On/Off	117 = Cycle AF-area Mode
46 = View Histograms	118 = Raw Processing (Current)
47 = Choose Folder	119 = Raw Processing (Multiple)
48 = Power Aperture (Open)	120 = Trim
49 = Power Aperture (Close)	121 = Resize (Current)
52 = Microphone Sensitivity	122 = Resize (Multiple)
53 = Release Mode	123 = D-Lighting
57 = Preset Focus Point	124 = Straighten
58 = AE/AWB Lock (hold)	125 = Distortion Control
59 = AF-AreaMode	126 = Perspective Control
60 = AF-AreaMode + AF-On	127 = Monochrome
61 = Recall Shooting Functions	128 = Overlay (Add)
64 = Filtered Playback	129 = Lighten
65 = Same as AF-On	130 = Darken
66 = Voice Memo	131 = Motion Blend
70 = Photo Shooting Bank	

## Nikon ShotInfo Tags

This information is encrypted for ShotInfoVersion 02xx, and some tags are only valid for specific models.

Index1	Tag Name	Writable	Values / Notes
0	ShotInfoVersion	no	
4	FirmwareVersion	no	
16	DistortionControl	int8u	(P6000) 0 = Off 1 = On
102	VR_0x66?	int8u	(D2X, D2Xs (unverified)) 0 = Off 1 = On (normal) 2 = On (active)
106	ShutterCount	int32u	(D2X, D2Xs)
110	DeletedImageCount	int32u	(D2X, D2Xs)
117	VibrationReduction	int8u	(D200) 0 = Off 1 = On (1) 2 = On (2) 3 = On (3)
130	VibrationReduction	int8u	(D2X, D2Xs) 0 = Off 1 = On

343	ShutterCount	int32u	Values / Notes D50
430	VibrationReduction	int8u	(D50) 0x0 = n/a 0xc = Off 0xf = On
589	ShutterCount	int32u	(D60)

## Nikon ColorBalance1 Tags

Index2	Tag Name	Writable	Values / Notes
0	WB_RBGGLevels	int16u[4]!	

## Nikon ColorBalance2 Tags

This information is encrypted for most camera models.

Index2	Tag Name	Writable	Values / Notes
0	WB_RGGBLevels	int16u[4]!	

## Nikon ColorBalance3 Tags

Index2	Tag Name	Writable	Values / Notes
0	WB_RGBGLevels	int16u[4]!	

## Nikon ColorBalance4 Tags

Index2	Tag Name	Writable	Values / Notes
0	WB_GRBGLevels	int16u[4]!	

## Nikon ColorBalanceUnknown Tags

Index1	Tag Name	Writable	Values / Notes
0	ColorBalanceVersion	undef[4]	

## Nikon ColorBalanceUnknown2 Tags

Index2	Tag Name	Writable	Values / Notes
0	ColorBalanceVersion	undef[4]	

## Nikon LensData00 Tags

This structure is used by the D100, and D1X with firmware version 1.1.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
6	LensIDNumber	int8u	(see LensID values below)
7	LensFStops	int8u	
8	MinFocalLength	int8u	
9	MaxFocalLength	int8u	
10	MaxApertureAtMinFocal	int8u	
11	MaxApertureAtMaxFocal	int8u	
12	MCUVersion	int8u	

## Nikon LensData01 Tags

Nikon encrypts the LensData information below if LensDataVersion is 0201 or higher, but the decryption algorithm is known so the information can be extracted.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
4	ExitPupilPosition	int8u	
5	AFAperture	int8u	
8	FocusPosition	int8u	
9	FocusDistance	int8u	(this focus distance is approximate, and not very accurate for some lenses)
10	FocalLength	int8u	
11	LensIDNumber	int8u	(see LensID values below)
12	LensFStops	int8u	
13	MinFocalLength	int8u	
14	MaxFocalLength	int8u	
15	MaxApertureAtMinFocal	int8u	
16	MaxApertureAtMaxFocal	int8u	
17	MCUVersion	int8u	
18	EffectiveMaxAperture	int8u	

## Nikon LensData0204 Tags

Nikon encrypts the LensData information below if LensDataVersion is 0201 or higher, but the decryption algorithm is known so the information can be extracted.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
4	ExitPupilPosition	int8u	
5	AFAperture	int8u	
8	FocusPosition	int8u	
10	FocusDistance	int8u	(this focus distance is approximate, and not very accurate for some lenses)
11	FocalLength	int8u	
12	LensIDNumber	int8u	(see LensID values below)
13	LensFStops	int8u	
14	MinFocalLength	int8u	
15	MaxFocalLength	int8u	
16	MaxApertureAtMinFocal	int8u	
17	MaxApertureAtMaxFocal	int8u	
18	MCUVersion	int8u	
19	EffectiveMaxAperture	int8u	

## Nikon LensData0400 Tags

Tags extracted from the encrypted lens data of the Nikon 1J1/1V1/1J2.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
394	LensModel	string[64]	

## Nikon LensData0402 Tags

Tags extracted from the encrypted lens data of the Nikon 1J3/1S1/1V2.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
395	LensModel	string[64]	

## Nikon LensData0403 Tags

Tags extracted from the encrypted lens data of the Nikon 1J4/1J5.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
684	LensModel	string[64]	

## Nikon LensData0800 Tags

Tags found in the encrypted LensData from cameras such as the Z6 and Z7.

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	
4	ExitPupilPosition	int8u	
5	AFAperture	int8u	
11	FocusDistance	int8u	(this focus distance is approximate, and not very accurate for some lenses)
12	FocalLength	int8u	
13	LensIDNumber	int8u	(see LensID values below)
14	LensFStops	int8u	
15	MinFocalLength	int8u	
16	MaxFocalLength	int8u	
17	MaxApertureAtMinFocal	int8u	
18	MaxApertureAtMaxFocal	int8u	
19	MCUVersion	int8u	
20	EffectiveMaxAperture	int8u	
47	NewLensData	undef[17]	
48	LensID	int16u	(tags from here onward used for Nikkor Z lenses only) 1 = Nikkor Z 24-70mm f/4 S 2 = Nikkor Z 14-30mm f/4 S 4 = Nikkor Z 35mm f/1.8 S 8 = Nikkor Z 58mm f/0.95 S Noct 9 = Nikkor Z 50mm f/1.8 S 11 = Nikkor Z DX 16-50mm f/3.5-6.3 VR 12 = Nikkor Z DX 50-250mm f/4.5-6.3 VR 13 = Nikkor Z 24-70mm f/2.8 S 14 = Nikkor Z 85mm f/1.8 S 15 = Nikkor Z 24mm f/1.8 S 16 = Nikkor Z 70-200mm f/2.8 VR S 17 = Nikkor Z 20mm f/1.8 S 18 = Nikkor Z 24-200mm f/4-6.3 VR 21 = Nikkor Z 50mm f/1.2 S 22 = Nikkor Z 24-50mm f/4-6.3 23 = Nikkor Z 14-24mm f/2.8 S 24 = Nikkor Z MC 105mm f/2.8 VR S 25 = Nikkor Z 40mm f/2 26 = Nikkor Z DX 18-140mm f/3.5-6.3 VR 27 = Nikkor Z MC 50mm f/2.8 28 = Nikkor Z 100-400mm f/4.5-5.6 VR S 29 = Nikkor Z 28mm f/2.8 30 = Nikkor Z 400mm f/2.8 TC VR S 31 = Nikkor Z 24-120mm f/4 S 32 = Nikkor Z 800mm f/6.3 VR S 35 = Nikkor Z 28-75mm f/2.8 36 = Nikkor Z 400mm f/4.5 VR S 37 = Nikkor Z 600mm f/4 TC VR S 38 = Nikkor Z 85mm f/1.2 S 39 = Nikkor Z 17-28mm f/2.8 40 = Nikkor Z 26mm f/2.8 41 = Nikkor Z DX 12-28mm f/3.5-5.6 PZ VR 42 = Nikkor Z 180-600mm f/5.6-6.3 VR 43 = Nikkor Z DX 24mm f/1.7 44 = Nikkor Z 70-180mm f/2.8 45 = Nikkor Z 600mm f/6.3 VR S 46 = Nikkor Z 135mm f/1.8 S Plena 47 = Nikkor Z 35mm f/1.2 S 48 = Nikkor Z 28-400mm f/4-8 VR 49 = Nikkor Z 28-135mm f/4 PZ 51 = Nikkor Z 35mm f/1.4 52 = Nikkor Z 50mm f/1.4 2305 = Laowa FFII 10mm F2.8 C&D Dreamer

52	LensFirmwareVersion	int16u~	
54	MaxAperture	int16u	
56	FNumber	int16u	
60	FocalLength	int16u	
76	FocusDistanceRangeWidth?	int8u	
78	FocusDistance	int16u~	
86	LensDriveEnd?	int8u	
88	FocusStepsFromInfinity?	int8u	
90	LensPositionAbsolute	int32s	
95	LensMountType	int8u	[val & 0x1] 0 = Z-mount 1 = F-mount

## Nikon LensDataUnknown Tags

Index1	Tag Name	Writable	Values / Notes
0	LensDataVersion	no	

## Nikon FlashInfo0100 Tags

These tags are used by the D2H, D2Hs, D2X, D2Xs, D50, D70, D70s, D80 and D200.

Index1	Tag Name	Writable	Values / Notes
0	FlashInfoVersion	no	
4	FlashSource	int8u	0 = None 1 = External 2 = Internal
6	ExternalFlashFirmware	int8u[2]	--> <a href="#">Nikon FlashFirmware Values</a>
8	ExternalFlashFlags	int8u	0x0 = (none) Bit 0 = Fired Bit 2 = Bounce Flash Bit 4 = Wide Flash Adapter Bit 5 = Dome Diffuser
9.1	FlashCommanderMode	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
9.2	FlashControlMode	int8u	[val & 0x7f] --> <a href="#">Nikon FlashControlMode Values</a>
10	FlashOutput FlashCompensation	int8u int8s	
11	FlashFocalLength	int8u	
12	RepeatingFlashRate	int8u	
13	RepeatingFlashCount	int8u	
14	FlashGNDistance	int8u	--> <a href="#">Nikon FlashGNDistance Values</a>
15	FlashGroupAControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a>
16	FlashGroupBControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a>
17	FlashGroupAOutput FlashGroupACompensation	int8u int8s	
18	FlashGroupBOutput FlashGroupBCompensation	int8u int8s	

## Nikon FlashFirmware Values

Value	FlashFirmware	Value	FlashFirmware
'0 0'	= n/a	'4 2'	= 4.02 (SB-400)
'1 1'	= 1.01 (SB-800 or Metz 58 AF-1)	'4 4'	= 4.04 (SB-400)
'1 3'	= 1.03 (SB-800)	'5 1'	= 5.01 (SB-900)

'2 1'	= 2.01 (SB-800)	'5 2'	= 5.02 (SB-900)
'2 4'	= 2.04 (SB-600)	'6 1'	= 6.01 (SB-700)
'2 5'	= 2.05 (SB-600)	'7 1'	= 7.01 (SB-910)
'3 1'	= 3.01 (SU-800 Remote Commander)	'14 3'	= 14.03 (SB-5000)
'4 1'	= 4.01 (SB-400)		

## Nikon FlashControlMode Values

Value	FlashControlMode	Value	FlashControlMode	Value	FlashControlMode
0	= Off	3	= Auto Aperture	6	= Manual
1	= iTTL-BL	4	= Automatic	7	= Repeating Flash
2	= iTTL	5	= GN (distance priority)		

## Nikon FlashGNDistance Values

Value	FlashGNDistance	Value	FlashGNDistance	Value	FlashGNDistance
0	= 0	13	= 1.4 m	26	= 6.3 m
1	= 0.1 m	14	= 1.6 m	27	= 7.1 m
2	= 0.2 m	15	= 1.8 m	28	= 8.0 m
3	= 0.3 m	16	= 2.0 m	29	= 9.0 m
4	= 0.4 m	17	= 2.2 m	30	= 10.0 m
5	= 0.5 m	18	= 2.5 m	31	= 11.0 m
6	= 0.6 m	19	= 2.8 m	32	= 13.0 m
7	= 0.7 m	20	= 3.2 m	33	= 14.0 m
8	= 0.8 m	21	= 3.6 m	34	= 16.0 m
9	= 0.9 m	22	= 4.0 m	35	= 18.0 m
10	= 1.0 m	23	= 4.5 m	36	= 20.0 m
11	= 1.1 m	24	= 5.0 m	255	= n/a
12	= 1.3 m	25	= 5.6 m		

## Nikon FlashInfo0102 Tags

These tags are used by the D3 (firmware 1.x), D40, D40X, D60 and D300 (firmware 1.00).

Index1	Tag Name	Writable	Values / Notes	
0	FlashInfoVersion	no		
4	FlashSource	int8u	0 = None 1 = External 2 = Internal	
6	ExternalFlashFirmware	int8u[2]	--> <a href="#">Nikon FlashFirmware Values</a>	
8	ExternalFlashFlags	int8u	Bit 0 = Fired Bit 2 = Bounce Flash Bit 4 = Wide Flash Adapter Bit 5 = Dome Diffuser	
9.1	FlashCommanderMode	int8u	[val >> 7 & 0x1] 0 = Off 1 = On	
9.2	FlashControlMode	int8u	[val & 0x7f] --> <a href="#">Nikon FlashControlMode Values</a>	
10	FlashOutput FlashCompensation	int8u int8s		
12	FlashFocalLength	int8u		
13	RepeatingFlashRate	int8u		
14	RepeatingFlashCount	int8u		
15	FlashGNDistance	int8u	--> <a href="#">Nikon FlashGNDistance Values</a>	
16.1	FlashGroupAControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group A tags may apply to the built-in flash settings for some models)	
17.1	FlashGroupBControlMode	int8u	[val >> 4 & 0x1] --> <a href="#">Nikon FlashControlMode Values</a> (note: group B tags may apply to group A settings for some models)	
17.2	FlashGroupCControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group C tags may apply to group B settings for some models)	

18	FlashGroupAOutput FlashGroupACompensation	int8u int8s
19	FlashGroupBOutput FlashGroupBCompensation	int8u int8s
20	FlashGroupCOutput FlashGroupCCompensation	int8u int8s

## Nikon FlashInfo0103 Tags

These tags are used by the D3 (firmware 2.x), D3X, D3S, D4, D90, D300 (firmware 1.10), D300S, D600, D700, D800, D3000, D3100, D3200, D5000, D5100, D5200, D7000.

Index	Tag Name	Writable	Values / Notes
0	FlashInfoVersion	no	
4	FlashSource	int8u	0 = None 1 = External 2 = Internal
6	ExternalFlashFirmware	int8u[2]	--> <a href="#">Nikon FlashFirmware Values</a>
8	ExternalFlashFlags	int8u	Bit 0 = Fired Bit 2 = Bounce Flash Bit 4 = Wide Flash Adapter Bit 5 = Dome Diffuser
9.1	FlashCommanderMode	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
9.2	FlashControlMode	int8u	[val & 0x7f] --> <a href="#">Nikon FlashControlMode Values</a>
10	FlashOutput FlashCompensation	int8u int8s	
12	FlashFocalLength	int8u	
13	RepeatingFlashRate	int8u	
14	RepeatingFlashCount	int8u	
15	FlashGNDistance	int8u	--> <a href="#">Nikon FlashGNDistance Values</a>
16	FlashColorFilter	int8u	--> <a href="#">Nikon FlashColorFilter Values</a>
17.1	FlashGroupAControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group A tags may apply to the built-in flash settings for some models)
18.1	FlashGroupBControlMode	int8u	[val >> 4 & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group B tags may apply to group A settings for some models)
18.2	FlashGroupCControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group C tags may apply to group B settings for some models)
19	FlashGroupAOutput FlashGroupACompensation	int8u int8s	
20	FlashGroupBOutput FlashGroupBCompensation	int8u int8s	
21	FlashGroupCOutput FlashGroupCCompensation	int8u int8s	
27	ExternalFlashCompensation	int8s	
29	FlashExposureComp3	int8s	(does not include the effect of flash bracketing)
39	FlashExposureComp4	int8s	(includes the effect of flash bracketing. Valid for repeating flash)

## Nikon FlashColorFilter Values

Value	FlashColorFilter	Value	FlashColorFilter	Value	FlashColorFilter
0 = None		10 = TN-A2		68 = Amber	
1 = FL-GL1 or SZ-2FL Fluorescent		65 = Red		128 = Incandescent	
2 = FL-GL2		66 = Blue			
9 = TN-A1 or SZ-2TN Incandescent		67 = Yellow			

## Nikon FlashInfo0106 Tags

These tags are used by the Df, D610, D3300, D5300, D7100 and Coolpix A.

Index1	Tag Name	Writable	Values / Notes
0	FlashInfoVersion	no	
4	FlashSource	int8u	0 = None 1 = External 2 = Internal
6	ExternalFlashFirmware	int8u[2]	--> <a href="#">Nikon FlashFirmware Values</a>
8	ExternalFlashFlags	int8u	Bit 0 = Fired Bit 2 = Bounce Flash Bit 4 = Wide Flash Adapter Bit 5 = Dome Diffuser
9.1	FlashCommanderMode	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
9.2	FlashControlMode	int8u	[val & 0x7f] --> <a href="#">Nikon FlashControlMode Values</a>
12	FlashFocalLength	int8u	(only valid if flash pattern is "Standard Illumination")
13	RepeatingFlashRate	int8u	
14	RepeatingFlashCount	int8u	
15	FlashGNDistance	int8u	--> <a href="#">Nikon FlashGNDistance Values</a>
16	FlashColorFilter	int8u	--> <a href="#">Nikon FlashColorFilter Values</a>
17.1	FlashGroupAControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a>
18.1	FlashGroupBControlMode	int8u	[val >> 4 & 0xf] --> <a href="#">Nikon FlashControlMode Values</a>
18.2	FlashGroupCControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a>
39	FlashOutput FlashCompensation	int8u int8s	
40	FlashGroupAOutput FlashGroupACompensation	int8u int8s	
41	FlashGroupBOutput FlashGroupBCompensation	int8u int8s	
42	FlashGroupCOutput FlashGroupCCCompensation	int8u int8s	

## Nikon FlashInfo0107 Tags

These tags are used by the D4S, D750, D810, D5500, D7200 (FlashInfoVersion 0107) and the D5, D500, D850 and D3400 (FlashInfoVersion 0108).

Index1	Tag Name	Writable	Values / Notes
0	FlashInfoVersion	no	
4	FlashSource	int8u	0 = None 1 = External 2 = Internal
6	ExternalFlashFirmware	int8u[2]	--> <a href="#">Nikon FlashFirmware Values</a>
8.1	ExternalFlashZoomOverride	int8u	(indicates that the user has overridden the flash zoom distance) [val >> 7 & 0x1] 0 = No 1 = Yes
8.2	ExternalFlashStatus	int8u	[val & 0x1] 0 = Flash Not Attached 1 = Flash Attached
9.1	ExternalFlashReadyState	int8u	[val & 0x7] 0 = n/a 1 = Ready 6 = Not Ready
10	FlashCompensation	int8s	
12	FlashFocalLength	int8u	(only valid if flash pattern is "Standard Illumination")

13	RepeatingFlashRate	int8u	
14	RepeatingFlashCount	int8u	
15	FlashGNDistance	int8u	--> <a href="#">Nikon FlashGNDistance Values</a>
17.1	FlashGroupAControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group A tags may apply to the built-in flash settings for some models)
18.1	FlashGroupBControlMode	int8u	[val >> 4 & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group B tags may apply to group A settings for some models)
18.2	FlashGroupCControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group C tags may apply to group B settings for some models)
40	FlashGroupAOutput FlashGroupACCompensation	int8u int8s	
41	FlashGroupBOutput FlashGroupBCompensation	int8u int8s	
42	FlashGroupCOutput FlashGroupCCompensation	int8u int8s	

## Nikon FlashInfo0300 Tags

Index1	Tag Name	Writable	Values / Notes
0	FlashInfoVersion	no	
4	FlashSource	int8u	0 = None 1 = External 2 = Internal
6	ExternalFlashFirmware	int8u[2]	--> <a href="#">Nikon FlashFirmware Values</a>
8	ExternalFlashFlags	int8u	Bit 0 = Flash Ready Bit 2 = Bounce Flash Bit 4 = Wide Flash Adapter Bit 7 = Zoom Override
9.1	FlashCommanderMode	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
9.2	FlashControlMode	int8u	[val & 0x7f] --> <a href="#">Nikon FlashControlMode Values</a>
10	FlashCompensation	int8s	
13	RepeatingFlashRate	int8u	
14	RepeatingFlashCount	int8u	
15	FlashGNDistance	int8u	--> <a href="#">Nikon FlashGNDistance Values</a>
16	FlashColorFilter	int8u	--> <a href="#">Nikon FlashColorFilter Values</a>
17.1	FlashGroupAControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group A tags may apply to the built-in flash settings for some models)
18.1	FlashGroupBControlMode	int8u	[val >> 4 & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group B tags may apply to group A settings for some models)
18.2	FlashGroupCControlMode	int8u	[val & 0xf] --> <a href="#">Nikon FlashControlMode Values</a> (note: group C tags may apply to group B settings for some models)
33	FlashOutput	int8u	
37	FlashIlluminationPattern	int8u	0 = Standard 1 = Center-weighted 2 = Even
38	FlashFocalLength	int8u	(only valid if flash pattern is "Standard Illumination")
40	FlashGroupAOutput FlashGroupACCompensation	int8u int8s	
41	FlashGroupBOutput FlashGroupBCompensation	int8u int8s	
42	FlashGroupCOutput FlashGroupCCompensation	int8u int8s	

# Nikon FlashInfoUnknown Tags

Index1	Tag Name	Writable	Values / Notes
0	FlashInfoVersion	no	

# Nikon MultiExposure Tags

Index4	Tag Name	Writable	Values / Notes
0	MultiExposureVersion	no	
1	MultiExposureMode	int32u	0 = Off 1 = Multiple Exposure 2 = Image Overlay 3 = HDR
2	MultiExposureShots	int32u	
3	MultiExposureAutoGain	int32u	0 = Off 1 = On

# Nikon MultiExposure2 Tags

Index4	Tag Name	Writable	Values / Notes
0	MultiExposureVersion	no	
1	MultiExposureMode	int32u	0 = Off 1 = Multiple Exposure 3 = HDR
2	MultiExposureShots	int32u	
3	MultiExposureOverlayMode	int32u	0 = Add 1 = Average 2 = Light 3 = Dark

# Nikon AFInfo2V0100 Tags

AF information for Nikon cameras with LiveView that were introduced 2007 thru 2015 (and the D5600 in 2016), including D3, D4, D3000, D3100-D3300, D5000-D5600, D6x0, D700, D7000, D7100, D810

Index1	Tag Name	Writable	Values / Notes
0	AFInfo2Version	no	
4	AFDetectionMethod	int8u	0 = Phase Detect 1 = Contrast Detect 2 = Hybrid
5	AFAreaMode	int8u	0 = Single Area 1 = Dynamic Area 2 = Dynamic Area (closest subject) 3 = Group Dynamic 4 = Dynamic Area (9 points) 5 = Dynamic Area (21 points) 6 = Dynamic Area (51 points) 7 = Dynamic Area (51 points, 3D-tracking) 8 = Auto-area 9 = Dynamic Area (3D-tracking) 10 = Single Area (wide) 11 = Dynamic Area (wide) 12 = Dynamic Area (wide, 3D-tracking) 13 = Group Area 14 = Dynamic Area (25 points) 15 = Dynamic Area (72 points) 16 = Group Area (HL) 17 = Group Area (VL) 18 = Dynamic Area (49 points) 128 = Single 129 = Auto (41 points) 130 = Subject Tracking (41 points) 131 = Face Priority (41 points) 192 = Pinpoint 193 = Single 194 = Dynamic 195 = Wide (S)

196 = Wide (L)  
 197 = Auto  
 199 = Auto  
 0 = Contrast-detect  
 1 = Contrast-detect (normal area)  
 2 = Contrast-detect (wide area)  
 3 = Contrast-detect (face priority)  
 4 = Contrast-detect (subject tracking)  
 128 = Single  
 129 = Auto (41 points)  
 130 = Subject Tracking (41 points)  
 131 = Face Priority (41 points)  
 192 = Pinpoint  
 193 = Single  
 194 = Dynamic  
 195 = Wide (S)  
 196 = Wide (L)  
 197 = Auto  
 198 = Auto (People)  
 199 = Auto (Animal)  
 200 = Normal-area AF  
 201 = Wide-area AF  
 202 = Face-priority AF  
 203 = Subject-tracking AF  
 204 = Dynamic Area (S)  
 205 = Dynamic Area (M)  
 206 = Dynamic Area (L)  
 207 = 3D-tracking  
 208 = Wide-Area (C1/C2)

7	PrimaryAFPoint	int8u	<p>(models with 51-point AF -- 5 rows (A-E) and 11 columns (1-11): D3, D3S, D3X, D4, D4S, D300, D300S, D700, D750, D800, D800E, D810, D7100 and D7200)</p> <table> <tbody> <tr><td>0 = (none)</td><td>11 = C5</td><td>22 = B9</td><td>33 = D11</td><td>44 = C2</td></tr> <tr><td>1 = C6 (Center)</td><td>12 = B5</td><td>23 = A8</td><td>34 = C4</td><td>45 = B2</td></tr> <tr><td>2 = B6</td><td>13 = A4</td><td>24 = D9</td><td>35 = B4</td><td>46 = A1</td></tr> <tr><td>3 = A5</td><td>14 = D5</td><td>25 = E8</td><td>36 = A3</td><td>47 = D2</td></tr> <tr><td>4 = D6</td><td>15 = E4</td><td>26 = C10</td><td>37 = D4</td><td>48 = E1</td></tr> <tr><td>5 = E5</td><td>16 = C8</td><td>27 = B10</td><td>38 = E3</td><td>49 = C1</td></tr> <tr><td>6 = C7</td><td>17 = B8</td><td>28 = A9</td><td>39 = C3</td><td>50 = B1</td></tr> <tr><td>7 = B7</td><td>18 = A7</td><td>29 = D10</td><td>40 = B3</td><td>51 = D1</td></tr> <tr><td>8 = A6</td><td>19 = D8</td><td>30 = E9</td><td>41 = A2</td><td></td></tr> <tr><td>9 = D7</td><td>20 = E7</td><td>31 = C11</td><td>42 = D3</td><td></td></tr> <tr><td>10 = E6</td><td>21 = C9</td><td>32 = B11</td><td>43 = E2</td><td></td></tr> </tbody> </table> <p>(models with 11-point AF: D90, D3000-D3300, D5000 and D5100)</p> <table> <tbody> <tr><td>0 = (none)</td><td>6 = Lower-left</td></tr> <tr><td>1 = Center</td><td>7 = Far Left</td></tr> <tr><td>2 = Top</td><td>8 = Mid-right</td></tr> <tr><td>3 = Bottom</td><td>9 = Upper-right</td></tr> <tr><td>4 = Mid-left</td><td>10 = Lower-right</td></tr> <tr><td>5 = Upper-left</td><td>11 = Far Right</td></tr> </tbody> </table> <p>(models with 39-point AF: D600, D610, D5200-D5600, D7000 and Df)</p> <table> <tbody> <tr><td>0 = (none)</td><td>8 = A3</td><td>16 = C8</td><td>24 = D10</td><td>32 = B3</td></tr> <tr><td>1 = C6 (Center)</td><td>9 = D7</td><td>17 = B8</td><td>25 = C11</td><td>33 = D3</td></tr> <tr><td>2 = B6</td><td>10 = E3</td><td>18 = D8</td><td>26 = B11</td><td>34 = C2</td></tr> <tr><td>3 = A2</td><td>11 = C5</td><td>19 = C9</td><td>27 = D11</td><td>35 = B2</td></tr> <tr><td>4 = D6</td><td>12 = B5</td><td>20 = B9</td><td>28 = C4</td><td>36 = D2</td></tr> <tr><td>5 = E2</td><td>13 = A1</td><td>21 = D9</td><td>29 = B4</td><td>37 = C1</td></tr> <tr><td>6 = C7</td><td>14 = D5</td><td>22 = C10</td><td>30 = D4</td><td>38 = B1</td></tr> <tr><td>7 = B7</td><td>15 = E1</td><td>23 = B10</td><td>31 = C3</td><td>39 = D1</td></tr> <tr><td>0 = (none)</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	0 = (none)	11 = C5	22 = B9	33 = D11	44 = C2	1 = C6 (Center)	12 = B5	23 = A8	34 = C4	45 = B2	2 = B6	13 = A4	24 = D9	35 = B4	46 = A1	3 = A5	14 = D5	25 = E8	36 = A3	47 = D2	4 = D6	15 = E4	26 = C10	37 = D4	48 = E1	5 = E5	16 = C8	27 = B10	38 = E3	49 = C1	6 = C7	17 = B8	28 = A9	39 = C3	50 = B1	7 = B7	18 = A7	29 = D10	40 = B3	51 = D1	8 = A6	19 = D8	30 = E9	41 = A2		9 = D7	20 = E7	31 = C11	42 = D3		10 = E6	21 = C9	32 = B11	43 = E2		0 = (none)	6 = Lower-left	1 = Center	7 = Far Left	2 = Top	8 = Mid-right	3 = Bottom	9 = Upper-right	4 = Mid-left	10 = Lower-right	5 = Upper-left	11 = Far Right	0 = (none)	8 = A3	16 = C8	24 = D10	32 = B3	1 = C6 (Center)	9 = D7	17 = B8	25 = C11	33 = D3	2 = B6	10 = E3	18 = D8	26 = B11	34 = C2	3 = A2	11 = C5	19 = C9	27 = D11	35 = B2	4 = D6	12 = B5	20 = B9	28 = C4	36 = D2	5 = E2	13 = A1	21 = D9	29 = B4	37 = C1	6 = C7	14 = D5	22 = C10	30 = D4	38 = B1	7 = B7	15 = E1	23 = B10	31 = C3	39 = D1	0 = (none)				
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	AFPointsUsed	int8u	0 = (none)																																																																																																																
16	AFImageWidth	int16u	(this and the following tags are valid only for contrast-detect AF)																																																																																																																
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20	AFAreaXPosition	int16u	(center of AF area in AFImage coordinates)																																																																																																																

22	AFAreaYPosition	int16u	
24	AFAreaWidth	int16u	(size of AF area in AFImage coordinates)
26	AFAreaHeight	int16u	
28	ContrastDetectAFInFocus AFPointsSelected	int8u undef[20]	0 = No 1 = Yes

## Nikon AFInfo2V0101 Tags

AF information for Nikon cameras D5, D500, D850, D3400, D3500 and D7500

Index1	Tag Name	Writable	Values / Notes
0	AFInfo2Version	no	
4	AFDetectionMethod	int8u	0 = Phase Detect 1 = Contrast Detect 2 = Hybrid
5	AFAreaMode	int8u	0 = Single Area 1 = Dynamic Area 2 = Dynamic Area (closest subject) 3 = Group Dynamic 4 = Dynamic Area (9 points) 5 = Dynamic Area (21 points) 6 = Dynamic Area (51 points) 7 = Dynamic Area (51 points, 3D-tracking) 8 = Auto-area 9 = Dynamic Area (3D-tracking) 10 = Single Area (wide) 11 = Dynamic Area (wide) 12 = Dynamic Area (wide, 3D-tracking) 13 = Group Area 14 = Dynamic Area (25 points) 15 = Dynamic Area (72 points) 16 = Group Area (HL) 17 = Group Area (VL) 18 = Dynamic Area (49 points) 128 = Single 129 = Auto (41 points) 130 = Subject Tracking (41 points) 131 = Face Priority (41 points) 192 = Pinpoint 193 = Single 194 = Dynamic 195 = Wide (S) 196 = Wide (L) 197 = Auto 199 = Auto  0 = Contrast-detect 1 = Contrast-detect (normal area) 2 = Contrast-detect (wide area) 3 = Contrast-detect (face priority) 4 = Contrast-detect (subject tracking) 128 = Single 129 = Auto (41 points) 130 = Subject Tracking (41 points) 131 = Face Priority (41 points) 192 = Pinpoint 193 = Single 194 = Dynamic 195 = Wide (S) 196 = Wide (L) 197 = Auto 198 = Auto (People) 199 = Auto (Animal) 200 = Normal-area AF 201 = Wide-area AF 202 = Face-priority AF 203 = Subject-tracking AF 204 = Dynamic Area (S) 205 = Dynamic Area (M) 206 = Dynamic Area (L) 207 = 3D-tracking 208 = Wide-Area (C1/C2)
8	AFPointsUsed AFPointsUsed	undef[7] undef[2]	(models with 51-point AF -- 5 rows: A1-9, B1-11, C1-11, D1-11, E1-9. Center point is C6) (models with 11-point AF)

	AFPointsUsed AFPointsUsed	int8u undef[20]	0x0 = (none) 0x7ff = All 11 Points Bit 0 = Center Bit 1 = Top Bit 2 = Bottom Bit 3 = Mid-left Bit 4 = Upper-left Bit 5 = Lower-left Bit 6 = Far Left Bit 7 = Mid-right Bit 8 = Upper-right Bit 9 = Lower-right Bit 10 = Far Right (models with 153-point AF -- 9 rows (A-I) and 17 columns (1-17). Center point is E9) 0 = (none)
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28	ContrastDetectAFInFocus AFPointsUsed AFPointsSelected	int8u undef[7] undef[20]	0 = No 1 = Yes
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48	AFPointsInFocus AFPointsInFocus	undef[7] undef[20]	(AF points in focus at the time image was captured)
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68	PrimaryAFPoint	int8u	(models with 51-point AF -- 5 rows (A-E) and 11 columns (1-11): D7500) 0 = (none) 11 = C5 22 = B9 33 = D11 44 = C2 1 = C6 (Center) 12 = B5 23 = A8 34 = C4 45 = B2 2 = B6 13 = A4 24 = D9 35 = B4 46 = A1 3 = A5 14 = D5 25 = E8 36 = A3 47 = D2 4 = D6 15 = E4 26 = C10 37 = D4 48 = E1 5 = E5 16 = C8 27 = B10 38 = E3 49 = C1 6 = C7 17 = B8 28 = A9 39 = C3 50 = B1 7 = B7 18 = A7 29 = D10 40 = B3 51 = D1 8 = A6 19 = D8 30 = E9 41 = A2 9 = D7 20 = E7 31 = C11 42 = D3 10 = E6 21 = C9 32 = B11 43 = E2 (models with 11-point AF: D3400, D3500) 0 = (none) 6 = Lower-left 1 = Center 7 = Far Left 2 = Top 8 = Mid-right 3 = Bottom 9 = Upper-right 4 = Mid-left 10 = Lower-right 5 = Upper-left 11 = Far Right (Nikon models with 153-point AF -- 9 rows (A-I) and 17 columns (1-17): D5, D500 and D850) 0 = (none) 31 = B8 62 = H13 93 = C17 124 = G4 1 = E9 (Center) 32 = A8 63 = I13 94 = B17 125 = H4 2 = D9 33 = F8 64 = E14 95 = A17 126 = I4 3 = C9 34 = G8 65 = D14 96 = F17 127 = E3 4 = B9 35 = H8 66 = C14 97 = G17 128 = D3 5 = A9 36 = I8 67 = B14 98 = H17 129 = C3 6 = F9 37 = E7 68 = A14 99 = I17 130 = B3 7 = G9 38 = D7 69 = F14 100 = E6 131 = A3 8 = H9 39 = C7 70 = G14 101 = D6 132 = F3 9 = I9 40 = B7 71 = H14 102 = C6 133 = G3 10 = E10 41 = A7 72 = I14 103 = B6 134 = H3 11 = D10 42 = F7 73 = E15 104 = A6 135 = I3 12 = C10 43 = G7 74 = D15 105 = F6 136 = E2 13 = B10 44 = H7 75 = C15 106 = G6 137 = D2 14 = A10 45 = I7 76 = B15 107 = H6 138 = C2 15 = F10 46 = E12 77 = A15 108 = I6 139 = B2 16 = G10 47 = D12 78 = F15 109 = E5 140 = A2 17 = H10 48 = C12 79 = G15 110 = D5 141 = F2 18 = I10 49 = B12 80 = H15 111 = C5 142 = G2 19 = E11 50 = A12 81 = I15 112 = B5 143 = H2 20 = D11 51 = F12 82 = E16 113 = A5 144 = I2 21 = C11 52 = G12 83 = D16 114 = F5 145 = E1 22 = B11 53 = H12 84 = C16 115 = G5 146 = D1 23 = A11 54 = I12 85 = B16 116 = H5 147 = C1 24 = F11 55 = E13 86 = A16 117 = I5 148 = B1 25 = G11 56 = D13 87 = F16 118 = E4 149 = A1 26 = H11 57 = C13 88 = G16 119 = D4 150 = F1 27 = I11 58 = B13 89 = H16 120 = C4 151 = G1 28 = E8 59 = A13 90 = I16 121 = B4 152 = H1 29 = D8 60 = F13 91 = E17 122 = A4 153 = I1 30 = C8 61 = G13 92 = D17 123 = F4 0 = (none)
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70	AFImageWidth	int16u	(this and the following tags are valid only for contrast-detect AF)
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72	AFImageHeight	int16u	
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74	AFAreaXPosition	int16u	(center of AF area in AFImage coordinates)
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76	AFAreaYPosition	int16u	
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78	AFAreaWidth	int16u	(size of AF area in AFImage coordinates)
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80	AFAreaHeight	int16u	
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## Nikon AFInfo2V0200 Tags

AF information for Nikon 1 series cameras: Nikon 1 V1, V2, V3, J1, J2, J3, S1, S2 AW1.

Index1	Tag Name	Writable	Values / Notes
0	AFInfo2Version	no	
5	AFAreaMode	int8u	128 = Single 129 = Auto (41 points) 130 = Subject Tracking (41 points) 131 = Face Priority (41 points)
6	PhaseDetectAF	int8u	(PrimaryAFPoint and AFPointsUsed below are only valid when this is On) 4 = On (73-point) 5 = On (5) 6 = On (105-point)
7	PrimaryAFPoint	int8u	(Nikon 1 models with older 135-point AF and 73-point phase-detect AF) 0 = (none) 28 = E10 56 = D13 84 = C6 112 = B3 1 = E8 (Center) 29 = D10 57 = C13 85 = B6 113 = A3 2 = D8 30 = C10 58 = B13 86 = A6 114 = F3 3 = C8 31 = B10 59 = A13 87 = F6 115 = G3 4 = B8 32 = A10 60 = F13 88 = G6 116 = H3 5 = A8 33 = F10 61 = G13 89 = H6 117 = I3 6 = F8 34 = G10 62 = H13 90 = I6 118 = E2 7 = G8 35 = H10 63 = I13 91 = E5 119 = D2 8 = H8 36 = I10 64 = E14 92 = D5 120 = C2 9 = I8 37 = E11 65 = D14 93 = C5 121 = B2 10 = E9 38 = D11 66 = C14 94 = B5 122 = A2 11 = D9 39 = C11 67 = B14 95 = A5 123 = F2 12 = C9 40 = B11 68 = A14 96 = F5 124 = G2 13 = B9 41 = A11 69 = F14 97 = G5 125 = H2 14 = A9 42 = F11 70 = G14 98 = H5 126 = I2 15 = F9 43 = G11 71 = H14 99 = I5 127 = E1 16 = G9 44 = H11 72 = I14 100 = E4 128 = D1 17 = H9 45 = I11 73 = E15 101 = D4 129 = C1 18 = I9 46 = E12 74 = D15 102 = C4 130 = B1 19 = E7 47 = D12 75 = C15 103 = B4 131 = A1 20 = D7 48 = C12 76 = B15 104 = A4 132 = F1 21 = C7 49 = B12 77 = A15 105 = F4 133 = G1 22 = B7 50 = A12 78 = F15 106 = G4 134 = H1 23 = A7 51 = F12 79 = G15 107 = H4 135 = I1 24 = F7 52 = G12 80 = H15 108 = I4 25 = G7 53 = H12 81 = I15 109 = E3 26 = H7 54 = I12 82 = E6 110 = D3 27 = I7 55 = E13 83 = D6 111 = C3  (Nikon 1 models with newer 135-point AF and 73-point phase-detect AF -- 9 rows (B-J) and 15 columns (1-15), inside a grid of 11 rows by 15 columns. The points are numbered sequentially, with F8 at the center) 0 = (none) 82 = F8 (Center) (Nikon 1 models with 171-point AF and 105-point phase-detect AF -- 9 rows (B-J) and 19 columns (2-20), inside a grid of 11 rows by 21 columns. The points are numbered sequentially, with F11 at the center) 0 = (none) 115 = F11 (Center)
8	AFPointsUsed	undef[17]	(older models with 135-point AF -- 9 rows (A-I) and 15 columns (1-15). Center point is E8. The odd-numbered columns, columns 2 and 14, and the remaining corner points are not used for 41-point AF mode)
	AFPointsUsed	undef[21]	(newer models with 135-point AF -- 9 rows (B-J) and 15 columns (1-15). Center point is F8)
	AFPointsUsed	undef[29]	(models with 171-point AF -- 9 rows (B-J) and 19 columns (2-20). Center point is F10)

## Nikon AFInfo2V0300 Tags

AF information for Nikon cameras with the Expeed 6 processor: D6, D780, Z5, Z6, Z6ii, Z7, Z7ii, Z50 and Zfc.

Index1	Tag Name	Writable	Values / Notes
0	AFInfo2Version	no	
4	AFDetectionMethod	int8u	0 = Phase Detect 1 = Contrast Detect 2 = Hybrid

5 AFAreaMode	int8u	<p>0 = Single Area      1 = Dynamic Area      2 = Dynamic Area (closest subject)      3 = Group Dynamic      4 = Dynamic Area (9 points)      5 = Dynamic Area (21 points)      6 = Dynamic Area (51 points)      7 = Dynamic Area (51 points, 3D-tracking)      8 = Auto-area      9 = Dynamic Area (3D-tracking)      10 = Single Area (wide)      11 = Dynamic Area (wide)      12 = Dynamic Area (wide, 3D-tracking)      13 = Group Area      14 = Dynamic Area (25 points)      15 = Dynamic Area (72 points)      16 = Group Area (HL)      17 = Group Area (VL)      18 = Dynamic Area (49 points)      128 = Single      129 = Auto (41 points)      130 = Subject Tracking (41 points)      131 = Face Priority (41 points)      192 = Pinpoint      193 = Single      194 = Dynamic      195 = Wide (S)      196 = Wide (L)      197 = Auto      199 = Auto        0 = Contrast-detect      1 = Contrast-detect (normal area)      2 = Contrast-detect (wide area)      3 = Contrast-detect (face priority)      4 = Contrast-detect (subject tracking)      128 = Single      129 = Auto (41 points)      130 = Subject Tracking (41 points)      131 = Face Priority (41 points)      192 = Pinpoint      193 = Single      194 = Dynamic      195 = Wide (S)      196 = Wide (L)      197 = Auto      198 = Auto (People)      199 = Auto (Animal)      200 = Normal-area AF      201 = Wide-area AF      202 = Face-priority AF      203 = Subject-tracking AF      204 = Dynamic Area (S)      205 = Dynamic Area (M)      206 = Dynamic Area (L)      207 = 3D-tracking      208 = Wide-Area (C1/C2)</p>
7 AFCoordinatesAvailable	int8u	0 = No 1 = Yes
10 AFPointsUsed	undef[7]	(models with 51-point AF -- 5 rows: A1-9, B1-11, C1-11, D1-11, E1-9. Center point is C6)
AFPointsUsed	undef[11]	(models with hybrid detect AF have 81 auto-area points -- 9 rows (A-I) and 9 columns (1-9). Center point is E5)
AFPointsUsed	undef[14]	
42 AFImageWidth	int16u	
44 AFImageHeight	int16u	
46 AFAreaXPosition	int16u	
47 FocusPositionHorizontal	no	
48 AFAreaYPosition	int16u	
49 FocusPositionVertical	no	
50 AFAreaWidth	int16u	
52 AFAreaHeight	int16u	
56 PrimaryAFPoint	int8u	(models with 51-point AF -- 5 rows (A-E) and 11 columns (1-11): D3, D3S, D3X, D4, D4S, D300, D300S, D700, D750, D800, D800E, D810, D7100 and D7200)

0 = (none)	11 = C5	22 = B9	33 = D11	44 = C2
1 = C6 (Center)	12 = B5	23 = A8	34 = C4	45 = B2
2 = B6	13 = A4	24 = D9	35 = B4	46 = A1
3 = A5	14 = D5	25 = E8	36 = A3	47 = D2
4 = D6	15 = E4	26 = C10	37 = D4	48 = E1
5 = E5	16 = C8	27 = B10	38 = E3	49 = C1
6 = C7	17 = B8	28 = A9	39 = C3	50 = B1
7 = B7	18 = A7	29 = D10	40 = B3	51 = D1
8 = A6	19 = D8	30 = E9	41 = A2	
9 = D7	20 = E7	31 = C11	42 = D3	
10 = E6	21 = C9	32 = B11	43 = E2	
(models with hybrid detect AF have 81 auto-area points -- 9 rows (A-I) and 9 columns (1-9). Center point is E5)				
0 = (none)	17 = H6	34 = G7	51 = F8	68 = A9
1 = E5 (Center)	18 = I6	35 = H7	52 = G8	69 = F9
2 = D5	19 = E4	36 = I7	53 = H8	70 = G9
3 = C5	20 = D4	37 = E3	54 = I8	71 = H9
4 = B5	21 = C4	38 = D3	55 = E2	72 = I9
5 = A5	22 = B4	39 = C3	56 = D2	73 = E1
6 = F5	23 = A4	40 = B3	57 = C2	74 = D1
7 = G5	24 = F4	41 = A3	58 = B2	75 = C1
8 = H5	25 = G4	42 = F3	59 = A2	76 = B1
9 = I5	26 = H4	43 = G3	60 = F2	77 = A1
10 = E6	27 = I4	44 = H3	61 = G2	78 = F1
11 = D6	28 = E7	45 = I3	62 = H2	79 = G1
12 = C6	29 = D7	46 = E8	63 = I2	80 = H1
13 = B6	30 = C7	47 = D8	64 = E9	81 = I1
14 = A6	31 = B7	48 = C8	65 = D9	
15 = F6	32 = A7	49 = B8	66 = C9	
16 = G6	33 = F7	50 = A8	67 = B9	
(Nikon models with 105-point AF -- 7 rows (A-G) and 15 columns (1-15): D6)				
0 = (none)	22 = D7	44 = C12	66 = B15	88 = A3
1 = D8 (Center)	23 = C7	45 = B12	67 = A15	89 = E3
2 = C8	24 = B7	46 = A12	68 = E15	90 = F3
3 = B8	25 = A7	47 = E12	69 = F15	91 = G3
4 = A8	26 = E7	48 = F12	70 = G15	92 = D2
5 = E8	27 = F7	49 = G12	71 = D5	93 = C2
6 = F8	28 = G7	50 = D13	72 = C5	94 = B2
7 = G8	29 = D6	51 = C13	73 = B5	95 = A2
8 = D9	30 = C6	52 = B13	74 = A5	96 = E2
9 = C9	31 = B6	53 = A13	75 = E5	97 = F2
10 = B9	32 = A6	54 = E13	76 = F5	98 = G2
11 = A9	33 = E6	55 = F13	77 = G5	99 = D1
12 = E9	34 = F6	56 = G13	78 = D4	100 = C1
13 = F9	35 = G6	57 = D14	79 = C4	101 = B1
14 = G9	36 = D11	58 = C14	80 = B4	102 = A1
15 = D10	37 = C11	59 = B14	81 = A4	103 = E1
16 = C10	38 = B11	60 = A14	82 = E4	104 = F1
17 = B10	39 = A11	61 = E14	83 = F4	105 = G1
18 = A10	40 = E11	62 = F14	84 = G4	
19 = E10	41 = F11	63 = G14	85 = D3	
20 = F10	42 = G11	64 = D15	86 = C3	
21 = G10	43 = D12	65 = C15	87 = B3	

## Nikon AFInfo2V0400 Tags

AF information for Nikon cameras with the Expeed 7 processor: The Zf, Z6\_3, Z8, Z9, Z50\_2 and Z5\_2.

Index1	Tag Name	Writable	Values / Notes	
0	AFInfo2Version	no		
4	AFDetectionMethod	int8u	0 = Phase Detect 1 = Contrast Detect 2 = Hybrid	
5	AFAreaMode	int8u	192 = Pinpoint 193 = Single 195 = Wide (S) 196 = Wide (L) 197 = Auto	204 = Dynamic Area (S) 205 = Dynamic Area (M) 206 = Dynamic Area (L) 207 = 3D-tracking 208 = Wide (C1/C2)
7	AFCoordinatesAvailable	int8u	0 = No 1 = Yes	
10	AFPointsUsed	undef[51]	(either AFPointsUsed or AFAreaX/YPosition will be set, but not both)	
	AFPointsUsed	undef[38]		
	AFPointsUsed	undef[29]		
62	AFImageWidth	int16u		

64	AFFImageHeight		int16u	
66	AFAreaXPosition		int16u	
67	FocusPositionHorizontal		no	
68	AFAreaYPosition		int16u	
69	FocusPositionVertical		no	
70	AFAreaWidth		int16u	(size of AF area in AFFImage pixels)
72	AFAreaHeight		int16u	
74	FocusResult		int8u	0 = Out of Focus 1 = Focus

## Nikon FileInfo Tags

Index2	Tag Name	Writable	Values / Notes
0	FileInfoVersion		no
2	MemoryCardNumber	int16u	
3	DirectoryNumber	int16u	
4	FileNumber	int16u	

## Nikon AFTune Tags

Index1	Tag Name	Writable	Values / Notes	
0	AFFineTune	int8u	0 = Off	
			1 = On (1)	
			2 = On (2)	
			3 = On (Zoom)	
1	AFFineTuneIndex	int8u	(index of saved lens)	
2	AFFineTuneAdj	int8s	(may only be valid for saved lenses)	
3	AFFineTuneAdjTele	int8s	(only valid for zoom lenses (ie, AFTune=3))	

## Nikon RetouchInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	RetouchInfoVersion		no
5	RetouchNEFProcessing	int8s	-1 = Off 1 = On

## Nikon BarometerInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	BarometerInfoVersion		no
6	Altitude	int32s	

## Nikon CaptureOffsets Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	IFD0_Offset		no
0x0002	PreviewIFD_Offset		no
0x0003	SubIFD_Offset		no

## Nikon Scan Tags

This information is written by the Nikon Scan software.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	FilmType		string
0x0040	MultiSample		string

0x0041	BitDepth	int16u
0x0050	MasterGain	rational64s
0x0051	ColorGain	rational64s[3]
0x0060	ScanImageEnhancer	int32u 0 = Off 1 = On
0x0100	DigitalICE	string
0x0110	ROCInfo	- --> <a href="#">Nikon ROC Tags</a>
0x0120	GEMInfo	- --> <a href="#">Nikon GEM Tags</a>
0x0200	DigitalDEEShadowAdj	int32u
0x0201	DigitalDEEThreshold	int32u
0x0202	DigitalDEEHighlightAdj	int32u

## Nikon ROC Tags

Index	Tag Name	Writable	Values / Notes
0	DigitalROC	int32u	

## Nikon GEM Tags

Index	Tag Name	Writable	Values / Notes
0	DigitalGEM	int32u	

## Nikon CaptureOutput Tags

Index	Tag Name	Writable	Values / Notes
2	OutputImageWidth	int32u	
3	OutputImageHeight	int32u	
4	OutputResolution	int32u	

## Nikon Type2 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0003	Quality	yes	
0x0004	ColorMode	yes	
0x0005	ImageAdjustment	yes	
0x0006	CCDSensitivity	yes	
0x0007	WhiteBalance	yes	
0x0008	Focus	yes	
0x000a	DigitalZoom	yes	
0x000b	Converter	yes	

## Nikon NEFInfo Tags

As-yet unknown information found in SubIFD1 tag 0xc7d5 of NEF images from cameras such as the Z6 and Z7, and NRW images from some Coolpix cameras.

Tag ID	Tag Name	Writable	Values / Notes
0x0005	DistortionInfo	-	--> <a href="#">Nikon DistortionInfo Tags</a>
0x0006	VignetteInfo	-	--> <a href="#">Nikon VignetteInfo Tags</a>

## Nikon DistortionInfo Tags

Index	Tag Name	Writable	Values / Notes
0	DistortionCorrectionVersion	string[4]	
4	DistortionCorrection	int8u 0 = No Lens Attached 1 = On (Optional)	

			2 = Off 3 = On (Required)
20	RadialDistortionCoefficient1	rational64s~	
28	RadialDistortionCoefficient2	rational64s~	
36	RadialDistortionCoefficient3	rational64s~	

## Nikon VignetteInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	VignetteCorrectionVersion	string[4]	
36	VignetteCoefficient1	rational64s~	
52	VignetteCoefficient2	rational64s~	
68	VignetteCoefficient3	rational64s~	

## Nikon AVI Tags

Nikon-specific RIFF tags found in AVI videos.

Tag ID	Tag Name	Writable	Values / Notes
'nctg'	NikonTags	-	--> <a href="#">Nikon AVITags Tags</a>
'ncth'	ThumbnailImage	no	
'ncvr'	NikonVers	-	--> <a href="#">Nikon AVIVers Tags</a>
'ncvw'	PreviewImage	no	

## Nikon AVITags Tags

These tags and the AVIVer tags below are found in proprietary-format records of Nikon AVI videos.

Tag ID	Tag Name	Writable	Values / Notes
0x0003	Make	no	
0x0004	Model	no	
0x0005	Software	no	
0x0006	Equipment	no	
0x0007	Orientation	no	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical 5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
0x0008	ExposureTime	no	
0x0009	FNumber	no	
0x000a	ExposureCompensation	no	
0x000b	MaxApertureValue	no	
0x000c	MeteringMode	no	0 = Unknown 1 = Average 2 = Center-weighted average 3 = Spot 4 = Multi-spot 5 = Multi-segment 6 = Partial 255 = Other
0x000f	FocalLength	no	
0x0010	XResolution	no	
0x0011	YResolution	no	
0x0012	ResolutionUnit	no	1 = None 2 = inches 3 = cm
0x0013	DateTimeOriginal	no	

0x0014	CreateDate	no	
0x0016	Duration	no	
0x0018	FocusMode	no	
0x001b	DigitalZoom	no	
0x001d	ColorMode	no	
0x001e	Sharpness	no	
0x001f	WhiteBalance	no	
0x0020	NoiseReduction	no	

## Nikon AVIVers Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	MakerNoteType	no	
0x0002	MakerNoteVersion	no	

## Nikon NCDT Tags

Nikon-specific QuickTime tags found in the NCDT atom of MOV videos from various Nikon models.

Tag ID	Tag Name	Writable	Values / Notes
'NCDB'	NikonNCDB	-	--> <a href="#">Nikon NCDB Tags</a>
'NCHD'	MakerNoteVersion	no	
'NCM1'	PreviewImage1	no	
'NCM2'	PreviewImage2	no	
'NCTG'	NikonTags	-	--> <a href="#">Nikon NCTG Tags</a>
'NCTH'	ThumbnailImage	no	
'NCVW'	PreviewImage	no	

## Nikon NCDB Tags

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## Nikon NCTG Tags

These tags are found in proprietary-format records of the NCTG atom in MOV videos from some Nikon cameras.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Make	no	
0x0002	Model	no	
0x0003	Software	no	
0x0011	CreateDate	no	
0x0012	DateTimeOriginal	no	
0x0013	FrameCount	no	
0x0016	FrameRate	no	
0x0019	TimeZone	no	
0x0022	FrameWidth	no	
0x0023	FrameHeight	no	
0x0032	AudioChannels	no	
0x0033	AudioBitsPerSample	no	
0x0034	AudioSampleRate	no	
0x1002	NikonDateTime	no	
0x1013	ElectronicVR	no	0 = Off 1 = On
0x110829a	ExposureTime	no	

0x110829d	FNumber	no	
0x110822	ExposureProgram	no	0 = Not Defined 1 = Manual 2 = Program AE 3 = Aperture-priority AE 4 = Shutter speed priority AE 5 = Creative (Slow speed) 6 = Action (High speed) 7 = Portrait 8 = Landscape
0x1109204	ExposureCompensation	no	
0x1109207	MeteringMode	no	0 = Unknown 1 = Average 2 = Center-weighted average 3 = Spot 4 = Multi-spot 5 = Multi-segment 6 = Partial 255 = Other
0x110920a	FocalLength	no	
0x110a431	SerialNumber	no	
0x110a432	LensInfo	no	
0x110a433	LensMake	no	
0x110a434	LensModel	no	
0x110a435	LensSerialNumber	no	
0x1200000	GPSVersionID	no	
0x1200001	GPSLatitudeRef	no	'N' = North 'S' = South
0x1200002	GPSLatitude	no	
0x1200003	GPSLongitudeRef	no	'E' = East 'W' = West
0x1200004	GPSLongitude	no	
0x1200005	GPSAltitudeRef	no	0 = Above Sea Level 1 = Below Sea Level
0x1200006	GPSAltitude	no	
0x1200007	GPSTimeStamp	no	
0x1200008	GPSSatellites	no	
0x1200010	GPSImgDirectionRef	no	'M' = Magnetic North 'T' = True North
0x1200011	GPSImgDirection	no	
0x1200012	GPSMapDatum	no	
0x120001d	GPSDateStamp	no	
0x2000001	MakerNoteVersion	no	
0x2000005	WhiteBalance	no	
0x2000007	FocusMode	no	
0x200000b	WhiteBalanceFineTune	no	
0x200001b	CropHiSpeed	no	0 = Off 1 = 1.3x Crop 2 = DX Crop 3 = 5:4 Crop 4 = 3:2 Crop 6 = 16:9 Crop 8 = 2.7x Crop 9 = DX Movie 16:9 Crop 10 = 1.3x Movie Crop 11 = FX Uncropped 12 = DX Uncropped 13 = 2.8x Movie Crop 14 = 1.4x Movie Crop 15 = 1.5x Movie Crop 17 = FX 1:1 Crop 18 = DX 1:1 Crop
0x200001e	ColorSpace	no	1 = sRGB 2 = Adobe RGB
0x200001f	VRInfo	-	--> <a href="#">Nikon VRInfo Tags</a>
0x2000022	ActiveD-Lighting	no	0 = Off 1 = Low 3 = Normal 5 = High 7 = Extra High 8 = Extra High 1 9 = Extra High 2 10 = Extra High 3 11 = Extra High 4 65535 = Auto
0x2000023	PictureControlData	-	--> <a href="#">Nikon PictureControl Tags</a> --> <a href="#">Nikon PictureControl2 Tags</a>

			--> <a href="#">Nikon PictureControl3 Tags</a> --> <a href="#">Nikon PictureControlUnknown Tags</a>
0x2000024	WorldTime	-	--> <a href="#">Nikon WorldTime Tags</a>
0x2000025	ISOInfo	-	--> <a href="#">Nikon ISOInfo Tags</a>
0x200002a	VignetteControl	no	0 = Off 1 = Low 3 = Normal 5 = High
0x200002c	UnknownInfo	-	--> <a href="#">Nikon UnknownInfo Tags</a>
0x2000032	UnknownInfo2	-	--> <a href="#">Nikon UnknownInfo2 Tags</a>
0x2000039	LocationInfo	-	--> <a href="#">Nikon LocationInfo Tags</a>
0x200003f	WhiteBalanceFineTune	no	
0x200004e	NikonSettings	-	--> <a href="#">NikonSettings Tags</a>
0x2000083	LensType	no	Bit 0 = MF Bit 1 = D Bit 2 = G Bit 3 = VR Bit 4 = 1 Bit 6 = E
0x2000084	Lens	no	
0x2000087	FlashMode	no	0 = Did Not Fire 1 = Fired, Manual 3 = Not Ready 7 = Fired, External 8 = Fired, Commander Mode 9 = Fired, TTL Mode 18 = LED Light
0x2000098	LensData0100	-	--> <a href="#">Nikon LensData00 Tags</a>
	LensData0101	-	--> <a href="#">Nikon LensData01 Tags</a>
	LensData0201	-	--> <a href="#">Nikon LensData01 Tags</a>
	LensData0204	-	--> <a href="#">Nikon LensData0204 Tags</a>
	LensData0400	-	--> <a href="#">Nikon LensData0400 Tags</a>
	LensData0402	-	--> <a href="#">Nikon LensData0402 Tags</a>
	LensData0403	-	--> <a href="#">Nikon LensData0403 Tags</a>
	LensData0800	-	--> <a href="#">Nikon LensData0800 Tags</a>
	LensDataUnknown	-	--> <a href="#">Nikon LensDataUnknown Tags</a>
0x20000a7	ShutterCount	no	
0x20000a8	FlashInfo0100	-	--> <a href="#">Nikon FlashInfo0100 Tags</a>
	FlashInfo0102	-	--> <a href="#">Nikon FlashInfo0102 Tags</a>
	FlashInfo0103	-	--> <a href="#">Nikon FlashInfo0103 Tags</a>
	FlashInfo0106	-	--> <a href="#">Nikon FlashInfo0106 Tags</a>
	FlashInfo0107	-	--> <a href="#">Nikon FlashInfo0107 Tags</a>
	FlashInfoUnknown	-	--> <a href="#">Nikon FlashInfoUnknown Tags</a>
0x20000ab	VariProgram	no	
0x20000b1	HighISONoiseReduction	no	0 = Off                  4 = Normal 1 = Minimal            5 = Medium High 2 = Low                 6 = High 3 = Medium Low
0x20000b7	AFInfo2	-	--> <a href="#">Nikon AFInfo2V0100 Tags</a> --> <a href="#">Nikon AFInfo2V0101 Tags</a> --> <a href="#">Nikon AFInfo2V0200 Tags</a> --> <a href="#">Nikon AFInfo2V0300 Tags</a> --> <a href="#">Nikon AFInfo2V0400 Tags</a>
0x20000c3	BarometerInfo	-	--> <a href="#">Nikon BarometerInfo Tags</a>

## Nikon MOV Tags

This information is found in MOV and QT videos from some Nikon cameras.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	
38	ExposureTime	no	
42	FNumber	no	

50	ExposureCompensation	no
68	WhiteBalance	no 0 = Auto    3 = Fluorescent 1 = Daylight    4 = Tungsten 2 = Shade    5 = Manual
72	FocalLength	no
175	Software	no
223	ISO	no

## Nikon LensID Values

The Nikon LensID is constructed as a Composite tag from the raw hex values of 8 other tags: LensIDNumber, LensFStops, MinFocalLength, MaxFocalLength, MaxApertureAtMinFocal, MaxApertureAtMaxFocal, MCUVersion and LensType, in that order. The user-defined "Lenses" list may be used to specify the lens for ExifTool to choose in these cases (see the [sample config file](#) for details).

Value	LensID
'00 00 00 00 00 00 00 01'	= Manual Lens No CPU
'00 00 00 00 00 E1 12'	= TC-17E II
'00 00 00 00 00 F1 0C'	= TC-14E [II] or Sigma APO Tele Converter 1.4x EX DG or Kenko Teleplus PRO 300 DG 1.4x
'00 00 00 00 00 F2 18'	= TC-20E [II] or Sigma APO Tele Converter 2x EX DG or Kenko Teleplus PRO 300 DG 2.0x
'00 00 48 48 53 53 00 01'	= Loreo 40mm F11-22 3D Lens in a Cap 9005
'00 36 1C 2D 34 3C 00 06'	= Tamron SP AF 11-18mm f/4.5-5.6 Di II LD Aspherical (IF) (A13)
'00 3C 1F 37 30 30 00 06'	= Tokina AT-X 124 AF PRO DX (AF 12-24mm f/4)
'00 3C 2B 44 30 30 00 06'	= Tokina AT-X 17-35 F4 PRO FX (AF 17-35mm f/4)
'00 3C 5C 80 30 30 00 0E'	= Tokina AT-X 70-200 F4 FX VCM-S (AF 70-200mm f/4)
'00 3E 80 A0 38 3F 00 02'	= Tamron SP AF 200-500mm f/5-6.3 Di LD (IF) (A08)
'00 3F 2D 80 2B 40 00 06'	= Tamron AF 18-200mm f/3.5-6.3 XR Di II LD Aspherical (IF) (A14)
'00 3F 2D 80 2C 40 00 06'	= Tamron AF 18-200mm f/3.5-6.3 XR Di II LD Aspherical (IF) Macro (A14)
'00 3F 80 A0 38 3F 00 02'	= Tamron SP AF 200-500mm f/5-6.3 Di (A08)
'00 40 11 11 2C 2C 00 00'	= Samyang 8mm f/3.5 Fish-Eye
'00 40 18 2B 2C 34 00 06'	= Tokina AT-X 107 AF DX Fisheye (AF 10-17mm f/3.5-4.5)
'00 40 2A 72 2C 3C 00 06'	= Tokina AT-X 16.5-135 DX (AF 16.5-135mm F3.5-5.6)
'00 40 2B 2B 2C 2C 00 02'	= Tokina AT-X 17 AF PRO (AF 17mm f/3.5)
'00 40 2D 2D 2C 2C 00 00'	= Carl Zeiss Distagon T* 3.5/18 ZF.2
'00 40 2D 80 2C 40 00 06'	= Tamron AF 18-200mm f/3.5-6.3 XR Di II LD Aspherical (IF) Macro (A14NII)
'00 40 2D 88 2C 40 00 06'	= Tamron AF 18-250mm f/3.5-6.3 Di II LD Aspherical (IF) Macro (A18NII)
'00 40 2D 88 2C 40 62 06'	= Tamron AF 18-250mm f/3.5-6.3 Di II LD Aspherical (IF) Macro (A18)
'00 40 31 31 2C 2C 00 00'	= Voigtlander Color Skopar 20mm F3.5 SLII Aspherical
'00 40 37 80 2C 3C 00 02'	= Tokina AT-X 242 AF (AF 24-200mm f/3.5-5.6)
'00 40 64 64 2C 2C 00 00'	= Voigtlander APO-Lanthar 90mm F3.5 SLII Close Focus
'00 44 60 98 34 3C 00 02'	= Tokina AT-X 840 D (AF 80-400mm f/4.5-5.6)
'00 47 10 10 24 24 00 00'	= Fisheye Nikkor 8mm f/2.8 AiS
'00 47 25 25 24 24 00 02'	= Tamron SP AF 14mm f/2.8 Aspherical (IF) (69E)
'00 47 3C 3C 24 24 00 00'	= Nikkor 28mm f/2.8 AiS
'00 47 44 44 24 24 00 06'	= Tokina AT-X M35 PRO DX (AF 35mm f/2.8 Macro)
'00 47 53 80 30 3C 00 06'	= Tamron AF 55-200mm f/4-5.6 Di II LD (A15)
'00 48 1C 29 24 24 00 06'	= Tokina AT-X 116 PRO DX (AF 11-16mm f/2.8)
'00 48 27 27 24 24 00 00'	= Carl Zeiss Distagon T* 2.8/15 ZF.2
'00 48 29 3C 24 24 00 06'	= Tokina AT-X 16-28 AF PRO FX (AF 16-28mm f/2.8)
'00 48 29 50 24 24 00 06'	= Tokina AT-X 165 PRO DX (AF 16-50mm f/2.8)
'00 48 32 32 24 24 00 00'	= Carl Zeiss Distagon T* 2.8/21 ZF.2
'00 48 37 5C 24 24 00 06'	= Tokina AT-X 24-70 F2.8 PRO FX (AF 24-70mm f/2.8)
'00 48 3C 3C 24 24 00 00'	= Voigtlander Color Skopar 28mm F2.8 SL II
'00 48 3C 60 24 24 00 02'	= Tokina AT-X 280 AF PRO (AF 28-80mm f/2.8)
'00 48 3C 6A 24 24 00 02'	= Tamron SP AF 28-105mm f/2.8 LD Aspherical IF (176D)
'00 48 50 50 18 18 00 00'	= Nikkor H 50mm f/2
'00 48 50 72 24 24 00 06'	= Tokina AT-X 535 PRO DX (AF 50-135mm f/2.8)
'00 48 5C 80 30 30 00 0E'	= Tokina AT-X 70-200 F4 FX VCM-S (AF 70-200mm f/4)
'00 48 5C 8E 30 3C 00 06'	= Tamron AF 70-300mm f/4-5.6 Di LD Macro 1:2 (A17NII)
'00 48 68 68 24 24 00 00'	= Series E 100mm f/2.8
'00 48 80 80 30 30 00 00'	= Nikkor 200mm f/4 AiS
'00 49 30 48 22 2B 00 02'	= Tamron SP AF 20-40mm f/2.7-3.5 (166D)
'00 4C 6A 6A 20 20 00 00'	= Nikkor 105mm f/2.5 AiS
'00 4C 7C 7C 2C 2C 00 02'	= Tamron SP AF 180mm f/3.5 Di Model (B01)
'00 53 2B 50 24 24 00 06'	= Tamron SP AF 17-50mm f/2.8 XR Di II LD Aspherical (IF) (A16)
'00 54 2B 50 24 24 00 06'	= Tamron SP AF 17-50mm f/2.8 XR Di II LD Aspherical (IF) (A16NII)
'00 54 38 38 18 18 00 00'	= Carl Zeiss Distagon T* 2/25 ZF.2
'00 54 3C 3C 18 18 00 00'	= Carl Zeiss Distagon T* 2/28 ZF.2
'00 54 44 44 0C 0C 00 00'	= Carl Zeiss Distagon T* 1.4/35 ZF.2
'00 54 44 44 18 18 00 00'	= Carl Zeiss Distagon T* 2/35 ZF.2
'00 54 48 48 18 18 00 00'	= Voigtlander Ultron 40mm F2 SLII Aspherical

'00 54 50 50 0C 0C 00 00'	= Carl Zeiss Planar T* 1.4/50 ZF.2
'00 54 50 50 18 18 00 00'	= Carl Zeiss Makro-Planar T* 2/50 ZF.2
'00 54 53 53 0C 0C 00 00'	= Zeiss Otus 1.4/55
'00 54 55 55 0C 0C 00 00'	= Voigtlander Nokton 58mm F1.4 SLII
'00 54 56 56 30 30 00 00'	= Coastal Optical Systems 60mm 1:4 UV-VIS-IR Macro Apo
'00 54 62 62 0C 0C 00 00'	= Carl Zeiss Planar T* 1.4/85 ZF.2
'00 54 68 68 18 18 00 00'	= Carl Zeiss Makro-Planar T* 2/100 ZF.2
'00 54 68 68 24 24 00 02'	= Tokina AT-X M100 AF PRO D (AF 100mm f/2.8 Macro)
'00 54 72 72 18 18 00 00'	= Carl Zeiss Apo Sonnar T* 2/135 ZF.2
'00 54 8E 8E 24 24 00 02'	= Tokina AT-X 300 AF PRO (AF 300mm f/2.8)
'00 57 50 50 14 14 00 00'	= Nikkor 50mm f/1.8 AI
'00 58 64 64 20 20 00 00'	= Soligor C/D Macro MC 90mm f/2.5
'01 00 00 00 00 00 02 00'	= TC-16A
'01 00 00 00 00 00 08 00'	= TC-16A
'01 54 62 62 0C 0C 00 00'	= Zeiss Otus 1.4/85
'01 58 50 50 14 14 02 00'	= AF Nikkor 50mm f/1.8
'01 58 50 50 14 14 05 00'	= AF Nikkor 50mm f/1.8
'02 2F 98 98 3D 3D 02 00'	= Sigma APO 400mm F5.6
'02 34 A0 A0 44 44 02 00'	= Sigma APO 500mm F7.2
'02 37 5E 8E 35 3D 02 00'	= Sigma 75-300mm F4.5-5.6 APO
'02 37 A0 A0 34 34 02 00'	= Sigma APO 500mm F4.5
'02 3A 37 50 31 3D 02 00'	= Sigma 24-50mm F4-5.6 UC
'02 3A 5E 8E 32 3D 02 00'	= Sigma 75-300mm F4.0-5.6
'02 3B 44 61 30 3D 02 00'	= Sigma 35-80mm F4-5.6
'02 3B 5C 82 30 3C 02 00'	= Sigma Zoom-K 70-210mm F4-5.6
'02 3C B0 B0 3C 3C 02 00'	= Sigma APO 800mm F5.6
'02 3F 24 24 2C 2C 02 00'	= Sigma 14mm F3.5
'02 3F 3C 5C 2D 35 02 00'	= Sigma 28-70mm F3.5-4.5 UC
'02 40 44 5C 2C 34 02 00'	= Exakta AF 35-70mm 1:3.5-4.5 MC
'02 40 44 73 2B 36 02 00'	= Sigma 35-135mm F3.5-4.5 a
'02 40 5C 82 2C 35 02 00'	= Sigma APO 70-210mm F3.5-4.5
'02 42 44 5C 2A 34 02 00'	= AF Zoom-Nikkor 35-70mm f/3.3-4.5
'02 42 44 5C 2A 34 08 00'	= AF Zoom-Nikkor 35-70mm f/3.3-4.5
'02 46 37 37 25 25 02 00'	= Sigma 24mm F2.8 Super Wide II Macro
'02 46 3C 5C 25 25 02 00'	= Sigma 28-70mm F2.8
'02 46 5C 82 25 25 02 00'	= Sigma 70-210mm F2.8 APO
'02 48 50 50 24 24 02 00'	= Sigma Macro 50mm F2.8
'02 48 65 65 24 24 02 00'	= Sigma Macro 90mm F2.8
'02 54 3C 3C 0C 0C 00 00'	= Zeiss Otus 1.4/28 ZF.2
'03 43 5C 81 35 35 02 00'	= Soligor AF C/D Zoom UMCS 70-210mm 1:4.5
'03 48 5C 81 30 30 02 00'	= AF Zoom-Nikkor 70-210mm f/4
'03 54 68 68 0C 0C 00 00'	= Zeiss Otus 1.4/100
'04 48 3C 3C 24 24 03 00'	= AF Nikkor 28mm f/2.8
'05 54 50 50 0C 0C 04 00'	= AF Nikkor 50mm f/1.4
'06 3F 68 68 2C 2C 06 00'	= Cosina AF 100mm F3.5 Macro
'06 54 53 53 24 24 06 00'	= AF Micro-Nikkor 55mm f/2.8
'07 36 3D 5F 2C 3C 03 00'	= Cosina AF Zoom 28-80mm F3.5-5.6 MC Macro
'07 3E 30 43 2D 35 03 00'	= Soligor AF Zoom 19-35mm 1:3.5-4.5 MC
'07 40 2F 44 2C 34 03 02'	= Tamron AF 19-35mm f/3.5-4.5 (A10)
'07 40 30 45 2D 35 03 02'	= Tamron AF 19-35mm f/3.5-4.5 (A10)
'07 40 30 45 2D 35 03 02'	= Voigtlander Ultron 19-35mm F3.5-4.5 VMV
'07 40 3C 5C 2C 35 03 00'	= Tokina AF 270 II (AF 28-70mm f/3.5-4.5)
'07 40 3C 62 2C 34 03 00'	= AF Zoom-Nikkor 28-85mm f/3.5-4.5
'07 46 2B 44 24 30 03 02'	= Tamron SP AF 17-35mm f/2.8-4 Di LD Aspherical (IF) (A05)
'07 46 3D 6A 25 2F 03 00'	= Cosina AF Zoom 28-105mm F2.8-3.8 MC
'07 47 3C 5C 25 35 03 00'	= Tokina AF 287 SD (AF 28-70mm f/2.8-4.5)
'07 48 3C 5C 24 24 03 00'	= Tokina AT-X 287 AF (AF 28-70mm f/2.8)
'08 40 44 6A 2C 34 04 00'	= AF Zoom-Nikkor 35-105mm f/3.5-4.5
'09 48 37 37 24 24 04 00'	= AF Nikkor 24mm f/2.8
'0A 48 8E 8E 24 24 03 00'	= AF Nikkor 300mm f/2.8 IF-ED
'0A 48 8E 8E 24 24 05 00'	= AF Nikkor 300mm f/2.8 IF-ED N
'0B 3E 3D 7F 2F 3D 0E 00'	= Tamron AF 28-200mm f/3.8-5.6 (71D)
'0B 3E 3D 7F 2F 3D 0E 02'	= Tamron AF 28-200mm f/3.8-5.6D (171D)
'0B 48 7C 7C 24 24 05 00'	= AF Nikkor 180mm f/2.8 IF-ED
'0D 40 44 72 2C 34 07 00'	= AF Zoom-Nikkor 35-135mm f/3.5-4.5
'0E 48 5C 81 30 30 05 00'	= AF Zoom-Nikkor 70-210mm f/4
'0E 4A 31 48 23 2D 0E 02'	= Tamron SP AF 20-40mm f/2.7-3.5 (166D)
'0F 58 50 50 14 14 05 00'	= AF Nikkor 50mm f/1.8 N
'10 3D 3C 60 2C 3C D2 02'	= Tamron AF 28-80mm f/3.5-5.6 Aspherical (177D)
'10 48 8E 8E 30 30 08 00'	= AF Nikkor 300mm f/4 IF-ED
'11 48 44 5C 24 24 08 00'	= AF Zoom-Nikkor 35-70mm f/2.8
'11 48 44 5C 24 24 15 00'	= AF Zoom-Nikkor 35-70mm f/2.8
'12 36 5C 81 35 3D 09 00'	= Cosina AF Zoom 70-210mm F4.5-5.6 MC Macro
'12 36 69 97 35 42 09 00'	= Soligor AF Zoom 100-400mm 1:4.5-6.7 MC
'12 38 69 97 35 42 09 02'	= Promaster Spectrum 7 100-400mm F4.5-6.7

'12 39 5C 8E 34 3D 08 02'	= Cosina AF Zoom 70-300mm F4.5-5.6 MC Macro
'12 3B 68 8D 3D 43 09 02'	= Cosina AF Zoom 100-300mm F5.6-6.7 MC Macro
'12 3B 98 98 3D 3D 09 00'	= Tokina AT-X 400 AF SD (AF 400mm f/5.6)
'12 3D 3C 80 2E 3C DF 02'	= Tamron AF 28-200mm f/3.8-5.6 AF Aspherical LD (IF) (271D)
'12 44 5E 8E 34 3C 09 00'	= Tokina AF 730 (AF 75-300mm F4.5-5.6)
'12 48 5C 81 30 3C 09 00'	= AF Nikkor 70-210mm f/4-5.6
'12 4A 5C 81 31 3D 09 00'	= Soligor AF C/D Auto Zoom+Macro 70-210mm 1:4-5.6 UMCS
'13 42 37 50 2A 34 0B 00'	= AF Zoom-Nikkor 24-50mm f/3.3-4.5
'14 48 60 80 24 24 0B 00'	= AF Zoom-Nikkor 80-200mm f/2.8 ED
'14 48 68 8E 30 30 0B 00'	= Tokina AT-X 340 AF (AF 100-300mm f/4)
'14 54 60 80 24 24 0B 00'	= Tokina AT-X 828 AF (AF 80-200mm f/2.8)
'15 4C 62 62 14 14 0C 00'	= AF Nikkor 85mm f/1.8
'17 3C A0 A0 30 30 0F 00'	= Nikkor 500mm f/4 P ED IF
'17 3C A0 A0 30 30 11 00'	= Nikkor 500mm f/4 P ED IF
'18 40 44 72 2C 34 0E 00'	= AF Zoom-Nikkor 35-135mm f/3.5-4.5 N
'1A 54 44 44 18 18 11 00'	= AF Nikkor 35mm f/2
'1B 44 5E 8E 34 3C 10 00'	= AF Zoom-Nikkor 75-300mm f/4.5-5.6
'1C 48 30 30 24 24 12 00'	= AF Nikkor 20mm f/2.8
'1D 42 44 5C 2A 34 12 00'	= AF Zoom-Nikkor 35-70mm f/3.3-4.5 N
'1E 54 56 56 24 24 13 00'	= AF Micro-Nikkor 60mm f/2.8
'1E 5D 64 64 20 20 13 00'	= Tamron SP AF 90mm f/2.5 (52E)
'1F 54 6A 6A 24 24 14 00'	= AF Micro-Nikkor 105mm f/2.8
'20 3C 80 98 3D 3D 1E 02'	= Tamron AF 200-400mm f/5.6 LD IF (75D)
'20 48 60 80 24 24 15 00'	= AF Zoom-Nikkor 80-200mm f/2.8 ED
'20 5A 64 64 20 20 14 00'	= Tamron SP AF 90mm f/2.5 Macro (152E)
'21 40 3C 5C 2C 34 16 00'	= AF Zoom-Nikkor 28-70mm f/3.5-4.5
'21 56 8E 8E 24 24 14 00'	= Tamron SP AF 300mm f/2.8 LD-IF (60E)
'22 48 72 72 18 18 16 00'	= AF DC-Nikkor 135mm f/2
'22 53 64 64 24 24 E0 02'	= Tamron SP AF 90mm f/2.8 Macro 1:1 (72E)
'23 30 BE CA 3C 48 17 00'	= Zoom-Nikkor 1200-1700mm f/5.6-8 P ED IF
'24 44 60 98 34 3C 1A 02'	= Tokina AT-X 840 AF-II (AF 80-400mm f/4.5-5.6)
'24 48 60 80 24 24 1A 02'	= AF Zoom-Nikkor 80-200mm f/2.8D ED
'24 54 60 80 24 24 1A 02'	= Tokina AT-X 828 AF PRO (AF 80-200mm f/2.8)
'25 44 44 8E 34 42 1B 02'	= Tokina AF 353 (AF 35-300mm f/4.5-6.7)
'25 48 3C 5C 24 24 1B 02'	= Tokina AT-X 270 AF PRO II (AF 28-70mm f/2.6-2.8)
'25 48 3C 5C 24 24 1B 02'	= Tokina AT-X 287 AF PRO SV (AF 28-70mm f/2.8)
'25 48 44 5C 24 24 1B 02'	= AF Zoom-Nikkor 35-70mm f/2.8D
'25 48 44 5C 24 24 3A 02'	= AF Zoom-Nikkor 35-70mm f/2.8D
'25 48 44 5C 24 24 52 02'	= AF Zoom-Nikkor 35-70mm f/2.8D
'26 3C 54 80 30 3C 1C 06'	= Sigma 55-200mm F4-5.6 DC
'26 3C 5C 82 30 3C 1C 02'	= Sigma 70-210mm F4-5.6 UC-II
'26 3C 5C 8E 30 3C 1C 02'	= Sigma 70-300mm F4-5.6 DG Macro
'26 3C 98 98 3C 3C 1C 02'	= Sigma APO Tele Macro 400mm F5.6
'26 3D 3C 80 2F 3D 1C 02'	= Sigma 28-300mm F3.8-5.6 Aspherical
'26 3E 3C 6A 2E 3C 1C 02'	= Sigma 28-105mm F3.8-5.6 UC-III Aspherical IF
'26 40 27 3F 2C 34 1C 02'	= Sigma 15-30mm F3.5-4.5 EX DG Aspherical DF
'26 40 2D 44 2B 34 1C 02'	= Sigma 18-35mm F3.5-4.5 Aspherical
'26 40 2D 50 2C 3C 1C 06'	= Sigma 18-50mm F3.5-5.6 DC
'26 40 2D 70 2B 3C 1C 06'	= Sigma 18-125mm F3.5-5.6 DC
'26 40 2D 80 2C 40 1C 06'	= Sigma 18-200mm F3.5-6.3 DC
'26 40 37 5C 2C 3C 1C 02'	= Sigma 24-70mm F3.5-5.6 Aspherical HF
'26 40 3C 5C 2C 34 1C 02'	= AF Zoom-Nikkor 28-70mm f/3.5-4.5D
'26 40 3C 60 2C 3C 1C 02'	= Sigma 28-80mm F3.5-5.6 Mini Zoom Macro II Aspherical
'26 40 3C 65 2C 3C 1C 02'	= Sigma 28-90mm F3.5-5.6 Macro
'26 40 3C 80 2B 3C 1C 02'	= Sigma 28-200mm F3.5-5.6 Compact Aspherical Hyperzoom Macro
'26 40 3C 80 2C 3C 1C 02'	= Sigma 28-200mm F3.5-5.6 Compact Aspherical Hyperzoom Macro
'26 40 3C 8E 2C 40 1C 02'	= Sigma 28-300mm F3.5-6.3 Macro
'26 40 7B A0 34 40 1C 02'	= Sigma APO 170-500mm F5-6.3 Aspherical RF
'26 41 3C 8E 2C 40 1C 02'	= Sigma 28-300mm F3.5-6.3 DG Macro
'26 44 73 98 34 3C 1C 02'	= Sigma 135-400mm F4.5-5.6 APO Aspherical
'26 45 68 8E 34 42 1C 02'	= Sigma 100-300mm F4.5-6.7 DL
'26 48 11 11 30 30 1C 02'	= Sigma 8mm F4 EX Circular Fisheye
'26 48 27 27 24 24 1C 02'	= Sigma 15mm F2.8 EX Diagonal Fisheye
'26 48 2D 50 24 24 1C 06'	= Sigma 18-50mm F2.8 EX DC
'26 48 31 49 24 24 1C 02'	= Sigma 20-40mm F2.8
'26 48 37 56 24 24 1C 02'	= Sigma 24-60mm F2.8 EX DG
'26 48 3C 5C 24 24 1C 06'	= Sigma 28-70mm F2.8 EX DG
'26 48 3C 5C 24 30 1C 02'	= Sigma 28-70mm F2.8-4 DG
'26 48 3C 6A 24 30 1C 02'	= Sigma 28-105mm F2.8-4 Aspherical
'26 48 8E 8E 30 30 1C 02'	= Sigma APO Tele Macro 300mm F4
'26 54 2B 44 24 30 1C 02'	= Sigma 17-35mm F2.8-4 EX Aspherical
'26 54 37 5C 24 24 1C 02'	= Sigma 24-70mm F2.8 EX DG Macro
'26 54 37 73 24 34 1C 02'	= Sigma 24-135mm F2.8-4.5
'26 54 3C 5C 24 24 1C 02'	= Sigma 28-70mm F2.8 EX
'26 58 31 31 14 14 1C 02'	= Sigma 20mm F1.8 EX DG Aspherical RF

'26 58 37 37 14 14 1C 02'	= Sigma 24mm F1.8 EX DG Aspherical Macro
'26 58 3C 3C 14 14 1C 02'	= Sigma 28mm F1.8 EX DG Aspherical Macro
'27 48 8E 8E 24 24 1D 02'	= AF-I Nikkor 300mm f/2.8D IF-ED
'27 48 8E 8E 24 24 E1 02'	= AF-I Nikkor 300mm f/2.8D IF-ED + TC-17E
'27 48 8E 8E 24 24 F1 02'	= AF-I Nikkor 300mm f/2.8D IF-ED + TC-14E
'27 48 8E 8E 24 24 F2 02'	= AF-I Nikkor 300mm f/2.8D IF-ED + TC-20E
'27 48 8E 8E 30 30 1D 02'	= Tokina AT-X 304 AF (AF 300mm f/4.0)
'27 54 8E 8E 24 24 1D 02'	= Tamron SP AF 300mm f/2.8 LD-IF (360E)
'28 3C A6 A6 30 30 1D 02'	= AF-I Nikkor 600mm f/4D IF-ED
'28 3C A6 A6 30 30 E1 02'	= AF-I Nikkor 600mm f/4D IF-ED + TC-17E
'28 3C A6 A6 30 30 F1 02'	= AF-I Nikkor 600mm f/4D IF-ED + TC-14E
'28 3C A6 A6 30 30 F2 02'	= AF-I Nikkor 600mm f/4D IF-ED + TC-20E
'2A 54 3C 3C 0C 0C 26 02'	= AF Nikkor 28mm f/1.4D
'2B 3C 44 60 30 3C 1F 02'	= AF Zoom-Nikkor 35-80mm f/4-5.6D
'2C 48 6A 6A 18 18 27 02'	= AF DC-Nikkor 105mm f/2D
'2D 48 80 80 30 30 21 02'	= AF Micro-Nikkor 200mm f/4D IF-ED
'2E 48 5C 82 30 3C 22 02'	= AF Nikkor 70-210mm f/4-5.6D
'2E 48 5C 82 30 3C 28 02'	= AF Nikkor 70-210mm f/4-5.6D
'2F 40 30 44 2C 34 29 02'	= Tokina AF 235 II (AF 20-35mm f/3.5-4.5)
'2F 40 30 44 2C 34 29 02'	= Tokina AF 193 (AF 19-35mm f/3.5-4.5)
'2F 48 30 44 24 24 29 02'	= AF Zoom-Nikkor 20-35mm f/2.8D IF
'2F 48 30 44 24 24 29 02'	= Tokina AT-X 235 AF PRO (AF 20-35mm f/2.8)
'30 48 98 98 24 24 24 02'	= AF-I Nikkor 400mm f/2.8D IF-ED
'30 48 98 98 24 24 E1 02'	= AF-I Nikkor 400mm f/2.8D IF-ED + TC-17E
'30 48 98 98 24 24 F1 02'	= AF-I Nikkor 400mm f/2.8D IF-ED + TC-14E
'30 48 98 98 24 24 F2 02'	= AF-I Nikkor 400mm f/2.8D IF-ED + TC-20E
'31 54 56 56 24 24 25 02'	= AF Micro-Nikkor 60mm f/2.8D
'32 53 64 64 24 24 35 02'	= Tamron SP AF 90mm f/2.8 [Di] Macro 1:1 (172E/272E)
'32 54 50 50 24 24 35 02'	= Sigma Macro 50mm F2.8 EX DG
'32 54 6A 6A 24 24 35 02'	= AF Micro-Nikkor 105mm f/2.8D
'32 54 6A 6A 24 24 35 02'	= Sigma Macro 105mm F2.8 EX DG
'33 48 2D 2D 24 24 31 02'	= AF Nikkor 18mm f/2.8D
'33 54 3C 5E 24 24 62 02'	= Tamron SP AF 28-75mm f/2.8 XR Di LD Aspherical (IF) Macro (A09)
'34 48 29 29 24 24 32 02'	= AF Fisheye Nikkor 16mm f/2.8D
'35 3C A0 A0 30 30 33 02'	= AF-I Nikkor 500mm f/4D IF-ED
'35 3C A0 A0 30 30 E1 02'	= AF-I Nikkor 500mm f/4D IF-ED + TC-17E
'35 3C A0 A0 30 30 F1 02'	= AF-I Nikkor 500mm f/4D IF-ED + TC-14E
'35 3C A0 A0 30 30 F2 02'	= AF-I Nikkor 500mm f/4D IF-ED + TC-20E
'36 48 37 37 24 24 34 02'	= AF Nikkor 24mm f/2.8D
'37 48 30 30 24 24 36 02'	= AF Nikkor 20mm f/2.8D
'38 4C 62 62 14 14 37 02'	= AF Nikkor 85mm f/1.8D
'3A 40 3C 5C 2C 34 39 02'	= AF Zoom-Nikkor 28-70mm f/3.5-4.5D
'3B 48 44 5C 24 24 3A 02'	= AF Zoom-Nikkor 35-70mm f/2.8D N
'3C 48 60 80 24 24 3B 02'	= AF Zoom-Nikkor 80-200mm f/2.8D ED
'3D 3C 44 60 30 3C 3E 02'	= AF Zoom-Nikkor 35-80mm f/4-5.6D
'3E 48 3C 3C 24 24 3D 02'	= AF Nikkor 28mm f/2.8D
'3F 40 44 6A 2C 34 45 02'	= AF Zoom-Nikkor 35-105mm f/3.5-4.5D
'41 48 7C 7C 24 24 43 02'	= AF Nikkor 180mm f/2.8D IF-ED
'42 54 44 44 18 18 44 02'	= AF Nikkor 35mm f/2D
'43 54 50 50 0C 0C 46 02'	= AF Nikkor 50mm f/1.4D
'44 44 60 80 34 3C 47 02'	= AF Zoom-Nikkor 80-200mm f/4.5-5.6D
'45 3D 3C 60 2C 3C 48 02'	= Tamron AF 28-80mm f/3.5-5.6 Aspherical (177D)
'45 40 3C 60 2C 3C 48 02'	= AF Zoom-Nikkor 28-80mm f/3.5-5.6D
'45 41 37 72 2C 3C 48 02'	= Tamron SP AF 24-135mm f/3.5-5.6 AD Aspherical (IF) Macro (190D)
'46 3C 44 60 30 3C 49 02'	= AF Zoom-Nikkor 35-80mm f/4-5.6D N
'47 42 37 50 2A 34 4A 02'	= AF Zoom-Nikkor 24-50mm f/3.3-4.5D
'48 38 1F 37 34 3C 4B 06'	= Sigma 12-24mm F4.5-5.6 EX DG Aspherical HSM
'48 3C 19 31 30 3C 4B 06'	= Sigma 10-20mm F4-5.6 EX DC HSM
'48 3C 50 A0 30 40 4B 02'	= Sigma 50-500mm F4-6.3 EX APO RF HSM
'48 3C 8E B0 3C 3C 4B 02'	= Sigma APO 300-800mm F5.6 EX DG HSM
'48 3C B0 B0 3C 3C 4B 02'	= Sigma APO 800mm F5.6 EX HSM
'48 44 A0 A0 34 34 4B 02'	= Sigma APO 500mm F4.5 EX HSM
'48 48 24 24 24 24 4B 02'	= Sigma 14mm F2.8 EX Aspherical HSM
'48 48 2B 44 24 30 4B 06'	= Sigma 17-35mm F2.8-4 EX DG Aspherical HSM
'48 48 68 8E 30 30 4B 02'	= Sigma APO 100-300mm F4 EX IF HSM
'48 48 76 76 24 24 4B 06'	= Sigma APO Macro 150mm F2.8 EX DG HSM
'48 48 8E 24 24 4B 02'	= AF-S Nikkor 300mm f/2.8D IF-ED
'48 48 8E 24 24 E1 02'	= AF-S Nikkor 300mm f/2.8D IF-ED + TC-17E
'48 48 8E 24 24 F1 02'	= AF-S Nikkor 300mm f/2.8D IF-ED + TC-14E
'48 48 8E 24 24 F2 02'	= AF-S Nikkor 300mm f/2.8D IF-ED + TC-20E
'48 4C 7C 7C 2C 2C 4B 02'	= Sigma APO Macro 180mm F3.5 EX DG HSM
'48 4C 7D 7D 2C 2C 4B 02'	= Sigma APO Macro 180mm F3.5 EX DG HSM
'48 54 3E 3E 0C 0C 4B 06'	= Sigma 30mm F1.4 EX DC HSM
'48 54 5C 80 24 24 4B 02'	= Sigma 70-200mm F2.8 EX APO IF HSM
'48 54 6F 8E 24 24 4B 02'	= Sigma APO 120-300mm F2.8 EX DG HSM

'48 54 8E 8E 24 24 4B 02'	= Sigma APO 300mm F2.8 EX DG HSM
'49 3C A6 A6 30 30 4C 02'	= AF-S Nikkor 600mm f/4D IF-ED
'49 3C A6 A6 30 30 E1 02'	= AF-S Nikkor 600mm f/4D IF-ED + TC-17E
'49 3C A6 A6 30 30 F1 02'	= AF-S Nikkor 600mm f/4D IF-ED + TC-14E
'49 3C A6 A6 30 30 F2 02'	= AF-S Nikkor 600mm f/4D IF-ED + TC-20E
'4A 40 11 11 2C 0C 4D 02'	= Samyang 8mm f/3.5 Fish-Eye CS
'4A 48 1E 1E 24 0C 4D 02'	= Samyang 12mm f/2.8 ED AS NCS Fish-Eye
'4A 48 24 24 24 0C 4D 02'	= Samyang 10mm f/2.8 ED AS NCS CS
'4A 48 24 24 24 0C 4D 02'	= Samyang AE 14mm f/2.8 ED AS IF UMC
'4A 4C 24 24 1E 6C 4D 06'	= Samyang 14mm f/2.4 Premium
'4A 54 29 29 18 0C 4D 02'	= Samyang 16mm f/2.0 ED AS UMC CS
'4A 54 62 62 0C 0C 4D 02'	= AF Nikkor 85mm f/1.4D IF
'4A 58 30 30 14 0C 4D 02'	= Rokinon 20mm f/1.8 ED AS UMC
'4A 60 36 36 0C 0C 4D 02'	= Samyang 24mm f/1.4 ED AS UMC
'4A 60 44 44 0C 0C 4D 02'	= Samyang 35mm f/1.4 AS UMC
'4A 60 62 62 0C 0C 4D 02'	= Samyang AE 85mm f/1.4 AS IF UMC
'4B 3C A0 A0 30 30 4E 02'	= AF-S Nikkor 500mm f/4D IF-ED
'4B 3C A0 A0 30 30 E1 02'	= AF-S Nikkor 500mm f/4D IF-ED + TC-17E
'4B 3C A0 A0 30 30 F1 02'	= AF-S Nikkor 500mm f/4D IF-ED + TC-14E
'4B 3C A0 A0 30 30 F2 02'	= AF-S Nikkor 500mm f/4D IF-ED + TC-20E
'4C 40 37 6E 2C 3C 4F 02'	= AF Zoom-Nikkor 24-120mm f/3.5-5.6D IF
'4D 3E 3C 80 2E 3C 62 02'	= Tamron AF 28-200mm f/3.8-5.6 XR Aspherical (IF) Macro (A03N)
'4D 40 3C 80 2C 3C 62 02'	= AF Zoom-Nikkor 28-200mm f/3.5-5.6D IF
'4D 41 3C 8E 2B 40 62 02'	= Tamron AF 28-300mm f/3.5-6.3 XR Di LD Aspherical (IF) (A061)
'4D 41 3C 8E 2C 40 62 02'	= Tamron AF 28-300mm f/3.5-6.3 XR LD Aspherical (IF) (185D)
'4E 48 72 72 18 18 51 02'	= AF DC-Nikkor 135mm f/2D
'4F 40 37 5C 2C 3C 53 06'	= IX-Nikkor 24-70mm f/3.5-5.6
'50 48 56 7C 30 3C 54 06'	= IX-Nikkor 60-180mm f/4-5.6
'52 54 44 44 18 18 00 00'	= Zeiss Milvus 35mm f/2
'53 48 60 80 24 24 57 02'	= AF Zoom-Nikkor 80-200mm f/2.8D ED
'53 48 60 80 24 24 60 02'	= AF Zoom-Nikkor 80-200mm f/2.8D ED
'53 54 50 50 0C 0C 00 00'	= Zeiss Milvus 50mm f/1.4
'54 44 5C 7C 34 3C 58 02'	= AF Zoom-Micro Nikkor 70-180mm f/4.5-5.6D ED
'54 44 5C 7C 34 3C 61 02'	= AF Zoom-Micro Nikkor 70-180mm f/4.5-5.6D ED
'54 54 50 50 18 18 00 00'	= Zeiss Milvus 50mm f/2 Macro
'55 54 62 62 0C 0C 00 00'	= Zeiss Milvus 85mm f/1.4
'56 3C 5C 8E 30 3C 1C 02'	= Sigma 70-300mm F4-5.6 APO Macro Super II
'56 48 5C 8E 30 3C 5A 02'	= AF Zoom-Nikkor 70-300mm f/4-5.6D ED
'56 54 68 68 18 18 00 00'	= Zeiss Milvus 100mm f/2 Macro
'59 48 98 98 24 24 5D 02'	= AF-S Nikkor 400mm f/2.8D IF-ED
'59 48 98 98 24 24 E1 02'	= AF-S Nikkor 400mm f/2.8D IF-ED + TC-17E
'59 48 98 98 24 24 F1 02'	= AF-S Nikkor 400mm f/2.8D IF-ED + TC-14E
'59 48 98 98 24 24 F2 02'	= AF-S Nikkor 400mm f/2.8D IF-ED + TC-20E
'5A 3C 3E 56 30 3C 5E 06'	= IX-Nikkor 30-60mm f/4-5.6
'5B 44 56 7C 34 3C 5F 06'	= IX-Nikkor 60-180mm f/4.5-5.6
'5D 48 3C 5C 24 24 63 02'	= AF-S Zoom-Nikkor 28-70mm f/2.8D IF-ED
'5E 48 60 80 24 24 64 02'	= AF-S Zoom-Nikkor 80-200mm f/2.8D IF-ED
'5F 40 3C 6A 2C 34 65 02'	= AF Zoom-Nikkor 28-105mm f/3.5-4.5D IF
'60 40 3C 60 2C 3C 66 02'	= AF Zoom-Nikkor 28-80mm f/3.5-5.6D
'61 44 5E 86 34 3C 67 02'	= AF Zoom-Nikkor 75-240mm f/4.5-5.6D
'63 48 2B 44 24 24 68 02'	= AF-S Nikkor 17-35mm f/2.8D IF-ED
'64 00 62 62 24 24 6A 02'	= PC Micro-Nikkor 85mm f/2.8D
'65 44 60 98 34 3C 6B 0A'	= AF VR Zoom-Nikkor 80-400mm f/4.5-5.6D ED
'66 40 2D 44 2C 34 6C 02'	= AF Zoom-Nikkor 18-35mm f/3.5-4.5D IF-ED
'67 48 37 62 24 30 6D 02'	= AF Zoom-Nikkor 24-85mm f/2.8-4D IF
'67 54 37 5C 24 24 1C 02'	= Sigma 24-70mm F2.8 EX DG Macro
'68 42 3C 60 2A 3C 6E 06'	= AF Zoom-Nikkor 28-80mm f/3.3-5.6G
'69 47 5C 8E 30 3C 00 02'	= Tamron AF 70-300mm f/4-5.6 Di LD Macro 1:2 (A17N)
'69 48 5C 8E 30 3C 6F 02'	= Tamron AF 70-300mm f/4-5.6 LD Macro 1:2 (572D/772D)
'69 48 5C 8E 30 3C 6F 06'	= AF Zoom-Nikkor 70-300mm f/4-5.6G
'6A 48 8E 8E 30 30 70 02'	= AF-S Nikkor 300mm f/4D IF-ED
'6B 48 24 24 24 24 71 02'	= AF Nikkor ED 14mm f/2.8D
'6D 48 8E 8E 24 24 73 02'	= AF-S Nikkor 300mm f/2.8D IF-ED II
'6E 48 98 98 24 24 74 02'	= AF-S Nikkor 400mm f/2.8D IF-ED II
'6F 3C A0 A0 30 30 75 02'	= AF-S Nikkor 500mm f/4D IF-ED II
'70 3C A6 A6 30 30 76 02'	= AF-S Nikkor 600mm f/4D IF-ED II
'71 48 64 64 24 24 00 00'	= Voigtlander APO-Skopar 90mm F2.8 SL IIs
'72 48 4C 4C 24 24 77 00'	= Nikkor 45mm f/2.8 P
'74 40 37 62 2C 34 78 06'	= AF-S Zoom-Nikkor 24-85mm f/3.5-4.5G IF-ED
'75 40 3C 68 2C 3C 79 06'	= AF Zoom-Nikkor 28-100mm f/3.5-5.6G
'76 58 50 50 14 14 7A 02'	= AF Nikkor 50mm f/1.8D
'77 44 60 98 34 3C 7B 0E'	= Sigma 80-400mm F4.5-5.6 APO DG D OS
'77 44 61 98 34 3C 7B 0E'	= Sigma 80-400mm F4.5-5.6 EX OS
'77 48 5C 80 24 24 7B 0E'	= AF-S VR Zoom-Nikkor 70-200mm f/2.8G IF-ED
'78 40 37 6E 2C 3C 7C 0E'	= AF-S VR Zoom-Nikkor 24-120mm f/3.5-5.6G IF-ED

'79 40 11 11 2C 2C 1C 06'	= Sigma 8mm F3.5 EX Circular Fisheye
'79 40 3C 80 2C 3C 7F 06'	= AF Zoom-Nikkor 28-200mm f/3.5-5.6G IF-ED
'79 48 3C 5C 24 24 1C 06'	= Sigma 28-70mm F2.8 EX DG
'79 48 5C 5C 24 24 1C 06'	= Sigma Macro 70mm F2.8 EX DG
'79 54 31 31 0C 0C 4B 06'	= Sigma 20mm F1.4 DG HSM   A
'7A 3B 53 80 30 3C 4B 06'	= Sigma 55-200mm F4-5.6 DC HSM
'7A 3C 1F 37 30 30 7E 06'	= AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED
'7A 3C 1F 37 30 30 7E 06'	= Tokina AT-X 124 AF PRO DX II (AF 12-24mm f/4)
'7A 3C 1F 3C 30 30 7E 06'	= Tokina AT-X 12-28 PRO DX (AF 12-28mm f/4)
'7A 40 2D 50 2C 3C 4B 06'	= Sigma 18-50mm F3.5-5.6 DC HSM
'7A 40 2D 80 2C 40 4B 0E'	= Sigma 18-200mm F3.5-6.3 DC OS HSM
'7A 47 2B 5C 24 34 4B 06'	= Sigma 17-70mm F2.8-4.5 DC Macro Asp. IF HSM
'7A 47 50 76 24 24 4B 06'	= Sigma 50-150mm F2.8 EX APO DC HSM
'7A 48 1C 29 24 24 7E 06'	= Tokina AT-X 116 PRO DX II (AF 11-16mm f/2.8)
'7A 48 1C 30 24 24 7E 06'	= Tokina AT-X 11-20 F2.8 PRO DX (AF 11-20mm f/2.8)
'7A 48 2B 5C 24 34 4B 06'	= Sigma 17-70mm F2.8-4.5 DC Macro Asp. IF HSM
'7A 48 2D 50 24 24 4B 06'	= Sigma 18-50mm F2.8 EX DC Macro
'7A 48 5C 80 24 24 4B 06'	= Sigma 70-200mm F2.8 EX APO DG Macro HSM II
'7A 54 6E 8E 24 24 4B 02'	= Sigma APO 120-300mm F2.8 EX DG HSM
'7B 48 37 44 18 18 4B 06'	= Sigma 24-35mm F2.0 DG HSM   A
'7B 48 80 98 30 30 80 0E'	= AF-S VR Zoom-Nikkor 200-400mm f/4G IF-ED
'7C 54 2B 50 24 24 00 06'	= Tamron SP AF 17-50mm f/2.8 XR Di II LD Aspherical (IF) (A16)
'7D 48 2B 53 24 24 82 06'	= AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED
'7E 54 37 37 0C 0C 4B 06'	= Sigma 24mm F1.4 DG HSM   A
'7F 40 2D 5C 2C 34 84 06'	= AF-S DX Zoom-Nikkor 18-70mm f/3.5-4.5G IF-ED
'7F 48 2B 5C 24 34 1C 06'	= Sigma 17-70mm F2.8-4.5 DC Macro Asp. IF
'7F 48 2D 50 24 24 1C 06'	= Sigma 18-50mm F2.8 EX DC Macro
'80 48 1A 1A 24 24 85 06'	= AF DX Fisheye-Nikkor 10.5mm f/2.8G ED
'80 48 1C 29 24 24 7A 06'	= Tokina atx-i 11-16mm F2.8 CF
'81 34 76 A6 38 40 4B 0E'	= Sigma 150-600mm F5-6.3 DG OS HSM   S
'81 54 80 80 18 18 86 0E'	= AF-S VR Nikkor 200mm f/2G IF-ED
'82 34 76 A6 38 40 4B 0E'	= Sigma 150-600mm F5-6.3 DG OS HSM   C
'82 48 8E 8E 24 24 87 0E'	= AF-S VR Nikkor 300mm f/2.8G IF-ED
'83 00 B0 B0 5A 5A 88 04'	= FSA-L2, EDG 65, 800mm F13 G
'87 2C 2D 8E 2C 40 4B 0E'	= Sigma 18-300mm F3.5-6.3 DC Macro HSM
'88 54 50 50 0C 0C 4B 06'	= Sigma 50mm F1.4 DG HSM   A
'89 30 2D 80 2C 40 4B 0E'	= Sigma 18-200mm F3.5-6.3 DC Macro OS HS   C
'89 3C 53 80 30 3C 8B 06'	= AF-S DX Zoom-Nikkor 55-200mm f/4-5.6G ED
'8A 3C 37 6A 30 30 4B 0E'	= Sigma 24-105mm F4 DG OS HSM
'8A 54 6A 6A 24 24 8C 0E'	= AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED
'8B 40 2D 80 2C 3C 8D 0E'	= AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G IF-ED
'8B 40 2D 80 2C 3C FD 0E'	= AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G IF-ED [II]
'8B 48 1C 30 24 24 85 06'	= Tokina AT-X 11-20 F2.8 PRO DX (AF 11-20mm f/2.8)
'8B 4C 2D 44 14 14 4B 06'	= Sigma 18-35mm F1.8 DC HSM
'8C 40 2D 53 2C 3C 8E 06'	= AF-S DX Zoom-Nikkor 18-55mm f/3.5-5.6G ED
'8C 48 29 3C 24 24 86 06'	= Tokina opera 16-28mm F2.8 FF
'8D 44 5C 8E 34 3C 8F 0E'	= AF-S VR Zoom-Nikkor 70-300mm f/4.5-5.6G IF-ED
'8D 48 6E 8E 24 24 4B 0E'	= Sigma 120-300mm F2.8 DG OS HSM Sports
'8D 54 68 68 24 24 87 02'	= Tokina AT-X PRO 100mm F2.8 D Macro
'8E 3C 2B 5C 24 30 4B 0E'	= Sigma 17-70mm F2.8-4 DC Macro OS HSM   C
'8F 40 2D 72 2C 3C 91 06'	= AF-S DX Zoom-Nikkor 18-135mm f/3.5-5.6G IF-ED
'8F 48 2B 50 24 24 4B 0E'	= Sigma 17-50mm F2.8 EX DC OS HSM
'90 3B 53 80 30 3C 92 0E'	= AF-S DX VR Zoom-Nikkor 55-200mm f/4-5.6G IF-ED
'90 40 2D 80 2C 40 4B 0E'	= Sigma 18-200mm F3.5-6.3 II DC OS HSM
'91 54 44 44 0C 0C 4B 06'	= Sigma 35mm F1.4 DG HSM
'92 2C 2D 88 2C 40 4B 0E'	= Sigma 18-250mm F3.5-6.3 DC Macro OS HSM
'92 48 24 37 24 24 94 06'	= AF-S Zoom-Nikkor 14-24mm f/2.8G ED
'93 48 37 5C 24 24 95 06'	= AF-S Zoom-Nikkor 24-70mm f/2.8G ED
'94 40 2D 53 2C 3C 96 06'	= AF-S DX Zoom-Nikkor 18-55mm f/3.5-5.6G ED II
'94 48 7C 7C 24 24 4B 0E'	= Sigma APO Macro 180mm F2.8 EX DG OS HSM
'95 00 37 37 2C 2C 97 06'	= PC-E Nikkor 24mm f/3.5D ED
'95 4C 37 37 2C 2C 97 02'	= PC-E Nikkor 24mm f/3.5D ED
'96 38 1F 37 34 3C 4B 06'	= Sigma 12-24mm F4.5-5.6 II DG HSM
'96 48 98 98 24 24 98 0E'	= AF-S VR Nikkor 400mm f/2.8G ED
'97 3C A0 A0 30 30 99 0E'	= AF-S VR Nikkor 500mm f/4G ED
'97 48 6A 6A 24 24 4B 0E'	= Sigma Macro 105mm F2.8 EX DG OS HSM
'98 3C A6 A6 30 30 9A 0E'	= AF-S VR Nikkor 600mm f/4G ED
'98 48 50 76 24 24 4B 0E'	= Sigma 50-150mm F2.8 EX APO DC OS HSM
'99 40 29 62 2C 3C 9B 0E'	= AF-S DX VR Zoom-Nikkor 16-85mm f/3.5-5.6G ED
'99 48 76 76 24 24 4B 0E'	= Sigma APO Macro 150mm F2.8 EX DG OS HSM
'9A 40 2D 53 2C 3C 9C 0E'	= AF-S DX VR Zoom-Nikkor 18-55mm f/3.5-5.6G
'9A 4C 50 50 14 14 9C 06'	= Yongnuo YN50mm F1.8N
'9B 00 4C 4C 24 24 9D 06'	= PC-E Micro Nikkor 45mm f/2.8D ED
'9B 54 4C 4C 24 24 9D 02'	= PC-E Micro Nikkor 45mm f/2.8D ED
'9B 54 62 62 0C 0C 4B 06'	= Sigma 85mm F1.4 EX DG HSM

'9C 48 5C 80 24 24 4B 0E' = Sigma 70-200mm F2.8 EX DG OS HSM  
'9C 54 56 56 24 24 9E 06' = AF-S Micro Nikkor 60mm f/2.8G ED  
'9D 00 62 62 24 24 9F 06' = PC-E Micro Nikkor 85mm f/2.8D  
'9D 48 2B 50 24 24 4B 0E' = Sigma 17-50mm F2.8 EX DC OS HSM  
'9D 54 62 62 24 24 9F 02' = PC-E Micro Nikkor 85mm f/2.8D  
'9E 38 11 29 34 3C 4B 06' = Sigma 8-16mm F4.5-5.6 DC HSM  
'9E 40 2D 6A 2C 3C A0 0E' = AF-S DX VR Zoom-Nikkor 18-105mm f/3.5-5.6G ED  
'9F 37 50 A0 34 40 4B 0E' = Sigma 50-500mm F4.5-6.3 DG OS HSM  
'9F 48 48 48 24 24 A1 06' = Yongnuo YN40mm F2.8N  
'9F 4C 44 44 18 18 A1 06' = Yongnuo YN35mm F2  
'9F 4D 50 50 14 14 A0 06' = Yongnuo YN50mm F1.8N  
'9F 54 68 68 18 18 A2 06' = Yongnuo YN100mm F2N  
'9F 58 44 44 14 14 A1 06' = AF-S DX Nikkor 35mm f/1.8G  
'A0 37 5C 8E 34 3C A2 06' = Sony FE 70-300mm F4.5-5.6 G OSS  
'A0 40 2D 53 2C 3C CA 0E' = AF-P DX Nikkor 18-55mm f/3.5-5.6G VR  
'A0 40 2D 53 2C 3C CA 8E' = AF-P DX Nikkor 18-55mm f/3.5-5.6G  
'A0 40 2D 74 2C 3C BB 0E' = AF-S DX Nikkor 18-140mm f/3.5-5.6G ED VR  
'A0 48 2A 5C 24 30 4B 0E' = Sigma 17-70mm F2.8-4 DC Macro OS HSM  
'A0 54 50 50 0C 0C A2 06' = AF-S Nikkor 50mm f/1.4G  
'A0 56 44 44 14 14 A2 06' = Sony FE 35mm F1.8  
'A1 40 18 37 2C 34 A3 06' = AF-S DX Nikkor 10-24mm f/3.5-4.5G ED  
'A1 40 2D 53 2C 3C CB 86' = AF-P DX Nikkor 18-55mm f/3.5-5.6G  
'A1 41 19 31 2C 2C 4B 06' = Sigma 10-20mm F3.5 EX DC HSM  
'A1 48 6E 8E 24 24 DB 4E' = AF-S Nikkor 120-300mm f/2.8E FL ED SR VR  
'A1 54 55 55 0C 0C BC 06' = AF-S Nikkor 58mm f/1.4G  
'A2 38 5C 8E 34 40 CD 86' = AF-P DX Nikkor 70-300mm f/4.5-6.3G VR  
'A2 40 2D 53 2C 3C BD 0E' = AF-S DX Nikkor 18-55mm f/3.5-5.6G VR II  
'A2 48 5C 80 24 24 A4 0E' = AF-S Nikkor 70-200mm f/2.8G ED VR II  
'A3 38 5C 8E 34 40 CE 0E' = AF-P DX Nikkor 70-300mm f/4.5-6.3G ED  
'A3 38 5C 8E 34 40 CE 8E' = AF-P DX Nikkor 70-300mm f/4.5-6.3G ED VR  
'A3 3C 29 44 30 30 A5 0E' = AF-S Nikkor 16-35mm f/4G ED VR  
'A3 3C 5C 8E 30 3C 4B 0E' = Sigma 70-300mm F4-5.6 DG OS  
'A4 40 2D 8E 2C 40 BF 0E' = AF-S DX Nikkor 18-300mm f/3.5-6.3G ED VR  
'A4 47 2D 50 24 34 4B 0E' = Sigma 18-50mm F2.8-4.5 DC OS HSM  
'A4 48 5C 80 24 24 CF 0E' = AF-S Nikkor 70-200mm f/2.8E FL ED VR  
'A4 48 5C 80 24 24 CF 4E' = AF-S Nikkor 70-200mm f/2.8E FL ED VR  
'A4 54 37 37 0C 0C A6 06' = AF-S Nikkor 24mm f/1.4G ED  
'A5 40 2D 88 2C 40 4B 0E' = Sigma 18-250mm F3.5-6.3 DC OS HSM  
'A5 40 3C 8E 2C 3C A7 0E' = AF-S Nikkor 28-300mm f/3.5-5.6G ED VR  
'A5 4C 44 44 14 14 C0 06' = AF-S Nikkor 35mm f/1.8G ED  
'A5 54 6A 6A 0C 0C D0 06' = AF-S Nikkor 105mm f/1.4E ED  
'A5 54 6A 6A 0C 0C D0 46' = AF-S Nikkor 105mm f/1.4E ED  
'A6 48 2F 2F 30 30 D1 06' = PC Nikkor 19mm f/4E ED  
'A6 48 2F 2F 30 30 D1 46' = PC Nikkor 19mm f/4E ED  
'A6 48 37 5C 24 24 4B 06' = Sigma 24-70mm F2.8 IF EX DG HSM  
'A6 48 8E 8E 24 24 A8 0E' = AF-S Nikkor 300mm f/2.8G IF-ED VR II  
'A6 48 98 98 24 24 C1 0E' = AF-S Nikkor 400mm f/2.8E FL ED VR  
'A7 3C 53 80 30 3C C2 0E' = AF-S DX Nikkor 55-200mm f/4-5.6G ED VR II  
'A7 40 11 26 2C 34 D2 06' = AF-S Fisheye Nikkor 8-15mm f/3.5-4.5E ED  
'A7 40 11 26 2C 34 D2 46' = AF-S Fisheye Nikkor 8-15mm f/3.5-4.5E ED  
'A7 49 80 A0 24 24 4B 06' = Sigma APO 200-500mm F2.8 EX DG  
'A7 4B 62 62 2C 2C A9 0E' = AF-S DX Micro Nikkor 85mm f/3.5G ED VR  
'A8 38 18 30 34 3C D3 0E' = AF-P DX Nikkor 10-20mm f/4.5-5.6G VR  
'A8 38 18 30 34 3C D3 8E' = AF-P DX Nikkor 10-20mm f/4.5-5.6G VR  
'A8 48 80 98 30 30 AA 0E' = AF-S Zoom-Nikkor 200-400mm f/4G IF-ED VR II  
'A8 48 8E 8E 30 30 C3 0E' = AF-S Nikkor 300mm f/4E PF ED VR  
'A8 48 8E 8E 30 30 C3 4E' = AF-S Nikkor 300mm f/4E PF ED VR  
'A9 48 7C 98 30 30 D4 0E' = AF-S Nikkor 180-400mm f/4E TC1.4 FL ED VR  
'A9 48 7C 98 30 30 D4 4E' = AF-S Nikkor 180-400mm f/4E TC1.4 FL ED VR  
'A9 4C 31 31 14 14 C4 06' = AF-S Nikkor 20mm f/1.8G ED  
'A9 54 80 80 18 18 AB 0E' = AF-S Nikkor 200mm f/2G ED VR II  
'AA 3C 37 6E 30 30 AC 0E' = AF-S Nikkor 24-120mm f/4G ED VR  
'AA 48 37 5C 24 24 C5 0E' = AF-S Nikkor 24-70mm f/2.8E ED VR  
'AA 48 37 5C 24 24 C5 4E' = AF-S Nikkor 24-70mm f/2.8E ED VR  
'AA 48 88 A4 3C 3C D5 0E' = AF-S Nikkor 180-400mm f/4E TC1.4 FL ED VR + 1.4x TC  
'AA 48 88 A4 3C 3C D5 4E' = AF-S Nikkor 180-400mm f/4E TC1.4 FL ED VR + 1.4x TC  
'AB 3C A0 A0 30 30 C6 4E' = AF-S Nikkor 500mm f/4E FL ED VR  
'AB 44 5C 8E 34 3C D6 0E' = AF-P Nikkor 70-300mm f/4.5-5.6E ED VR  
'AB 44 5C 8E 34 3C D6 4E' = AF-P Nikkor 70-300mm f/4.5-5.6E ED VR  
'AB 44 5C 8E 34 3C D6 CE' = AF-P Nikkor 70-300mm f/4.5-5.6E ED VR  
'AC 38 53 8E 34 3C AE 0E' = AF-S DX Nikkor 55-300mm f/4.5-5.6G ED VR  
'AC 3C A6 A6 30 30 C7 4E' = AF-S Nikkor 600mm f/4E FL ED VR  
'AC 54 3C 3C 0C 0C D7 06' = AF-S Nikkor 28mm f/1.4E ED  
'AC 54 3C 3C 0C 0C D7 46' = AF-S Nikkor 28mm f/1.4E ED  
'AD 3C 2D 8E 2C 3C AF 0E' = AF-S DX Nikkor 18-300mm f/3.5-5.6G ED VR

'AD 3C A0 A0 3C 3C D8 0E' = AF-S Nikkor 500mm f/5.6E PF ED VR  
'AD 3C A0 A0 3C 3C D8 4E' = AF-S Nikkor 500mm f/5.6E PF ED VR  
'AD 48 28 60 24 30 C8 0E' = AF-S DX Nikkor 16-80mm f/2.8-4E ED VR  
'AD 48 28 60 24 30 C8 4E' = AF-S DX Nikkor 16-80mm f/2.8-4E ED VR  
'AE 3C 80 A0 3C 3C C9 0E' = AF-S Nikkor 200-500mm f/5.6E ED VR  
'AE 3C 80 A0 3C 3C C9 4E' = AF-S Nikkor 200-500mm f/5.6E ED VR  
'AE 54 62 62 0C 0C B0 06' = AF-S Nikkor 85mm f/1.4G  
'AF 4C 37 37 14 14 CC 06' = AF-S Nikkor 24mm f/1.8G ED  
'AF 54 44 44 0C 0C B1 06' = AF-S Nikkor 35mm f/1.4G  
'B0 4C 50 50 14 14 B2 06' = AF-S Nikkor 50mm f/1.8G  
'B1 48 48 48 24 24 B3 06' = AF-S DX Micro Nikkor 40mm f/2.8G  
'B2 48 5C 80 30 30 B4 0E' = AF-S Nikkor 70-200mm f/4G ED VR  
'B3 4C 62 62 14 14 B5 06' = AF-S Nikkor 85mm f/1.8G  
'B4 40 37 62 2C 34 B6 0E' = AF-S Zoom-Nikkor 24-85mm f/3.5-4.5G IF-ED VR  
'B5 4C 3C 3C 14 14 B7 06' = AF-S Nikkor 28mm f/1.8G  
'B6 3C B0 B0 3C 3C B8 0E' = AF-S VR Nikkor 800mm f/5.6E FL ED  
'B6 3C B0 B0 3C 3C B8 4E' = AF-S VR Nikkor 800mm f/5.6E FL ED  
'B6 48 37 56 24 24 1C 02' = Sigma 24-60mm F2.8 EX DG  
'B7 44 60 98 34 3C B9 0E' = AF-S Nikkor 80-400mm f/4.5-5.6G ED VR  
'B8 40 2D 44 2C 34 BA 06' = AF-S Nikkor 18-35mm f/3.5-4.5G ED  
'BB 48 5C 80 24 24 4B 4E' = Sigma 70-200mm F2.8 DG OS HSM | S  
'BC 54 3C 3C 0C 0C 4B 46' = Sigma 28mm F1.4 DG HSM | A  
'BD 54 48 48 0C 0C 4B 46' = Sigma 40mm F1.4 DG HSM | A  
'BE 54 6A 6A 0C 0C 4B 46' = Sigma 105mm F1.4 DG HSM | A  
'BF 3C 1B 1B 30 30 01 04' = Irix 11mm f/4 Firefly  
'BF 4E 26 26 1E 1E 01 04' = Irix 15mm f/2.4 Firefly  
'C1 48 24 37 24 24 4B 46' = Sigma 14-24mm F2.8 DG HSM | A  
'C2 4C 24 24 14 14 4B 06' = Sigma 14mm F1.8 DG HSM | A  
'C3 34 68 98 38 40 4B 4E' = Sigma 100-400mm F5-6.3 DG OS HSM | C  
'C4 4C 73 73 14 14 4B 46' = Sigma 135mm F1.8 DG HSM | A  
'C8 54 44 44 0D 0D DF 46' = Tamron SP 35mm f/1.4 Di USD (F045)  
'C8 54 62 62 0C 0C 4B 06' = Sigma 85mm F1.4 DG HSM | A  
'C8 54 62 62 0C 0C 4B 46' = Sigma 85mm F1.4 DG HSM | A  
'C9 3C 44 76 25 31 DF 4E' = Tamron 35-150mm f/2.8-4 Di VC OSD (A043)  
'C9 48 37 5C 24 24 4B 4E' = Sigma 24-70mm F2.8 DG OS HSM | A  
'CA 3C 1F 37 30 30 4B 46' = Sigma 12-24mm F4 DG HSM | A  
'CA 48 27 3E 24 24 DF 4E' = Tamron SP 15-30mm f/2.8 Di VC USD G2 (A041)  
'CB 3C 2B 44 24 31 DF 46' = Tamron 17-35mm f/2.8-4 Di OSD (A037)  
'CC 44 68 98 34 41 DF 0E' = Tamron 100-400mm f/4.5-6.3 Di VC USD  
'CC 4C 50 68 14 14 4B 06' = Sigma 50-100mm F1.8 DC HSM | A  
'CD 3D 2D 70 2E 3C 4B 0E' = Sigma 18-125mm F3.8-5.6 DC OS HSM  
'CE 00 37 5C 25 25 DF 4E' = Tamron SP 24-70mm f/2.8 Di VC USD G2 (A032)  
'CE 34 76 A0 38 40 4B 0E' = Sigma 150-500mm F5-6.3 DG OS APO HSM  
'CE 47 37 5C 25 25 DF 4E' = Tamron SP 24-70mm f/2.8 Di VC USD G2 (A032)  
'CF 38 6E 98 34 3C 4B 0E' = Sigma APO 120-400mm F4.5-5.6 DG OS HSM  
'CF 47 5C 8E 31 3D DF 0E' = Tamron SP 70-300mm f/4-5.6 Di VC USD (A030)  
'D2 3C 8E B0 3C 3C 4B 02' = Sigma APO 300-800mm F5.6 EX DG HSM  
'DB 40 11 11 2C 2C 1C 06' = Sigma 8mm F3.5 EX DG Circular Fisheye  
'DC 48 19 19 24 24 4B 06' = Sigma 10mm F2.8 EX DC HSM Fisheye  
'DE 54 50 50 0C 0C 4B 06' = Sigma 50mm F1.4 EX DG HSM  
'E0 3C 5C 8E 30 3C 4B 06' = Sigma 70-300mm F4-5.6 APO DG Macro HSM  
'E0 40 2D 98 2C 41 DF 4E' = Tamron 18-400mm f/3.5-6.3 Di II VC HLD (B028)  
'E1 40 19 36 2C 35 DF 0E' = Tamron 10-24mm f/3.5-4.5 Di II VC HLD (B023)  
'E1 40 19 36 2C 35 DF 4E' = Tamron 10-24mm f/3.5-4.5 Di II VC HLD (B023)  
'E1 58 37 37 14 14 1C 02' = Sigma 24mm F1.8 EX DG Aspherical Macro  
'E2 47 5C 80 24 24 DF 4E' = Tamron SP 70-200mm f/2.8 Di VC USD G2 (A025)  
'E3 40 76 A6 38 40 DF 0E' = Tamron SP 150-600mm f/5-6.3 Di VC USD G2 (A022)  
'E3 40 76 A6 38 40 DF 4E' = Tamron SP 150-600mm f/5-6.3 Di VC USD G2  
'E3 54 50 50 24 24 35 02' = Sigma Macro 50mm F2.8 EX DG  
'E4 54 64 64 24 24 DF 0E' = Tamron SP 90mm f/2.8 Di VC USD Macro 1:1 (F017)  
'E5 4C 62 62 14 14 C9 4E' = Tamron SP 85mm f/1.8 Di VC USD (F016)  
'E5 54 6A 6A 24 24 35 02' = Sigma Macro 105mm F2.8 EX DG  
'E6 40 2D 80 2C 40 DF 0E' = Tamron 18-200mm f/3.5-6.3 Di II VC (B018)  
'E6 41 3C 8E 2C 40 1C 02' = Sigma 28-300mm F3.5-6.3 DG Macro  
'E7 4C 4C 4C 14 14 DF 0E' = Tamron SP 45mm f/1.8 Di VC USD (F013)  
'E8 4C 44 44 14 14 DF 0E' = Tamron SP 35mm f/1.8 Di VC USD (F012)  
'E9 48 27 3E 24 24 DF 0E' = Tamron SP 15-30mm f/2.8 Di VC USD (A012)  
'E9 54 37 5C 24 24 1C 02' = Sigma 24-70mm F2.8 EX DG Macro  
'EA 40 29 8E 2C 40 DF 0E' = Tamron 16-300mm f/3.5-6.3 Di II VC PZD (B016)  
'EA 48 27 27 24 24 1C 02' = Sigma 15mm F2.8 EX Diagonal Fisheye  
'EB 40 76 A6 38 40 DF 0E' = Tamron SP AF 150-600mm f/5-6.3 VC USD (A011)  
'EC 3E 3C 8E 2C 40 DF 0E' = Tamron 28-300mm f/3.5-6.3 Di VC PZD A010  
'ED 40 2D 80 2C 40 4B 0E' = Sigma 18-200mm F3.5-6.3 DC OS HSM  
'EE 48 5C 80 24 24 4B 06' = Sigma 70-200mm F2.8 EX APO DG Macro HSM II  
'F0 38 1F 37 34 3C 4B 06' = Sigma 12-24mm F4.5-5.6 EX DG Aspherical HSM

'F0 3F 2D 8A 2C 40 DF 0E'	= Tamron AF 18-270mm f/3.5-6.3 Di II VC PZD (B008)
'F1 44 A0 A0 34 34 4B 02'	= Sigma APO 500mm F4.5 EX DG HSM
'F1 47 5C 8E 30 3C DF 0E'	= Tamron SP 70-300mm f/4-5.6 Di VC USD (A005)
'F3 48 68 8E 30 30 4B 02'	= Sigma APO 100-300mm F4 EX IF HSM
'F3 54 2B 50 24 24 84 0E'	= Tamron SP AF 17-50mm f/2.8 XR Di II VC LD Aspherical (IF) (B005)
'F4 4C 7C 2C 2C 4B 02'	= Sigma APO Macro 180mm F3.5 EX DG HSM
'F4 54 56 56 18 18 84 06'	= Tamron SP AF 60mm f/2.0 Di II Macro 1:1 (G005)
'F5 40 2C 8A 2C 40 40 0E'	= Tamron AF 18-270mm f/3.5-6.3 Di II VC LD Aspherical (IF) Macro (B003)
'F5 48 76 76 24 24 4B 06'	= Sigma APO Macro 150mm F2.8 EX DG HSM
'F6 3F 18 37 2C 34 84 06'	= Tamron SP AF 10-24mm f/3.5-4.5 Di II LD Aspherical (IF) (B001)
'F6 3F 18 37 2C 34 DF 06'	= Tamron SP AF 10-24mm f/3.5-4.5 Di II LD Aspherical (IF) (B001)
'F6 48 2D 50 24 24 4B 06'	= Sigma 18-50mm F2.8 EX DC Macro
'F7 53 5C 80 24 24 40 06'	= Tamron SP AF 70-200mm f/2.8 Di LD (IF) Macro (A001)
'F7 53 5C 80 24 24 84 06'	= Tamron SP AF 70-200mm f/2.8 Di LD (IF) Macro (A001)
'F8 54 3E 3E 0C 0C 4B 06'	= Sigma 30mm F1.4 EX DC HSM
'F8 54 64 64 24 24 DF 06'	= Tamron SP AF 90mm f/2.8 Di Macro 1:1 (272NII)
'F8 55 64 64 24 24 84 06'	= Tamron SP AF 90mm f/2.8 Di Macro 1:1 (272NII)
'F9 3C 19 31 30 3C 4B 06'	= Sigma 10-20mm F4-5.6 EX DC HSM
'F9 40 3C 8E 2C 40 40 0E'	= Tamron AF 28-300mm f/3.5-6.3 XR Di VC LD Aspherical (IF) Macro (A20)
'FA 54 3C 5E 24 24 84 06'	= Tamron SP AF 28-75mm f/2.8 XR Di LD Aspherical (IF) Macro (A09NII)
'FA 54 3C 5E 24 24 DF 06'	= Tamron SP AF 28-75mm f/2.8 XR Di LD Aspherical (IF) Macro (A09NII)
'FA 54 6E 8E 24 24 4B 02'	= Sigma APO 120-300mm F2.8 EX DG HSM
'FB 54 2B 50 24 24 84 06'	= Tamron SP AF 17-50mm f/2.8 XR Di II LD Aspherical (IF) (A16NII)
'FB 54 8E 8E 24 24 4B 02'	= Sigma APO 300mm F2.8 EX DG HSM
'FC 40 2D 80 2C 40 DF 06'	= Tamron AF 18-200mm f/3.5-6.3 XR Di II LD Aspherical (IF) Macro (A14NII)
'FD 00 44 44 18 18 DF 00'	= Voigtlander APO-Lanthar 35mm F2
'FD 00 48 48 07 07 DF 00'	= Voigtlander Nokton 40mm F1.2 Aspherical
'FD 00 50 50 18 18 DF 00'	= Voigtlander APO-Lanthar 50mm F2 Aspherical
'FD 00 59 59 18 18 DF 00'	= Voigtlander Macro APO-Lanthar 65mm F2
'FD 47 50 76 24 24 4B 06'	= Sigma 50-150mm F2.8 EX APO DC HSM II
'FE 47 00 00 24 24 4B 06'	= Sigma 4.5mm F2.8 EX DC HSM Circular Fisheye
'FE 48 37 5C 24 24 DF 0E'	= Tamron SP 24-70mm f/2.8 Di VC USD (A007)
'FE 53 5C 80 24 24 84 06'	= Tamron SP AF 70-200mm f/2.8 Di LD (IF) Macro (A001)
'FE 54 5C 80 24 24 DF 0E'	= Tamron SP 70-200mm f/2.8 Di VC USD (A009)
'FE 54 64 64 24 24 DF 0E'	= Tamron SP 90mm f/2.8 Di VC USD Macro 1:1 (F004)
'FF 40 2D 80 2C 40 4B 06'	= Sigma 18-200mm F3.5-6.3 DC

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Sep 6, 2025*

[--> ExifTool Tag Names](#)

# NikonCapture Tags

This information is written by the Nikon Capture software in tag 0x0e01 of the maker notes of NEF images.

Tag ID	Tag Name	Writable	Values / Notes
0x8ae85e	LCHEditor	int8u	0 = Off 1 = On
0x83a1a25	HistogramXML	undef	
0xc89224b	ColorAberrationControl	int8u	0 = Off 1 = On
0x116fea21	HighlightData	-	--> <a href="#">NikonCapture HighlightData Tags</a>
0x2175eb78	D-LightingHQ	int8u	0 = Off 1 = On
0x2fc08431	StraightenAngle	double	
0x374233e0	CropData	-	--> <a href="#">NikonCapture CropData Tags</a>
0x39c456ac	PictureCtrl	-	--> <a href="#">NikonCapture PictureCtrl Tags</a>
0x3cfc73c6	RedEyeData	-	--> <a href="#">NikonCapture RedEyeData Tags</a>
0x3d136244	EditVersionName	string	
0x416391c6	QuickFix	int8u	0 = Off 1 = On
0x56a54260	Exposure	-	--> <a href="#">NikonCapture Exposure Tags</a>
0x5f0e7d23	ColorBooster	int8u	0 = Off 1 = On
0x6a6e36b6	D-LightingHQSelected	int8u	0 = No 1 = Yes
0x753dcbc0	NoiseReduction	int8u	0 = Off 1 = On
0x76a43200	UnsharpMask	int8u	0 = Off 1 = On
0x76a43201	Curves	int8u	0 = Off 1 = On
0x76a43202	ColorBalanceAdj	int8u	0 = Off 1 = On
0x76a43203	AdvancedRaw	int8u	0 = Off 1 = On
0x76a43204	WhiteBalanceAdj	int8u	0 = Off 1 = On
0x76a43205	VignetteControl	int8u	0 = Off 1 = On
0x76a43206	FlipHorizontal	int8u	0 = No 1 = Yes
0x76a43207	Rotation	int16u	
0x84589434	BrightnessData	-	--> <a href="#">NikonCapture Brightness Tags</a>
0x890ff591	D-LightingHQData	-	--> <a href="#">NikonCapture DLightingHQ Tags</a>
0x926f13e0	NoiseReductionData	-	--> <a href="#">NikonCapture NoiseReduction Tags</a>
0x9ef5f6e0	IPTCData	-	--> <a href="#">IPTC Tags</a>
0xab5eca5e	PhotoEffects	int8u	0 = Off 1 = On
0xac6bd5c0	VignetteControllIntensity	int16s	
0xb0384e1e	PhotoEffectsData	-	--> <a href="#">NikonCapture PhotoEffects Tags</a>
0xb999a36f	ColorBoostData	-	--> <a href="#">NikonCapture ColorBoost Tags</a>
0xbf3c6c20	WBAdjData	-	--> <a href="#">NikonCapture WBAdjData Tags</a>
0xce5554aa	D-LightingHS	int8u	0 = Off 1 = On
0xe2173c47	PictureControl	int8u	0 = Off 1 = On
0xe37b4337	D-LightingHSData	-	--> <a href="#">NikonCapture DLightingHS Tags</a>
0xe42b5161	UnsharpData	-	--> <a href="#">NikonCapture UnsharpData Tags</a>
0xe9651831	PhotoEffectHistoryXML	undef	
0xfe28a44f	AutoRedEye	int8u	0 = Off 1 = On

## NikonCapture HighlightData Tags

Index1	Tag Name	Writable	Values / Notes
0	ShadowProtection	int8s	
1	SaturationAdj	int8s	
6	HighlightProtection	int8s	

## NikonCapture CropData Tags

Index1	Tag Name	Writable	Values / Notes
30	CropLeft	double	
38	CropTop	double	
46	CropRight	double	
54	CropBottom	double	
142	CropOutputWidthInches	double	
150	CropOutputHeightInches	double	
158	CropScaledResolution	double	
174	CropSourceResolution	double	
182	CropOutputResolution	double	
190	CropOutputScale	double	
198	CropOutputWidth	double	
206	CropOutputHeight	double	
214	CropOutputPixels	double	

## NikonCapture PictureCtrl Tags

Index1	Tag Name	Writable	Values / Notes
0	PictureControlActive	int8u	0 = Off 1 = On
19	PictureControlMode	string[16]	
42	QuickAdjust	int8u	
43	SharpeningAdj	int8u	
44	ContrastAdj	int8u	
45	BrightnessAdj	int8u	
46	SaturationAdj	int8u	
47	HueAdj	int8u	

## NikonCapture RedEyeData Tags

Index1	Tag Name	Writable	Values / Notes
0	RedEyeCorrection	int8u	0 = Off 1 = Automatic 2 = Click on Eyes

## NikonCapture Exposure Tags

Index1	Tag Name	Writable	Values / Notes
0	ExposureAdj	int16s	
18	ExposureAdj2	double	
36	ActiveD-Lighting	int8u	0 = Off 1 = On
37	ActiveD-LightingMode	int8u	0 = Unchanged 1 = Off 4 = High 6 = Extra High

## NikonCapture Brightness Tags

Index1	Tag Name	Writable	Values / Notes
0	BrightnessAdj	double	
8	EnhanceDarkTones	int8u	0 = Off 1 = On

## NikonCapture DLightingHQ Tags

Index4	Tag Name	Writable	Values / Notes
0	D-LightingHQShadow	int32u	
1	D-LightingHQHighlight	int32u	
2	D-LightingHQColorBoost	int32u	

## NikonCapture NoiseReduction Tags

Index1	Tag Name	Writable	Values / Notes
4	EdgeNoiseReduction	int8u	0 = Off 1 = On
5	ColorMoireReductionMode	int8u	0 = Off 1 = Low 2 = Medium 3 = High
9	NoiseReductionIntensity	int32u	
13	NoiseReductionSharpness	int32u	
17	NoiseReductionMethod	int16u	0 = Faster 1 = Better Quality 2 = Better Quality 2013
21	ColorMoireReduction	int8u	0 = Off 1 = On
23	NoiseReduction	int8u	0 = Off 1 = On
24	ColorNoiseReductionIntensity	int32u	
28	ColorNoiseReductionSharpness	int32u	

## NikonCapture PhotoEffects Tags

Index1	Tag Name	Writable	Values / Notes
0	PhotoEffectsType	int8u	0 = None 1 = B&W 2 = Sepia 3 = Tinted
4	PhotoEffectsRed	int16s	
6	PhotoEffectsGreen	int16s	
8	PhotoEffectsBlue	int16s	

## NikonCapture ColorBoost Tags

Index1	Tag Name	Writable	Values / Notes
0	ColorBoostType	int8u	0 = Nature 1 = People
1	ColorBoostLevel	int32u	

## NikonCapture WBAdjData Tags

Index1	Tag Name	Writable	Values / Notes
0	WBAdjRedBalance	double	

8	WBAdjBlueBalance	double	
16	WBAdjMode	int8u	1 = Use Gray Point 2 = Recorded Value 3 = Use Temperature 4 = Calculate Automatically 5 = Auto2 6 = Underwater 7 = Auto1
20	WBAdjLighting	int16u	0x0 = None 0x100 = Incandescent 0x200 = Daylight (direct sunlight) 0x201 = Daylight (shade) 0x202 = Daylight (cloudy) 0x300 = Standard Fluorescent (warm white) 0x301 = Standard Fluorescent (3700K) 0x302 = Standard Fluorescent (cool white) 0x303 = Standard Fluorescent (5000K) 0x304 = Standard Fluorescent (daylight) 0x305 = Standard Fluorescent (high temperature mercury vapor) 0x400 = High Color Rendering Fluorescent (warm white) 0x401 = High Color Rendering Fluorescent (3700K) 0x402 = High Color Rendering Fluorescent (cool white) 0x403 = High Color Rendering Fluorescent (5000K) 0x404 = High Color Rendering Fluorescent (daylight) 0x500 = Flash 0x501 = Flash (FL-G1 filter) 0x502 = Flash (FL-G2 filter) 0x503 = Flash (TN-A1 filter) 0x504 = Flash (TN-A2 filter) 0x600 = Sodium Vapor Lamps
24	WBAdjTemperature	int16u	
37	WBAdjTint	int32s	

## NikonCapture DLightingHS Tags

Index4	Tag Name	Writable	Values / Notes
0	D-LightingHSAdjustment	int32u	
1	D-LightingHSColorBoost	int32u	

## NikonCapture UnsharpData Tags

Index1	Tag Name	Writable	Values / Notes
0	UnsharpCount	int8u	
19	Unsharp1Color	int16u	0 = RGB 4 = Yellow 1 = Red 5 = Magenta 2 = Green 6 = Cyan 3 = Blue
23	Unsharp1Intensity	int16u	
25	Unsharp1HaloWidth	int16u	
27	Unsharp1Threshold	int8u	
46	Unsharp2Color	int16u	0 = RGB 4 = Yellow 1 = Red 5 = Magenta 2 = Green 6 = Cyan 3 = Blue
50	Unsharp2Intensity	int16u	
52	Unsharp2HaloWidth	int16u	
54	Unsharp2Threshold	int8u	
73	Unsharp3Color	int16u	0 = RGB 4 = Yellow 1 = Red 5 = Magenta 2 = Green 6 = Cyan 3 = Blue
77	Unsharp3Intensity	int16u	
79	Unsharp3HaloWidth	int16u	
81	Unsharp3Threshold	int8u	

100	Unsharp4Color	int16u	0 = RGB 1 = Red 2 = Green 3 = Blue	4 = Yellow 5 = Magenta 6 = Cyan
104	Unsharp4Intensity	int16u		
106	Unsharp4HaloWidth	int16u		
108	Unsharp4Threshold	int8u		

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised May 2, 2014*

[--> ExifTool Tag Names](#)

# NikonCustom Tags

Unfortunately, the NikonCustom settings are stored in a binary data block which changes from model to model. This means that significant effort must be spent in decoding these for each model, usually requiring hundreds of test images from a dedicated Nikon owner. For this reason, the NikonCustom settings have not been decoded for all models. The tables below list the custom settings for the currently supported models.

## NikonCustom Settings D40 Tags

Custom settings for the Nikon D40.

Index1	Tag Name	Writable	Values / Notes
0.1	Beep	int8u	[val >> 7 & 0x1] 0 = On 1 = Off
0.2	AFAssist	int8u	[val >> 6 & 0x1] 0 = On 1 = Off
0.3	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
0.4	ImageReview	int8u	[val >> 4 & 0x1] 0 = On 1 = Off
1.1	AutoISO	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
1.2	AutoISOMax	int8u	[val >> 4 & 0x3] 1 = 400 2 = 800 3 = 1600
1.3	AutoISOMinShutterSpeed	int8u	[val & 0x7] 0 = 1/125 s 4 = 1/8 s 1 = 1/60 s 5 = 1/4 s 2 = 1/30 s 6 = 1/2 s 3 = 1/15 s 7 = 1 s
2.1	ImageReviewTime	int8u	[val & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 10 min
3.1	MonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 10 min
3.2	MeteringTime	int8u	[val >> 2 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 30 min
3.3	SelfTimerTime	int8u	[val & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
3.4	RemoteOnDuration	int8u	[val >> 6 & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 15 min
4.1	AELockButton	int8u	[val >> 1 & 0x7] 0 = AE/AF Lock 1 = AE Lock Only 2 = AF Lock Only 3 = AE Lock (hold) 4 = AF-ON

	4.2 AE Lock	int8u	[val & 0x1] 0 = Off 1 = On
5.1	ShootingModeSetting	int8u	[val >> 4 & 0x7] 0 = Single Frame 1 = Continuous 2 = Self-timer 3 = Delayed Remote 4 = Quick-response Remote
5.2	TimerFunctionButton	int8u	[val & 0x7] 0 = Shooting Mode 1 = Image Quality/Size 2 = ISO 3 = White Balance 4 = Self-timer
6.1	Metering	int8u	[val & 0x3] 0 = Matrix 1 = Center-weighted 2 = Spot
8.1	InternalFlash	int8u	[val >> 4 & 0x1] 0 = TTL 1 = Manual
8.2	ManualFlashOutput	int8u	[val & 0x7]
9	FlashLevel	int8s	
10.1	FocusModeSetting	int8u	[val >> 6 & 0x3] 0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A
11.1	AFAreaModeSetting	int8u	[val >> 4 & 0x3] 0 = Single Area 1 = Dynamic Area 2 = Closest Subject

## NikonCustom SettingsD80 Tags

Custom settings for the Nikon D80.

Index1	Tag Name	Writable	Values / Notes
0.1	Beep	int8u	[val >> 7 & 0x1] 0 = On 1 = Off
0.2	AFAssist	int8u	[val >> 6 & 0x1] 0 = On 1 = Off
0.3	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
0.4	ImageReview	int8u	[val >> 4 & 0x1] 0 = On 1 = Off
0.5	Illumination	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
0.6	MainDialExposureComp	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
0.7	EVStepSize	int8u	[val & 0x1] 0 = 1/3 EV 1 = 1/2 EV
1.1	AutoISO	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
1.2	AutoISOMax	int8u	[val >> 4 & 0x3] 0 = 200 1 = 400 2 = 800 3 = 1600
1.3	AutoISOMinShutterSpeed	int8u	[val & 0xf] 0 = 1/125 s 6 = 1/15 s 1 = 1/100 s 7 = 1/8 s

			2 = 1/80 s    8 = 1/4 s 3 = 1/60 s    9 = 1/2 s 4 = 1/40 s    10 = 1 s 5 = 1/30 s
2.1	AutoBracketSet	int8u	[val >> 6 & 0x3] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing
2.2	AutoBracketOrder	int8u	[val >> 5 & 0x1] 0 = 0,-,+ 1 = -,0,+
3.1	MonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 5 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
3.2	MeteringTime	int8u	[val >> 2 & 0x7] 0 = 4 s    3 = 16 s 1 = 6 s    4 = 30 s 2 = 8 s    5 = 30 min
3.3	SelfTimerTime	int8u	[val & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
4.1	AELockButton	int8u	[val >> 1 & 0xf] 0 = AE/AF Lock 1 = AE Lock Only 2 = AF Lock Only 3 = AE Lock (hold) 4 = AF-ON 5 = FV Lock 6 = Focus Area Selection 7 = AE-L/AF-L/AF Area 8 = AE-L/AF Area 9 = AF-L/AF Area 10 = AF-ON/AF Area
4.2	AELock	int8u	[val & 0x1] 0 = Off 1 = On
4.3	RemoteOnDuration	int8u	[val >> 6 & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 15 min
5.1	CommandDials	int8u	[val >> 7 & 0x1] 0 = Standard (Main Shutter, Sub Aperture) 1 = Reversed (Main Aperture, Sub Shutter)
5.2	FunctionButton	int8u	[val >> 3 & 0xf] 0 = ISO Display    5 = Flash Off 1 = Framing Grid    6 = Matrix Metering 2 = AF-area Mode    7 = Center-weighted 3 = Center AF Area    8 = Spot Metering 4 = FV Lock
6.1	GridDisplay	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
6.2	ViewfinderWarning	int8u	[val >> 6 & 0x1] 0 = On 1 = Off
6.3	CenterWeightedAreaSize	int8u	[val >> 2 & 0x3] 0 = 6 mm 1 = 8 mm 2 = 10 mm
6.4	ExposureDelayMode	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
6.5	MB-D80Batteries	int8u	[val & 0x3] 0 = LR6 (AA Alkaline) 1 = HR6 (AA Ni-MH) 2 = FR6 (AA Lithium) 3 = ZR6 (AA Ni-Mg)

7.1 FlashWarning	int8u	[val >> 7 & 0x1] 0 = On 1 = Off
7.2 FlashShutterSpeed	int8u	[val >> 3 & 0xf]
7.3 AutoFP	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
7.4 ModelingFlash	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
8.1 InternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
8.2 ManualFlashOutput	int8u	[val & 0x7]
9.1 RepeatingFlashOutput	int8u	[val >> 4 & 0x7]
9.2 RepeatingFlashCount	int8u	[val & 0xf]
10.1 RepeatingFlashRate	int8u	[val >> 4 & 0xf]
10.2 CommanderChannel	int8u	[val & 0x3]
11.1 CommanderInternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Off
11.2 CommanderGroupAMode	int8u	[val >> 4 & 0x3] 0 = TTL 1 = Auto Aperture 2 = Manual 3 = Off
11.3 CommanderGroupBMode	int8u	[val >> 2 & 0x3] 0 = TTL 1 = Auto Aperture 2 = Manual 3 = Off
12.1 CommanderInternalTTLComp	int8u	[val & 0x1f]
12.2 CommanderInternalManualOutput	int8u	[val >> 5 & 0x7]
13.1 CommanderGroupA_TTL-AAComp	int8u	[val & 0x1f]
13.2 CommanderGroupAManualOutput	int8u	[val >> 5 & 0x7]
14.1 CommanderGroupB_TTL-AAComp	int8u	[val & 0x1f]
14.2 CommanderGroupBManualOutput	int8u	[val >> 5 & 0x7]
15.1 CenterAFArea	int8u	[val >> 7 & 0x1] 0 = Normal Zone 1 = Wide Zone
15.2 FocusAreaSelection	int8u	[val >> 2 & 0x1] 0 = No Wrap 1 = Wrap
15.3 AFAreallumination	int8u	[val & 0x3] 0 = Auto 1 = Off 2 = On
16.1 AFAreaModeSetting	int8u	[val >> 6 & 0x3] 0 = Single Area 1 = Dynamic Area 2 = Auto-area

## NikonCustom SettingsD90 Tags

Custom settings for the D90.

Index1	Tag Name	Writable	Values / Notes
0.1	LightSwitch	int8u	[val >> 3 & 0x1] 0 = LCD Backlight 1 = LCD Backlight and Shooting Information
2.1	AFAreaModeSetting	int8u	[val >> 5 & 0x3] 0 = Single Area 1 = Dynamic Area

			2 = Auto-area 3 = 3D-tracking (11 points)
2.2	CenterFocusPoint	int8u	[val >> 4 & 0x1] 0 = Normal Zone 1 = Wide Zone
2.3	AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
2.4	AFPointIllumination	int8u	[val >> 1 & 0x3] 0 = Auto 1 = On 2 = Off
2.5	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
3.1	AELockForMB-D80	int8u	[val >> 2 & 0x7] 0 = AE Lock Only 1 = AF Lock Only 2 = AE Lock (hold) 3 = AF-On 4 = FV Lock 5 = Focus Point Selection 7 = AE/AF Lock
3.2	MB-D80BatteryType	int8u	[val & 0x3] 0 = LR6 (AA alkaline) 1 = HR6 (AA Ni-MH) 2 = FR6 (AA lithium) 3 = ZR6 (AA Ni-Mn)
4.1	Beep	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
4.2	GridDisplay	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
4.3	ISODisplay	int8u	[val >> 2 & 0x3] 0 = Show ISO/Easy ISO 1 = Show ISO Sensitivity 3 = Show Frame Count
4.4	ViewfinderWarning	int8u	[val & 0x1] 0 = On 1 = Off
4.5	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
5.1	ScreenTips	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
5.2	FileNumberSequence	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
5.3	ShootingInfoDisplay	int8u	[val >> 6 & 0x3] 0 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark)
5.4	LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
6.1	EasyExposureComp	int8u	[val & 0x1] 0 = Off 1 = On
6.2	ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
7.1	ExposureControlStepSize	int8u	[val >> 6 & 0x1] 0 = 1/3 EV 1 = 1/2 EV
8.1	CenterWeightedAreaSize	int8u	[val >> 5 & 0x3] 0 = 6 mm 1 = 8 mm 2 = 10 mm
8.2	FineTuneOptMatrixMetering	int8u	[val & 0xf]
9.1	FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]

9.2	FineTuneOptSpotMetering	int8u	[val & 0x1]
11.1	CLModeShootingSpeed	int8u	[val & 0x7]
11.2	ExposureDelayMode	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
13.1	AutoBracketSet	int8u	[val >> 5 & 0x7] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing 4 = Active D-Lighting
13.2	AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+
14.1	FuncButton	int8u	[val >> 3 & 0xf] 1 = Framing Grid 2 = AF-area Mode 3 = Center Focus Point 4 = FV Lock 5 = Flash Off 6 = Matrix Metering 7 = Center-weighted Metering 8 = Spot Metering 9 = My Menu Top 10 = + NEF (RAW)
16.1	OKButton	int8u	[val >> 3 & 0x3] 0 = Not Used 1 = Select Center Focus Point 2 = Highlight Active Focus Point 3 = Not Used
17.1	AELockButton	int8u	[val >> 3 & 0x7] 0 = AE/AF Lock    3 = AE Lock (hold) 1 = AE Lock Only    4 = AF-ON 2 = AF Lock Only    5 = FV Lock
18.1	CommandDialsReverseRotation	int8u	[val >> 7 & 0x1] 0 = No 1 = Yes
18.2	ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
19.1	MeteringTime	int8u	[val >> 4 & 0xf] 0 = 4 s    5 = 1 min 1 = 6 s    6 = 5 min 2 = 8 s    7 = 10 min 3 = 16 s    8 = 30 min 4 = 30 s
19.2	RemoteOnDuration	int8u	[val & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 15 min
20.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
20.2	SelfTimerShotCount	int8u	[val >> 1 & 0xf]
21.1	PlaybackMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
21.2	ImageReviewTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
22.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
22.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7]

0 = 4 s    3 = 1 min  
 1 = 10 s    4 = 5 min  
 2 = 20 s    5 = 10 min

23.1	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s    6 = 1 s 1 = 1/30 s    7 = 2 s 2 = 1/15 s    8 = 4 s 3 = 1/8 s    9 = 8 s 4 = 1/4 s    10 = 15 s 5 = 1/2 s    11 = 30 s
24.1	InternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
24.2	ManualFlashOutput	int8u	[val & 0x1f]
25.1	RepeatingFlashOutput	int8u	[val >> 4 & 0x7]
25.2	RepeatingFlashCount	int8u	[val & 0xf]
26.1	RepeatingFlashRate	int8u	[val >> 4 & 0xf]
31.1	FlashWarning	int8u	[val >> 7 & 0x1] 0 = On 1 = Off
31.2	CommanderInternalTTLComp	int8u	[val & 0x1f]
31.3	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off
31.4	AutoFP	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
32.1	CommanderGroupA_TTLComp	int8u	[val & 0x1f]
33.1	CommanderGroupB_TTLComp	int8u	[val & 0x1f]
34.1	LiveViewAF	int8u	[val >> 6 & 0x3] 0 = Face Priority 1 = Wide Area 2 = Normal Area

## NikonCustom SettingsD3 Tags

Custom settings for the D3, D3S, D3X, D300 and D300S.

Index1	Tag Name	Writable	Values / Notes
0.1	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
0.2	CustomSettingsAllDefault	int8u	("No" if any custom setting for this bank was changed from the default) [val >> 7 & 0x1] 0 = Yes 1 = No
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	AFPointSelection	int8u	[val >> 4 & 0x1] 0 = 51 Points 1 = 11 Points
1.4	DynamicAFArea	int8u	[val >> 2 & 0x3] 0 = 9 Points 1 = 21 Points 2 = 51 Points 3 = 51 Points (3D-tracking)
1.5	FocusTrackingLockOn	int8u	(not D3S) [val & 0x3] 0 = Long

			1 = Normal 2 = Short 3 = Off
2.1	AFActivation	int8u	[val >> 7 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
2.2	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
2.3	AFPointIllumination	int8u	(D3) [val >> 5 & 0x3] 0 = On in Continuous Shooting and Manual Focusing 1 = On During Manual Focusing 2 = On in Continuous Shooting Modes 3 = Off (D300) [val >> 1 & 0x3] 0 = Auto 1 = Off 2 = On
2.4	AFPointBrightness	int8u	(D3 only) [val >> 1 & 0x3] 0 = Low 1 = Normal 2 = High 3 = Extra High
2.5	AFAssist	int8u	(D300 only) [val & 0x1] 0 = On 1 = Off
3.1	AFOnButton	int8u	(D3 only) [val & 0x7] 0 = AF On 1 = AE/AF Lock 2 = AE Lock Only 3 = AE Lock (reset on release) 4 = AE Lock (hold) 5 = AF Lock Only
3.2	VerticalAFOnButton	int8u	(D3 only) [val >> 4 & 0x7] 0 = AF On 1 = AE/AF Lock 2 = AE Lock Only 3 = AE Lock (reset on release) 4 = AE Lock (hold) 5 = AF Lock Only 7 = Same as AF On
3.3	AF-OnForMB-D10	int8u	(D300 only) [val >> 4 & 0x7] 0 = AF-On 1 = AE/AF Lock 2 = AE Lock Only 3 = AE Lock (reset on release) 4 = AE Lock (hold) 5 = AF Lock Only 6 = Same as FUNC Button
4.1	FocusTrackingLockOn	int8u	(D3S only) [val & 0x7] 0 = 5 (Long)      3 = 2 1 = 4              4 = 1 (Short) 2 = 3 (Normal)    5 = Off
4.2	AssignBktButton	int8u	(D3S only) [val >> 3 & 0x1] 0 = Auto Bracketing 1 = Multiple Exposure
4.3	MultiSelectorLiveView	int8u	(D3S only) [val >> 6 & 0x3] 0 = Reset 1 = Zoom On/Off 2 = Start Movie Recording 3 = Not Used
4.4	InitialZoomLiveView	int8u	(D3S only) [val >> 4 & 0x3] 0 = Low Magnification

			1 = Medium Magnification 2 = High Magnification
6.1	ISOStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
6.2	ExposureControlStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
6.3	ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
6.4	EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (auto reset)
7.1	CenterWeightedAreaSize	int8u	(D3) [val >> 5 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average (D300) [val >> 5 & 0x7] 0 = 6 mm 1 = 8 mm 2 = 10 mm 3 = 13 mm 4 = Average
7.2	FineTuneOptCenterWeighted	int8u	[val & 0xf]
8.1	FineTuneOptMatrixMetering	int8u	[val >> 4 & 0xf]
8.2	FineTuneOptSpotMetering	int8u	[val & 0xf]
9.1	MultiSelectorShootMode	int8u	[val >> 6 & 0x3] 0 = Select Center Focus Point 1 = Highlight Active Focus Point 2 = Not Used
9.2	MultiSelectorPlaybackMode	int8u	(all models except D3S) [val >> 4 & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off 3 = Choose Folder
9.3	InitialZoomSetting	int8u	(D3) [val >> 2 & 0x3] 0 = High Magnification 1 = Medium Magnification 2 = Low Magnification (D300) [val >> 2 & 0x3] 0 = Low Magnification 1 = Medium Magnification 2 = High Magnification
9.4	MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
10.1	ExposureDelayMode	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
10.2	CLModeShootingSpeed	int8u	[val & 0x7]
10.3	CHModeShootingSpeed	int8u	(D3 only) [val >> 4 & 0x3] 0 = 9 fps 1 = 10 fps 2 = 11 fps
11	MaxContinuousRelease	int8u	
12.1	ReverseIndicators	int8u	[val >> 5 & 0x1] 0 = + 0 - 1 = - 0 +
12.2	FileNumberSequence	int8u	(D3) [val >> 1 & 0x1]

			0 = On 1 = Off (D300) [val >> 3 & 0x1] 0 = On 1 = Off
12.3	RearDisplay	int8u	(D3 only) [val >> 7 & 0x1] 0 = ISO 1 = Exposures Remaining
12.4	ViewfinderDisplay	int8u	(D3 only) [val >> 6 & 0x1] 0 = Frame Count 1 = Exposures Remaining
12.5	BatteryOrder	int8u	(D300 only) [val >> 2 & 0x1] 0 = MB-D10 First 1 = Camera Battery First
12.6	MB-D10Batteries	int8u	(D300 only) [val & 0x3] 0 = LR6 (AA alkaline) 1 = HR6 (AA Ni-MH) 2 = FR6 (AA lithium) 3 = ZR6 (AA Ni-Mn)
12.7	ScreenTips	int8u	[val >> 4 & 0x1] 0 = On 1 = Off
13.1	Beep	int8u	[val >> 6 & 0x3] 0 = High 1 = Low 2 = Off
13.2	ShootingInfoDisplay	int8u	[val >> 4 & 0x3] 0 = Auto 1 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark)
13.3	GridDisplay	int8u	(D300 only) [val >> 1 & 0x1] 0 = Off 1 = On
13.4	ViewfinderWarning	int8u	(D300 only) [val & 0x1] 0 = On 1 = Off
13.5	MultiSelectorPlaybackMode	int8u	(D3S only) [val & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off
14.1	PreviewButton FuncButton	int8u int8u	(D3) [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = Flash Off 9 = Bracketing Burst 10 = Matrix Metering 11 = Center-weighted Metering 12 = Spot Metering 13 = Virtual Horizon 15 = Playback 16 = My Menu Top (D300) [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release)

		<p>6 = AE Lock (hold)      7 = AF Lock Only      9 = Flash Off      10 = Bracketing Burst      11 = Matrix Metering      12 = Center-weighted Metering      13 = Spot Metering      14 = Playback      15 = My Menu Top      16 = + NEF (RAW)</p>
14.2	PreviewButtonPlusDials FuncButtonPlusDials	int8u (D3) int8u [val & 0x7] 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number 5 = Choose Image Area (FX/DX) 6 = Shooting Bank Menu 7 = Dynamic AF Area (D300) [val & 0x7] 0 = None 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number 5 = Auto Bracketing 6 = Dynamic AF Area
15.1	FuncButton PreviewButton	int8u (D3) int8u [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = Flash Off 9 = Bracketing Burst 10 = Matrix Metering 11 = Center-weighted Metering 12 = Spot Metering 13 = Virtual Horizon 15 = Playback 16 = My Menu Top (D300) [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 9 = Flash Off 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top 16 = + NEF (RAW)
15.2	FuncButtonPlusDials PreviewButtonPlusDials	int8u (D3) int8u [val & 0x7] 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number 4 = Focus Point Selection 5 = Choose Image Area (FX/DX) 6 = Shooting Bank Menu 7 = Dynamic AF Area (D300) [val & 0x7] 0 = None 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number

				5 = Auto Bracketing 6 = Dynamic AF Area
16.1	AELockButton	int8u	(D3) [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = Flash Off 9 = Bracketing Burst 10 = Matrix Metering 11 = Center-weighted Metering 12 = Spot Metering 13 = Virtual Horizon 14 = AF On 15 = Playback 16 = My Menu Top (D300) [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF On 9 = Flash Off 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top 16 = + NEF (RAW)	
16.2	AELockButtonPlusDials	int8u	(D3) [val & 0x7] 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number 5 = Choose Image Area (FX/DX) 6 = Shooting Bank Menu 7 = Dynamic AF Area (D300) [val & 0x7] 0 = None 3 = Choose Non-CPU Lens Number 5 = Auto Bracketing 6 = Dynamic AF Area	
17.1	CommandDialsReverseRotation	int8u	[val >> 7 & 0x1] 0 = No 1 = Yes	
17.2	CommandDialsChangeMainSub	int8u	[val >> 6 & 0x1] 0 = Off 1 = On	
17.3	CommandDialsApertureSetting	int8u	[val >> 5 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring	
17.4	CommandDialsMenuAndPlayback	int8u	[val >> 4 & 0x1] 0 = Off 1 = On	
17.5	LCDIllumination	int8u	[val >> 3 & 0x1] 0 = Off 1 = On	
17.6	PhotoInfoPlayback	int8u	[val >> 2 & 0x1] 0 = Info Up-down, Playback Left-right 1 = Info Left-right, Playback Up-down	
17.7	ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On	

17.8 ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes
18.1 SelfTimerTime	int8u	[val >> 3 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
18.2 MonitorOffTime	int8u	[val & 0x7] 0 = 10 s 1 = 20 s 2 = 1 min 3 = 5 min 4 = 10 min
20.1 FlashSyncSpeed	int8u	(D3) [val >> 5 & 0x7] 0 = 1/250 s (auto FP) 4 = 1/125 s 1 = 1/250 s 5 = 1/100 s 2 = 1/200 s 6 = 1/80 s 3 = 1/160 s 7 = 1/60 s  (D300) [val >> 4 & 0xf] 0 = 1/320 s (auto FP) 5 = 1/125 s 1 = 1/250 s (auto FP) 6 = 1/100 s 2 = 1/250 s 7 = 1/80 s 3 = 1/200 s 8 = 1/60 s 4 = 1/160 s
20.2 FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s 6 = 1 s 1 = 1/30 s 7 = 2 s 2 = 1/15 s 8 = 4 s 3 = 1/8 s 9 = 8 s 4 = 1/4 s 10 = 15 s 5 = 1/2 s 11 = 30 s
21.1 AutoBracketSet	int8u	(D3 and D300) [val >> 6 & 0x3] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing (D3S and D300S) [val >> 5 & 0x7] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing 4 = ADL Bracketing
21.2 AutoBracketModeM	int8u	(D3 and D300) [val >> 4 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only (D3S and D300S) [val >> 3 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only
21.3 AutoBracketOrder	int8u	(D3 and D300) [val >> 3 & 0x1] 0 = 0,-,+ 1 = -,0,+ (D3S and D300S) [val >> 2 & 0x1] 0 = 0,-,+ 1 = -,0,+ 2 = 0,+,-
21.4 ModelingFlash	int8u	[val & 0x1] 0 = On 1 = Off
22.1 NoMemoryCard	int8u	[val >> 7 & 0x1] 0 = Release Locked 1 = Enable Release
22.2 MeteringTime	int8u	[val & 0xf]

0 = 4 s	5 = 1 min
1 = 6 s	6 = 5 min
2 = 8 s	7 = 10 min
3 = 16 s	8 = 30 min
4 = 30 s	9 = No Limit

23.1 InternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
25.1 ImageReviewTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
25.2 PlaybackMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
26.1 MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
26.2 ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min

## NikonCustom SettingsD700 Tags

Custom settings for the D700.

Index1	Tag Name	Writable	Values / Notes
0.1	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
0.2	CustomSettingsAllDefault	int8u	("No" if any custom setting for this bank was changed from the default) [val >> 7 & 0x1] 0 = Yes 1 = No
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	AFPointSelection	int8u	[val >> 4 & 0x1] 0 = 51 Points 1 = 11 Points
1.4	DynamicAFArea	int8u	[val >> 2 & 0x3] 0 = 9 Points 1 = 21 Points 2 = 51 Points 3 = 51 Points (3D-tracking)
2.1	AFActivation	int8u	[val >> 7 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
2.2	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
2.3	AFPointIllumination	int8u	[val >> 1 & 0x3] 0 = Auto 1 = Off 2 = On
2.4	FAssist	int8u	[val & 0x1] 0 = On 1 = Off

3.1 FocusTrackingLockOn	int8u	[val & 0x7] 0 = 3 Normal    3 = 2 1 = 4            4 = 1 Short 2 = 5 Long     5 = Off
3.2 AF-OnForMB-D10	int8u	[val >> 4 & 0x7] 0 = AF-On 1 = AE/AF Lock 2 = AE Lock Only 3 = AE Lock (reset on release) 4 = AE Lock (hold) 5 = AF Lock Only 6 = Same as FUNC Button
4.1 ISOStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
4.2 ExposureControlStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
4.3 ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
4.4 EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (auto reset)
5.1 CenterWeightedAreaSize	int8u	[val >> 4 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average
6.1 FineTuneOptMatrixMetering	int8u	[val >> 4 & 0xf]
6.2 FineTuneOptSpotMetering	int8u	[val & 0xf]
7.1 ShutterReleaseButtonAE-L	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
7.2 SelfTimerTime	int8u	[val >> 4 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
7.3 MeteringTime	int8u	[val & 0xf] 0 = 4 s    5 = 1 min 1 = 6 s    6 = 5 min 2 = 8 s    7 = 10 min 3 = 16 s   8 = 30 min 4 = 30 s   9 = No Limit
8.1 PlaybackMonitorOffTime	int8u	[val >> 3 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
8.2 MenuMonitorOffTime	int8u	[val & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
9.1 ShootingInfoMonitorOffTime	int8u	[val >> 3 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
9.2 ImageReviewTime	int8u	[val & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
10.1 Beep	int8u	[val >> 6 & 0x3] 0 = High 1 = Low 2 = Off

	10.2 ShootingInfoDisplay	int8u	[val >> 4 & 0x3] 0 = Auto 1 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark)
	10.3 LCDIllumination	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
10.4	ExposureDelayMode	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
	10.5 GridDisplay	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
11.1	FileNumberSequence	int8u	[val >> 6 & 0x1] 0 = On 1 = Off
11.2	CLModeShootingSpeed	int8u	[val & 0x7]
12	MaxContinuousRelease	int8u	
13.1	ScreenTips	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
13.2	BatteryOrder	int8u	[val >> 2 & 0x1] 0 = MB-D10 First 1 = Camera Battery First
13.3	MB-D10BatteryType	int8u	[val & 0x3] 0 = LR6 (AA alkaline) 1 = HR6 (AA Ni-MH) 2 = FR6 (AA lithium) 3 = ZR6 (AA Ni-Mn)
15.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 0 = 1/320 s (auto FP) 5 = 1/125 s 1 = 1/250 s (auto FP) 6 = 1/100 s 2 = 1/250 s 7 = 1/80 s 3 = 1/200 s 8 = 1/60 s 4 = 1/160 s
15.2	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s 6 = 1 s 1 = 1/30 s 7 = 2 s 2 = 1/15 s 8 = 4 s 3 = 1/8 s 9 = 8 s 4 = 1/4 s 10 = 15 s 5 = 1/2 s 11 = 30 s
16.1	FlashControlBuilt-in	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
16.2	ManualFlashOutput	int8u	[val & 0x1f]
17.1	RepeatingFlashOutput	int8u	[val >> 4 & 0x7]
17.2	RepeatingFlashCount	int8u	[val & 0xf]
18.1	RepeatingFlashRate	int8u	[val >> 4 & 0xf]
18.2	CommanderInternalTTLChannel	int8u	[val & 0x3] 0 = 1 ch 1 = 2 ch 2 = 3 ch 3 = 4 ch
20.1	CommanderInternalTTLCompBuiltin	int8u	[val & 0x1f]
21.1	CommanderInternalTTLCompGroupA	int8u	[val & 0x1f]
22.1	CommanderInternalTTLCompGroupB	int8u	[val & 0x1f]
26.1	AutoBracketSet	int8u	[val >> 6 & 0x3] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing
26.2	AutoBracketModeM	int8u	[val >> 4 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only

26.3 AutoBracketOrder	int8u	[val >> 3 & 0x1] 0 = -,+ 1 = -,0,+
26.4 ModelingFlash	int8u	[val & 0x1] 0 = On 1 = Off
27.1 MultiSelectorShootMode	int8u	[val >> 6 & 0x3] 0 = Select Center Focus Point 1 = Highlight Active Focus Point 2 = Not Used
27.2 MultiSelectorPlaybackMode	int8u	[val >> 4 & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off 3 = Choose Folder
27.3 InitialZoomSetting	int8u	[val >> 2 & 0x3] 0 = Low Magnification 1 = Medium Magnification 2 = High Magnification
27.4 MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
28.1 FuncButton	int8u	[val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 9 = Flash Off 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = My Menu Top 15 = Live View 16 = + NEF (RAW) 17 = Virtual Horizon
29.1 PreviewButton	int8u	[val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-ON 9 = Flash Off 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = My Menu Top 15 = Live View 16 = + NEF (RAW) 17 = Virtual Horizon
30.1 AELOCKButton	int8u	(D300) [val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-ON 9 = Flash Off 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = My Menu Top

15 = Live View  
16 = + NEF (RAW)  
17 = Virtual Horizon

31.1	FuncButtonPlusDials	int8u	[val >> 4 & 0x7] 0 = None 1 = Choose Image Area 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number 5 = Auto bracketing 6 = Dynamic AF Area 7 = Shutter speed & Aperture lock
31.2	PreviewButtonPlusDials	int8u	[val & 0x7] 0 = None 1 = Choose Image Area 2 = One Step Speed/Aperture 3 = Choose Non-CPU Lens Number 5 = Auto bracketing 6 = Dynamic AF Area 7 = Shutter speed & Aperture lock
32.1	AELockButtonPlusDials	int8u	[val >> 4 & 0x7]
33.1	CommandDialsReverseRotation	int8u	[val >> 7 & 0x1] 0 = No 1 = Yes
33.2	CommandDialsChangeMainSub	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
33.3	CommandDialsApertureSetting	int8u	[val >> 5 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring
33.4	CommandDialsMenuAndPlayback	int8u	[val >> 4 & 0x1] 0 = Off 1 = On
33.5	ReverseIndicators	int8u	[val >> 3 & 0x1] 0 = + 0 - 1 = - 0 +
33.6	PhotoInfoPlayback	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
33.7	NoMemoryCard	int8u	[val >> 1 & 0x1] 0 = Release Locked 1 = Enable Release
33.8	ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes

## NikonCustom SettingsD800 Tags

Custom settings for the D800 and D800E.

Index1	Tag Name	Writable	Values / Notes
12.1	AutoBracketingSet	int8u	[val >> 5 & 0x7] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing 4 = Active D-Lighting
12.2	AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+
12.3	AutoBracketingMode	int8u	[val >> 2 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only
22.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 0 = 1/320 s (auto FP) 5 = 1/125 s 1 = 1/250 s (auto FP) 6 = 1/100 s 2 = 1/250 s 7 = 1/80 s 3 = 1/200 s 8 = 1/60 s 4 = 1/160 s
22.2	FlashShutterSpeed	int8u	[val & 0xf]

0 = 1/60 s	6 = 1 s
1 = 1/30 s	7 = 2 s
2 = 1/15 s	8 = 4 s
3 = 1/8 s	9 = 8 s
4 = 1/4 s	10 = 15 s
5 = 1/2 s	11 = 30 s

23.1	FlashControlBuilt-in	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
23.2	ManualFlashOutput	int8u	[val & 0x1f]
24.1	RepeatingFlashOutput	int8u	[val >> 4 & 0x7]
24.2	RepeatingFlashCount	int8u	[val & 0xf]
25.1	RepeatingFlashRate	int8u	[val >> 4 & 0xf]
25.2	CommanderChannel	int8u	[val & 0x3]
27.1	CommanderInternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Off
27.2	CommanderInternalManualOutput	int8u	[val & 0x1f]
28.1	CommanderGroupAMode	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Auto Aperture 2 = Manual 3 = Off
28.2	CommanderGroupAManualOutput	int8u	[val & 0x1f]
29.1	CommanderGroupBMode	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Auto Aperture 2 = Manual 3 = Off
29.2	CommanderGroupBManualOutput	int8u	[val & 0x1f]
30.1	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off
30.2	CommanderInternalTTLComp	int8u	[val & 0x1f]
31.1	CommanderGroupA_TTL-AAComp	int8u	[val & 0x1f]
32.1	CommanderGroupB_TTL-AAComp	int8u	[val & 0x1f]

## NikonCustom SettingsD810 Tags

Custom settings for the D810.

Index1	Tag Name	Writable	Values / Notes
0.1	LightSwitch	int8u	[val >> 3 & 0x1] 0 = LCD Backlight 1 = LCD Backlight and Shooting Information
0.2	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	AFPointSelection	int8u	[val >> 4 & 0x1] 0 = 51 Points 1 = 11 Points
1.4	FocusTrackingLockOn	int8u	[val & 0x7] 0 = Off                    3 = 3 (Normal) 1 = 1 (Short)            4 = 4 2 = 2                    5 = 5 (Long)

2.1 AFActivation	int8u	[val >> 7 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
2.2 FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
2.3 AFPointBrightness	int8u	[val >> 1 & 0x3] 0 = Auto 1 = On 2 = Off
2.4 AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
3.1 BatteryOrder	int8u	[val >> 6 & 0x1] 0 = MB-D12 First 1 = Camera Battery First
3.2 MB-D12BatteryType	int8u	[val & 0x3] 0 = LR6 (AA alkaline) 1 = HR6 (AA Ni-MH) 2 = FR6 (AA lithium)
4.1 Pitch	int8u	[val >> 6 & 0x1] 0 = High 1 = Low
4.2 NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
4.3 ISODisplay	int8u	[val >> 2 & 0x3] 0 = Show ISO/Easy ISO 1 = Show ISO Sensitivity 3 = Show Frame Count
4.4 GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off
5.1 ShootingInfoDisplay	int8u	[val >> 6 & 0x3] 0 = Not Set 1 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark)
5.2 LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
5.3 ElectronicFront-CurtainShutter	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
5.4 ScreenTips	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
5.5 Beep	int8u	[val & 0x3] 0 = Off 1 = Low 2 = Medium 3 = High
6.1 ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
6.2 CommandDialsReverseRotation	int8u	[val >> 3 & 0x3] 0 = No 1 = Shutter Speed & Aperture 2 = Exposure Compensation 3 = Exposure Compensation, Shutter Speed & Aperture
6.3 EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (auto reset)
7.1 ExposureControlStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.2 ISOStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV

7.3 ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
8.1 CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average
8.2 FineTuneOptMatrixMetering	int8u	[val & 0xf]
9.1 FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]
9.2 FineTuneOptSpotMetering	int8u	[val & 0xf]
10.1 MultiSelectorShootMode	int8u	[val >> 6 & 0x3] 0 = Select Center Focus Point (Reset) 1 = Highlight Active Focus Point 2 = Preset Focus Point (Pre) 3 = Not Used (None)
10.2 MultiSelectorPlaybackMode	int8u	[val >> 4 & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off 3 = Choose Folder
10.3 MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
11.1 ExposureDelayMode	int8u	[val >> 6 & 0x3] 0 = Off 1 = 1 s 2 = 2 s 3 = 3 s
11.2 CLModeShootingSpeed	int8u	[val & 0xf]
12.1 MaxContinuousRelease	int8u	
13.1 AutoBracketSet	int8u	[val >> 5 & 0x7] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing 4 = Active D-Lighting
13.2 AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+
13.3 AutoBracketModeM	int8u	[val >> 2 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only
14.1 FuncButton	int8u	[val & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 19 = Grid Display 20 = My Menu 21 = Disable Synchronized Release 22 = Remote Release Only 26 = Flash Disable/Enable 27 = Highlight-weighted Metering
15.1 PreviewButton	int8u	[val & 0x1f]

			<p>0 = None      1 = Preview      2 = FV Lock      3 = AE/AF Lock      4 = AE Lock Only      5 = AE Lock (reset on release)      6 = AE Lock (hold)      7 = AF Lock Only      8 = AF-On      10 = Bracketing Burst      11 = Matrix Metering      12 = Center-weighted Metering      13 = Spot Metering      14 = Playback      15 = My Menu Top Item      16 = +NEF(RAW)      17 = Virtual Horizon      19 = Grid Display      20 = My Menu      21 = Disable Synchronized Release      22 = Remote Release Only      26 = Flash Disable/Enable      27 = Highlight-weighted Metering</p>
16.1 AssignBktButton	int8u	[val & 0x7] 0 = Auto Bracketing 1 = Multiple Exposure 2 = HDR (high dynamic range) 3 = None	
17.1 AELOCKButton	int8u	[val & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 19 = Grid Display 20 = My Menu 21 = Disable Synchronized Release 22 = Remote Release Only 26 = Flash Disable/Enable 27 = Highlight-weighted Metering	
18.1 CommandDialsChangeMainSub	int8u	[val >> 5 & 0x7] 0 = Autofocus Off, Exposure Off 1 = Autofocus Off, Exposure On 2 = Autofocus Off, Exposure On (Mode A) 4 = Autofocus On, Exposure Off 5 = Autofocus On, Exposure On 6 = Autofocus On, Exposure On (Mode A)	
18.2 CommandDialsMenuAndPlayback	int8u	[val >> 3 & 0x3] 0 = On 1 = Off 2 = On (Image Review Excluded)	
18.3 CommandDialsApertureSetting	int8u	[val >> 2 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring	
18.4 ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On	
18.5 ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes	
19.1 StandbyTimer	int8u	[val >> 4 & 0xf] 0 = 4 s    5 = 30 s    8 = 10 min 1 = 6 s    6 = 1 min   9 = 30 min 3 = 10 s   7 = 5 min   10 = No Limit	

20.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
20.2	SelfTimerShotInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
20.3	SelfTimerShotCount	int8u	[val & 0xf]
21.1	ImageReviewMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 2 s 5 = 1 min 1 = 4 s 6 = 5 min 3 = 10 s 7 = 10 min 4 = 20 s
21.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 1 = 5 min 4 = 20 min 2 = 10 min 5 = 30 min 3 = 15 min 6 = No Limit
22.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s 5 = 1 min 2 = 10 s 6 = 5 min 4 = 20 s 7 = 10 min
22.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s 5 = 1 min 2 = 10 s 6 = 5 min 4 = 20 s 7 = 10 min
23.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 0 = 1/320 s (auto FP) 7 = 1/125 s 2 = 1/250 s (auto FP) 8 = 1/100 s 3 = 1/250 s 9 = 1/80 s 5 = 1/200 s 10 = 1/60 s 6 = 1/160 s
23.2	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s 6 = 1 s 1 = 1/30 s 7 = 2 s 2 = 1/15 s 8 = 4 s 3 = 1/8 s 9 = 8 s 4 = 1/4 s 10 = 15 s 5 = 1/2 s 11 = 30 s
24.1	FlashControlBuilt-in	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
31.1	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off
36.1	PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s 3 = 1 min 1 = 10 s 4 = 5 min 2 = 20 s 5 = 10 min
37.1	MultiSelectorLiveView	int8u	[val >> 6 & 0x3] 0 = Reset 1 = Zoom 3 = Not Used
38.1	ShutterSpeedLock	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
38.2	ApertureLock	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
38.3	MovieShutterButton	int8u	[val >> 5 & 0x1] 0 = Take Photo 1 = Record Movies
38.4	FlashExposureCompArea	int8u	[val >> 2 & 0x1] 0 = Entire frame 1 = Background only
40.1	MovieAELockButtonAssignment	int8u	[val & 0xf]

			<p>0 = None      3 = Index Marking      4 = View Photo Shooting Info      5 = AE/AF Lock      6 = AE Lock Only      7 = AE Lock (hold)      8 = AF Lock Only</p>
41.1	MovieFunctionButton	int8u	<p>[val &gt;&gt; 4 &amp; 0x7]      0 = None      1 = Power Aperture (open)      3 = Index Marking      4 = View Photo Shooting Info</p>
41.2	MoviePreviewButton	int8u	<p>[val &amp; 0x7]      0 = None      2 = Power Aperture (open)      3 = Index Marking      4 = View Photo Shooting Info</p>
42.1	FuncButtonPlusDials	int8u	<p>[val &amp; 0xf]      0 = None      1 = Choose Image Area (FX/DX/5:4)      2 = Shutter Speed &amp; Aperture Lock      3 = One Step Speed / Aperture      4 = Choose Non-CPU Lens Number      5 = Active D-Lighting      8 = Exposure Delay Mode</p>
43.1	PreviewButtonPlusDials	int8u	<p>[val &amp; 0xf]      0 = None      1 = Choose Image Area (FX/DX/5:4)      2 = Shutter Speed &amp; Aperture Lock      3 = One Step Speed / Aperture      4 = Choose Non-CPU Lens Number      5 = Active D-Lighting      8 = Exposure Delay Mode</p>
44.1	AELockButtonPlusDials	int8u	<p>[val &amp; 0xf]      0 = None      1 = Choose Image Area (FX/DX/5:4)      2 = Shutter Speed &amp; Aperture Lock      4 = Choose Non-CPU Lens Number      8 = Exposure Delay Mode</p>
45.1	AssignMovieRecordButton	int8u	<p>[val &amp; 0xf]      0 = None      1 = Choose Image Area (FX/DX/5:4)      2 = Shutter Speed &amp; Aperture Lock      9 = White Balance      10 = ISO Sensitivity</p>
46.1	FineTuneOptHighlightWeighted	int8u	[val & 0xf]
47.1	DynamicAreaAFDisplay	int8u	<p>[val &gt;&gt; 7 &amp; 0x1]      0 = Off      1 = On</p>
47.2	AFPointIllumination	int8u	<p>[val &gt;&gt; 6 &amp; 0x1]      0 = Off      1 = On During Manual Focusing</p>
47.3	StoreByOrientation	int8u	<p>[val &gt;&gt; 3 &amp; 0x3]      0 = Off      1 = Focus Point      2 = Focus Point and AF-area mode</p>
47.4	GroupAreaAFIllumination	int8u	<p>[val &gt;&gt; 2 &amp; 0x1]      0 = Squares      1 = Dots</p>
48.1	MatrixMetering	int8u	<p>[val &gt;&gt; 7 &amp; 0x1]      0 = Face Detection On      1 = Face Detection Off</p>
48.2	LiveViewButtonOptions	int8u	<p>[val &gt;&gt; 4 &amp; 0x3]      0 = Enable      2 = Disable</p>
48.3	AFModeRestrictions	int8u	<p>[val &amp; 0x3]      0 = No Restrictions      1 = AF-C      2 = AF-S</p>
49.1	LimitAFAreaModeSelection	int8u	<p>[val &gt;&gt; 1 &amp; 0x3f]      0x0 = No Restrictions      Bit 0 = Auto-area      Bit 1 = Group-area</p>

Bit 2 = 3D-tracking  
 Bit 3 = Dynamic area (51 points)  
 Bit 4 = Dynamic area (21 points)  
 Bit 5 = Dynamic area (9 points)

50.1	AF-OnForMB-D12	int8u	[val & 0x7] 0 = AE/AF Lock      4 = AE Lock (reset) 1 = AE Lock Only    5 = AF-On 2 = AF Lock Only    6 = FV Lock 3 = AE Lock (hold)   7 = Same As Fn Button
51.1	AssignRemoteFnButton	int8u	[val & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 7 = AF Lock Only 8 = AF-On 16 = +NEF(RAW) 25 = Live View 26 = Flash Disable/Enable
52.1	LensFocusFunctionButtons	int8u	[val & 0x3f] 3 = AE/AF Lock 4 = AE Lock Only 7 = AF Lock Only 21 = Disable Synchronized Release 22 = Remote Release Only 24 = Preset focus Point 26 = Flash Disable/Enable 32 = AF-Area Mode: Single-point AF 33 = AF-Area Mode: Dynamic-area AF (9 points) 34 = AF-Area Mode: Dynamic-area AF (21 points) 35 = AF-Area Mode: Dynamic-area AF (51 points) 36 = AF-Area Mode: Group-area AF 37 = AF-Area Mode: Auto area AF

## NikonCustom SettingsD850 Tags

Custom settings for the D850.

Index1	Tag Name	Writable	Values / Notes
0.2	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus 3 = Focus + Release
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	AFPointSelection	int8u	[val >> 4 & 0x1] 0 = 55 Points 1 = 15 Points
1.4	Three-DTrackingFaceDetection	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
1.5	BlockShotAFResponse	int8u	[val & 0x7] 1 = 1 (Quick) 2 = 2 3 = 3 (Normal) 4 = 4 5 = 5 (Delay)
2.1	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
2.2	AFPointBrightness	int8u	[val >> 1 & 0x3] 0 = Auto 1 = On 2 = Off

4.1 ISODisplay	int8u	[val >> 3 & 0x1] 0 = Show ISO Sensitivity 1 = Show Frame Count
4.2 GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off
5.1 LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
5.2 ElectronicFront-CurtainShutter	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
6.1 ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
6.2 CommandDialsReverseRotation	int8u	[val >> 3 & 0x3] 0 = No 1 = Shutter Speed & Aperture 2 = Exposure Compensation 3 = Exposure Compensation, Shutter Speed & Aperture
6.3 EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (Auto Reset)
7.1 ExposureControlStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.2 ISOStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.3 ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
8.1 CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average
8.2 FineTuneOptMatrixMetering	int8u	[val & 0xf]
9.1 FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]
9.2 FineTuneOptSpotMetering	int8u	[val & 0xf]
10.1 MultiSelectorShootMode	int8u	[val >> 5 & 0x7] 0 = Select Center Focus Point (Reset) 2 = Preset Focus Point (Pre) 3 = Highlight Active Focus Point 4 = Not Used (None)
10.2 MultiSelectorPlaybackMode	int8u	[val >> 2 & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off 3 = Choose Folder
10.3 MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
11.1 ExposureDelayMode	int8u	[val >> 5 & 0x7] 0 = Off      3 = 1 s 1 = 0.2 s    4 = 2 s 2 = 0.5 s    5 = 3 s
11.2 CLModeShootingSpeed	int8u	[val & 0xf]
12.1 MaxContinuousRelease	int8u	
13.1 AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+
13.2 AutoBracketModeM	int8u	[val >> 2 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture

			2 = Flash/Aperture 3 = Flash Only
14.1 Func1Button	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 19 = Grid Display 20 = My Menu 22 = Remote Release Only 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only) 56 = AF-Area Mode (Dynamic Area 9 Points) 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points)	
15.1 PreviewButton	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 19 = Grid Display 20 = My Menu 22 = Remote Release Only 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only)	

			56 = AF-Area Mode (Dynamic Area 9 Points) 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points)
16.1 AssignBktButton	int8u	[val & 0x7] 0 = Auto Bracketing 1 = Multiple Exposure 2 = HDR (high dynamic range) 3 = None	
18.1 CommandDialsChangeMainSub	int8u	[val >> 5 & 0x7] 0 = Autofocus Off, Exposure Off 1 = Autofocus Off, Exposure On 2 = Autofocus Off, Exposure On (Mode A) 4 = Autofocus On, Exposure Off 5 = Autofocus On, Exposure On 6 = Autofocus On, Exposure On (Mode A)	
18.2 CommandDialsMenuAndPlayback	int8u	[val >> 3 & 0x3] 0 = On 1 = Off 2 = On (Image Review Excluded)	
18.3 CommandDialsApertureSetting	int8u	[val >> 2 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring	
18.4 ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes	
19.1 StandbyTimer	int8u	[val >> 4 & 0xf] 0 = 4 s    5 = 30 s    8 = 10 min 1 = 6 s    6 = 1 min    9 = 30 min 3 = 10 s    7 = 5 min    10 = No Limit	
20.1 SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s	
20.2 SelfTimerShotInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s	
20.3 SelfTimerShotCount	int8u	[val & 0xf]	
21.1 ImageReviewMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 2 s    5 = 1 min 1 = 4 s    6 = 5 min 3 = 10 s    7 = 10 min 4 = 20 s	
21.2 LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 1 = 5 min    4 = 20 min 2 = 10 min    5 = 30 min 3 = 15 min    6 = No Limit	
22.1 MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    5 = 1 min 2 = 10 s    6 = 5 min 4 = 20 s    7 = 10 min	
22.2 ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    5 = 1 min 2 = 10 s    6 = 5 min 4 = 20 s    7 = 10 min	
23.1 FlashSyncSpeed	int8u	[val >> 4 & 0xf] 2 = 1/250 s (auto FP)    7 = 1/125 s 3 = 1/250 s                8 = 1/100 s 5 = 1/200 s                9 = 1/80 s 6 = 1/160 s                10 = 1/60 s	
23.2 FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s    6 = 1 s 1 = 1/30 s    7 = 2 s 2 = 1/15 s    8 = 4 s 3 = 1/8 s     9 = 8 s 4 = 1/4 s     10 = 15 s 5 = 1/2 s     11 = 30 s	
31.1 ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off	

36.1 PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
37.1 MultiSelectorLiveView	int8u	[val >> 6 & 0x3] 0 = Reset 1 = Zoom 3 = Not Used
38.1 ShutterSpeedLock	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
38.2 ApertureLock	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
38.3 MovieShutterButton	int8u	[val >> 4 & 0x1] 0 = Take Photo 1 = Record Movies
38.4 FlashExposureCompArea	int8u	[val >> 2 & 0x1] 0 = Entire Frame 1 = Background Only
38.5 AutoFlashISOSensitivity	int8u	[val >> 1 & 0x1] 0 = Subject and Background 1 = Subject Only
41.1 MovieFunc1Button	int8u	[val >> 4 & 0xf] 0 = None 2 = Power Aperture (close) 3 = Index Marking 4 = View Photo Shooting Info 11 = Exposure Compensation -
41.2 MoviePreviewButton	int8u	[val & 0xf] 0 = None 1 = Power Aperture (open) 3 = Index Marking 4 = View Photo Shooting Info 10 = Exposure Compensation +
42.1 Func1ButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
43.1 PreviewButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
45.1 AssignMovieRecordButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 7 = Photo Shooting Menu Bank 11 = Exposure Mode
46.1 FineTuneOptHighlightWeighted	int8u	[val & 0xf]
47.1 DynamicAreaAFDisplay	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
47.2 AFPointIllumination	int8u	[val >> 6 & 0x1] 0 = Off 1 = On During Manual Focusing
47.3 StoreByOrientation	int8u	[val >> 3 & 0x3] 0 = Off 1 = Focus Point 2 = Focus Point and AF-area Mode
48.1 MatrixMetering	int8u	[val >> 7 & 0x1] 0 = Face Detection On 1 = Face Detection Off

48.2 LiveViewButtonOptions	int8u	[val >> 4 & 0x3] 0 = Enable 1 = Enable (Standby Timer Active) 2 = Disable
48.3 AFModeRestrictions	int8u	[val & 0x3] 0 = No Restrictions 1 = AF-C 2 = AF-S
49.1 LimitAFAreaModeSelection	int8u	[val >> 1 & 0x3f] 0x0 = No Restrictions Bit 0 = Auto-area Bit 1 = Group-area Bit 2 = 3D-tracking Bit 3 = Dynamic area (153 points) Bit 4 = Dynamic area (72 points) Bit 5 = Dynamic area (25 points)
52.1 LensFocusFunctionButtons	int8u	[val & 0x3f] 3 = AE/AF Lock 4 = AE Lock Only 7 = AF Lock Only 8 = AF-On 24 = Preset Focus Point 26 = Flash Disable/Enable 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only) 56 = AF-Area Mode (Dynamic Area 9 Points) 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points)
66.1 VerticalMultiSelector	int8u	[val & 0xff] 0x0 = Same as Multi-Selector with Info(U/D) & Playback(R/L) 0x8 = Same as Multi-Selector with Info(R/L) & Playback(U/D) 0x80 = Focus Point Selection
67.1 AssignMB-D18FuncButton	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = Reset Focus Point 19 = Grid Display 20 = My Menu 22 = Remote Release Only 23 = Preset Focus Point 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points)

46 = AF-Area Mode + AF-On (Group Area AF)  
 47 = AF-Area Mode + AF-On (Auto Area AF)  
 49 = Sync Release (Master Only)  
 50 = Sync Release (Remote Only)  
 54 = Highlight Active Focus Point  
 56 = AF-Area Mode (Dynamic Area 9 Points)  
 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points)

68.1	AssignMB-D18FuncButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode 10 = ISO Sensitivity 11 = Exposure Mode 12 = Exposure Compensation 13 = Metering Mode
70.1	AF-OnButton	int8u	[val & 0x3f] 0 = None 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 56 = AF-Area Mode (Dynamic Area 9 Points) 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points)
71.1	SubSelector	int8u	[val >> 7 & 0x1] 0 = Focus Point Selection 1 = Same as MultiSelector
72.1	SubSelectorCenter	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = Reset Focus Point 19 = Grid Display 20 = My Menu 22 = Remote Release Only 23 = Preset Focus Point 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points)

44 = AF-Area Mode + AF-On (Dynamic Area 72 Points)  
 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points)  
 46 = AF-Area Mode + AF-On (Group Area AF)  
 47 = AF-Area Mode + AF-On (Auto Area AF)  
 49 = Sync Release (Master Only)  
 50 = Sync Release (Remote Only)  
 54 = Highlight Active Focus Point  
 56 = AF-Area Mode (Dynamic Area 9 Points)  
 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points)

73.1	SubSelectorPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 4 = Choose Non-CPU Lens Number 7 = Photo Shooting Menu Bank
74.1	AssignMovieSubselector	int8u	[val >> 4 & 0xf] 0 = None 3 = Index Marking 4 = View Photo Shooting Info 5 = AE/AF Lock 6 = AE Lock (Only) 7 = AE Lock (Hold) 8 = AF Lock (Only)
75.1	AssignMovieFunc1ButtonPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area
75.2	AssignMoviePreviewButtonPlusDials	int8u	[val & 0x1] 0 = None 1 = Choose Image Area
76.1	AssignMovieSubselectorPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area
77.1	SyncReleaseMode	int8u	[val >> 7 & 0x1] 0 = No Sync 1 = Sync
77.2	ContinuousModeLiveView	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
78.1	Three-DTrackingWatchArea	int8u	[val >> 7 & 0x1] 0 = Wide 1 = Normal
78.2	SubjectMotion	int8u	[val >> 5 & 0x3] 0 = Steady 1 = Middle 2 = Erratic
78.3	AFActivation	int8u	[val >> 3 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
78.4	ShutterReleaseButtonAE-L	int8u	[val & 0x3] 0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
79.1	AssignMB-D18AF-OnButton	int8u	[val & 0x7f] 0 = None 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 153 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 153 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 56 = AF-Area Mode (Dynamic Area 9 Points) 57 = AF-Area Mode + AF-On (Dynamic Area 9 Points) 100 = Same as Camera AF-On Button

80.1 Func2Button		int8u	[val & 0x3f] 0 = None 15 = My Menu Top Item 20 = My Menu 55 = Rating
82.1 AssignMovieFunc2Button		int8u	[val >> 4 & 0x7] 0 = None 3 = Index Marking 4 = View Photo Shooting Info

## NikonCustom SettingsD5000 Tags

Custom settings for the D5000.

Index1	Tag Name	Writable	Values / Notes
0.1	AFAreaModeSetting	int8u	[val >> 5 & 0x3] 0 = Single Area 1 = Dynamic Area 2 = Auto-area 3 = 3D-tracking (11 points)
0.2	AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
2.1	Beep	int8u	[val >> 6 & 0x3] 0 = Off 1 = Low 2 = High
2.2	GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off
2.3	ISODisplay	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
2.4	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
3.1	FileNumberSequence	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
4.1	RangeFinder	int8u	[val >> 4 & 0x1] 0 = Off 1 = On
4.2	DatelImprint	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
4.3	ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
5.1	EVStepSize	int8u	[val >> 6 & 0x1] 0 = 1/3 EV 1 = 1/2 EV
9.1	ExposureDelayMode	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
11.1	AutoBracketSet	int8u	[val >> 6 & 0x3] 0 = Exposure 1 = Active D-Lighting 2 = WB Bracketing
12.1	TimerFunctionButton	int8u	[val >> 3 & 0x7] 0 = Self-timer 1 = Release Mode 2 = Image Quality/Size 3 = ISO 4 = White Balance 5 = Active D-Lighting 6 = + NEF (RAW) 7 = Auto Bracketing
15.1	AELockButton	int8u	[val >> 3 & 0x7] 0 = AE/AF Lock 1 = AE Lock Only 2 = AF Lock Only 3 = AE Lock (hold) 4 = AF-ON
16.1	ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off

			1 = On
16.2	CommandDialsReverseRotation	int8u	[val >> 7 & 0x1] 0 = No 1 = Yes
17.1	MeteringTime	int8u	[val >> 4 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 30 min
17.2	RemoteOnDuration	int8u	[val & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 15 min
18.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
18.2	SelfTimerShotCount	int8u	[val >> 1 & 0xf]
19.1	ImageReviewTime	int8u	[val >> 5 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 10 min
20.1	PlaybackMenusTime	int8u	[val >> 5 & 0x7] 0 = 8 s 1 = 12 s 2 = 20 s 3 = 1 min 4 = 10 min
22.1	InternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual
22.2	ManualFlashOutput	int8u	[val & 0x1f]
32.1	LiveViewAF	int8u	[val >> 5 & 0x3] 0 = Face Priority 1 = Wide Area 2 = Normal Area 3 = Subject Tracking

## NikonCustom SettingsD5100 Tags

Custom settings for the D5100.

Index1	Tag Name	Writable	Values / Notes
0.1	AF-CPrioritySelection	int8u	[val >> 7 & 0x1] 0 = Release 1 = Focus
1.1	AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
3.1	Beep	int8u	[val >> 6 & 0x3] 0 = Off 1 = Low 2 = High
3.2	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
3.3	ISODisplay	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
4.1	FileNumberSequence	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
5.1	RangeFinder	int8u	[val >> 4 & 0x1] 0 = Off 1 = On

	5.2 ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
	6.1 EVStepSize	int8u	[val >> 6 & 0x1] 0 = 1/3 EV 1 = 1/2 EV
10.1	ExposureDelayMode	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
12.1	AutoBracketSet	int8u	[val >> 6 & 0x3] 0 = Exposure 1 = WB Bracketing 2 = Active D-Lighting
13.1	TimerFunctionButton	int8u	[val >> 3 & 0x7] 0 = Self-timer 1 = Release Mode 2 = Image Quality/Size 3 = ISO 4 = White Balance 5 = Active D-Lighting 6 = + NEF (RAW) 7 = Auto Bracketing
16.1	AELockButton	int8u	[val >> 3 & 0x7] 0 = AE/AF Lock 1 = AE Lock Only 2 = AF Lock Only 3 = AE Lock (hold) 4 = AF-ON
17.1	ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
17.2	CommandDialsReverseRotation	int8u	[val >> 7 & 0x1] 0 = No 1 = Yes
18.1	MeteringTime	int8u	[val >> 4 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 30 min
18.2	RemoteOnDuration	int8u	[val & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 20 min
19.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
19.2	SelfTimerShotCount	int8u	[val & 0xf]
20.1	ImageReviewTime	int8u	[val >> 5 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 10 min
20.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 3 min    3 = 15 min 1 = 5 min    4 = 20 min 2 = 10 min    5 = 30 min
21.1	PlaybackMenusTime	int8u	[val >> 5 & 0x7] 0 = 8 s 1 = 12 s 2 = 20 s 3 = 1 min 4 = 10 min
23.1	ManualFlashOutput	int8u	[val & 0x1f]

## NikonCustom SettingsD5200 Tags

Custom settings for the D5200.

Index1	Tag Name	Writable	Values / Notes
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0.1 AF-CPrioritySelection	int8u	[val >> 7 & 0x1] 0 = Release 1 = Focus
0.2 NumberOfFocusPoints	int8u	[val >> 4 & 0x1] 0 = 39 Points 1 = 11 Points
1.1 AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
3.1 Beep	int8u	[val >> 6 & 0x3] 0 = Off 1 = Low 2 = High
3.2 NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
3.3 ISODisplay	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
4.1 FileNumberSequence	int8u	[val >> 3 & 0x1] 0 = On 1 = Off
5.1 RangeFinder	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
5.2 ReverseExposureCompDial	int8u	[val >> 4 & 0x1] 0 = No 1 = Yes
5.3 ReverseShutterSpeedAperture	int8u	[val >> 3 & 0x1] 0 = No 1 = Yes
5.4 ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
6.1 EVStepSize	int8u	[val >> 6 & 0x1] 0 = 1/3 EV 1 = 1/2 EV
10.1 ExposureDelayMode	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
12.1 AutoBracketSet	int8u	[val >> 6 & 0x3] 0 = Exposure 1 = WB Bracketing 2 = Active D-Lighting
13.1 FunctionButton	int8u	[val & 0x1f] 3 = AE/AF Lock 4 = AE Lock Only 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-ON 16 = + NEF (RAW) 18 = Active D-Lighting 25 = Live View 26 = Image Quality 27 = ISO 28 = White Balance 29 = HDR 30 = Auto Bracketing 31 = AF-area Mode
16.1 AELOCKButton	int8u	[val & 0xf] 3 = AE/AF Lock 4 = AE Lock Only 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-ON
17.1 ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
18.1 StandbyTimer	int8u	[val >> 5 & 0x7] 0 = 4 s 1 = 8 s 2 = 20 s 3 = 1 min 4 = 30 min
18.2 RemoteOnDuration	int8u	[val & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 15 min

19.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
19.2	SelfTimerShotCount	int8u	[val & 0xf]
20.1	ImageReviewTime	int8u	[val >> 5 & 0x7] 1 = 4 s 2 = 8 s 4 = 20 s 5 = 1 min 7 = 10 min
20.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 1 = 5 min 2 = 10 min 3 = 15 min 4 = 20 min 5 = 30 min
21.1	PlaybackMenusTime	int8u	[val >> 5 & 0x7] 1 = 8 s 4 = 20 s 5 = 1 min 6 = 5 min 7 = 10 min
23.1	InternalFlash	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual
23.2	ManualFlashOutput	int8u	[val & 0x1f]

## NikonCustom SettingsD7000 Tags

Custom settings for the D7000.

Index1	Tag Name	Writable	Values / Notes
0.1	AF-CPrioritySelection	int8u	[val >> 7 & 0x1] 0 = Release 1 = Focus
0.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
0.3	NumberOfFocusPoints	int8u	[val >> 4 & 0x1] 0 = 39 Points 1 = 11 Points
0.4	FocusTrackingLockOn	int8u	[val & 0x7] 0 = Off            3 = 3 Normal 1 = 1 Short      4 = 4 2 = 2            5 = 5 Long
1.1	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
1.2	AFPointIllumination	int8u	[val >> 1 & 0x3] 0 = Auto 1 = On 2 = Off
1.3	AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
2.1	BatteryOrder	int8u	[val >> 6 & 0x1] 0 = MB-D11 First 1 = Camera Battery First
2.2	AF-OnForMB-D11	int8u	[val >> 2 & 0x7] 0 = AE/AF Lock    4 = AF-ON 1 = AE Lock Only    5 = FV Lock 2 = AF Lock Only    6 = Same as FUNC Button 3 = AE Lock (hold)
2.3	MB-D11BatteryType	int8u	[val & 0x3] 0 = LR6 (AA alkaline) 1 = Ni-MH (AA Ni-MH) 2 = FR6 (AA lithium)
3.1	BeepPitch	int8u	[val >> 6 & 0x3] 0 = Off

				1 = Low 2 = High
3.2	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release	
3.3	ISODisplay	int8u	[val >> 2 & 0x3] 0 = Show ISO/Easy ISO 1 = Show ISO Sensitivity 3 = Show Frame Count	
3.4	GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off	
3.5	ViewfinderWarning	int8u	[val & 0x1] 0 = On 1 = Off	
4.1	ShootingInfoDisplay	int8u	[val >> 6 & 0x3] 0 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark)	
4.2	LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On	
4.3	FileNumberSequence	int8u	[val >> 3 & 0x1] 0 = On 1 = Off	
4.4	ScreenTips	int8u	[val >> 2 & 0x1] 0 = Off 1 = On	
4.5	BeepVolume	int8u	[val & 0x3] 0 = Off 1 = 1 2 = 2 3 = 3	
5.1	ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +	
5.2	EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On Auto Reset	
6.1	ExposureControlStep	int8u	[val >> 6 & 0x1] 0 = 1/3 EV 1 = 1/2 EV	
6.2	ISOsensitivityStep	int8u	[val >> 4 & 0x1] 0 = 1/3 EV 1 = 1/2 EV	
7.1	CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 6 mm 1 = 8 mm 2 = 10 mm 3 = 13 mm 4 = Average	
10.1	ExposureDelayMode	int8u	[val >> 6 & 0x1] 0 = Off 1 = On	
10.2	CLModeShootingSpeed	int8u	[val & 0x7]	
11	MaxContinuousRelease	int8u		
12.1	AutoBracketSet	int8u	[val >> 5 & 0x7] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing 4 = Active D-Lighting	
12.2	AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+	
13.1	FuncButton	int8u	[val >> 3 & 0x1f] 0 = Grid Display 1 = FV Lock 2 = Flash Off 3 = Matrix Metering 4 = Center-weighted Metering	

5 = Spot Metering  
 6 = My Menu Top  
 7 = + NEF (RAW)  
 8 = Active D-Lighting  
 9 = Preview  
 10 = AE/AF Lock  
 11 = AE Lock Only  
 12 = AF Lock Only  
 13 = AE Lock (hold)  
 14 = Bracketing Burst  
 15 = Playback  
 16 = 1EV Step Speed/Aperture  
 17 = Choose Non-CPU Lens  
 18 = Virtual Horizon  
 19 = Start Movie Recording

14.1	PreviewButton	int8u	[val >> 3 & 0x1f] 0 = Grid Display 1 = FV Lock 2 = Flash Off 3 = Matrix Metering 4 = Center-weighted Metering 5 = Spot Metering 6 = My Menu Top 7 = + NEF (RAW) 8 = Active D-Lighting 9 = Preview 10 = AE/AF Lock 11 = AE Lock Only 12 = AF Lock Only 13 = AE Lock (hold) 14 = Bracketing Burst 15 = Playback 16 = 1EV Step Speed/Aperture 17 = Choose Non-CPU Lens 18 = Virtual Horizon 19 = Start Movie Recording
15.1	OKButton	int8u	[val >> 3 & 0x3] 0 = Off 1 = Select Center Focus Point 2 = Highlight Active Focus Point 3 = Not Used
16.1	AELockButton	int8u	[val >> 3 & 0x7] 0 = AE/AF Lock      3 = AE Lock (hold) 1 = AE Lock Only    4 = AF-ON 2 = AF Lock Only    5 = FV Lock
17.1	CommandDialsReverseRotation	int8u	[val >> 7 & 0x1] 0 = No 1 = Yes
17.2	CommandDialsChangeMainSub	int8u	[val >> 5 & 0x3] 0 = Off 1 = On 2 = On (A mode only)
17.3	CommandDialsApertureSetting	int8u	[val >> 2 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring
17.4	CommandDialsMenuAndPlayback	int8u	[val >> 3 & 0x3] 0 = On 1 = Off 2 = On (Image Review Exclude)
17.5	ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
17.6	ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes
18.1	MeteringTime	int8u	[val >> 4 & 0xf] 0 = 4 s    5 = 1 min 1 = 6 s    6 = 5 min 2 = 8 s    7 = 10 min 3 = 16 s   8 = 30 min 4 = 30 s   9 = No Limit
18.2	RemoteOnDuration	int8u	[val & 0x3] 0 = 1 min 1 = 5 min

			2 = 10 min 3 = 15 min
19.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
19.2	SelfTimerInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
19.3	SelfTimerShotCount	int8u	[val & 0xf]
20.1	ImageReviewTime	int8u	[val >> 5 & 0x7] 0 = 4 s 3 = 1 min 1 = 10 s 4 = 5 min 2 = 20 s 5 = 10 min
20.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s 3 = 1 min 1 = 10 s 4 = 5 min 2 = 20 s 5 = 10 min
21.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s 3 = 1 min 1 = 10 s 4 = 5 min 2 = 20 s 5 = 10 min
21.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s 3 = 1 min 1 = 10 s 4 = 5 min 2 = 20 s 5 = 10 min
22.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 0 = 1/320 s (auto FP) 5 = 1/125 s 1 = 1/250 s (auto FP) 6 = 1/100 s 2 = 1/250 s 7 = 1/80 s 3 = 1/200 s 8 = 1/60 s 4 = 1/160 s
22.2	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s 6 = 1 s 1 = 1/30 s 7 = 2 s 2 = 1/15 s 8 = 4 s 3 = 1/8 s 9 = 8 s 4 = 1/4 s 10 = 15 s 5 = 1/2 s 11 = 30 s
23.1	FlashControlBuilt-in	int8u	[val >> 6 & 0x3] 0 = TTL 1 = Manual 2 = Repeating Flash 3 = Commander Mode
23.2	ManualFlashOutput	int8u	[val & 0x1f]
24.1	RepeatingFlashOutput	int8u	[val >> 4 & 0x7]
24.2	RepeatingFlashCount	int8u	[val & 0xf]
25.1	RepeatingFlashRate	int8u	[val >> 4 & 0xf]
26.1	CommanderInternalTTLCompBuiltIn	int8u	[val & 0x1f]
27.1	CommanderInternalTTLCompGroupA	int8u	[val & 0x1f]
28.1	CommanderInternalTTLCompGroupB	int8u	[val & 0x1f]
30.1	FlashWarning	int8u	[val >> 7 & 0x1] 0 = On 1 = Off
30.2	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off
34.1	LiveViewAFAreaMode	int8u	[val >> 5 & 0x3] 0 = Face-Priority 1 = NormalArea 2 = WideArea 3 = SubjectTracking
34.2	LiveViewAFMode	int8u	[val >> 1 & 0x1] 0 = AF-C 1 = AF-F
35.1	PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7]

	0 = 4 s	3 = 1 min
	1 = 10 s	4 = 5 min
	2 = 20 s	5 = 10 min

# NikonCustom SettingsD4 Tags

Custom settings for the D4 and D4S.

Index1	Tag Name	Writable	Values / Notes
0.1	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus 3 = Focus + Release
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	AFPointSelection	int8u	[val >> 4 & 0x1] 0 = 51 Points 1 = 11 Points
1.4	FocusTrackingLockOn	int8u	[val & 0x7] 0 = Off            3 = 3 (Normal) 1 = 1 (Short)    4 = 4 2 = 2            5 = 5 (Long)
2.1	AFActivation	int8u	[val >> 7 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
2.2	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
4.1	Pitch	int8u	[val >> 6 & 0x1] 0 = High 1 = Low
4.2	NoMemoryCard	int8u	[val >> 5 & 0x1] 0 = Release Locked 1 = Enable Release
4.3	GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off
5.1	ShootingInfoDisplay	int8u	[val >> 6 & 0x3] 1 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark)
5.2	LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
5.3	ScreenTips	int8u	[val >> 2 & 0x1] 0 = Off 1 = On
5.4	Beep	int8u	[val & 0x3] 0 = Off 1 = Low 2 = Medium 3 = High
6.1	ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
6.2	RearDisplay	int8u	[val >> 6 & 0x1] 0 = ISO 1 = Exposures Remaining
6.3	ViewfinderDisplay	int8u	[val >> 5 & 0x1] 0 = Frame Count 1 = Exposures Remaining
6.4	CommandDialsReverseRotation	int8u	[val >> 3 & 0x3] 0 = No 1 = Shutter Speed & Aperture

			2 = Exposure Compensation 3 = Exposure Compensation, Shutter Speed & Aperture
6.5	EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (auto reset)
7.1	ExposureControlStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.2	ISOStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.3	ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
8.1	CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average
8.2	FineTuneOptMatrixMetering	int8u	[val & 0xf]
9.1	FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]
9.2	FineTuneOptSpotMetering	int8u	[val & 0xf]
10.1	MultiSelectorShootMode	int8u	[val >> 6 & 0x3] 0 = Select Center Focus Point (Reset) 2 = Preset Focus Point (Pre) 3 = Not Used (None)
10.2	MultiSelectorPlaybackMode	int8u	[val >> 4 & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off 3 = Choose Folder
10.3	MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
11.1	ExposureDelayMode	int8u	[val >> 6 & 0x3] 0 = Off 1 = 1 s 2 = 2 s 3 = 3 s
11.2	CHModeShootingSpeed	int8u	[val >> 4 & 0x1] 0 = 10 fps 1 = 11 fps
11.3	CLModeShootingSpeed	int8u	[val & 0xf]
12	MaxContinuousRelease	int8u	
13.1	AutoBracketSet	int8u	[val >> 5 & 0x7] 0 = AE & Flash 1 = AE Only 2 = Flash Only 3 = WB Bracketing 4 = Active D-Lighting
13.2	AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+
13.3	AutoBracketModeM	int8u	[val >> 2 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only
14.1	FuncButton	int8u	[val >> 3 & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only

8 = AF-On  
 10 = Bracketing Burst  
 11 = Matrix Metering  
 12 = Center-weighted Metering  
 13 = Spot Metering  
 14 = Playback  
 15 = My Menu Top Item  
 16 = +NEF(RAW)  
 17 = Virtual Horizon  
 18 = My Menu  
 20 = Grid Display  
 21 = Disable Synchronized Release  
 22 = Remote Release Only  
 26 = Flash Disable/Enable

14.2 FuncButtonPlusDials	int8u	$[val \& 0x7]$ 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 6 = Shooting Bank Menu
15.1 PreviewButton	int8u	$[val >> 3 \& 0x1f]$ 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = My Menu 20 = Grid Display 21 = Disable Synchronized Release 22 = Remote Release Only 26 = Flash Disable/Enable
15.2 PreviewButtonPlusDials	int8u	$[val \& 0x7]$ 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 6 = Shooting Bank Menu
16.1 AssignBktButton	int8u	$[val \& 0x7]$ 0 = Auto Bracketing 1 = Multiple Exposure 2 = HDR (high dynamic range) 3 = None
18.1 CommandDialsChangeMainSub	int8u	$[val >> 5 \& 0x7]$ 0 = Autofocus Off, Exposure Off 1 = Autofocus Off, Exposure On 2 = Autofocus Off, Exposure On (Mode A) 4 = Autofocus On, Exposure Off 5 = Autofocus On, Exposure On 6 = Autofocus On, Exposure On (Mode A)
18.2 CommandDialsMenuAndPlayback	int8u	$[val >> 3 \& 0x3]$ 0 = On 1 = Off 2 = On (Image Review Excluded)
18.3 CommandDialsApertureSetting	int8u	$[val >> 2 \& 0x1]$ 0 = Sub-command Dial 1 = Aperture Ring
18.4 ShutterReleaseButtonAE-L	int8u	$[val >> 1 \& 0x1]$ 0 = Off 1 = On

18.5	ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes
19.1	StandbyTimer	int8u	[val >> 4 & 0xf] 0 = 4 s    6 = 1 min 1 = 6 s    7 = 5 min 3 = 10 s    8 = 10 min 5 = 30 s    9 = 30 min
20.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
20.2	SelfTimerShotCount	int8u	[val & 0xf]
20.3	SelfTimerShotInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
21.1	ImageReviewMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 2 s    4 = 1 min 1 = 4 s    5 = 5 min 2 = 10 s    6 = 10 min 3 = 20 s
21.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 5 min    3 = 20 min 1 = 10 min    4 = 30 min 2 = 15 min    5 = No Limit
22.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
22.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
23.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 1 = 1/250 s (auto FP)    5 = 1/125 s 2 = 1/250 s                6 = 1/100 s 3 = 1/200 s                7 = 1/80 s 4 = 1/160 s                8 = 1/60 s
23.2	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s    6 = 1 s 1 = 1/30 s    7 = 2 s 2 = 1/15 s    8 = 4 s 3 = 1/8 s     9 = 8 s 4 = 1/4 s     10 = 15 s 5 = 1/2 s     11 = 30 s
31.1	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off
36.1	PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
37.1	PlaybackZoom	int8u	[val & 0x1] 0 = Use Separate Zoom Buttons 1 = Use Either Zoom Button with Command Dial
38.1	ShutterSpeedLock	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
38.2	ApertureLock	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
38.3	MovieShutterButton	int8u	[val >> 4 & 0x3] 0 = Take Photo 1 = Record Movies 2 = Live Frame Grab
38.4	FlashExposureCompArea	int8u	[val >> 2 & 0x1] 0 = Entire frame 1 = Background only

41.1 MovieFunctionButton	int8u	[val >> 4 & 0x7] 0 = None 1 = Power Aperture (open) 3 = Index Marking 4 = View Photo Shooting Info
41.2 MoviePreviewButton	int8u	[val & 0x7] 0 = None 2 = Power Aperture (open) 3 = Index Marking 4 = View Photo Shooting Info
42.1 VerticalMultiSelector	int8u	[val >> 5 & 0x3] 0 = Same as Multi-Selector with Info(U/D) & Playback(R/L) 1 = Same as Multi-Selector with Info(R/L) & Playback(U/D) 2 = Focus Point Selection
42.2 VerticalFuncButton	int8u	[val & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = My Menu 20 = Grid Display 26 = Flash Disable/Enable
43.1 VerticalFuncButtonPlusDials	int8u	[val >> 4 & 0xf] 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 6 = Shooting Bank Menu 7 = ISO Sensitivity 8 = Exposure Mode 9 = Exposure Compensation 10 = Metering
43.2 AssignMovieRecordButton	int8u	[val & 0x7] 0 = None 1 = Choose Image Area (FX/DX/5:4) 2 = Shutter Speed & Aperture Lock 3 = ISO Sensitivity 4 = Shooting Bank Menu
46.1 DynamicAreaAFDisplay	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
46.2 AFPointIllumination	int8u	[val >> 5 & 0x3] 0 = Off 1 = On in Continuous Shooting Modes 2 = On During Manual Focusing 3 = On in Continuous Shooting and Manual Focusing
46.3 StoreByOrientation	int8u	[val >> 3 & 0x3] 0 = Off 1 = Focus Point 2 = Focus Point and AF-area mode
46.4 GroupAreaAFIllumination	int8u	[val >> 2 & 0x1] 0 = Squares 1 = Dots
46.5 AFPointBrightness	int8u	[val & 0x3] 0 = Low 1 = Normal 2 = High 3 = Extra High
47.1 AFOnButton	int8u	[val >> 4 & 0x7] 0 = AF On 1 = AE/AF Lock

2 = AE Lock Only  
 3 = AE Lock (reset on release)  
 4 = AE Lock (hold)  
 5 = AF Lock Only  
 6 = None

47.2	VerticalAFOnButton	int8u	<p>[val &amp; 0x7]</p> <p>0 = Same as AF On      1 = AF On      2 = AE/AF Lock      3 = AE Lock Only      4 = AE Lock (reset on release)      5 = AE Lock (hold)      6 = AF Lock Only      7 = None</p>
48.1	SubSelectorAssignment	int8u	<p>[val &gt;&gt; 7 &amp; 0x1]</p> <p>0 = Focus Point Selection      1 = Same As Multi-selector</p>
48.2	MovieSubSelectorAssignment	int8u	<p>[val &amp; 0x7]</p> <p>0 = None      1 = Index Marking      2 = AE/AF Lock      3 = AE Lock Only      4 = AE Lock (hold)      5 = AF Lock Only      6 = View Photo Shooting Info</p>
49.1	SubSelector	int8u	<p>[val &gt;&gt; 3 &amp; 0x1f]</p> <p>0 = None      1 = Preview      2 = FV Lock      3 = AE/AF Lock      4 = AE Lock Only      5 = AE Lock (reset on release)      6 = AE Lock (hold)      7 = AF Lock Only      8 = AF-On      10 = Bracketing Burst      11 = Matrix Metering      12 = Center-weighted Metering      13 = Spot Metering      14 = Playback      15 = My Menu Top Item      16 = +NEF(RAW)      17 = Virtual Horizon      18 = My Menu      19 = Reset      20 = Grid Display      21 = Disable Synchronized Release      22 = Remote Release Only      23 = Preview      26 = Flash Disable/Enable</p>
49.2	SubSelectorPlusDials	int8u	<p>[val &amp; 0x7]</p> <p>0 = None      1 = Choose Image Area (FX/DX/5:4)      2 = Shutter Speed &amp; Aperture Lock      4 = Choose Non-CPU Lens Number      6 = Shooting Bank Menu</p>
50.1	MatrixMetering	int8u	<p>(D4S only)</p> <p>[val &gt;&gt; 7 &amp; 0x1]</p> <p>0 = Face Detection On      1 = Face Detection Off</p>
50.2	LiveViewButtonOptions	int8u	<p>(D4S only)</p> <p>[val &gt;&gt; 4 &amp; 0x3]</p> <p>0 = Enable      1 = Enable (standby time active)      2 = Disable</p>
50.3	AFModeRestrictions	int8u	<p>(D4S only)</p> <p>[val &amp; 0x3]</p> <p>0 = Off      1 = AF-C      2 = AF-S</p>
51.1	LimitAFAreaModeSelection	int8u	<p>(D4S only)</p> <p>[val &gt;&gt; 1 &amp; 0x3f]</p> <p>0x0 = No Restrictions      Bit 0 = Auto-area      Bit 1 = Group-area</p>

			Bit 2 = 3D-tracking Bit 3 = Dynamic area (51 points) Bit 4 = Dynamic area (21 points) Bit 5 = Dynamic area (9 points)
52.1	MovieFunctionButtonPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area
52.2	MoviePreviewButtonPlusDials	int8u	[val & 0x1] 0 = None 1 = Choose Image Area
53.1	MovieSubSelectorAssignmentPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area
54.1	AssignRemoteFnButton	int8u	(D4S only) [val & 0x1f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 7 = AF Lock Only 8 = AF-On 16 = +NEF(RAW) 25 = Live View 26 = Flash Disable/Enable
55.1	LensFocusFunctionButtons	int8u	(D4S only) [val & 0x3f] 3 = AE/AF Lock 4 = AE Lock Only 7 = AF Lock Only 21 = Disable Synchronized Release 22 = Remote Release Only 24 = Preset focus Point 26 = Flash Disable/Enable 32 = AF-Area Mode: Single-point AF 33 = AF-Area Mode: Dynamic-area AF (9 points) 34 = AF-Area Mode: Dynamic-area AF (21 points) 35 = AF-Area Mode: Dynamic-area AF (51 points) 36 = AF-Area Mode: Group-area AF 37 = AF-Area Mode: Auto area AF

## NikonCustom SettingsD5 Tags

Custom settings for the D5.

Index1	Tag Name	Writable	Values / Notes
0.1	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus 3 = Focus + Release
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	NumberOfFocusPoints	int8u	[val >> 4 & 0x1] 0 = 55 Points 1 = 15 Points
1.4	Three-DTrackingFaceDetection	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
1.5	BlockShotAFResponse	int8u	[val & 0x7]
2.1	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
2.2	AFPointBrightness	int8u	[val >> 1 & 0x3] 0 = Auto

			1 = On 2 = Off
4.1	ISODisplay	int8u	[val >> 3 & 0x1] 0 = Show ISO Sensitivity 1 = Show Frame Count
4.2	GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off
5.1	LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
5.2	ElectronicFront-CurtainShutter	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
6.1	ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
6.2	CommandDialsReverseRotation	int8u	[val >> 3 & 0x3] 0 = No 1 = Shutter Speed & Aperture 2 = Exposure Compensation 3 = Exposure Compensation, Shutter Speed & Aperture
6.3	EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (auto reset)
7.1	ExposureControlStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.2	ISOStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.3	ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
8.1	CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average
8.2	FineTuneOptMatrixMetering	int8u	[val & 0xf]
9.1	FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]
9.2	FineTuneOptSpotMetering	int8u	[val & 0xf]
10.1	MultiSelectorShootMode	int8u	[val >> 5 & 0x7] 0 = Select Center Focus Point (Reset) 1 = Zoom On/Off 2 = Preset Focus Point (Pre) 4 = Not Used (None)
10.3	MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
11.1	ExposureDelayMode	int8u	[val >> 6 & 0x3] 0 = Off 1 = 1 s 2 = 2 s 3 = 3 s
11.2	CLModeShootingSpeed	int8u	[val & 0xf]
12.1	MaxContinuousRelease	int8u	
13.1	AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = -,0,+
13.2	AutoBracketModeM	int8u	[val >> 2 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only

## 14.1 Func1Button

int8u [val & 0x3f]  
 0 = None  
 1 = Preview  
 2 = FV Lock  
 3 = AE/AF Lock  
 4 = AE Lock Only  
 5 = AE Lock (reset on release)  
 6 = AE Lock (hold)  
 7 = AF Lock Only  
 8 = AF-On  
 10 = Bracketing Burst  
 11 = Matrix Metering  
 12 = Center-weighted Metering  
 13 = Spot Metering  
 14 = Playback  
 15 = My Menu Top Item  
 16 = +NEF(RAW)  
 17 = Virtual Horizon  
 19 = Grid Display  
 20 = My Menu  
 21 = Disable Synchronized Release  
 22 = Remote Release Only  
 26 = Flash Disable/Enable  
 27 = Highlight-weighted Metering  
 36 = AF-Area Mode (Single)  
 37 = AF-Area Mode (Dynamic Area 25 Points)  
 38 = AF-Area Mode (Dynamic Area 72 Points)  
 39 = AF-Area Mode (Dynamic Area 152 Points)  
 40 = AF-Area Mode (Group Area AF)  
 41 = AF-Area Mode (Auto Area AF)  
 42 = AF-Area Mode + AF-On (Single)  
 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points)  
 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points)  
 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points)  
 46 = AF-Area Mode + AF-On (Group Area AF)  
 47 = AF-Area Mode + AF-On (Auto Area AF)  
 49 = Sync Release (Master Only)  
 50 = Sync Release (Remote Only)  
 58 = AF-Area Mode + AF-On (Group Area AF - HL)  
 59 = AF-Area Mode + AF-On (Group Area AF - VL)

## 15.1 PreviewButton

int8u [val & 0x3f]  
 0 = None  
 1 = Preview  
 2 = FV Lock  
 3 = AE/AF Lock  
 4 = AE Lock Only  
 5 = AE Lock (reset on release)  
 6 = AE Lock (hold)  
 7 = AF Lock Only  
 8 = AF-On  
 10 = Bracketing Burst  
 11 = Matrix Metering  
 12 = Center-weighted Metering  
 13 = Spot Metering  
 14 = Playback  
 15 = My Menu Top Item  
 16 = +NEF(RAW)  
 17 = Virtual Horizon  
 19 = Grid Display  
 20 = My Menu  
 21 = Disable Synchronized Release  
 22 = Remote Release Only  
 26 = Flash Disable/Enable  
 27 = Highlight-weighted Metering  
 36 = AF-Area Mode (Single)  
 37 = AF-Area Mode (Dynamic Area 25 Points)  
 38 = AF-Area Mode (Dynamic Area 72 Points)  
 39 = AF-Area Mode (Dynamic Area 152 Points)  
 40 = AF-Area Mode (Group Area AF)  
 41 = AF-Area Mode (Auto Area AF)  
 42 = AF-Area Mode + AF-On (Single)  
 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points)  
 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points)  
 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points)  
 46 = AF-Area Mode + AF-On (Group Area AF)  
 47 = AF-Area Mode + AF-On (Auto Area AF)  
 49 = Sync Release (Master Only)  
 50 = Sync Release (Remote Only)

			58 = AF-Area Mode + AF-On (Group Area AF - HL) 59 = AF-Area Mode + AF-On (Group Area AF - VL)
16.1	AssignBktButton	int8u	[val & 0x7] 0 = Auto Bracketing 1 = Multiple Exposure 2 = HDR (high dynamic range) 3 = None
18.1	CommandDialsChangeMainSub	int8u	[val >> 5 & 0x7] 0 = Autofocus Off, Exposure Off 1 = Autofocus Off, Exposure On 2 = Autofocus Off, Exposure On (Mode A) 4 = Autofocus On, Exposure Off 5 = Autofocus On, Exposure On 6 = Autofocus On, Exposure On (Mode A)
18.2	CommandDialsMenuAndPlayback	int8u	[val >> 3 & 0x3] 0 = On 1 = Off 2 = On (Image Review Excluded)
18.3	CommandDialsApertureSetting	int8u	[val >> 2 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring
18.4	ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes
19.1	StandbyTimer	int8u	[val >> 4 & 0xf] 0 = 4 s    5 = 30 s    8 = 10 min 1 = 6 s    6 = 1 min    9 = 30 min 3 = 10 s    7 = 5 min    10 = No Limit
20.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
20.2	SelfTimerShotInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
20.3	SelfTimerShotCount	int8u	[val & 0xf]
21.1	ImageReviewMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 2 s    5 = 1 min 1 = 4 s    6 = 5 min 3 = 10 s    7 = 10 min 4 = 20 s
21.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 1 = 5 min    4 = 20 min 2 = 10 min    5 = 30 min 3 = 15 min    6 = No Limit
22.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    5 = 1 min 2 = 10 s    6 = 5 min 4 = 20 s    7 = 10 min
22.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    5 = 1 min 2 = 10 s    6 = 5 min 4 = 20 s    7 = 10 min
23.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 2 = 1/250 s (auto FP)    7 = 1/125 s 3 = 1/250 s                8 = 1/100 s 5 = 1/200 s                9 = 1/80 s 6 = 1/160 s                10 = 1/60 s
23.2	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s    6 = 1 s 1 = 1/30 s    7 = 2 s 2 = 1/15 s    8 = 4 s 3 = 1/8 s     9 = 8 s 4 = 1/4 s     10 = 15 s 5 = 1/2 s     11 = 30 s
31.1	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off

	36.1 PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
	37.1 MultiSelectorLiveView	int8u	[val >> 6 & 0x3] 0 = Reset 1 = Zoom 3 = Not Used
38.1	ShutterSpeedLock	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
38.2	ApertureLock	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
38.3	MovieShutterButton	int8u	[val >> 4 & 0x1] 0 = Take Photo 1 = Record Movies
38.4	FlashExposureCompArea	int8u	[val >> 2 & 0x1] 0 = Entire Frame 1 = Background Only
38.5	AutoFlashISOSensitivity	int8u	[val >> 1 & 0x1] 0 = Subject and Background 1 = Subject Only
41.1	MovieFunc1Button	int8u	[val >> 4 & 0xf] 0 = None 2 = Power Aperture (close) 3 = Index Marking 4 = View Photo Shooting Info 11 = Exposure Compensation -
41.2	MoviePreviewButton	int8u	[val & 0xf] 0 = None 1 = Power Aperture (open) 3 = Index Marking 4 = View Photo Shooting Info 10 = Exposure Compensation +
42.1	Func1ButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
43.1	PreviewButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
45.1	AssignMovieRecordButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 7 = Photo Shooting Menu Bank 11 = Exposure Mode
46.1	FineTuneOptHighlightWeighted	int8u	[val & 0xf]
47.1	DynamicAreaAFDisplay	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
47.2	AFPointIllumination	int8u	[val >> 6 & 0x1] 0 = Off 1 = On During Manual Focusing
47.3	StoreByOrientation	int8u	[val >> 3 & 0x3] 0 = Off 1 = Focus Point 2 = Focus Point and AF-area Mode
48.1	MatrixMetering	int8u	[val >> 7 & 0x1] 0 = Face Detection On 1 = Face Detection Off

48.2 LiveViewButtonOptions	int8u	[val >> 4 & 0x3] 0 = Enable 1 = Enable (Standby Timer Active) 2 = Disable
48.3 AFModeRestrictions	int8u	[val & 0x3] 0 = No Restrictions 1 = AF-C 2 = AF-S
49.1 LimitAFAreaModeSelection	int8u	[val >> 1 & 0x3f] 0x0 = No Restrictions Bit 0 = Auto-area Bit 1 = Group-area Bit 2 = 3D-tracking Bit 3 = Dynamic area (153 points) Bit 4 = Dynamic area (72 points) Bit 5 = Dynamic area (25 points)
52.1 LensFocusFunctionButtons	int8u	[val & 0x3f] 3 = AE/AF Lock 4 = AE Lock Only 7 = AF Lock Only 8 = AF-On 24 = Preset Focus Point 26 = Flash Disable/Enable 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only)
66.1 VerticalMultiSelector	int8u	[val & 0xff] 0x0 = Same as Multi-Selector with Info(U/D) & Playback(R/L) 0x8 = Same as Multi-Selector with Info(R/L) & Playback(U/D) 0x80 = Focus Point Selection
67.1 VerticalFuncButton	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = Reset Focus Point 19 = Grid Display 20 = My Menu 22 = Remote Release Only 23 = Preset Focus Point 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF)

			49 = Sync Release (Master Only) 50 = Sync Release (Remote Only) 54 = Highlight Active Focus Point
68.1 VerticalFuncPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode 10 = ISO Sensitivity 11 = Exposure Mode 12 = Exposure Compensation 13 = Metering	
70.1 AF-OnButton	int8u	[val & 0x3f] 0 = None 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF)	
71.1 SubSelector	int8u	[val >> 7 & 0x1] 0 = Focus Point Selection 1 = Same as MultiSelector	
72.1 SubSelectorCenter	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = Reset Focus Point 19 = Grid Display 20 = My Menu 22 = Remote Release Only 23 = Preset Focus Point 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only)	

			50 = Sync Release (Remote Only) 54 = Highlight Active Focus Point
73.1	SubSelectorPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 4 = Choose Non-CPU Lens Number 7 = Photo Shooting Menu Bank
74.1	AssignMovieSubselector	int8u	[val >> 4 & 0xf] 0 = None 3 = Index Marking 4 = View Photo Shooting Info 5 = AE/AF Lock 6 = AE Lock (Only) 7 = AE Lock (Hold) 8 = AF Lock (Only)
75.1	AssignMovieFunc1ButtonPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area
75.2	AssignMoviePreviewButtonPlusDials	int8u	[val & 0x1] 0 = None 1 = Choose Image Area (DX/1.3x)
76.1	AssignMovieSubselectorPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area
77.1	SyncReleaseMode	int8u	[val >> 7 & 0x1] 0 = No Sync 1 = Sync
78.1	Three-DTrackingWatchArea	int8u	[val >> 7 & 0x1] 0 = Wide 1 = Normal
78.2	SubjectMotion	int8u	[val >> 5 & 0x3] 0 = Steady 1 = Middle 2 = Erratic
78.3	AFActivation	int8u	[val >> 3 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
78.4	ShutterReleaseButtonAE-L	int8u	[val & 0x3] 0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
79.1	VerticalAFOnButton	int8u	[val & 0x7f] 0 = None 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 100 = Same as AF-On
80.1	Func2Button	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering

12 = Center-weighted Metering  
 13 = Spot Metering  
 14 = Playback  
 15 = My Menu Top Item  
 16 = +NEF(RAW)  
 17 = Virtual Horizon  
 19 = Grid Display  
 20 = My Menu  
 21 = Disable Synchronized Release  
 22 = Remote Release Only  
 26 = Flash Disable/Enable  
 27 = Highlight-weighted Metering  
 36 = AF-Area Mode (Single)  
 37 = AF-Area Mode (Dynamic Area 25 Points)  
 38 = AF-Area Mode (Dynamic Area 72 Points)  
 39 = AF-Area Mode (Dynamic Area 152 Points)  
 40 = AF-Area Mode (Group Area AF)  
 41 = AF-Area Mode (Auto Area AF)  
 42 = AF-Area Mode + AF-On (Single)  
 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points)  
 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points)  
 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points)  
 46 = AF-Area Mode + AF-On (Group Area AF)  
 47 = AF-Area Mode + AF-On (Auto Area AF)  
 49 = Sync Release (Master Only)  
 50 = Sync Release (Remote Only)

81.1 Func2ButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
82.1 AssignMovieFunc2Button	int8u	[val >> 4 & 0x7] 0 = None 3 = Index Marking 4 = View Photo Shooting Info
83.1 Func3Button	int8u	[val & 0x3] 0 = None 1 = Voice Memo 2 = Rating 3 = Connect To Network

## NikonCustom SettingsD500 Tags

Custom settings for the D500.

Index1	Tag Name	Writable	Values / Notes
0.1	CustomSettingsBank	int8u	[val & 0x3] 0 = A 1 = B 2 = C 3 = D
1.1	AF-CPrioritySelection	int8u	[val >> 6 & 0x3] 0 = Release 1 = Release + Focus 2 = Focus 3 = Focus + Release
1.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Focus 1 = Release
1.3	NumberOfFocusPoints	int8u	[val >> 4 & 0x1] 0 = 55 Points 1 = 15 Points
1.4	Three-DTrackingFaceDetection	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
1.5	BlockShotAFResponse	int8u	[val & 0x7]
2.1	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap

	2.2 AFPointBrightness	int8u	[val >> 1 & 0x3] 0 = Auto 1 = On 2 = Off
4.1	ISODisplay	int8u	[val >> 3 & 0x1] 0 = Show ISO Sensitivity 1 = Show Frame Count
4.2	GridDisplay	int8u	[val >> 1 & 0x1] 0 = On 1 = Off
5.1	LCDIllumination	int8u	[val >> 5 & 0x1] 0 = Off 1 = On
5.2	ElectronicFront-CurtainShutter	int8u	[val >> 3 & 0x1] 0 = Off 1 = On
6.1	ReverseIndicators	int8u	[val >> 7 & 0x1] 0 = + 0 - 1 = - 0 +
6.2	CommandDialsReverseRotation	int8u	[val >> 3 & 0x3] 0 = No 1 = Shutter Speed & Aperture 2 = Exposure Compensation 3 = Exposure Compensation, Shutter Speed & Aperture
6.3	EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On (auto reset)
7.1	ExposureControlStepSize	int8u	[val >> 6 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.2	ISOStepSize	int8u	[val >> 4 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
7.3	ExposureCompStepSize	int8u	[val >> 2 & 0x3] 0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
8.1	CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 6 mm 1 = 8 mm 2 = 10 mm 3 = 13 mm 4 = Average
8.2	FineTuneOptMatrixMetering	int8u	[val & 0xf]
9.1	FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]
9.2	FineTuneOptSpotMetering	int8u	[val & 0xf]
10.1	MultiSelectorShootMode	int8u	[val >> 5 & 0x7] 0 = Select Center Focus Point (Reset) 2 = Preset Focus Point (Pre) 3 = Highlight Active Focus Point 4 = Not Used (None)
10.2	MultiSelectorPlaybackMode	int8u	[val >> 2 & 0x3] 0 = Thumbnail On/Off 1 = View Histograms 2 = Zoom On/Off 3 = Choose Folder
10.3	MultiSelector	int8u	[val & 0x1] 0 = Do Nothing 1 = Reset Meter-off Delay
11.1	ExposureDelayMode	int8u	[val >> 6 & 0x3] 0 = Off 1 = 1 s 2 = 2 s 3 = 3 s
11.2	CLModeShootingSpeed	int8u	[val & 0xf]
12.1	MaxContinuousRelease	int8u	
13.1	AutoBracketOrder	int8u	[val >> 4 & 0x1] 0 = 0,-,+ 1 = 0,+,- 2 = +,0,- 3 = +,-,0

			1 = -,0,+
13.2	AutoBracketModeM	int8u	[val >> 2 & 0x3] 0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only
14.1	Func1Button	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 19 = Grid Display 20 = My Menu 22 = Remote Release Only 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only)
15.1	PreviewButton	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 19 = Grid Display 20 = My Menu 22 = Remote Release Only 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF)

			49 = Sync Release (Master Only) 50 = Sync Release (Remote Only)
16.1	AssignBktButton	int8u	[val & 0x7] 0 = Auto Bracketing 1 = Multiple Exposure 2 = HDR (high dynamic range) 3 = None
18.1	CommandDialsChangeMainSub	int8u	[val >> 5 & 0x7] 0 = Autofocus Off, Exposure Off 1 = Autofocus Off, Exposure On 2 = Autofocus Off, Exposure On (Mode A) 4 = Autofocus On, Exposure Off 5 = Autofocus On, Exposure On 6 = Autofocus On, Exposure On (Mode A)
18.2	CommandDialsMenuAndPlayback	int8u	[val >> 3 & 0x3] 0 = On 1 = Off 2 = On (Image Review Excluded)
18.3	CommandDialsApertureSetting	int8u	[val >> 2 & 0x1] 0 = Sub-command Dial 1 = Aperture Ring
18.4	ReleaseButtonToUseDial	int8u	[val & 0x1] 0 = No 1 = Yes
19.1	StandbyTimer	int8u	[val >> 4 & 0xf] 0 = 4 s    5 = 30 s    8 = 10 min 1 = 6 s    6 = 1 min    9 = 30 min 3 = 10 s    7 = 5 min    10 = No Limit
20.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
20.2	SelfTimerShotInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
20.3	SelfTimerShotCount	int8u	[val & 0xf]
21.1	ImageReviewMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 2 s    5 = 1 min 1 = 4 s    6 = 5 min 3 = 10 s    7 = 10 min 4 = 20 s
21.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 1 = 5 min    4 = 20 min 2 = 10 min    5 = 30 min 3 = 15 min    6 = No Limit
22.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    5 = 1 min 2 = 10 s    6 = 5 min 4 = 20 s    7 = 10 min
22.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    5 = 1 min 2 = 10 s    6 = 5 min 4 = 20 s    7 = 10 min
23.1	FlashSyncSpeed	int8u	[val >> 4 & 0xf] 2 = 1/250 s (auto FP)    7 = 1/125 s 3 = 1/250 s                8 = 1/100 s 5 = 1/200 s                9 = 1/80 s 6 = 1/160 s                10 = 1/60 s
23.2	FlashShutterSpeed	int8u	[val & 0xf] 0 = 1/60 s    6 = 1 s 1 = 1/30 s    7 = 2 s 2 = 1/15 s    8 = 4 s 3 = 1/8 s     9 = 8 s 4 = 1/4 s     10 = 15 s 5 = 1/2 s     11 = 30 s
31.1	ModelingFlash	int8u	[val >> 5 & 0x1] 0 = On 1 = Off

36.1 PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s    4 = 5 min 2 = 20 s    5 = 10 min
37.1 MultiSelectorLiveView	int8u	[val >> 6 & 0x3] 0 = Reset 1 = Zoom 3 = Not Used
38.1 ShutterSpeedLock	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
38.2 ApertureLock	int8u	[val >> 6 & 0x1] 0 = Off 1 = On
38.3 MovieShutterButton	int8u	[val >> 4 & 0x1] 0 = Take Photo 1 = Record Movies
38.4 FlashExposureCompArea	int8u	[val >> 2 & 0x1] 0 = Entire Frame 1 = Background Only
38.5 AutoFlashISOSensitivity	int8u	[val >> 1 & 0x1] 0 = Subject and Background 1 = Subject Only
41.1 MovieFunc1Button	int8u	[val >> 4 & 0xf] 0 = None 2 = Power Aperture (close) 3 = Index Marking 4 = View Photo Shooting Info 11 = Exposure Compensation -
41.2 MoviePreviewButton	int8u	[val & 0xf] 0 = None 1 = Power Aperture (open) 3 = Index Marking 4 = View Photo Shooting Info 10 = Exposure Compensation +
42.1 Func1ButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area (DX/1.3x) 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
43.1 PreviewButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area (DX/1.3x) 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode
45.1 AssignMovieRecordButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area (DX/1.3x) 2 = Shutter Speed & Aperture Lock 7 = Photo Shooting Menu Bank 11 = Exposure Mode
46.1 FineTuneOptHighlightWeighted	int8u	[val & 0xf]
47.1 DynamicAreaAFDisplay	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
47.2 AFPointIllumination	int8u	[val >> 6 & 0x1] 0 = Off 1 = On During Manual Focusing
47.3 StoreByOrientation	int8u	[val >> 3 & 0x3] 0 = Off 1 = Focus Point 2 = Focus Point and AF-area Mode
47.4 GroupAreaAFIllumination	int8u	[val >> 2 & 0x1] 0 = Squares 1 = Dots

48.1 MatrixMetering	int8u	[val >> 7 & 0x1] 0 = Face Detection On 1 = Face Detection Off
48.2 LiveViewButtonOptions	int8u	[val >> 4 & 0x3] 0 = Enable 1 = Enable (Standby Timer Active) 2 = Disable
48.3 AFModeRestrictions	int8u	[val & 0x3] 0 = No Restrictions 1 = AF-C 2 = AF-S
49.1 LimitAFAreaModeSelection	int8u	[val >> 1 & 0x3f] 0x0 = No Restrictions Bit 0 = Auto-area Bit 1 = Group-area Bit 2 = 3D-tracking Bit 3 = Dynamic area (153 points) Bit 4 = Dynamic area (72 points) Bit 5 = Dynamic area (25 points)
52.1 LensFocusFunctionButtons	int8u	[val & 0x3f] 3 = AE/AF Lock 4 = AE Lock Only 7 = AF Lock Only 8 = AF-On 24 = Preset Focus Point 26 = Flash Disable/Enable 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only)
66.1 VerticalMultiSelector	int8u	[val & 0xff] 0x0 = Same as Multi-Selector with Info(U/D) & Playback(R/L) 0x8 = Same as Multi-Selector with Info(R/L) & Playback(U/D) 0x80 = Focus Point Selection
67.1 AssignMB-D17FuncButton	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = Reset Focus Point 19 = Grid Display 20 = My Menu 22 = Remote Release Only 23 = Preset Focus Point 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points)

			44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only) 54 = Highlight Active Focus Point
68.1 AssignMB-D17FuncButtonPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area (DX/1.3x) 2 = Shutter Speed & Aperture Lock 3 = One Step Speed / Aperture 4 = Choose Non-CPU Lens Number 5 = Active D-Lighting 7 = Photo Shooting Menu Bank 8 = Exposure Delay Mode 10 = ISO Sensitivity 11 = Exposure Mode 12 = Exposure Compensation 13 = Metering Mode	
70.1 AF-OnButton	int8u	[val & 0x3f] 0 = None 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF)	
71.1 SubSelector	int8u	[val >> 7 & 0x1] 0 = Focus Point Selection 1 = Same as MultiSelector	
72.1 SubSelectorCenter	int8u	[val & 0x3f] 0 = None 1 = Preview 2 = FV Lock 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 10 = Bracketing Burst 11 = Matrix Metering 12 = Center-weighted Metering 13 = Spot Metering 14 = Playback 15 = My Menu Top Item 16 = +NEF(RAW) 17 = Virtual Horizon 18 = Reset Focus Point 19 = Grid Display 20 = My Menu 22 = Remote Release Only 23 = Preset Focus Point 26 = Flash Disable/Enable 27 = Highlight-weighted Metering 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points)	

			46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 49 = Sync Release (Master Only) 50 = Sync Release (Remote Only) 54 = Highlight Active Focus Point
73.1	SubSelectorPlusDials	int8u	[val & 0xf] 0 = None 1 = Choose Image Area (DX/1.3x) 2 = Shutter Speed & Aperture Lock 4 = Choose Non-CPU Lens Number 7 = Photo Shooting Menu Bank
74.1	AssignMovieSubselector	int8u	[val >> 4 & 0xf] 0 = None 3 = Index Marking 4 = View Photo Shooting Info 5 = AE/AF Lock 6 = AE Lock (Only) 7 = AE Lock (Hold) 8 = AF Lock (Only)
75.1	AssignMovieFunc1ButtonPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area (DX/1.3x)
75.2	AssignMoviePreviewButtonPlusDials	int8u	[val & 0x1] 0 = None 1 = Choose Image Area (DX/1.3x)
76.1	AssignMovieSubselectorPlusDials	int8u	[val >> 4 & 0x1] 0 = None 1 = Choose Image Area (DX/1.3x)
77.1	SyncReleaseMode	int8u	[val >> 7 & 0x1] 0 = No Sync 1 = Sync
78.1	Three-DTrackingWatchArea	int8u	[val >> 7 & 0x1] 0 = Wide 1 = Normal
78.2	SubjectMotion	int8u	[val >> 5 & 0x3] 0 = Steady 1 = Middle 2 = Erratic
78.3	AFActivation	int8u	[val >> 3 & 0x1] 0 = Shutter/AF-On 1 = AF-On Only
78.4	ShutterReleaseButtonAE-L	int8u	[val & 0x3] 0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
79.1	AssignMB-D17AF-OnButton	int8u	[val & 0x7f] 0 = None 3 = AE/AF Lock 4 = AE Lock Only 5 = AE Lock (reset on release) 6 = AE Lock (hold) 7 = AF Lock Only 8 = AF-On 36 = AF-Area Mode (Single) 37 = AF-Area Mode (Dynamic Area 25 Points) 38 = AF-Area Mode (Dynamic Area 72 Points) 39 = AF-Area Mode (Dynamic Area 152 Points) 40 = AF-Area Mode (Group Area AF) 41 = AF-Area Mode (Auto Area AF) 42 = AF-Area Mode + AF-On (Single) 43 = AF-Area Mode + AF-On (Dynamic Area 25 Points) 44 = AF-Area Mode + AF-On (Dynamic Area 72 Points) 45 = AF-Area Mode + AF-On (Dynamic Area 152 Points) 46 = AF-Area Mode + AF-On (Group Area AF) 47 = AF-Area Mode + AF-On (Auto Area AF) 100 = Same as Camera AF-On Button
80.1	Func2Button	int8u	[val & 0x3f] 0 = None 15 = My Menu Top Item 20 = My Menu 55 = Rating
82.1	AssignMovieFunc2Button	int8u	[val >> 4 & 0x7] 0 = None 3 = Index Marking 4 = View Photo Shooting Info

# NikonCustom Settings D610 Tags

Custom settings for the D610.

Index	Tag Name	Writable	Values / Notes
0.1	AF-CPrioritySelection	int8u	[val >> 7 & 0x1] 0 = Release 1 = Focus
0.2	AF-SPrioritySelection	int8u	[val >> 5 & 0x1] 0 = Release 1 = Focus
0.3	NumberOfFocusPoints	int8u	[val >> 4 & 0x1] 0 = 39 Points 1 = 11 Points
0.4	FocusTrackingLockOn	int8u	[val & 0x7] 0 = Off      3 = 3 Normal 1 = 1 Short   4 = 4 2 = 2      5 = 5 Long
1.1	FocusPointWrap	int8u	[val >> 3 & 0x1] 0 = No Wrap 1 = Wrap
1.2	AFPointIllumination	int8u	[val >> 1 & 0x3] 0 = Auto 1 = On 2 = Off
1.3	AFAssist	int8u	[val & 0x1] 0 = On 1 = Off
5.1	EasyExposureCompensation	int8u	[val & 0x3] 0 = Off 1 = On 2 = On Auto Reset
6.1	ExposureControlStep	int8u	[val >> 6 & 0x1] 0 = 1/3 EV 1 = 1/2 EV
6.2	ISOsensitivityStep	int8u	[val >> 4 & 0x1] 0 = 1/3 EV 1 = 1/2 EV
7.1	CenterWeightedAreaSize	int8u	[val >> 5 & 0x7] 0 = 8 mm 1 = 12 mm 2 = 15 mm 3 = 20 mm 4 = Average
7.2	FineTuneOptMatrixMetering	int8u	[val & 0xf]
8.1	FineTuneOptCenterWeighted	int8u	[val >> 4 & 0xf]
8.2	FineTuneOptSpotMetering	int8u	[val & 0xf]
17.1	ShutterReleaseButtonAE-L	int8u	[val >> 1 & 0x1] 0 = Off 1 = On
18.1	StandbyTimer	int8u	[val >> 4 & 0xf] 0 = 4 s    3 = 30 s    6 = 10 min 1 = 6 s    4 = 1 min   7 = 30 min 2 = 10 s   5 = 5 min   8 = No Limit
18.2	RemoteOnDuration	int8u	[val & 0x3] 0 = 1 min 1 = 5 min 2 = 10 min 3 = 20 min
19.1	SelfTimerTime	int8u	[val >> 6 & 0x3] 0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
19.2	SelfTimerShotInterval	int8u	[val >> 4 & 0x3] 0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
19.3	SelfTimerShotCount	int8u	[val & 0xf]

20.1	ImageReviewMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 2 s    4 = 1 min 1 = 4 s    5 = 5 min 2 = 10 s   6 = 10 min 3 = 20 s
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20.2	LiveViewMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 5 min    3 = 20 min 1 = 10 min   4 = 30 min 2 = 15 min   5 = No Limit
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21.1	MenuMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
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21.2	ShootingInfoMonitorOffTime	int8u	[val >> 2 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
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35.1	PlaybackMonitorOffTime	int8u	[val >> 5 & 0x7] 0 = 4 s    3 = 1 min 1 = 10 s   4 = 5 min 2 = 20 s   5 = 10 min
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## NikonCustom SettingsZ6III Tags

Custom settings for the Z6III.

Index1	Tag Name	Writable	Values / Notes
3	AF-CPrioritySelection	int8u	0 = Release 1 = Release + Focus 3 = Focus
5	AF-SPrioritySelection	int8u	0 = Release 1 = Focus
7	BlockShotAFResponse	int8u	1 = 1 (Quick) 2 = 2 3 = 3 (Normal) 4 = 4 5 = 5 (Delayed)
11	AFPointSel	int8u	0 = Use All 1 = Use Half
13	StoreByOrientation	int8u	0 = Off 1 = Focus Point 2 = Focus Point and AF-area mode
15	AFActivation	int8u	0 = AF-On Only 1 = Shutter/AF-On
16	AF-OnOutOfFocusRelease?	int8u	0 = Disable 1 = Enable
17	LimitAF-AreaModeSelPinpoint?	int8u	0 = Limit 1 = No Limit
19	LimitAF-AreaModeSelWideAF_S?	int8u	0 = Limit 1 = No Limit
20	LimitAF-AreaModeSelWideAF_L?	int8u	0 = Limit 1 = No Limit
21	LimitAFAreaModeSelAuto?	int8u	0 = Limit 1 = No Limit
22	FocusPointWrap?	int8u	0 = No Wrap 1 = Wrap
23	ManualFocusPointIllumination?	int8u	0 = On During Focus Point Selection Only 1 = On
24	DynamicAreaAFAssist?	int8u	0 = Focus Point Only 1 = Focus and Surrounding Points
26	AF-AssistIlluminator	int8u	0 = Off 1 = On
27	ManualFocusRingInAFMode	int8u	0 = Off 1 = On
29	ExposureControlStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV

31	EasyExposureCompensation	int8u	0 = Off 1 = On 2 = On (auto reset)
33	CenterWeightedAreaSize	int8u	0 = Standard 1 = Small 4 = Average
35	FineTuneOptMatrixMetering	int8s	
37	FineTuneOptCenterWeighted	int8s	
39	FineTuneOptSpotMetering	int8s	
41	FineTuneOptHighlightWeighted	int8s	
43	ShutterReleaseButtonAE-L	int8u	0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
45	SelfTimerTime	int8u	0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
49	SelfTimerShotCount	int8u	
53	SelfTimerShotInterval	int8u	0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
55	PlaybackMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
57	MenuMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
59	ImageReviewMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
61	ShootingInfoMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
63	CLModeShootingSpeed	int8u	
65	MaxContinuousRelease	no	
69	SyncReleaseMode?	int8u	0 = No Sync 1 = Sync
75	LimitSelectableImageAreaDX?	int8u	0 = Limit 1 = No Limit
76	LimitSelectableImageArea1To1?	int8u	0 = Limit 1 = No Limit
77	LimitSelectableImageArea16To9?	int8u	0 = Limit 1 = No Limit
78	FileNumberSequence	int8u	0 = Off 1 = On
81	FocusPeakingLevel?	int8u	0 = High Sensitivity 1 = Standard Sensitivity 2 = Low Sensitivity
83	FocusPeakingHighlightColor?	int8u	0 = Red 1 = Yellow 2 = Blue 3 = White
85	ContinuousModeDisplay	int8u	0 = Off 1 = On
87	FlashSyncSpeed	no	0 = 1/60 s    3 = 1/125 s 1 = 1/80 s    4 = 1/160 s 2 = 1/100 s    5 = 1/200 s
89	HighSpeedSync	int8u	0 = Off 1 = On
91	FlashShutterSpeed	no	0 = 1 s    3 = 1/8 s    6 = 1/60 s    9 = 8 s 1 = 1/2 s    4 = 1/15 s    7 = 30 s    10 = 4 s 2 = 1/4 s    5 = 1/30 s    8 = 15 s    11 = 2 s
93	FlashExposureCompArea	int8u	0 = Entire Frame 1 = Background Only
95	AutoFlashISOSensitivity	int8u	0 = Subject and Background 1 = Subject Only
97	ModelingFlash	int8u	0 = Off 1 = On
99	AutoBracketModeM	int8u	0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only 4 = Flash/ISO

101	AutoBracketOrder	int8u	0 = 0,-,+ 1 = -,0,+  
103	Func1Button	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
119	Func2Button	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
135	AFOnButton	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
147	SubSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
159	AssignMovieRecordButton?	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
163	LensFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
171	LensFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
177	LensControlRing	int8u	0 = None (Disabled) 1 = Focus (M/A) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Aperture
179	MultiSelectorShootMode	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
183	MultiSelectorPlaybackMode	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
187	ShutterSpeedLock	int8u	0 = Off 1 = On
188	ApertureLock	int8u	0 = Off 1 = On
190	CmdDialsReverseRotation	int8u	0 = No 1 = Shutter Speed & Aperture 0 = Exposure Compensation 1 = Exposure Compensation, Shutter Speed & Aperture
195	UseDialWithoutHold?	int8u	0 = Off 1 = On
197	ReverseIndicators?	int8u	0 = + 0 - 1 = - 0 +
199	MovieFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
205	MovieFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
211	MovieAF-OnButton	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
223	MovieLensControlRing	int8u	0 = None (Disabled) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Power Aperture 5 = Hi-Res Zoom
225	MovieMultiSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
229	MovieAFSpeed	int8u	
231	MovieAFSpeedApply	int8u	0 = Always 1 = Only During Recording
233	MovieAFTackingSensitivity	int8u	0 = 1 (High)      4 = 5 1 = 2              5 = 6 2 = 3              6 = 7 (Low) 3 = 4 (Normal)
241	LCDIllumination?	int8u	0 = Off 1 = On
242	ExtendedShutterSpeeds	int8u	0 = Off 1 = On
245	FocusPointPersistence	int8u	0 = Auto 1 = Off
257	FlashBurstPriority?	int8u	0 = Frame Rate 1 = Exposure
319	LimitAF-AreaModeSelDynamic_S?	int8u	0 = Limit 1 = No Limit
320	LimitAF-AreaModeSelDynamic_M?	int8u	0 = Limit 1 = No Limit
321	LimitAF-AreaModeSelDynamic_L?	int8u	0 = Limit 1 = No Limit
323	LimitAF-AreaModeSel3DTracking?	int8u	0 = Limit 1 = No Limit
325	PlaybackFlickUp?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None

329 PlaybackFlickDown?		int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
333 ISOStepSize		int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
340 TouchFn?		int8u	0 = Off 1 = On
341 TouchFnRole?		int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
345 TouchFnAreaWide?		int8u	0 = Entire Frame 1 = Right Half 2 = Top Right Quadrant 3 = Bottom Right Quadrant 4 = Left Half 5 = Top Left Quadrant 6 = Bottom Left Quadrant 7 = Top Half 8 = Bottom Half
347 TouchFnAreaTall?		int8u	0 = Entire Frame 1 = Right Half 2 = Top Right Quadrant 3 = Bottom Right Quadrant 4 = Left Half 5 = Top Left Quadrant 6 = Bottom Left Quadrant 7 = Top Half 8 = Bottom Half
350 EVFImageFrame?		int8u	0 = Off 1 = On
351 EVFGrid?		int8u	0 = 3x3      3 = 1.85:1    6 = 1:1 1 = 4x4      4 = 5:4      7 = 16:9 2 = 2.35:1    5 = 4:3      8 = 90%
353 VirtualHorizonStyle?		int8u	0 = Type A (Cockpit) 1 = Type B (Sides)
415 Func1ButtonPlaybackMode?		int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
417 Func2ButtonPlaybackMode?		int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
431 MovieRecordButtonPlaybackMode?		int8u	--> <a href="#">NikonCustom ButtonsZ6III Values</a>
463 ControlRingResponse		int8u	0 = High 1 = Low
559 FocusPeakingDisplay?		int8u	0 = Off 1 = On

## NikonCustom DelaysZ9 Values

Value	DelaysZ9	Value	DelaysZ9	Value	DelaysZ9
0	= 2 s	5	= 30 s	11	= 30 min
1	= 4 s	6	= 1 min	12	= No Limit
3	= 10 s	7	= 5 min		
4	= 20 s	8	= 10 min		

## NikonCustom ButtonsZ6III Values

Value	ButtonsZ6III	Value	ButtonsZ6III
0	= None	59	= AF-AreaMode
1	= Preview	60	= AF-AreaMode + AF-On
3	= FV Lock	61	= Recall Shooting Functions
4	= AE/AF Lock	64	= Filtered Playback
5	= AE Lock Only	65	= Same as AF-On
6	= AE Lock (reset on release)	66	= Voice Memo
7	= AE Lock (hold)	70	= Photo Shooting Bank
8	= AF Lock Only	71	= ISO
9	= AF-On	72	= Shooting Mode
10	= Flash Disable/Enable	73	= Exposure Compensation
11	= Bracketing Burst	76	= Silent Mode
12	= +NEF(RAW)	78	= LiveView Information

18 = Virtual Horizon	79 = AWB Lock (hold)
19 = Synchronized Release	80 = Grid Display
20 = My Menu	81 = Starlight View
21 = My Menu Top Item	82 = Select To Send (PC)
22 = Playback	83 = Select To Send (FTP)
23 = Rating	84 = Pattern Tone Range
24 = Protect	85 = Control Lock
25 = Zoom	86 = Save Focus Position
26 = Focus Peaking	87 = Recall Focus Position
27 = Flash Mode/Compensation	88 = Recall Shooting Functions (Hold)
28 = Image Area	89 = Set Picture Control (HLG)
30 = Non-CPU Lens	90 = Skin Softening
31 = Active-D Lighting	91 = Portrait Impression Balance
32 = Exposure Delay Mode	97 = High Frequency Flicker Reduction
33 = 1 Stop Speed/Aperture	98 = Switch FX/DX
34 = White Balance	99 = View Mode (Photo LV)
35 = Metering	100 = Photo Flicker Reduction
36 = Auto Bracketing	101 = Filtered Playback (Select Criteria)
37 = Multiple Exposure	103 = Start Series Playback
38 = HDR Overlay	104 = View Assist
39 = Picture Control	105 = Hi-Res Zoom+
40 = Quality	106 = Hi-Res Zoom-
41 = Focus Mode/AF AreaMode	108 = Override Other Cameras
42 = Select Center Focus Point	109 = DISP - Cycle Information Display (shooting)
44 = Record Movie	110 = DISP - Cycle Information Display (playback)
45 = Thumbnail On/Off	111 = Resume Shooting
46 = View Histograms	112 = Switch Eyes
47 = Choose Folder	113 = Power Zoom +
48 = Power Aperture (Open)	114 = Power Zoom -
49 = Power Aperture (Close)	115 = Delete
52 = Microphone Sensitivity	116 = Pixel Shift Shooting
53 = Release Mode	117 = Cycle AF-area Mode
57 = Preset Focus Point	118 = Pixel Shift Shooting
58 = AE/AWB Lock (hold)	119 = Move Focus Point

## NikonCustom SettingsZ8 Tags

Custom settings for the Z8.

Index1	Tag Name	Writable	Values / Notes
1	CustomSettingsBank	int8u	0 = A 1 = B 2 = C 3 = D
3	AF-CPrioritySelection	int8u	0 = Release 1 = Release + Focus 3 = Focus
5	AF-SPrioritySelection	int8u	0 = Release 1 = Focus
7	BlockShotAFResponse	int8u	1 = 1 (Quick) 2 = 2 3 = 3 (Normal) 4 = 4 5 = 5 (Delayed)
11	AFPointSel	int8u	0 = Use All 1 = Use Half
13	StoreByOrientation	int8u	0 = Off 1 = Focus Point 2 = Focus Point and AF-area mode
15	AFActivation	int8u	0 = AF-On Only 1 = Shutter/AF-On
16	AF-OnOutOfFocusRelease?	int8u	0 = Disable 1 = Enable
17	LimitAF-AreaModeSelPinpoint?	int8u	0 = Limit 1 = No Limit
19	LimitAF-AreaModeSelWideAF_S?	int8u	0 = Limit 1 = No Limit
20	LimitAF-AreaModeSelWideAF_L?	int8u	0 = Limit 1 = No Limit
21	LimitAFAreaModeSelAuto?	int8u	0 = Limit 1 = No Limit

22	FocusPointWrap?	int8u	0 = No Wrap 1 = Wrap
23	ManualFocusPointIllumination?	int8u	0 = On During Focus Point Selection Only 1 = On
24	DynamicAreaAFAssist?	int8u	0 = Focus Point Only 1 = Focus and Surrounding Points
25	AF-AssistIlluminator	int8u	0 = Off 1 = On
26	ManualFocusRingInAFMode	int8u	0 = Off 1 = On
27	ExposureControlStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
29	EasyExposureCompensation	int8u	0 = Off 1 = On 2 = On (auto reset)
31	CenterWeightedAreaSize	int8u	0 = 8 mm 1 = 12 mm 4 = Average
33	FineTuneOptMatrixMetering	int8s	
35	FineTuneOptCenterWeighted	int8s	
37	FineTuneOptSpotMetering	int8s	
39	FineTuneOptHighlightWeighted	int8s	
41	ShutterReleaseButtonAE-L	int8u	0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
43	SelfTimerTime	int8u	0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
45	SelfTimerShotCount	int8u	
49	SelfTimerShotInterval	int8u	0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s 4 = Min
51	PlaybackMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
53	MenuMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
55	ShootingInfoMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
57	ImageReviewMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
59	CLModeShootingSpeed	int8u	
61	MaxContinuousRelease	no	
65	SyncReleaseMode?	int8u	0 = No Sync 1 = Sync
69	LimitSelectableImageAreaDX?	int8u	0 = Limit 1 = No Limit
70	LimitSelectableImageArea1To1?	int8u	0 = Limit 1 = No Limit
71	LimitSelectableImageArea16To9?	int8u	0 = Limit 1 = No Limit
72	FileNumberSequence	int8u	0 = Off 1 = On
73	FocusPeakingLevel?	int8u	0 = High Sensitivity 1 = Standard Sensitivity 2 = Low Sensitivity
75	FocusPeakingHighlightColor?	int8u	0 = Red 1 = Yellow 2 = Blue 3 = White
81	ContinuousModeDisplay	int8u	0 = Off 1 = On
83	FlashSyncSpeed	no	0 = 1/60 s    4 = 1/160 s 1 = 1/80 s    5 = 1/200 s 2 = 1/100 s    6 = 1/250 s 3 = 1/125 s
85	HighSpeedSync	int8u	0 = Off 1 = On

87	FlashShutterSpeed	no	0 = 1 s    3 = 1/8 s    6 = 1/60 s    9 = 8 s 1 = 1/2 s    4 = 1/15 s    7 = 30 s    10 = 4 s 2 = 1/4 s    5 = 1/30 s    8 = 15 s    11 = 2 s
89	FlashExposureCompArea	int8u	0 = Entire Frame 1 = Background Only
91	AutoFlashISOSensitivity	int8u	0 = Subject and Background 1 = Subject Only
93	ModelingFlash	int8u	0 = Off 1 = On
95	AutoBracketModeM	int8u	0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only 4 = Flash/ISO
97	AutoBracketOrder	int8u	0 = 0,-,+ 1 = -,0,+
99	Func1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
115	Func2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
131	AFOnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
143	SubSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
155	AssignMovieRecordButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
159	LensFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
167	LensFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
173	LensControlRing	int8u	0 = None (Disabled) 1 = Focus (M/A) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Aperture
175	MultiSelectorShootMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
179	MultiSelectorPlaybackMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
183	ShutterSpeedLock	int8u	0 = Off 1 = On
184	ApertureLock	int8u	0 = Off 1 = On
186	CmdDialsReverseRotation	int8u	0 = No 1 = Shutter Speed & Aperture 0 = Exposure Compensation 1 = Exposure Compensation, Shutter Speed & Aperture
191	UseDialWithoutHold?	int8u	0 = Off 1 = On
193	ReverseIndicators?	int8u	0 = + 0 - 1 = - 0 +
195	MovieFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
199	MovieFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
203	MovieAF-OnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
215	MovieLensControlRing	int8u	0 = None (Disabled) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Power Aperture 5 = Hi-Res Zoom
217	MovieMultiSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
221	MovieAFSpeed	int8u	
223	MovieAFSpeedApply	int8u	0 = Always 1 = Only During Recording
225	MovieAFTackingSensitivity	int8u	0 = 1 (High)    4 = 5 1 = 2    5 = 6 2 = 3    6 = 7 (Low) 3 = 4 (Normal)
257	LCDIllumination?	int8u	0 = Off 1 = On
258	ExtendedShutterSpeeds	int8u	0 = Off 1 = On
259	SubjectMotion	int8u	0 = Erratic 1 = Steady
261	FocusPointPersistence	int8u	0 = Auto 1 = Off

	263 AutoFocusModeRestrictions?	int8u	0 = AF-S 1 = AF-C 2 = Full-time AF 3 = Manual 4 = No Restrictions
267	CHModeShootingSpeed	int8u	
273	FlashBurstPriority?	int8u	0 = Frame Rate 1 = Exposure
281	Func3Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
335	LimitAF-AreaModeSelDynamic_S?	int8u	0 = Limit 1 = No Limit
336	LimitAF-AreaModeSelDynamic_M?	int8u	0 = Limit 1 = No Limit
337	LimitAF-AreaModeSelDynamic_L?	int8u	0 = Limit 1 = No Limit
339	LimitAF-AreaModeSel3DTracking?	int8u	0 = Limit 1 = No Limit
341	PlaybackFlickUp?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
345	PlaybackFlickDown?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
349	ISOStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
355	ReverseFocusRing	int8u	0 = Not Reversed 1 = Reversed
356	EVFImageFrame?	int8u	0 = Off 1 = On
357	EVFGrid?	int8u	0 = 3x3      3 = 1.85:1    6 = 1:1 1 = 4x4      4 = 5:4      7 = 16:9 2 = 2.35:1    5 = 4:3      8 = 90%
359	VirtualHorizonStyle?	int8u	0 = Type A (Cockpit) 1 = Type B (Sides)
421	Func1ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
423	Func2ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
437	MovieRecordButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
453	WBButtonPlaybackMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
459	CommandDialPlaybackMode?	int8u	0 = 1 Frame 1 = 10 Frames 2 = 50 Frames 3 = Folder 4 = Protect 5 = Photos Only 6 = Videos Only 7 = Rating 8 = Page 9 = Skip To First Shot In Series 10 = Uploaded to FTP 11 = Uploaded to Computer
461	CommandDialVideoPlaybackMode?	int8u	0 = 2 s      4 = 5 Frames 1 = 5 s      5 = 10 Frames 2 = 10 s     6 = First/Last Frame 3 = 1 Frame   7 = Playback Speed
463	SubCommandDialPlaybackMode?	int8u	0 = 1 Frame 1 = 10 Frames 2 = 50 Frames 3 = Folder 4 = Protect 5 = Photos Only 6 = Videos Only 7 = Rating 8 = Page

9 = Skip To First Shot In Series  
 10 = Uploaded to FTP  
 11 = Uploaded to Computer

465	SubCommandDialVideoPlaybackMode?	int8u	0 = 2 s      4 = 5 Frames 1 = 5 s      5 = 10 Frames 2 = 10 s     6 = First/Last Frame 3 = 1 Frame   7 = Playback Speed
467	FocusPointLock?	int8u	0 = Off 1 = On
469	ControlRingResponse	int8u	0 = High 1 = Low
529	ZebraPatternToneRange?	int8u	0 = Off 1 = Highlights 2 = Midtones
531	MovieZebraPattern?	int8u	0 = Pattern 1 1 = Pattern 2
533	MovieHighlightDisplayThreshold?	int8u	
535	MovieMidtoneDisplayValue?	int8u	
537	MovieMidtoneDisplayRange?	int8u~	
541	MovieEVFGrid?	int8u	0 = 3x3      3 = 1.85:1    6 = 1:1 1 = 4x4      4 = 5:4       7 = 16:9 2 = 2.35:1    5 = 4:3       8 = 90%
549	MovieShutterSpeedLock?	int8u	0 = Off 1 = On
550	MovieFocusPointLock?	int8u	0 = Off 1 = On
563	MatrixMetering?	int8u	0 = Face Detection Off 1 = Face Detection On
564	AF-CFocusDisplay	int8u	0 = Off 1 = On
565	FocusPeakingDisplay?	int8u	0 = Off 1 = On
567	KeepExposure	int8u	0 = Off 1 = Shutter Speed 2 = ISO
585	StarlightView?	int8u	0 = Off 1 = On
587	EVFWarmDisplayMode?	int8u	0 = Off 1 = Mode 1 2 = Mode 2
589	EVFWarmDisplayBrightness?	int8s	
591	EVFReleaseIndicator?	int8u	0 = Off 1 = Type A (Dark) 2 = Type B (Border) 3 = Type C (Sides)
601	MovieApertureLock?	int8u	0 = Off 1 = On
607	FlickAdvanceDirection?	int8u	0 = Left to Right 1 = Right to Left
647	PreReleaseBurstLength	int8u	0 = None 1 = 0.3 Sec 2 = 0.5 Sec 3 = 1 Sec
649	PostReleaseBurstLength	int8u	0 = 1 Sec 1 = 2 Sec 2 = 3 Sec 3 = Max
681	ViewModeShowEffectsOfSettings?	int8u	0 = Always 1 = Only When Flash Not Used
683	DispButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
753	ExposureDelay	int16u~	

## NikonCustom ButtonsZ9 Values

Value	ButtonsZ9	Value	ButtonsZ9
0 = None		71 = ISO	
1 = Preview		72 = Shooting Mode	

3 = FV Lock	73 = Exposure Compensation
4 = AE/AF Lock	76 = Silent Mode
5 = AE Lock Only	78 = LiveView Information
6 = AE Lock (reset on release)	79 = AWB Lock (hold)
7 = AE Lock (hold)	80 = Grid Display
8 = AF Lock Only	81 = Starlight View
9 = AF-On	82 = Select To Send (PC)
10 = Flash Disable/Enable	83 = Select To Send (FTP)
11 = Bracketing Burst	84 = Pattern Tone Range
12 = +NEF(RAW)	85 = Control Lock
18 = Virtual Horizon	86 = Save Focus Position
19 = Synchronized Release	87 = Recall Focus Position
20 = My Menu	88 = Recall Shooting Functions (Hold)
21 = My Menu Top Item	89 = Set Picture Control (HLG)
22 = Playback	90 = Skin Softening
23 = Rating	91 = Portrait Impression Balance
24 = Protect	92 = Fast AF-On
25 = Zoom	97 = High Frequency Flicker Reduction
26 = Focus Peaking	98 = Switch FX/DX
27 = Flash Mode/Compensation	99 = View Mode (Photo LV)
28 = Image Area	100 = Photo Flicker Reduction
30 = Non-CPU Lens	101 = Filtered Playback (Select Criteria)
31 = Active-D Lighting	103 = Start Series Playback
32 = Exposure Delay Mode	104 = View Assist
33 = 1 Stop Speed/Aperture	105 = Hi-Res Zoom+
34 = White Balance	106 = Hi-Res Zoom-
35 = Metering	108 = Override Other Cameras
36 = Auto Bracketing	109 = DISP - Cycle Information Display (shooting)
37 = Multiple Exposure	110 = DISP - Cycle Information Display (playback)
38 = HDR Overlay	111 = Resume Shooting
39 = Picture Control	112 = Switch Eyes
40 = Quality	113 = Power Zoom +
41 = Focus Mode/AF AreaMode	114 = Power Zoom -
42 = Select Center Focus Point	115 = Delete
44 = Record Movie	116 = Save and Load Power Zoom Position
45 = Thumbnail On/Off	117 = Cycle AF-area Mode
46 = View Histograms	118 = Raw Processing (Current)
47 = Choose Folder	119 = Raw Processing (Multiple)
48 = Power Aperture (Open)	120 = Trim
49 = Power Aperture (Close)	121 = Resize (Current)
52 = Microphone Sensitivity	122 = Resize (Multiple)
53 = Release Mode	123 = D-Lighting
57 = Preset Focus Point	124 = Straighten
58 = AE/AWB Lock (hold)	125 = Distortion Control
59 = AF-AreaMode	126 = Perspective Control
60 = AF-AreaMode + AF-On	127 = Monochrome
61 = Recall Shooting Functions	128 = Overlay (Add)
64 = Filtered Playback	129 = Lighten
65 = Same as AF-On	130 = Darken
66 = Voice Memo	131 = Motion Blend
70 = Photo Shooting Bank	

## NikonCustom SettingsZ9 Tags

Custom settings for the Z9.

Index1	Tag Name	Writable	Values / Notes
1	CustomSettingsBank	int8u	0 = A 1 = B 2 = C 3 = D
3	AF-CPrioritySelection	int8u	0 = Release 1 = Release + Focus 3 = Focus
5	AF-SPrioritySelection	int8u	0 = Release 1 = Focus
7	BlockShotAFResponse	int8u	1 = 1 (Quick) 2 = 2 3 = 3 (Normal) 4 = 4 5 = 5 (Delayed)

11	AFPointSel	int8u	0 = Use All 1 = Use Half
13	StoreByOrientation	int8u	0 = Off 1 = Focus Point 2 = Focus Point and AF-area mode
15	AFActivation	int8u	0 = AF-On Only 1 = Shutter/AF-On
16	AF-OnOutOfFocusRelease?	int8u	0 = Disable 1 = Enable
17	LimitAF-AreaModeSelPinpoint?	int8u	0 = Limit 1 = No Limit
19	LimitAF-AreaModeSelWideAF_S?	int8u	0 = Limit 1 = No Limit
20	LimitAF-AreaModeSelWideAF_L?	int8u	0 = Limit 1 = No Limit
21	LimitAFAreaModeSelAuto?	int8u	0 = Limit 1 = No Limit
22	FocusPointWrap?	int8u	0 = No Wrap 1 = Wrap
23	ManualFocusPointIllumination?	int8u	0 = On During Focus Point Selection Only 1 = On
24	DynamicAreaAFAssist?	int8u	0 = Focus Point Only 1 = Focus and Surrounding Points
25	AF-AssistIlluminator	int8u	0 = Off 1 = On
26	ManualFocusRingInAFMode	int8u	0 = Off 1 = On
27	ExposureControlStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
29	EasyExposureCompensation	int8u	0 = Off 1 = On 2 = On (auto reset)
31	CenterWeightedAreaSize	int8u	0 = 8 mm 1 = 12 mm 4 = Average
33	FineTuneOptMatrixMetering	int8s	
35	FineTuneOptCenterWeighted	int8s	
37	FineTuneOptSpotMetering	int8s	
39	FineTuneOptHighlightWeighted	int8s	
41	ShutterReleaseButtonAE-L	int8u	0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
43	SelfTimerTime	int8u	0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
45	SelfTimerShotCount	int8u	
49	SelfTimerShotInterval	int8u	0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
51	PlaybackMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
53	MenuMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
55	ShootingInfoMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
57	ImageReviewMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
59	CLModeShootingSpeed	int8u	
61	MaxContinuousRelease	no	
65	SyncReleaseMode?	int8u	0 = No Sync 1 = Sync
69	LimitSelectableImageAreaDX?	int8u	0 = Limit 1 = No Limit
70	LimitSelectableImageArea1To1?	int8u	0 = Limit 1 = No Limit
71	LimitSelectableImageArea16To9?	int8u	0 = Limit 1 = No Limit

72	FileNumberSequence	int8u	0 = Off 1 = On
73	FocusPeakingLevel?	int8u	0 = High Sensitivity 1 = Standard Sensitivity 2 = Low Sensitivity
75	FocusPeakingHighlightColor?	int8u	0 = Red 1 = Yellow 2 = Blue 3 = White
81	ContinuousModeDisplay	int8u	0 = Off 1 = On
83	FlashSyncSpeed	no	0 = 1/60 s    4 = 1/160 s 1 = 1/80 s    5 = 1/200 s 2 = 1/100 s    6 = 1/250 s 3 = 1/125 s
85	HighSpeedSync	int8u	0 = Off 1 = On
87	FlashShutterSpeed	no	0 = 1 s    3 = 1/8 s    6 = 1/60 s    9 = 8 s 1 = 1/2 s    4 = 1/15 s    7 = 30 s    10 = 4 s 2 = 1/4 s    5 = 1/30 s    8 = 15 s    11 = 2 s
89	FlashExposureCompArea	int8u	0 = Entire Frame 1 = Background Only
91	AutoFlashISOSensitivity	int8u	0 = Subject and Background 1 = Subject Only
93	ModelingFlash	int8u	0 = Off 1 = On
95	AutoBracketModeM	int8u	0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only 4 = Flash/ISO
97	AutoBracketOrder	int8u	0 = 0,-,+ 1 = -,0,+
99	Func1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
115	Func2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
131	AFOnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
143	SubSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
155	AssignMovieRecordButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
159	LensFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
167	LensFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
173	LensControlRing	int8u	0 = None (Disabled) 1 = Focus (M/A) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Aperture
175	MultiSelectorShootMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
179	MultiSelectorPlaybackMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
183	ShutterSpeedLock	int8u	0 = Off 1 = On
184	ApertureLock	int8u	0 = Off 1 = On
186	CmdDialsReverseRotation	int8u	0 = No 1 = Shutter Speed & Aperture 0 = Exposure Compensation 1 = Exposure Compensation, Shutter Speed & Aperture
191	UseDialWithoutHold?	int8u	0 = Off 1 = On
193	ReverseIndicators?	int8u	0 = + 0 - 1 = - 0 +
195	MovieFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
199	MovieFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
203	MovieAF-OnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
207	MovieMultiSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
215	MovieLensControlRing	int8u	0 = None (Disabled) 2 = ISO Sensitivity 3 = Exposure Compensation

			4 = Power Aperture 5 = Hi-Res Zoom
221	MovieAFSpeed	int8u	
223	MovieAFSpeedApply	int8u	0 = Always 1 = Only During Recording
225	MovieAFTTrackingSensitivity	int8u	0 = 1 (High)      4 = 5 1 = 2              5 = 6 2 = 3              6 = 7 (Low) 3 = 4 (Normal)
257	LCDIllumination?	int8u	0 = Off 1 = On
258	ExtendedShutterSpeeds	int8u	0 = Off 1 = On
259	SubjectMotion	int8u	0 = Erratic 1 = Steady
261	FocusPointPersistence	int8u	0 = Auto 1 = Off
263	AutoFocusModeRestrictions?	int8u	0 = AF-S 1 = AF-C 2 = Full-time AF 3 = Manual 4 = No Restrictions
267	CHModeShootingSpeed	int8u	
269.1	LimitReleaseModeSelCL?	int8u	[val >> 1 & 0x1] 0 = Limit 1 = No Limit
269.2	LimitReleaseModeSelCH?	int8u	[val >> 2 & 0x1] 0 = Limit 1 = No Limit
269.3	LimitReleaseModeSelC30?	int8u	[val >> 4 & 0x1] 0 = Limit 1 = No Limit
269.4	LimitReleaseModeSelC120?	int8u	[val >> 6 & 0x1] 0 = Limit 1 = No Limit
269.5	LimitReleaseModeSelSelf?	int8u	[val >> 7 & 0x1] 0 = Limit 1 = No Limit
273	FlashBurstPriority?	int8u	0 = Frame Rate 1 = Exposure
277	VerticalFuncButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
281	Func3Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
285	VerticalAFOnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
293	VerticalMultiSelectorPlaybackMode?	int8u	0 = Image Scroll L/R 1 = Image Scroll Up/Down
295	MovieFunc3Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
335	LimitAF-AreaModeSelDynamic_S?	int8u	0 = Limit 1 = No Limit
336	LimitAF-AreaModeSelDynamic_M?	int8u	0 = Limit 1 = No Limit
337	LimitAF-AreaModeSelDynamic_L?	int8u	0 = Limit 1 = No Limit
339	LimitAF-AreaModeSel3DTracking?	int8u	0 = Limit 1 = No Limit
341	PlaybackFlickUp?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
345	PlaybackFlickDown?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
349	ISOStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV

			2 = 1 EV
355	ReverseFocusRing	int8u	0 = Not Reversed 1 = Reversed
356	EVFImageFrame?	int8u	0 = Off 1 = On
357	EVFGrid?	int8u	0 = 3x3      3 = 1.85:1    6 = 1:1 1 = 4x4      4 = 5:4      7 = 16:9 2 = 2.35:1    5 = 4:3      8 = 90%
359	VirtualHorizonStyle?	int8u	0 = Type A (Cockpit) 1 = Type B (Sides)
373	Func4Button?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
379	AudioButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
381	QualityButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
399	VerticalMultiSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
421	Func1ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
423	Func2ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
425	Func3ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
431	Func4ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
437	MovieRecordButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
439	VerticalFuncButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
441	AudioButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
447	QualityButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
453	WhiteBalanceButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
459	CommandDialPlaybackMode?	int8u	0 = 1 Frame 1 = 10 Frames 2 = 50 Frames 3 = Folder 4 = Protect 5 = Photos Only 6 = Videos Only 7 = Rating 8 = Page 9 = Skip To First Shot In Series 10 = Uploaded to FTP 11 = Uploaded to Computer
463	SubCommandDialPlaybackMode?	int8u	0 = 1 Frame 1 = 10 Frames 2 = 50 Frames 3 = Folder 4 = Protect 5 = Photos Only 6 = Videos Only 7 = Rating 8 = Page 9 = Skip To First Shot In Series 10 = Uploaded to FTP 11 = Uploaded to Computer
467	FocusPointLock?	int8u	0 = Off 1 = On
469	ControlRingResponse	int8u	0 = High 1 = Low
481	VerticalMovieFuncButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
505	VerticalMovieAFOnButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
515	MovieAFAreaMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
527	HDMIViewAssist?	int8u	0 = Off 1 = On
529	ZebraPatternToneRange?	int8u	0 = Off 1 = Highlights 2 = Midtones
531	MovieZebraPattern?	int8u	0 = Pattern 1 1 = Pattern 2
533	MovieHighlightDisplayThreshold?	int8u	
535	MovieMidtoneDisplayValue?	int8u	
537	MovieMidtoneDisplayRange?	int8u~	

541	MovieEVFGGrid?	int8u	0 = 3x3 1 = 4x4 2 = 2.35:1	3 = 1.85:1 4 = 5:4 5 = 4:3	6 = 1:1 7 = 16:9 8 = 90%
549	MovieShutterSpeedLock?	int8u	0 = Off 1 = On		
550	MovieFocusPointLock?	int8u	0 = Off 1 = On		
563	MatrixMetering?	int8u	0 = Face Detection Off 1 = Face Detection On		
564	AF-CFocusDisplay	int8u	0 = Off 1 = On		
565	FocusPeakingDisplay?	int8u	0 = Off 1 = On		
567	KeepExposure	int8u	0 = Off 1 = Shutter Speed 2 = ISO		
585	StarlightView?	int8u	0 = Off 1 = On		
587	EVFWarmDisplayMode?	int8u	0 = Off 1 = Mode 1 2 = Mode 2		
589	EVFWarmDisplayBrightness?	int8s			
591	EVFReleaseIndicator?	int8u	0 = Off 1 = Type A (Dark) 2 = Type B (Border) 3 = Type C (Sides)		
601	MovieApertureLock?	int8u	0 = Off 1 = On		
607	FlickAdvanceDirection?	int8u	0 = Left to Right 1 = Right to Left		

## NikonCustom SettingsZ9v4 Tags

Custom settings for the Z9.

Index1	Tag Name	Writable	Values / Notes		
1	CustomSettingsBank	int8u	0 = A 1 = B 2 = C 3 = D		
3	AF-CPrioritySelection	int8u	0 = Release 1 = Release + Focus 3 = Focus		
5	AF-SPrioritySelection	int8u	0 = Release 1 = Focus		
7	BlockShotAFResponse	int8u	1 = 1 (Quick) 2 = 2 3 = 3 (Normal) 4 = 4 5 = 5 (Delayed)		
11	AFPointSel	int8u	0 = Use All 1 = Use Half		
13	StoreByOrientation	int8u	0 = Off 1 = Focus Point 2 = Focus Point and AF-area mode		
15	AFActivation	int8u	0 = AF-On Only 1 = Shutter/AF-On		
16	AF-OnOutOfFocusRelease?	int8u	0 = Disable 1 = Enable		
17	LimitAF-AreaModeSelPinpoint?	int8u	0 = Limit 1 = No Limit		
19	LimitAF-AreaModeSelWideAF_S?	int8u	0 = Limit 1 = No Limit		
20	LimitAF-AreaModeSelWideAF_L?	int8u	0 = Limit 1 = No Limit		
21	LimitAFAreaModeSelAuto?	int8u	0 = Limit 1 = No Limit		

22	FocusPointWrap?	int8u	0 = No Wrap 1 = Wrap
23	ManualFocusPointIllumination?	int8u	0 = On During Focus Point Selection Only 1 = On
24	DynamicAreaAFAssist?	int8u	0 = Focus Point Only 1 = Focus and Surrounding Points
25	AF-AssistIlluminator	int8u	0 = Off 1 = On
26	ManualFocusRingInAFMode	int8u	0 = Off 1 = On
27	ExposureControlStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
29	EasyExposureCompensation	int8u	0 = Off 1 = On 2 = On (auto reset)
31	CenterWeightedAreaSize	int8u	0 = 8 mm 1 = 12 mm 4 = Average
33	FineTuneOptMatrixMetering	int8s	
35	FineTuneOptCenterWeighted	int8s	
37	FineTuneOptSpotMetering	int8s	
39	FineTuneOptHighlightWeighted	int8s	
41	ShutterReleaseButtonAE-L	int8u	0 = Off 1 = On (Half Press) 2 = On (Burst Mode)
43	SelfTimerTime	int8u	0 = 2 s 1 = 5 s 2 = 10 s 3 = 20 s
45	SelfTimerShotCount	int8u	
49	SelfTimerShotInterval	int8u	0 = 0.5 s 1 = 1 s 2 = 2 s 3 = 3 s
51	PlaybackMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
53	MenuMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
55	ShootingInfoMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
57	ImageReviewMonitorOffTime	int8u	--> <a href="#">NikonCustom DelaysZ9 Values</a>
59	CLModeShootingSpeed	int8u	
61	MaxContinuousRelease	no	
65	SyncReleaseMode?	int8u	0 = No Sync 1 = Sync
69	LimitSelectableImageAreaDX?	int8u	0 = Limit 1 = No Limit
70	LimitSelectableImageArea1To1?	int8u	0 = Limit 1 = No Limit
71	LimitSelectableImageArea16To9?	int8u	0 = Limit 1 = No Limit
72	FileNumberSequence	int8u	0 = Off 1 = On
73	FocusPeakingLevel?	int8u	0 = High Sensitivity 1 = Standard Sensitivity 2 = Low Sensitivity
75	FocusPeakingHighlightColor?	int8u	0 = Red 1 = Yellow 2 = Blue 3 = White
81	ContinuousModeDisplay	int8u	0 = Off 1 = On
83	FlashSyncSpeed	no	0 = 1/60 s    4 = 1/160 s 1 = 1/80 s    5 = 1/200 s 2 = 1/100 s    6 = 1/250 s 3 = 1/125 s
85	HighSpeedSync	int8u	0 = Off 1 = On

87	FlashShutterSpeed	no	0 = 1 s    3 = 1/8 s    6 = 1/60 s    9 = 8 s 1 = 1/2 s    4 = 1/15 s    7 = 30 s    10 = 4 s 2 = 1/4 s    5 = 1/30 s    8 = 15 s    11 = 2 s
89	FlashExposureCompArea	int8u	0 = Entire Frame 1 = Background Only
91	AutoFlashISOSensitivity	int8u	0 = Subject and Background 1 = Subject Only
93	ModelingFlash	int8u	0 = Off 1 = On
95	AutoBracketModeM	int8u	0 = Flash/Speed 1 = Flash/Speed/Aperture 2 = Flash/Aperture 3 = Flash Only 4 = Flash/ISO
97	AutoBracketOrder	int8u	0 = 0,-,+ 1 = -,0,+
99	Func1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
115	Func2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
131	AFOnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
143	SubSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
155	AssignMovieRecordButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
159	LensFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
167	LensFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
173	LensControlRing	int8u	0 = None (Disabled) 1 = Focus (M/A) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Aperture
175	MultiSelectorShootMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
179	MultiSelectorPlaybackMode	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
183	ShutterSpeedLock	int8u	0 = Off 1 = On
184	ApertureLock	int8u	0 = Off 1 = On
186	CmdDialsReverseRotation	int8u	0 = No 1 = Shutter Speed & Aperture 0 = Exposure Compensation 1 = Exposure Compensation, Shutter Speed & Aperture
191	UseDialWithoutHold?	int8u	0 = Off 1 = On
193	ReverseIndicators?	int8u	0 = + 0 - 1 = - 0 +
195	MovieFunc1Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
199	MovieFunc2Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
203	MovieAF-OnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
207	MovieMultiSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
215	MovieLensControlRing	int8u	0 = None (Disabled) 2 = ISO Sensitivity 3 = Exposure Compensation 4 = Power Aperture 5 = Hi-Res Zoom
221	MovieAFSpeed	int8u	
223	MovieAFSpeedApply	int8u	0 = Always 1 = Only During Recording
225	MovieAFTackingSensitivity	int8u	0 = 1 (High)    4 = 5 1 = 2    5 = 6 2 = 3    6 = 7 (Low) 3 = 4 (Normal)
279	LCDIllumination?	int8u	0 = Off 1 = On
280	ExtendedShutterSpeeds	int8u	0 = Off 1 = On
281	SubjectMotion	int8u	0 = Erratic 1 = Steady
283	FocusPointPersistence	int8u	0 = Auto 1 = Off

	285 AutoFocusModeRestrictions?	int8u	0 = AF-S 1 = AF-C 2 = Full-time AF 3 = Manual 4 = No Restrictions
	289 CHModeShootingSpeed	int8u	
293.1	LimitReleaseModeSelCL?	int8u	[val >> 1 & 0x1] 0 = Limit 1 = No Limit
293.2	LimitReleaseModeSelCH?	int8u	[val >> 2 & 0x1] 0 = Limit 1 = No Limit
293.3	LimitReleaseModeSelC30?	int8u	[val >> 4 & 0x1] 0 = Limit 1 = No Limit
293.4	LimitReleaseModeSelC120?	int8u	[val >> 6 & 0x1] 0 = Limit 1 = No Limit
293.5	LimitReleaseModeSelSelf?	int8u	[val >> 7 & 0x1] 0 = Limit 1 = No Limit
297	FlashBurstPriority?	int8u	0 = Frame Rate 1 = Exposure
301	VerticalFuncButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
305	Func3Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
309	VerticalAFOOnButton	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
317	VerticalMultiSelectorPlaybackMode?	int8u	0 = Image Scroll L/R 1 = Image Scroll Up/Down
319	MovieFunc3Button	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
359	LimitAF-AreaModeSelDynamic_S?	int8u	0 = Limit 1 = No Limit
360	LimitAF-AreaModeSelDynamic_M?	int8u	0 = Limit 1 = No Limit
361	LimitAF-AreaModeSelDynamic_L?	int8u	0 = Limit 1 = No Limit
363	LimitAF-AreaModeSel3DTracking?	int8u	0 = Limit 1 = No Limit
365	PlaybackFlickUp?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
369	PlaybackFlickDown?	int8u	0 = Rating 1 = Select To Send (PC) 2 = Select To Send (FTP) 3 = Protect 4 = Voice Memo 5 = None
373	ISOStepSize	int8u	0 = 1/3 EV 1 = 1/2 EV 2 = 1 EV
379	ReverseFocusRing	int8u	0 = Not Reversed 1 = Reversed
380	EVFIImageFrame?	int8u	0 = Off 1 = On
381	EVFGGrid?	int8u	0 = 3x3      3 = 1.85:1    6 = 1:1 1 = 4x4      4 = 5:4      7 = 16:9 2 = 2.35:1    5 = 4:3      8 = 90%
383	VirtualHorizonStyle?	int8u	0 = Type A (Cockpit) 1 = Type B (Sides)
397	Func4Button?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
403	AudioButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
405	QualityButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
423	VerticalMultiSelector?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
445	Func1ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
447	Func2ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>

449	Func3ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
455	Func4ButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
461	MovieRecordButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
463	VerticalFuncButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
465	AudioButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
471	QualityButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
477	WhiteBalanceButtonPlaybackMode?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
483	CommandDialPlaybackMode?	int8u	0 = 1 Frame 1 = 10 Frames 2 = 50 Frames 3 = Folder 4 = Protect 5 = Photos Only 6 = Videos Only 7 = Rating 8 = Page 9 = Skip To First Shot In Series 10 = Uploaded to FTP 11 = Uploaded to Computer
485	CommandDialVideoPlaybackMode?	int8u	0 = 2 s      4 = 5 Frames 1 = 5 s      5 = 10 Frames 2 = 10 s     6 = First/Last Frame 3 = 1 Frame   7 = Playback Speed
487	SubCommandDialPlaybackMode?	int8u	0 = 1 Frame 1 = 10 Frames 2 = 50 Frames 3 = Folder 4 = Protect 5 = Photos Only 6 = Videos Only 7 = Rating 8 = Page 9 = Skip To First Shot In Series 10 = Uploaded to FTP 11 = Uploaded to Computer
489	SubCommandDialVideoPlaybackMode?	int8u	0 = 2 s      4 = 5 Frames 1 = 5 s      5 = 10 Frames 2 = 10 s     6 = First/Last Frame 3 = 1 Frame   7 = Playback Speed
491	FocusPointLock?	int8u	0 = Off 1 = On
493	ControlRingResponse	int8u	0 = High 1 = Low
505	VerticalMovieFuncButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
529	VerticalMovieAFOnButton?	int8u	--> <a href="#">NikonCustom ButtonsZ9 Values</a>
551	HDMIViewAssist?	int8u	0 = Off 1 = On
553	ZebraPatternToneRange?	int8u	0 = Off 1 = Highlights 2 = Midtones
555	MovieZebraPattern?	int8u	0 = Pattern 1 1 = Pattern 2
557	MovieHighlightDisplayThreshold?	int8u	
559	MovieMidtoneDisplayValue?	int8u	
561	MovieMidtoneDisplayRange?	int8u~	
565	MovieEVFGGrid?	int8u	0 = 3x3      3 = 1.85:1    6 = 1:1 1 = 4x4      4 = 5:4       7 = 16:9 2 = 2.35:1    5 = 4:3       8 = 90%
573	MovieShutterSpeedLock?	int8u	0 = Off 1 = On
574	MovieFocusPointLock?	int8u	0 = Off 1 = On
587	MatrixMetering?	int8u	0 = Face Detection Off 1 = Face Detection On
588	AF-CFocusDisplay	int8u	0 = Off 1 = On

589	FocusPeakingDisplay?	int8u	0 = Off 1 = On
591	KeepExposure	int8u	0 = Off 1 = Shutter Speed 2 = ISO
609	StarlightView?	int8u	0 = Off 1 = On
611	EVFWarmDisplayMode?	int8u	0 = Off 1 = Mode 1 2 = Mode 2
613	EVFWarmDisplayBrightness?	int8s	
615	EVFReleaseIndicator?	int8u	0 = Off 1 = Type A (Dark) 2 = Type B (Border) 3 = Type C (Sides)
625	MovieApertureLock?	int8u	0 = Off 1 = On
631	FlickAdvanceDirection?	int8u	0 = Left to Right 1 = Right to Left

(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Jul 25, 2025*

[<-- ExifTool Tag Names](#)

# NikonSettings Tags

User settings for newer Nikon models. A number of the tags are marked as Unknown only to reduce the volume of the normal output.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	ISOAutoHiLimit	no	(D6) 1 = ISO 200    24 = ISO 10000 2 = ISO 250    25 = ISO 12800 3 = ISO 280    26 = ISO 16000 4 = ISO 320    27 = ISO 18000 5 = ISO 400    28 = ISO 20000 6 = ISO 500    29 = ISO 25600 7 = ISO 560    30 = ISO 32000 8 = ISO 640    31 = ISO 36000 9 = ISO 800    32 = ISO 40000 10 = ISO 1000    33 = ISO 51200 11 = ISO 1100    34 = ISO 64000 12 = ISO 1250    35 = ISO 72000 13 = ISO 1600    36 = ISO 81200 14 = ISO 2000    37 = ISO 102400 15 = ISO 2200    38 = ISO Hi 0.3 16 = ISO 2500    39 = ISO Hi 0.5 17 = ISO 3200    40 = ISO Hi 0.7 18 = ISO 4000    41 = ISO Hi 1.0 19 = ISO 4500    42 = ISO Hi 2.0 20 = ISO 5000    43 = ISO Hi 3.0 21 = ISO 6400    44 = ISO Hi 4.0 22 = ISO 8000    45 = ISO Hi 5.0 23 = ISO 9000 (Z7 and Z7_2) 1 = ISO 100    21 = ISO 3200 2 = ISO 125    22 = ISO 4000 4 = ISO 160    24 = ISO 5000 5 = ISO 200    25 = ISO 6400 6 = ISO 250    26 = ISO 8000 8 = ISO 320    28 = ISO 10000 9 = ISO 400    29 = ISO 12800 10 = ISO 500    30 = ISO 16000 12 = ISO 640    32 = ISO 20000 13 = ISO 800    33 = ISO 25600 14 = ISO 1000    38 = ISO Hi 0.3 16 = ISO 1250    39 = ISO Hi 0.5 17 = ISO 1600    40 = ISO Hi 0.7 18 = ISO 2000    41 = ISO Hi 1.0 20 = ISO 2500    42 = ISO Hi 2.0
0x0002	ISOAutoFlashLimit	no	(D6) 1 = Same As Without Flash 2 = ISO 200 3 = ISO 250 5 = ISO 320 6 = ISO 400 7 = ISO 500 9 = ISO 640 10 = ISO 800 11 = ISO 1000 13 = ISO 1250 14 = ISO 1600 15 = ISO 2000 17 = ISO 2500 18 = ISO 3200 19 = ISO 4000 21 = ISO 5000 22 = ISO 6400 23 = ISO 8000 25 = ISO 10000 26 = ISO 12800 27 = ISO 16000 29 = ISO 20000 30 = ISO 25600 31 = ISO 32000 33 = ISO 40000 34 = ISO 51200 35 = ISO 64000 36 = ISO 72000 37 = ISO 81200

38 = ISO 102400  
 39 = ISO Hi 0.3  
 40 = ISO Hi 0.5  
 41 = ISO Hi 0.7  
 42 = ISO Hi 1.0  
 43 = ISO Hi 2.0  
 44 = ISO Hi 3.0  
 45 = ISO Hi 4.0  
 46 = ISO Hi 5.0  
 (Z7 and Z7\_2)  
 1 = Same As Without Flash  
 2 = ISO 100  
 3 = ISO 125  
 5 = ISO 160  
 6 = ISO 200  
 7 = ISO 250  
 9 = ISO 320  
 10 = ISO 400  
 11 = ISO 500  
 13 = ISO 640  
 14 = ISO 800  
 15 = ISO 1000  
 17 = ISO 1250  
 18 = ISO 1600  
 19 = ISO 2000  
 21 = ISO 2500  
 22 = ISO 3200  
 23 = ISO 4000  
 25 = ISO 5000  
 26 = ISO 6400  
 27 = ISO 8000  
 29 = ISO 10000  
 30 = ISO 12800  
 31 = ISO 16000  
 33 = ISO 20000  
 34 = ISO 25600  
 39 = ISO Hi 0.3  
 40 = ISO Hi 0.5  
 41 = ISO Hi 0.7  
 42 = ISO Hi 1.0  
 43 = ISO Hi 2.0

0x0003 ISOAutoShutterTime	no	1 = Auto (Slowest) 2 = Auto (Slower) 3 = Auto 4 = Auto (Faster) 5 = Auto (Fastest) 6 = 1/4000 s 7 = 1/3200 s 8 = 1/2500 s 9 = 1/2000 s 10 = 1/1600 s 11 = 1/1250 s 12 = 1/1000 s 13 = 1/800 s 14 = 1/640 s 15 = 1/500 s 16 = 1/400 s 17 = 1/320 s 18 = 1/250 s 19 = 1/200 s 20 = 1/160 s 21 = 1/125 s 22 = 1/100 s 23 = 1/80 s 24 = 1/60 s 25 = 1/50 s 26 = 1/40 s 27 = 1/30 s 28 = 1/25 s 29 = 1/20 s	30 = 1/15 s 31 = 1/13 s 32 = 1/10 s 33 = 1/8 s 34 = 1/6 s 35 = 1/5 s 36 = 1/4 s 37 = 1/3 s 38 = 1/2.5 s 39 = 1/2 s 40 = 1/1.6 s 41 = 1/1.3 s 42 = 1 s 43 = 1.3 s 44 = 1.6 s 45 = 2 s 46 = 2.5 s 47 = 3 s 48 = 4 s 49 = 5 s 50 = 6 s 51 = 8 s 52 = 10 s 53 = 13 s 54 = 15 s 55 = 20 s 56 = 25 s 57 = 30 s
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0x000b FlickerReductionShooting	no	1 = Enable 2 = Disable
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0x000c FlickerReductionIndicator	no	1 = Enable 2 = Disable
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0x000d MovieISOAutoHiLimit	no	(D6)
		1 = ISO 200      24 = ISO 10000
		2 = ISO 250      25 = ISO 12800
		3 = ISO 280      26 = ISO 16000

			4 = ISO 320 5 = ISO 400 6 = ISO 500 7 = ISO 560 8 = ISO 640 9 = ISO 800 10 = ISO 1000 11 = ISO 1100 12 = ISO 1250 13 = ISO 1600 14 = ISO 2000 15 = ISO 2200 16 = ISO 2500 17 = ISO 3200 18 = ISO 4000 19 = ISO 4500 20 = ISO 5000 21 = ISO 6400 22 = ISO 8000 23 = ISO 9000  (Z7 and Z7_2) 1 = ISO 200 2 = ISO 250 4 = ISO 320 5 = ISO 400 6 = ISO 500 8 = ISO 640 9 = ISO 800 10 = ISO 1000 12 = ISO 1250 13 = ISO 1600 14 = ISO 2000 16 = ISO 2500 17 = ISO 3200 18 = ISO 4000 20 = ISO 5000 21 = ISO 6400 22 = ISO 8000 24 = ISO 10000 25 = ISO 12800 26 = ISO 16000 28 = ISO 20000 29 = ISO 25600 30 = ISO 32000 31 = ISO 36000 33 = ISO 51200 34 = ISO 64000 35 = ISO 72000 36 = ISO 81200 37 = ISO 102400 38 = ISO Hi 0.3 39 = ISO Hi 0.5 40 = ISO Hi 0.7 41 = ISO Hi 1.0 42 = ISO Hi 2.0 43 = ISO Hi 3.0 44 = ISO Hi 4.0 45 = ISO Hi 5.0
0x000e	MovieISOAutoControlManualMode	no	1 = On 2 = Off
0x000f	MovieWhiteBalanceSameAsPhoto	no	1 = Yes 2 = No
0x001d	AF-CPrioritySel	no	(D6) 1 = Release 2 = Release + Focus 3 = Focus + Release 4 = Focus (Z Series cameras thru November 2021) 1 = Release 2 = Focus
0x001e	AF-SPrioritySel	no	1 = Release 2 = Focus
0x0020	AFPointSel	no	(D6) 1 = 105 Points 2 = 27 Points 3 = 15 Points (Z Series cameras thru November 2021) 1 = Use All 2 = Use Half
0x0022	AFActivation	no	1 = Shutter/AF-On 2 = AF-On Only
0x0023	FocusPointWrap	no	1 = Wrap 2 = No Wrap
0x0025	ManualFocusPointIllumination	no	1 = On 2 = On During Focus Point Selection Only
0x0026	AF-AssistIlluminator	no	1 = On 2 = Off
0x0027	ManualFocusRingInAFMode	no	1 = On 2 = Off
0x0029	ISOStepSize	no	1 = 1/3 EV 2 = 1/2 EV 3 = 1 EV
0x002a	ExposureControlStepSize	no	1 = 1/3 EV 2 = 1/2 EV 3 = 1 EV
0x002b	EasyExposureCompensation	no	1 = On (auto reset) 2 = On 3 = Off

0x002c	MatrixMetering	no	1 = Face Detection On 2 = Face Detection Off
0x002d	CenterWeightedAreaSize	no	(D6) 1 = 8 mm 2 = 12 mm 3 = 15 mm 4 = 20 mm 5 = Average (Z Series cameras thru November 2021) 1 = 12 mm 2 = Average
0x002f	FineTuneOptMatrixMetering	no	
0x0030	FineTuneOptCenterWeighted	no	
0x0031	FineTuneOptSpotMetering	no	
0x0032	FineTuneOptHighlightWeighted	no	
0x0033	ShutterReleaseButtonAE-L	no	1 = On (Half Press) 2 = On (Burst Mode) 3 = Off
0x0034	StandbyMonitorOffTime	no	(D6) 1 = 4 s    4 = 30 s    7 = 10 min 2 = 6 s    5 = 1 min    8 = 30 min 3 = 10 s    6 = 5 min    9 = No Limit (Z Series cameras thru November 2021) 1 = 10 s    5 = 5 min 2 = 20 s    6 = 10 min 3 = 30 s    7 = 30 min 4 = 1 min    8 = No Limit
0x0035	SelfTimerTime	no	1 = 2 s 2 = 5 s 3 = 10 s 4 = 20 s
0x0036	SelfTimerShotCount	no	
0x0037	SelfTimerShotInterval	no	1 = 0.5 s 2 = 1 s 3 = 2 s 4 = 3 s
0x0038	PlaybackMonitorOffTime	no	1 = 4 s    4 = 1 min 2 = 10 s    5 = 5 min 3 = 20 s    6 = 10 min
0x0039	MenuMonitorOffTime	no	1 = 4 s    4 = 1 min 2 = 10 s    5 = 5 min 3 = 20 s    6 = 10 min
0x003a	ShootingInfoMonitorOffTime	no	1 = 4 s    4 = 1 min 2 = 10 s    5 = 5 min 3 = 20 s    6 = 10 min
0x003b	ImageReviewMonitorOffTime	no	1 = 2 s    5 = 1 min 2 = 4 s    6 = 5 min 3 = 10 s    7 = 10 min 4 = 20 s
0x003c	LiveViewMonitorOffTime	no	1 = 5 min    4 = 20 min 2 = 10 min    5 = 30 min 3 = 15 min    6 = No Limit
0x003e	CLModeShootingSpeed	no	
0x003f	MaxContinuousRelease	no	
0x0040	ExposureDelayMode	no	1 = 3 s    4 = 0.5 s 2 = 2 s    5 = 0.2 s 3 = 1 s    6 = Off
0x0041	ElectronicFront-CurtainShutter	no	1 = On 2 = Off
0x0042	FileNumberSequence	no	1 = On 2 = Off
0x0043	FramingGridDisplay	no	1 = On 2 = Off
0x0045	LCDIllumination	no	1 = On 2 = Off
0x0046	OpticalVR	no	1 = On 2 = Off
0x0047	FlashSyncSpeed	no	(D6)

			<p>1 = 1/250 s (auto FP) 5 = 1/125 s      2 = 1/250 s 6 = 1/100 s      3 = 1/200 s 7 = 1/80 s      4 = 1/160 s 8 = 1/60 s</p> <p>(Z Series cameras thru November 2021)</p> <p>1 = 1/200 s (auto FP) 5 = 1/100 s      2 = 1/200 s 6 = 1/80 s      3 = 1/160 s 7 = 1/60 s      4 = 1/125 s</p>
0x0048	FlashShutterSpeed	no	<p>1 = 1/60 s 5 = 1/4 s      2 = 1/30 s 6 = 1/2 s      3 = 1/15 s 7 = 1 s      4 = 1/8 s 8 = 2 s</p>
0x0049	FlashExposureCompArea	no	<p>1 = Entire Frame      2 = Background Only</p>
0x004a	AutoFlashISOSENSitivity	no	<p>1 = Subject and Background      2 = Subject Only</p>
0x0051	AssignBktButton	no	<p>1 = Auto Bracketing      2 = Multiple Exposure      3 = HDR (high dynamic range)      4 = None</p>
0x0052	AssignMovieRecordButton	no	<p>(D6)</p> <p>1 = Voice Memo      2 = Photo Shooting Bank      3 = Exposure Mode      4 = AF Mode/AF Area Mode      5 = Image Area      6 = Shutter/Aperture Lock      7 = None</p> <p>(Z Series cameras thru November 2021)</p> <p>1 = AE Lock (hold)      2 = AE Lock (reset on release)      3 = Preview      4 = +NEF(RAW)      5 = LiveView Info Display On/Off      6 = Grid Display      7 = Zoom (Low)      8 = Zoom (1:1)      9 = Zoom (High)      10 = My Menu      11 = My Menu Top Item      12 = Image Area      13 = Image Quality      14 = White Balance      15 = Picture Control      16 = Active-D Lighting      17 = Metering      18 = Flash Mode      19 = Focus Mode      20 = Auto Bracketing      21 = Multiple Exposure      22 = HDR      23 = Exposure Delay Mode      24 = Shutter/Aperture Lock      25 = Non-CPU Lens      26 = None</p>
0x0053	MultiSelectorShootMode	no	<p>(D6)</p> <p>1 = Select Center Focus Point      2 = Preset Focus Point - Press To Recall      3 = Preset Focus Point - Hold To Recall      4 = None</p> <p>(Z Series cameras thru November 2021)</p> <p>1 = Select Center Focus Point      2 = Zoom (Low)      3 = Zoom (1:1)      4 = Zoom (High)      5 = None</p>
0x0054	MultiSelectorPlaybackMode	no	<p>(D6)</p> <p>1 = Filtered Playback 4 = Zoom (1:1)      2 = View Histograms 5 = Zoom (High)      3 = Zoom (Low) 6 = Choose Folder</p> <p>(Z Series cameras thru November 2021)</p> <p>1 = Thumbnail On/Off 4 = Zoom (1:1)      2 = View Histograms 5 = Zoom (High)      3 = Zoom (Low) 6 = Choose Folder</p>

0x0056	MultiSelectorLiveView	no	1 = Select Center Focus Point 2 = Zoom (Low) 3 = Zoom (1:1) 4 = Zoom (High) 5 = None
0x0058	CmdDialsReverseRotExposureComp?	no	
0x0059	CmdDialsChangeMainSubExposure?	no	
0x005a	CmdDialsChangeMainSub	no	1 = Autofocus On, Exposure On 2 = Autofocus Off, Exposure On 1 = Autofocus On, Exposure On (Mode A) 2 = Autofocus Off, Exposure On (Mode A) 1 = Autofocus On, Exposure Off 2 = Autofocus Off, Exposure Off
0x005b	CmdDialsMenuAndPlayback	no	1 = On 2 = On (Image Review Excluded) 3 = Off
0x005c	SubDialFrameAdvance	no	1 = 10 Frames 5 = Stills Only 2 = 50 Frames 6 = Movies Only 3 = Rating 7 = Folder 4 = Protect
0x005d	ReleaseButtonToUseDial	no	1 = Yes 2 = No
0x005e	ReverseIndicators	no	1 = + 0 - 2 = - 0 +
0x0062	MovieShutterButton	no	1 = Take Photo 2 = Record Movie
0x0063	Language	no	5 = English 6 = Spanish 8 = French 15 = Portuguese (Br)
0x006c	ShootingInfoDisplay	no	(D6) 1 = Auto 2 = Manual (dark on light) 3 = Manual (light on dark) (Z Series cameras thru November 2021) 1 = Manual (dark on light) 2 = Manual (light on dark)
0x0074	FlickAdvanceDirection	no	1 = Right to Left 2 = Left to Right
0x0075	HDMIOutputResolution	no	1 = Auto 5 = 720p 2 = 2160p 6 = 576p 3 = 1080p 7 = 480p 4 = 1080i
0x0077	HDMIOutputRange	no	1 = Auto 2 = Limit 3 = Full
0x0080	RemoteFuncButton	no	(D6) 1 = AF-On 2 = AF Lock Only 3 = AE Lock (reset on release) 4 = AE Lock Only 5 = AE/AF Lock 6 = FV Lock 7 = Flash Disable/Enable 8 = Preview 9 = +NEF(RAW) 10 = LiveView Info Display On/Off 11 = Recall Shooting Functions 12 = None (Z Series cameras thru November 2021) 1 = AF-On 2 = AF Lock Only 3 = AE Lock (reset on release) 4 = AE Lock Only 5 = AE/AF Lock 6 = FV Lock 7 = Flash Disable/Enable 8 = Preview 9 = +NEF(RAW) 10 = None 11 = LiveView Info Display On/Off
0x008b	CmdDialsReverseRotation	no	1 = No 2 = Shutter Speed & Aperture

			1 = Exposure Compensation 2 = Exposure Compensation, Shutter Speed & Aperture
0x008d	FocusPeakingHighlightColor	no	1 = Red 2 = Yellow 3 = Blue 4 = White
0x008e	ContinuousModeDisplay	no	1 = On 2 = Off
0x008f	ShutterSpeedLock	no	1 = On 2 = Off
0x0090	ApertureLock	no	1 = On 2 = Off
0x0091	MovieHighlightDisplayThreshold	no	1 = 255 5 = 213 2 = 248 6 = 202 3 = 235 7 = 191 4 = 224 8 = 180
0x0092	HDMIExternalRecorder	no	1 = On 2 = Off
0x0093	BlockShotAFResponse	no	1 = 1 (Quick) 2 = 2 3 = 3 (Normal) 4 = 4 5 = 5 (Delay)
0x0094	SubjectMotion	no	1 = Erratic 2 = Steady
0x0095	Three-DTrackingFaceDetection	no	1 = On 2 = Off
0x0097	StoreByOrientation	no	(D6) 1 = Focus Point 2 = Focus Point and AF-area mode 3 = Off (Z Series cameras thru November 2021) 1 = Focus Point 2 = Off
0x0099	DynamicAreaAFAssist	no	1 = On 2 = Off
0x009a	ExposureCompStepSize	no	1 = 1/3 EV 2 = 1/2 EV 3 = 1 EV
0x009b	SyncReleaseMode	no	1 = Sync 2 = No Sync
0x009c	ModelingFlash	no	1 = On 2 = Off
0x009d	AutoBracketModeM	no	1 = Flash/Speed 2 = Flash/Speed/Aperture 3 = Flash/Aperture 4 = Flash Only
0x009e	PreviewButton	no	1 = Preset Focus Point - Press To Recall 2 = Preset Focus Point - Hold To Recall 3 = AF-AreaMode S 4 = AF-AreaMode D9 5 = AF-AreaMode D25 6 = AF-AreaMode D49 7 = AF-AreaMode D105 8 = AF-AreaMode 3D 9 = AF-AreaMode Group 10 = AF-AreaMode Group C1 11 = AF-AreaMode Group C2 12 = AF-AreaMode Auto Area 13 = AF-AreaMode + AF-On S 14 = AF-AreaMode + AF-On D9 15 = AF-AreaMode + AF-On D25 16 = AF-AreaMode + AF-On D49 17 = AF-AreaMode + AF-On D105 18 = AF-AreaMode + AF-On 3D 19 = AF-AreaMode + AF-On Group 20 = AF-AreaMode + AF-On Group C1 21 = AF-AreaMode + AF-On Group C2 22 = AF-AreaMode + AF-On Auto Area 23 = AF-On 24 = AF Lock Only 25 = AE Lock (hold) 26 = AE/WB Lock (hold) 27 = AE Lock (reset on release)

28 = AE Lock Only  
 29 = AE/AF Lock  
 30 = FV Lock  
 31 = Flash Disable/Enable  
 32 = Preview  
 33 = Recall Shooting Functions  
 34 = Bracketing Burst  
 35 = Synchronized Release (Master)  
 36 = Synchronized Release (Remote)  
 39 = +NEF(RAW)  
 40 = Grid Display  
 41 = Virtual Horizon  
 42 = Voice Memo  
 43 = Wired LAN  
 44 = My Menu  
 45 = My Menu Top Item  
 46 = Playback  
 47 = Filtered Playback  
 48 = Photo Shooting Bank  
 49 = AF Mode/AF Area Mode  
 50 = Image Area  
 51 = Active-D Lighting  
 52 = Exposure Delay Mode  
 53 = Shutter/Aperture Lock  
 54 = 1 Stop Speed/Aperture  
 55 = Non-CPU Lens  
 56 = None

0x00a0 Func1Button	no	(D6)
		<p>       1 = Preset Focus Point - Press To Recall        2 = Preset Focus Point - Hold To Recall        3 = AF-AreaMode S        4 = AF-AreaMode D9        5 = AF-AreaMode D25        6 = AF-AreaMode D49        7 = AF-AreaMode D105        8 = AF-AreaMode 3D        9 = AF-AreaMode Group        10 = AF-AreaMode Group C1        11 = AF-AreaMode Group C2        12 = AF-AreaMode Auto Area        13 = AF-AreaMode + AF-On S        14 = AF-AreaMode + AF-On D9        15 = AF-AreaMode + AF-On D25        16 = AF-AreaMode + AF-On D49        17 = AF-AreaMode + AF-On D105        18 = AF-AreaMode + AF-On 3D        19 = AF-AreaMode + AF-On Group        20 = AF-AreaMode + AF-On Group C1        21 = AF-AreaMode + AF-On Group C2        22 = AF-AreaMode + AF-On Auto Area        23 = AF-On        24 = AF Lock Only        25 = AE Lock (hold)        26 = AE/WB Lock (hold)        27 = AE Lock (reset on release)        28 = AE Lock Only        29 = AE/AF Lock        30 = FV Lock        31 = Flash Disable/Enable        32 = Preview        33 = Recall Shooting Functions        34 = Bracketing Burst        35 = Synchronized Release (Master)        36 = Synchronized Release (Remote)        39 = +NEF(RAW)        40 = Grid Display        41 = Virtual Horizon        42 = Voice Memo        43 = Wired LAN        44 = My Menu        45 = My Menu Top Item        46 = Playback        47 = Filtered Playback        48 = Photo Shooting Bank        49 = AF Mode/AF Area Mode        50 = Image Area        51 = Active-D Lighting        52 = Exposure Delay Mode        53 = Shutter/Aperture Lock     </p>

54 = 1 Stop Speed/Aperture  
55 = Non-CPU Lens  
56 = None  
(Z6 and Z7)  
1 = AF-On or Subject Tracking  
2 = AF Lock Only  
3 = AE Lock (hold)  
4 = AE Lock (reset on release)  
5 = AE Lock Only  
6 = AE/AF Lock  
7 = FV Lock  
8 = Flash Disable/Enable  
9 = Preview  
10 = Matrix Metering  
11 = Center-weighted Metering  
12 = Spot Metering  
13 = Highlight-weighted Metering  
14 = Bracketing Burst  
15 = Synchronized Release (Master)  
16 = Synchronized Release (Remote)  
19 = +NEF(RAW)  
20 = Framing Grid Display  
22 = Zoom On/Off  
24 = My Menu  
25 = My Menu Top Item  
26 = Playback  
27 = Protect  
28 = Image Area  
29 = Image Quality  
30 = White Balance  
31 = Picture Control  
32 = Active D-Lighting  
33 = Metering  
34 = Flash Mode  
35 = Focus Mode  
36 = Auto Bracketing  
37 = Multiple Exposure  
38 = HDR  
39 = Exposure Delay Mode  
40 = Shutter/Aperture Lock  
41 = Focus Peaking  
42 = Rating  
43 = Non-CPU Lens  
44 = None

(Z Series cameras thru November 2021)

1 = AF-On  
2 = AF Lock Only  
3 = AE Lock (hold)  
4 = AE Lock (reset on release)  
5 = AE Lock Only  
6 = AE/AF Lock  
7 = FV Lock  
8 = Flash Disable/Enable  
9 = Preview  
10 = Matrix Metering  
11 = Center-weighted Metering  
12 = Spot Metering  
13 = Highlight-weighted Metering  
14 = Bracketing Burst  
15 = Synchronized Release (Master)  
16 = Synchronized Release (Remote)  
19 = +NEF(RAW)  
20 = Subject Tracking  
21 = Silent Photography  
22 = LiveView Info Display On/Off  
23 = Grid Display  
24 = Zoom (Low)  
25 = Zoom (1:1)  
26 = Zoom (High)  
27 = My Menu  
28 = My Menu Top Item  
29 = Playback  
30 = Protect  
31 = Image Area  
32 = Image Quality  
33 = White Balance  
34 = Picture Control  
35 = Active-D Lighting  
36 = Metering

		37 = Flash Mode 38 = Focus Mode 39 = Auto Bracketing 40 = Multiple Exposure 41 = HDR 42 = Exposure Delay Mode 43 = Shutter/Aperture Lock 44 = Focus Peaking 45 = Rating 0 46 = Rating 5 47 = Rating 4 48 = Rating 3 49 = Rating 2 50 = Rating 1 52 = None
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0x00a2 Func2Button	no	(D6) 1 = Preset Focus Point - Press To Recall 2 = Preset Focus Point - Hold To Recall 3 = AF-AreaMode S 4 = AF-AreaMode D9 5 = AF-AreaMode D25 6 = AF-AreaMode D49 7 = AF-AreaMode D105 8 = AF-AreaMode 3D 9 = AF-AreaMode Group 10 = AF-AreaMode Group C1 11 = AF-AreaMode Group C2 12 = AF-AreaMode Auto Area 13 = AF-AreaMode + AF-On S 14 = AF-AreaMode + AF-On D9 15 = AF-AreaMode + AF-On D25 16 = AF-AreaMode + AF-On D49 17 = AF-AreaMode + AF-On D105 18 = AF-AreaMode + AF-On 3D 19 = AF-AreaMode + AF-On Group 20 = AF-AreaMode + AF-On Group C1 21 = AF-AreaMode + AF-On Group C2 22 = AF-AreaMode + AF-On Auto Area 23 = AF-On 24 = AF Lock Only 25 = AE Lock (hold) 26 = AE/WB Lock (hold) 27 = AE Lock (reset on release) 28 = AE Lock Only 29 = AE/AF Lock 30 = FV Lock 31 = Flash Disable/Enable 32 = Preview 33 = Recall Shooting Functions 34 = Bracketing Burst 35 = Synchronized Release (Master) 36 = Synchronized Release (Remote) 39 = +NEF(RAW) 40 = Grid Display 41 = Virtual Horizon 42 = Voice Memo 43 = Wired LAN 44 = My Menu 45 = My Menu Top Item 46 = Playback 47 = Filtered Playback 48 = Photo Shooting Bank 49 = AF Mode/AF Area Mode 50 = Image Area 51 = Active-D Lighting 52 = Exposure Delay Mode 53 = Shutter/Aperture Lock 54 = 1 Stop Speed/Aperture 55 = Non-CPU Lens 56 = None (Z6 and Z7) 1 = AF-On or Subject Tracking 2 = AF Lock Only 3 = AE Lock (hold) 4 = AE Lock (reset on release) 5 = AE Lock Only 6 = AE/AF Lock 7 = FV Lock 8 = Flash Disable/Enable
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9 = Preview  
10 = Matrix Metering  
11 = Center-weighted Metering  
12 = Spot Metering  
13 = Highlight-weighted Metering  
14 = Bracketing Burst  
15 = Synchronized Release (Master)  
16 = Synchronized Release (Remote)  
19 = +NEF(RAW)  
20 = Framing Grid Display  
22 = Zoom On/Off  
24 = My Menu  
25 = My Menu Top Item  
26 = Playback  
27 = Protect  
28 = Image Area  
29 = Image Quality  
30 = White Balance  
31 = Picture Control  
32 = Active D-Lighting  
33 = Metering  
34 = Flash Mode  
35 = Focus Mode  
36 = Auto Bracketing  
37 = Multiple Exposure  
38 = HDR  
39 = Exposure Delay Mode  
40 = Shutter/Aperture Lock  
41 = Focus Peaking  
42 = Rating  
43 = Non-CPU Lens  
44 = None

(Z Series cameras thru November 2021)

1 = AF-On  
2 = AF Lock Only  
3 = AE Lock (hold)  
4 = AE Lock (reset on release)  
5 = AE Lock Only  
6 = AE/AF Lock  
7 = FV Lock  
8 = Flash Disable/Enable  
9 = Preview  
10 = Matrix Metering  
11 = Center-weighted Metering  
12 = Spot Metering  
13 = Highlight-weighted Metering  
14 = Bracketing Burst  
15 = Synchronized Release (Master)  
16 = Synchronized Release (Remote)  
19 = +NEF(RAW)  
20 = Subject Tracking  
21 = Silent Photography  
22 = LiveView Info Display On/Off  
23 = Grid Display  
24 = Zoom (Low)  
25 = Zoom (1:1)  
26 = Zoom (High)  
27 = My Menu  
28 = My Menu Top Item  
29 = Playback  
30 = Protect  
31 = Image Area  
32 = Image Quality  
33 = White Balance  
34 = Picture Control  
35 = Active-D Lighting  
36 = Metering  
37 = Flash Mode  
38 = Focus Mode  
39 = Auto Bracketing  
40 = Multiple Exposure  
41 = HDR  
42 = Exposure Delay Mode  
43 = Shutter/Aperture Lock  
44 = Focus Peaking  
45 = Rating 0  
46 = Rating 5  
47 = Rating 4  
48 = Rating 3  
49 = Rating 2

50 = Rating 1  
52 = None

0x00a3 AF-OnButton	no	(D6) 1 = AF-AreaMode S 2 = AF-AreaMode D9 3 = AF-AreaMode D25 4 = AF-AreaMode D49 5 = AF-AreaMode D105 6 = AF-AreaMode 3D 7 = AF-AreaMode Group 8 = AF-AreaMode Group C1 9 = AF-AreaMode Group C2 10 = AF-AreaMode Auto Area 11 = AF-AreaMode + AF-On S 12 = AF-AreaMode + AF-On D9 13 = AF-AreaMode + AF-On D25 14 = AF-AreaMode + AF-On D49 15 = AF-AreaMode + AF-On D105 16 = AF-AreaMode + AF-On 3D 17 = AF-AreaMode + AF-On Group 18 = AF-AreaMode + AF-On Group C1 19 = AF-AreaMode + AF-On Group C2 20 = AF-AreaMode + AF-On Auto Area 21 = AF-On 22 = AF Lock Only 23 = AE Lock (hold) 24 = AE/WB Lock (hold) 25 = AE Lock (reset on release) 26 = AE Lock Only 27 = AE/AF Lock 28 = Recall Shooting Functions 29 = None (Z Series cameras thru November 2021) 1 = Center Focus Point 2 = AF-On 3 = AF Lock Only 4 = AE Lock (hold) 5 = AE Lock (reset on release) 6 = AE Lock Only 7 = AE/AF Lock 8 = LiveView Info Display On/Off 9 = Zoom (Low) 10 = Zoom (1:1) 11 = Zoom (High) 12 = None
0x00a4 SubSelector	no	1 = Same as MultiSelector 2 = Focus Point Selection
0x00a5 SubSelectorCenter	no	(D6) 1 = Preset Focus Point - Press To Recall 2 = Preset Focus Point - Hold To Recall 3 = Center Focus Point 4 = AF-AreaMode S 5 = AF-AreaMode D9 6 = AF-AreaMode D25 7 = AF-AreaMode D49 8 = AF-AreaMode D105 9 = AF-AreaMode 3D 10 = AF-AreaMode Group 11 = AF-AreaMode Group C1 12 = AF-AreaMode Group C2 13 = AF-AreaMode Auto Area 14 = AF-AreaMode + AF-On S 15 = AF-AreaMode + AF-On D9 16 = AF-AreaMode + AF-On D25 17 = AF-AreaMode + AF-On D49 18 = AF-AreaMode + AF-On D105 19 = AF-AreaMode + AF-On 3D 20 = AF-AreaMode + AF-On Group 21 = AF-AreaMode + AF-On Group C1 22 = AF-AreaMode + AF-On Group C2 23 = AF-AreaMode + AF-On Auto Area 24 = AF-On 25 = AF Lock Only 26 = AE Lock (hold) 27 = AE/WB Lock (hold) 28 = AE Lock (reset on release) 29 = AE Lock Only 30 = AE/AF Lock

31 = FV Lock  
 32 = Flash Disable/Enable  
 33 = Preview  
 34 = Recall Shooting Functions  
 35 = Bracketing Burst  
 36 = Synchronized Release (Master)  
 37 = Synchronized Release (Remote)  
 38 = None  
 (Z Series cameras thru November 2021)  
 1 = Center Focus Point  
 2 = AF-On  
 3 = AF Lock Only  
 4 = AE Lock (hold)  
 5 = AE Lock (reset on release)  
 6 = AE Lock Only  
 7 = AE/AF Lock  
 8 = FV Lock  
 9 = Flash Disable/Enable  
 10 = Preview  
 11 = Matrix Metering  
 12 = Center-weighted Metering  
 13 = Spot Metering  
 14 = Highlight-weighted Metering  
 15 = Bracketing Burst  
 16 = Synchronized Release (Master)  
 17 = Synchronized Release (Remote)  
 20 = +NEF(RAW)  
 21 = LiveView Info Display On/Off  
 22 = Grid Display  
 23 = Image Area  
 24 = Non-CPU Lens  
 25 = None

0x00a7 LensFunc1Button

no

(D6)

1 = Preset Focus Point - Press To Recall  
 2 = Preset Focus Point - Hold To Recall  
 3 = AF-AreaMode S  
 4 = AF-AreaMode D9  
 5 = AF-AreaMode D25  
 6 = AF-AreaMode D49  
 7 = AF-AreaMode D105  
 8 = AF-AreaMode 3D  
 9 = AF-AreaMode Group  
 10 = AF-AreaMode Group C1  
 11 = AF-AreaMode Group C2  
 12 = AF-AreaMode Auto Area  
 13 = AF-AreaMode + AF-On S  
 14 = AF-AreaMode + AF-On D9  
 15 = AF-AreaMode + AF-On D25  
 16 = AF-AreaMode + AF-On D49  
 17 = AF-AreaMode + AF-On D105  
 18 = AF-AreaMode + AF-On 3D  
 19 = AF-AreaMode + AF-On Group  
 20 = AF-AreaMode + AF-On Group C1  
 21 = AF-AreaMode + AF-On Group C2  
 22 = AF-AreaMode + AF-On Auto Area  
 23 = AF-On  
 24 = AF Lock Only  
 25 = AE Lock Only  
 26 = AE/AF Lock  
 27 = Flash Disable/Enable  
 28 = Recall Shooting Functions  
 29 = Synchronized Release (Master)  
 30 = Synchronized Release (Remote)  
 (Z Series cameras thru November 2021)  
 1 = AF-On  
 2 = AF Lock Only  
 3 = AE Lock (hold)  
 4 = AE Lock (reset on release)  
 5 = AE Lock Only  
 6 = AE/AF Lock  
 7 = FV Lock  
 8 = Flash Disable/Enable  
 9 = Preview  
 10 = Matrix Metering  
 11 = Center-weighted Metering  
 12 = Spot Metering  
 13 = Highlight-weighted Metering  
 14 = Bracketing Burst  
 15 = Synchronized Release (Master)

16 = Synchronized Release (Remote)  
 19 = +NEF(RAW)  
 20 = Subject Tracking  
 21 = Grid Display  
 22 = Zoom (Low)  
 23 = Zoom (1:1)  
 24 = Zoom (High)  
 25 = My Menu  
 26 = My Menu Top Item  
 27 = Playback  
 28 = None

0x00a8	CmdDialsApertureSetting	no	1 = Sub-command Dial 2 = Aperture Ring
--------	-------------------------	----	---

0x00a9	MultiSelector	no	1 = Restart Standby Timer 2 = Do Nothing
--------	---------------	----	---

0x00aa	LiveViewButtonOptions	no	1 = Enable 2 = Enable (Standby Timer Active) 3 = Disable
--------	-----------------------	----	--

0x00ab	LightSwitch	no	1 = LCD Backlight 2 = LCD Backlight and Shooting Information
--------	-------------	----	---

0x00b1	MoviePreviewButton MovieFunc1Button	no	(D6)
		no	1 = Power Aperture (Open) 2 = Exposure Compensation 3 = Grid Display 4 = Zoom (Low) 5 = Zoom (1:1) 6 = Zoom (High) 7 = Image Area 8 = Microphone Sensitivity 9 = None  (Z Series cameras thru November 2021) 1 = Power Aperture (Open) 2 = Exposure Compensation 3 = Subject Tracking 4 = LiveView Info Display On/Off 5 = Grid Display 6 = Zoom (Low) 7 = Zoom (1:1) 8 = Zoom (High) 9 = Protect 10 = Image Area 11 = White Balance 12 = Picture Control 13 = Active-D Lighting 14 = Metering 15 = Focus Mode 16 = Microphone Sensitivity 17 = Focus Peaking 18 = Rating (None) 19 = Rating (5) 20 = Rating (4) 21 = Rating (3) 22 = Rating (2) 23 = Rating (1) 25 = None

0x00b3	MovieFunc1Button MovieFunc2Button	no	(D6)
		no	1 = Power Aperture (Close) 2 = Exposure Compensation 3 = Grid Display 4 = Zoom (Low) 5 = Zoom (1:1) 6 = Zoom (High) 7 = Image Area 8 = Microphone Sensitivity 9 = None  (Z Series cameras thru November 2021) 1 = Power Aperture (Close) 2 = Exposure Compensation 3 = Subject Tracking 4 = LiveView Info Display On/Off 5 = Grid Display 6 = Zoom (Low) 7 = Zoom (1:1) 8 = Zoom (High) 9 = Protect 10 = Image Area 11 = White Balance

12 = Picture Control  
 13 = Active-D Lighting  
 14 = Metering  
 15 = Focus Mode  
 16 = Microphone Sensitivity  
 17 = Focus Peaking  
 18 = Rating (None)  
 19 = Rating (5)  
 20 = Rating (4)  
 21 = Rating (3)  
 22 = Rating (2)  
 23 = Rating (1)  
 25 = None

0x00b5	MovieFunc2Button	no	1 = Grid Display 2 = Zoom (Low) 3 = Zoom (1:1) 4 = Zoom (High) 5 = Image Area 6 = Microphone Sensitivity 7 = None
0x00b6	AssignMovieSubselector	no	<p>(D6)</p> <p>           1 = Center Focus Point    7 = Zoom (Low)            2 = AF Lock Only            8 = Zoom (1:1)            3 = AE Lock (hold)        9 = Zoom (High)            4 = AE/WB Lock (hold)    10 = Record Movie            5 = AE Lock Only          11 = None            6 = AE/AF Lock         </p> <p>(Z Series cameras thru November 2021)</p> <p>           1 = Center Focus Point            2 = AF Lock Only            3 = AE Lock (hold)            4 = AE Lock Only            5 = AE/AF Lock            6 = LiveView Info Display On/Off            7 = Grid Display            8 = Zoom (Low)            9 = Zoom (1:1)            10 = Zoom (High)            11 = Record Movie            12 = Image Area            13 = None         </p>
0x00b8	LimitAFAreaModeSel9?	no	1 = Limit 2 = No Limit
0x00b9	LimitAFAreaModeSel25?	no	1 = Limit 2 = No Limit
0x00bc	LimitAFAreaModeSel3D?	no	1 = Limit 2 = No Limit
0x00bd	LimitAFAreaModeSelGroup?	no	1 = Limit 2 = No Limit
0x00be	LimitAFAreaModeSelAuto?	no	1 = Limit 2 = No Limit
0x00c1	LimitSelectableImageArea5To4?	no	1 = Limit 2 = No Limit
0x00c2	LimitSelectableImageArea1To1?	no	1 = Limit 2 = No Limit
0x00d4	PhotoShootingMenuBank	no	1 = A 2 = B 3 = C 4 = D
0x00d5	CustomSettingsBank	no	1 = A 2 = B 3 = C 4 = D
0x00d6	LimitAF-AreaModeSelPinpoint?	no	1 = Limit 2 = No Limit
0x00d7	LimitAF-AreaModeSelDynamic?	no	1 = Limit 2 = No Limit
0x00d8	LimitAF-AreaModeSelWideAF_S?	no	1 = Limit 2 = No Limit
0x00d9	LimitAF-AreaModeSelWideAF_L?	no	1 = Limit 2 = No Limit
0x00da	LowLightAF	no	1 = On 2 = Off

0x00db	LimitSelectableImageAreaDX?	no	1 = Limit 2 = No Limit
0x00dc	LimitSelectableImageArea5To4?	no	1 = Limit 2 = No Limit
0x00dd	LimitSelectableImageArea1To1?	no	1 = Limit 2 = No Limit
0x00de	LimitSelectableImageArea16To9?	no	1 = Limit 2 = No Limit
0x00df	ApplySettingsToLiveView	no	1 = On 2 = Off
0x00e0	FocusPeakingLevel	no	1 = High Sensitivity 2 = Standard Sensitivity 3 = Low Sensitivity 4 = Off
0x00ea	LensControlRing	no	1 = Aperture 2 = Exposure Compensation 3 = ISO Sensitivity 4 = None (Disabled)
0x00ed	MovieMultiSelector	no	(D6) 1 = Center Focus Point 4 = Zoom (High) 2 = Zoom (Low) 5 = Record Movie 3 = Zoom (1:1) 6 = None  1 = Center Focus Point 4 = Zoom (High) 2 = Zoom (Low) 5 = Record Movie 3 = Zoom (1:1) 6 = None
0x00ee	MovieAFSpeed	no	
0x00ef	MovieAFSpeedApply	no	1 = Always 2 = Only During Recording
0x00f0	MovieAFTackingSensitivity	no	1 = 1 (High) 5 = 5 2 = 2 6 = 6 3 = 3 7 = 7 (Low) 4 = 4 (Normal)
0x00f1	MovieHighlightDisplayPattern	no	1 = Pattern 1 2 = Pattern 2 3 = Off
0x00f2	SubDialFrameAdvanceRating5?	no	1 = No 2 = Yes
0x00f3	SubDialFrameAdvanceRating4?	no	1 = No 2 = Yes
0x00f4	SubDialFrameAdvanceRating3?	no	1 = No 2 = Yes
0x00f5	SubDialFrameAdvanceRating2?	no	1 = No 2 = Yes
0x00f6	SubDialFrameAdvanceRating1?	no	1 = No 2 = Yes
0x00f7	SubDialFrameAdvanceRating0?	no	1 = No 2 = Yes
0x00f9	MovieAF-OnButton	no	1 = Center Focus Point 2 = AF-On 3 = AF Lock Only 4 = AE Lock (hold) 5 = AE Lock Only 6 = AE/AF Lock 7 = LiveView Info Display On/Off 8 = Zoom (Low) 9 = Zoom (1:1) 10 = Zoom (High) 11 = Record Movie 12 = None
0x00fb	SecondarySlotFunction	no	1 = Overflow 2 = Backup 3 = NEF Primary + JPG Secondary 4 = JPG Primary + JPG Secondary
0x00fc	SilentPhotography	no	1 = On 2 = Off
0x00fd	ExtendedShutterSpeeds	no	1 = On 2 = Off
0x0102	HDMIBitDepth	no	1 = 8 Bit 2 = 10 Bit

0x0103	HDMIOutputHDR	no	2 = On 3 = Off
0x0104	HDMIViewAssist	no	1 = On 2 = Off
0x0109	BracketSet	no	1 = AE/Flash 2 = AE 3 = Flash 4 = White Balance 5 = Active-D Lighting
0x010a	BracketProgram	no	(AE and/or Flash Bracketing) 15 = +3F 18 = -2F 21 = 5F 16 = -3F 19 = Disabled 22 = 7F 17 = +2F 20 = 3F 23 = 9F  (White Balance Bracketing) 1 = B3F 5 = Disabled 9 = 9F 2 = A3F 6 = 3F 19 = N/A 3 = B2F 7 = 5F 4 = A2F 8 = 7F  (Active-D Bracketing) [val & 0xf] 10 = Disabled 11 = 2 Exposures 12 = 3 Exposures 13 = 4 Exposures 14 = 5 Exposures
0x010b	BracketIncrement	no	(AE and/or Flash Bracketing enabled) 1 = 0.3 3 = 0.5 4 = 1.0 5 = 2.0 6 = 3.0  (White Balance Bracketing enabled)
0x010c	BracketIncrement	no	(Active-D Bracketing enabled) 0 = Off 1 = Off, Low 2 = Off, Normal 3 = Off, High 4 = Off, Extra High 5 = Off, Auto 6 = Off, Normal 7 = Off, Normal, High 8 = Off, Normal, High, Extra High
0x010e	MonitorBrightness	no	
0x0116	GroupAreaC1	no	1 = 1x7 6 = 5x7 11 = 7x5 16 = 15x3 2 = 1x5 7 = 5x5 12 = 7x3 17 = 15x1 3 = 3x7 8 = 5x3 13 = 7x1 4 = 3x5 9 = 5x1 14 = 11x3 5 = 3x3 10 = 7x7 15 = 11x1
0x0117	AutoAreaAFStartingPoint	no	1 = Enable 2 = Disable
0x0118	FocusPointPersistence	no	1 = Auto 2 = Off
0x0119	LimitAFAreaModeSelD49?	no	1 = Limit 2 = No Limit
0x011a	LimitAFAreaModeSelD105?	no	1 = Limit 2 = No Limit
0x011b	LimitAFAreaModeSelGroupC1?	no	1 = Limit 2 = No Limit
0x011c	LimitAFAreaModeSelGroupC2?	no	1 = Limit 2 = No Limit
0x011d	AutoFocusModeRestrictions	no	1 = AF-S 2 = AF-C 3 = No Limit
0x011e	FocusPointBrightness	no	1 = Extra High 2 = High 3 = Normal 4 = Low
0x011f	CHModeShootingSpeed	no	
0x0120	CLModeShootingSpeed	no	

0x0121	QuietShutterShootingSpeed	no	1 = Single 2 = 5 fps 3 = 4 fps	4 = 3 fps 5 = 2 fps 6 = 1 fps
0x0122	LimitReleaseModeSelCL?	no	0 = No Limit 1 = Limit 2 = No Limit	
0x0123	LimitReleaseModeSelCH?	no	0 = No Limit 1 = Limit 2 = No Limit	
0x0124	LimitReleaseModeSelQ?	no	0 = No Limit 1 = Limit 2 = No Limit	
0x0125	LimitReleaseModeSelTimer?	no	0 = No Limit 1 = Limit 2 = No Limit	
0x0126	LimitReleaseModeSelMirror-Up?	no	0 = No Limit 1 = Limit 2 = No Limit	
0x0127	LimitSelectableImageArea16To9?	no	1 = Limit 2 = No Limit	
0x0128	RearControPanelDisplay	no	1 = Release Mode 2 = Frame Count	
0x0129	FlashBurstPriority	no	1 = Frame Rate 2 = Exposure	
0x012a	RecallShootFuncExposureMode	no	1 = Off 2 = On	
0x012b	RecallShootFuncShutterSpeed	no	1 = Off 2 = On	
0x012c	RecallShootFuncAperture	no	1 = Off 2 = On	
0x012d	RecallShootFuncExposureComp	no	1 = Off 2 = On	
0x012e	RecallShootFuncISO	no	1 = Off 2 = On	
0x012f	RecallShootFuncMeteringMode	no	1 = Off 2 = On	
0x0130	RecallShootFuncWhiteBalance	no	1 = Off 2 = On	
0x0131	RecallShootFuncAFAreaMode	no	1 = Off 2 = On	
0x0132	RecallShootFuncFocusTracking	no	1 = Off 2 = On	
0x0133	RecallShootFuncAF-On	no	1 = Off 2 = On	
0x0134	VerticalFuncButton	no	1 = Preset Focus Point 2 = AE Lock (hold) 3 = AE/WB Lock (hold) 4 = AE Lock (reset on release) 5 = FV Lock 6 = Preview 7 = +NEF(RAW) 8 = Grid Display 9 = Virtual Horizon 10 = Voice Memo 11 = Playback 12 = Filtered Playback 13 = Photo Shooting Bank 14 = Exposure Mode 15 = Exposure Comp 16 = AF Mode/AF Area Mode 17 = Image Area 18 = ISO 19 = Active-D Lighting 20 = Metering 21 = Exposure Delay Mode 22 = Shutter/Aperture Lock 23 = 1 Stop Speed/Aperture 24 = Rating 0 25 = Rating 5 26 = Rating 4 27 = Rating 3 28 = Rating 2	

29 = Rating 1  
 30 = Candidate For Deletion  
 31 = Non-CPU Lens  
 32 = None

0x0135 Func3Button	no	1 = Voice Memo 2 = Select To Send 3 = Wired LAN 4 = My Menu 5 = My Menu Top Item 6 = Filtered Playback 7 = Rating 0 8 = Rating 5 9 = Rating 4 10 = Rating 3 11 = Rating 2 12 = Rating 1 13 = Candidate For Deletion 14 = None
0x0136 VerticalAF-OnButton	no	1 = AF-AreaMode S 2 = AF-AreaMode D9 3 = AF-AreaMode D25 4 = AF-AreaMode D49 5 = AF-AreaMode D105 6 = AF-AreaMode 3D 7 = AF-AreaMode Group 8 = AF-AreaMode Group C1 9 = AF-AreaMode Group C2 10 = AF-AreaMode Auto Area 11 = AF-AreaMode + AF-On S 12 = AF-AreaMode + AF-On D9 13 = AF-AreaMode + AF-On D25 14 = AF-AreaMode + AF-On D49 15 = AF-AreaMode + AF-On D105 16 = AF-AreaMode + AF-On 3D 17 = AF-AreaMode + AF-On Group 18 = AF-AreaMode + AF-On Group C1 19 = AF-AreaMode + AF-On Group C2 20 = AF-AreaMode + AF-On Auto Area 21 = Same as AF-On 22 = AF-On 23 = AF Lock Only 24 = AE Lock (hold) 25 = AE/WB Lock (hold) 26 = AE Lock (reset on release) 27 = AE Lock Only 28 = AE/AF Lock 29 = Recall Shooting Functions 30 = None
0x0137 VerticalMultiSelector	no	1 = Same as MultiSelector 2 = Focus Point Selection
0x0138 MeteringButton	no	1 = Photo Shooting Bank 2 = Image Area 3 = Active-D Lighting 4 = Metering 5 = Exposure Delay Mode 6 = Shutter/Aperture Lock 7 = 1 Stop Speed/Aperture 8 = Non-CPU Lens 9 = None
0x0139 PlaybackFlickUp	no	1 = Rating 2 = Select To Send 3 = Protect 4 = Voice Memo 5 = None
0x013a PlaybackFlickUpRating	no	(Meaningful only when PlaybackFlickUp is Rating) 1 = Rating 5 2 = Rating 4 3 = Rating 3 4 = Rating 2 5 = Rating 1 6 = Candidate for Deletion
0x013b PlaybackFlickDown	no	1 = Rating 2 = Select To Send 3 = Protect 4 = Voice Memo 5 = None

0x013c	PlaybackFlickDownRating	no	(Meaningful only when PlaybackFlickDown is Rating) 1 = Rating 5 2 = Rating 4 3 = Rating 3 4 = Rating 2 5 = Rating 1 6 = Candidate for Deletion
0x013d	MovieFunc3Button	no	1 = Record Movie 2 = My Menu 3 = My Menu Top Item 4 = None
0x0150	ShutterType	no	1 = Auto 2 = Mechanical 3 = Electronic
0x0151	LensFunc2Button	no	1 = AF-On 2 = AF Lock Only 3 = AE Lock (hold) 4 = AE Lock (reset on release) 5 = AE Lock Only 6 = AE/AF Lock 7 = FV Lock 8 = Flash Disable/Enable 9 = Preview 10 = Matrix Metering 11 = Center-weighted Metering 12 = Spot Metering 13 = Highlight-weighted Metering 14 = Bracketing Burst 15 = Synchronized Release (Master) 16 = Synchronized Release (Remote) 19 = +NEF(RAW) 20 = Subject Tracking 21 = Grid Display 22 = Zoom (Low) 23 = Zoom (1:1) 24 = Zoom (High) 25 = My Menu 26 = My Menu Top Item 27 = Playback 28 = None
0x0158	USBPowerDelivery	no	1 = Enable 2 = Disable
0x0159	EnergySavingMode	no	1 = On 2 = Off
0x015c	BracketingBurstOptions	no	1 = Enable 2 = Disable
0x015e	PrimarySlot	no	1 = CFexpress/XQD Card 2 = SD Card
0x015f	ReverseFocusRing	no	1 = Not Reversed 2 = Reversed
0x0160	VerticalFuncButton	no	1 = AE Lock (hold) 2 = AE Lock (reset on release) 3 = FV Lock 4 = Preview 5 = +NEF(RAW) 6 = Subject Tracking 7 = Silent Photography 8 = LiveView Info Display On/Off 9 = Playback 10 = Image Area 11 = Metering 12 = Flash Mode 13 = Focus Mode 14 = Exposure Delay Mode 15 = Shutter/Aperture Lock 16 = Exposure Compensation 17 = ISO Sensitivity 18 = None
0x0161	VerticalAFOnButton	no	1 = Same as AF-On Button 2 = Select Center Focus Point 3 = AF-On 4 = AF Lock Only 5 = AE Lock (hold) 6 = AE Lock (reset on release) 7 = AE Lock Only

			8 = AE/AF Lock 9 = LiveView Info Display On/Off 10 = Zoom (Low) 11 = Zoom (1:1) 12 = Zoom (High) 13 = None
0x0162	VerticalMultiSelector	no	1 = Same as MultiSelector 2 = Focus Point Selection
0x0164	VerticalMovieFuncButton	no	1 = LiveView Info Display On/Off 2 = Record Movie 3 = Exposure Compensation 4 = ISO 5 = None
0x0165	VerticalMovieAFOnButton	no	1 = Same as AF-On 2 = Center Focus Point 3 = AF-On 4 = AF Lock Only 5 = AE Lock (hold) 6 = AE Lock Only 7 = AE/AF Lock 8 = LiveView Info Display On/Off 9 = Zoom (Low) 10 = Zoom (1:1) 11 = Zoom (High) 12 = Record Movie 13 = None
0x0169	LimitAF-AreaModeSelAutoPeople?	no	1 = Limit 2 = No Limit
0x016a	LimitAF-AreaModeSelAutoAnimals?	no	1 = Limit 2 = No Limit
0x016b	LimitAF-AreaModeSelWideLPeople?	no	1 = Limit 2 = No Limit
0x016c	LimitAF-AreaModeSelWideLAnimals?	no	1 = Limit 2 = No Limit
0x016d	SaveFocus	no	1 = On 2 = Off
0x016e	AFAreaMode	no	2 = Single-point      7 = Wide (L-animals) 3 = Dynamic-area      8 = Auto 4 = Wide (S)      9 = Auto (People) 5 = Wide (L)      10 = Auto (Animals) 6 = Wide (L-people)
0x016f	MovieAFAreaMode	no	1 = Single-point      5 = Wide (L-animals) 2 = Wide (S)      6 = Auto 3 = Wide (L)      7 = Auto (People) 4 = Wide (L-people)      8 = Auto (Animals)
0x0170	PreferSubSelectorCenter	no	1 = Off 2 = On
0x0171	KeepExposureWithTeleconverter	no	1 = Off 2 = Shutter Speed 3 = ISO
0x0174	FocusPointSelectionSpeed	no	1 = Normal 2 = High 3 = Very High

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*Last revised Aug 9, 2024*

[--> ExifTool Tag Names](#)

# Nintendo Tags

Tag ID	Tag Name	Writable	Values / Notes
0x1101	CameralInfo	-	--> <a href="#">Nintendo CameralInfo Tags</a>

## Nintendo CameralInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	ModelID	undef[4]	
8	TimeStamp	int32u	
24	InternalSerialNumber	undef[4]	
40	Parallax	float	
48	Category	int16u	0x0 = (none) 0x1000 = Mii 0x2000 = Man 0x4000 = Woman

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Mar 25, 2014

[--> ExifTool Tag Names](#)

# OOXML Tags

The Office Open XML (OOXML) format was introduced with Microsoft Office 2007 and is used by file types such as DOCX, PPTX, XLSX and VSDX. These are essentially ZIP archives containing XML files. The table below lists some tags which have been observed in OOXML documents, but ExifTool will extract any tags found from XML files of the OOXML document properties ("docProps") directory.

## Tips:

- 1) Structural ZIP tags may be ignored (if desired) with `--ZIP:all` on the command line.
- 2) Tags may be grouped by their document number in the ZIP archive with the `-g3` or `-G3` option.

Tag Name	Writable	Values / Notes
AppVersion	no	
Application	no	
Category	no	
Characters	no	
CharactersWithSpaces	no	
CheckedBy	no	
Client	no	
Company	no	
CreateDate	no	
DateCompleted	no	
Department	no	
Destination	no	
Disposition	no	
Division	no	
DocSecurity	no	0 = None 1 = Password protected 2 = Read-only recommended 4 = Read-only enforced 8 = Locked for annotations
DocumentNumber	no	
Editor	no	
ForwardTo	no	
Group	no	
HeadingPairs	no	
HiddenSlides	no	
HyperlinkBase	no	
HyperlinksChanged	no	'false' = No 'true' = Yes
Keywords	no	
Language	no	
LastModifiedBy	no	
LastPrinted	no	
Lines	no	
LinksUpToDate	no	'false' = No 'true' = Yes
MMClips	no	
Mailstop	no	
Manager	no	
Matter	no	
ModifyDate	no	
Notes	no	
Office	no	
Owner	no	
Pages	no	

Paragraphs	no	
PresentationFormat	no	
Project	no	
Publisher	no	
Purpose	no	
ReceivedFrom	no	
RecordedBy	no	
RecordedDate	no	
Reference	no	
RevisionNumber	no	
ScaleCrop	no	'false' = No 'true' = Yes
SharedDoc	no	'false' = No 'true' = Yes
Slides	no	
Source	no	
Status	no	
TelephoneNumber	no	
Template	no	
TitlesOfParts	no	
TotalEditTime	no	
Typist	no	
Words	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Oct 20, 2025*

[<-- ExifTool Tag Names](#)

# Ogg Tags

ExifTool extracts the following types of information from Ogg files. See <http://www.xiph.org/vorbis/doc/> for the Ogg specification.

Tag ID	Tag Name	Writable	Values / Notes
'FLAC'	FLAC	-	--> <a href="#">FLAC Tags</a>
'ID3'	ID3	-	--> <a href="#">ID3 Tags</a>
'Opus'	Opus	-	--> <a href="#">Opus Tags</a>
'theora'	Theora	-	--> <a href="#">Theora Tags</a>
'vorbis'	Vorbis	-	--> <a href="#">Vorbis Tags</a>

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*Last revised Jul 14, 2016*

[<- ExifTool Tag Names](#)

# Olympus Tags

Tags 0x0000 through 0x0103 are used by some older Olympus cameras, and are the same as Konica/Minolta tags. These tags are also used for some models from other brands such as Acer, BenQ, Epson, Hitachi, HP, Maginon, Minolta, Pentax, Ricoh, Samsung, Sanyo, SeaLife, Sony, Supra and Vivitar.

Tag ID	Tag Name	Writable	Values / Notes	
0x0000	MakerNoteVersion	undef		
0x0001	MinoltaCameraSettingsOld	-	--> <a href="#">Minolta CameraSettings Tags</a>	
0x0003	MinoltaCameraSettings	-	--> <a href="#">Minolta CameraSettings Tags</a>	
0x0040	CompressedImageSize	int32u		
0x0081	PreviewImageData	no		
0x0088	PreviewImageStart	no		
0x0089	PreviewImageLength	no		
0x0100	ThumbnailImage	undef		
0x0104	BodyFirmwareVersion	string		
0x0200	SpecialMode	int32u[3]~	(3 numbers: 1. Shooting mode: 0=Normal, 2=Fast, 3=Panorama; 2. Sequence Number; 3. Panorama Direction: 1=Left-right, 2=Right-left, 3=Bottom-Top, 4=Top-Bottom)	
0x0201	Quality	int16u~	(Quality values are decoded based on the CameraType tag. All types represent SQ, HQ and SHQ as sequential integers, but in general SX-type cameras start with a value of 0 for SQ while others start with 1)	
0x0202	Macro	int16u	0 = Off 1 = On 2 = Super Macro	
0x0203	BWMode	int16u	0 = Off 1 = On 6 = (none)	
0x0204	DigitalZoom	rational64u		
0x0205	FocalPlaneDiagonal	rational64u		
0x0206	LensDistortionParams	int16s[6]		
0x0207	CameraType	string	--> <a href="#">Olympus CameraType Values</a>	
0x0208	TextInfo	-	--> <a href="#">Olympus TextInfo Tags</a>	
0x0209	CameralID	string		
0x020b	EpsonImageWidth	int32u		
0x020c	EpsonImageHeight	int32u		
0x020d	EpsonSoftware	string		
0x0280	PreviewImage	int8u	(found in ERF and JPG images from some Epson models)	
0x0300	PreCaptureFrames	int16u		
0x0301	WhiteBoard	int16u		
0x0302	OneTouchWB	int16u	0 = Off 1 = On 2 = On (Preset)	
0x0303	WhiteBalanceBracket	int16u		
0x0304	WhiteBalanceBias	int16u		
0x0400	SensorArea	undef[8]	(found in Epson ERF images)	
0x0401	BlackLevel	int32u[4]	(found in Epson ERF images)	
0x0403	SceneMode	int16u	0 = Normal 1 = Standard 2 = Auto 3 = Intelligent Auto 4 = Portrait 5 = Landscape+Portrait 6 = Landscape 7 = Night Scene 8 = Night+Portrait 9 = Sport 10 = Self Portrait 11 = Indoor 12 = Beach & Snow 13 = Beach 14 = Snow 15 = Self Portrait+Self Timer 20 = Fireworks 21 = Available Light 22 = Vivid 23 = Underwater Wide1 24 = Underwater Macro 25 = Museum 26 = Behind Glass 27 = Auction 28 = Shoot & Select1 29 = Shoot & Select2 30 = Underwater Wide2 31 = Digital Image Stabilization 32 = Face Portrait 33 = Pet 34 = Smile Shot 35 = Quick Shutter	

16 = Sunset  
 17 = Cuisine  
 18 = Documents  
 19 = Candle  
 43 = Hand-held Starlight  
 100 = Panorama  
 101 = Magic Filter  
 103 = HDR

0x0404	SerialNumber	string		
0x0405	Firmware	string		
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>	
0x0f00	DataDump	no		
0x0f01	DataDump2	no		
0x0f04	ZoomedPreviewStart	int32u*		
0x0f05	ZoomedPreviewLength	int32u*		
0x0f06	ZoomedPreviewSize	int16u[2]		
0x1000	ShutterSpeedValue	rational64s		
0x1001	ISOValue	rational64s		
0x1002	ApertureValue	rational64s		
0x1003	BrightnessValue	rational64s		
0x1004	FlashMode	int16u	2 = On 3 = Off	
0x1005	FlashDevice	int16u	0 = None 1 = Internal 4 = External 5 = Internal + External	
0x1006	ExposureCompensation	rational64s		
0x1007	SensorTemperature	int16s		
0x1008	LensTemperature	int16s		
0x1009	LightCondition	int16u		
0x100a	FocusRange	int16u	0 = Normal 1 = Macro	
0x100b	FocusMode	int16u	0 = Auto 1 = Manual	
0x100c	ManualFocusDistance	rational64u		
0x100d	ZoomStepCount	int16u		
0x100e	FocusStepCount	int16u		
0x100f	Sharpness	int16u	0 = Normal 1 = Hard 2 = Soft	
0x1010	FlashChargeLevel	int16u		
0x1011	ColorMatrix	int16u[9]		
0x1012	BlackLevel	int16u[4]		
0x1013	ColorTemperatureBG?	int16u		
0x1014	ColorTemperatureRG?	int16u		
0x1015	WBMode	int16u[2]	1 = Auto '2 4' = 4000 Kelvin '1 0' = Auto '2 5' = 4500 Kelvin '1 2' = Auto (2) '2 6' = 5500 Kelvin '1 4' = Auto (4) '2 7' = 6500 Kelvin '2 2' = 3000 Kelvin '2 8' = 7500 Kelvin '2 3' = 3700 Kelvin '3 0' = One-touch	
0x1017	RedBalance	int16u[2]		
0x1018	BlueBalance	int16u[2]		
0x1019	ColorMatrixNumber	int16u		
0x101a	SerialNumber	string		
0x101b	ExternalFlashAE1_0?	int32u		
0x101c	ExternalFlashAE2_0?	int32u		
0x101d	InternalFlashAE1_0?	int32u		
0x101e	InternalFlashAE2_0?	int32u		
0x101f	ExternalFlashAE1?	int32u		
0x1020	ExternalFlashAE2?	int32u		
0x1021	InternalFlashAE1?	int32u		
0x1022	InternalFlashAE2?	int32u		

0x1023	FlashExposureComp	rational64s	
0x1024	InternalFlashTable	int16u	
0x1025	ExternalFlashGValue	rational64s	
0x1026	ExternalFlashBounce	int16u	0 = No 1 = Yes
0x1027	ExternalFlashZoom	int16u	
0x1028	ExternalFlashMode	int16u	
0x1029	Contrast	int16u	0 = High 1 = Normal 2 = Low
0x102a	SharpnessFactor	int16u	
0x102b	ColorControl	int16u[6]	
0x102c	ValidBits	int16u[2]	
0x102d	CoringFilter	int16u	
0x102e	OlympusImageWidth	int32u	
0x102f	OlympusImageHeight	int32u	
0x1030	SceneDetect	int16u	
0x1031	SceneArea?	int32u[8]	
0x1033	SceneDetectData?	int32u[720]	
0x1034	CompressionRatio	rational64u	
0x1035	PreviewImageValid	int32u	0 = No 1 = Yes
0x1036	PreviewImageStart	int32u*	
0x1037	PreviewImageLength	int32u*	
0x1038	AFResult	int16u	
0x1039	CCDScanMode	int16u	0 = Interlaced 1 = Progressive
0x103a	NoiseReduction	int16u	0 = Off 1 = On
0x103b	FocusStepInfinity	int16u	
0x103c	FocusStepNear	int16u	
0x103d	LightValueCenter	rational64s	
0x103e	LightValuePeriphery	rational64s	
0x103f	FieldCount?	int16u	
0x2010	Equipment	-	--> <a href="#">Olympus Equipment Tags</a>
	EquipmentIFD	-	--> <a href="#">Olympus Equipment Tags</a>
0x2020	CameraSettings	-	--> <a href="#">Olympus CameraSettings Tags</a>
	CameraSettingsIFD	-	--> <a href="#">Olympus CameraSettings Tags</a>
0x2030	RawDevelopment	-	--> <a href="#">Olympus RawDevelopment Tags</a>
	RawDevelopmentIFD	-	--> <a href="#">Olympus RawDevelopment Tags</a>
0x2031	RawDev2	-	--> <a href="#">Olympus RawDevelopment2 Tags</a>
	RawDev2IFD	-	--> <a href="#">Olympus RawDevelopment2 Tags</a>
0x2040	ImageProcessing	-	--> <a href="#">Olympus ImageProcessing Tags</a>
	ImageProcessingIFD	-	--> <a href="#">Olympus ImageProcessing Tags</a>
0x2050	FocusInfo	-	--> <a href="#">Olympus FocusInfo Tags</a>
	FocusInfoIFD	-	--> <a href="#">Olympus FocusInfo Tags</a>
	CameraParameters	undef	
0x2100	Olympus2100	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2100IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2200	Olympus2200	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2200IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2300	Olympus2300	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2300IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2400	Olympus2400	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2400IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2500	Olympus2500	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2500IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2600	Olympus2600	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2600IFD	-	--> <a href="#">Olympus FE Tags</a>

0x2700	Olympus2700	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2700IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2800	Olympus2800	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2800IFD	-	--> <a href="#">Olympus FE Tags</a>
0x2900	Olympus2900	-	--> <a href="#">Olympus FE Tags</a>
	Olympus2900IFD	-	--> <a href="#">Olympus FE Tags</a>
0x3000	RawInfo	-	--> <a href="#">Olympus RawInfo Tags</a>
	RawInfoIFD	-	--> <a href="#">Olympus RawInfo Tags</a>
0x4000	MainInfo	-	--> <a href="#">Olympus Tags</a>
	MainInfoIFD	-	--> <a href="#">Olympus Tags</a>
0x5000	UnknownInfo	-	--> <a href="#">Olympus UnknownInfo Tags</a>
	UnknownInfoIFD	-	--> <a href="#">Olympus UnknownInfo Tags</a>

## Olympus CameraType Values

These values are currently decoded only for Olympus models. Models with Olympus-style maker notes from other brands such as Acer, BenQ, Hitachi, HP, Premier, Konica-Minolta, Maginon, Ricoh, Rollei, SeaLife, Sony, Supra, Vivitar are not listed.

Value	CameraType	Value	CameraType	Value	CameraType
'D4028' = X-2,C-50Z		'D4406' = u7010,S7010 / u7020,S7020		'S0023' = E-620	
'D4029' = E-20,E-20N,E-20P		'D4407' = FE4010,X930		'S0026' = E-P2	
'D4034' = C720UZ		'D4408' = X560WP		'S0027' = E-PL1	
'D4040' = E-1		'D4409' = FE26,X21		'S0029' = E-450	
'D4041' = E-300		'D4410' = FE4000,X920,X925		'S0030' = E-600	
'D4083' = C2Z,D520Z,C220Z		'D4411' = FE46,X41,X42		'S0032' = E-P3	
'D4106' = u20D,S400D,u400D		'D4412' = FE5020,X935		'S0033' = E-5	
'D4120' = X-1		'D4413' = uTough-3000		'S0034' = E-PL2	
'D4122' = u10D,S300D,u300D		'D4414' = StylusTough-6020		'S0036' = E-M5	
'D4125' = AZ-1		'D4415' = StylusTough-8010		'S0038' = E-PL3	
'D4141' = C150,D390		'D4417' = u5010,S5010		'S0039' = E-PM1	
'D4193' = C-5000Z		'D4418' = u7040,S7040		'S0040' = E-PL1s	
'D4194' = X-3,C-60Z		'D4419' = u9010,S9010		'S0042' = E-PL5	
'D4199' = u30D,S410D,u410D		'D4423' = FE4040		'S0043' = E-PM2	
'D4205' = X450,D535Z,C370Z		'D4424' = FE47,X43		'S0044' = E-P5	
'D4210' = C160,D395		'D4426' = FE4030,X950		'S0045' = E-PL6	
'D4211' = C725UZ		'D4428' = FE5030,X965,X960		'S0046' = E-PL7	
'D4213' = FerrariMODEL2003		'D4430' = u7030,S7030		'S0047' = E-M1	
'D4216' = u15D		'D4432' = SP600UZ		'S0051' = E-M10	
'D4217' = u25D		'D4434' = SP800UZ		'S0052' = E-M5MarkII	
'D4220' = u-miniD,Stylus V		'D4439' = FE4020,X940		'S0059' = E-M10MarkII	
'D4221' = u40D,S500,uD500		'D4442' = FE5035		'S0061' = PEN-F	
'D4231' = FerrariMODEL2004		'D4448' = FE4050,X970		'S0065' = E-PL8	
'D4240' = X500,D590Z,C470Z		'D4450' = FE5050,X985		'S0067' = E-M1MarkII	
'D4244' = uD800,S800		'D4454' = u-7050		'S0068' = E-M10MarkIII	
'D4256' = u720SW,S720SW		'D4464' = T10,X27		'S0076' = E-PL9	
'D4261' = X600,D630,FE5500		'D4470' = FE5040,X980		'S0080' = E-M1X	
'D4262' = uD600,S600		'D4472' = TG-310		'S0085' = E-PL10	
'D4301' = u810/S810		'D4474' = TG-610		'S0088' = E-M10MarkIV	
'D4302' = u710,S710		'D4476' = TG-810		'S0089' = E-M5MarkIII	
'D4303' = u700,S700		'D4478' = VG145,VG140,D715		'S0092' = E-M1MarkIII	
'D4304' = FE100,X710		'D4479' = VG130,D710		'S0093' = E-P7	
'D4305' = FE110,X705		'D4480' = VG120,D705		'S0094' = E-M10MarkIIIS	
'D4310' = FE-130,X-720		'D4482' = VR310,D720		'S0095' = OM-1	
'D4311' = FE-140,X-725		'D4484' = VR320,D725		'S0101' = OM-5	
'D4312' = FE150,X730		'D4486' = VR330,D730		'S0121' = OM-1MarkII	
'D4313' = FE160,X735		'D4488' = VG110,D700		'S0123' = OM-3	
'D4314' = u740,S740		'D4490' = SP-610UZ		'S0130' = OM-5MarkII	
'D4315' = u750,S750		'D4492' = SZ-10		'SR45' = D220	
'D4316' = u730/S730		'D4494' = SZ-20		'SR55' = D320L	
'D4317' = FE115,X715		'D4496' = SZ-30MR		'SR83' = D340L	
'D4321' = SP550UZ		'D4498' = SP-810UZ		'SR85' = C830L,D340R	
'D4322' = SP510UZ		'D4500' = SZ-11		'SR852' = C860L,D360L	
'D4324' = FE170,X760		'D4504' = TG-615		'SR872' = C900Z,D400Z	
'D4326' = FE200		'D4508' = TG-620		'SR874' = C960Z,D460Z	
'D4327' = FE190/X750		'D4510' = TG-820		'SR951' = C2000Z	
'D4328' = u760,S760		'D4512' = TG-1		'SR952' = C21	
'D4330' = FE180/X745		'D4516' = SH-21		'SR953' = C21T.commu	
'D4331' = u1000/S1000		'D4519' = SZ-14		'SR954' = C2020Z	
'D4332' = u770SW,S770SW		'D4520' = SZ-31MR		'SR955' = C990Z,D490Z	

'D4333' = FE240/X795	'D4521' = SH-25MR	'SR956' = C211Z
'D4334' = FE210,X775	'D4523' = SP-720UZ	'SR959' = C990ZS,D490Z
'D4336' = FE230/X790	'D4529' = VG170	'SR95A' = C2100UZ
'D4337' = FE220,X785	'D4530' = VH210	'SR971' = C100,D370
'D4338' = u725SW,S725SW	'D4531' = XZ-2	'SR973' = C2,D230
'D4339' = FE250/X800	'D4535' = SP-620UZ	'SX151' = E100RS
'D4341' = u780,S780	'D4536' = TG-320	'SX351' = C3000Z / C3030Z
'D4343' = u790SW,S790SW	'D4537' = VR340,D750	'SX354' = C3040Z
'D4344' = u1020,S1020	'D4538' = VG160,X990,D745	'SX355' = C2040Z
'D4346' = FE15,X10	'D4541' = SZ-12	'SX357' = C700UZ
'D4348' = FE280,X820,C520	'D4545' = VH410	'SX358' = C200Z,D510Z
'D4349' = FE300,X830	'D4546' = XZ-10	'SX374' = C3100Z,C3020Z
'D4350' = u820,S820	'D4547' = TG-2	'SX552' = C4040Z
'D4351' = u1200,S1200	'D4548' = TG-830	'SX553' = C40Z,D40Z
'D4352' = FE270,X815,C510	'D4549' = TG-630	'SX556' = C730UZ
'D4353' = u795SW,S795SW	'D4550' = SH-50	'SX558' = C5050Z
'D4354' = u1030SW,S1030SW	'D4553' = SZ-16,DZ-105	'SX571' = C120,D380
'D4355' = SP560UZ	'D4562' = SP-820UZ	'SX574' = C300Z,D550Z
'D4356' = u1010,S1010	'D4566' = SZ-15	'SX575' = C4100Z,C4000Z
'D4357' = u830,S830	'D4572' = STYLUS1	'SX751' = X200,D560Z,C350Z
'D4359' = u840,S840	'D4574' = TG-3	'SX752' = X300,D565Z,C450Z
'D4360' = FE350WIDE,X865	'D4575' = TG-850	'SX753' = C750UZ
'D4361' = u850SW,S850SW	'D4579' = SP-100EE	'SX754' = C740UZ
'D4362' = FE340,X855,C560	'D4580' = SH-60	'SX755' = C755UZ
'D4363' = FE320,X835,C540	'D4581' = SH-1	'SX756' = C5060WZ
'D4364' = SP570UZ	'D4582' = TG-835	'SX757' = C8080WZ
'D4366' = FE330,X845,C550	'D4585' = SH-2 / SH-3	'SX758' = X350,D575Z,C360Z
'D4368' = FE310,X840,C530	'D4586' = TG-4	'SX759' = X400,D580Z,C460Z
'D4370' = u1050SW,S1050SW	'D4587' = TG-860	'SX75A' = AZ-2ZOOM
'D4371' = u1060,S1060	'D4590' = TG-TRACKER	'SX75B' = D595Z,C500Z
'D4372' = FE370,X880,C575	'D4591' = TG-870	'SX75C' = X550,D545Z,C480Z
'D4374' = SP565UZ	'D4593' = TG-5	'SX75D' = IR-300
'D4377' = u1040,S1040	'D4603' = TG-6	'SX75F' = C55Z,C5500Z
'D4378' = FE360,X875,C570	'D4605' = TG-7	'SX75G' = C170,D425
'D4379' = FE20,X15,C25	'D4809' = C2500L	'SX75J' = C180,D435
'D4380' = uT6000,ST6000	'D4842' = E-10	'SX771' = C760UZ
'D4381' = uT8000,ST8000	'D4856' = C-1	'SX772' = C770UZ
'D4382' = u9000,S9000	'D4857' = C-1Z,D-150Z	'SX773' = C745UZ
'D4384' = SP590UZ	'DCHC' = D500L	'SX774' = X250,D560Z,C350Z
'D4385' = FE3010,X895	'DCHT' = D600L / D620L	'SX775' = X100,D540Z,C310Z
'D4386' = FE3000,X890	'K0055' = AIR-A01	'SX776' = C460ZdelSol
'D4387' = FE35,X30	'S0003' = E-330	'SX777' = C765UZ
'D4388' = u550WP,S550WP	'S0004' = E-500	'SX77A' = D555Z,C315Z
'D4390' = FE5000,X905	'S0009' = E-400	'SX851' = C7070WZ
'D4391' = u5000	'S0010' = E-510	'SX852' = C70Z,C7000Z
'D4392' = u7000,S7000	'S0011' = E-3	'SX853' = SP500UZ
'D4396' = FE5010,X915	'S0013' = E-410	'SX854' = SP310
'D4397' = FE25,X20	'S0016' = E-420	'SX855' = SP350
'D4398' = FE45,X40	'S0017' = E-30	'SX873' = SP320
'D4401' = XZ-1	'S0018' = E-520	'SX875' = FE180/X745
'D4402' = uT6010,ST6010	'S0019' = E-P1	'SX876' = FE190/X750

## Olympus TextInfo Tags

This information is in text format (similar to APP12 information, but with spaces instead of linefeeds). Below are tags which have been observed, but any information found here will be extracted, even if the tag is not listed.

Tag ID	Tag Name	Writable	Values / Notes
'Resolution'	Resolution	no	
'Type'	CameraType	no	--> <a href="#">Olympus CameraType Values</a>

## Olympus Equipment Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	EquipmentVersion	undef[4]	
0x0100	CameraType2	string[6]	--> <a href="#">Olympus CameraType Values</a>
0x0101	SerialNumber	string[32]	
0x0102	InternalSerialNumber	string[32]	(16 digits: 0-3=model, 4=year, 5-6=month, 8-12=unit number)
0x0103	FocalPlaneDiagonal	rational64u	

0x0104	BodyFirmwareVersion	int32u	
0x0201	LensType	int8u[6]	--> <a href="#">Olympus LensType Values</a> (6 numbers: 1. Make, 2. Unknown, 3. Model, 4. Sub-model, 5-6. Unknown. Only the Make, Model and Sub-model are used to identify the lens type)
0x0202	LensSerialNumber	string[32]	
0x0203	LensModel	string	
0x0204	LensFirmwareVersion	int32u	
0x0205	MaxApertureAtMinFocal	int16u	
0x0206	MaxApertureAtMaxFocal	int16u	
0x0207	MinFocalLength	int16u	
0x0208	MaxFocalLength	int16u	
0x020a	MaxAperture	int16u	
0x020b	LensProperties	int16u	
0x0301	Extender	int8u[6]	(6 numbers: 1. Make, 2. Unknown, 3. Model, 4. Sub-model, 5-6. Unknown. Only the Make and Model are used to identify the extender) '0 00' = None '0 04' = Olympus Zuiko Digital EC-14 1.4x Teleconverter '0 08' = Olympus EX-25 Extension Tube '0 10' = Olympus Zuiko Digital EC-20 2.0x Teleconverter
0x0302	ExtenderSerialNumber	string[32]	
0x0303	ExtenderModel	string	
0x0304	ExtenderFirmwareVersion	int32u	
0x0403	ConversionLens	string	
0x1000	FlashType	int16u	0 = None 2 = Simple E-System 3 = E-System 4 = E-System (body powered)
0x1001	FlashModel	int16u	0 = None 6 = FL-50R 1 = FL-20 7 = FL-36R 2 = FL-50 9 = FL-14 3 = RF-11 11 = FL-600R 4 = TF-22 13 = FL-LM3 5 = FL-36 15 = FL-900R
0x1002	FlashFirmwareVersion	int32u	
0x1003	FlashSerialNumber	string[32]	

## Olympus LensType Values

The numerical values below are given in hexadecimal. (Prior to ExifTool 9.15 these were in decimal.)

Value	LensType
'0 00 00'	= None
'0 01 00'	= Olympus Zuiko Digital ED 50mm F2.0 Macro
'0 01 01'	= Olympus Zuiko Digital 40-150mm F3.5-4.5
'0 01 10'	= Olympus M.Zuiko Digital ED 14-42mm F3.5-5.6
'0 02 00'	= Olympus Zuiko Digital ED 150mm F2.0
'0 02 10'	= Olympus M.Zuiko Digital 17mm F2.8 Pancake
'0 03 00'	= Olympus Zuiko Digital ED 300mm F2.8
'0 03 10'	= Olympus M.Zuiko Digital ED 14-150mm F4.0-5.6 [II]
'0 04 10'	= Olympus M.Zuiko Digital ED 9-18mm F4.0-5.6
'0 05 00'	= Olympus Zuiko Digital 14-54mm F2.8-3.5
'0 05 01'	= Olympus Zuiko Digital Pro ED 90-250mm F2.8
'0 05 10'	= Olympus M.Zuiko Digital ED 14-42mm F3.5-5.6 L
'0 06 00'	= Olympus Zuiko Digital ED 50-200mm F2.8-3.5
'0 06 01'	= Olympus Zuiko Digital ED 8mm F3.5 Fish-eye
'0 06 10'	= Olympus M.Zuiko Digital ED 40-150mm F4.0-5.6
'0 07 00'	= Olympus Zuiko Digital 11-22mm F2.8-3.5
'0 07 01'	= Olympus Zuiko Digital 18-180mm F3.5-6.3
'0 07 10'	= Olympus M.Zuiko Digital ED 12mm F2.0
'0 08 01'	= Olympus Zuiko Digital 70-300mm F4.0-5.6
'0 08 10'	= Olympus M.Zuiko Digital ED 75-300mm F4.8-6.7
'0 09 10'	= Olympus M.Zuiko Digital 14-42mm F3.5-5.6 II
'0 10 01'	= Kenko Tokina Reflex 300mm F6.3 MF Macro
'0 10 10'	= Olympus M.Zuiko Digital ED 12-50mm F3.5-6.3 EZ
'0 11 10'	= Olympus M.Zuiko Digital 45mm F1.8

'0 12 10' = Olympus M.Zuiko Digital ED 60mm F2.8 Macro  
'0 13 10' = Olympus M.Zuiko Digital 14-42mm F3.5-5.6 II R  
'0 14 10' = Olympus M.Zuiko Digital ED 40-150mm F4.0-5.6 R  
'0 15 00' = Olympus Zuiko Digital ED 7-14mm F4.0  
'0 15 10' = Olympus M.Zuiko Digital ED 75mm F1.8  
'0 16 10' = Olympus M.Zuiko Digital 17mm F1.8  
'0 17 00' = Olympus Zuiko Digital Pro ED 35-100mm F2.0  
'0 18 00' = Olympus Zuiko Digital 14-45mm F3.5-5.6  
'0 18 10' = Olympus M.Zuiko Digital ED 75-300mm F4.8-6.7 II  
'0 19 10' = Olympus M.Zuiko Digital ED 12-40mm F2.8 Pro  
'0 20 00' = Olympus Zuiko Digital 35mm F3.5 Macro  
'0 20 10' = Olympus M.Zuiko Digital ED 40-150mm F2.8 Pro  
'0 21 10' = Olympus M.Zuiko Digital ED 14-42mm F3.5-5.6 EZ  
'0 22 00' = Olympus Zuiko Digital 17.5-45mm F3.5-5.6  
'0 22 10' = Olympus M.Zuiko Digital 25mm F1.8  
'0 23 00' = Olympus Zuiko Digital ED 14-42mm F3.5-5.6  
'0 23 10' = Olympus M.Zuiko Digital ED 7-14mm F2.8 Pro  
'0 24 00' = Olympus Zuiko Digital ED 40-150mm F4.0-5.6  
'0 24 10' = Olympus M.Zuiko Digital ED 300mm F4.0 IS Pro  
'0 25 10' = Olympus M.Zuiko Digital ED 8mm F1.8 Fisheye Pro  
'0 26 10' = Olympus M.Zuiko Digital ED 12-100mm F4.0 IS Pro  
'0 27 10' = Olympus M.Zuiko Digital ED 30mm F3.5 Macro  
'0 28 10' = Olympus M.Zuiko Digital ED 25mm F1.2 Pro  
'0 29 10' = Olympus M.Zuiko Digital ED 17mm F1.2 Pro  
'0 30 00' = Olympus Zuiko Digital ED 50-200mm F2.8-3.5 SWD  
'0 30 10' = Olympus M.Zuiko Digital ED 45mm F1.2 Pro  
'0 31 00' = Olympus Zuiko Digital ED 12-60mm F2.8-4.0 SWD  
'0 32 00' = Olympus Zuiko Digital ED 14-35mm F2.0 SWD  
'0 32 10' = Olympus M.Zuiko Digital ED 12-200mm F3.5-6.3  
'0 33 00' = Olympus Zuiko Digital 25mm F2.8  
'0 33 10' = Olympus M.Zuiko Digital 150-400mm F4.5 TC1.25x IS Pro  
'0 34 00' = Olympus Zuiko Digital ED 9-18mm F4.0-5.6  
'0 34 10' = Olympus M.Zuiko Digital ED 12-45mm F4.0 Pro  
'0 35 00' = Olympus Zuiko Digital 14-54mm F2.8-3.5 II  
'0 35 10' = Olympus M.Zuiko 100-400mm F5.0-6.3  
'0 36 10' = Olympus M.Zuiko Digital ED 8-25mm F4 Pro  
'0 37 10' = Olympus M.Zuiko Digital ED 40-150mm F4.0 Pro  
'0 38 10' = Olympus M.Zuiko Digital ED 20mm F1.4 Pro  
'0 39 10' = Olympus M.Zuiko Digital ED 90mm F3.5 Macro IS Pro  
'0 40 10' = Olympus M.Zuiko Digital ED 150-600mm F5.0-6.3  
'0 41 10' = OM System M.Zuiko Digital ED 50-200mm F2.8 IS Pro  
'1 01 00' = Sigma 18-50mm F3.5-5.6 DC  
'1 01 10' = Sigma 30mm F2.8 EX DN  
'1 02 00' = Sigma 55-200mm F4.0-5.6 DC  
'1 02 10' = Sigma 19mm F2.8 EX DN  
'1 03 00' = Sigma 18-125mm F3.5-5.6 DC  
'1 03 10' = Sigma 30mm F2.8 DN | A  
'1 04 00' = Sigma 18-125mm F3.5-5.6 DC  
'1 04 10' = Sigma 19mm F2.8 DN | A  
'1 05 00' = Sigma 30mm F1.4 EX DC HSM  
'1 05 10' = Sigma 60mm F2.8 DN | A  
'1 06 00' = Sigma APO 50-500mm F4.0-6.3 EX DG HSM  
'1 06 10' = Sigma 30mm F1.4 DC DN | C  
'1 07 00' = Sigma Macro 105mm F2.8 EX DG  
'1 07 10' = Sigma 16mm F1.4 DC DN | C (017)  
'1 08 00' = Sigma APO Macro 150mm F2.8 EX DG HSM  
'1 09 00' = Sigma 18-50mm F2.8 EX DC Macro  
'1 10 00' = Sigma 24mm F1.8 EX DG Aspherical Macro  
'1 11 00' = Sigma APO 135-400mm F4.5-5.6 DG  
'1 12 00' = Sigma APO 300-800mm F5.6 EX DG HSM  
'1 13 00' = Sigma 30mm F1.4 EX DC HSM  
'1 14 00' = Sigma APO 50-500mm F4.0-6.3 EX DG HSM  
'1 15 00' = Sigma 10-20mm F4.0-5.6 EX DC HSM  
'1 16 00' = Sigma APO 70-200mm F2.8 II EX DG Macro HSM  
'1 17 00' = Sigma 50mm F1.4 EX DG HSM  
'2 01 00' = Leica D Vario Elmarit 14-50mm F2.8-3.5 Asph.  
'2 01 10' = Lumix G Vario 14-45mm F3.5-5.6 Asph. Mega OIS  
'2 02 00' = Leica D Summilux 25mm F1.4 Asph.  
'2 02 10' = Lumix G Vario 45-200mm F4.0-5.6 Mega OIS  
'2 03 00' = Leica D Vario Elmar 14-50mm F3.8-5.6 Asph. Mega OIS  
'2 03 01' = Leica D Vario Elmar 14-50mm F3.8-5.6 Asph.  
'2 03 10' = Lumix G Vario HD 14-140mm F4.0-5.8 Asph. Mega OIS  
'2 04 00' = Leica D Vario Elmar 14-150mm F3.5-5.6  
'2 04 10' = Lumix G Vario 7-14mm F4.0 Asph.  
'2 05 10' = Lumix G 20mm F1.7 Asph.

'2 06 10' = Leica DG Macro-Elmarit 45mm F2.8 Asph. Mega OIS  
 '2 07 10' = Lumix G Vario 14-42mm F3.5-5.6 Asph. Mega OIS  
 '2 08 10' = Lumix G Fisheye 8mm F3.5  
 '2 09 10' = Lumix G Vario 100-300mm F4.0-5.6 Mega OIS  
 '2 10 10' = Lumix G 14mm F2.5 Asph.  
 '2 11 10' = Lumix G 12.5mm F12 3D  
 '2 12 10' = Leica DG Summilux 25mm F1.4 Asph.  
 '2 13 10' = Lumix G X Vario PZ 45-175mm F4.0-5.6 Asph. Power OIS  
 '2 14 10' = Lumix G X Vario PZ 14-42mm F3.5-5.6 Asph. Power OIS  
 '2 15 10' = Lumix G X Vario 12-35mm F2.8 Asph. Power OIS  
 '2 16 10' = Lumix G Vario 45-150mm F4.0-5.6 Asph. Mega OIS  
 '2 17 10' = Lumix G X Vario 35-100mm F2.8 Power OIS  
 '2 18 10' = Lumix G Vario 14-42mm F3.5-5.6 II Asph. Mega OIS  
 '2 19 10' = Lumix G Vario 14-140mm F3.5-5.6 Asph. Power OIS  
 '2 20 10' = Lumix G Vario 12-32mm F3.5-5.6 Asph. Mega OIS  
 '2 21 10' = Leica DG Nocticron 42.5mm F1.2 Asph. Power OIS  
 '2 22 10' = Leica DG Summilux 15mm F1.7 Asph.  
 '2 23 10' = Lumix G Vario 35-100mm F4.0-5.6 Asph. Mega OIS  
 '2 24 10' = Lumix G Macro 30mm F2.8 Asph. Mega OIS  
 '2 25 10' = Lumix G 42.5mm F1.7 Asph. Power OIS  
 '2 26 10' = Lumix G 25mm F1.7 Asph.  
 '2 27 10' = Leica DG Vario-Elmar 100-400mm F4.0-6.3 Asph. Power OIS  
 '2 28 10' = Lumix G Vario 12-60mm F3.5-5.6 Asph. Power OIS  
 '2 29 10' = Leica DG Summilux 12mm F1.4 Asph.  
 '2 30 10' = Leica DG Vario-Elmarit 12-60mm F2.8-4 Asph. Power OIS  
 '2 31 10' = Lumix G Vario 45-200mm F4.0-5.6 II  
 '2 32 10' = Lumix G Vario 100-300mm F4.0-5.6 II  
 '2 33 10' = Lumix G X Vario 12-35mm F2.8 II Asph. Power OIS  
 '2 34 10' = Lumix G Vario 35-100mm F2.8 II  
 '2 35 10' = Leica DG Vario-Elmarit 8-18mm F2.8-4 Asph.  
 '2 36 10' = Leica DG Elmarit 200mm F2.8 Power OIS  
 '2 37 10' = Leica DG Vario-Elmarit 50-200mm F2.8-4 Asph. Power OIS  
 '2 38 10' = Leica DG Vario-Summilux 10-25mm F1.7 Asph.  
 '2 39 10' = Leica DG Summilux 25mm F1.4 II Asph.  
 '2 40 10' = Leica DG Vario-Summilux 25-50mm F1.7 Asph.  
 '2 41 10' = Leica DG Summilux 9mm F1.7 Asph.  
 '3 01 00' = Leica D Vario Elmarit 14-50mm F2.8-3.5 Asph.  
 '3 02 00' = Leica D Summilux 25mm F1.4 Asph.  
 '5 01 10' = Tamron 14-150mm F3.5-5.8 Di III  
 '24 01 10' = Venus Optics Laowa 50mm F2.8 2x Macro  
 'f7 03 10' = LAOWA C&D-Dreamer MFT 7.5mm F2.0  
 'f7 10 10' = LAOWA C&D-Dreamer MFT 6.0mm F2.0

## Olympus CameraSettings Tags

Tag ID	Tag Name	Writable	Values / Notes	
0x0000	CameraSettingsVersion	undef[4]		
0x0100	PreviewImageValid	int32u	0 = No 1 = Yes	
0x0101	PreviewImageStart	int32u*		
0x0102	PreviewImageLength	int32u*		
0x0200	ExposureMode	int16u	1 = Manual 2 = Program 3 = Aperture-priority AE 4 = Shutter speed priority AE 5 = Program-shift	
0x0201	AELock	int16u	0 = Off 1 = On	
0x0202	MeteringMode	int16u	2 = Center-weighted average 3 = Spot 5 = ESP 261 = Pattern+AF 515 = Spot+Highlight control 1027 = Spot+Shadow control	
0x0203	ExposureShift	rational64s		
0x0204	NDFilter	yes	0 = Off 1 = On	
0x0300	MacroMode	int16u	0 = Off 1 = On 2 = Super Macro	

0x0301 FocusMode	int16u[n]	(1 or 2 values) [Value 0] 0 = Single AF 1 = Sequential shooting AF 2 = Continuous AF 3 = Multi AF 4 = Face Detect 10 = MF [Value 1] 0x0 = (none) Bit 0 = S-AF Bit 2 = C-AF Bit 4 = MF Bit 5 = Face Detect Bit 6 = Imager AF Bit 7 = Live View Magnification Frame Bit 8 = AF sensor Bit 9 = Starry Sky AF
0x0302 FocusProcess	int16u[n]	(1 or 2 values) [Value 0] 0 = AF Not Used 1 = AF Used
0x0303 AFSearch	int16u	0 = Not Ready 1 = Ready
0x0304 AFAreas	int32u[64]~	(coordinates range from 0 to 255)
0x0305 AFPointSelected	rational64s[5]	(coordinates expressed as a percent)
0x0306 AFFineTune	int8u	0 = Off 1 = On
0x0307 AFFineTuneAdj	int16s[3]	
0x0308 FocusBracketStepSize	int8u	
0x0309 AISubjectTrackingMode	int16u	0 = Off 256 = Motorsports; Object Not Found 257 = Motorsports; Racing Car Found 258 = Motorsports; Car Found 259 = Motorsports; Motorcycle Found 512 = Airplanes; Object Not Found 513 = Airplanes; Passenger/Transport Plane Found 514 = Airplanes; Small Plane/Fighter Jet Found 515 = Airplanes; Helicopter Found 768 = Trains; Object Not Found 769 = Trains; Object Found 1024 = Birds; Object Not Found 1025 = Birds; Object Found 1280 = Dogs & Cats; Object Not Found 1281 = Dogs & Cats; Object Found 1536 = Human; Object Not Found 1537 = Human; Object Found
0x030a AFTargetInfo	int16u	--> <a href="#">Olympus AFTargetInfo Tags</a>
0x030b SubjectDetectInfo	int16u	--> <a href="#">Olympus SubjectDetectInfo Tags</a>
0x0400 FlashMode	int16u	0x0 = Off              Bit 3 = Slow-sync Bit 0 = On              Bit 4 = Forced On Bit 1 = Fill-in        Bit 5 = 2nd Curtain Bit 2 = Red-eye
0x0401 FlashExposureComp	rational64s	
0x0403 FlashRemoteControl	int16u	0x0 = Off              0xb = Channel 3, Mid 0x1 = Channel 1, Low    0xc = Channel 4, Mid 0x2 = Channel 2, Low    0x11 = Channel 1, High 0x3 = Channel 3, Low    0x12 = Channel 2, High 0x4 = Channel 4, Low    0x13 = Channel 3, High 0x9 = Channel 1, Mid    0x14 = Channel 4, High 0xa = Channel 2, Mid
0x0404 FlashControlMode	int16u[n]	(3 or 4 values) [Value 0] 0 = Off 3 = TTL 4 = Auto 5 = Manual
0x0405 FlashIntensity	rational64s[n]	(3 or 4 values) 'undef undef undef' = n/a 'undef undef undef undef' = n/a (x4)
0x0406 ManualFlashStrength	rational64s[n]	(3 or 4 values) 'undef undef undef' = n/a

			'undef undef undef = n/a (x4)																																																														
0x0500	WhiteBalance2	int16u	0 = Auto 1 = Auto (Keep Warm Color Off) 16 = 7500K (Fine Weather with Shade) 17 = 6000K (Cloudy) 18 = 5300K (Fine Weather) 20 = 3000K (Tungsten light) 21 = 3600K (Tungsten light-like) 22 = Auto Setup 23 = 5500K (Flash) 33 = 6600K (Daylight fluorescent) 34 = 4500K (Neutral white fluorescent) 35 = 4000K (Cool white fluorescent) 36 = White Fluorescent 48 = 3600K (Tungsten light-like) 67 = Underwater 256 = One Touch WB 1 257 = One Touch WB 2 258 = One Touch WB 3 259 = One Touch WB 4 512 = Custom WB 1 513 = Custom WB 2 514 = Custom WB 3 515 = Custom WB 4																																																														
0x0501	WhiteBalanceTemperature	int16u																																																															
0x0502	WhiteBalanceBracket	int16s																																																															
0x0503	CustomSaturation	int16s[3]~	(3 numbers: 1. CS Value, 2. Min, 3. Max)																																																														
0x0504	ModifiedSaturation	int16u	0 = Off 1 = CM1 (Red Enhance) 2 = CM2 (Green Enhance) 3 = CM3 (Blue Enhance) 4 = CM4 (Skin Tones)																																																														
0x0505	ContrastSetting	int16s[3]	(value, min, max)																																																														
0x0506	SharpnessSetting	int16s[3]	(value, min, max)																																																														
0x0507	ColorSpace	int16u	0 = sRGB 1 = Adobe RGB 2 = Pro Photo RGB																																																														
0x0509	SceneMode	int16u	<table> <tbody> <tr><td>0 = Standard</td><td>36 = Underwater Macro</td></tr> <tr><td>6 = Auto</td><td>37 = Shoot &amp; Select1</td></tr> <tr><td>7 = Sport</td><td>38 = Shoot &amp; Select2</td></tr> <tr><td>8 = Portrait</td><td>39 = High Key</td></tr> <tr><td>9 = Landscape+Portrait</td><td>40 = Digital Image Stabilization</td></tr> <tr><td>10 = Landscape</td><td>41 = Auction</td></tr> <tr><td>11 = Night Scene</td><td>42 = Beach</td></tr> <tr><td>12 = Self Portrait</td><td>43 = Snow</td></tr> <tr><td>13 = Panorama</td><td>44 = Underwater Wide2</td></tr> <tr><td>14 = 2 in 1</td><td>45 = Low Key</td></tr> <tr><td>15 = Movie</td><td>46 = Children</td></tr> <tr><td>16 = Landscape+Portrait</td><td>47 = Vivid</td></tr> <tr><td>17 = Night+Portrait</td><td>48 = Nature Macro</td></tr> <tr><td>18 = Indoor</td><td>49 = Underwater Snapshot</td></tr> <tr><td>19 = Fireworks</td><td>50 = Shooting Guide</td></tr> <tr><td>20 = Sunset</td><td>54 = Face Portrait</td></tr> <tr><td>21 = Beauty Skin</td><td>57 = Bulb</td></tr> <tr><td>22 = Macro</td><td>59 = Smile Shot</td></tr> <tr><td>23 = Super Macro</td><td>60 = Quick Shutter</td></tr> <tr><td>24 = Food</td><td>63 = Slow Shutter</td></tr> <tr><td>25 = Documents</td><td>64 = Bird Watching</td></tr> <tr><td>26 = Museum</td><td>65 = Multiple Exposure</td></tr> <tr><td>27 = Shoot &amp; Select</td><td>66 = e-Portrait</td></tr> <tr><td>28 = Beach &amp; Snow</td><td>67 = Soft Background Shot</td></tr> <tr><td>29 = Self Portrait+Timer</td><td>142 = Hand-held Starlight</td></tr> <tr><td>30 = Candle</td><td>154 = HDR</td></tr> <tr><td>31 = Available Light</td><td>197 = Panning</td></tr> <tr><td>32 = Behind Glass</td><td>203 = Light Trails</td></tr> <tr><td>33 = My Mode</td><td>204 = Backlight HDR</td></tr> <tr><td>34 = Pet</td><td>205 = Silent</td></tr> <tr><td>35 = Underwater Wide1</td><td>206 = Multi Focus Shot</td></tr> </tbody> </table>	0 = Standard	36 = Underwater Macro	6 = Auto	37 = Shoot & Select1	7 = Sport	38 = Shoot & Select2	8 = Portrait	39 = High Key	9 = Landscape+Portrait	40 = Digital Image Stabilization	10 = Landscape	41 = Auction	11 = Night Scene	42 = Beach	12 = Self Portrait	43 = Snow	13 = Panorama	44 = Underwater Wide2	14 = 2 in 1	45 = Low Key	15 = Movie	46 = Children	16 = Landscape+Portrait	47 = Vivid	17 = Night+Portrait	48 = Nature Macro	18 = Indoor	49 = Underwater Snapshot	19 = Fireworks	50 = Shooting Guide	20 = Sunset	54 = Face Portrait	21 = Beauty Skin	57 = Bulb	22 = Macro	59 = Smile Shot	23 = Super Macro	60 = Quick Shutter	24 = Food	63 = Slow Shutter	25 = Documents	64 = Bird Watching	26 = Museum	65 = Multiple Exposure	27 = Shoot & Select	66 = e-Portrait	28 = Beach & Snow	67 = Soft Background Shot	29 = Self Portrait+Timer	142 = Hand-held Starlight	30 = Candle	154 = HDR	31 = Available Light	197 = Panning	32 = Behind Glass	203 = Light Trails	33 = My Mode	204 = Backlight HDR	34 = Pet	205 = Silent	35 = Underwater Wide1	206 = Multi Focus Shot
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0x050a	NoiseReduction	int16u	0x0 = (none) Bit 0 = Noise Reduction Bit 1 = Noise Filter Bit 2 = Noise Filter (ISO Boost) Bit 3 = Auto																																																														

0x050b	DistortionCorrection	int16u	0 = Off 1 = On
0x050c	ShadingCompensation	int16u	0 = Off 1 = On
0x050d	CompressionFactor	rational64u	
0x050f	Gradation	int16s[n]	(3 or 4 values) [Values 0-2] '-1 -1 1' = Low Key '0 -1 1' = Normal '0 0 0' = n/a '1 -1 1' = High Key [Value 3] 0 = User-Selected 1 = Auto-Override
0x0520	PictureMode	int16u[n]	(1 or 2 values) [Value 0] 1 = Vivid 2 = Natural 3 = Muted 4 = Portrait 5 = i-Enhance 6 = e-Portrait 7 = Color Creator 8 = Underwater 9 = Color Profile 1 10 = Color Profile 2 11 = Color Profile 3 12 = Monochrome Profile 1 13 = Monochrome Profile 2 14 = Monochrome Profile 3 17 = Art Mode 18 = Monochrome Profile 4 256 = Monotone 512 = Sepia
0x0521	PictureModeSaturation	int16s[3]	(value, min, max)
0x0522	PictureModeHue?	int16s	
0x0523	PictureModeContrast	int16s[3]	(value, min, max)
0x0524	PictureModeSharpness	int16s[3]	(value, min, max)
0x0525	PictureModeBWFilter	int16s	0 = n/a      3 = Orange 1 = Neutral    4 = Red 2 = Yellow     5 = Green
0x0526	PictureModeTone	int16s	0 = n/a      3 = Blue 1 = Neutral    4 = Purple 2 = Sepia      5 = Green
0x0527	NoiseFilter	int16s[3]	'-1 -2 1' = Low '-2 -2 1' = Off '0 -2 1' = Standard '0 0 0' = n/a '1 -2 1' = High
0x0529	ArtFilter	int16u[4]	[Value 0] 0 = Off                  23 = Sparkle 1 = Soft Focus        24 = Watercolor 2 = Pop Art            25 = Key Line 3 = Pale & Light Color 26 = Key Line II 4 = Light Tone        27 = Miniature 5 = Pin Hole           28 = Reflection 6 = Grainy Film       29 = Fragmented 8 = Underwater       31 = Cross Process II 9 = Diorama           32 = Dramatic Tone II 10 = Cross Process   33 = Watercolor I 12 = Fish Eye          34 = Watercolor II 13 = Drawing           35 = Diorama II 14 = Gentle Sepia     36 = Vintage 15 = Pale & Light Color II 37 = Vintage II 16 = Pop Art II       38 = Vintage III 17 = Pin Hole II      39 = Partial Color 18 = Pin Hole III     40 = Partial Color II 19 = Grainy Film II   41 = Partial Color III 20 = Dramatic Tone   42 = Bleach Bypass 21 = Punk              43 = Bleach Bypass II 22 = Soft Focus 2     44 = Instant Film
0x052c	MagicFilter	int16u[4]	[Value 0]

0 = Off	23 = Sparkle
1 = Soft Focus	24 = Watercolor
2 = Pop Art	25 = Key Line
3 = Pale & Light Color	26 = Key Line II
4 = Light Tone	27 = Miniature
5 = Pin Hole	28 = Reflection
6 = Grainy Film	29 = Fragmented
8 = Underwater	31 = Cross Process II
9 = Diorama	32 = Dramatic Tone II
10 = Cross Process	33 = Watercolor I
12 = Fish Eye	34 = Watercolor II
13 = Drawing	35 = Diorama II
14 = Gentle Sepia	36 = Vintage
15 = Pale & Light Color II	37 = Vintage II
16 = Pop Art II	38 = Vintage III
17 = Pin Hole II	39 = Partial Color
18 = Pin Hole III	40 = Partial Color II
19 = Grainy Film II	41 = Partial Color III
20 = Dramatic Tone	42 = Bleach Bypass
21 = Punk	43 = Bleach Bypass II
22 = Soft Focus 2	44 = Instant Film

0x052d	PictureModeEffect	int16s[3]	'-1 -1 1' = Low '0 -1 1' = Standard '0 0 0' = n/a '1 -1 1' = High
0x052e	ToneLevel	yes	[Values 0, 4, 8, 12, 16, 20 and 24] -31999 = Highlights -31998 = Shadows -31997 = Midtones 0 = 0
0x052f	ArtFilterEffect	int16u[20]	[Value 0] 0x0 = Off 0x17 = Sparkle 0x1 = Soft Focus 0x18 = Watercolor 0x2 = Pop Art 0x19 = Key Line 0x3 = Pale & Light Color 0x1a = Key Line II 0x4 = Light Tone 0x1b = Miniature 0x5 = Pin Hole 0x1c = Reflection 0x6 = Grainy Film 0x1d = Fragmented 0x8 = Underwater 0x1f = Cross Process II 0x9 = Diorama 0x20 = Dramatic Tone II 0xa = Cross Process 0x21 = Watercolor I 0xc = Fish Eye 0x22 = Watercolor II 0xd = Drawing 0x23 = Diorama II 0xe = Gentle Sepia 0x24 = Vintage 0xf = Pale & Light Color II 0x25 = Vintage II 0x10 = Pop Art II 0x26 = Vintage III 0x11 = Pin Hole II 0x27 = Partial Color 0x12 = Pin Hole III 0x28 = Partial Color II 0x13 = Grainy Film II 0x29 = Partial Color III 0x14 = Dramatic Tone 0x2a = Bleach Bypass 0x15 = Punk 0x2b = Bleach Bypass II 0x16 = Soft Focus 2 0x2c = Instant Film  [Value 4] 0x0 = No Effect 0x8050 = White Edge 0x8010 = Star Light 0x8060 = B&W 0x8020 = Pin Hole 0x8080 = Blur Top and Bottom 0x8030 = Frame 0x8081 = Blur Left and Right 0x8040 = Soft Focus  [Value 6] 0x0 = No Color Filter 0x3 = Red Color Filter 0x1 = Yellow Color Filter 0x4 = Green Color Filter 0x2 = Orange Color Filter
0x0532	ColorCreatorEffect	int16s[6]	
0x0537	MonochromeProfileSettings	int16s[6]	[Value 0] 0 = No Filter 5 = Blue Filter 1 = Yellow Filter 6 = Cyan Filter 2 = Orange Filter 7 = Green Filter 3 = Red Filter 8 = Yellow-green Filter 4 = Magenta Filter
0x0538	FilmGrainEffect	int16s	0 = Off 1 = Low 2 = Medium 3 = High
0x0539	ColorProfileSettings	int16s[14]	
0x053a	MonochromeVignetting	int16s	(-5 to +5: positive is white vignetting, negative is black vignetting)

0x053b	MonochromeColor	int16s	0 = (none) 3 = Blue 1 = Normal 4 = Purple 2 = Sepia 5 = Green
0x0600	DriveMode	int16u[n]~	(2, 3, 5 or numbers: 1. Mode, 2. Shot number, 3. Mode bits, 5. Shutter mode, 6. Shooting mode (E-M1 II and later models))
0x0601	PanoramaMode	int16u~	(2 numbers: 1. Mode, 2. Shot number)
0x0603	ImageQuality2	int16u	1 = SQ 2 = HQ 3 = SHQ 4 = RAW 5 = SQ (5)
0x0604	ImageStabilization	int32u	0 = Off 1 = On, S-IS1 (All Direction Shake IS) 2 = On, S-IS2 (Vertical Shake IS) 3 = On, S-IS3 (Horizontal Shake IS) 4 = On, S-IS Auto
0x0804	StackedImage	int32u[2]	'0 0' = No '3 2' = ND2 (1EV) '3 4' = ND4 (2EV) '3 8' = ND8 (3EV) '3 16' = ND16 (4EV) '3 32' = ND32 (5EV) '3 64' = ND64 (6EV) '5 4' = HDR1 '6 4' = HDR2 '8 8' = Tripod high resolution '11 12' = Hand-held high resolution (11 12) '11 16' = Hand-held high resolution (11 16) '13 2' = GND2 (1EV) '13 4' = GND4 (2EV) '13 8' = GND8 (3EV) '1 **' = Live Composite (* images) '4 **' = Live Time/Bulb (* images) '9 **' = Focus-stacked (* images)
0x0821	ISOAutoSettings	int16u[2]	(2 numbers: 1. Default sensitivity, 2. Maximum sensitivity) [Value 0] 0 = n/a 2304 = 1600 3157 = 16000 1536 = 200 2389 = 2000 3242 = 20000 1621 = 250 2474 = 2500 3328 = 25600 1706 = 320 2560 = 3200 3413 = 32000 1792 = 400 2645 = 4000 3498 = 40000 1877 = 500 2730 = 5000 3584 = 51200 1962 = 640 2816 = 6400 3669 = 64000 2048 = 800 2901 = 8000 3754 = 80000 2133 = 1000 2986 = 10000 3840 = 102400 2218 = 1250 3072 = 12800 [Value 1] 0 = n/a 2304 = 1600 3157 = 16000 1536 = 200 2389 = 2000 3242 = 20000 1621 = 250 2474 = 2500 3328 = 25600 1706 = 320 2560 = 3200 3413 = 32000 1792 = 400 2645 = 4000 3498 = 40000 1877 = 500 2730 = 5000 3584 = 51200 1962 = 640 2816 = 6400 3669 = 64000 2048 = 800 2901 = 8000 3754 = 80000 2133 = 1000 2986 = 10000 3840 = 102400 2218 = 1250 3072 = 12800
0x0900	ManometerPressure	int16u	
0x0901	ManometerReading	int32s[2]	
0x0902	ExtendedWB Detect	int16u	0 = Off 1 = On
0x0903	RollAngle	int16s[2]	(converted to degrees of clockwise camera rotation)
0x0904	PitchAngle	int16s[2]	(converted to degrees of upward camera tilt)
0x0908	DateTimeUTC	string	

## Olympus AFTargetInfo Tags

Position and size of selected AF Area and focus areas for OM cameras.

Index2	Tag Name	Writable	Values / Notes
0	AFFrameSize	int16u[2]	(width/height of the focus/select frame)

2 AFFocusArea int16u[4] (X Y width height. The center is identical to AFPointSelected)

6 AFSelectedArea int16u[4] (X Y width height. Subject and Face Detection OFF: User selected AF target area. Subject or Face Detection ON: Area related to detection process.)

## Olympus SubjectDetectInfo Tags

Subject Detection data for OM cameras. These tags contain the areas of a subject and its elements detected by Subject Detection, or the main face and eyes detected by Face Detection. These elements can be either L1 details (level 1, such as head, chassis, airplane nose, etc.) or L2 details (level 2, such as eye, driver, airplane cockpit, etc.).

Index2	Tag Name	Writable	Values / Notes
0	SubjectDetectFrameSize	int16u[2]	(width/height of the subject detect frame)
2	SubjectDetectArea	int16u[4]	(X Y width height)
6	SubjectDetectDetail	int16u[4]	(X Y width height)
10	SubjectDetectStatus	int16u	(Indicates the presence of data related to subject and face detection, not necessarily corresponding to the detection result) 0 = No Data 257 = Subject and L1 Detail Detected 258 = Subject and L2 Detail Detected 260 = Subject Detected, No Details 515 = Face and Eye Detected 516 = Face Detected 771 = Subject Detail or Eye Detected 772 = No Subject or Face Detected

## Olympus RawDevelopment Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	RawDevVersion	undef[4]	
0x0100	RawDevExposureBiasValue	rational64s	
0x0101	RawDevWhiteBalanceValue	int16u	
0x0102	RawDevWBFineAdjustment	int16s	
0x0103	RawDevGrayPoint	int16u[3]	
0x0104	RawDevSaturationEmphasis	int16s[3]	
0x0105	RawDevMemoryColorEmphasis	int16u	
0x0106	RawDevContrastValue	int16s[3]	
0x0107	RawDevSharpnessValue	int16s[3]	
0x0108	RawDevColorSpace	int16u	0 = sRGB 1 = Adobe RGB 2 = Pro Photo RGB
0x0109	RawDevEngine	int16u	0 = High Speed 1 = High Function 2 = Advanced High Speed 3 = Advanced High Function
0x010a	RawDevNoiseReduction	int16u	0x0 = (none) Bit 0 = Noise Reduction Bit 1 = Noise Filter Bit 2 = Noise Filter (ISO Boost)
0x010b	RawDevEditStatus	int16u	0 = Original 1 = Edited (Landscape) 6 = Edited (Portrait) 8 = Edited (Portrait)
0x010c	RawDevSettings	int16u	0x0 = (none) Bit 4 = Sharpness Bit 0 = WB Color Temp Bit 5 = Color Space Bit 1 = WB Gray Point Bit 6 = High Function Bit 2 = Saturation Bit 7 = Noise Reduction Bit 3 = Contrast

## Olympus RawDevelopment2 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	RawDevVersion	undef[4]	
0x0100	RawDevExposureBiasValue	rational64s	

0x0101	RawDevWhiteBalance	int16u	1 = Color Temperature 2 = Gray Point
0x0102	RawDevWhiteBalanceValue	int16u	
0x0103	RawDevWBFineAdjustment	int16s	
0x0104	RawDevGrayPoint	int16u[3]	
0x0105	RawDevContrastValue	int16s[3]	
0x0106	RawDevSharpnessValue	int16s[3]	
0x0107	RawDevSaturationEmphasis	int16s[3]	
0x0108	RawDevMemoryColorEmphasis	int16u	
0x0109	RawDevColorSpace	int16u	0 = sRGB 1 = Adobe RGB 2 = Pro Photo RGB
0x010a	RawDevNoiseReduction	int16u	0x0 = (none) Bit 0 = Noise Reduction Bit 1 = Noise Filter Bit 2 = Noise Filter (ISO Boost)
0x010b	RawDevEngine	int16u	0 = High Speed 1 = High Function
0x010c	RawDevPictureMode	int16u	1 = Vivid 2 = Natural 3 = Muted 256 = Monotone 512 = Sepia
0x010d	RawDevPMSaturation	int16s[3]	
0x010e	RawDevPMContrast	int16s[3]	
0x010f	RawDevPMSharpness	int16s[3]	
0x0110	RawDevPM_BWFilter	int16u	1 = Neutral 2 = Yellow 3 = Orange 4 = Red 5 = Green
0x0111	RawDevPMPictureTone	int16u	1 = Neutral 2 = Sepia 3 = Blue 4 = Purple 5 = Green
0x0112	RawDevGradation	int16s[3]	
0x0113	RawDevSaturation3	int16s[3]	
0x0119	RawDevAutoGradation	int16u	0 = Off 1 = On
0x0120	RawDevPMNoiseFilter	int16u	
0x0121	RawDevArtFilter	int16u[4]	[Value 0] 0 = Off 23 = Sparkle 1 = Soft Focus 24 = Watercolor 2 = Pop Art 25 = Key Line 3 = Pale & Light Color 26 = Key Line II 4 = Light Tone 27 = Miniature 5 = Pin Hole 28 = Reflection 6 = Grainy Film 29 = Fragmented 8 = Underwater 31 = Cross Process II 9 = Diorama 32 = Dramatic Tone II 10 = Cross Process 33 = Watercolor I 12 = Fish Eye 34 = Watercolor II 13 = Drawing 35 = Diorama II 14 = Gentle Sepia 36 = Vintage 15 = Pale & Light Color II 37 = Vintage II 16 = Pop Art II 38 = Vintage III 17 = Pin Hole II 39 = Partial Color 18 = Pin Hole III 40 = Partial Color II 19 = Grainy Film II 41 = Partial Color III 20 = Dramatic Tone 42 = Bleach Bypass 21 = Punk 43 = Bleach Bypass II 22 = Soft Focus 2 44 = Instant Film
0x8000	RawDevSubIFD	-	--> <a href="#">Olympus RawDevSubIFD Tags</a>

## Olympus RawDevSubIFD Tags

Tag ID	Tag Name	Writable	Values / Notes
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# Olympus ImageProcessing Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	ImageProcessingVersion	undef[4]	
0x0100	WB_RBLevels	int16u[n]	(These tags store 2 values, red and blue levels, for some models, but 4 values, presumably RBGG levels, for other models)
0x0102	WB_RBLevels3000K	int16u[n]	
0x0103	WB_RBLevels3300K	int16u[n]	
0x0104	WB_RBLevels3600K	int16u[n]	
0x0105	WB_RBLevels3900K	int16u[n]	
0x0106	WB_RBLevels4000K	int16u[n]	
0x0107	WB_RBLevels4300K	int16u[n]	
0x0108	WB_RBLevels4500K	int16u[n]	
0x0109	WB_RBLevels4800K	int16u[n]	
0x010a	WB_RBLevels5300K	int16u[n]	
0x010b	WB_RBLevels6000K	int16u[n]	
0x010c	WB_RBLevels6600K	int16u[n]	
0x010d	WB_RBLevels7500K	int16u[n]	
0x010e	WB_RBLevelsCWB1	int16u[n]	
0x010f	WB_RBLevelsCWB2	int16u[n]	
0x0110	WB_RBLevelsCWB3	int16u[n]	
0x0111	WB_RBLevelsCWB4	int16u[n]	
0x0113	WB_GLevel3000K	int16u	
0x0114	WB_GLevel3300K	int16u	
0x0115	WB_GLevel3600K	int16u	
0x0116	WB_GLevel3900K	int16u	
0x0117	WB_GLevel4000K	int16u	
0x0118	WB_GLevel4300K	int16u	
0x0119	WB_GLevel4500K	int16u	
0x011a	WB_GLevel4800K	int16u	
0x011b	WB_GLevel5300K	int16u	
0x011c	WB_GLevel6000K	int16u	
0x011d	WB_GLevel6600K	int16u	
0x011e	WB_GLevel7500K	int16u	
0x011f	WB_GLevel	int16u	
0x0200	ColorMatrix	int16u[9]	
0x0300	Enhancer	int16u	
0x0301	EnhancerValues	int16u[7]	
0x0310	CoringFilter	int16u	
0x0311	CoringValues	int16u[7]	
0x0600	BlackLevel2	int16u[4]	
0x0610	GainBase	int16u	
0x0611	ValidBits	int16u[2]	
0x0612	CropLeft	int16u[2]	
0x0613	CropTop	int16u[2]	
0x0614	CropWidth	int32u	
0x0615	CropHeight	int32u	
0x0635	UnknownBlock1?	undef	(large unknown data block in ORF images but not JPG images)
0x0636	UnknownBlock2?	undef	(large unknown data block in ORF images but not JPG images)
0x0805	SensorCalibration	int16s[2]	(2 numbers: 1. Recommended maximum, 2. Calibration midpoint)
0x1010	NoiseReduction2	int16u	0x0 = (none) Bit 0 = Noise Reduction

				Bit 1 = Noise Filter Bit 2 = Noise Filter (ISO Boost)
0x1011	DistortionCorrection2	int16u	0 = Off 1 = On	
0x1012	ShadingCompensation2	int16u	0 = Off 1 = On	
0x101c	MultipleExposureMode	int16u[2]	[Value 0] 0 = Off 1 = Live Composite 2 = On (2 frames) 3 = On (3 frames)	
0x1103	UnknownBlock3?	undef	(large unknown data block in ORF images but not JPG images)	
0x1104	UnknownBlock4?	undef	(large unknown data block in ORF images but not JPG images)	
0x1112	AspectRatio	int8u[2]	'1 1' = 4:3 '1 4' = 1:1 '2 1' = 3:2 (RAW) '2 2' = 3:2 '3 1' = 16:9 (RAW) '3 3' = 16:9 '4 1' = 1:1 (RAW)	'4 4' = 6:6 '5 5' = 5:4 '6 6' = 7:6 '7 7' = 6:5 '8 8' = 7:5 '9 1' = 3:4 (RAW) '9 9' = 3:4
0x1113	AspectFrame	int16u[4]		
0x1200	FacesDetected	int32u[n]	(2 or 3 values)	
0x1201	FaceDetectArea	int16s[n]	(for models with 2 values in FacesDetected this gives X/Y coordinates in the FaceDetectFrame for all 4 corners of the face rectangle. For models with 3 values in FacesDetected this gives X/Y coordinates, size and rotation angle of the face detect square)	
0x1202	MaxFaces	int32u[3]		
0x1203	FaceDetectFrameSize	int16u[6]	(width/height of the full face detect frame)	
0x1207	FaceDetectFrameCrop	int16s[12]	(X/Y offset and width/height of the cropped face detect frame)	
0x1306	CameraTemperature	no	(this seems to be in degrees C only for some models)	
0x1900	KeystoneCompensation	int8u[2]	'0 0' = Off '0 1' = On	
0x1901	KeystoneDirection	int8u[2]	0 = Vertical 1 = Horizontal	
0x1906	KeystoneValue	int16s[3]	(3 numbers: 1. Keystone Value, 2. Min, 3. Max)	
0x2110	GNDFilterType	int8u	0 = High 1 = Medium 2 = Soft	

## Olympus FocusInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	FocusInfoVersion	undef[4]	
0x0209	AutoFocus?	int16u	0 = Off 1 = On
0x0210	SceneDetect	int16u	
0x0211	SceneArea?	int32u[8]	
0x0212	SceneDetectData?	int32u[720]	
0x0300	ZoomStepCount	int16u	
0x0301	FocusStepCount	int16u	
0x0303	FocusStepInfinity	int16u	
0x0304	FocusStepNear	int16u	
0x0305	FocusDistance	rational64u	
0x0308	AFPoint	int16u	(for the E-3, E-5 and E-30 the value is separated into 2 parts: low 5 bits give AF point, upper bits give AF target selection mode) [Value 0] 0x0 = (none) 0xc = Top-left (vertical) 0x1 = Top-left (horizontal) 0xd = Top-center (vertical) 0x2 = Top-center (horizontal) 0xe = Top-right (vertical) 0x3 = Top-right (horizontal) 0xf = Left (vertical) 0x4 = Left (horizontal) 0x10 = Mid-left (vertical) 0x5 = Mid-left (horizontal) 0x11 = Center (vertical) 0x6 = Center (horizontal) 0x12 = Mid-right (vertical) 0x7 = Mid-right (horizontal) 0x13 = Right (vertical) 0x8 = Right (horizontal) 0x14 = Bottom-left (vertical)

0x9 = Bottom-left (horizontal)      0x15 = Bottom-center (vertical)  
 0xa = Bottom-center (horizontal)      0x16 = Bottom-right (vertical)  
 0xb = Bottom-right (horizontal)      0x1f = n/a  
 [Value 1]  
 0x0 = Single Target      0x80 = Dynamic Single Target  
 0x40 = All Target      0xe0 = n/a  
 (models with 7-point AF)  
 [Value 0]  
 0x0 = (none)  
 0x2 = Top-center (horizontal)  
 0x4 = Right (horizontal)  
 0x5 = Mid-right (horizontal)  
 0x6 = Center (horizontal)  
 0x7 = Mid-left (horizontal)  
 0x8 = Left (horizontal)  
 0xa = Bottom-center (horizontal)  
 0xc = Top-center (vertical)  
 0xf = Right (vertical)  
 0x10 = Mid-right (vertical)  
 0x11 = Center (vertical)  
 0x12 = Mid-left (vertical)  
 0x13 = Left (vertical)  
 0x15 = Bottom-center (vertical)  
 [Value 1]  
 0x0 = Single Target  
 0x40 = All Target  
 (models other than E-Mxxx and OM-x)  
 0 = Left (or n/a)  
 1 = Center (horizontal)  
 2 = Right  
 3 = Center (vertical)  
 255 = None  
 (other models)

0x031b	AFPointDetails AFPointDetails	no int16u	(models E-Mxxx and OM-x)  [Value 0] 0x0 = No Subject      0x2 = Airplanes      0x4 = Birds      0x6 = Human Detection      0x5 = Dogs & Cats 0x1 = Motorsports      0x3 = Trains  [Value 1] 0x0 = Face Priority      0x1 = Target Priority  [Value 2] 0x0 = Normal AF      0x1 = AF on Half Press  [Value 3] 0x0 = No Eye-AF Priority      0x1 = Right Eye Priority      0x2 = Left Eye Priority      0x3 = Both Eyes Priority  [Value 4] 0x0 = No Face Detection      0x1 = Face Detection  [Value 5] 0x0 = No MF      0x1 = With MF  [Value 6] 0x0 = AF Priority      0x1 = Release Priority  [Value 7] 0x0 = No Object found      0x1 = Object found  [Value 8] 0x0 = MF      0x1 = S-AF      0x2 = C-AF      0x6 = C-AF + TR (other models)
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0x0328	AInfo	-	--> <a href="#">Olympus AInfo Tags</a>
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0x1201	ExternalFlash	int16u[2]	'0 0' = Off '1 0' = On
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0x1203	ExternalFlashGuideNumber?	rational64s	
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0x1204	ExternalFlashBounce	int16u	0 = Bounce or Off 1 = Direct
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0x1205	ExternalFlashZoom	rational64u	
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0x1208	InternalFlash	int16u[n]	0 = Off 1 = On '0 0' = Off '1 0' = On
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0x1209	ManualFlash	int16u[2]~	(2 numbers: 1. 0=Off, 1=On, 2. Flash strength)
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0x120a	MacroLED	int16u	0 = Off 1 = On
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0x1500	SensorTemperature	int16s	
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0x1600	ImageStabilization	undef~	
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## Olympus AFInfo Tags

Index	Tag Name	Writable	Values / Notes
1580	CAFoSensitivity	no	

## Olympus FE Tags

Some FE models write a large number of tags here, but most of this information remains unknown.

Tag ID	Tag Name	Writable	Values / Notes
0x0100	BodyFirmwareVersion	string	

## Olympus RawInfo Tags

These tags are found only in ORF images of some models (eg. C8080WZ).

Tag ID	Tag Name	Writable	Values / Notes
0x0000	RawInfoVersion	undef[4]	
0x0100	WB_RBLevelsUsed	int16u[2]	
0x0110	WB_RBLevelsAuto	int16u[2]	
0x0120	WB_RBLevelsShade	int16u[2]	
0x0121	WB_RBLevelsCloudy	int16u[2]	
0x0122	WB_RBLevelsFineWeather	int16u[2]	
0x0123	WB_RBLevelsTungsten	int16u[2]	
0x0124	WB_RBLevelsEveningSunlight	int16u[2]	
0x0130	WB_RBLevelsDaylightFluor	int16u[2]	
0x0131	WB_RBLevelsDayWhiteFluor	int16u[2]	
0x0132	WB_RBLevelsCoolWhiteFluor	int16u[2]	
0x0133	WB_RBLevelsWhiteFluorescent	int16u[2]	
0x0200	ColorMatrix2	int16u[9]	
0x0310	CoringFilter	int16u	
0x0311	CoringValues	int16u[11]	
0x0600	BlackLevel2	int16u[4]	
0x0601	YCbCrCoefficients	no	(stored as int16u[6], but extracted as rational32u[3])
0x0611	ValidPixelDepth	int16u[2]	
0x0612	CropLeft	int16u	
0x0613	CropTop	int16u	
0x0614	CropWidth	int32u	
0x0615	CropHeight	int32u	
0x1000	LightSource	int16u	0 = Unknown 16 = Shade 17 = Cloudy 18 = Fine Weather 20 = Tungsten (Incandescent) 22 = Evening Sunlight 33 = Daylight Fluorescent 34 = Day White Fluorescent 35 = Cool White Fluorescent 36 = White Fluorescent 256 = One Touch White Balance 512 = Custom 1-4
0x1001	WhiteBalanceComp	int16s[3]	
0x1010	SaturationSetting	int16s[3]	
0x1011	HueSetting	int16s[3]	
0x1012	ContrastSetting	int16s[3]	
0x1013	SharpnessSetting	int16s[3]	

0x2000	CMEposureCompensation	rational64s
0x2001	CMWhiteBalance	int16u
0x2002	CMWhiteBalanceComp	int16s
0x2010	CMWhiteBalanceGrayPoint	int16u[3]
0x2020	CMSaturation	int16s[3]
0x2021	CMHue	int16s[3]
0x2022	CMContrast	int16s[3]
0x2023	CMSharpness	int16s[3]

## Olympus UnknownInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## Olympus DSS Tags

Information extracted from DSS/DS2 files and the ID3 XOLY frame of MP3 files written by some Olympus voice recorders.

Index1	Tag Name	Writable	Values / Notes
12	Model	no	
38	StartTime	no	
50	EndTime	no	
62	Duration	no	
798	Comment	no	

## Olympus AVI Tags

This information is found in Olympus AVI videos.

Index1	Tag Name	Writable	Values / Notes
18	Make	no	
44	Model	no	--> <a href="#">Olympus CameraType Values</a>
94	FNumber	no	
131	DateTime1	no	
157	DateTime2	no	
297	ThumbInfo	-	--> <a href="#">Olympus thmb2 Tags</a>

## Olympus thmb2 Tags

Index1	Tag Name	Writable	Values / Notes
0	ThumbnailWidth	no	
2	ThumbnailHeight	no	
4	ThumbnailLength	no	
8	ThumbnailImage	no	(160x120 JPEG thumbnail image)

## Olympus WAV Tags

This information is found in WAV files from Olympus PCM linear recorders like the LS-5, LS-10, LS-11.

Index1	Tag Name	Writable	Values / Notes
12	Model	no	
28	FileNumber	no	
38	DateTimeOriginal	no	(time at start of recording)
50	DateTimeEnd	no	(time at end of recording)
62	RecordingTime	no	

512	Duration	no
522	Index01	no
532	Index02	no
542	Index03	no
552	Index04	no
562	Index05	no
572	Index06	no
582	Index07	no
592	Index08	no
602	Index09	no
612	Index10	no
622	Index11	no
632	Index12	no
642	Index13	no
652	Index14	no
662	Index15	no
672	Index16	no

## Olympus MOV1 Tags

This information is found in MOV videos from Olympus models such as the D540Z, D595Z, FE100, FE110, FE115, FE170 and FE200.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	--> <a href="#">Olympus CameraType Values</a>
38	ExposureUnknown?	no	
42	FNumber	no	
50	ExposureCompensation	no	
72	FocalLength	no	

## Olympus MOV2 Tags

This information is found in MOV videos from Olympus models such as the FE120, FE140 and FE190.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	(the actual model name, no decoding necessary)
54	ExposureTime	no	
58	FNumber	no	
66	ExposureCompensation	no	
88	FocalLength	no	
193	ISO	no	

## Olympus MP4 Tags

This information is found in MP4 videos from Olympus models such as the u7040 and u9010.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	(oddly different than CameraType values in JPEG images by the same camera) 'SG472' = u7040,S7040    'SG554' = SZ-10 'SG473' = u9010,S9010    'SG555' = SZ-20 'SG475' = SP800UZ        'SG573' = SZ-14 'SG551' = SZ-30MR        'SG575' = SP-620UZ 'SG553' = SP-610UZ

40	FNumber	no
48	ExposureCompensation	no
104	MovableInfo	- --> <a href="#">Olympus MovableInfo Tags</a>
114	MovableInfo	- --> <a href="#">Olympus MovableInfo Tags</a>

## Olympus MovableInfo Tags

Index1	Tag Name	Writable	Values / Notes
4	ISO	no	
44	EncoderVersion	no	
60	DecoderVersion	no	
131	Thumbnail	-	--> <a href="#">Olympus Thumbnail Tags</a>

## Olympus Thumbnail Tags

Index4	Tag Name	Writable	Values / Notes
1	ThumbnailWidth	no	
2	ThumbnailHeight	no	
3	ThumbnailLength	no	
4	ThumbnailOffset	no	

## Olympus MOV3 Tags

QuickTime information found in the TAGS atom of MOV videos from the E-M5.

Tag ID	Tag Name	Writable	Values / Notes
'OLYM'	OlympusAtom	-	--> <a href="#">Olympus OLYM2 Tags</a>

## Olympus OLYM2 Tags

Tag ID	Tag Name	Writable	Values / Notes
'prms'	MakerNotes	-	--> <a href="#">Olympus prms Tags</a>
'scrn'	PreviewInfo	-	--> <a href="#">Olympus scrn2 Tags</a>
'thmb'	ThumbInfo	-	--> <a href="#">Olympus thmb2 Tags</a>

## Olympus prms Tags

Information extracted from the "prms" atom in MOV videos from Olympus models such as the OM E-M5.

Index1	Tag Name	Writable	Values / Notes
18	Make	no	
44	Model	no	--> <a href="#">Olympus CameraType Values</a>
131	DateTime1	no	
157	DateTime2	no	
383	LensModel	no	

## Olympus scrn2 Tags

Index1	Tag Name	Writable	Values / Notes
2	OlympusPreview	-	--> <a href="#">Olympus scrn Tags</a>

## Olympus scrn Tags

Information extracted from the "scrn" atom of Olympus MP4 videos.

Index1	Tag Name	Writable	Values / Notes
2	OlympusPreview	-	--> <a href="#">Olympus scrn Tags</a>

0 PreviewImageLength	no	
4 PreviewImage	no	(640x480 JPEG preview image)

## Olympus thmb Tags

Information extracted from the "thmb" atom of Olympus MP4 videos.

Index1	Tag Name	Writable	Values / Notes
0	ThumbnailLength	no	
4	ThumbnailImage	no	(160x120 JPEG thumbnail image)

## Olympus OLYM Tags

Tags found in the OLYM atom of MP4 videos from the TG-810.

Index1	Tag Name	Writable	Values / Notes
14	Make	no	
40	Model	no	--> <a href="#">Olympus CameraType Values</a>
90	FNumber	no	
127	DateTimeOriginal	no	
153	DateTime2	no	
265	ThumbnailWidth	no	
267	ThumbnailHeight	no	

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*Last revised Oct 12, 2025*

[-- ExifTool Tag Names](#)

# OpenEXR Tags

Information extracted from EXR images. Use the ExtractEmbedded option to extract information from all frames of a multipart image. See <http://www.openexr.com/> for the official specification.

Tag ID	Tag Name	Writable	Values / Notes				
'_flags'	Flags	no	Bit 9 = Tiled Bit 10 = Long names Bit 11 = Deep data Bit 12 = Multipart				
'_ver'	EXRVersion	no	(low byte of Flags word)				
'adoptedNeutral'	AdoptedNeutral	no					
'altitude'	GPSAltitude	no					
'aperture'	Aperture	no					
'capDate'	DateTimeOriginal	no					
'channels'	Channels	no					
'chromaticities'	Chromaticities	no					
'chunkCount'	ChunkCount	no					
'comments'	Comments	no					
'compression'	Compression	no	0 = None 1 = RLE 2 = ZIPS 3 = ZIP 4 = PIZ	5 = PXR24 6 = B44 7 = B44A 8 = DWAA 9 = DWAB			
'dataWindow'	DataWindow	no					
'displayWindow'	DisplayWindow	no					
'envmap'	EnvironmentMap	no	0 = Latitude/Longitude 1 = Cube				
'exif'	EXIF	-	--> <a href="#">EXIF Tags</a>				
'expTime'	ExposureTime	no					
'focus'	FocusDistance	no					
'framesPerSecond'	FramesPerSecond	no					
'isoSpeed'	ISO	no					
'keyCode'	KeyCode	no					
'latitude'	GPSLatitude	no					
'lineOrder'	LineOrder	no	0 = Increasing Y 1 = Decreasing Y 2 = Random Y				
'longitude'	GPSLongitude	no					
'lookModTransform'	LookModTransform	no					
'multiView'	MultiView	no					
'name'	Name	no					
'owner'	Owner	no					
'pixelAspectRatio'	PixelAspectRatio	no					
'preview'	Preview	no					
'renderingTransform'	RenderingTransform	no					
'screenWindowCenter'	ScreenWindowCenter	no					
'screenWindowWidth'	ScreenWindowWidth	no					
'tiles'	Tiles	no					
'timeCode'	TimeCode	no					
'type'	Type	no					
'utcOffset'	TimeZone	no					
'version'	Version	no					
'whiteLuminance'	WhiteLuminance	no					
'worldToCamera'	WorldToCamera	no					
'worldToNDC'	WorldToNDC	no					
'wrapmodes'	WrapModes	no					

'xDensity'	XResolution	no
'xmp'	XMP	- --> <a href="#">XMP Tags</a>

(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Aug 9, 2024*

[<- ExifTool Tag Names](#)

# Opus Tags

Information extracted from Ogg Opus files. See <https://www.opus-codec.org/docs/> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'OpusHead'	Header	-	--> <a href="#">Opus Header Tags</a>
'OpusTags'	Comments	-	--> <a href="#">Vorbis Comments Tags</a>

## Opus Header Tags

Index	1	Tag Name	Writable	Values / Notes
0	OpusVersion	no		
1	AudioChannels	no		
4	SampleRate	no		
8	OutputGain	no		

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*Last revised Jul 14, 2016*

[<- ExifTool Tag Names](#)

# Other PFM Tags

Tags extracted from Portable FloatMap images. See <http://www.pauldebevec.com/Research/HDR/PFM/> for the specification.

Tag Name	Writable	Values / Notes
ByteOrder	no	
ColorSpace	no	'PF' = RGB 'Pf' = Monochrome
ImageHeight	no	
ImageWidth	no	

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*Last revised Aug 12, 2021*

[<- ExifTool Tag Names](#)

# PCAP Tags

Tags extracted from CAP, PCAP and PCAPNG Packet Capture files.

Tag ID	Tag Name	Writable	Values / Notes	
0x0001	Comment	no		
0xbac	CustomOption1	no		
0x0bad	CustomOption2	no		
0x4bac	CustomOption3	no		
0x4bad	CustomOption4	no		
'ByteOrder'	ByteOrder	no	'II' = Little-endian (Intel, II) 'MM' = Big-endian (Motorola, MM)	
'IDB-2'	DeviceName	no		
'IDB-3'	Description	no		
'IDB-4'	IPv4Addr	no		
'IDB-5'	IPv6Addr	no		
'IDB-6'	MACAddr	no		
'IDB-7'	EUIAddr	no		
'IDB-8'	Speed	no		
'IDB-9'	TimeStampResolution	no		
'IDB-10'	TimeZone	no		
'IDB-11'	Filter	no		
'IDB-12'	OperatingSystem	no		
'IDB-13'	FrameCheckSequenceLength	no		
'IDB-14'	TimeStampOffset	no		
'IDB-15'	Hardware	no		
'IDB-16'	TXSpeed	no		
'IDB-17'	RXSpeed	no		
'IDB-18'	TimezoneName	no		
'LinkType'	LinkType	no	0 = BSD Loopback 1 = IEEE 802.3 Ethernet 2 = Experimental 4Mb Ethernet 3 = AX.25 4 = PRONET 5 = MIT CHAOSNET 6 = IEEE 802.5 7 = ARCNET BSD 8 = SLIP 9 = PPP 10 = fddi 50 = PPP HDLC 51 = PPP Ethernet 99 = Symantec Firewall 100 = ATM RFC 1483 101 = Raw 102 = SLIP BSD/OS 103 = PPP BSD/OS 104 = Cisco PPP with HDLC 105 = IEEE 802.11 106 = ATM Classical IP 107 = Frame Relay 108 = OpenBSD Loopback 109 = OpenBSD IPSEC 110 = ATM LANE 802.3 111 = NetBSD HIPPI 112 = NetBSD HDLC 113 = Linux SLL 114 = Apple LocalTalk 115 = Acorn Econet 116 = OpenBSD ipfilter 117 = OpenBSD pflog 118 = Cisco IOS 119 = IEEE 802.11 Prism 120 = IEEE 802.11 Aironet 121 = Siemens HiPath HDLC	197 = ERF 198 = RAIF1 199 = IPMB Kontron 200 = Juniper ST 201 = Bluetooth HCI H4 with PHDR 202 = AX.25 KISS 203 = LAPD 204 = PPP with DIR 205 = Cisco HDLC with DIR 206 = Frame Relay with DIR 207 = LAPB with DIR 209 = IPMB Linux 210 = FlexRay 211 = MOST 212 = LIN 213 = X2E Serial 214 = X2E Xoraya 215 = IEEE 802.15.4 Nonask PHY 216 = Linux evdev 217 = GSMTap Um 218 = GSMTap Abis 219 = MPLS 220 = USB Linux MMapped 221 = DECT 222 = AOS 223 = Wireless HART 224 = FC-2 225 = FC-2 with Frame Delims 226 = IPNET 227 = CAN Socketcan 228 = IPv4 229 = IPv6 230 = IEEE 802.15.4 No FCS 231 = D-Bus

122 = IP-over-Fibre	232 = Juniper VS
123 = SunATM	233 = Juniper SRX E2E
124 = RapidIO	234 = Juniper Fibre Channel
125 = PCI Express	235 = DVB-CI
126 = Xilinx Aurora	236 = Mux 27.010
127 = IEEE 802.11 Radiotap	237 = STANAG 5066 D_PDU
128 = Tazmen Sniffer	238 = Juniper ATM Cemic
129 = ARCNET Linux	239 = NFLOG
130 = Juniper MLPPP	240 = Netanalyzer
131 = Juniper MLFR	241 = Netanalyzer
132 = Juniper ES	Transparent
133 = Juniper GGSN	242 = IP-over-InfiniBand
134 = Juniper MFR	243 = MPEG-2 TS
135 = Juniper ATM2	244 = NG40
136 = Juniper Services	245 = NFC LLCP
137 = Juniper ATM1	246 = Pfsync
138 = Apple IP-over-IEEE	247 = InfiniBand
1394	248 = SCTP
139 = MTP2 with PHDR	249 = USBPcap
140 = MTP2	250 = RTAC Serial
141 = MTP3	251 = Bluetooth LE LL
142 = SCCP	252 = Wireshark Upper PDU
143 = DOCSIS	253 = Netlink
144 = Linux IrDA	254 = Bluetooth Linux
145 = IBM SP	Monitor
146 = IBM SN	255 = Bluetooth BREDR BB
163 = IEEE 802.11 AVS	256 = Bluetooth LE LL with
164 = Juniper Monitor	PHDR
165 = BACnet MS/TP	257 = PROFIBUS Data Link
166 = PPP PPPD	258 = Apple PKTAP
167 = Juniper PPPOE	259 = EPON
168 = Juniper PPPOE ATM	260 = IPMI HPM.2
169 = GPRS LLC	261 = Z-Wave R1/R2
170 = GPF-T	262 = Z-Wave R3
171 = GPF-F	263 = WattStopper DLM
172 = Gcom T1/E1	264 = ISO 14443
173 = Gcom Serial	265 = RDS
174 = Juniper PIC Peer	266 = USB Darwin
175 = ERF ETH	267 = Openflow
176 = ERF POS	268 = SDLC
177 = Linux LAPD	269 = TI LLN Sniffer
178 = Juniper Ether	270 = LoRaTap
179 = Juniper PPP	271 = Vsock
180 = Juniper Frame Relay	272 = Nordic BLE
181 = Juniper CHDLC	273 = DOCSIS 31 XRA31
182 = Juniper VP	274 = Ethernet MPacket
185 = A653 ICM	275 = DisplayPort AUX
186 = USB FreeBSD	276 = Linux SLL2
187 = Bluetooth HCI H4	277 = Sercos Monitor
188 = IEEE 802.16 MAC CPS	278 = Openvizsla
189 = USB Linux	279 = Elektrobit EBHSR
190 = CAN 2.0B	280 = VPP Dispatch
191 = IEEE 802.15.4 Linux	281 = DSA Tag BRCM
192 = PPI	282 = DSA Tag BRCM
193 = IEEE 802.16 MAC CPS	Prepend
Radio	283 = IEEE 802.15.4 Tap
194 = Juniper ISM	284 = DSA Tag DSA
195 = IEEE 802.15.4 with	285 = DSA Tag EDSA
FCS	286 = ELEE
196 = SITA	287 = Z-Wave Serial
	288 = USB 2.0
	289 = ATSC ALP

'PCAPVersion'	PCAPVersion	no
'SHB-2'	Hardware	no
'SHB-3'	OperatingSystem	no
'SHB-4'	UserApplication	no
'TimeStamp'	TimeStamp	no

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*Last revised Mar 11, 2025*

[<-- ExifTool Tag Names](#)

# PCX Tags

Tags extracted from PC Paintbrush images.

Index1	Tag Name	Writable	Values / Notes
0	Manufacturer	no	10 = ZSoft
1	Software	no	0 = PC Paintbrush 2.5 2 = PC Paintbrush 2.8 (with palette) 3 = PC Paintbrush 2.8 (without palette) 4 = PC Paintbrush for Windows 5 = PC Paintbrush 3.0+
2	Encoding	no	1 = RLE
3	BitsPerPixel	no	
4	LeftMargin	no	
6	TopMargin	no	
8	ImageWidth	no	(adjusted for LeftMargin)
10	ImageHeight	no	(adjusted for TopMargin)
12	XResolution	no	
14	YResolution	no	
65	ColorPlanes	no	
66	BytesPerLine	no	
68	ColorMode	no	0 = n/a 1 = Color Palette 2 = Grayscale
70	ScreenWidth	no	
72	ScreenHeight	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Jan 2, 2019

[-- ExifTool Tag Names](#)

# PDF Tags

The tags listed in the PDF tables below are those which are used by ExifTool to extract meta information, but they are only a small fraction of the total number of available PDF tags. See [http://www.adobe.com/devnet/pdf/pdf\\_reference.html](http://www.adobe.com/devnet/pdf/pdf_reference.html) for the official PDF specification.

ExifTool supports reading and writing PDF documents up to version 2.0, including support for RC4, AES-128 and AES-256 encryption. A [Password](#) option is provided to allow processing of password-protected PDF files.

ExifTool may be used to write native PDF and XMP metadata to PDF files. It uses an incremental update technique that has the advantages of being both fast and reversible. If ExifTool was used to modify a PDF file, the original may be recovered by deleting the [PDF-update](#) pseudo-group (with `-PDF-update:all=` on the command line). However, there are two main disadvantages to this technique:

- 1) A linearized PDF file is no longer linearized after the update, so it must be subsequently re-linearized if this is required.
- 2) All metadata edits are reversible. While this would normally be considered an advantage, it is a potential security problem because old information is never actually deleted from the file. (However, after running ExifTool the old information may be removed permanently using the "qpdf" utility with this command: "qpdf --linearize in.pdf out.pdf".)

Tag ID	Tag Name	Writable	Values / Notes
'Encrypt'	Encrypt	-	--> <a href="#">PDF Encrypt Tags</a>
'Info'	Info	-	--> <a href="#">PDF Info Tags</a>
'Root'	Root	-	--> <a href="#">PDF Root Tags</a>
'_linearized'	Linearized	no	(flag set if document is linearized for fast web display; not a real Tag ID) 'false' = No 'true' = Yes

## PDF Encrypt Tags

Tags extracted from the document Encrypt dictionary.

Tag ID	Tag Name	Writable	Values / Notes
'Filter'	Encryption	no	(extracted value is actually a combination of the Filter, SubFilter, V, R and Length information from the Encrypt dictionary)
'P'	UserAccess	no	Bit 2 = Print      Bit 8 = Fill forms Bit 3 = Modify    Bit 9 = Extract Bit 4 = Copy       Bit 10 = Assemble Bit 5 = Annotate   Bit 11 = Print high-res

## PDF Info Tags

As well as the tags listed below, the PDF specification allows for user-defined tags to exist in the Info dictionary. These tags, which should have corresponding XMP-pdflx entries in the XMP of the PDF XML Metadata object, are also extracted by ExifTool.

**Writable** specifies the value format, and may be `string`, `date`, `integer`, `real`, `boolean` or `name` for PDF tags.

Tag ID	Tag Name	Writable	Values / Notes
'AAPL:Keywords'	AppleKeywords	string+	(keywords written by Apple utilities, although they seem to use PDF:Keywords when reading)
'Author'	Author	string	
'CreationDate'	CreateDate	date	
'Creator'	Creator	string	
'Keywords'	Keywords	string+	(stored as a string but treated as a comma- or semicolon-separated list of items when reading if the string contains commas or semicolons, whichever is more numerous, otherwise it is treated a space-separated list of items. The list behaviour may be defeated by setting the API NoPDFList option. Written as a comma-separated string. Note that the corresponding XMP-pdf:Keywords tag is not treated as a list, so the NoPDFList option should be used when copying between these two.)
'ModDate'	ModifyDate	date	
'Producer'	Producer	string	
'SourceModified'	SourceModified	date	

'Subject'	Subject	string
'Title'	Title	string
'Trapped'	Trapped	string!

## PDF Root Tags

This is the PDF document catalog.

Tag ID	Tag Name	Writable	Values / Notes
'AF'	AF	-	--> <a href="#">PDF AF Tags</a>
'AcroForm'	AcroForm	-	--> <a href="#">PDF AcroForm Tags</a>
'Lang'	Language	no	
'MarkInfo'	MarkInfo	-	--> <a href="#">PDF MarkInfo Tags</a>
'Metadata'	Metadata	-	--> <a href="#">PDF Metadata Tags</a>
'PageLayout'	PageLayout	no	
'PageMode'	PageMode	no	
'Pages'	Pages	-	--> <a href="#">PDF Pages Tags</a>
'Perms'	Perms	-	--> <a href="#">PDF Perms Tags</a>
'Version'	PDFVersion	no	

## PDF AF Tags

Processed only for C2PA information if AFRelationship is "/C2PA\_Manifest".

Tag ID	Tag Name	Writable	Values / Notes
'EF'	EF	-	--> <a href="#">PDF EF Tags</a>

## PDF EF Tags

Tag ID	Tag Name	Writable	Values / Notes
'F'	F_	-	--> <a href="#">PDF F Tags</a>

## PDF F Tags

C2PA JUMBF metadata extracted from "/C2PA\_Manifest" file.

Tag ID	Tag Name	Writable	Values / Notes
'_stream'	JUMBF	-	--> <a href="#">Jpeg2000 Tags</a>

## PDF AcroForm Tags

Tag ID	Tag Name	Writable	Values / Notes
'_has_xfa'	HasXFA	no	(this tag is defined if a document contains form fields, and is true if it uses XML Forms Architecture; not a real Tag ID) 'false' = No 'true' = Yes

## PDF MarkInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'Marked'	TaggedPDF	no	(not a Tagged PDF if this tag is missing) 'false' = No 'true' = Yes

## PDF Metadata Tags

Tag ID	Tag Name	Writable	Values / Notes

## PDF Pages Tags

Tag ID	Tag Name	Writable	Values / Notes
'Count'	PageCount	no	
'Kids'	Kids	-	--> <a href="#">PDF Kids Tags</a>
'MediaBox'	MediaBox	no+	

## PDF Kids Tags

Tag ID	Tag Name	Writable	Values / Notes
'Kids'	Kids	-	--> <a href="#">PDF Kids Tags</a>
'Metadata'	Metadata	-	--> <a href="#">PDF Metadata Tags</a>
'PieceInfo'	PieceInfo	-	--> <a href="#">PDF PieceInfo Tags</a>
'Resources'	Resources	-	--> <a href="#">PDF Resources Tags</a>

## PDF PieceInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'AdobePhotoshop'	AdobePhotoshop	-	--> <a href="#">PDF AdobePhotoshop Tags</a>
'Illustrator'	Illustrator	-	--> <a href="#">PDF Illustrator Tags</a>

## PDF AdobePhotoshop Tags

Tag ID	Tag Name	Writable	Values / Notes
'Private'	Private	-	--> <a href="#">PDF Private Tags</a>

## PDF Private Tags

Tag ID	Tag Name	Writable	Values / Notes
'ImageResources'	ImageResources	-	--> <a href="#">PDF ImageResources Tags</a>

## PDF ImageResources Tags

Tag ID	Tag Name	Writable	Values / Notes
'_stream'	PhotoshopStream	-	--> <a href="#">Photoshop Tags</a>

## PDF Illustrator Tags

Tag ID	Tag Name	Writable	Values / Notes
'Private'	Private	-	--> <a href="#">PDF AIPrivate Tags</a>

## PDF AIPrivate Tags

Tag ID	Tag Name	Writable	Values / Notes
'AIMetaData'	AIMetaData	-	--> <a href="#">PDF AI metaData Tags</a>
'AIPDFPrivateData'	AIPDFPrivateData	-	--> <a href="#">PostScript Tags</a>
'AIPrivateData'	AIPrivateData	-	--> <a href="#">PostScript Tags</a> (the <a href="#">ExtractEmbedded</a> option enables information to be extracted from embedded PostScript documents in the AIPrivateData# and AIPDFPrivateData# streams)
'ContainerVersion'	ContainerVersion	no	
'CreatorVersion'	CreatorVersion	no	
'RoundTripVersion'	RoundTripVersion	no	

# PDF AI\_MetaData Tags

Tag ID	Tag Name	Writable	Values / Notes
'_stream'	AIStream	-	--> <a href="#">PostScript Tags</a>

## PDF Resources Tags

Tag ID	Tag Name	Writable	Values / Notes
'ColorSpace'	ColorSpace	-	--> <a href="#">PDF ColorSpace Tags</a>
'Properties'	Properties	-	--> <a href="#">PDF Properties Tags</a>
'XObject'	XObject	-	--> <a href="#">PDF XObject Tags</a>

## PDF ColorSpace Tags

Tag ID	Tag Name	Writable	Values / Notes
'CS0'	CS0	-	--> <a href="#">PDF DefaultRGB Tags</a>
'Cs1'	Cs1	-	--> <a href="#">PDF DefaultRGB Tags</a>
'DefaultCMYK'	DefaultCMYK	-	--> <a href="#">PDF DefaultRGB Tags</a>
'DefaultRGB'	DefaultRGB	-	--> <a href="#">PDF DefaultRGB Tags</a>

## PDF DefaultRGB Tags

Tag ID	Tag Name	Writable	Values / Notes
'ICCBased'	ICCBased	-	--> <a href="#">PDF ICCBased Tags</a>

## PDF ICCBased Tags

Tag ID	Tag Name	Writable	Values / Notes
'_stream'	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>

## PDF Properties Tags

Tag ID	Tag Name	Writable	Values / Notes
'MC'	MC	-	--> <a href="#">PDF MC Tags</a> (the <a href="#">ExtractEmbedded</a> option enables information to be extracted from these embedded metadata dictionaries)

## PDF MC Tags

Tag ID	Tag Name	Writable	Values / Notes
'Metadata'	Metadata	-	--> <a href="#">PDF Metadata Tags</a>

## PDF XObject Tags

Tag ID	Tag Name	Writable	Values / Notes
'Im'	Im	-	--> <a href="#">PDF Im Tags</a> (the <a href="#">ExtractEmbedded</a> option enables information to be extracted from these embedded images)

## PDF Im Tags

Information extracted from embedded images with the [ExtractEmbedded](#) option. The EmbeddedImage and its metadata are extracted only for JPEG and Jpeg2000 image formats.

Tag ID	Tag Name	Writable	Values / Notes
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'ColorSpace'	EmbeddedImageColorSpace	no+	
'Filter'	EmbeddedImageFilter	no+	
'Height'	EmbeddedImageHeight	no	
'Image_stream'	EmbeddedImage	no	
'Width'	EmbeddedImageWidth	no	

## PDF Perms Tags

Additional document permissions imposed by digital signatures.

Tag ID	Tag Name	Writable	Values / Notes
'DocMDP'	DocMDP	-	--> <a href="#">PDF Signature Tags</a>
'FieldMDP'	FieldMDP	-	--> <a href="#">PDF Signature Tags</a>
'UR3'	UR3	-	--> <a href="#">PDF Signature Tags</a>

## PDF Signature Tags

Tag ID	Tag Name	Writable	Values / Notes
'ContactInfo'	SignerContactInfo	no	
'Location'	SigningLocation	no	
'M'	SigningDate	no	
'Name'	SigningAuthority	no	
'Prop_AuthTime'	AuthenticationTime	no	
'Prop_AuthType'	AuthenticationType	no	
'Reason'	SigningReason	no	
'Reference'	Reference	-	--> <a href="#">PDF Reference Tags</a>

## PDF Reference Tags

Tag ID	Tag Name	Writable	Values / Notes
'TransformParams'	TransformParams	-	--> <a href="#">PDF TransformParams Tags</a>

## PDF TransformParams Tags

Tag ID	Tag Name	Writable	Values / Notes
'Action'	FieldPermissions	no	(FieldMDP signatures only) 'All' = Disallow changes to all form fields 'Exclude' = Allow changes to specified form fields 'Include' = Disallow changes to specified form fields
'Annots'	AnnotationUsageRights	no+	(possible values are Create, Delete, Modify, Copy, Import and Export; additional values for UR3 signatures are Online and SummaryView)
'Document'	DocumentUsageRights	no+	(only possible value is FullSave)
'EF'	EmbeddedFileUsageRights	no+	(possible values are Create, Delete, Modify and Import)
'Fields'	FormFields	no+	(FieldMDP signatures only)
'Form'	FormUsageRights	no+	(possible values are FillIn, Import, Export, SubmitStandalone and SpawnTemplate; additional values for UR3 signatures are BarcodePlaintext and Online)
'FormEX'	FormExtraUsageRights	no+	(UR signatures only; only possible value is BarcodePlaintext)
'Msg'	UsageRightsMessage	no	
'P'	ModificationPermissions	no	(1-3 for DocMDP signatures, default 2; true/false for UR3 signatures, default false) 1 = No changes permitted 2 = Fill forms, Create page templates, Sign 3 = Fill forms, Create page templates, Sign, Create/Delete/Edit annotations 'false' = Do not restrict applications to reader permissions 'true' = Restrict all applications to reader permissions
'Signature'	SignatureUsageRights	no+	(only possible value is Modify)

[<-- ExifTool Tag Names](#)

# PGF Tags

The following table lists information extracted from the header of Progressive Graphics File (PGF) images. As well, information is extracted from the embedded PNG metadata image if it exists. See <http://www.libpgf.org/> for the PGF specification.

Index1	Tag Name	Writable	Values / Notes
3	PGFVersion	no	
8	ImageWidth	no	
12	ImageHeight	no	
16	PyramidLevels	no	
17	Quality	no	
18	BitsPerPixel	no	
19	ColorComponents	no	
20	ColorMode	no	0 = Bitmap      4 = CMYK 1 = Grayscale    7 = Multichannel 2 = Indexed     8 = Duotone 3 = RGB          9 = Lab
21	BackgroundColor	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Jan 26, 2011*

[-- ExifTool Tag Names](#)

# PICT Tags

The PICT format contains no true meta information, except for the possible exception of the LongComment opcode. By default, only ImageWidth, ImageHeight and X/YResolution are extracted from a PICT image. Tags in the following table represent image opcodes. Extraction of these tags is experimental, and is only enabled with the Verbose or Unknown options.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Nop	no	
0x0001	ClipRgn	no	
0x0002	BkPat	no	
0x0003	TxFont	no	
0x0004	TxFace	no	
0x0005	TxMode	no	
0x0006	SpExtra	no	
0x0007	PnSize	no	
0x0008	PnMode	no	
0x0009	PnPat	no	
0x000a	FillPat	no	
0x000b	OvSize	no	
0x000c	Origin	no	
0x000d	TxSize	no	
0x000e	FgColor	no	
0x000f	BkColor	no	
0x0010	TxRatio	no	
0x0011	VersionOp	no	
0x0012	BkPixPat	no	
0x0013	PnPixPat	no	
0x0014	FillPixPat	no	
0x0015	PnLocHFrac	no	
0x0016	ChExtra	no	
0x0017	Reserved	no	
0x001a	RGBFgCol	no	
0x001b	RGBBkCol	no	
0x001c	HiliteMode	no	
0x001d	HiliteColor	no	
0x001e	DefHilite	no	
0x001f	OpColor	no	
0x0020	Line	no	
0x0021	LineFrom	no	
0x0022	ShortLine	no	
0x0023	ShortLineFrom	no	
0x0024	Reserved	no	
0x0028	LongText	no	
0x0029	DHText	no	
0x002a	DVText	no	
0x002b	DHDVText	no	
0x002c	FontName	no	
0x002d	LineJustify	no	
0x002e	GlyphState	no	
0x002f	Reserved	no	
0x0030	FrameRect	no	
0x0031	PaintRect	no	
0x0032	EraseRect	no	

0x0033	InvertRect	no
0x0034	FillRect	no
0x0035	Reserved	no
0x0038	FrameSameRect	no
0x0039	PaintSameRect	no
0x003a	EraseSameRect	no
0x003b	InvertSameRect	no
0x003c	FillSameRect	no
0x003d	Reserved	no
0x0040	FrameRRect	no
0x0041	PaintRRect	no
0x0042	EraseRRect	no
0x0043	InvertRRect	no
0x0044	FillRRect	no
0x0045	Reserved	no
0x0048	FrameSameRRect	no
0x0049	PaintSameRRect	no
0x004a	EraseSameRRect	no
0x004b	InvertSameRRect	no
0x004c	FillSameRRect	no
0x004d	Reserved	no
0x0050	FrameOval	no
0x0051	PaintOval	no
0x0052	EraseOval	no
0x0053	InvertOval	no
0x0054	FillOval	no
0x0055	Reserved	no
0x0058	FrameSameOval	no
0x0059	PaintSameOval	no
0x005a	EraseSameOval	no
0x005b	InvertSameOval	no
0x005c	FillSameOval	no
0x005d	Reserved	no
0x0060	FrameArc	no
0x0061	PaintArc	no
0x0062	EraseArc	no
0x0063	InvertArc	no
0x0064	FillArc	no
0x0065	Reserved	no
0x0068	FrameSameArc	no
0x0069	PaintSameArc	no
0x006a	EraseSameArc	no
0x006b	InvertSameArc	no
0x006c	FillSameArc	no
0x006d	Reserved	no
0x0070	FramePoly	no
0x0071	PaintPoly	no
0x0072	ErasePoly	no
0x0073	InvertPoly	no
0x0074	FillPoly	no
0x0075	Reserved	no
0x0078	FrameSamePoly	no
0x0079	PaintSamePoly	no

0x007a	EraseSamePoly	no	
0x007b	InvertSamePoly	no	
0x007c	FillSamePoly	no	
0x007d	Reserved	no	
0x0080	FrameRgn	no	
0x0081	PaintRgn	no	
0x0082	EraseRgn	no	
0x0083	InvertRgn	no	
0x0084	FillRgn	no	
0x0085	Reserved	no	
0x0088	FrameSameRgn	no	
0x0089	PaintSameRgn	no	
0x008a	EraseSameRgn	no	
0x008b	InvertSameRgn	no	
0x008c	FillSameRgn	no	
0x008d	Reserved	no	
0x0090	BitsRect	no	
0x0091	BitsRgn	no	
0x0092	Reserved	no	
0x0098	PackBitsRect	no	
0x0099	PackBitsRgn	no	
0x009a	DirectBitsRect	no	
0x009b	DirectBitsRgn	no	
0x009c	Reserved	no	
0x009d	Reserved	no	
0x009e	Reserved	no	
0x009f	Reserved	no	
0x00a0	ShortComment	no	
0x00a1	LongComment	-	--> <a href="#">Photoshop Tags</a> --> <a href="#">ICC_Profile Tags</a>
0x00a2	Reserved	no	
0x00b0	Reserved	no	
0x00d0	Reserved	no	
0x00ff	OpEndPic	no	
0x0100	Reserved	no	
0x0200	Reserved	no	
0x02ff	Version	no	
0x0300	Reserved	no	
0x0bff	Reserved	no	
0x0c00	HeaderOp	no	
0x0c01	Reserved	no	
0x7f00	Reserved	no	
0x8000	Reserved	no	
0x8100	Reserved	no	
0x8200	CompressedQuickTime	no	
0x8201	UncompressedQuickTime	no	
0xffff	Reserved	no	

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*Last revised Oct 13, 2006*

[-- ExifTool Tag Names](#)

# PLIST Tags

Apple Property List tags. ExifTool reads both XML and binary-format PLIST files, and will extract any existing tags even if they aren't listed below. These tags belong to the family 0 "PLIST" group, but family 1 group may be either "XML" or "PLIST" depending on whether the format is XML or binary.

Tag ID	Tag Name	Writable	Values / Notes
'MetaDataList//DateTimeOriginal'	DateTimeOriginal	no	
'MetaDataList//Duration'	Duration	no	
'MetaDataList//Geolocation/Latitude'	GPSLatitude	no	
'MetaDataList//Geolocation/Longitude'	GPSLongitude	no	
'MetaDataList//Geolocation/MapDatum'	GPSMapDatum	no	
'XMLFileType'	XMLFileType	no	
'adjustmentData'	AdjustmentData	-	--> <a href="#">PLIST Tags</a>
'cast//name'	Cast	no+	
'codirectors//name'	Codirectors	no+	
'directors//name'	Directors	no+	
'producers//name'	Producers	no+	
'screenwriters//name'	Screenwriters	no+	
'slowMotion/rate'	SlowMotionRate	no	
'slowMotion/regions'	SlowMotionRegions	no	
'slowMotion/regions/timeRange/duration/epoch'	SlowMotionRegionsDurationEpoch	no	
'slowMotion/regions/timeRange/duration flags'	SlowMotionRegionsDurationFlags	no	Bit 0 = Valid Bit 1 = Has been rounded Bit 2 = Positive infinity Bit 3 = Negative infinity Bit 4 = Indefinite
'slowMotion/regions/timeRange/duration/timescale'	SlowMotionRegionsDurationTimeScale	no	
'slowMotion/regions/timeRange/duration/value'	SlowMotionRegionsDurationValue	no	
'slowMotion/regions/timeRange/start/epoch'	SlowMotionRegionsStartTimeEpoch	no	
'slowMotion/regions/timeRange/start flags'	SlowMotionRegionsStartTimeFlags	no	Bit 0 = Valid Bit 1 = Has been rounded Bit 2 = Positive infinity Bit 3 = Negative infinity Bit 4 = Indefinite
'slowMotion/regions/timeRange/start/timescale'	SlowMotionRegionsStartTimeScale	no	
'slowMotion/regions/timeRange/start/value'	SlowMotionRegionsStartTimeValue	no	
'studio//name'	Studio	no+	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Feb 10, 2025

[--> ExifTool Tag Names](#)

# PLUS XMP Tags

PLUS (Picture Licensing Universal System) License Data Format 2.0.1 XMP tags. Note that all controlled-vocabulary tags in this table (ie. tags with a fixed set of values) have raw values which begin with "http://ns.useplus.org/ldf/vocab/", but to reduce clutter this prefix has been removed from the values shown below, and from the values read and written with the -n option. See <http://ns.useplus.org/> for the complete specification.

These tags belong to the ExifTool XMP-plus family 1 group.

Tag Name	Writable	Values / Notes
AdultContentWarning	string	'CW-AWR' = Adult Content Warning Required 'CW-NRQ' = Not Required 'CW-UNK' = Unknown
CopyrightOwner	struct+	--> <a href="#">CopyrightOwner Struct</a>
CopyrightOwnerID	string_+	(CopyrightOwnerCopyrightOwnerID)
CopyrightOwnerName	string_+	(CopyrightOwnerCopyrightOwnerName)
CopyrightOwnerImageID	string	
CopyrightRegistrationNumber	string	
CopyrightStatus	string	'CS-PRO' = Protected 'CS-PUB' = Public Domain 'CS-UNK' = Unknown
CreditLineRequired	string	'CR-CAI' = Credit Adjacent To Image 'CR-CCA' = Credit in Credits Area 'CR-COI' = Credit on Image 'CR-NRQ' = Not Required
Custom1	lang-alt+	
Custom10	lang-alt+	
Custom2	lang-alt+	
Custom3	lang-alt+	
Custom4	lang-alt+	
Custom5	lang-alt+	
Custom6	lang-alt+	
Custom7	lang-alt+	
Custom8	lang-alt+	
Custom9	lang-alt+	
DataMining	string	'DMI-ALLOWED' = Allowed 'DMI-PROHIBITED' = Prohibited 'DMI-PROHIBITED-AIMLTRAINING' = Prohibited for AI/ML training 'DMI-PROHIBITED-EXCEPTSEARCHENGINEINDEXING' = Prohibited except for search engine indexing 'DMI-PROHIBITED-GENAIMLTRAINING' = Prohibited for Generative AI/ML training 'DMI-PROHIBITED-SEECONSTRAINT' = Prohibited, see plus:OtherConstraints 'DMI-PROHIBITED-SEEEMBEDDEDRIGHTSEXPR' = Prohibited, see iptcExt:EmbdEncRightsExpr 'DMI-PROHIBITED-SEELINKEDRIGHTSEXPR' = Prohibited, see iptcExt:LinkedEncRightsExpr 'DMI-UNSPECIFIED' = Unspecified - no prohibition defined
EndUser	struct+	--> <a href="#">EndUser Struct</a>
EndUserID	string_+	(EndUserEndUserID)
EndUserName	string_+	(EndUserEndUserName)
FileNameAsDelivered	string	
FirstPublicationDate	date	
ImageAlterationConstraints	string+	'AL-CLR' = No Colorization 'AL-CRP' = No Cropping 'AL-DCL' = No De-Colorization 'AL-FLP' = No Flipping 'AL-MRG' = No Merging 'AL-RET' = No Retouching
ImageCreator	struct+	--> <a href="#">ImageCreator Struct</a>
ImageCreatorID	string_+	(ImageCreatorImageCreatorID)
ImageCreatorName	string_+	(ImageCreatorImageCreatorName)
ImageCreatorImageID	string	

ImageDuplicationConstraints	string	'DP-LIC' = Duplication Only as Necessary Under License 'DP-NDC' = No Duplication Constraints 'DP-NOD' = No Duplication
ImageFileConstraints	string+	'IF-MFN' = Maintain File Name 'IF-MFT' = Maintain File Type 'IF-MID' = Maintain ID in File Name 'IF-MMD' = Maintain Metadata
ImageFileFormatAsDelivered	string	'FF-BMP' = Windows Bitmap (BMP) 'FF-DNG' = Digital Negative (DNG) 'FF-EPS' = Encapsulated PostScript (EPS) 'FF-GIF' = Graphics Interchange Format (GIF) 'FF-JPG' = JPEG Interchange Formats (JPG, JIF, JFIF) 'FF-OTR' = Other 'FF-PIC' = Macintosh Picture (PICT) 'FF-PNG' = Portable Network Graphics (PNG) 'FF-PSD' = Photoshop Document (PSD) 'FF-RAW' = Proprietary RAW Image Format 'FF-TIF' = Tagged Image File Format (TIFF) 'FF-WMP' = Windows Media Photo (HD Photo)
ImageFileSizeAsDelivered	string	'SZ-G50' = Greater than 50 MB 'SZ-U01' = Up to 1 MB 'SZ-U10' = Up to 10 MB 'SZ-U30' = Up to 30 MB 'SZ-U50' = Up to 50 MB
ImageSupplier	struct+	--> <a href="#">ImageSupplier Struct</a>
ImageSupplierImageID	string	
ImageSupplierID	string_+	(ImageSupplierImageSupplierID)
ImageSupplierName	string_+	(ImageSupplierImageSupplierName)
ImageType	string	'TY-ILL' = Illustrated Image 'TY-MCI' = Multimedia or Composited Image 'TY-OTR' = Other 'TY-PHO' = Photographic Image 'TY-VID' = Video
Licensee	struct+	--> <a href="#">Licensee Struct</a>
LicenseeImageID	string	
LicenseeImageNotes	lang-alt	
LicenseeID	string_+	(LicenseeLicenseeID)
LicenseeName	string_+	(LicenseeLicenseeName)
LicenseEndDate	date	
LicenseeProjectReference	string+	
LicenseeTransactionID	string+	
LicenseID	string	
LicenseStartDate	date	
LicenseTransactionDate	date	
Licensor	struct+	--> <a href="#">Licensor Struct</a>
LicensorImageID	string	
LicensorCity	string_+	(LicensorLicensorCity)
LicensorCountry	string_+	(LicensorLicensorCountry)
LicensorEmail	string_+	(LicensorLicensorEmail)
LicensorExtendedAddress	string_+	(LicensorLicensorExtendedAddress)
LicensorID	string_+	(LicensorLicensorID)
LicensorName	string_+	(LicensorLicensorName)
LicensorPostalCode	string_+	(LicensorLicensorPostalCode)
LicensorRegion	string_+	(LicensorLicensorRegion)
LicensorStreetAddress	string_+	(LicensorLicensorStreetAddress)
LicensorTelephone1	string_+	(LicensorLicensorTelephone1)
LicensorTelephone2	string_+	(LicensorLicensorTelephone2)
LicensorTelephoneType1	string_+	(LicensorLicensorTelephoneType1) 'cell' = Cell 'fax' = FAX 'home' = Home 'pager' = Pager 'work' = Work

LicensorTelephoneType2	string_+	(LicensorLicensorTelephoneType2) 'cell' = Cell 'fax' = FAX 'home' = Home 'pager' = Pager 'work' = Work
LicensorURL	string_+	(LicensorLicensorURL)
LicensorNotes	lang-alt	
LicensorTransactionID	string+	
MediaConstraints	lang-alt	
MediaSummaryCode	string	--> <a href="#">PLUS MediaMatrix Values</a>
MinorModelAgeDisclosure	string	'AG-A15' = Age 15 'AG-A16' = Age 16 'AG-A17' = Age 17 'AG-A18' = Age 18 'AG-A19' = Age 19 'AG-A20' = Age 20 'AG-A21' = Age 21 'AG-A22' = Age 22 'AG-A23' = Age 23 'AG-A24' = Age 24 'AG-A25' = Age 25 or Over 'AG-U14' = Age 14 or Under 'AG-UNK' = Age Unknown
ModelReleaseID	string+	
ModelReleaseStatus	string	'MR-LMR' = Limited or Incomplete Model Releases 'MR-NAP' = Not Applicable 'MR-NON' = None 'MR-UMR' = Unlimited Model Releases
OtherConditions	lang-alt	
OtherConstraints	lang-alt	
OtherImageInfo	lang-alt	
OtherLicenseDocuments	string+	
OtherLicenseInfo	lang-alt	
OtherLicenseRequirements	lang-alt	
ProductOrServiceConstraints	lang-alt	
PropertyReleaseID	string+	
PropertyReleaseStatus	string	'PR-LPR' = Limited or Incomplete Property Releases 'PR-NAP' = Not Applicable 'PR-NON' = None 'PR-UPR' = Unlimited Property Releases
RegionConstraints	lang-alt	
Reuse	string	'RE-NAP' = Not Applicable 'RE-REU' = Repeat Use
TermsAndConditionsText	lang-alt	
TermsAndConditionsURL	string	
PLUSVersion	string	(tag ID is 'Version')

## PLUS MediaMatrix Values

The lookup below is used to add human-readable descriptions to Media Matrix ID's in PLUS Media Summary Codes.

Value	MediaMatrix
'1IAA'	= 1 Usage Item:
'1IAB'	= 2 Usage Items:
'1IAC'	= 3 Usage Items:
'1IAD'	= 4 Usage Items:
'1IAE'	= 5 Usage Items:
'1UNA'	= Usage Number A
'1UNB'	= Usage Number B
'1UNC'	= Usage Number C
'1UND'	= Usage Number D
'1UNE'	= Usage Number E
'2AAA'	= Advertising>All Media Types>All Formats>All Distribution Formats
'2AAB'	= All Categories Book>All Book Types>All Distribution Formats
'2AAC'	= All Categories Periodicals>All Periodical Types>All Distribution Formats

'2AAD' = All Categories|Display>All Display Types>All Distribution Formats  
'2AAE' = Editorial>All Media Types>All Formats>All Distribution Formats  
'2AAG' = All Categories|Product Packaging>All Product Packaging Types>All Distribution Formats  
'2AAH' = All Categories|Merchandise>All Merchandise Types>All Distribution Formats  
'2AAI' = Internal Company Use>All Media Types>All Formats>All Distribution Formats  
'2AAL' = All Categories|Mobile>All Mobile Types>All Distribution Formats  
'2AAM' = Motion Picture & TV>All Media Types>All Formats>All Distribution Formats  
'2AAN' = All Categories|Television Programming>All Television Programming Types>All Distribution Formats  
'2AAP' = Products>All Media Types>All Formats>All Distribution Formats  
'2AAR' = All Categories|Point of Purchase>All Point Of Purchase Types>All Distribution Formats  
'2AAT' = All Categories|Marketing Materials>All Marketing Material Types>All Distribution Formats  
'2AAU' = Personal Use>All Media Types>All Formats>All Distribution Formats  
'2AAV' = All Categories|Music Video>All Music Video Types>All Distribution Formats  
'2AAX' = All Categories|Motion Picture>All Motion Picture Types>All Distribution Formats  
'2AAY' = Advertising>All Media Types|Promotional Reproduction of Licensed Usage in Context>All Distribution Formats  
'2ACE' = Advertising|Periodicals|Magazine, Consumer|Internet Website  
'2ACT' = Motion Picture & TV|Motion Picture>All Motion Picture Types>All Electronic Distribution Formats  
'2ADD' = Products|Merchandise|Address Book|Printed  
'2ADH' = Advertising|Point of Purchase|Adhesive Tag|Printed  
'2ADS' = Advertising|Periodicals|Magazine, Consumer|Internet Email  
'2AFT' = Advertising|Periodicals|Magazine, Trade|Internet Email  
'2AGE' = Advertising|Periodicals|Magazine, Trade|Recordable Media  
'2AGO' = Advertising|Periodicals|Magazine, Corporate|Internet Email  
'2AHA' = Advertising|Periodicals|Magazine, Education|Internet Email  
'2AID' = Motion Picture & TV|Motion Picture|Movie Trailer>All Electronic Distribution Formats  
'2AIL' = Advertising|Periodicals|Magazine, Custom Published|Internet Email  
'2AIM' = Motion Picture & TV|Motion Picture|Short Film|Recordable Media  
'2ALB' = Products|Merchandise|Photo Album|Printed  
'2ALL' = All Categories>All Media Types>All Formats>All Distribution Formats  
'2ALP' = Advertising|Periodicals|Magazine, Custom Published|Recordable Media  
'2AMI' = Advertising|Periodicals|Magazine, Custom Published>All Electronic Distribution Formats  
'2AMP' = Advertising|Periodicals|Magazine Reprints, All Types|Internet Email  
'2ANA' = Advertising|Periodicals|Magazine, All Types|Internet Website  
'2ANN' = Advertising|Periodicals|Annual Report|Printed  
'2ANT' = Products|Merchandise|Anthology|Printed  
'2ANY' = Advertising|Periodicals|Magazine, All Types|Internet Downloadable File  
'2APE' = Advertising|Periodicals|Magazine, All Types|Internet Email  
'2APP' = Products|Merchandise|Apparel, General Apparel|Printed or Woven  
'2APT' = Advertising|Periodicals|Magazine, All Types>All Internet Distribution Formats  
'2ARC' = Motion Picture & TV|Motion Picture|Set Decor|Projected Display  
'2ARK' = Advertising|Periodicals|Magazine, All Types>All Electronic Distribution Formats  
'2ARM' = Advertising|Periodicals|Newspaper, Weekly Supplement|Internet Email  
'2ART' = Advertising|Art|Art Display, All Art Types|Printed  
'2ASH' = Advertising|Periodicals|Newspaper, Tabloid|Internet Downloadable File  
'2ASK' = Motion Picture & TV|Motion Picture|Short Film>All Internet Distribution Formats  
'2ATE' = Motion Picture & TV|Motion Picture|Movie Trailer|Projected Display  
'2ATM' = Products|Merchandise|Card, ATM Card|Printed  
'2ATT' = Products|Merchandise|Card, Phone Card|Printed  
'2BAA' = All Categories|Website>All Web Page Types>All Distribution Formats  
'2BAB' = Products|Art|Artist's Reference, Tattoo|Printed  
'2BAG' = Advertising|Periodicals>All Periodical Types|Printed  
'2BAH' = Advertising|Periodicals|Quarterly Report|Printed  
'2BAJ' = Products|Merchandise|Computer Software|Recordable Media  
'2BAK' = Products|Merchandise|Computer Software|Internet Downloadable File  
'2BAL' = Advertising|Periodicals|Quarterly Report|Internet Email  
'2BAM' = Advertising|Periodicals|Magazine, Advertorial|Internet Downloadable File  
'2BAN' = Advertising|Display|Banner, All Types|Electronic Display  
'2BAP' = Advertising|Periodicals|Magazine, Advertorial|Internet Website  
'2BAR' = Advertising|Point of Purchase>All Point of Purchase Types>All Electronic Distribution Formats  
'2BAS' = Advertising|Periodicals|Annual Report|Recordable Media  
'2BAT' = Advertising|Periodicals|Free Standing Insert, All Insert Types|Printed  
'2BAU' = Products|Merchandise|Computer Software|Internet Email  
'2BAV' = Products|Merchandise|Computer Software>All Internet Distribution Formats  
'2BAW' = Products|Merchandise|Diary|Recordable Media  
'2BAY' = Advertising|Periodicals|Newspaper, Tabloid|Internet Email  
'2BAZ' = Products|Merchandise|Diary|Internet Downloadable File  
'2BBA' = Products|Merchandise|Diary|Internet Email  
'2BCF' = Products|Merchandise|Retail Calendar, Multi-Page|Recordable Media  
'2BCG' = Products|Merchandise|Retail Calendar, Multi-Page>All Electronic Distribution Formats  
'2BCH' = Products|Merchandise|Retail Calendar, Multi-Page>All Internet Distribution Formats  
'2BCI' = Products|Merchandise|Retail Calendar, Multi-Page|Internet Email  
'2BCJ' = Products|Merchandise|Retail Calendar, Multi-Page|Internet Downloadable File  
'2BED' = Advertising|Periodicals|Newspaper, All Types|Internet Email  
'2BEE' = Editorial|Book|Textbook, Middle Reader|Printed  
'2BEG' = Advertising|Book|Retail Book, Directory|Printed

'2BEL' = Advertising|Art|Art Display, All Art Types|Internet Website  
'2BEN' = Advertising|Periodicals|Magazine, Advertorial|Printed  
'2BER' = Motion Picture & TV|Music Video|All Music Video Types|Recordable Media  
'2BES' = Motion Picture & TV|Music Video|All Music Video Types|All Internet Distribution Formats  
'2BET' = Motion Picture & TV|Motion Picture|Movie Trailer|All Internet Distribution Formats  
'2BEY' = Advertising|Art|Art Display, All Art Types|All Internet Distribution Formats  
'2BFH' = Personal Use|Art|Art Display, All Art Types|All Electronic Distribution Formats  
'2BFI' = Personal Use|Art|Art Display, All Art Types|All Internet Distribution Formats  
'2BFJ' = Personal Use|Art|Art Display, All Art Types|Internet Website  
'2BFK' = Personal Use|Art|Art Display, All Art Types|Electronic Display  
'2BFN' = Personal Use|Art|Art Display, Display Print|Printed  
'2BFP' = Personal Use|Art|Study Print, Educational|Printed  
'2BFR' = Personal Use|Website|Web Page, All Types|Internet Website  
'2BFS' = Personal Use|Website|Web Page, All Types|Recordable Media  
'2BFT' = Personal Use|Website|Web Page, All Types|All Electronic Distribution Formats  
'2BFU' = Personal Use|Website|Web Page, All Types|All Internet Distribution Formats  
'2BHB' = Internal Company Use|Art|Art Display, Display Print|Printed  
'2BHD' = Internal Company Use>Email|All Email Types|Intranet and Extranet Email  
'2BHF' = Internal Company Use|Live Presentation|Internal Presentation|Projected Display  
'2BHG' = Internal Company Use|Promotional Materials|Corporate Brochure|Recordable Media  
'2BHH' = Internal Company Use|Promotional Materials|Corporate Brochure|Intranet and Extranet Downloadable File  
'2BHI' = Internal Company Use|Promotional Materials|Corporate Brochure|Intranet and Extranet Email  
'2BHK' = Internal Company Use|Promotional Materials|Corporate Calendar|Recordable Media  
'2BHL' = Internal Company Use|Promotional Materials|Corporate Calendar|Intranet and Extranet Downloadable File  
'2BHM' = Internal Company Use|Promotional Materials|Corporate Calendar|Intranet and Extranet Email  
'2BHN' = Internal Company Use|Promotional Materials|Corporate Calendar|Printed  
'2BHQ' = Internal Company Use|Promotional Materials|Card, Corporate Card|Printed  
'2BHS' = Internal Company Use|Promotional Materials|Card, Corporate Card|Recordable Media  
'2BHT' = Internal Company Use|Promotional Materials|Card, Corporate Card|Intranet and Extranet Downloadable File  
'2BHU' = Internal Company Use|Promotional Materials|Card, Corporate Card|Intranet and Extranet Email  
'2BHV' = Internal Company Use|Promotional Materials|Sales Kit|All Electronic Distribution Formats  
'2BHW' = Internal Company Use|Promotional Materials|Training Materials|Printed  
'2BHY' = Internal Company Use|Promotional Materials|Corporate Folder|Printed  
'2BHZ' = Internal Company Use|Promotional Materials|CD ROM|Recordable Media  
'2BIA' = Internal Company Use|Periodicals|Magazine, Custom Published|Recordable Media  
'2BIB' = Advertising|Point of Purchase|All Point of Purchase Types|Electronic Display  
'2BIC' = Internal Company Use|Periodicals|Magazine, Custom Published|Intranet and Extranet Website  
'2BID' = Advertising|Periodicals|Newsletter, All Types|Internet Email  
'2BIF' = Internal Company Use|Periodicals|Magazine, Custom Published|Intranet and Extranet Downloadable File  
'2BIG' = Advertising|Display|All Display Types|Printed  
'2BIH' = Internal Company Use|Periodicals|Magazine, Custom Published|All Electronic Distribution Formats  
'2BII' = Internal Company Use|Periodicals|Magazine, Custom Published|All Intranet and Extranet Distribution Formats  
'2BIL' = Advertising|Display|Billboard, All Types|Printed  
'2BIN' = Advertising|Point of Purchase|All Point of Purchase Types|Printed  
'2BIO' = Products|Merchandise|Birthday Book|Printed  
'2BIS' = Advertising|Art|Art Display, All Art Types|All Electronic Distribution Formats  
'2BIT' = Products|Merchandise|Card, Debit Card|Printed  
'2BIZ' = Advertising|Marketing Materials|Card, Business Greeting Card|Printed  
'2BJH' = Internal Company Use|Website|Webcast, All Types|Intranet and Extranet Website  
'2BJK' = Internal Company Use|Website|Web Page, All Types|All Electronic Distribution Formats  
'2B JL' = Internal Company Use|Website|Web Page, All Types|Recordable Media  
'2B JN' = Internal Company Use|Website|Web Page, Content Body|Intranet and Extranet Website  
'2BLA' = Products|Merchandise|Blank Note Book|Printed  
'2BLD' = Advertising|Display|Billboard, Building Wrap|Printed  
'2BNK' = Products|Merchandise|Card, Bank Card|Printed  
'2BOA' = Editorial|Book|Textbook, Student Edition|Printed  
'2BOB' = Advertising|Periodicals|Magazine, Consumer|Printed  
'2BOD' = Advertising|Periodicals|All Periodical Types|Internet Downloadable File  
'2BOG' = Advertising|Display|All Display Types|Electronic Display  
'2BOO' = Editorial|Book|Retail Book, All Types|Printed  
'2BOP' = Advertising|Periodicals|Magazine, Advertorial|Internet Email  
'2BOS' = Advertising|Art|Art Display, All Art Types|Electronic Display  
'2BOT' = Advertising|Point of Purchase|Bottleneck|Printed  
'2BOW' = Advertising|Periodicals|All Periodical Types|Internet Email  
'2BOX' = Products|Merchandise|Gift Box|Printed  
'2BOY' = Advertising|Art|Art Display, Display Print|Printed  
'2BPE' = Advertising|Display|Transit Advertising, Bus Poster|Electronic Display  
'2BRA' = Advertising|Display|Banner, Airborne Display|Printed  
'2BRO' = Advertising|Display|Banner, All Types|Printed  
'2BRR' = Advertising|Display|Banner, Backdrop|Printed  
'2BUB' = Advertising|Display|Banner, Background|Printed  
'2BUD' = Advertising|Display|Billboard, All Types|Electronic Display  
'2BUG' = Editorial|Book|Retail Book, Children's Book|Printed  
'2BUN' = Advertising|Marketing Materials|Promo Card|Printed  
'2BUR' = Advertising|Display|Billboard, Bulletin|Electronic Display

'2BUS' = Advertising|Display|Transit Advertising, Bus Panel|Printed  
'2BUY' = Advertising|Point of Purchase|Floor Graphic|Printed  
'2BYE' = Advertising|Display|Billboard, Mobile Billboard|Electronic Display  
'2BYS' = Advertising|Display|Billboard, Mobile Billboard|Printed  
'2CAL' = Products|Merchandise|Retail Calendar, Multi-Page|Printed  
'2CAR' = Advertising|Display|Shopping Cart|Printed  
'2CAS' = Advertising|Point of Purchase|Case Card|Printed  
'2CDR' = Products|Merchandise|CD ROM|Recordable Media  
'2CHK' = Products|Merchandise|Check|Printed  
'2CLO' = Products|Merchandise|Retail Calendar, One Page|Printed  
'2COU' = Advertising|Point of Purchase|Counter Card|Printed  
'2CRD' = Products|Merchandise|Card, Other Card|Printed  
'2CRE' = Products|Merchandise|Card, Credit Card|Printed  
'2CRT' = Advertising|Display|Shopping Cart|Electronic Display  
'2CUS' = Advertising|Periodicals|Magazine, Custom Published|Printed  
'2DAB' = Advertising|Display|Billboard, Rotating Billboard|Printed  
'2DAD' = Advertising|Display|Billboard, Spectacular|Electronic Display  
'2DAG' = Advertising|Display|Billboard, Spectacular|Printed  
'2DAH' = Advertising|Display|Billboard, Wallscape|Electronic Display  
'2DAK' = Advertising|Display|Billboard, Wallscape|Printed  
'2DAL' = Advertising|Display|Event, Stadium Advertising|Electronic Display  
'2DAM' = Advertising|Display|Event, Stadium Advertising|Printed  
'2DAP' = Advertising|Display|Event, Trade Show Display|Electronic Display  
'2DAW' = Advertising|Display|Poster, All Types|Electronic Display  
'2DAY' = Products|Product Packaging>All Product Packaging Types|Printed  
'2DEB' = Advertising|Periodicals|Magazine, Education|Printed  
'2DEE' = Advertising|Periodicals|Wrapper|Printed  
'2DEL' = Advertising|Display|Poster, Backlit Print|Printed  
'2DEN' = Advertising|Display|Poster, Corporate Poster|Electronic Display  
'2DEV' = Advertising|Display|Poster, Corporate Poster|Printed  
'2DEW' = Editorial|Book|Trade Book, All Types|Printed  
'2DEX' = Advertising|Display|Poster, Display Chrome|Printed  
'2DEY' = Advertising|Display|Poster, Door Side Poster|Electronic Display  
'2DIA' = Products|Merchandise|Diary|Printed  
'2DIB' = Advertising|Display|Poster, Door Side Poster|Printed  
'2DID' = Advertising|Display|Poster, Elevator Advertising|Electronic Display  
'2DIG' = Motion Picture & TV|Motion Picture|Movie Trailer|Recordable Media  
'2DIM' = Personal Use|Personal Review>All Review Types>All Electronic Distribution Formats  
'2DIN' = Advertising|Display|Store Display, All Display Types|Electronic Display  
'2DIP' = Motion Picture & TV|Motion Picture>All Motion Picture Types>All Internet Distribution Formats  
'2DIR' = Editorial|Book|Retail Book, Directory|Printed  
'2DIS' = Advertising|Display|Event, Trade Show Display|Printed  
'2DIT' = Advertising|Display|Store Display, In-Store Poster|Electronic Display  
'2DOC' = Motion Picture & TV|Motion Picture|Documentary Film>All Electronic Distribution Formats  
'2DOE' = Advertising|Display|Terminal Advertising, All Types|Electronic Display  
'2DOG' = Editorial|Book|Reference Book, All Types|Printed  
'2DOL' = Advertising|Display|Terminal Advertising, Bus Stop Advertising|Electronic Display  
'2DOM' = Advertising|Display|Terminal Advertising, Bus Stop Advertising|Printed  
'2DON' = Advertising|Display|Terminal Advertising, Ferry Terminal Advertising|Electronic Display  
'2DOR' = Advertising|Display|Terminal Advertising, Ferry Terminal Advertising|Printed  
'2DOS' = Advertising|Display|Terminal Advertising, Shelter Advertising|Electronic Display  
'2DOT' = Advertising|Marketing Materials|Artist's Reference, All Types>All Electronic Distribution Formats  
'2DOW' = Advertising|Display|Terminal Advertising, Station Poster|Electronic Display  
'2DRY' = Advertising|Display|Poster, Restroom Poster|Printed  
'2DUB' = Advertising|Display|Terminal Advertising, Station Poster|Printed  
'2DUE' = Advertising|Display|Terminal Advertising, Subway Terminal Advertising|Electronic Display  
'2DUG' = Advertising|Display|Terminal Advertising, Subway Terminal Advertising|Printed  
'2DUH' = Advertising|Periodicals|Magazine, Advertorial>All Electronic Distribution Formats  
'2DUI' = Advertising|Display|Terminal Advertising, Train Terminal Advertising|Electronic Display  
'2DUN' = Advertising|Display|Terminal Advertising, Train Terminal Advertising|Printed  
'2DUO' = Advertising|Marketing Materials>All Marketing Material Types|Recordable Media  
'2DUP' = Advertising|Periodicals|Magazine Reprints, All Types|Printed  
'2DVA' = Advertising|Marketing Materials|DVD|Recordable Media  
'2DVD' = Products|Merchandise|DVD|Recordable Media  
'2DVE' = Editorial|Merchandise|DVD|Recordable Media  
'2DVI' = Internal Company Use|Promotional Materials|DVD|Recordable Media  
'2DVL' = Products|Product Packaging|Packaging For Recordable Media, Liner Notes|Printed  
'2DVP' = Products|Product Packaging|Packaging For Recordable Media, All Packaging Types|Printed  
'2DYE' = Advertising|Marketing Materials>All Marketing Material Types|Internet Email  
'2EAB' = Editorial|Book|Retail Book, Directory>All E-Book Distribution Formats  
'2EAC' = Advertising|Book|Retail Book, Directory|E-Book in Internet Website  
'2EAD' = Advertising|Book|Retail Book, Directory|E-Book in Internet Downloadable File  
'2EAE' = Advertising|Book|Retail Book, Directory>All E-Book Internet Distribution Formats  
'2EAF' = Advertising|Book|Retail Book, Directory|E-Book on Recordable Media  
'2EAG' = Advertising|Book|Retail Book, Directory>All E-Book Distribution Formats

'2EAH' = Advertising|Book|Textbook, All Types|E-Book in Internet Website  
'2EAJ' = Advertising|Book|Textbook, All Types|E-Book in Internet Downloadable File  
'2EAK' = Advertising|Book|Textbook, All Types|All E-Book Internet Distribution Formats  
'2EAL' = Advertising|Book|Textbook, All Types|E-Book on Recordable Media  
'2EAM' = Advertising|Book|Textbook, All Types|All E-Book Distribution Formats  
'2EAN' = Advertising|Book|All Book Types|All E-Book Internet Distribution Formats  
'2EAP' = Advertising|Book|All Book Types|All E-Book Distribution Formats  
'2EAQ' = Editorial|Book|Reference Book, Encyclopedia|E-Book in Internet Website  
'2EAR' = Advertising|Live Presentation|All Live Presentation Types|All Electronic Distribution Formats  
'2EAT' = Products|Merchandise|Edible Media|Printed  
'2EAU' = Editorial|Display|Poster, Educational Poster|Printed  
'2EBA' = Editorial|Book|Textbook Ancillary Materials, Lab Manual|E-Book in Internet Downloadable File  
'2EBB' = Editorial|Book|Textbook Ancillary Materials, Workbook|E-Book in Internet Downloadable File  
'2EBC' = Editorial|Book|Retail Book, All Types|E-Book in Internet Downloadable File  
'2EBD' = Editorial|Book|Textbook Ancillary Materials, Teacher's Manual|E-Book in Internet Downloadable File  
'2EBE' = Editorial|Book|Retail Book, Children's Book|E-Book in Internet Downloadable File  
'2EBF' = Editorial|Book|Retail Book, Concept Book|E-Book in Internet Downloadable File  
'2EBG' = Editorial|Book|Retail Book, Directory|E-Book in Internet Downloadable File  
'2EBH' = Editorial|Book|Retail Book, Handbook|E-Book in Internet Downloadable File  
'2EBI' = Editorial|Book|Retail Book, Hi-lo Book|E-Book in Internet Downloadable File  
'2EBJ' = Editorial|Book|Retail Book, Illustrated Book|E-Book in Internet Downloadable File  
'2EBK' = Editorial|Book|All Book Types|E-Book in Internet Downloadable File  
'2EBL' = Editorial|Book|Retail Book, Illustrated Guide|E-Book in Internet Downloadable File  
'2EBM' = Editorial|Book|Retail Book, Manual|E-Book in Internet Downloadable File  
'2EBN' = Editorial|Book|Retail Book, Novelty Book|E-Book in Internet Downloadable File  
'2EBP' = Editorial|Book|Retail Book, Postcard Book|E-Book in Internet Downloadable File  
'2EBQ' = Editorial|Book|Retail Book, Young Adult Book|E-Book in Internet Downloadable File  
'2EBR' = Editorial|Book|Textbook, All Types|E-Book in Internet Downloadable File  
'2EBS' = Editorial|Book|Textbook, Compendium|E-Book in Internet Downloadable File  
'2EBT' = Editorial|Book|Textbook, Middle Reader|E-Book in Internet Downloadable File  
'2EBV' = Editorial|Book|Textbook, Student Edition|E-Book in Internet Downloadable File  
'2EBW' = Editorial|Book|Textbook Ancillary Materials, Teachers' Edition|E-Book in Internet Downloadable File  
'2ECU' = Advertising|Marketing Materials|Artist's Reference, All Types|All Internet Distribution Formats  
'2EDH' = Advertising|Marketing Materials|Artist's Reference, All Types|Printed  
'2EDU' = Advertising|Marketing Materials|CD ROM|Recordable Media  
'2EEL' = Editorial|Book|Textbook, Compendium|Printed  
'2EFF' = Advertising|Marketing Materials|Brochure|Internet Downloadable File  
'2EFS' = Advertising|Marketing Materials|Brochure|Internet Email  
'2EFT' = Advertising|Marketing Materials|Brochure|Recordable Media  
'2EFX' = Motion Picture & TV|Motion Picture|Prop|All Electronic Distribution Formats  
'2EGA' = Editorial|Book|Textbook, All Types|E-Book in Internet Email  
'2EGB' = Editorial|Book|Retail Book, Children's Book|E-Book in Internet Email  
'2EGC' = Editorial|Book|Retail Book, Children's Book|All E-Book Distribution Formats  
'2EGD' = Editorial|Book|Retail Book, Concept Book|E-Book in Internet Email  
'2EGE' = Editorial|Book|Retail Book, Concept Book|All E-Book Distribution Formats  
'2EGG' = Advertising|Marketing Materials|Brochure|Printed  
'2EGH' = Editorial|Book|Retail Book, Handbook|E-Book in Internet Email  
'2EGJ' = Editorial|Book|Retail Book, Handbook|All E-Book Distribution Formats  
'2EGK' = Editorial|Book|Retail Book, Hi-lo Book|E-Book in Internet Email  
'2EGL' = Editorial|Book|Retail Book, Hi-lo Book|All E-Book Distribution Formats  
'2EGM' = Editorial|Book|Retail Book, Illustrated Book|E-Book in Internet Email  
'2EGN' = Editorial|Book|Retail Book, Illustrated Book|All E-Book Distribution Formats  
'2EGO' = Advertising|Marketing Materials|Coupon|Internet Downloadable File  
'2EGP' = Editorial|Book|Retail Book, Illustrated Guide|E-Book in Internet Email  
'2EGQ' = Editorial|Book|Retail Book, Illustrated Guide|All E-Book Distribution Formats  
'2EGR' = Editorial|Book|Retail Book, Illustrated Guide|All E-Book Distribution Formats  
'2EGS' = Editorial|Book|Retail Book, Manual|E-Book in Internet Email  
'2EGT' = Editorial|Book|Retail Book, Manual|All E-Book Distribution Formats  
'2EGV' = Editorial|Book|Retail Book, Novelty Book|E-Book in Internet Email  
'2EGW' = Editorial|Book|Retail Book, Novelty Book|All E-Book Distribution Formats  
'2EGY' = Editorial|Book|Retail Book, Postcard Book|E-Book in Internet Email  
'2EGZ' = Editorial|Book|Retail Book, Postcard Book|All E-Book Distribution Formats  
'2EJA' = Editorial|Book|All Book Types|All E-Book Distribution Formats  
'2EJB' = Editorial|Book|Retail Book, Young Adult Book|E-Book in Internet Email  
'2EJC' = Editorial|Book|Retail Book, Young Adult Book|All E-Book Distribution Formats  
'2EJD' = Editorial|Book|Retail Book, All Types|E-Book in Internet Email  
'2EJE' = Editorial|Book|Retail Book, All Types|All E-Book Distribution Formats  
'2EJF' = Editorial|Book|Textbook, Compendium|E-Book in Internet Email  
'2EJJ' = Editorial|Book|Textbook, Compendium|All E-Book Distribution Formats  
'2EJK' = Editorial|Book|Textbook, Middle Reader|E-Book in Internet Email  
'2EJL' = Editorial|Book|Textbook, Middle Reader|All E-Book Distribution Formats  
'2EJM' = Editorial|Book|Textbook, Student Edition|E-Book in Internet Email  
'2EJN' = Editorial|Book|Textbook, Student Edition|All E-Book Distribution Formats  
'2EJP' = Editorial|Book|Textbook, All Types|All E-Book Distribution Formats  
'2EJQ' = Editorial|Book|Textbook Ancillary Materials, Lab Manual|E-Book in Internet Email

'2EJR' = Editorial|Book|Textbook Ancillary Materials, Lab Manual|All E-Book Distribution Formats  
'2EJS' = Editorial|Book|Textbook Ancillary Materials, Teachers' Edition|E-Book in Internet Email  
'2EJT' = Editorial|Book|Textbook Ancillary Materials, Teachers' Edition|All E-Book Distribution Formats  
'2EJU' = Editorial|Book|All Book Types|E-Book in Internet Email  
'2EJV' = Editorial|Book|Textbook Ancillary Materials, Teacher's Manual|E-Book in Internet Email  
'2EJW' = Editorial|Book|Textbook Ancillary Materials, Teacher's Manual|All E-Book Distribution Formats  
'2EJY' = Editorial|Book|Textbook Ancillary Materials, Workbook|E-Book in Internet Email  
'2EJZ' = Editorial|Book|Textbook Ancillary Materials, Workbook|All E-Book Distribution Formats  
'2EKA' = Editorial|Book|All Book Types|All E-Book Internet Distribution Formats  
'2EKB' = Editorial|Book|Retail Book, Children's Book|All E-Book Internet Distribution Formats  
'2EKC' = Editorial|Book|Retail Book, Concept Book|All E-Book Internet Distribution Formats  
'2EKD' = Editorial|Book|Retail Book, Handbook|All E-Book Internet Distribution Formats  
'2EKE' = Editorial|Book|Retail Book, Hi-lo Book|All E-Book Internet Distribution Formats  
'2EKF' = Editorial|Book|Retail Book, Illustrated Book|All E-Book Internet Distribution Formats  
'2EKG' = Editorial|Book|Retail Book, Illustrated Guide|All E-Book Internet Distribution Formats  
'2EKH' = Editorial|Book|Retail Book, Manual|All E-Book Internet Distribution Formats  
'2EKJ' = Editorial|Book|Retail Book, Novelty Book|All E-Book Internet Distribution Formats  
'2EKK' = Editorial|Book|Retail Book, Postcard Book|All E-Book Internet Distribution Formats  
'2EKL' = Editorial|Book|Retail Book, Young Adult Book|All E-Book Internet Distribution Formats  
'2EKM' = Editorial|Book|Retail Book, All Types|All E-Book Internet Distribution Formats  
'2EKN' = Editorial|Book|Textbook, Compendium|All E-Book Internet Distribution Formats  
'2EKP' = Editorial|Book|Textbook, Middle Reader|All E-Book Internet Distribution Formats  
'2EKQ' = Editorial|Book|Textbook, Student Edition|All E-Book Internet Distribution Formats  
'2EKR' = Editorial|Book|Textbook, All Types|All E-Book Internet Distribution Formats  
'2EKS' = Editorial|Book|Textbook Ancillary Materials, Lab Manual|All E-Book Internet Distribution Formats  
'2EKT' = Editorial|Book|Textbook Ancillary Materials, Teachers' Edition|All E-Book Internet Distribution Formats  
'2EKU' = Editorial|Book|Textbook Ancillary Materials, Teacher's Manual|All E-Book Internet Distribution Formats  
'2EKV' = Editorial|Book|Textbook Ancillary Materials, Workbook|All E-Book Internet Distribution Formats  
'2EKW' = Editorial|Book|Artist's Reference, All Types|All E-Book Internet Distribution Formats  
'2ELE' = Advertising|Display|Poster, Elevator Advertising|Printed  
'2ELF' = Advertising|Marketing Materials|Catalog|Recordable Media  
'2ELK' = Editorial|Book|Textbook Ancillary Materials, All Ancillary Types|Printed  
'2ELL' = Advertising|Marketing Materials|Catalog|Internet Downloadable File  
'2ELM' = Advertising|Book|Textbook, All Types|Printed  
'2ELS' = Advertising|Marketing Materials|Catalog|Internet Email  
'2EMA' = Advertising>Email|All Email Types|Internet Email  
'2EMB' = Editorial|Book|Reference Book, Encyclopedia|E-Book in Internet Downloadable File  
'2EMC' = Editorial|Book|Reference Book, Encyclopedia|All E-Book Internet Distribution Formats  
'2EMD' = Editorial|Book|Reference Book, Encyclopedia|E-Book on Recordable Media  
'2EMF' = Editorial|Book|Reference Book, Telephone Book|E-Book in Internet Website  
'2EMG' = Editorial|Book|Reference Book, Telephone Book|E-Book in Internet Downloadable File  
'2EMH' = Editorial|Book|Reference Book, Telephone Book|All E-Book Internet Distribution Formats  
'2EMI' = Editorial|Book|Reference Book, Telephone Book|E-Book on Recordable Media  
'2EMJ' = Editorial|Book|Reference Book, Telephone Book|All E-Book Distribution Formats  
'2EMK' = Editorial|Book|Reference Book, All Types|E-Book in Internet Website  
'2EML' = Editorial|Book|Reference Book, All Types|E-Book in Internet Downloadable File  
'2EMM' = Editorial|Book|Reference Book, All Types|All E-Book Internet Distribution Formats  
'2EMN' = Editorial|Book|Reference Book, All Types|E-Book on Recordable Media  
'2EMP' = Editorial|Book|Reference Book, All Types|All E-Book Distribution Formats  
'2EMQ' = Editorial|Book|Trade Book, All Types|E-Book in Internet Downloadable File  
'2EMR' = Editorial|Book|Trade Book, All Types|E-Book in Internet Email  
'2EMS' = Editorial|Book|Trade Book, All Types|All E-Book Internet Distribution Formats  
'2EMT' = Editorial|Book|Trade Book, All Types|All E-Book Distribution Formats  
'2EMU' = Editorial|Book|Textbook, Course Pack|Printed  
'2EMV' = Editorial|Book|Artist's Reference, All Types|All E-Book Distribution Formats  
'2END' = Advertising|Marketing Materials|Magalog|Internet Downloadable File  
'2ENG' = Advertising|Marketing Materials|Coupon|Internet Email  
'2ENS' = Advertising|Marketing Materials|Coupon|Recordable Media  
'2EON' = Advertising|Marketing Materials|Magalog|Internet Email  
'2EPA' = Editorial|Book|All Book Types|E-Book in Internet Website  
'2EPB' = Editorial|Book|Retail Book, All Types|E-Book in Internet Website  
'2EPC' = Editorial|Book|Retail Book, Children's Book|E-Book in Internet Website  
'2EPD' = Editorial|Book|Retail Book, Concept Book|E-Book in Internet Website  
'2EPE' = Editorial|Book|Retail Book, Directory|E-Book in Internet Website  
'2EPF' = Editorial|Book|Retail Book, Handbook|E-Book in Internet Website  
'2EPG' = Editorial|Book|Retail Book, Hi-lo Book|E-Book in Internet Website  
'2EPH' = Editorial|Book|Retail Book, Illustrated Book|E-Book in Internet Website  
'2EPJ' = Editorial|Book|Retail Book, Illustrated Guide|E-Book in Internet Website  
'2EPK' = Editorial|Book|Retail Book, Manual|E-Book in Internet Website  
'2EPL' = Editorial|Book|Retail Book, Novelty Book|E-Book in Internet Website  
'2EPM' = Editorial|Book|Retail Book, Postcard Book|E-Book in Internet Website  
'2EPN' = Editorial|Book|Retail Book, Young Adult Book|E-Book in Internet Website  
'2EPP' = Editorial|Book|Textbook, All Types|E-Book in Internet Website  
'2EPQ' = Editorial|Book|Textbook, Compendium|E-Book in Internet Website  
'2EPR' = Editorial|Book|Textbook, Middle Reader|E-Book in Internet Website

'2EPS'	= Editorial Book Textbook, Student Edition E-Book in Internet Website
'2EPT'	= Editorial Book Textbook Ancillary Materials, Teachers' Edition E-Book in Internet Website
'2EPV'	= Editorial Book Trade Book, All Types E-Book in Internet Website
'2EPW'	= Editorial Book Textbook Ancillary Materials, Teacher's Manual E-Book in Internet Website
'2EPY'	= Editorial Book Textbook Ancillary Materials, Workbook E-Book in Internet Website
'2EPZ'	= Editorial Book Textbook Ancillary Materials, Lab Manual E-Book in Internet Website
'2ERA'	= Editorial Book Trade Book, All Types E-Book on Recordable Media
'2ERB'	= Editorial Book Retail Book, Children's Book E-Book on Recordable Media
'2ERC'	= Editorial Book Retail Book, Concept Book E-Book on Recordable Media
'2ERD'	= Editorial Book Retail Book, Directory E-Book on Recordable Media
'2ERF'	= Editorial Book Retail Book, Handbook E-Book on Recordable Media
'2ERG'	= Editorial Book Retail Book, Hi-lo Book E-Book on Recordable Media
'2ERH'	= Editorial Book Retail Book, Illustrated Book E-Book on Recordable Media
'2ERI'	= Editorial Book Retail Book, Illustrated Guide E-Book on Recordable Media
'2ERJ'	= Editorial Book Retail Book, Manual E-Book on Recordable Media
'2ERK'	= Editorial Book Retail Book, Novelty Book E-Book on Recordable Media
'2ERL'	= Editorial Book Retail Book, Postcard Book E-Book on Recordable Media
'2ERM'	= Editorial Book Retail Book, Young Adult Book E-Book on Recordable Media
'2ERN'	= Editorial Book Retail Book, All Types E-Book on Recordable Media
'2ERP'	= Editorial Book Textbook, Compendium E-Book on Recordable Media
'2ERQ'	= Editorial Book Textbook, Middle Reader E-Book on Recordable Media
'2ERS'	= Editorial Book Textbook, Student Edition E-Book on Recordable Media
'2ERT'	= Editorial Book Textbook, All Types E-Book on Recordable Media
'2ERU'	= Editorial Book Textbook Ancillary Materials, Lab Manual E-Book on Recordable Media
'2ERV'	= Editorial Book Textbook Ancillary Materials, Teachers' Edition E-Book on Recordable Media
'2ERW'	= Editorial Book Textbook Ancillary Materials, Teacher's Manual E-Book on Recordable Media
'2ERY'	= Editorial Book Textbook Ancillary Materials, Workbook E-Book on Recordable Media
'2ERZ'	= Editorial Book All Book Types E-Book on Recordable Media
'2ESS'	= Advertising Marketing Materials Promotional Calendar, Multi-Page Internet Downloadable File
'2ETA'	= Advertising Marketing Materials Promotional Calendar, Multi-Page Internet Email
'2EVE'	= Products Product Packaging Retail Packaging, All Packaging Types Printed
'2EWE'	= Advertising Marketing Materials Promotional Calendar, One Page All Electronic Distribution Formats
'2EYE'	= Advertising Live Presentation Panel Presentation Projected Display
'2FAB'	= Internal Company Use Website Web Page, Content Body Recordable Media
'2FAC'	= Internal Company Use Website Web Page, Content Body All Electronic Distribution Formats
'2FAD'	= Advertising Display Poster, Movie Poster Printed
'2FAH'	= Internal Company Use Website Web Page, Design Element Intranet and Extranet Website
'2FAI'	= Internal Company Use Website Web Page, Design Element Recordable Media
'2FAJ'	= Internal Company Use Website Web Page, Design Element All Electronic Distribution Formats
'2FAN'	= Editorial Periodicals Newspaper, Tabloid Printed
'2FAR'	= Products Merchandise Retail Postcard Printed
'2FAS'	= Advertising Marketing Materials Promotional Calendar, One Page Internet Downloadable File
'2FAT'	= Advertising Display Poster, All Types Printed
'2FAX'	= Advertising Marketing Materials Magalogs Recordable Media
'2FAY'	= Advertising Marketing Materials Promotional Calendar, One Page Internet Email
'2FEA'	= Motion Picture & TV Motion Picture Feature Film Projected Display
'2FEH'	= Advertising Marketing Materials Promotional E-card Recordable Media
'2FEM'	= Products Merchandise Textiles Printed or Woven
'2FEN'	= Advertising Marketing Materials Promotional E-card Internet Downloadable File
'2FER'	= Advertising Display Transit Advertising, Ferry Advertising Printed
'2FET'	= Advertising Marketing Materials Promotional E-card Internet Email
'2FEU'	= Advertising Marketing Materials Promotional E-card All Internet Distribution Formats
'2FEZ'	= Advertising Merchandise Apparel, General Apparel Printed or Woven
'2FIB'	= Products Merchandise Screen Saver Internet Downloadable File
'2FID'	= Advertising Merchandise Apparel, T-Shirts Printed or Woven
'2FIE'	= Advertising Merchandise Folder Printed
'2FIG'	= Advertising Marketing Materials Catalog Printed
'2FIL'	= Motion Picture & TV Motion Picture Feature Film All Electronic Distribution Formats
'2FIN'	= Advertising Point of Purchase Kiosk, All Types Printed
'2FIR'	= Advertising Periodicals>All Periodical Types Recordable Media
'2FIT'	= Motion Picture & TV Motion Picture Short Film All Electronic Distribution Formats
'2FIX'	= Motion Picture & TV Motion Picture All Motion Picture Types Projected Display
'2FIZ'	= Advertising Periodicals>All Periodical Types Internet Website
'2FLU'	= Advertising Periodicals>All Periodical Types All Electronic Distribution Formats
'2FLY'	= Advertising Marketing Materials Flyer Printed
'2FOB'	= Advertising Periodicals>All Periodical Types All Internet Distribution Formats
'2FOE'	= Internal Company Use Periodicals Magazine, Custom Published Internet Email
'2FOG'	= Advertising Display Store Display, All Display Types Printed
'2FOH'	= Advertising Periodicals Annual Report Internet Downloadable File
'2FOL'	= Products Merchandise Folder Printed
'2FON'	= Advertising Periodicals Annual Report Internet Website
'2FOP'	= Advertising Periodicals Annual Report Internet Email
'2FOU'	= Advertising Periodicals Annual Report All Electronic Distribution Formats
'2FOX'	= Editorial Book Textbook, All Types Printed
'2FOY'	= Advertising Periodicals Annual Report All Internet Distribution Formats

'2FPO' = Internal Company Use|Comp Use>All Comp Types>All Electronic Distribution Formats  
'2FRA' = Products|Product Packaging|Picture Frame Insert|Printed  
'2FRO' = Internal Company Use|Comp Use>All Comp Types|Printed  
'2FRY' = Motion Picture & TV|Motion Picture|Prop|Recordable Media  
'2FUB' = Advertising|Periodicals|Belly Band|Printed  
'2FUD' = Advertising|Periodicals|Cover Wrap|Printed  
'2FUN' = Products|Merchandise|Playing Cards|Printed  
'2FUR' = Advertising|Live Presentation|Sales Presentation|Projected Display  
'2GAB' = Products|Merchandise|Game, Computer Game|Internet Downloadable File  
'2GAD' = Products|Merchandise|Game, All Types|All Internet Distribution Formats  
'2GAE' = Products|Merchandise|Game, Computer Game|All Internet Distribution Formats  
'2GAG' = Products|Merchandise|Game, Computer Game|Recordable Media  
'2GAH' = Products|Merchandise|Game, Computer Game|Internet Email  
'2GAL' = Editorial|Display|Gallery Exhibition|Printed  
'2GAM' = Products|Merchandise|Game, All Types>All Electronic Distribution Formats  
'2GAN' = Products|Merchandise|Game, Computer Game|All Electronic Distribution Formats  
'2GAP' = Products|Merchandise|Game, All Types|Printed  
'2GAR' = Products|Merchandise|Game, All Types|Recordable Media  
'2GAS' = Products|Merchandise|Game, All Types|Internet Email  
'2GAT' = Products|Merchandise|Game, All Types|Internet Downloadable File  
'2GBM' = Editorial|Book|Textbook, Course Pack|Internet Downloadable File  
'2GBN' = Editorial|Book|Textbook, Course Pack|Internet Website  
'2GBP' = Editorial|Book|Textbook, Course Pack|All Distribution Formats  
'2GBQ' = Editorial|Book|Textbook, Course Pack|All Internet Distribution Formats  
'2GBW' = Editorial|Book|Textbook Ancillary Materials, All Ancillary Types|All Distribution Formats  
'2GBY' = Editorial|Book|Textbook Ancillary Materials, All Ancillary Types|All Internet Distribution Formats  
'2GBZ' = Editorial|Book|Textbook Ancillary Materials, Educational Film Set|Projected Display  
'2GDJ' = Editorial|Display|Gallery Exhibition|Electronic Display  
'2GDK' = Editorial|Display|Museum Display|Electronic Display  
'2GDM' = Editorial|Periodicals|Magazine, All Types|Internet Downloadable File  
'2GDP' = Editorial|Periodicals|Magazine, All Types|Internet Website  
'2GDQ' = Editorial|Periodicals|Magazine, All Types|Internet Email  
'2GDR' = Editorial|Periodicals|Magazine, All Types|Recordable Media  
'2GDS' = Editorial|Periodicals|Magazine, All Types>All Electronic Distribution Formats  
'2GDT' = Editorial|Periodicals|Magazine, All Types|All Internet Distribution Formats  
'2GDV' = Editorial|Periodicals|Magazine, Consumer|Recordable Media  
'2GDW' = Editorial|Periodicals|Magazine, Consumer|Internet Website  
'2GDY' = Editorial|Periodicals|Magazine, Consumer|Internet Downloadable File  
'2GDZ' = Editorial|Periodicals|Magazine, Consumer>All Electronic Distribution Formats  
'2GEA' = Editorial|Periodicals|Magazine, Consumer>All Internet Distribution Formats  
'2GEC' = Editorial|Periodicals|Magazine, Custom Published|Recordable Media  
'2GED' = Internal Company Use|Internal Review>All Review Types|Printed  
'2GEE' = Editorial|Book|Textbook Ancillary Materials, Workbook|Printed  
'2GEF' = Editorial|Periodicals|Magazine, Custom Published|Internet Website  
'2GEG' = Editorial|Periodicals|Magazine, Custom Published|Internet Downloadable File  
'2GEH' = Editorial|Periodicals|Magazine, Custom Published>All Electronic Distribution Formats  
'2GEI' = Editorial|Periodicals|Magazine, Custom Published|All Internet Distribution Formats  
'2GEK' = Editorial|Periodicals|Magazine, Education|Recordable Media  
'2GEL' = Products|Merchandise|Screen Saver|Internet Email  
'2GEM' = Editorial|Periodicals|Magazine, Consumer|Printed  
'2GEN' = Advertising|Periodicals|Magazine, Consumer|Internet Downloadable File  
'2GEP' = Editorial|Periodicals|Magazine, Education|Internet Website  
'2GEQ' = Editorial|Periodicals|Magazine, Education|Internet Downloadable File  
'2GER' = Editorial|Periodicals|Magazine, Education>All Electronic Distribution Formats  
'2GES' = Editorial|Periodicals|Magazine, Education|All Internet Distribution Formats  
'2GEV' = Editorial|Periodicals|Magazine, Partworks|Internet Website  
'2GEW' = Editorial|Periodicals|Magazine, Partworks|Internet Downloadable File  
'2GEY' = Advertising|Periodicals|Magazine, Consumer>All Electronic Distribution Formats  
'2GEZ' = Editorial|Periodicals|Magazine, Partworks|Recordable Media  
'2GFA' = Editorial|Periodicals|Magazine, Partworks>All Electronic Distribution Formats  
'2GFB' = Editorial|Periodicals|Magazine, Partworks|All Internet Distribution Formats  
'2GFD' = Editorial|Periodicals|Magazine, Trade|Recordable Media  
'2GFG' = Editorial|Periodicals|Newsletter|Recordable Media  
'2GFH' = Editorial|Periodicals|Newsletter|Internet Website  
'2GFI' = Editorial|Periodicals|Newsletter|Internet Downloadable File  
'2GFJ' = Editorial|Periodicals|Newsletter>All Electronic Distribution Formats  
'2GFK' = Editorial|Periodicals|Newsletter>All Internet Distribution Formats  
'2GFM' = Editorial|Periodicals|Newspaper, All Types|Recordable Media  
'2GFN' = Editorial|Periodicals|Newspaper, All Types|Internet Website  
'2GFP' = Editorial|Periodicals|Newspaper, All Types|Internet Downloadable File  
'2GFQ' = Editorial|Periodicals|Newspaper, All Types>All Electronic Distribution Formats  
'2GFR' = Editorial|Periodicals|Newspaper, All Types|All Internet Distribution Formats  
'2GFS' = Editorial|Periodicals|Newspaper, Weekly Supplement|Recordable Media  
'2GFT' = Products|Merchandise|Card, Gift Card|Printed  
'2GFU' = Editorial|Periodicals|Newspaper, Weekly Supplement>All Electronic Distribution Formats

'2GFV' = Editorial|Periodicals|Newspaper, Weekly Supplement>All Internet Distribution Formats  
'2GFW' = Editorial|Periodicals|Newspaper, Weekly Supplement|Internet Website  
'2GFY' = Editorial|Periodicals|Newspaper, Weekly Supplement|Internet Downloadable File  
'2GGA' = Editorial|Periodicals|Newspaper, Tabloid|Internet Downloadable File  
'2GGD' = Editorial|Periodicals|Scholarly Journal|Recordable Media  
'2GGF' = Editorial|Periodicals|Scholarly Journal|Internet Website  
'2GGG' = Editorial|Periodicals|Scholarly Journal|Internet Downloadable File  
'2GGH' = Editorial|Periodicals|Scholarly Journal>All Electronic Distribution Formats  
'2GGI' = Editorial|Periodicals|Scholarly Journal>All Internet Distribution Formats  
'2GGM' = Editorial|Merchandise|CD ROM|Recordable Media  
'2GHA' = Editorial|Website|Webcast, All Types|Internet Website  
'2GHB' = Editorial|Website|Web Page, All Types|Internet Website  
'2GHC' = Editorial|Website|Web Page, All Types|Recordable Media  
'2GHD' = Editorial|Website|Web Page, All Types>All Electronic Distribution Formats  
'2GHF' = Editorial|Website|Web Page, All Types>All Internet Distribution Formats  
'2GHG' = Editorial|Website|Web Page, Body Content|Internet Website  
'2GHH' = Editorial|Website|Web Page, Body Content|Recordable Media  
'2GHI' = Advertising|Periodicals|Magazine, Consumer|Recordable Media  
'2GHJ' = Editorial|Website|Web Page, Body Content>All Electronic Distribution Formats  
'2GHK' = Editorial|Website|Web Page, Body Content>All Internet Distribution Formats  
'2GIB' = Advertising|Periodicals|Magazine, Consumer>All Internet Distribution Formats  
'2GID' = Internal Company Use|Internal Review>All Review Types>All Electronic Distribution Formats  
'2GIE' = Advertising|Periodicals|Magazine, Corporate|Internet Downloadable File  
'2GIF' = Products|Merchandise|Gift Certificate|Printed  
'2GIG' = Products|Merchandise|Datebook|Printed  
'2GIN' = Advertising|Periodicals|Magazine, Corporate|Internet Website  
'2GIP' = Advertising|Periodicals|Magazine, Corporate|Recordable Media  
'2GIT' = Advertising|Periodicals|Magazine, Corporate>All Electronic Distribution Formats  
'2GNU' = Advertising|Periodicals|Magazine, Corporate>All Internet Distribution Formats  
'2GOA' = Internal Company Use|Promotional Materials|Corporate Brochure|Printed  
'2GOB' = Advertising|Periodicals|Magazine, Advertorial>All Internet Distribution Formats  
'2GOO' = Advertising|Periodicals|Magazine, All Types|Recordable Media  
'2GOR' = Advertising|Periodicals|Magazine, Custom Published|Internet Website  
'2GOS' = Advertising|Periodicals|Magazine, Custom Published|Internet Downloadable File  
'2GOX' = Advertising|Periodicals|Magazine, Custom Published>All Internet Distribution Formats  
'2GOY' = Internal Company Use|Art|Art Display, All Art Types|Printed  
'2GRE' = Products|Merchandise|Card, Greeting Card|Printed  
'2GUL' = Advertising|Periodicals|Magazine, Education|Internet Downloadable File  
'2GUM' = Advertising|Periodicals|Magazine, Education|Internet Website  
'2GUN' = Advertising|Point of Purchase|Kiosk, Interactive Kiosk|Electronic Display  
'2GUT' = Advertising|Marketing Materials|Promotional Calendar, One Page|Recordable Media  
'2GUV' = Advertising|Periodicals|Magazine, Education|Recordable Media  
'2GUY' = Advertising|Periodicals|Magazine, Education>All Electronic Distribution Formats  
'2GYM' = Advertising|Point of Purchase|Kiosk, Interactive Kiosk|Printed  
'2GYP' = Advertising|Periodicals|Magazine, Education>All Internet Distribution Formats  
'2HAD' = Advertising|Marketing Materials|Promotional Calendar, Multi-Page|Recordable Media  
'2HAE' = Advertising|Periodicals|Magazine, Trade|Internet Downloadable File  
'2HAG' = Advertising|Periodicals|Magazine, Trade|Internet Website  
'2HAH' = Advertising|Periodicals|Magazine, Trade>All Electronic Distribution Formats  
'2HAJ' = Advertising|Periodicals|Magazine, Trade>All Internet Distribution Formats  
'2HAM' = Advertising|Marketing Materials>All Marketing Material Types|Internet Downloadable File  
'2HAN' = Editorial|Book|Retail Book, Handbook|Printed  
'2HAO' = Internal Company Use|Art|Art Display, All Art Types|Electronic Display  
'2HAP' = Advertising|Periodicals|Magazine Reprints, All Types|Internet Downloadable File  
'2HAS' = Advertising|Periodicals|Magazine Reprints, All Types|Internet Website  
'2HAT' = Advertising|Periodicals|Magazine, Trade|Printed  
'2HAW' = Advertising|Periodicals|Magazine Reprints, All Types|Recordable Media  
'2HAY' = Advertising|Periodicals|Magazine Reprints, All Types>All Electronic Distribution Formats  
'2HEH' = Advertising|Periodicals|Magazine Reprints, All Types>All Internet Distribution Formats  
'2HEM' = Advertising|Display|Billboard, Bulletin|Printed  
'2HEN' = Advertising|Periodicals|Newsletter, All Types>All Electronic Distribution Formats  
'2HEP' = Advertising|Periodicals|Newsletter, All Types|Internet Downloadable File  
'2HER' = Products|Merchandise|Card, Hero Card|Printed  
'2HES' = Advertising|Periodicals|Newsletter, All Types|Internet Website  
'2HET' = Advertising|Periodicals|Newsletter, All Types|Recordable Media  
'2HEW' = Advertising|Periodicals|Newsletter, All Types>All Internet Distribution Formats  
'2HEX' = Products|Merchandise|Screen Saver>All Electronic Distribution Formats  
'2HEY' = Advertising|Periodicals|Newspaper, All Types>All Electronic Distribution Formats  
'2HIC' = Advertising|Periodicals|Newspaper, All Types>All Internet Distribution Formats  
'2HID' = Advertising|Periodicals|Newspaper, All Types|Internet Website  
'2HIE' = Advertising|Periodicals|Newspaper, All Types|Internet Downloadable File  
'2HIL' = Editorial|Book|Retail Book, Hi-lo Book|Printed  
'2HIM' = Advertising|Periodicals|Newspaper, All Types|Recordable Media  
'2HIP' = Advertising|Periodicals|Free Standing Insert, Advertorial Insert|Printed  
'2HIS' = Advertising|Periodicals|Newspaper, Weekly Supplement>All Electronic Distribution Formats

'2HIT' = Motion Picture & TV|Motion Picture|Prop>All Internet Distribution Formats  
'2HMM' = Advertising|Periodicals|Newspaper, Weekly Supplement>All Internet Distribution Formats  
'2HOB' = Advertising|Periodicals|Newspaper, Weekly Supplement|Internet Website  
'2HOD' = Advertising|Periodicals|Newspaper, Weekly Supplement|Internet Downloadable File  
'2HOE' = Advertising|Periodicals|Newspaper, Weekly Supplement|Recordable Media  
'2HOG' = Advertising|Book>All Book Types|Printed  
'2HON' = Advertising|Display|Poster, Movie Poster|Electronic Display  
'2HOP' = Motion Picture & TV|Motion Picture|Prop|Projected Display  
'2HOT' = Advertising|Display|Terminal Advertising, Airport Display|Printed  
'2HOW' = Advertising|Periodicals|Newspaper, Tabloid>All Electronic Distribution Formats  
'2HOY' = Advertising|Periodicals|Newspaper, Tabloid|Internet Website  
'2HUB' = Products|Merchandise|Double Postcard|Printed  
'2HUE' = Advertising|Periodicals|Newspaper, Tabloid|Recordable Media  
'2HUG' = Motion Picture & TV|Motion Picture|Set Decor|Recordable Media  
'2HUH' = Advertising|Periodicals|Newspaper, Tabloid>All Internet Distribution Formats  
'2HUM' = Motion Picture & TV|Motion Picture|Set Decor>All Electronic Distribution Formats  
'2HUP' = Advertising|Periodicals|Quarterly Report|Internet Downloadable File  
'2HUT' = Advertising|Periodicals|Quarterly Report|Internet Website  
'2HYP' = Advertising|Periodicals|Quarterly Report|Recordable Media  
'2JAB' = Motion Picture & TV|Motion Picture|Set Decor>All Internet Distribution Formats  
'2JAG' = Advertising|Periodicals|Quarterly Report>All Electronic Distribution Formats  
'2JAM' = Advertising|Marketing Materials>All Marketing Material Types|Printed  
'2JAR' = Advertising|Periodicals|Magazine, Corporate|Printed  
'2JAW' = Advertising|Live Presentation|Stage Performance|Projected Display  
'2JAY' = Advertising|Periodicals|Newsletter, All Types|Printed  
'2JEE' = Advertising|Periodicals|Quarterly Report>All Internet Distribution Formats  
'2JET' = Editorial|Periodicals|Newspaper, All Types|Printed  
'2JIB' = Advertising|Marketing Materials|Public Relations, All Types|Printed  
'2JIG' = Products|Merchandise|Jigsaw Puzzle|Printed  
'2JIL' = Products|Merchandise|Jigsaw Puzzle|Recordable Media  
'2JIN' = Products|Merchandise|Jigsaw Puzzle|Internet Downloadable File  
'2JOB' = Advertising|Marketing Materials|Public Relations, Press Kit|Recordable Media  
'2JOE' = Advertising|Marketing Materials|Public Relations, Press Kit>All Electronic Distribution Formats  
'2JOG' = Motion Picture & TV|Motion Picture|Documentary Film|Projected Display  
'2JOT' = Motion Picture & TV|Motion Picture|In Theater Commercial|Projected Display  
'2JOU' = Advertising|Display|Terminal Advertising, Airport Display|Electronic Display  
'2JOW' = Advertising|Marketing Materials|Public Relations, Press Kit>All Internet Distribution Formats  
'2JOY' = Advertising|Display|Terminal Advertising, All Types|Printed  
'2JRN' = Products|Merchandise|Journal|Printed  
'2JUG' = Advertising|Point of Purchase|Kiosk, Telephone Kiosk|Printed  
'2JUN' = Advertising|Marketing Materials|Public Relations, Press Kit|Internet Downloadable File  
'2JUS' = Advertising|Marketing Materials|Public Relations, Press Kit|Internet Email  
'2JUT' = Advertising|Marketing Materials|Public Relations, Press Kit|Internet Website  
'2JWL' = Advertising|Website|Web Page, Web Interstitial Ad|Internet Website  
'2KAB' = Advertising|Marketing Materials|Public Relations, Press Kit|Television Broadcast  
'2KAF' = Advertising|Marketing Materials|Public Relations, Press Kit|Printed  
'2KAS' = Advertising|Marketing Materials|Public Relations, Press Release|Recordable Media  
'2KAT' = Advertising|Marketing Materials|Public Relations, Press Release|Internet Downloadable File  
'2KAY' = Advertising|Marketing Materials|Public Relations, Press Release|Internet Email  
'2KEA' = Advertising|Marketing Materials|Public Relations, Press Release|Internet Website  
'2KEF' = Advertising|Marketing Materials|Public Relations, Press Release|Television Broadcast  
'2KEG' = Advertising|Periodicals|Newspaper, Weekly Supplement|Printed  
'2KEN' = Advertising|Periodicals|Newspaper, Tabloid|Printed  
'2KEP' = Products|Merchandise|Souvenir|Printed  
'2KEX' = Advertising|Marketing Materials|Public Relations, Press Release|Printed  
'2KID' = Advertising|Marketing Materials|Public Relations, Press Release>All Electronic Distribution Formats  
'2KIN' = Editorial|Periodicals|Magazine, Consumer|Internet Email  
'2KIO' = Advertising|Point of Purchase|Kiosk, All Types|Electronic Display  
'2KIP' = Advertising|Periodicals|Program Advertising|Printed  
'2KIT' = Personal Use|Art|Art Display, All Art Types|Printed  
'2KOA' = Motion Picture & TV|Television Programming|Artist's Reference, All Types|Projected Display  
'2KOB' = Motion Picture & TV|Television Programming|Artist's Reference, All Types|Internet Downloadable File  
'2KOI' = Motion Picture & TV|Television Programming|Artist's Reference, All Types>All Internet Distribution Formats  
'2KOP' = Motion Picture & TV|Television Programming|Artist's Reference, All Types|Recordable Media  
'2KOR' = Motion Picture & TV|Television Programming|Artist's Reference, All Types>All Electronic Distribution Formats  
'2KOS' = Motion Picture & TV|Television Programming|Artist's Reference, All Types|Television Broadcast  
'2KUE' = Advertising|Website|Web Page, All Types>All Internet Distribution Formats  
'2MAB' = Products|Merchandise|Map>All Electronic Distribution Formats  
'2MAC' = Advertising|Website|Web Page, All Types|Recordable Media  
'2MAD' = Products|Merchandise|Map|Internet Downloadable File  
'2MAE' = Advertising|Website|Web Page, All Types>All Electronic Distribution Formats  
'2MAG' = Editorial|Periodicals|Magazine, All Types|Printed  
'2MAN' = Editorial|Book|Retail Book, Manual|Printed  
'2MAP' = Products|Merchandise|Map|Printed  
'2MAR' = Advertising|Website|Web Page, Design Element|Internet Website

'2MAS' = Advertising|Website|Web Page, Design Element|Recordable Media  
'2MAT' = Products|Merchandise|Placemat|Printed  
'2MAW' = Advertising|Website|Web Page, Design Element|All Electronic Distribution Formats  
'2MAX' = Advertising|Website|Web Page, Design Element|All Internet Distribution Formats  
'2MAY' = Editorial|Periodicals|Magazine, Education|Printed  
'2MCH' = Products|Merchandise|Other Merchandise|Printed  
'2MED' = Advertising|Website|Web Page, Web Banner Ad|Internet Website  
'2MEG' = Advertising|Website|Web Page, Web Banner Ad|Recordable Media  
'2MEL' = Editorial|Periodicals|Magazine, Partworks|Printed  
'2MEM' = Advertising|Website|Web Page, Web Banner Ad|All Electronic Distribution Formats  
'2MEN' = Advertising|Point of Purchase|Menu|Printed  
'2MER' = Products|Merchandise|All Merchandise Types|Printed  
'2MET' = Products|Merchandise|Map|Internet Email  
'2MEW' = Advertising|Website|Web Page, Web Banner Ad|All Internet Distribution Formats  
'2MIB' = Advertising|Website|Web Page, Web Interstitial Ad|Recordable Media  
'2MID' = Advertising|Website|Web Page, Web Interstitial Ad|All Electronic Distribution Formats  
'2MIG' = Advertising|Website|Web Page, Web Interstitial Ad|All Internet Distribution Formats  
'2MIL' = Advertising|Website|Webcast, All Types|Internet Website  
'2MIM' = Products|Merchandise|Map|All Internet Distribution Formats  
'2MIR' = Products|Merchandise|Map|Recordable Media  
'2MIX' = Motion Picture & TV|Motion Picture|Artist's Reference, All Types|Recordable Media  
'2MMA' = Advertising|Marketing Materials|Bill Insert|Printed  
'2MMB' = Advertising|Marketing Materials|Blow In Card|Printed  
'2MMC' = Advertising|Marketing Materials|Bound-in Insert|Printed  
'2MMD' = Advertising|Marketing Materials|Broadside|Printed  
'2MME' = Advertising|Marketing Materials|Buckslip|Printed  
'2MMF' = Advertising|Marketing Materials|Business Card|Printed  
'2MMG' = Advertising|Marketing Materials|Business Envelope|Printed  
'2MMI' = Advertising|Marketing Materials|Business Invitation|Printed  
'2MMJ' = Advertising|Marketing Materials|Business Reply Card|Printed  
'2MMK' = Advertising|Marketing Materials|Business Reply Envelope|Printed  
'2MML' = Advertising|Marketing Materials|Business Stationery|Printed  
'2MMM' = Advertising|Marketing Materials|Compliment Slip|Printed  
'2MMN' = Advertising|Marketing Materials|Coupon|Printed  
'2MMP' = Advertising|Marketing Materials|Coupon Packs|Printed  
'2MMQ' = Advertising|Marketing Materials|Flyaway Card|Printed  
'2MMR' = Advertising|Marketing Materials|Leaflet|Printed  
'2MMS' = Advertising|Marketing Materials|Magalog|Printed  
'2MMT' = Advertising|Marketing Materials|One Sheet|Printed  
'2MMU' = Advertising|Marketing Materials|Onsert|Printed  
'2MMV' = Advertising|Marketing Materials|Polybag|Printed  
'2MMW' = Advertising|Marketing Materials|Promotional Calendar, One Page|Printed  
'2MMX' = Advertising|Marketing Materials|Promotional Envelope|Printed  
'2MMY' = Advertising|Marketing Materials|Sales Kit|Printed  
'2MMZ' = Advertising|Marketing Materials|Self Mailer|Printed  
'2MOB' = Advertising|Display|Store Display, In-Store Poster|Printed  
'2MOG' = Editorial|Book>All Book Types|Printed  
'2MOM' = Editorial|Periodicals|Magazine, Trade|Printed  
'2MOO' = Advertising|Periodicals|Magazine, All Types|Printed  
'2MOP' = Editorial|Periodicals|Magazine, Custom Published|Printed  
'2MOR' = Editorial|Book|Artist's Reference, All Types|Printed  
'2MOU' = Products|Merchandise|Mouse Pad|Printed  
'2MOV' = Motion Picture & TV|Motion Picture|All Motion Picture Types|Recordable Media  
'2MOW' = Editorial|Periodicals|Magazine, Trade|Internet Website  
'2MPA' = Motion Picture & TV|Motion Picture|All Motion Picture Types|Television Broadcast  
'2MPB' = Motion Picture & TV|Music Video|All Music Video Types|Television Broadcast  
'2MPC' = Motion Picture & TV|Motion Picture|Artist's Reference, All Types|Television Broadcast  
'2MPD' = Motion Picture & TV|Motion Picture|Documentary Film|Television Broadcast  
'2MPE' = Motion Picture & TV|Motion Picture|Feature Film|Television Broadcast  
'2MPF' = Motion Picture & TV|Motion Picture|Movie Trailer|Television Broadcast  
'2MPG' = Motion Picture & TV|Motion Picture|Prop|Television Broadcast  
'2MPH' = Motion Picture & TV|Motion Picture|Set Decor|Television Broadcast  
'2MPI' = Motion Picture & TV|Motion Picture|Short Film|Television Broadcast  
'2MPJ' = Motion Picture & TV|Motion Picture|All Motion Picture Types|Internet Downloadable File  
'2MPK' = Motion Picture & TV|Music Video|All Music Video Types|Internet Downloadable File  
'2MPL' = Motion Picture & TV|Motion Picture|Artist's Reference, All Types|Internet Downloadable File  
'2MPM' = Motion Picture & TV|Motion Picture|Documentary Film|Internet Downloadable File  
'2MPN' = Motion Picture & TV|Motion Picture|Feature Film|Internet Downloadable File  
'2MPP' = Motion Picture & TV|Motion Picture|Movie Trailer|Internet Downloadable File  
'2MPQ' = Motion Picture & TV|Motion Picture|Prop|Internet Downloadable File  
'2MPR' = Motion Picture & TV|Motion Picture|Set Decor|Internet Downloadable File  
'2MPS' = Motion Picture & TV|Motion Picture|Short Film|Internet Downloadable File  
'2MRP' = Products|Merchandise|Plates|Printed  
'2MUG' = Products|Merchandise|Mugs|Printed  
'2MUS' = Editorial|Display|Museum Display|Printed

'2MUT' = Editorial|Periodicals|Magazine, Trade|Internet Downloadable File  
'2NAB' = Editorial|Periodicals|Magazine, Trade|Internet Email  
'2NAG' = Editorial|Periodicals|Magazine, Trade|All Internet Distribution Formats  
'2NAH' = Editorial|Book|Reference Book, Encyclopedia|All Electronic Distribution Formats  
'2NAP' = Motion Picture & TV|Motion Picture|Artist's Reference, All Types|All Electronic Distribution Formats  
'2NAY' = Editorial|Book|Reference Book, Encyclopedia|Printed  
'2NEL' = Editorial|Periodicals|Newsletter|Internet Email  
'2NET' = Internal Company Use|Website|Web Page, All Types|Intranet and Extranet Website  
'2NEW' = Advertising|Periodicals|Newspaper, All Types|Printed  
'2NIP' = Editorial|Book|Reference Book, Telephone Book|Printed  
'2NOB' = Editorial|Periodicals|Magazine, Trade|All Electronic Distribution Formats  
'2NOD' = Motion Picture & TV|Motion Picture|Artist's Reference, All Types|All Internet Distribution Formats  
'2NOV' = Products|Merchandise|Novelty Products|Printed  
'2NOW' = Editorial|Periodicals|Magazine, Education|Internet Email  
'2NUN' = Editorial|Periodicals|Magazine, Custom Published|Internet Email  
'2NUT' = Advertising|Marketing Materials|Promotional Postcard|Printed  
'2TAB' = Editorial|Periodicals|Magazine, Partworks|Internet Email  
'2TAD' = Editorial|Periodicals|Scholarly Journal|Internet Email  
'2TAE' = Editorial|Book|Retail Book, Coffee Table Book|Printed  
'2TAG' = Advertising|Point of Purchase|Hang Tag|Printed  
'2TAJ' = Editorial|Periodicals|Newspaper, All Types|Internet Email  
'2TAL' = Advertising|Point of Purchase|Shelf Talker|Printed  
'2TAN' = Advertising|Display|Terminal Advertising, Shelter Advertising|Printed  
'2TAO' = Editorial|Periodicals|Newspaper, Weekly Supplement|Internet Email  
'2TAP' = Motion Picture & TV|Motion Picture|Artist's Reference, All Types|Projected Display  
'2TAT' = Personal Use|Art|Artist's Reference, Tattoo|Printed  
'2TAV' = Editorial|Book|Retail Book, Concept Book|Printed  
'2TAX' = Advertising|Display|Transit Advertising, Taxi Advertising|Printed  
'2TEA' = Motion Picture & TV|Television Programming|All Television Advertising Types|Internet Downloadable File  
'2TEB' = Motion Picture & TV|Television Programming|Commercial|Internet Downloadable File  
'2TEC' = Motion Picture & TV|Television Programming|Commercial|All Internet Distribution Formats  
'2TED' = Motion Picture & TV|Television Programming|All Television Advertising Types|Recordable Media  
'2TEE' = Motion Picture & TV|Television Programming|All Editorial Television Types|Television Broadcast  
'2TEF' = Motion Picture & TV|Television Programming|News Program, Flash|Television Broadcast  
'2TEG' = Motion Picture & TV|Television Programming|Commercial|Recordable Media  
'2TEH' = Motion Picture & TV|Television Programming|Infomercial|Internet Downloadable File  
'2TEJ' = Motion Picture & TV|Television Programming|Infomercial|All Internet Distribution Formats  
'2TEK' = Motion Picture & TV|Television Programming|Infomercial|Recordable Media  
'2TEL' = Motion Picture & TV|Television Programming|On-Air Promotion|Internet Downloadable File  
'2TEM' = Motion Picture & TV|Television Programming|On-Air Promotion|All Internet Distribution Formats  
'2TEP' = Motion Picture & TV|Television Programming|On-Air Promotion|Recordable Media  
'2TEQ' = Motion Picture & TV|Television Programming|All Television Advertising Types|All Internet Distribution Formats  
'2TER' = Motion Picture & TV|Television Programming|Documentary Program|Internet Downloadable File  
'2TES' = Motion Picture & TV|Television Programming|Documentary Program|All Internet Distribution Formats  
'2TET' = Motion Picture & TV|Television Programming|Documentary Program|Recordable Media  
'2TEU' = Motion Picture & TV|Television Programming|Educational Program|Internet Downloadable File  
'2TEV' = Motion Picture & TV|Television Programming|Educational Program|All Internet Distribution Formats  
'2TEW' = Motion Picture & TV|Television Programming|Educational Program|Recordable Media  
'2TEX' = Editorial|Periodicals|Newspaper, Tabloid|Internet Website  
'2TEY' = Motion Picture & TV|Television Programming|Entertainment Program|Internet Downloadable File  
'2TEZ' = Motion Picture & TV|Television Programming|Entertainment Program|All Internet Distribution Formats  
'2TIC' = Products|Merchandise|Sticker|Printed  
'2TIE' = Editorial|Periodicals|Newspaper, Tabloid|Recordable Media  
'2TIN' = Advertising|Point of Purchase|Slip Case|Printed  
'2TIP' = Editorial|Periodicals|Newspaper, Tabloid|Internet Email  
'2TKT' = Products|Merchandise|Ticket|Printed  
'2TLA' = Motion Picture & TV|Television Programming|Entertainment Program|Recordable Media  
'2TLB' = Motion Picture & TV|Television Programming|Made For TV Movie|All Internet Distribution Formats  
'2TLC' = Motion Picture & TV|Television Programming|Made For TV Movie|Internet Downloadable File  
'2TLD' = Motion Picture & TV|Television Programming|Made For TV Movie|Recordable Media  
'2TLE' = Motion Picture & TV|Television Programming|News Program|Internet Downloadable File  
'2TLF' = Motion Picture & TV|Television Programming|News Program|All Internet Distribution Formats  
'2TLG' = Motion Picture & TV|Television Programming|News Program|Recordable Media  
'2TLH' = Motion Picture & TV|Television Programming|Non Broadcast Pilot|Recordable Media  
'2TLJ' = Motion Picture & TV|Television Programming|Non Broadcast Pilot|Projected Display  
'2TLK' = Motion Picture & TV|Television Programming|Non-Profit Program|Internet Downloadable File  
'2TLL' = Motion Picture & TV|Television Programming|Non-Profit Program|All Internet Distribution Formats  
'2TLM' = Motion Picture & TV|Television Programming|Non-Profit Program|Recordable Media  
'2TLN' = Motion Picture & TV|Television Programming|Prop|Internet Downloadable File  
'2TLP' = Motion Picture & TV|Television Programming|Prop|All Internet Distribution Formats  
'2TLQ' = Motion Picture & TV|Television Programming|Prop|Recordable Media  
'2TLR' = Motion Picture & TV|Television Programming|Prop|Television Broadcast  
'2TLS' = Motion Picture & TV|Television Programming|Set Decor|Internet Downloadable File  
'2TLT' = Motion Picture & TV|Television Programming|Set Decor|All Internet Distribution Formats  
'2TLU' = Motion Picture & TV|Television Programming|Set Decor|Recordable Media

'2TLV' = Motion Picture & TV|Television Programming|Set Decor|Television Broadcast  
'2TLW' = Motion Picture & TV|Television Programming|All Editorial Television Types|Internet Downloadable File  
'2TLY' = Motion Picture & TV|Television Programming|All Editorial Television Types|All Internet Distribution Formats  
'2TLZ' = Motion Picture & TV|Television Programming|All Editorial Television Types|Recordable Media  
'2TOD' = Products|Merchandise|Screen Saver|All Internet Distribution Formats  
'2TOE' = Advertising|Live Presentation|Trade Show Presentation|Projected Display  
'2TOM' = Editorial|Periodicals|Newsletter|Printed  
'2TON' = Editorial|Periodicals|Newspaper, Tabloid|All Internet Distribution Formats  
'2TOP' = Products|Merchandise|Poster, Retail Poster|Printed  
'2TOT' = Editorial|Periodicals|Newspaper, Tabloid|All Electronic Distribution Formats  
'2TOY' = Products|Merchandise|Toy|Printed  
'2TRA' = Advertising|Display|Transit Advertising, All Types|Printed  
'2TRB' = Advertising|Display|Transit Advertising, All Types|Electronic Display  
'2TRC' = Advertising|Display|Transit Advertising, Bus Panel|Electronic Display  
'2TRD' = Products|Merchandise|Trading Cards|Printed  
'2TRE' = Advertising|Display|Transit Advertising, Bus Poster|Printed  
'2TRF' = Advertising|Display|Transit Advertising, Bus Rear Display|Electronic Display  
'2TRG' = Advertising|Display|Transit Advertising, Bus Rear Display|Printed  
'2TRH' = Advertising|Display|Transit Advertising, Ferry Advertising|Electronic Display  
'2TRI' = Advertising|Display|Transit Advertising, Subway Advertising|Electronic Display  
'2TRJ' = Advertising|Display|Transit Advertising, Subway Advertising|Printed  
'2TRK' = Advertising|Display|Transit Advertising, Train Advertising|Electronic Display  
'2TRL' = Advertising|Display|Transit Advertising, Train Advertising|Printed  
'2TRM' = Advertising|Display|Transit Advertising, Bus Wrap|Electronic Display  
'2TRN' = Advertising|Display|Transit Advertising, Bus Wrap|Printed  
'2TRQ' = Advertising|Display|Transit Advertising, Commercial Vehicles|Printed  
'2TRR' = Advertising|Display|Transit Advertising, Commercial Vehicles|Electronic Display  
'2TRY' = Motion Picture & TV|Motion Picture|Documentary Film|Recordable Media  
'2TST' = Products|Merchandise|Apparel, T-Shirts|Printed or Woven  
'2TUA' = Products|Merchandise|Virtual Reality|Recordable Media  
'2TUB' = Editorial|Periodicals|Newspaper, Weekly Supplement|Printed  
'2TUG' = Motion Picture & TV|Motion Picture|Documentary Film|All Internet Distribution Formats  
'2TUX' = Internal Company Use|Periodicals|Magazine, Custom Published|Printed  
'2TVA' = Motion Picture & TV|Television Programming|All Television Advertising Types|Television Broadcast  
'2TVB' = Motion Picture & TV|Television Programming|All Television Advertising Types|All Electronic Distribution Formats  
'2TVC' = Motion Picture & TV|Television Programming|Commercial|Television Broadcast  
'2TVD' = Motion Picture & TV|Television Programming|Commercial|All Electronic Distribution Formats  
'2TVE' = Motion Picture & TV|Television Programming|Infomercial|Television Broadcast  
'2TVF' = Motion Picture & TV|Television Programming|Infomercial|All Electronic Distribution Formats  
'2TVG' = Motion Picture & TV|Television Programming|On-Air Promotion|Television Broadcast  
'2TVH' = Motion Picture & TV|Television Programming|On-Air Promotion|All Electronic Distribution Formats  
'2TVI' = Motion Picture & TV|Television Programming|Documentary Program|Television Broadcast  
'2TVJ' = Motion Picture & TV|Television Programming|Documentary Program|All Electronic Distribution Formats  
'2TVK' = Motion Picture & TV|Television Programming|Educational Program|Television Broadcast  
'2TVL' = Motion Picture & TV|Television Programming|Educational Program|All Electronic Distribution Formats  
'2TVM' = Motion Picture & TV|Television Programming|Entertainment Program|Television Broadcast  
'2TVN' = Motion Picture & TV|Television Programming|Entertainment Program|All Electronic Distribution Formats  
'2TVP' = Motion Picture & TV|Television Programming|Made For TV Movie|All Electronic Distribution Formats  
'2TVQ' = Motion Picture & TV|Television Programming|Set Decor|All Electronic Distribution Formats  
'2TVR' = Motion Picture & TV|Music Video|All Music Video Types|All Electronic Distribution Formats  
'2TVS' = Motion Picture & TV|Television Programming|News Program|Television Broadcast  
'2TVT' = Motion Picture & TV|Television Programming|News Program|All Electronic Distribution Formats  
'2TVU' = Motion Picture & TV|Television Programming|Non-Profit Program|Television Broadcast  
'2TVV' = Motion Picture & TV|Television Programming|Non-Profit Program|All Electronic Distribution Formats  
'2TVW' = Motion Picture & TV|Television Programming|Prop|All Electronic Distribution Formats  
'2TVY' = Motion Picture & TV|Television Programming|Made For TV Movie|Television Broadcast  
'2TVZ' = Motion Picture & TV|Television Programming|All Editorial Television Types|All Electronic Distribution Formats  
'2UNL' = Unlicensed|Not Applicable|Not Applicable|Not Applicable  
'2WAB' = Editorial|Book|Retail Book, Illustrated Book|Printed  
'2WAG' = Motion Picture & TV|Motion Picture|Feature Film|All Internet Distribution Formats  
'2WAL' = Products|Merchandise|Wallpaper|Printed  
'2WAN' = Internal Company Use|Website>All Website Types|Intranet and Extranet Website  
'2WAR' = Products|Merchandise|Computer Software|All Electronic Distribution Formats  
'2WAX' = Advertising|Point of Purchase|Table Tent|Printed  
'2WEB' = Advertising|Website|Web Page, All Types|Internet Website  
'2WED' = Personal Use|Personal Review|All Review Types|Printed  
'2WEE' = Products|Merchandise|Stamp|Printed  
'2WET' = Advertising|Display|Poster, Restroom Poster|Electronic Display  
'2WHA' = Editorial|Book|Retail Book, Illustrated Guide|Printed  
'2WHO' = Products|Product Packaging|Wholesale Packaging, All Packaging Types|Printed  
'2WIG' = Editorial|Periodicals|Scholarly Journal|Printed  
'2WIN' = Motion Picture & TV|Motion Picture|Feature Film|Recordable Media  
'2WIT' = Products|Merchandise|Stationery|Printed  
'2WIZ' = Motion Picture & TV|Motion Picture|Short Film|Projected Display  
'2WRP' = Products|Merchandise|Gift Wrap|Printed

'2WRY' = Products|Merchandise|Screen Saver|Recordable Media  
'2YAK' = Editorial|Book|Textbook Ancillary Materials, Teachers' Edition|Printed  
'2YAM' = Advertising|Marketing Materials|Promotional Calendar, Multi-Page|Printed  
'2YAP' = Editorial|Book|Retail Book, Novelty Book|Printed  
'2YEA' = Editorial|Book|Retail Book, Directory>All Electronic Distribution Formats  
'2YEN' = Editorial|Book|Retail Book, Postcard Book|Printed  
'2YET' = Editorial|Book|Textbook Ancillary Materials, Packaging For Recordable Media|Printed  
'2YOK' = Editorial|Book|Retail Book, Young Adult Book|Printed  
'2YUM' = Editorial|Book|Textbook Ancillary Materials, Lab Manual|Printed  
'2ZAG' = Editorial|Mobile>All Mobile Types|Mobile  
'2ZAM' = Products|Mobile>All Mobile Types|Mobile  
'2ZAP' = Products|Mobile|Entertainment Programming|Mobile  
'2ZEN' = Products|Mobile|Computer Software|Mobile  
'2ZIG' = Products|Mobile|Wallpaper|Mobile  
'2ZIP' = Products|Mobile|Game, All Types|Mobile  
'2ZIT' = Personal Use|Mobile|Wallpaper|Mobile  
'2ZOA' = Editorial|Book|Textbook, Course Pack|Recordable Media  
'2ZOB' = Personal Use|Mobile>All Mobile Types|Mobile  
'2ZOO' = Editorial|Book|Textbook, Course Pack|Internet Email  
'2ZOT' = Editorial|Book|Textbook Ancillary Materials, Teacher's Manual|Printed  
'2ZUM' = Internal Company Use|Mobile>All Mobile Types|Mobile  
'2ZUS' = Advertising|Mobile>All Mobile Types|Mobile  
'3PAA' = Any Placements on All Pages  
'3PNB' = Multiple Placements on One Side  
'3PNC' = Multiple Placements on Back Cover  
'3PND' = Single Placement as Chapter Opener  
'3PNE' = Single Placement on Front Side  
'3PNF' = Single Placement on Front Cover And Back Cover  
'3PNH' = Multiple Placements in Body Of Program  
'3PNI' = Single Placement as Chapter Opener  
'3PNJ' = Multiple Placements on Pop Ups  
'3PNK' = Multiple Placements on Front Side  
'3PNL' = Multiple Placements on Item  
'3PNM' = Single Placement in Body Of Program  
'3PNN' = Single Placement on Front Cover  
'3PNP' = Single Placement on Both Sides  
'3PNQ' = Single Placement in Content Body  
'3PNR' = Single Placement on Back Cover  
'3PNS' = Multiple Placements on Splash Pages  
'3PNT' = Single Placement on Front Page  
'3PNU' = Multiple Placements on Home Page  
'3PNV' = Multiple Placements on Front Side  
'3PNW' = Single Placement in Body Of Program  
'3PNX' = Multiple Placements as Flash  
'3PNY' = Multiple Placements on Inside Cover  
'3PNZ' = Single Placement in Bibliography  
'3PPA' = Single Placement on Dust Jacket  
'3PPB' = Single Placement in Closing Sequence  
'3PPC' = Multiple Placements in Packaging Interior  
'3PPD' = Single Placement in Packaging Interior  
'3PPE' = Single Placement as Flash  
'3PPF' = Multiple Placements on Front Cover  
'3PPG' = Single Placement on Splash Page  
'3PPH' = Single Placement on Inside  
'3PPI' = Multiple Placements on Landing Pages  
'3PPJ' = Multiple Placements in Body Of Advertisement  
'3PPK' = Single Placement on Inside Cover  
'3PPL' = Single Placement on Both Sides  
'3PPM' = Multiple Placements on Any Pages  
'3PPN' = Multiple Placements in Closing Sequence  
'3PPP' = Multiple Placements on Front Cover And Interior Pages  
'3PPQ' = Multiple Placements on Home Page And Secondary Pages  
'3PPR' = Single Placement in Any Part  
'3PPS' = Single Placement on Landing Page  
'3PPU' = Single Placement on Title Page  
'3PPV' = Multiple Placements on Front Cover  
'3PPW' = Single Placement as Forward  
'3PPX' = Single Placement on Packaging Exterior|Front  
'3PPY' = Single Placement on Home Page  
'3PPZ' = Multiple Placements in Body Of Program  
'3PQA' = Single Placement as Frontispiece  
'3PQB' = Multiple Placements on Wrap Around Cover  
'3PQC' = Single Placement on Back Side  
'3PQD' = Single Placement on Secondary Page  
'3PQE' = Single Placement on Spine

'3PQF' = Single Placements in Bibliography  
'3PQG' = Single Placement on Any Interior Page  
'3PQH' = Single Placement on Back Cover  
'3PQI' = Single Placement on Preface  
'3PQJ' = Single Placement on Wrap Around Cover  
'3PQK' = Multiple Placements on Both Sides  
'3PQL' = Multiple Placements in Closing Sequence  
'3PQM' = Multiple Placements on Back Side  
'3PQN' = Single Placement as Vignette  
'3PQP' = Single Placement on Pop Up  
'3PQQ' = Single Placement as Unit Opener  
'3PQS' = Multiple Placements on Back Cover  
'3PQT' = Single Placement on Table Of Contents  
'3PQU' = Single Placement in Closing Sequence  
'3PQW' = Multiple Placements on Any Interior Pages  
'3PQX' = Single Placement on Any Interior Page  
'3PQY' = Single Placement on Front Cover  
'3PQZ' = Single Placement on Index  
'3PRB' = Single Placement on Front Cover  
'3PRC' = Single Placement on Table Of Contents  
'3PRD' = Multiple Placements in Content Body  
'3PRF' = Multiple Placements on Any Interior Pages  
'3PRG' = Multiple Placements on Front Cover And Back Cover  
'3PRH' = Single Placement on Any Interior Page  
'3PRI' = Single Placement as Colophon  
'3PRJ' = Multiple Placements on Front Cover  
'3PRK' = Multiple Placements on Inside  
'3PRL' = Multiple Placements on Any Interior Pages  
'3PRM' = Single Placement on Front Cover And Back Cover  
'3PRN' = Single Placement on Any Interior Page  
'3PRP' = Single Placement in Body Of Advertisement  
'3PRQ' = Single Placement on Screen  
'3PRR' = Single Placement in Title Sequence  
'3PRS' = Single Placement in Content Body  
'3PRT' = Single Placement on Pop Up  
'3PRU' = Single Placement on Front Side  
'3PRV' = Multiple Placements on Both Sides  
'3PRW' = Multiple Placements in Any Part  
'3PRY' = Multiple Placements in Content Body  
'3PRZ' = Multiple Placements on Front Cover  
'3PSA' = Single Placement as Front Matter  
'3PSB' = Multiple Placements on Back Side  
'3PSC' = Single Placement in Title Sequence  
'3PSD' = Multiple Placements on Screen  
'3PSF' = Multiple Placements on Back Cover  
'3PSH' = Single Placement on Back Cover  
'3PSI' = Multiple Placements on Packaging Exterior|Front  
'3PSJ' = Single Placement on Front Cover  
'3PSK' = Multiple Placements in Title Sequence  
'3PSL' = Single Placement on Flap  
'3PSM' = Multiple Placements on Any Interior Pages  
'3PSN' = Multiple Placements on Back Cover  
'3PSP' = Single Placement on Back Cover  
'3PSQ' = Single Placement on Back Side  
'3PSR' = Single Placement on Inside Cover  
'3PSS' = Multiple Placements on Front Cover And Back Cover  
'3PST' = Single Placement on Any Interior Page  
'3PSU' = Multiple Placements on Inside Cover  
'3PSV' = Multiple Placements in Title Sequence  
'3PSW' = Single Placement on Item  
'3PSY' = Multiple Placements on Any Interior Pages  
'3PSZ' = Multiple Placements on Secondary Pages  
'3PTA' = Single Placement on One Side  
'3PTB' = Single Placement on Front Cover And Interior Page  
'3PTC' = Multiple Placements on Dust Jacket  
'3PTD' = Single Placements on Interior, Covers and Jacket  
'3PTE' = Multiple Placements on Interior, Covers and Jacket  
'3PTF' = Single Placement on Section Opener Page  
'3PTG' = Multiple Placements on Section Opener Page  
'3PTH' = Single Placement on Section Opener and Front Page  
'3PTI' = Multiple Placements on Section Opener and Front Page  
'3PTJ' = Single Placement on Any Covers And Interior Pages  
'3PTK' = Multiple Placements on Any Covers And Interior Pages  
'3PTL' = Single Placement on Front Cover And Back Cover  
'3PTM' = Multiple Placements on Front Cover And Back Cover

'3PTN' = Multiple Placements on Any Covers And Interior Pages  
'3PTP' = Single Placement on Any Cover And Interior Page  
'3PTQ' = Single Placement on Any Covers And Interior Pages  
'3PTR' = Multiple Placements on Any Covers And Interior Pages  
'3PTS' = Single Placement Anywhere On Packaging  
'3PTT' = Multiple Placements Anywhere On Packaging  
'3PTU' = Multiple Placements in Any Part  
'3PTV' = Single Placement in Any Part  
'3PTW' = Single Placement on Any Pages  
'3PTY' = Single Placement on Home Page And Secondary Pages  
'3PTZ' = Multiple Placements on Any Pages  
'3PUB' = Multiple Placements in Any Part  
'3PUC' = Single Placement in Any Part  
'3PUD' = Single Placement on Back Cover Or Interior Page  
'3PUF' = Single Placement on Front Cover Or Back Cover  
'3PUH' = Multiple Placements on Packaging Exterior|Back or Side  
'3PUJ' = Single Placement on Packaging Exterior|Back or Side  
'3PUL' = Any Placements  
'3PXX' = Not Applicable or None  
'4SAA' = Any Size Image|Any Size Media  
'4SAB' = Up To 1/2 Area Image|Up To A0 Display  
'4SAC' = Up To Full Page Image|Up To Full Page Media  
'4SAD' = Up To 1/4 Area Image|Up To 16 Sheet Display  
'4SAE' = Up To 14 x 20 Inch Image|Any Size Media  
'4SAF' = Up To 1/2 Area Image|Up To 4,800 Square Foot Display  
'4SAG' = Up To Full Page Image|Any Size Page  
'4SAH' = Up To Full Area Image|Up To 69 x 48 Inch Display  
'4SAI' = Up To 1/2 Area Image|Up To 180 x 150 Pixels Ad  
'4SAJ' = Up To 1/2 Area Image|Up To 11 x 36 Foot Display  
'4SAK' = Up To 1/4 Page Image|Any Size Page  
'4SAL' = Up To 1/4 Area Image|Up To Full Area Media  
'4SAM' = Up To 1/2 Area Image|Up To B1 Media  
'4SAN' = Up To Full Area Image|Up To 10 x 8 Foot Media  
'4SAP' = Up To 1/4 Screen Image|Up To 32 Inch Screen  
'4SAQ' = Up To 1/2 Area Image|Any Size Display  
'4SAR' = Up To Full Area Image|Up To 728 x 90 Pixels Ad  
'4SAS' = Up To 1/2 Area Image|Up To 24 x 36 Inch Media  
'4SAT' = Up To 75 x 75 cm Image|Up To 100 x 100 cm Media  
'4SAU' = Up To 1/2 Area Image|Up To 26 x 241 Inch Display  
'4SAV' = Up To 8 x 12 Inch Image|Any Size Media  
'4SAW' = Up To 1/2 Area Image|Up To 10,000 Square Foot Display  
'4SAX' = Up To 1/2 Area Image|Up To 4 x 8 Foot Media  
'4SAY' = Up To 1/2 Area Image|Up To 43 x 62 Inch Display  
'4SAZ' = Up To 1/2 Area Image|Up To B0 Display  
'4SBA' = Up To 1/2 Area Image|Up To 24 x 30 Inch Display  
'4SBC' = Up To 1/4 Area Image|Up To 8 Sheet Display  
'4SBD' = Up To Full Area Image|Up To 10,000 Square Foot Display  
'4SBE' = Up To 1/2 Screen Image|Up To 63 Inch Screen  
'4SBF' = Up To Full Area Image|Any Size Display  
'4SBG' = Any Size Image|Up To Full Screen Ad  
'4SBH' = Up To Full Area Image|Up To A1 Media  
'4SBI' = Up To 1/4 Area Image|Up To 10 x 8 Foot Media  
'4SBJ' = Up To 20 x 20 cm Image|Up To 100 x 100 cm Media  
'4SBK' = Up To 1/16 Page Image|Any Size Page  
'4SBL' = Up To 1/2 Area Image|Up To 8 Sheet Display  
'4SBM' = Up To Full Area Image|Up To B0 Media  
'4SBN' = Up To 1/8 Page Image|Any Size Page  
'4SBP' = Any Size Image|Any Size Page  
'4SBQ' = Up To 1/2 Area Image|Up To 40 x 60 Inch Media  
'4SBR' = Up To 1/2 Area Image|Up To 30 x 240 Inch Display  
'4SBS' = Up To 1/4 Area Image|Up To 83 x 135 Inch Display  
'4SBT' = Up To Full Area Image|Up To 30 x 40 Inch Display  
'4SBU' = Up To 1/2 Page Image|Up To 2 Page Ad  
'4SBV' = Up To 1/2 Area Image|Up To 43 x 126 Inch Display  
'4SBW' = Up To 1/2 Area Image|Up To 138 x 53 Inch Media  
'4SBX' = Up To Full Area Image|Up To 83 x 135 Inch Display  
'4SBY' = Up To 1/2 Area Image|Up To 60 x 40 Inch Display  
'4SBZ' = Up To Full Screen Image|Up To 32 Inch Screen  
'4SCA' = Up To 1/4 Area Image|Up To 468 x 60 Pixels Ad  
'4SCB' = Up To 50 x 50 cm Image|Up To 100 x 100 cm Media  
'4SCC' = Up To 1/2 Area Image|Up To B1 Display  
'4SCD' = Up To 1/4 Area Image|Up To 48 Sheet Display  
'4SCE' = Up To 20 x 20 Inch Image|Up To 40 x 40 Inch Media  
'4SCF' = Up To 1/4 Area Image|Up To 300 x 600 Pixels Ad  
'4SCG' = Up To 1/2 Area Image|Any Size Item

'4SCH' = Up To 1/4 Page Image|Up To 1/2 Page Ad  
'4SCI' = Up To 100 x 100 cm Image|Up To 100 x 100 cm Media  
'4SCJ' = Up To 1/4 Area Image|Up To B1 Media  
'4SCK' = Up To 1/4 Area Image|Up To 728 x 90 Pixels Ad  
'4SCL' = Up To 1/2 Area Image|Up To 30 x 40 Inch Display  
'4SCM' = Up To 40 x 60 Inch Image|Any Size Media  
'4SCN' = Up To 1/8 Page Image|Up To Full Page Media  
'4SCP' = Up To Full Page Image|Up To Full Page Ad  
'4SCQ' = Up To 70 x 100 cm Image|Any Size Media  
'4SCR' = Up To 1/2 Area Image|Up To 14 x 48 Foot Display  
'4SCS' = Up To 1/4 Screen Image|Up To 21 Inch Screen  
'4SCT' = Up To 40 x 40 Inch Image|Up To 40 x 40 Inch Media  
'4SCU' = Up To 6 x 9 Inch Image|Any Size Media  
'4SCV' = Up To 1/2 Page Image|Up To 1/2 Page Ad  
'4SCW' = Up To 1/2 Area Image|Up To 728 x 90 Pixels Ad  
'4SCX' = Up To Full Area Image|Any Size Display  
'4SCY' = Up To Full Screen Image|Up To 15 Inch Screen  
'4SCZ' = Up To 1/4 Screen Image|Up To 15 Inch Screen  
'4SDA' = Up To 11 x 15 cm Image|Any Size Media  
'4SDB' = Up To 20 x 24 Inch Image|Any Size Media  
'4SDC' = Up To 50 x 71 cm Image|Any Size Media  
'4SDD' = Up To 1/4 Area Image|Up To 4 Sheet Display  
'4SDE' = Up To 30 x 40 Inch Image|Any Size Media  
'4SDF' = Up To 1/2 Area Image|Up To 96 Sheet Display  
'4SDG' = Up To 24 x 30 Inch Image|Any Size Media  
'4SDH' = Up To 1/4 Area Image|Up To 27 x 141 Inch Display  
'4SDI' = Up To Full Area Image|Up To 12 x 24 Foot Media  
'4SDJ' = Up To Full Area Image|Up To 138 x 53 Inch Media  
'4SDK' = Up To Full Area Image|Up To 96 Sheet Display  
'4SDL' = Up To Full Screen Image|Any Size Screen  
'4SDM' = Up To 1/4 Area Image|Up To 27 x 85 Inch Display  
'4SDN' = Up To Full Area Image|Up To 40 x 60 Inch Media  
'4SDP' = Up To 30x 30 Inch Image|Up To 40 x 40 Inch Media  
'4SDQ' = Up To 1/2 Screen Image|Up To 100 Diagonal Foot Screen  
'4SDR' = Up To Full Area Image|Up To 26 x 241 Inch Display  
'4SDS' = Up To Full Area Image|Up To 1,200 Square Foot Display  
'4SDT' = Up To 1/4 Area Image|Up To 46 x 60 Inch Media  
'4SDU' = Up To 1/2 Area Image|Up To 4 Sheet Display  
'4SDV' = Up To 1/4 Area Image|Up To 40 x 60 Inch Media  
'4SDW' = Up To Full Area Image|Up To 43 x 62 Inch Display  
'4SDX' = Up To 1/2 Area Image|Up To 10 x 40 Foot Display  
'4SDY' = Up To 60 x 85 cm Image|Any Size Media  
'4SDZ' = Up To 1/2 Area Image|Up To A0 Media  
'4SEA' = Up To 1/4 Area Image|Up To 30 Sheet Display  
'4SEB' = Up To Full Screen Image|Up To 21 Inch Screen  
'4SEC' = Up To Full Area Image|Up To A0 Display  
'4SED' = Up To 1/2 Screen Image|Up To 15 Inch Screen  
'4SEE' = Up To 42 x 60 cm Image|Any Size Media  
'4SEF' = Up To 1/4 Area Image|Up To A1 Media  
'4SEG' = Up To Full Area Image|Up To 300 x 600 Pixels Ad  
'4SEH' = Up To 1/4 Area Image|Up To 43 x 126 Inch Display  
'4SEI' = Up To 1/4 Area Image|Up To B0 Display  
'4SEJ' = Up To 1/2 Page Image|Any Size Page  
'4SEK' = Up To 1/4 Screen Image|Up To 63 Inch Screen  
'4SEL' = Up To Full Area Image|Up To A0 Media  
'4SEM' = Up To 1/4 Screen Image|Up To 100 Diagonal Foot Screen  
'4SEN' = Up To 1/2 Area Image|Up To 16 Sheet Display  
'4SEP' = Up To 1/2 Area Image|Up To 83 x 135 Inch Display  
'4SEQ' = Up To 5 x 5 Inch Image|Up To 40 x 40 Inch Media  
'4SER' = Up To 1/2 Area Image|Up To 12 Sheet Display  
'4SES' = Up To Full Screen Image|Any Size Screen  
'4SET' = Up To Full Area Image|Up To B0 Display  
'4SEU' = Up To 1/3 Page Image|Any Size Page  
'4SEV' = Up To 21 x 30 cm Image|Any Size Media  
'4SEW' = Up To 1/4 Area Image|Up To 48 x 71 Inch Display  
'4SEX' = Up To 1/2 Area Image|Up To 46 x 60 Inch Media  
'4SEY' = Up To 1/4 Area Image|Up To 10,000 Square Foot Display  
'4SEZ' = Up To 16 x 20 Inch Image|Any Size Media  
'4SFA' = Up To 1/4 Area Image|Any Size Item  
'4SFB' = Up To 1/4 Area Image|Up To 138 x 53 Inch Media  
'4SFC' = Up To 15 x 21 cm Image|Any Size Media  
'4SFD' = Up To Full Area Image|Up To 30 Sheet Display  
'4SFE' = Up To 1/4 Area Image|Any Size Display  
'4SFF' = Up To 1/4 Area Image|Any Size Media  
'4SFG' = Up To 4 Page Image|Any Size Pages

'4SFH' = Up To 5 x 7 Inch Image|Any Size Media  
'4SFI' = Up To 2 Page Image|Any Size Pages  
'4SFJ' = Up To 2 Page Image|Any Size Pages  
'4SFK' = Up To 1/4 Area Image|Up To 30 x 40 Inch Media  
'4SFL' = Up To Full Area Image|Up To 4 Sheet Display  
'4SFM' = Up To Full Area Image|Up To 11 x 36 Foot Display  
'4SFN' = Up To 1/4 Area Image|Up To 25 x 13 Inch Media  
'4SFP' = Up To 11 x 14 Inch Image|Any Size Media  
'4SFQ' = Up To 30 x 42 cm Image|Any Size Media  
'4SFR' = Up To 2 Page Image|Any Size Ad  
'4SFS' = Up To Full Area Image|Up To 8 Sheet Display  
'4SFT' = Up To 1/2 Area Image|Up To Full Screen Ad  
'4SFU' = Up To Full Area Image|Up To 48 Sheet Display  
'4SFV' = Up To 1/2 Screen Image|Up To 21 Inch Screen  
'4SFW' = Up To Full Area Image|Up To 48 x 71 Inch Display  
'4SFX' = Up To 8 x 10 Inch Image|Any Size Media  
'4SFZ' = Up To 1/2 Area Image|Up To 27 x 141 Inch Display  
'4SGA' = Up To Full Area Image|Up To 27 x 141 Inch Display  
'4SGB' = Up To 1/2 Area Image|Up To 30 x 40 Inch Media  
'4SGC' = Up To 1/2 Screen Image|Any Size Screen  
'4SGD' = Up To Full Area Image|Up To 468 x 60 Pixels Ad  
'4SGE' = Up To Full Area Image|Up To 14 x 48 Foot Display  
'4SGF' = Up To 1/4 Page Image|Up To 1/4 Page Ad  
'4SGG' = Up To Full Area Image|Up To 46 x 60 Inch Media  
'4SGH' = Up To 1/4 Screen Image|Any Size Screen  
'4SGI' = Up To Full Area Image|Up To 24 x 30 Inch Display  
'4SGJ' = Up To 1/2 Screen Image|Up To 32 Inch Screen  
'4SGK' = Up To Full Area Image|Up To 27 x 85 Inch Display  
'4SGL' = Up To Full Page Image|Up To 2 Page Ad  
'4SGM' = Up To Full Page Image|Any Size Ad  
'4SGN' = Up To Full Area Image|Up To 43 x 126 Inch Display  
'4SGP' = Any Size Image|Any Size Media  
'4SGQ' = Up To 1/2 Area Image|Up To 48 Sheet Display  
'4SGR' = Up To Full Area Image|Up To B1 Display  
'4SGS' = Up To 1/2 Area Image|Up To 1,200 Square Foot Display  
'4SGT' = Up To 1/2 Area Image|Up To B0 Media  
'4SGU' = Up To 1/4 Area Image|Up To 14 x 48 Foot Display  
'4SGV' = Up To 1/2 Area Image|Up To 25 x 13 Inch Media  
'4SGW' = Up To 1/2 Page Image|Any Size Page  
'4SGX' = Up To Full Area Image|Up To 4,800 Square Foot Display  
'4SGY' = Up To 1/2 Screen Image|Up To 30 Diagonal Foot Screen  
'4SGZ' = Up To 3 x 4.5 Inch Image|Any Size Media  
'4SHA' = Up To 1/4 Area Image|Up To 10 x 40 Foot Display  
'4SIB' = Up To 1/4 Area Image|Up To 69 x 48 Inch Display  
'4SIC' = Up To 1/2 Area Image|Up To 27 x 85 Inch Display  
'4SID' = Up To Full Area Image|Up To 30 x 240 Inch Display  
'4SIE' = Up To 1/4 Screen Image|Up To 30 Diagonal Foot Screen  
'4SIF' = Up To Full Area Image|Up To 12 Sheet Display  
'4SIG' = Up To 18 x 25 cm Image|Any Size Media  
'4SIH' = Up To 1/4 Area Image|Up To 24 x 30 Inch Display  
'4SII' = Up To 1/2 Area Image|Up To 468 x 60 Pixels Ad  
'4SIJ' = Up To 1/2 Screen Image|Up To 10 Diagonal Foot Screen  
'4SIK' = Up To 1/4 Area Image|Up To 24 x 36 Inch Media  
'4SIL' = Up To Full Area Image|Up To 60 x 40 Inch Display  
'4SIM' = Up To 1/4 Area Image|Up To 12 x 24 Foot Media  
'4SIN' = Any Size Image|Any Size Media  
'4SIP' = Up To 1/4 Area Image|Up To B0 Media  
'4SIQ' = Up To Full Area Image|Up To 24 x 36 Inch Media  
'4SIR' = Up To 1/4 Area Image|Up To 26 x 53 Inch Media  
'4SIS' = Up To Full Area Image|Up To 16 Sheet Display  
'4SIT' = Up To Full Area Image|Up To 2,400 Square Foot Display  
'4SIU' = Up To 1/4 Area Image|Up To Full Screen Ad  
'4SIV' = Up To 10 x 10 Inch Image|Up To 40 x 40 Inch Media  
'4SIW' = Any Size Image|Any Size Pages  
'4SIX' = Up To 1/4 Area Image|Up To 11 x 36 Foot Display  
'4SIY' = Up To 1/4 Page Image|Up To Full Page Ad  
'4SIZ' = Up To 1/2 Page Image|Up To Full Page Media  
'4SJA' = Up To 1/16 Page|Any Size Page  
'4SJB' = Up To 1/4 Page Image|Any Size Page  
'4SJC' = Up To 100 x 142 cm Image|Any Size Media  
'4SJD' = Up To 21 x 30 cm Image|Any Size Media  
'4SJE' = Up To 38 x 50 Inch Image|Any Size Media  
'4SJF' = Up To Full Screen Image|Up To 63 Inch Screen  
'4SJG' = Up To 1/4 Area Image|Up To A0 Media  
'4SJI' = Up To 1/4 Area Image|Up To 4 x 8 Foot Media

'4SJ' = Up To 25 x 36 cm Image|Any Size Media  
'4SJK' = Any Size Image|Up To Full Card  
'4SJL' = Up To 1/4 Area Image|Up To 30 x 240 Inch Display  
'4SJM' = Up To 1/2 Area Image|Up To Full Area Media  
'4SJN' = Up To Full Area Image|Up To 25 x 13 Inch Media  
'4SJP' = Up To 1/4 Area Image|Up To 60 x 40 Inch Display  
'4SJQ' = Up To 1/4 Area Image|Up To 4,800 Square Foot Display  
'4SJR' = Up To 1/2 Area Image|Up To 50 x 24 Inch Media  
'4SJS' = Up To 1/8 Page Image|Any Size Page  
'4SJT' = Up To Full Area Image|Up To 180 x 150 Pixels Ad  
'4SJu' = Up To 2 Page Image|Any Size Pages  
'4SJV' = Up To Full Page Image|Any Size Page  
'4SJW' = Up To 40 x 40 cm Image|Up To 100 x 100 cm Media  
'4SJX' = Up To 1/4 Area Image|Up To B0 Display  
'4SJY' = Up To Full Screen Image|Up To 30 Diagonal Foot Screen  
'4SJZ' = Up To 3 Page Image|Any Size Pages  
'4SKA' = Up To 1/4 Area Image|Up To 20 x 30 Inch Media  
'4SKB' = Up To 11 x 14 Inch Image|Any Size Media  
'4SKC' = Up To Full Screen Image|Up To 100 Diagonal Foot Screen  
'4SKD' = Up To Full Page Image|Any Size Page  
'4SKE' = Up To 1/8 Page Image|Any Size Page  
'4SKF' = Up To 1/4 Area Image|Up To 672 Square Foot Display  
'4SKG' = Any Size Image|Any Size Screen  
'4SKH' = Up To Full Area Image|Up To 50 x 24 Inch Media  
'4SKI' = Up To 30 x 30 cm Image|Up To 100 x 100 cm Media  
'4SKJ' = Up To 1/2 Area Image|Up To A1 Media  
'4SKK' = Up To Full Area Image|Up To B0 Display  
'4SKL' = Up To 1/2 Area Image|Up To 26 x 53 Inch Media  
'4SKM' = Up To Full Area Image|Up To 26 x 53 Inch Media  
'4SKN' = Up To Full Area Image|Up To 20 x 30 Inch Media  
'4SKP' = Any Size Image|Any Size Ad  
'4SKQ' = Up To 1/4 Area Image|Up To 180 x 150 Pixels Ad  
'4SKR' = Up To 1/4 Area Image|Up To 1,200 Square Foot Display  
'4SKS' = Up To 1/2 Area Image|Up To 672 Square Foot Display  
'4SKT' = Up To 1/4 Area Image|Up To 43 x 62 Inch Display  
'4SKU' = Up To 1/2 Area Image|Up To 20 x 30 Inch Media  
'4SKV' = Up To Full Area Image|Up To 10 x 40 Foot Display  
'4SKW' = Up To 1/4 Area Image|Up To 30 x 40 Inch Display  
'4SKX' = Up To 1/4 Area Image|Up To 96 Sheet Display  
'4SKY' = Up To 1/2 Area Image|Up To 48 x 71 Inch Display  
'4SKZ' = Up To Full Area Image|Up To Full Area Media  
'4SLA' = Any Size Image|Any Size Pages  
'4SLC' = Up To 1/4 Area Image|Up To 50 x 24 Inch Media  
'4SLD' = Up To 1/2 Page Image|Any Size Page  
'4SLE' = Up To Full Screen Image|Up To 10 Diagonal Foot Screen  
'4SLF' = Up To 8 x 10 Inch Image|Any Size Media  
'4SLG' = Up To Full Area Image|Up To 4 x 8 Foot Media  
'4SLH' = Up To 30 x 42 cm Image|Any Size Media  
'4SLI' = Up To 1/2 Area Image|Up To 10 x 8 Foot Media  
'4SLJ' = Up To 1/4 Area Image|Up To 12 Sheet Display  
'4SLK' = Up To 1/4 Area Image|Up To 2,400 Square Foot Display  
'4SLL' = Up To 1/4 Area Image|Up To A0 Display  
'4SLM' = Up To 1/2 Area Image|Up To 300 x 600 Pixels Ad  
'4SLN' = Up To Full Area Image|Up To 672 Square Foot Display  
'4SLP' = Up To 1/2 Area Image|Up To 30 Sheet Display  
'4SLQ' = Up To 1/4 Area Image|Up To B1 Display  
'4SLR' = Up To Full Area Image|Any Size Item  
'4SLS' = Up To 1/2 Area Image|Up To 12 x 24 Foot Media  
'4SLT' = Up To Full Area Image|Up To 30 x 40 Inch Media  
'4SLU' = Up To Full Area Image|Up To B1 Media  
'4SLV' = Up To 1/4 Page Image|Any Size Page  
'4SLW' = Up To 1/4 Page Image|Up To Full Page Media  
'4SLX' = Up To 1/2 Area Image|Up To B0 Display  
'4SLY' = Up To 1/2 Page Image|Up To Full Page Ad  
'4SLZ' = Up To 1/4 Screen Image|Up To 10 Diagonal Foot Screen  
'4SMA' = Up To 1/2 Area Image|Up To 2,400 Square Foot Display  
'4SMB' = Up To 2 Page Image|Up To 2 Page Ad  
'4SMD' = Up To 25 x 36 cm Image|Any Size Media  
'4SME' = Up To 13 x 18 cm Image|Any Size Media  
'4SMF' = Up To 85 x 119 cm Image|Any Size Media  
'4SMG' = Up To 3/4 Page Image|Any Size Page  
'4SMH' = Up To 150 x 150 Pixels Image|Any Size Screen  
'4SMJ' = Up To 300 x 600 Pixels Image|Any Size Screen  
'4SMK' = Up To 1/2 Area Image|Any Size Media  
'4SML' = Up To Full Area Image|Any Size Media

'4SMN' = Up To 1/4 Area Image|Any Size Display  
'4SMP' = Up To 1/2 Area Image|Any Size Display  
'4SMQ' = Up To Full Area Image|Any Size Display  
'4SMR' = Up To 1/4 Area Image|Any Size Display  
'4SMS' = Up To 1/4 Screen Image|Any Size Screen  
'4SMT' = Up To 1/2 Screen Image|Any Size Screen  
'4SMU' = Up To Full Screen Image|Any Size Screen  
'4SMV' = Any Size Image|Any Size Media  
'4SMW' = Up To Full Area Image|Any Size Display  
'4SMX' = Up To 1/4 Area Image|Any Size Media  
'4SMY' = Up To 1/2 Area Image|Any Size Media  
'4SMZ' = Up To Full Area Image|Any Size Media  
'4SNG' = Up To 1/2 Area Image|Any Size Display  
'4SNO' = Up To Full Area Image|Any Size Display  
'4SUL' = Any Sizes  
'4SXX' = Not Applicable or None  
'5VAA' = All Versions  
'5VUG' = Single Edition  
'5VUK' = Single Hardcover Edition  
'5VUL' = Any Versions  
'5VUP' = Single Version  
'5VUU' = Multiple Hardcover Editions  
'5VUY' = Multiple Versions  
'5VUZ' = Single Issue  
'5VVB' = Multiple Print Versions  
'5VVC' = Single Paperback Edition  
'5VVG' = Multiple Editions  
'5VWH' = Single Edition in All Binding Formats  
'5VVJ' = Multiple Issues  
'5VVK' = Multiple Paperback Editions  
'5VVL' = Multiple Editions in All Binding Formats  
'5VVM' = Single Print Version  
'5VXX' = Not Applicable or None  
'6QAA' = Any Quantity  
'6QAB' = Up To 10,000|Impressions  
'6QAC' = Up To 1,000|Copies  
'6QAD' = Up To 10,000|Copies  
'6QAE' = Up To 100|Displays  
'6QAF' = Up To 50,000|Copies  
'6QAG' = Up To 500|Displays  
'6QAH' = Up To 100,000|Print Run  
'6QAI' = Up To 500|Copies  
'6QAK' = Up To 10|Copies  
'6QAL' = Up To 10|Displays  
'6QAM' = Any Quantity Of|Copies  
'6QAN' = Up To 50,000|Total Circulation  
'6QAP' = Up To 500|Displays  
'6QAQ' = Up To 5,000|Print Run  
'6QAR' = Up To 3 Million|Print Run  
'6QAS' = Up To 1,000|Copies  
'6QAT' = Up To 5,000|Total Circulation  
'6QUA' = One|Print Run  
'6QAV' = Up To 5 Million|Total Circulation  
'6QAW' = Up To 5|Copies  
'6QAX' = Up To 500,000|Displays  
'6QAY' = Up To 1,000|Reprints  
'6QAZ' = Up To 100|Print Run  
'6QBA' = Up To 1,000|Print Run  
'6QBB' = Up To 10,000|Total Circulation  
'6QBC' = Up To 2,500|Displays  
'6QBD' = Up To 50|Displays  
'6QBE' = One|Copy  
'6QBF' = Up To 10,000|Reprints  
'6QBG' = Up To 250,000|Print Run  
'6QBH' = Up To 40,000|Print Run  
'6QBI' = Up To 100 Million|Viewers  
'6QBK' = Four|Copies  
'6QBL' = Five|Copies  
'6QBM' = Up To 10 Million|Impressions  
'6QBN' = Up To 1 Million|Viewers  
'6QBP' = Up To 5|Displays  
'6QBQ' = Any Quantity Of|Viewers  
'6QBR' = Up To 100,000|Impressions  
'6QBS' = Up To 500|Copies  
'6QBT' = Up To 25,000|Copies

'6QBU' = One|Copy  
'6QBV' = Up To 25,000|Print Run  
'6QBW' = Up To 250,000|Displays  
'6QBX' = Up To 1 Million|Copies  
'6QBY' = Up To 1,000|Displays  
'6QBZ' = Up To 100,000|Viewers  
'6QCA' = Up To 250|Copies  
'6QCB' = Up To 100|Reprints  
'6QCC' = Any Quantity Of|Viewers  
'6QCD' = Up To 1,000|Total Circulation  
'6QCE' = Up To 250|Displays  
'6QCF' = Three|Copies  
'6QCG' = Up To 50,000|Print Run  
'6QCH' = One|Copy  
'6QCI' = Up To 500,000|Total Circulation  
'6QCJ' = Up To 5 Million|Displays  
'6QCK' = Up To 2 Million|Total Circulation  
'6QCL' = Up To 3 Million|Total Circulation  
'6QCM' = Up To 100|Copies  
'6QCN' = Up To 1 Million|Total Circulation  
'6QCP' = Up To 10|Copies  
'6QCQ' = Up To 10,000|Copies  
'6QCR' = Up To 100|Copies  
'6QCS' = Up To 100,000|Total Circulation  
'6QCT' = Up To 2 Million|Print Run  
'6QCU' = Any Quantity Of|Reprints  
'6QCV' = Up To 100,000|Viewers  
'6QCW' = Up To 5,000|Print Run  
'6QCX' = One|Display  
'6QCY' = Up To 1 Million|Impressions  
'6QCZ' = Up To 1 Million|Print Run  
'6QDA' = Up To 10|Print Run  
'6QDB' = Up To 1 Million|Displays  
'6QDC' = Up To 5 Million|Print Run  
'6QDD' = Up To 100|Viewers  
'6QDE' = Up To 250,000|Print Run  
'6QDF' = Up To 1,000|Copies  
'6QDG' = Up To 10|Reprints  
'6QDH' = Up To 10|Print Run  
'6QDI' = One|Display  
'6QDJ' = Up To 500,000|Print Run  
'6QDK' = Up To 10 Million|Total Circulation  
'6QDL' = Any Quantity Of|Print Run  
'6QDM' = Up To 500,000|Copies  
'6QDN' = Up To 100,000|Copies  
'6QDP' = Up To 50,000|Copies  
'6QDQ' = Up To 100,000|Print Run  
'6QDR' = Up To 10|Total Circulation  
'6QDS' = Up To 25,000|Displays  
'6QDT' = Up To 250,000|Total Circulation  
'6QDU' = Up To 10 Million|Print Run  
'6QDV' = Up To 50|Copies  
'6QDW' = Up To 5,000|Copies  
'6QDX' = Up To 25|Displays  
'6QDY' = Up To 5|Displays  
'6QDZ' = Up To 100,000|Displays  
'6QEА' = Up To 100|Displays  
'6QEБ' = Up To 10|Copies  
'6QEС' = Up To 10,000|Print Run  
'6QEД' = Up To 100,000|Copies  
'6QEЕ' = Up To 10,000|Copies  
'6QEФ' = Up To 25,000|Copies  
'6QEГ' = Up To 10,000|Print Run  
'6QEИ' = One|Print Run  
'6QEІ' = Any Quantity Of|Displays  
'6QEЈ' = Up To 100|Total Circulation  
'6QEЌ' = Up To 2 Million|Displays  
'6QEЉ' = Up To 25|Displays  
'6QEІ' = Up To 50|Displays  
'6QEҤ' = Up To 500,000|Print Run  
'6QEҤ' = One|Copy  
'6QEҀ' = Up To 1,000|Viewers  
'6QEҤ' = Any Quantity Of|Copies  
'6QEҤ' = Up To 50,000|Displays  
'6QEҤ' = Up To 5,000|Displays

'6QEY' = Any Quantity Of|Print Run  
'6QEY' = Any Quantity Of|Circulation  
'6QEY' = Up To 2,500|Copies  
'6QEY' = Two|Copies  
'6QEY' = Up To 100|Print Run  
'6QEY' = Up To 10,000|Viewers  
'6QFA' = Up To 3 Million|Displays  
'6QFB' = Up To 1,000|Print Run  
'6QFC' = Up To 5|Copies  
'6QFD' = Up To 25,000|Print Run  
'6QFE' = Up To 5,000|Copies  
'6QFF' = Up To 10,000|Displays  
'6QFG' = Up To 250|Displays  
'6QFH' = Up To 10,000|Viewers  
'6QFI' = One|Reprint  
'6QFJ' = Up To 10|Displays  
'6QFK' = Up To 250,000|Copies  
'6QFL' = Up To 100|Copies  
'6QFM' = Any Quantity Of|Impressions  
'6QFN' = Any Quantity Of|Copies  
'6QFP' = Up To 10 Million|Viewers  
'6QFQ' = Any Quantity Of|Displays  
'6QFR' = Up To 50,000|Print Run  
'6QFS' = Up To 25,000|Total Circulation  
'6QFT' = One|Copy  
'6QFU' = Up To 25|Total Circulation  
'6QFV' = Up To 50|Total Circulation  
'6QFW' = Up To 250|Total Circulation  
'6QFY' = Up To 500|Total Circulation  
'6QFZ' = Up To 2,500|Total Circulation  
'6QGB' = Up To 25 Million|Total Circulation  
'6QGC' = Up To 50 Million|Total Circulation  
'6QGD' = Up To 25|Copies  
'6QGE' = Up To 50|Copies  
'6QUL' = Any Quantity  
'6QXX' = Not Applicable or None  
'7DAA' = In Perpetuity  
'7DUL' = Any Durations  
'7DUQ' = Up To 10 Years  
'7DUS' = Up To 6 Months  
'7DUT' = Up To 10 Years  
'7DUV' = Up To 6 Months  
'7DUW' = Up To 1 Year  
'7DUY' = Up To 3 Years  
'7DUZ' = Up To 5 Years  
'7DWB' = Up To 7 Years  
'7DWC' = Up To 3 Months  
'7DWE' = Up To 2 Years  
'7DWG' = Up To 15 Years  
'7DWI' = Up To 1 Year  
'7DWJ' = Up To 1 Month  
'7DWK' = Up To 2 Years  
'7DWL' = Up To 1 Week  
'7DWM' = In Perpetuity  
'7DWP' = Up To 13 Weeks  
'7DWR' = In Perpetuity  
'7DWS' = Life Of Publication  
'7DWT' = Up To 52 Weeks  
'7DWU' = Up To 7 Years  
'7DWV' = Up To 5 Years  
'7DWW' = Up To 6 Months  
'7DWY' = Up To 3 Months  
'7DWZ' = Up To 2 Years  
'7DXA' = Full Term Of Copyright  
'7DXB' = Up To 1 Week  
'7DXC' = Up To 1 Day  
'7DXD' = Up To 1 Year  
'7DXE' = Up To 1 Year  
'7DXF' = Up To 1 Month  
'7DXG' = Up To 10 Years  
'7DXH' = Life Of Publication  
'7DXI' = In Perpetuity  
'7DXK' = Up To 1 Month  
'7DXL' = Up To 1 Week  
'7DXM' = Up To 1 Year

'7DXP' = Up To 3 Years  
'7DXQ' = Up To 1 Year  
'7DXR' = Up To 10 Years  
'7DXS' = In Perpetuity  
'7DXT' = Up To 1 Day  
'7DXV' = Up To 15 Years  
'7DXW' = Up To 6 Months  
'7DXX' = Not Applicable or None  
'7DXY' = Up To 15 Years  
'7DXZ' = Up To 3 Months  
'7DYA' = Up To 5 Years  
'7DYB' = Up To 6 Months  
'7DYC' = Up To 10 Years  
'7DYD' = Up To 5 Years  
'7DYE' = Up To 3 Months  
'7DYF' = Up To 1 Day  
'7DYG' = Up To 1 Day  
'7DYI' = Up To 1 Month  
'7DYJ' = Up To 2 Weeks  
'7DYK' = Up To 2 Years  
'7DYL' = Up To 3 Years  
'7DYM' = Up To 1 Year  
'7DYN' = Up To 5 Years  
'7DYP' = Up To 1 Week  
'7DYQ' = In Perpetuity  
'7DYS' = Life Of Publication  
'7DYT' = Up To 26 Weeks  
'7DYV' = Life Of Event  
'7DYW' = Up To 1 Day  
'7DYX' = Up To 6 Months  
'7DYY' = Up To 10 Years  
'7DYZ' = Up To 1 Day  
'7DZA' = Up To 1 Year  
'7DZB' = Up To 3 Years  
'7DZD' = Up To 1 Week  
'7DZF' = Up To 2 Months  
'7DZG' = Up To 1 Year  
'7DZH' = Up To 2 Years  
'7DZJ' = Up To 3 Years  
'7DZK' = Up To 5 Years  
'7DZL' = Up To 10 Years  
'7DZM' = Up To 2 Years  
'7DZN' = Up To 3 Years  
'7DZP' = Up To 2 Years  
'8IAA' = All Industries  
'8IAD' = Advertising and Marketing  
'8IAE' = Arts and Entertainment  
'8IAG' = Agriculture, Farming and Horticulture  
'8IAL' = Alcohol  
'8IAP' = Consumer Appliances and Electronics  
'8IAR' = Architecture and Engineering  
'8IAT' = Airline Transportation  
'8IAU' = Automotive  
'8IAV' = Aviation  
'8IBA' = Baby and Childcare  
'8IBE' = Beauty and Personal Care  
'8IBI' = Biotechnology  
'8IBR' = Broadcast Media  
'8ICC' = Construction and Contracting  
'8ICE' = Communications Equipment and Services  
'8ICG' = Counseling  
'8ICH' = Chemicals  
'8ICO' = Business Consulting and Services  
'8IEC' = Ecology, Environmental and Conservation  
'8IED' = Education  
'8IEM' = Employment Training and Recruitment  
'8IEN' = Energy, Utilities and Fuel  
'8IEV' = Events and Conventions  
'8IFA' = Fashion  
'8IFB' = Food and Beverage Processing  
'8IFI' = Financial Services and Banking  
'8IFL' = Food and Beverage Retail  
'8IFO' = Forestry and Wood Products  
'8IFR' = Freight and Warehousing  
'8IFS' = Food Services

'8IFU'	= Furniture
'8IGA'	= Games, Toys and Hobbies
'8IGC'	= Greeting Card
'8IGI'	= Gaming Industry
'8IGL'	= Gardening and Landscaping
'8IGO'	= Government and Politics
'8IGR'	= Graphic Design
'8IHA'	= Household Appliances
'8IHC'	= Household Cleaning Products
'8IHH'	= Hotels and Hospitality
'8IHI'	= Heavy Industry
'8IHO'	= Home Improvement
'8IHS'	= Computer Hardware, Software and Peripherals
'8IIM'	= Industry and Manufacturing
'8IIN'	= Insurance
'8IIS'	= Internet Services
'8IIT'	= Information Technologies
'8ILS'	= Legal Services
'8IME'	= Medical and Healthcare
'8IMM'	= Mining and Metals
'8IMS'	= Microelectronics and Semiconductors
'8IMU'	= Music
'8IMW'	= Military and Weapons
'8INP'	= Not For Profit, Social, Charitable
'8IOG'	= Oil and Gas
'8IOI'	= Other Industry
'8IOP'	= Office Products
'8IPM'	= Publishing Media
'8IPO'	= Personal Use Only
'8IPP'	= Pet Products and Services
'8IPR'	= Public Relations
'8IPS'	= Pharmaceuticals and Supplements
'8IPT'	= Printing and Reprographics
'8IRE'	= Real Estate
'8IRM'	= Retail Merchandise
'8IRR'	= Religion and Religious Services
'8ISC'	= Sciences
'8ISF'	= Sports, Fitness and Recreation
'8ISH'	= Shipping
'8ISM'	= Retail Sales and Marketing
'8ISO'	= Software
'8ISS'	= Safety and Security
'8ITB'	= Tobacco
'8ITE'	= Telecommunications
'8ITR'	= Travel and Tourism
'8ITX'	= Textiles and Apparel
'8IUL'	= Any Industries
'8IXX'	= Not Applicable or None
'8LAA'	= All Languages
'8LAF'	= Afrikaans
'8LAR'	= Arabic
'8LB0'	= Bosnian
'8LB0U'	= Bulgarian
'8LC0A'	= Chinese-Cantonese
'8LC0H'	= Chinese-Mandarin
'8LC0P'	= Chinese-Other
'8LC0R'	= Croatian
'8LC0Z'	= Czech
'8LD0A'	= Danish
'8LD0U'	= Dutch
'8LEN'	= English
'8LES'	= Estonian
'8LFI'	= Finnish
'8LFR'	= French
'8LG0E'	= German
'8LG0R'	= Greek
'8LHE'	= Hebrew
'8LHI'	= Hindi
'8LHU'	= Hungarian
'8LIC'	= Icelandic
'8LIG'	= Irish Gaelic
'8LIN'	= Indonesian
'8LIT'	= Italian
'8LJA'	= Japanese
'8LKO'	= Korean

'8LLA' = Latvian  
'8LMG' = Mongolian  
'8LNO' = Norwegian  
'8LOL' = Any One Language  
'8LOT' = Other Language  
'8LPO' = Polish  
'8LPR' = Portuguese  
'8LRO' = Romanian  
'8LRU' = Russian  
'8LSE' = Serbian  
'8LSG' = Scottish Gaelic  
'8LSH' = Swahili  
'8LSI' = Sindhi  
'8LSL' = Slovenian  
'8LSP' = Spanish  
'8LSV' = Slovakian  
'8LSW' = Swedish  
'8LSZ' = Swazi  
'8LTA' = Tagalog  
'8LTH' = Thai  
'8LTU' = Turkish  
'8LUL' = Any Languages  
'8LUR' = Ukrainian  
'8LXX' = Not Applicable or None  
'8LYI' = Yiddish  
'8RAA' = Worldwide  
'8RAC' = Latin America and Caribbean|All Latin America and Caribbean  
'8RAD' = Europe|Andorra  
'8RAE' = Middle East|United Arab Emirates  
'8RAF' = Middle East|Afghanistan  
'8RAG' = Latin America and Caribbean|Antigua and Barbuda  
'8RAH' = Broad International Region|All Spanish Speaking Countries  
'8RAI' = Latin America and Caribbean|Anguilla  
'8RAJ' = Africa|All Africa  
'8RAK' = Africa|All African Mediterranean Countries  
'8RAL' = Europe|Albania  
'8RAM' = Europe|Armenia  
'8RAN' = Latin America and Caribbean|Netherlands Antilles  
'8RAO' = Africa|Angola  
'8RAP' = Africa|All Central Africa  
'8RAQ' = Africa|All Eastern Africa  
'8RAR' = Latin America and Caribbean|Argentina  
'8RAS' = Oceania|American Samoa  
'8RAT' = Europe|Austria  
'8RAU' = Oceania|Australia  
'8RAV' = Asia|Up To 3 States Or Provinces  
'8RAW' = Latin America and Caribbean|Aruba  
'8RAX' = Europe|Aland Islands  
'8RAY' = Asia|China-Northeast  
'8RAZ' = Europe|Azerbaijan  
'8RBA' = Europe|Bosnia and Herzegovina  
'8RB'B' = Latin America and Caribbean|Barbados  
'8RBC' = Africa|All Southern Africa  
'8RBD' = Asia|Bangladesh  
'8RBE' = Europe|Belgium  
'8RBF' = Africa|Burkina Faso  
'8RBG' = Europe|Bulgaria  
'8RBH' = Middle East|Bahrain  
'8RBI' = Africa|Burundi  
'8RBJ' = Africa|Benin  
'8RBK' = Northern America|Canada-British Columbia  
'8RBL' = Africa|All Western Africa  
'8RBM' = Northern America|Bermuda  
'8RBN' = Asia|Brunei Darussalam  
'8RBO' = Latin America and Caribbean|Bolivia  
'8RBP' = Africa|Ascension Island  
'8RBQ' = Other Regions|Antarctica  
'8RBR' = Latin America and Caribbean|Brazil  
'8RBS' = Latin America and Caribbean|Bahamas  
'8RBT' = Asia|Bhutan  
'8RBW' = Africa|Botswana  
'8RBX' = Middle East|Up To 5 States Or Provinces  
'8RBY' = Europe|Belarus  
'8RBZ' = Latin America and Caribbean|Belize  
'8RCA' = Northern America|Canada

'8RCB' = Other Regions>All Arctic and Arctic Ocean Islands  
'8RCC' = Oceania|Cocos, Keeling Islands  
'8RCD' = Northern America|Up To 5 States Or Provinces  
'8RCE' = Northern America|USA and Canada  
'8RCF' = Africa|Central African Republic  
'8RCG' = Africa|Congo  
'8RCH' = Europe|Switzerland  
'8RCI' = Africa|Cote D'Ivoire  
'8RCJ' = Northern America|Canada-Ontario  
'8RCK' = Oceania|Cook Islands  
'8RCL' = Latin America and Caribbean|Chile  
'8RCM' = Africa|Cameroon  
'8RCN' = Asia>All China  
'8RCO' = Latin America and Caribbean|Colombia  
'8RCP' = Asia>All Eastern Asia  
'8RCR' = Latin America and Caribbean|Costa Rica  
'8RCS' = Europe|Serbia and Montenegro  
'8RCT' = Oceania>All Oceania  
'8RCU' = Latin America and Caribbean|Cuba  
'8RCV' = Africa|Cape Verde  
'8RCX' = Oceania|Christmas Island  
'8RCY' = Europe|Cyprus  
'8RCZ' = Europe|Czech Republic  
'8RDA' = Asia|Tibet  
'8RDB' = Asia>All Asia  
'8RDC' = Asia>All Central Asia  
'8RDE' = Europe|Germany  
'8RDG' = Asia>All Southern Asia  
'8RDH' = Asia>All Southeastern Asia  
'8RDJ' = Africa|Djibouti  
'8RDK' = Europe|Denmark  
'8RDM' = Latin America and Caribbean|Dominica  
'8RDO' = Latin America and Caribbean|Dominican Republic  
'8RDQ' = Other Regions>All British Indian Ocean Territories  
'8RDR' = Europe|Croatia  
'8RDS' = Europe|Faeroe Islands  
'8RDT' = Europe|Vatican City State  
'8RDU' = Europe>All Europe  
'8RDW' = Europe>All Baltic States  
'8RDX' = Europe>All Benelux  
'8RDY' = Europe>All Caucasian States  
'8RDZ' = Africa|Algeria  
'8REA' = Europe>All Eastern Europe  
'8REB' = Europe>All European Mediterranean Countries  
'8REC' = Latin America and Caribbean|Ecuador  
'8RED' = Europe>All Northern Europe  
'8REE' = Europe|Estonia  
'8REF' = Europe>All Scandinavia  
'8REG' = Africa|Egypt  
'8REH' = Africa|Western Sahara  
'8REI' = Europe>All United Kingdom  
'8REJ' = Europe>All Western Europe  
'8REK' = Broad International Region|Europe, Middle East and Africa  
'8REL' = Europe>All European Union Countries  
'8REM' = Europe|England  
'8REN' = Europe|Scotland  
'8RER' = Africa|Eritrea  
'8RES' = Europe|Spain  
'8RET' = Africa|Ethiopia  
'8REU' = Other Regions>All French Southern Territories  
'8REV' = Middle East|Palestinian Authority  
'8REX' = Middle East>All Middle East  
'8REY' = Middle East>All Middle Eastern Gulf States  
'8RFB' = Other Regions>All Northern Atlantic Ocean Islands  
'8RFF' = Oceania|Midway Islands  
'8RFH' = Oceania|Rapa Nui, Easter Island  
'8RFI' = Europe|Finland  
'8RFJ' = Oceania|Fiji  
'8RFK' = Latin America and Caribbean|Falkland Islands, Malvinas  
'8RFL' = Oceania|Tahiti  
'8RFM' = Oceania|Micronesia  
'8RFP' = Oceania|Wallis and Futuna  
'8RFQ' = Latin America and Caribbean|Patagonia  
'8RFR' = Europe|France  
'8RFS' = Latin America and Caribbean>All South America

'8RFT' = Latin America and Caribbean|All Andean Countries  
'8RFU' = Latin America and Caribbean|All Southern Cone  
'8RFV' = Latin America and Caribbean|All Amazonia  
'8RFW' = Other Regions|All Southern Atlantic Ocean Islands  
'8RFX' = Other Regions|All Southern Indian Ocean Islands  
'8RFY' = Broad International Region|All Americas  
'8RFZ' = Latin America and Caribbean|All Caribbean  
'8RGA' = Africa|Gabon  
'8RGC' = Latin America and Caribbean|All Central America  
'8RGD' = Latin America and Caribbean|Grenada  
'8RGE' = Europe|Georgia  
'8RGF' = Latin America and Caribbean|French Guiana  
'8RGG' = Europe|Guernsey  
'8RGH' = Africa|Ghana  
'8RGI' = Europe|Gibraltar  
'8RGJ' = Northern America|All Northern American Countries  
'8RGL' = Northern America|Greenland  
'8RGM' = Africa|Gambia  
'8RGN' = Africa|Guinea  
'8RGP' = Latin America and Caribbean|Guadeloupe  
'8RGQ' = Africa|Equatorial Guinea  
'8RGR' = Europe|Greece  
'8RGT' = Latin America and Caribbean|Guatemala  
'8RGU' = Oceania|Guam  
'8RGW' = Africa|Guinea-Bissau  
'8RGY' = Latin America and Caribbean|Guyana  
'8RGZ' = Latin America and Caribbean|Bequia  
'8RHA' = Latin America and Caribbean|Bonaire  
'8RHB' = Latin America and Caribbean|British Virgin Islands  
'8RHC' = Latin America and Caribbean|Curacao  
'8RHD' = Latin America and Caribbean|Saba  
'8RHE' = Latin America and Caribbean|Saint Barthelemy  
'8RHF' = Latin America and Caribbean|Saint Eustatius  
'8RHG' = Latin America and Caribbean|Saint Martin  
'8RHH' = Latin America and Caribbean|U.S. Virgin Islands  
'8RHJ' = Northern America|USA-Central  
'8RHK' = Asia|Hong Kong  
'8RHN' = Latin America and Caribbean|Honduras  
'8RHP' = Northern America|USA-Midwest  
'8RHQ' = Northern America|USA  
'8RHR' = Northern America|USA-Northeast  
'8RHS' = Northern America|USA-Pacific Northwest  
'8RHT' = Latin America and Caribbean|Haiti  
'8RHU' = Europe|Hungary  
'8RHW' = Northern America|USA-Southeast  
'8RHX' = Northern America|USA-Southwest  
'8RHY' = Northern America|USA-Minor Outlying Islands  
'8RIA' = Northern America|USA-West  
'8RIB' = Middle East|All Middle Eastern Mediterranean Countries  
'8RID' = Asia|Indonesia  
'8RIE' = Europe|Ireland  
'8RIL' = Middle East|Israel  
'8RIM' = Europe|Isle Of Man  
'8RIN' = Asia|India  
'8RIQ' = Middle East|Iraq  
'8RIR' = Middle East|Iran  
'8RIS' = Europe|Iceland  
'8RIT' = Europe|Italy  
'8RJE' = Europe|Jersey  
'8RJM' = Latin America and Caribbean|Jamaica  
'8RJO' = Middle East|Jordan  
'8RJP' = Asia|Japan  
'8RKE' = Africa|Kenya  
'8RKG' = Asia|Kyrgyzstan  
'8RKH' = Asia|Cambodia  
'8RKI' = Oceania|Kiribati  
'8RKM' = Oceania|Comoros  
'8RKN' = Latin America and Caribbean|Saint Kitts and Nevis  
'8RKP' = Asia|North Korea  
'8RKR' = Asia|South Korea  
'8RKW' = Middle East|Kuwait  
'8RKY' = Latin America and Caribbean|Cayman Islands  
'8RKZ' = Asia|Kazakhstan  
'8RLA' = Asia|Laos  
'8RLB' = Middle East|Lebanon

'8RLC' = Latin America and Caribbean|Saint Lucia  
'8RLI' = Europe|Liechtenstein  
'8RLK' = Oceania|Sri Lanka  
'8RLR' = Africa|Liberia  
'8RLS' = Africa|Lesotho  
'8RLT' = Europe|Lithuania  
'8RLU' = Europe|Luxembourg  
'8RLV' = Europe|Latvia  
'8RLY' = Africa|Libyan Arab Jamahiriya  
'8RMA' = Africa|Morocco  
'8RMC' = Europe|Monaco  
'8RMD' = Europe|Moldova  
'8RMG' = Oceania|Madagascar  
'8RMH' = Oceania|Marshall Islands  
'8RMK' = Europe|Macedonia  
'8RML' = Africa|Mali  
'8RMM' = Asia|Myanmar  
'8RMN' = Asia|Mongolia  
'8RMO' = Asia|Macao  
'8RMP' = Oceania|Northern Mariana Islands  
'8RMQ' = Latin America and Caribbean|Martinique  
'8RMR' = Africa|Mauritania  
'8RMS' = Latin America and Caribbean|Montserrat  
'8RMT' = Europe|Malta  
'8RMU' = Oceania|Mauritius  
'8RMV' = Asia|Maldives  
'8RMW' = Africa|Malawi  
'8RMX' = Latin America and Caribbean|Mexico  
'8RMY' = Asia|Malaysia  
'8RMZ' = Africa|Mozambique  
'8RNA' = Africa|Namibia  
'8RNC' = Oceania|New Caledonia  
'8RNE' = Africa|Niger  
'8RNF' = Oceania|Norfolk Island  
'8RNG' = Africa|Nigeria  
'8RNI' = Latin America and Caribbean|Nicaragua  
'8RNL' = Europe|Netherlands  
'8RNO' = Europe|Norway  
'8RNP' = Asia|Nepal  
'8RNR' = Oceania|Nauru  
'8RNU' = Oceania|Niue  
'8RNZ' = Oceania|New Zealand  
'8ROM' = Middle East|Oman  
'8RPA' = Latin America and Caribbean|Panama  
'8RPE' = Latin America and Caribbean|Peru  
'8RPF' = Oceania|French Polynesia  
'8RPG' = Oceania|Papua New Guinea  
'8RPH' = Asia|Philippines  
'8RPK' = Asia|Pakistan  
'8RPL' = Europe|Poland  
'8RPM' = Northern America|Saint Pierre and Miquelon  
'8RPN' = Oceania|Pitcairn Islands  
'8RPR' = Latin America and Caribbean|Puerto Rico  
'8RPT' = Europe|Portugal  
'8RPW' = Oceania|Palau  
'8RPY' = Latin America and Caribbean|Paraguay  
'8RQA' = Middle East|Qatar  
'8RQB' = Africa|One Metropolitan Area, Adjoining Cities  
'8RQC' = Africa|One Minor City, Up To 250,000 Population  
'8RQD' = Asia|One Major City, Over 250,000 Population  
'8RQE' = Asia|One Metropolitan Area, Adjoining Cities  
'8RQF' = Asia|One Minor City, Up To 250,000 Population  
'8RQJ' = Europe|One Major City, Over 250,000 Population  
'8RQK' = Europe|One Metropolitan Area, Adjoining Cities  
'8RQL' = Europe|One Minor City, Up To 250,000 Population  
'8RQM' = Latin America and Caribbean|One Major City, Over 250,000 Population  
'8RQN' = Latin America and Caribbean|One Metropolitan Area, Adjoining Cities  
'8RQQ' = Latin America and Caribbean|One Minor City, Up To 250,000 Population  
'8RQP' = Middle East|One Major City, Over 250,000 Population  
'8RQR' = Middle East|One Metropolitan Area, Adjoining Cities  
'8RQS' = Middle East|One Minor City, Up To 250,000 Population  
'8RQT' = Northern America|One Major City, Over 250,000 Population  
'8RQU' = Northern America|One Metropolitan Area, Adjoining Cities  
'8RQV' = Northern America|One Minor City, Up To 250,000 Population  
'8RQW' = Oceania|One Major City, Over 250,000 Population

'8RQX' = Africa|One Major City, Over 250,000 Population  
'8RQY' = Oceania|One Metropolitan Area, Adjoining Cities  
'8RQZ' = Oceania|One Minor City, Up To 250,000 Population  
'8RRB' = Africa|One State Or Province  
'8RRC' = Asia|One State Or Province  
'8RRE' = Africa|Reunion  
'8RRF' = Europe|One State Or Province  
'8RRG' = Latin America and Caribbean|One State Or Province  
'8RRH' = Middle East|One State Or Province  
'8RRJ' = Northern America|One State Or Province  
'8RRK' = Oceania|One State Or Province  
'8RRO' = Europe|Romania  
'8RRU' = Europe|Russian Federation  
'8RRW' = Africa|Rwanda  
'8RSA' = Middle East|Saudi Arabia  
'8RSB' = Oceania|Solomon Islands  
'8RSC' = Oceania|Seychelles  
'8RSD' = Africa|Sudan  
'8RSE' = Europe|Sweden  
'8RSG' = Asia|Singapore  
'8RSH' = Africa|Saint Helena  
'8RSI' = Europe|Slovenia  
'8RSK' = Europe|Slovakia  
'8RSL' = Africa|Sierra Leone  
'8RSM' = Europe|San Marino  
'8RSN' = Africa|Senegal  
'8RSO' = Africa|Somalia  
'8RSR' = Latin America and Caribbean|Suriname  
'8RST' = Africa|Sao Tome and Principe  
'8RSV' = Latin America and Caribbean|El Salvador  
'8RSY' = Middle East|Syria  
'8RSZ' = Africa|Swaziland  
'8RTC' = Latin America and Caribbean|Turks and Caicos Islands  
'8RTD' = Africa|Chad  
'8RTG' = Africa|Togo  
'8RTH' = Asia|Thailand  
'8RTJ' = Asia|Tajikistan  
'8RTK' = Oceania|Tokelau  
'8RTL' = Asia|Timor-Leste  
'8RTM' = Asia|Turkmenistan  
'8RTN' = Africa|Tunisia  
'8RTO' = Oceania|Tonga  
'8RTR' = Middle East|Turkey  
'8RTT' = Latin America and Caribbean|Trinidad and Tobago  
'8RTV' = Oceania|Tuvalu  
'8RTW' = Asia|Taiwan  
'8RTZ' = Africa|Tanzania, United Republic Of  
'8RUA' = Europe|Ukraine  
'8RUB' = Asia|China-East  
'8RUC' = Asia|China-North  
'8RUD' = Asia|China-South Central  
'8RUF' = Asia|China-Southwest  
'8RUG' = Africa|Uganda  
'8RUH' = Europe|Northern Ireland  
'8RUI' = Europe|Wales  
'8RUJ' = Latin America and Caribbean>All Latin America  
'8RUK' = Northern America|USA-All Territories, Protectorates, Dependencies, Outposts  
'8RUL' = Any Regions  
'8RUM' = Northern America|Canada-Prairies  
'8RUN' = Northern America|Canada-Atlantic Provinces  
'8RUP' = Northern America|Canada-Quebec  
'8RUQ' = Northern America|Canada-Northern Territories  
'8RUR' = Oceania|All Australia and New Zealand  
'8RUS' = Oceania|All Oceania excluding Australia and New Zealand  
'8RUY' = Latin America and Caribbean|Uruguay  
'8RUZ' = Asia|Uzbekistan  
'8RVC' = Latin America and Caribbean|Saint Vincent and The Grenadines  
'8RVE' = Latin America and Caribbean|Venezuela  
'8RVN' = Asia|Viet Nam  
'8RVU' = Oceania|Vanuatu  
'8RWA' = Broad International Region|Worldwide Excluding Northern America  
'8RWB' = Broad International Region|Worldwide Excluding USA  
'8RWC' = Broad International Region|Worldwide Excluding USA and Europe  
'8RWD' = Broad International Region|Worldwide Excluding Europe  
'8RWE' = Broad International Region|Worldwide Excluding USA and UK

'8RWF' = Broad International Region|Worldwide Excluding UK  
'8RWG' = Broad International Region>All English Speaking Countries  
'8RWH' = Broad International Region>All English Speaking Countries Excluding USA  
'8RWI' = Broad International Region>All Spanish Speaking Countries Excluding USA  
'8RWJ' = Broad International Region|USA, Canada and Mexico  
'8RWS' = Oceania|Samoa  
'8RXX' = Not Applicable or None  
'8RYB' = Africa|Up To 3 States Or Provinces  
'8RYC' = Africa|Up To 5 States Or Provinces  
'8RYD' = Asia|Up To 5 States Or Provinces  
'8RYE' = Middle East|Yemen  
'8RYF' = Europe|Up To 3 States Or Provinces  
'8RYG' = Europe|Up To 5 States Or Provinces  
'8RYH' = Latin America and Caribbean|Up To 3 States Or Provinces  
'8RYI' = Latin America and Caribbean|Up To 5 States Or Provinces  
'8RYJ' = Middle East|Up To 3 States Or Provinces  
'8RYK' = Northern America|Up To 3 States Or Provinces  
'8RYL' = Oceania|Up To 3 States Or Provinces  
'8RYM' = Oceania|Up To 5 States Or Provinces  
'8RYT' = Africa|Mayotte  
'8RZA' = Africa|South Africa  
'8RZM' = Africa|Zambia  
'8RZW' = Africa|Zimbabwe  
'9EIN' = Exclusivity For Industry  
'9ELA' = Exclusivity For Language  
'9EME' = Exclusivity For Media  
'9ENE' = Non-Exclusive  
'9ERE' = Exclusivity For Region  
'9EXC' = All Exclusive  
'9EXX' = Not Applicable or None

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(This document generated automatically by Image::ExifTool::BuildTagLookup)  
Last revised Sep 22, 2025

[<-- ExifTool Tag Names](#)

# PNG Tags

Tags extracted from PNG images. See <http://www.libpng.org/pub/png/spec/1.2/> for the official PNG 1.2 specification.

According to the specification, a PNG file should end at the IEND chunk, however ExifTool will preserve any data found after this when writing unless it is specifically deleted with `-Trailer:All=`. When reading, a minor warning is issued if this trailer exists, and ExifTool will attempt to parse this data as additional PNG chunks.

Also according to the PNG specification, there is no restriction on the location of text-type chunks (tEXt, zTXt and iTxt). However, certain utilities (including some Apple and Adobe utilities) won't read the XMP iTxt chunk if it comes after the IDAT chunk, and at least one utility won't read other text chunks here. For this reason, when writing, ExifTool 11.63 and later create new text chunks (including XMP) before IDAT, and move existing text chunks to before IDAT.

The PNG format contains CRC checksums that are validated when reading with either the [Verbose](#) or [Validate](#) option. When writing, these checksums are validated by default, but the [FastScan](#) option may be used to bypass this check if speed is more of a concern.

Tag ID	Tag Name	Writable	Values / Notes
'IHDR'	ImageHeader	-	--> <a href="#">PNG ImageHeader Tags</a>
'PLTE'	Palette	no	
'acTL'	AnimationControl	-	--> <a href="#">PNG AnimationControl Tags</a>
'bKGD'	BackgroundColor	no	
'cHRM'	PrimaryChromaticities	-	--> <a href="#">PNG PrimaryChromaticities Tags</a>
'cICP'	CICodePoints	-	--> <a href="#">PNG CICodePoints Tags</a>
'caBX'	JUMBF	-	--> <a href="#">Jpeg2000 Tags</a>
'cPlp'	OLEInfo	-	--> <a href="#">FlashPix Tags</a>
'dSIG'	DigitalSignature	no	
'eXIf'	eXIf	-	--> <a href="#">EXIF Tags</a> (this is where ExifTool will create new EXIF)
'fRAC'	FractalParameters	no	
'gAMA'	Gamma	yes!	(ExifTool reports the gamma for decoding the image, which is consistent with the EXIF convention, but is the inverse of the stored encoding gamma)
'gIFg'	GIFGraphicControlExtension	no	
'gIFT'	GIFPlainTextExtension	no	
'gIFx'	GIFApplicationExtension	no	
'gdAT'	GainMapImage	no	
'hIST'	PaletteHistogram	no	
'iCCP'	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a> (this is where ExifTool will write a new ICC_Profile. When creating a new ICC_Profile, the SRGBRendering tag should be deleted if it exists)
'iCCP-name'	ProfileName	yes	(not a real tag ID, this tag represents the iCCP profile name, and may only be written when the ICC_Profile is written)
'iDOT'	AppleDataOffsets	no	
'iTXT'	InternationalText	-	--> <a href="#">PNG TextualData Tags</a>
'meTa'	MeTa	-	--> <a href="#">XMP XML Tags</a>
'oFFs'	ImageOffset	no	
'pCAL'	PixelCalibration	no	
'pHYS'	PhysicalPixel	-	--> <a href="#">PNG PhysicalPixel Tags</a>
'sBIT'	SignificantBits	no	
'sCAL'	SubjectScale	-	--> <a href="#">PNG SubjectScale Tags</a>
'sPLT'	SuggestedPalette	no	
'sRGB'	SRGBRendering	yes!	(this chunk should not be present if an iCCP chunk exists) 0 = Perceptual 1 = Relative Colorimetric 2 = Saturation 3 = Absolute Colorimetric
'sTER'	StereolImage	-	--> <a href="#">PNG StereolImage Tags</a>
'seAI'	SEAL	-	--> <a href="#">XMP SEAL Tags</a>

'tEXT'	TextualData	-	--> <a href="#">PNG TextualData Tags</a>
'tIME'	ModifyDate	yes	
'tRNS'	Transparency	no	
'tXMP'	XMP	-	--> <a href="#">XMP Tags</a> (obsolete location specified by a September 2001 XMP draft)
'vpAg'	VirtualPage	-	--> <a href="#">PNG VirtualPage Tags</a>
'zTXT'	CompressedText	-	--> <a href="#">PNG TextualData Tags</a>
'zIIf'	zIIf	-	--> <a href="#">EXIF Tags</a> (a once-proposed chunk for compressed EXIF)

## PNG ImageHeader Tags

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
4	ImageHeight	no	
8	BitDepth	no	
9	ColorType	no	0 = Grayscale 2 = RGB 3 = Palette 4 = Grayscale with Alpha 6 = RGB with Alpha
10	Compression	no	0 = Deflate/Inflate
11	Filter	no	0 = Adaptive
12	Interlace	no	0 = Noninterlaced 1 = Adam7 Interlace

## PNG AnimationControl Tags

Tags found in the Animation Control chunk. See [https://wiki.mozilla.org/APNG\\_Specification](https://wiki.mozilla.org/APNG_Specification) for details.

Index4	Tag Name	Writable	Values / Notes
0	AnimationFrames	no	
1	AnimationPlays	no	

## PNG PrimaryChromaticities Tags

Index4	Tag Name	Writable	Values / Notes
0	WhitePointX	no	
1	WhitePointY	no	
2	RedX	no	
3	RedY	no	
4	GreenX	no	
5	GreenY	no	
6	BlueX	no	
7	BlueY	no	

## PNG CICodePoints Tags

These tags are found in the PNG cICP chunk and belong to the PNG-cICP family 1 group.

Index1	Tag Name	Writable	Values / Notes
0	ColorPrimaries	no	1 = BT.709 2 = Unspecified 4 = BT.470 System M (historical) 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 8 = Generic film (color filters using illuminant C) 9 = BT.2020, BT.2100 10 = SMPTE 428 (CIE 1921 XYZ) 11 = SMPTE RP 431-2

1 TransferCharacteristics	no	0 = For future use (0) 1 = BT.709 2 = Unspecified 3 = For future use (3) 4 = BT.470 System M (historical) 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 M 8 = Linear 9 = Logarithmic (100 : 1 range) 10 = Logarithmic (100 * Sqrt(10) : 1 range) 11 = IEC 61966-2-4 12 = BT.1361 13 = sRGB or sYCC 14 = BT.2020 10-bit systems 15 = BT.2020 12-bit systems 16 = SMPTE ST 2084, ITU BT.2100 PQ 17 = SMPTE ST 428 18 = BT.2100 HLG, ARIB STD-B67
2 MatrixCoefficients	no	0 = Identity matrix 1 = BT.709 2 = Unspecified 3 = For future use (3) 4 = US FCC 73.628 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 M 8 = YCgCo 9 = BT.2020 non-constant luminance, BT.2100 YCbCr 10 = BT.2020 constant luminance 11 = SMPTE ST 2085 YDzDx 12 = Chromaticity-derived non-constant luminance 13 = Chromaticity-derived constant luminance 14 = BT.2100 ICtCp
3 VideoFullRangeFlag	no	

## PNG TextualData Tags

The PNG TextualData format allows arbitrary tag names to be used. The tags listed below are the only ones that can be written (unless new user-defined tags are added via the configuration file), however ExifTool will extract any other TextualData tags that are found. All TextualData tags (including tags not listed below) are removed when deleting all PNG tags.

These tags may be stored as tEXt, zTXt or iTXt chunks in the PNG image. By default ExifTool writes new string-value tags as uncompressed tEXt, or compressed zTXt if the [Compress](#) (-z) option is used and Compress::Zlib is available. Alternate language tags and values containing special characters (unless the Latin character set is used) are written as iTXt, and compressed if the [Compress](#) option is used and Compress::Zlib is available. Raw profile information is always created as compressed zTXt if Compress::Zlib is available, or tEXt otherwise. Standard XMP is written as uncompressed iTXt. User-defined tags may set an 'iTEx' flag in the tag definition to be written only as iTXt.

Alternate languages are accessed by suffixing the tag name with a '-', followed by an RFC 3066 language code (eg. "PNG:Comment-fr", or "Title-en-US"). See <http://www.ietf.org/rfc/rfc3066.txt> for the RFC 3066 specification.

Some of the tags below are not registered as part of the PNG specification, but are included here because they are generated by other software such as ImageMagick.

Tag ID	Tag Name	Writable	Values / Notes
'Artist'	Artist	string	(unregistered)
'Author'	Author	string	
'Collection'	Collection	string	
'Comment'	Comment	string	
'Copyright'	Copyright	string	
'Creation Time'	CreationTime	string	(stored in RFC-1123 format and converted to/from EXIF format by ExifTool)
'Description'	Description	string	
'Disclaimer'	Disclaimer	string	
'Document'	Document	string	(unregistered)

'Label'	Label	string	(unregistered)
'Make'	Make	string	(unregistered)
'Model'	Model	string	(unregistered)
'Raw profile type 8bim'	Photoshop_Profile	-	--> <a href="#">Photoshop Tags</a> (unregistered)
'Raw profile type APP1'	APP1_Profile	-	--> <a href="#">EXIF Tags</a> --> <a href="#">XMP Tags</a> (unregistered)
'Raw profile type exif'	EXIF_Profile	-	--> <a href="#">EXIF Tags</a> (unregistered)
'Raw profile type icc'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a> (unregistered)
'Raw profile type icm'	ICC_Profile	-	--> <a href="#">ICC Profile Tags</a> (unregistered)
'Raw profile type iptc'	IPTC_Profile	-	--> <a href="#">Photoshop Tags</a> (unregistered. May be either IPTC IIM or Photoshop IRB format. This is where ExifTool will add new IPTC, inside a Photoshop IRB container)
'Raw profile type xmp'	XMP_Profile	-	--> <a href="#">XMP Tags</a> (unregistered)
'Software'	Software	string	
'Source'	Source	string	
'TimeStamp'	TimeStamp	string	(unregistered)
'Title'	Title	string	
'URL'	URL	string	(unregistered)
'Warning'	PNGWarning	string	
'XML:com.adobe.xmp'	XMP	-	--> <a href="#">XMP Tags</a> (unregistered, but this is the location according to the June 2002 or later XMP specification, and is where ExifTool will add a new XMP chunk if the image didn't already contain XMP)
'aesthetic_score'	AestheticScore	string	(unregistered)
'create-date'	CreateDate	string	(unregistered)
'modify-date'	ModDate	string	(unregistered)
'parameters'	Parameters	string	(unregistered)

## PNG PhysicalPixel Tags

These tags are found in the PNG pHYs chunk and belong to the PNG-pHYs family 1 group. They are all created together with default values if necessary when any of these tags is written, and may only be deleted as a group.

Index1	Tag Name	Writable	Values / Notes
0	PixelsPerUnitX	int32u	(default 2834)
4	PixelsPerUnitY	int32u	(default 2834)
8	PixelUnits	int8u	(default meters) 0 = Unknown 1 = meters

## PNG SubjectScale Tags

Index1	Tag Name	Writable	Values / Notes
0	SubjectUnits	no	1 = meters 2 = radians
1	SubjectPixelWidth	no	
2	SubjectPixelHeight	no	

## PNG StereolImage Tags

Index1	Tag Name	Writable	Values / Notes
0	StereoMode	no	0 = Cross-fuse Layout 1 = Diverging-fuse Layout

# PNG VirtualPage Tags

Index	Tag Name	Writable	Values / Notes
0	VirtuallImageWidth	no	
1	VirtuallImageHeight	no	
2	VirtualPageUnits	no	

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*Last revised Feb 26, 2025*

[<-- ExifTool Tag Names](#)

# PSP Tags

Tags extracted from Paint Shop Pro images (PSP, PSPIMAGE, PSPFRAME, PSPSHAPE, PSPTUBE and TUB extensions).

Tag ID	Tag Name	Writable	Values / Notes
'FileVersion'	FileVersion	no	
0x0000	ImageInfo	-	--> <a href="#">PSP Image Tags</a> --> <a href="#">PSP Image Tags</a>
0x0001	CreatorInfo	-	--> <a href="#">PSP Creator Tags</a>
0x000a	ExtendedInfo	-	--> <a href="#">PSP Ext Tags</a>

## PSP Image Tags

Index1	Tag Name	Writable	Values / Notes
0	ImageWidth	no	
4	ImageHeight	no	
8	ImageResolution	no	
16	ResolutionUnit	no	0 = None 1 = inches 2 = cm
17	Compression	no	0 = None 1 = RLE 2 = LZ77 3 = JPEG
19	BitsPerSample	no	
21	Planes	no	
23	NumColors	no	

## PSP Creator Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Title	no	
0x0001	CreateDate	no	
0x0002	ModifyDate	no	
0x0003	Artist	no	
0x0004	Copyright	no	
0x0005	Description	no	
0x0006	CreatorAppID	no	0 = Unknown 1 = Paint Shop Pro
0x0007	CreatorAppVersion	no	

## PSP Ext Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0003	EXIFInfo	-	--> <a href="#">EXIF Tags</a>

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Last revised Oct 12, 2010

[--> ExifTool Tag Names](#)

# Palm Tags

Information extracted from Palm database files (PDB and PRC extensions), Mobipocket electronic books (MOBI), and Amazon Kindle KF7 and KF8 books (AZW and AZW3).

Index4	Tag Name	Writable	Values / Notes
0	DatabaseName	no	
9	CreateDate	no	
10	ModifyDate	no	
11	LastBackupDate	no	
12	ModificationNumber	no	
15	PalmFileType	no	'.pdfADBE' = Adobe Reader 'BDOCWrds' = WordSmith 'BOOKMOBI' = Mobipocket 'BVokBDIC' = BDicty 'DATALSdb' = LIST 'DB99DBOS' = DB (Database program) 'DataPPRs' = eReader 'DataPlkr' = Plucker 'DataSprd' = QuickSheet 'DataTMI' = TealMeal 'DataTIPt' = TealPaint 'InfoINDB' = InfoView 'InfoTIIf' = TealInfo 'JbDbJBas' = JFile 'JfDbJFfil' = JFile Pro 'Mdb1Mdb1' = MobileDB 'PNRdPPRs' = eReader 'PmDBPmDB' = HanDBase 'SDocSiIIX' = iSilo 3 'SM01SMem' = SuperMemo 'TEXtREAd' = PalmDOC 'TEXtTIDc' = TealDoc 'TdatTide' = Tides 'ToGoToGo' = iSilo 'ToRaTRPW' = TomeRaider 'dataTDBP' = ThinkDB 'vIMGView' = FireViewer (ImageViewer) 'zTXTGPIm' = Weasel

# Palm MOBI Tags

Information extracted from the MOBI header of Mobipocket and Amazon Kindle KF7 and KF8 files.

Index4	Tag Name	Writable	Values / Notes
0	Compression	no	1 = None 2 = PalmDOC 17480 = HUFF/CDIC
1	UncompressedTextLength	no	
3	Encryption	no	0 = None 1 = Old Mobipocket 2 = Mobipocket
6	MobiType	no	2 = Mobipocket Book 3 = PalmDoc Book 4 = Audio 232 = mobipocket? generated by kindlegen1.2 248 = KF8: generated by kindlegen2 257 = News 258 = News_Feed 259 = News_Magazine 513 = PICS 514 = WORD 515 = XLS 516 = PPT 517 = TEXT 518 = HTML
7	CodePage	no	1252 = Windows Latin 1 (Western European) 65001 = Unicode (UTF-8)
9	MobiVersion	no	

21 BookName	no
26 MinimumVersion	no

## Palm EXTH Tags

Information extracted from the MOBI extended header.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	DRMServerID	no	
0x0002	DRMCommerceID	no	
0x0003	DRM_E-BookBaseID	no	
0x0064	Author	no	
0x0065	Publisher	no	
0x0066	Imprint	no	
0x0067	Description	no	
0x0068	ISBN	no	
0x0069	Subject	no+	
0x006a	PublishDate	no	
0x006b	Review	no	
0x006c	Contributor	no	
0x006d	Rights	no	
0x006e	SubjectCode	no	
0x006f	BookType	no	
0x0070	Source	no	
0x0071	ASIN	no	
0x0072	BookVersion	no	
0x0073	SampleFlag	no	
0x0074	StartReading	no	
0x0075	Adult	no	
0x0076	RetailPrice	no	
0x0077	RetailPriceCurrency	no	
0x007d	ResourceCount	no	
0x0081	KF8CoverURI	no	
0x00c8	DictionaryShortName	no	
0x00cc	CreatorSoftware	no	1 = Mobigen 2 = Mobipocket 200 = KindleGen (Windows) 201 = KindleGen (Linux) 202 = KindleGen (Mac)
0x00cd	CreatorMajorVersion	no	
0x00ce	CreatorMinorVersion	no	
0x00cf	CreatorBuildNumber	no	
0x00d0	Watermark	no	
0x00d1	Tamper-proofKeys	no	
0x0191	ClippingLimit	no	
0x0192	PublisherLimit	no	
0x0194	TextToSpeech	no	0 = Enabled 1 = Disabled
0x0195	RentalFlag	no	
0x0196	RentalExpirationDate	no	
0x01f5	CDEType	no	
0x01f6	LastUpdateTime	no	
0x01f7	UpdatedTitle	no	
0x01f8	ASIN2	no	
0x020c	Language	no	
0x020d	Alignment	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
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[<-- ExifTool Tag Names](#)

# Panasonic Tags

These tags are used in Panasonic/Leica cameras.

Tag ID	Tag Name	Writable	Values / Notes	
0x0001	ImageQuality	int16u	(quality of the main image, which may be in a different file) 1 = TIFF      7 = RAW 2 = High      9 = Motion Picture 3 = Normal    11 = Full HD Movie 6 = Very High 12 = 4k Movie	
0x0002	FirmwareVersion	undef	(for some camera models such as the FZ30 this may be an internal production reference number and not the actual firmware version)	
0x0003	WhiteBalance	int16u	1 = Auto                11 = Manual 2 2 = Daylight            12 = Shade 3 = Cloudy             13 = Kelvin 4 = Incandescent      14 = Manual 3 5 = Manual             15 = Manual 4 8 = Flash              19 = Auto (cool) 10 = Black & White	
0x0007	FocusMode	int16u	1 = Auto                6 = AF-S 2 = Manual             7 = AF-C 4 = Auto, Focus button 8 = AF-F 5 = Auto, Continuous	
0x000f	AFAreaMode	int8u[2]	(DMC-FZ10) '0 1' = Spot Mode On '0 16' = Spot Mode Off (other models) 16 = Normal? '0 1' = 9-area '0 16' = 3-area (high speed) '0 23' = 23-area '0 49' = 49-area '0 225' = 225-area '1 0' = Spot Focusing '1 1' = 5-area '16 0' = 1-area '16 16' = 1-area (high speed) '16 32' = 1-area + '17 0' = Full Area '32 0' = Tracking '32 1' = 3-area (left)? '32 2' = 3-area (center)? '32 3' = 3-area (right)? '32 16' = Zone '32 18' = Zone (horizontal/vertical) '64 0' = Face Detect '64 1' = Face Detect (animal detect on) '64 2' = Face Detect (animal detect off) '128 0' = Pinpoint focus '240 0' = Tracking	
0x001a	ImageStabilization	int16u	2 = On, Optical 3 = Off 4 = On, Mode 2 5 = On, Optical Panning 6 = On, Body-only 7 = On, Body-only Panning 9 = Dual IS 10 = Dual IS Panning 11 = Dual2 IS 12 = Dual2 IS Panning	
0x001c	MacroMode	int16u	1 = On 2 = Off 257 = Tele-Macro 513 = Macro Zoom	
0x001f	ShootingMode	int16u	1 = Normal              43 = Pin Hole 2 = Portrait             44 = Film Grain 3 = Scenery             45 = My Color 4 = Sports              46 = Photo Frame 5 = Night Portrait     48 = Movie 6 = Program             51 = HDR 7 = Aperture Priority   52 = Peripheral Defocus 8 = Shutter Priority    55 = Handheld Night Shot	

9 = Macro	57 = 3D
10 = Spot	59 = Creative Control
11 = Manual	60 = Intelligent Auto Plus
12 = Movie Preview	62 = Panorama
13 = Panning	63 = Glass Through
14 = Simple	64 = HDR
15 = Color Effects	66 = Digital Filter
16 = Self Portrait	67 = Clear Portrait
17 = Economy	68 = Silky Skin
18 = Fireworks	69 = Backlit Softness
19 = Party	70 = Clear in Backlight
20 = Snow	71 = Relaxing Tone
21 = Night Scenery	72 = Sweet Child's Face
22 = Food	73 = Distinct Scenery
23 = Baby	74 = Bright Blue Sky
24 = Soft Skin	75 = Romantic Sunset
25 = Candlelight	Glow
26 = Starry Night	76 = Vivid Sunset Glow
27 = High Sensitivity	77 = Glistening Water
28 = Panorama Assist	78 = Clear Nightscape
29 = Underwater	79 = Cool Night Sky
30 = Beach	80 = Warm Glowing
31 = Aerial Photo	Nightscape
32 = Sunset	81 = Artistic Nightscape
33 = Pet	82 = Glittering Illuminations
34 = Intelligent ISO	83 = Clear Night Portrait
35 = Clipboard	84 = Soft Image of a
36 = High Speed Continuous	Flower
Shooting	85 = Appetizing Food
37 = Intelligent Auto	86 = Cute Dessert
39 = Multi-aspect	87 = Freeze Animal Motion
41 = Transform	88 = Clear Sports Shot
42 = Flash Burst	89 = Monochrome
	90 = Creative Control
	92 = Handheld Night Shot

0x0020	Audio	int16u	1 = Yes 2 = No 3 = Stereo
0x0021	DataDump	no	
0x0023	WhiteBalanceBias	int16s	
0x0024	FlashBias	int16s	
0x0025	InternalSerialNumber	undef[16]	(this number is unique, and contains the date of manufacture, but is not the same as the number printed on the camera body)
0x0026	PanasonicExifVersion	undef	
0x0027	VideoFrameRate	int16u	(only valid for older models) 0 = n/a
0x0028	ColorEffect	int16u	1 = Off                    5 = Sepia 2 = Warm                 6 = Happy 3 = Cool                  8 = Vivid 4 = Black & White
0x0029	TimeSincePowerOn	int32u	(time in 1/100 s from when the camera was powered on to when the image is written to memory card)
0x002a	BurstMode	int16u	(decoding may be different for some models) 0 = Off 1 = On 2 = Auto Exposure Bracketing (AEB) 3 = Focus Bracketing 4 = Unlimited 8 = White Balance Bracketing 17 = On (with flash) 18 = Aperture Bracketing
0x002b	SequenceNumber	int32u	
0x002c	ContrastMode	int16u	(this decoding seems to work for some models such as the LC1, LX2, FZ7, FZ8, FZ18 and FZ50, but may not be correct for other models such as the FX10, G1, L1, L10 and LC80) 0x0 = Normal 0x1 = Low 0x2 = High 0x5 = Normal 2 0x6 = Medium Low 0x7 = Medium High 0xd = High Dynamic 0x18 = Dynamic Range (film-like)

0x2e = Match Filter Effects Toy  
 0x37 = Match Photo Style L. Monochrome  
 0x100 = Low  
 0x110 = Normal  
 0x120 = High  
 (these values are used by the G2, GF1, GF2, GF3, GF5 and GF6)  
 0 = -2  
 1 = -1  
 2 = Normal  
 3 = +1  
 4 = +2  
 5 = Normal 2  
 7 = Nature (Color Film)  
 9 = Expressive  
 12 = Smooth (Color Film) or Pure (My Color)  
 17 = Dynamic (B&W Film)  
 22 = Smooth (B&W Film)  
 25 = High Dynamic  
 26 = Retro  
 27 = Dynamic (Color Film)  
 28 = Low Key  
 29 = Toy Effect  
 32 = Vibrant (Color Film) or Expressive (My Color)  
 33 = Elegant (My Color)  
 37 = Nostalgic (Color Film)  
 41 = Dynamic Art (My Color)  
 42 = Retro (My Color)  
 45 = Cinema  
 47 = Dynamic Mono  
 50 = Impressive Art  
 51 = Cross Process  
 100 = High Dynamic 2  
 101 = Retro 2  
 102 = High Key 2  
 103 = Low Key 2  
 104 = Toy Effect 2  
 107 = Expressive 2  
 112 = Sepia  
 117 = Miniature  
 122 = Dynamic Monochrome  
 127 = Old Days  
 132 = Dynamic Monochrome 2  
 135 = Impressive Art 2  
 136 = Cross Process 2  
 137 = Toy Pop  
 138 = Fantasy  
 256 = Normal 3  
 272 = Standard  
 288 = High  
 (these values are used by the TZ10 and ZS7)  
 0 = Normal  
 1 = -2  
 2 = +2  
 5 = -1  
 6 = +1

0x002d NoiseReduction	int16u	(the encoding for this value is not consistent between models)
		0 = Standard      6 = +6 1 = Low (-1)      65531 = -5 2 = High (+1)      65532 = -4 3 = Lowest (-2)      65533 = -3 4 = Highest (+2)      65534 = -2 5 = +5      65535 = -1
0x002e SelfTimer	int16u	0 = Off (0) 1 = Off 2 = 10 s 3 = 2 s 4 = 10 s / 3 pictures 258 = 2 s after shutter pressed 266 = 10 s after shutter pressed 778 = 3 photos after 10 s
0x0030 Rotation	int16u	1 = Horizontal (normal) 3 = Rotate 180 6 = Rotate 90 CW 8 = Rotate 270 CW
0x0031 AFAssistLamp	int16u	1 = Fired 2 = Enabled but Not Used

			3 = Disabled but Required 4 = Disabled and Not Required
0x0032	ColorMode	int16u	0 = Normal 1 = Natural 2 = Vivid
0x0033	BabyAge	string	(or pet age)
0x0034	OpticalZoomMode	int16u	1 = Standard 2 = Extended
0x0035	ConversionLens	int16u	1 = Off 2 = Wide 3 = Telephoto 4 = Macro
0x0036	TravelDay	int16u	
0x0038	BatteryLevel	int16u	1 = Full 2 = Medium 3 = Low 4 = Near Empty 7 = Near Full 8 = Medium Low 256 = n/a
0x0039	Contrast	int16u	0 = Normal
0x003a	WorldTimeLocation	int16u	1 = Home 2 = Destination
0x003b	TextStamp	int16u	1 = Off 2 = On
0x003c	ProgramISO	int16u	-1 = n/a 65534 = Intelligent ISO 65535 = n/a
0x003d	AdvancedSceneType	int16u	(used together with SceneMode to derive Composite AdvancedSceneMode)
0x003e	TextStamp	int16u	1 = Off 2 = On
0x003f	FacesDetected	int16u	
0x0040	Saturation	int16u	0 = Normal
0x0041	Sharpness	int16u	0 = Normal
0x0042	FilmMode	int16u	0 = n/a 1 = Standard (color) 2 = Dynamic (color) 3 = Nature (color) 4 = Smooth (color) 5 = Standard (B&W) 6 = Dynamic (B&W) 7 = Smooth (B&W) 10 = Nostalgic 11 = Vibrant
0x0043	JPEGQuality	int16u	0 = n/a (Movie) 2 = High 3 = Standard 6 = Very High 255 = n/a (RAW only)
0x0044	ColorTempKelvin	int16u	
0x0045	BracketSettings	int16u	0 = No Bracket 1 = 3 Images, Sequence 0/-/+ 2 = 3 Images, Sequence -/0/+ 3 = 5 Images, Sequence 0/-/+ 4 = 5 Images, Sequence -/0/+ 5 = 7 Images, Sequence 0/-/+ 6 = 7 Images, Sequence -/0/+
0x0046	WBShiftAB	int16u	(positive is a shift toward blue)
0x0047	WBShiftGM	int16u	(positive is a shift toward green)
0x0048	FlashCurtain	int16u	0 = n/a 1 = 1st 2 = 2nd
0x0049	LongExposureNoiseReduction	int16u	1 = Off 2 = On
0x004b	PanasonicImageWidth	int32u	
0x004c	PanasonicImageHeight	int32u	
0x004d	AFPointPosition	rational64u[2]	(X Y coordinates of primary AF area center, in the range 0.0 to 1.0)
0x004e	FaceDetInfo	-	--> <a href="#">Panasonic FaceDetInfo Tags</a>
0x0051	LensType	string	
0x0052	LensSerialNumber	string	
0x0053	AccessoryType	string	

0x0054	AccessorySerialNumber	string	
0x0059	Transform	undef[4]	(decoded as two 16-bit signed integers) '-1 1' = Slim Low '-3 2' = Slim High '0 0' = Off '1 1' = Stretch Low '3 2' = Stretch High
0x005d	IntelligentExposure	int16u	(not valid for some models) 0 = Off 1 = Low 2 = Standard 3 = High
0x0060	LensFirmwareVersion	undef[4]	
0x0061	FaceReclInfo	-	--> <a href="#">Panasonic FaceReclInfo Tags</a>
0x0062	FlashWarning	int16u	0 = No 1 = Yes (flash required but disabled)
0x0063	RecognizedFaceFlags?	undef[4]	
0x0065	Title	undef	
0x0066	BabyName	undef	(or pet name)
0x0067	Location	undef	
0x0069	Country	undef	
0x006b	State	undef	
0x006d	City	undef	(City/Town as stored by some models, or County/Township for others)
0x006f	Landmark	undef	
0x0070	IntelligentResolution	int8u	0 = Off 1 = Low 2 = Standard 3 = High 4 = Extended
0x0076	MergedImages	int16u	(number of images in HDR or Live View Composite picture)
0x0077	BurstSpeed	int16u	(images per second)
0x0079	IntelligentD-Range	int16u	0 = Off 1 = Low 2 = Standard 3 = High
0x007c	ClearRetouch	int16u	0 = Off 1 = On
0x0080	City2	undef	(City/Town/Village as stored by some models)
0x0086	ManometerPressure	int16u	
0x0089	PhotoStyle	int16u	0 = Auto                    8 = Cinelike D 1 = Standard or Custom    9 = Cinelike V 2 = Vivid                  11 = L. Monochrome 3 = Natural                12 = Like709 4 = Monochrome            15 = L. Monochrome D 5 = Scenery                17 = V-Log 6 = Portrait               18 = Cinelike D2
0x008a	ShadingCompensation	int16u	0 = Off 1 = On
0x008b	WBShiftIntelligentAuto	int16u	(value is -9 for blue to +9 for amber. Valid for Intelligent-Auto modes)
0x008c	AccelerometerZ	int16u	(positive is acceleration upwards)
0x008d	AccelerometerX	int16u	(positive is acceleration to the left)
0x008e	AccelerometerY	int16u	(positive is acceleration backwards)
0x008f	CameraOrientation	int8u	0 = Normal      3 = Rotate CCW 1 = Rotate CW    4 = Tilt Upwards 2 = Rotate 180   5 = Tilt Downwards
0x0090	RollAngle	int16u	(converted to degrees of clockwise camera rotation)
0x0091	PitchAngle	int16u	(converted to degrees of upward camera tilt)
0x0092	WBShiftCreativeControl	int8u	(WB shift or style strength. Valid for Creative-Control modes)
0x0093	SweepPanoramaDirection	int8u	0 = Off 1 = Left to Right 2 = Right to Left 3 = Top to Bottom 4 = Bottom to Top

0x0094 SweepPanoramaFieldOfView	int16u	
0x0096 TimerRecording	int8u	0 = Off 1 = Time Lapse 2 = Stop-motion Animation 3 = Focus Bracketing
0x009d InternalNDFilter	rational64u	
0x009e HDR	int16u	0 = Off 32868 = 1 EV (Auto) 100 = 1 EV 32968 = 2 EV (Auto) 200 = 2 EV 33068 = 3 EV (Auto) 300 = 3 EV
0x009f ShutterType	int16u	0 = Mechanical 1 = Electronic 2 = Hybrid
0x00a1 FilterEffect	rational64u[0.5]	'0 0' = Off '0 1' = Expressive '0 2' = Retro '0 4' = High Key '0 8' = Sepia '0 16' = High Dynamic '0 32' = Miniature Effect '0 1024' = Dynamic Monochrome '0 1048576' = Sunshine '0 134217728' = Silky Monochrome '0 16384' = One Point Color '0 2048' = Soft Focus '0 2097152' = Bleach Bypass '0 256' = Low Key '0 32768' = Star Filter '0 33554432' = Monochrome '0 4096' = Impressive Art '0 4194304' = Toy Pop '0 512' = Toy Effect '0 524288' = Old Days '0 67108864' = Rough Monochrome '0 8192' = Cross Process '0 8388608' = Fantasy
0x00a3 ClearRetouchValue	rational64u	
0x00a7 OutputLUT	yes	(2-column by 432-row binary lookup table of unsigned short values for converting to 16-bit output (1st column) from 14 bits (2nd column) with camera contrast)
0x00ab TouchAE	int16u	0 = Off 1 = On
0x00ac MonochromeFilterEffect	int16u	0 = Off 1 = Yellow 2 = Orange 3 = Red 4 = Green
0x00ad HighlightShadow	int16u[2]	
0x00af TimeStamp	string	
0x00b3 VideoBurstResolution	int16u	1 = Off or 4K 4 = 6K
0x00b4 MultiExposure	int16u	0 = n/a 1 = Off 2 = On
0x00b9 RedEyeRemoval	int16u	0 = Off 1 = On
0x00bb VideoBurstMode	int32u	0x1 = Off 0x4 = Post Focus 0x18 = 4K Burst 0x28 = 4K Burst (Start/Stop) 0x48 = 4K Pre-burst 0x108 = Loop Recording 0x408 = Focus Stacking 0x810 = 6K Burst 0x820 = 6K Burst (Start/Stop) 0x1001 = High Resolution Mode
0x00bc DiffractionCorrection	int16u	0 = Off 1 = Auto
0x00bd FocusBracket	int16u	(positive is further, negative is closer)
0x00be LongExposureNRUsed	int16u	1 = No 2 = Yes

0x00bf	PostFocusMerging	int32u[2]	'0 0' = Post Focus Auto Merging or None
0x00c1	VideoPreburst	int16u	0 = No 1 = 4K or 6K
0x00c4	LensTypeMake	int16u	
0x00c5	LensTypeModel	int16u	
0x00ca	SensorType	int16u	0 = Multi-aspect 1 = Standard
0x00d1	ISO	int32u	
0x00d2	MonochromeGrainEffect	int16u	0 = Off 1 = Low 2 = Standard 3 = High
0x00d6	NoiseReductionStrength	rational64s	
0x00de	AFAreaSize	rational64u[2]	(relative to size of image. "n/a" for manual focus)
0x00e4	LensTypeModel	int16u	
0x00e8	MinimumISO	int32u	
0x00e9	AFSubjectDetection	int16u	0 = n/a 1 = Human Eye/Face/Body 2 = Animal 3 = Human Eye/Face 4 = Animal Body 5 = Animal Eye/Body 6 = Car 7 = Motorcycle 8 = Car (main part priority) 9 = Motorcycle (helmet priority) 10 = Train 11 = Train (main part priority) 12 = Airplane 13 = Airplane (nose priority)
0x00ee	DynamicRangeBoost	int16u	0 = Off 1 = On
0xe00	PrintIM	-	--> <a href="#">PrintIM Tags</a>
0x2003	TimeInfo	-	--> <a href="#">Panasonic TimeInfo Tags</a>
0x8000	MakerNoteVersion	undef	
0x8001	SceneMode	int16u	0 = Off 1 = Normal 2 = Portrait 3 = Scenery 4 = Sports 5 = Night Portrait 6 = Program 7 = Aperture Priority 8 = Shutter Priority 9 = Macro 10 = Spot 11 = Manual 12 = Movie Preview 13 = Panning 14 = Simple 15 = Color Effects 16 = Self Portrait 17 = Economy 18 = Fireworks 19 = Party 20 = Snow 21 = Night Scenery 22 = Food 23 = Baby 24 = Soft Skin 25 = Candlelight 26 = Starry Night 27 = High Sensitivity 28 = Panorama Assist 29 = Underwater 30 = Beach 31 = Aerial Photo 32 = Sunset 33 = Pet 34 = Intelligent ISO 35 = Clipboard 36 = High Speed Continuous 43 = Pin Hole 44 = Film Grain 45 = My Color 46 = Photo Frame 48 = Movie 51 = HDR 52 = Peripheral Defocus 55 = Handheld Night Shot 57 = 3D 59 = Creative Control 60 = Intelligent Auto Plus 62 = Panorama 63 = Glass Through 64 = HDR 66 = Digital Filter 67 = Clear Portrait 68 = Silky Skin 69 = Backlit Softness 70 = Clear in Backlight 71 = Relaxing Tone 72 = Sweet Child's Face 73 = Distinct Scenery 74 = Bright Blue Sky 75 = Romantic Sunset Glow 76 = Vivid Sunset Glow 77 = Glistening Water 78 = Clear Nightscape 79 = Cool Night Sky 80 = Warm Glowing Nightscape 81 = Artistic Nightscape 82 = Glittering Illuminations 83 = Clear Night Portrait 84 = Soft Image of a Flower 85 = Appetizing Food

			Shooting 37 = Intelligent Auto 39 = Multi-aspect 41 = Transform 42 = Flash Burst	86 = Cute Dessert 87 = Freeze Animal Motion 88 = Clear Sports Shot 89 = Monochrome 90 = Creative Control 92 = Handheld Night Shot
0x8002	HighlightWarning	int16u	0 = Disabled 1 = No 2 = Yes	
0x8003	DarkFocusEnvironment	int16u	1 = No 2 = Yes	
0x8004	WBRedLevel	int16u		
0x8005	WBGreenLevel	int16u		
0x8006	WBBlueLevel	int16u		
0x8008	TimeStamp	int16u	1 = Off 2 = On	
0x8009	TimeStamp	int16u	1 = Off 2 = On	
0x8010	BabyAge	string	(or pet age)	
0x8012	Transform	undef[4]	(decoded as two 16-bit signed integers) '-1 1' = Slim Low '-3 2' = Slim High '0 0' = Off '1 1' = Stretch Low '3 2' = Stretch High	

## Panasonic DSA Tags

XMP Digital Shift Assistant tags written by some Leica cameras.

These tags belong to the ExifTool XMP-xmpDSA family 1 group.

Tag Name	Writable	Values / Notes
ApplyAutomatically	boolean/	
CorrectionAlreadyApplied	boolean/	
FocalLength35mm	real/	
NormalizedCropCorners	real/+	
PitchAngle	real/	
RollAngle	real/	
ScalingFactorHeight	real/	
TargetAspectRatio	real/	
ValidCropCorners	boolean/	
Version	string/	

## Panasonic FaceDetInfo Tags

Face detection position information.

Index2	Tag Name	Writable	Values / Notes
0	NumFacePositions	int16u	(number of detected face positions stored in this record. May be less than FacesDetected)
1	Face1Position	int16u[4]	(4 numbers: X/Y coordinates of the face center and width/height of face. Coordinates are relative to an image twice the size of the thumbnail, or 320 pixels wide)
5	Face2Position	int16u[4]	
9	Face3Position	int16u[4]	
13	Face4Position	int16u[4]	
17	Face5Position	int16u[4]	

## Panasonic FaceRecInfo Tags

Tags written by cameras with facial recognition. These cameras not only detect faces in an image, but also recognize specific people based a user-supplied set of known faces.

Index1	Tag Name	Writable	Values / Notes
0	FacesRecognized	int16u	
4	RecognizedFace1Name	string[20]	
24	RecognizedFace1Position	int16u[4]	(coordinates in same format as face detection tags above)
32	RecognizedFace1Age	string[20]	
52	RecognizedFace2Name	string[20]	
72	RecognizedFace2Position	int16u[4]	
80	RecognizedFace2Age	string[20]	
100	RecognizedFace3Name	string[20]	
120	RecognizedFace3Position	int16u[4]	
128	RecognizedFace3Age	string[20]	

## Panasonic TimeInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	PanasonicDateTime	undef[8]	
16	TimeLapseShotNumber	int32u	

## Panasonic Leica2 Tags

These tags are used by the Leica M8.

Tag ID	Tag Name	Writable	Values / Notes
0x0300	Quality	int16u	1 = Fine 2 = Basic
0x0302	UserProfile	int32u	1 = User Profile 1 2 = User Profile 2 3 = User Profile 3 4 = User Profile 0 (Dynamic)
0x0303	SerialNumber	int32u	
0x0304	WhiteBalance	int16u	(values above 0x8000 are converted to Kelvin color temperatures) 0 = Auto or Manual 4 = Flash 1 = Daylight 10 = Cloudy 2 = Fluorescent 11 = Shade 3 = Tungsten
0x0310	LensType	int32u	--> <a href="#">Panasonic LensType Values</a>
0x0311	ExternalSensorBrightnessValue	rational64s	("blue dot" measurement)
0x0312	MeasuredLV	rational64s	(imaging sensor or TTL exposure meter measurement)
0x0313	ApproximateFNumber	rational64u	
0x0320	CameraTemperature	int32s	
0x0321	ColorTemperature	int32u	
0x0322	WBRedLevel	rational64u	
0x0323	WBGreenLevel	rational64u	
0x0324	WBBlueLevel	rational64u	
0x0325	UV-IRFilterCorrection	int32u	0 = Not Active 1 = Active
0x0330	CCDVersion	int32u	
0x0331	CCDBoardVersion	int32u	
0x0332	ControllerBoardVersion	int32u	
0x0333	M16CVersion	int32u	
0x0340	ImageIDNumber	int32u	

## Panasonic LensType Values

The LensType value is obtained by splitting the stored value into 2 integers: The stored value divided by 4, and its lower 2 bits. The second number is used only if necessary to identify certain manually coded lenses on the M9, or the focal length of some multi-focal lenses.

Value	LensType	Value	LensType
1	= Elmarit-M 21mm f/2.8	42	= Tri-Elmar-M 28-35-50mm f/4 ASPH.
3	= Elmarit-M 28mm f/2.8 (III)	43	= Summarit-M 35mm f/2.5
4	= Tele-Elmarit-M 90mm f/2.8 (II)	44	= Summarit-M 50mm f/2.5
5	= Summilux-M 50mm f/1.4 (II)	45	= Summarit-M 75mm f/2.5
6	= Summicron-M 35mm f/2 (IV)	46	= Summarit-M 90mm f/2.5
7	= Summicron-M 90mm f/2 (II)	47	= Summilux-M 21mm f/1.4 ASPH.
9	= Elmarit-M 135mm f/2.8 (I/II)	48	= Summilux-M 24mm f/1.4 ASPH.
11	= Summaron-M 28mm f/5.6	49	= Noctilux-M 50mm f/0.95 ASPH.
12	= Thambar-M 90mm f/2.2	50	= Elmar-M 24mm f/3.8 ASPH.
16	= Tri-Elmar-M 16-18-21mm f/4 ASPH.	51	= Super-Elmar-M 21mm f/3.4 Asph
23	= Summicron-M 50mm f/2 (III)	52	= Apo-Telyt-M 18mm f/3.8 ASPH.
24	= Elmarit-M 21mm f/2.8 ASPH.	53	= Apo-Telyt-M 135mm f/3.4
25	= Elmarit-M 24mm f/2.8 ASPH.	58	= Noctilux-M 75mm f/1.25 ASPH.
26	= Summicron-M 28mm f/2 ASPH.	'0 0'	= Uncoded lens
27	= Elmarit-M 28mm f/2.8 (IV)	'6 0'	= Summilux-M 35mm f/1.4
28	= Elmarit-M 28mm f/2.8 ASPH.	'9 0'	= Apo-Telyt-M 135mm f/3.4
29	= Summilux-M 35mm f/1.4 ASPH.	'16 1'	= Tri-Elmar-M 16-18-21mm f/4 ASPH. (at 16mm)
30	= Summicron-M 35mm f/2 ASPH.	'16 2'	= Tri-Elmar-M 16-18-21mm f/4 ASPH. (at 18mm)
31	= Noctilux-M 50mm f/1	'16 3'	= Tri-Elmar-M 16-18-21mm f/4 ASPH. (at 21mm)
32	= Summilux-M 50mm f/1.4 ASPH.	'29 0'	= Summilux-M 35mm f/1.4 ASPHERICAL
33	= Summicron-M 50mm f/2 (IV, V)	'31 0'	= Noctilux-M 50mm f/1.2
34	= Elmar-M 50mm f/2.8	'39 0'	= Tele-Elmar-M 135mm f/4 (II)
35	= Summilux-M 75mm f/1.4	'41 3'	= Apo-Summicron-M 50mm f/2 ASPH.
36	= Apo-Summicron-M 75mm f/2 ASPH.	'42 1'	= Tri-Elmar-M 28-35-50mm f/4 ASPH. (at 28mm)
37	= Apo-Summicron-M 90mm f/2 ASPH.	'42 2'	= Tri-Elmar-M 28-35-50mm f/4 ASPH. (at 35mm)
38	= Elmarit-M 90mm f/2.8	'42 3'	= Tri-Elmar-M 28-35-50mm f/4 ASPH. (at 50mm)
39	= Macro-Elmar-M 90mm f/4	'51 2'	= Super-Elmar-M 14mm f/3.8 Asph
40	= Macro-Adapter M	'53 2'	= Apo-Telyt-M 135mm f/3.4
41	= Apo-Summicron-M 50mm f/2 ASPH.	'53 3'	= Apo-Summicron-M 50mm f/2 (VI)

## Panasonic Leica3 Tags

These tags are used by the Leica R8 and R9 digital backs.

Tag ID	Tag Name	Writable	Values / Notes
0x000b	SerialInfo	-	--> <a href="#">Panasonic SerialInfo Tags</a>
0x000d	WB_RGBLevels	int16u[3]	

## Panasonic SerialInfo Tags

Index1	Tag Name	Writable	Values / Notes
4	SerialNumber	no	

## Panasonic Leica4 Tags

This information is written by the M9.

Tag ID	Tag Name	Writable	Values / Notes
0x3000	Subdir3000	-	--> <a href="#">Panasonic Subdir Tags</a>
0x3100	Subdir3100	-	--> <a href="#">Panasonic Subdir Tags</a>
0x3400	Subdir3400	-	--> <a href="#">Panasonic Subdir Tags</a>
0x3900	Subdir3900	-	--> <a href="#">Panasonic Subdir Tags</a>

## Panasonic Subdir Tags

Tag ID	Tag Name	Writable	Values / Notes
0x300a	Contrast	int32u	0 = Low 1 = Medium Low 2 = Normal 3 = Medium High 4 = High
0x300b	Sharpening	int32u	0 = Off 1 = Low 2 = Normal

			3 = Medium High 4 = High
0x300d Saturation	int32u	0 = Low 1 = Medium Low 2 = Normal 3 = Medium High	4 = High 5 = Black & White 6 = Vintage B&W
0x3033 WhiteBalance	int32u	0 = Auto 1 = Tungsten 2 = Fluorescent 3 = Daylight Fluorescent 4 = Daylight 5 = Flash 6 = Cloudy 7 = Shade 8 = Manual 9 = Kelvin	
0x3034 JPEGQuality	int32u	94 = Basic 97 = Fine	
0x3036 WB_RGBLevels	rational64u[3]		
0x3038 UserProfile	string		
0x303a JPEGSize	int32u	0 = 5216x3472 1 = 3840x2592 2 = 2592x1728 3 = 1728x1152 4 = 1280x864	
0x3103 SerialNumber	string		
0x3109 FirmwareVersion	string		
0x312a BaselISO	int32u		
0x312b SensorWidth	int32u		
0x312c SensorHeight	int32u		
0x312d SensorBitDepth	int32u		
0x3402 CameraTemperature	int32s		
0x3405 LensType	int32u	--> <a href="#">Panasonic LensType Values</a>	
0x3406 ApproximateFNumber	rational64u		
0x3407 MeasuredLV	int32s	(imaging sensor or TTL exposure meter measurement)	
0x3408 ExternalSensorBrightnessValue	int32s	("blue dot" measurement)	
0x3901 Data1	-	--> <a href="#">Panasonic Data1 Tags</a>	
0x3902 Data2	-	--> <a href="#">Panasonic Data2 Tags</a>	

## Panasonic Data1 Tags

Index1	Tag Name	Writable	Values / Notes
22	LensType	int32u	--> <a href="#">Panasonic LensType Values</a>

## Panasonic Data2 Tags

Index1	Tag Name	Writable	Values / Notes
[no tags known]			

## Panasonic Leica5 Tags

This information is written by the X1, X2, X VARIO and T.

Tag ID	Tag Name	Writable	Values / Notes
0x0303	LensType	string	(Leica T only)
0x0305	SerialNumber	int32u	
0x0407	OriginalFileName	string	
0x0408	OriginalDirectory	string	
0x040a	FocusInfo	-	--> <a href="#">Panasonic FocusInfo Tags</a>
0x040d	ExposureMode	int8u[4]	'0 0 0 0' = Program AE '1 0 0 0' = Aperture-priority AE

			'1 1 0 0' = Aperture-priority AE (1) '2 0 0 0' = Shutter speed priority AE '3 0 0 0' = Manual
0x0410	ShotInfo	-	--> <a href="#">Panasonic ShotInfo Tags</a>
0x0412	FilmMode	string	
0x0413	WB_RGBLevels	rational64u[3]	
0x0500	InternalSerialNumber	undef	
0x05ff	CameralFD	-	--> <a href="#">PanasonicRaw CameralFD Tags</a>

## Panasonic FocusInfo Tags

Index2	Tag Name	Writable	Values / Notes
0	FocusDistance	int16u	
1	FocalLength	int16u	

## Panasonic ShotInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	FileIndex	int16u	

## Panasonic Leica6 Tags

This information is written by the S2 and M (Typ 240), as a trailer in JPEG images.

Tag ID	Tag Name	Writable	Values / Notes
0x0300	PreviewImage	undef	(S2 and M (Typ 240))
0x0301	UnknownBlock?	no	(unknown 320kB block, not copied to JPEG images)
0x0303	LensType	string	
0x0304	FocusDistance	int32u	(focus distance in mm for most models, but cm for others)
0x0311	ExternalSensorBrightnessValue	rational64s	(Leica S only)
0x0312	MeasuredLV	rational64s	(Leica S only)
0x0320	FirmwareVersion	int8u[4]	(Leica S only)
0x0321	LensSerialNumber	int32u	(Leica S only)

## Panasonic Leica9 Tags

This information is written by the Leica S (Typ 007) and M10 models.

Tag ID	Tag Name	Writable	Values / Notes
0x0304	FocusDistance	int32u	(focus distance in mm for most models, but cm for others)
0x0311	ExternalSensorBrightnessValue	rational64s	
0x0312	MeasuredLV	rational64s	
0x034c	UserProfile	string	
0x0359	ISOSelected	int32s	0 = Auto
0x035a	FNumber	int32s	
0x035b	CorrelatedColorTemp	int16u	
0x035c	ColorTint	int16s	
0x035d	WhitePoint	rational64u[2]	
0x0370	LensProfileName	string	

## Panasonic Type2 Tags

This type of maker notes is used by models such as the NV-DS65, PV-D2002, PV-DC3000, PV-DV203, PV-DV401, PV-DV702, PV-L2001, PV-SD4090, PV-SD5000 and iPalm.

Index2	Tag Name	Writable	Values / Notes
0	MakerNoteType	no	

## Panasonic PANA Tags

Tags extracted from the PANA and LEIC user data found in MP4 videos from various Panasonic and Leica models.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
4	Model	no	
12	Model	no	
16	JPEG-likeData	-	--> <a href="#">EXIF Tags</a>
22	Model	no	
52	Version1	no	
62	Version2	no	
80	MakerNoteLeica5	-	--> <a href="#">Panasonic Leica5 Tags</a>
88	ThumbnailWidth	no	(Panasonic models)
90	ThumbnailHeight	no	
92	ThumbnailImage	no	
1334	ThumbnailWidth	no	(Leica X Vario)
1338	ThumbnailHeight	no	
1342	ThumbnailLength	no	
1350	ThumbnailImage	no	
1358	ThumbnailWidth	no	(Leica X Vario)
1362	ThumbnailHeight	no	
1366	ThumbnailLength	no	
1374	ThumbnailImage	no	
16488	ExifData	-	--> <a href="#">EXIF Tags</a>
16512	ExifData	-	--> <a href="#">EXIF Tags</a>
0x00200080	ExifData	-	--> <a href="#">EXIF Tags</a>

## Panasonic AdvancedSceneMode Values

A Composite tag derived from Model, SceneMode and AdvancedSceneType.

Value	AdvancedSceneMode	Value	AdvancedSceneMode
'0 1'	= Off	'59 1'	= Expressive
'2 2'	= Outdoor Portrait	'59 2'	= Retro
'2 3'	= Indoor Portrait	'59 3'	= High Key
'2 4'	= Creative Portrait	'59 4'	= Sepia
'3 2'	= Nature	'59 5'	= High Dynamic
'3 3'	= Architecture	'59 6'	= Miniature
'3 4'	= Creative Scenery	'59 9'	= Low Key
'4 2'	= Outdoor Sports	'59 10'	= Toy Effect
'4 3'	= Indoor Sports	'59 11'	= Dynamic Monochrome
'4 4'	= Creative Sports	'59 12'	= Soft
'9 2'	= Flower	'66 1'	= Impressive Art
'9 3'	= Objects	'66 2'	= Cross Process
'9 4'	= Creative Macro	'66 3'	= Color Select
'18 1'	= High Sensitivity	'66 4'	= Star
'20 1'	= Fireworks	'90 3'	= Old Days
'21 2'	= Illuminations	'90 4'	= Sunshine
'21 4'	= Creative Night Scenery	'90 5'	= Bleach Bypass
'26 1'	= High-speed Burst (shot 1)	'90 6'	= Toy Pop
'27 1'	= High-speed Burst (shot 2)	'90 7'	= Fantasy
'29 1'	= Snow	'90 8'	= Monochrome
'30 1'	= Starry Sky	'90 9'	= Rough Monochrome
'31 1'	= Beach	'90 10'	= Silky Monochrome
'36 1'	= High-speed Burst (shot 3)	'92 1'	= Handheld Night Shot
'39 1'	= Aerial Photo / Underwater / Multi-aspect	'DMC-TZ40 90 1'	= Expressive
'45 2'	= Cinema	'DMC-TZ40 90 2'	= Retro
'45 7'	= Expressive	'DMC-TZ40 90 3'	= High Key
'45 8'	= Retro	'DMC-TZ40 90 4'	= Sepia

'45 9' = Pure  
'45 10' = Elegant  
'45 12' = Monochrome  
'45 13' = Dynamic Art  
'45 14' = Silhouette  
'51 2' = HDR Art  
'51 3' = HDR B&W

'DMC-TZ40 90 5' = High Dynamic  
'DMC-TZ40 90 6' = Miniature  
'DMC-TZ40 90 9' = Low Key  
'DMC-TZ40 90 10' = Toy Effect  
'DMC-TZ40 90 11' = Dynamic Monochrome  
'DMC-TZ40 90 12' = Soft

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Jul 21, 2025

[<- ExifTool Tag Names](#)

# PanasonicRaw Tags

These tags are found in IFD0 of Panasonic/Leica RAW, RW2 and RWL images.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	PanasonicRawVersion	undef	
0x0002	SensorWidth	no	
0x0003	SensorHeight	no	
0x0004	SensorTopBorder	no	
0x0005	SensorLeftBorder	no	
0x0006	SensorBottomBorder	no	
0x0007	SensorRightBorder	no	
0x0008	SamplesPerPixel	int16u!	
0x0009	CFAPattern	int16u!	0 = n/a 1 = [Red,Green][Green,Blue] 2 = [Green,Red][Blue,Green] 3 = [Green,Blue][Red,Green] 4 = [Blue,Green][Green,Red]
0x000a	BitsPerSample	int16u!	
0x000b	Compression	int16u!	34316 = Panasonic RAW 1 34826 = Panasonic RAW 2 34828 = Panasonic RAW 3 34830 = Panasonic RAW 4
0x000e	LinearityLimitRed	int16u	
0x000f	LinearityLimitGreen	int16u	
0x0010	LinearityLimitBlue	int16u	
0x0011	RedBalance	int16u	(found in Digilux 2 RAW images)
0x0012	BlueBalance	int16u	
0x0013	WBInfo	-	--> <a href="#">PanasonicRaw WBInfo Tags</a>
0x0017	ISO	int16u	
0x0018	HighISOMultiplierRed	int16u	
0x0019	HighISOMultiplierGreen	int16u	
0x001a	HighISOMultiplierBlue	int16u	
0x001b	NoiseReductionParams	undef[n]!	(the camera's default noise reduction setup. The first number is the number of entries, then for each entry there are 4 numbers: an ISO speed, and noise-reduction strengths the R, G and B channels)
0x001c	BlackLevelRed	int16u	
0x001d	BlackLevelGreen	int16u	
0x001e	BlackLevelBlue	int16u	
0x0024	WBRedLevel	int16u	
0x0025	WBGreenLevel	int16u	
0x0026	WBBlueLevel	int16u	
0x0027	WBInfo2	-	--> <a href="#">PanasonicRaw WBInfo2 Tags</a>
0x002d	RawFormat	int16u!	
0x002e	JpgFromRaw	undef!	--> <a href="#">JPEG Tags</a> (processed as an embedded document because it contains full EXIF)
0x002f	CropTop	int16u	
0x0030	CropLeft	int16u	
0x0031	CropBottom	int16u	
0x0032	CropRight	int16u	
0x0037	ISO	int32u	
0x010f	Make	string	
0x0110	Model	string	
0x0111	StripOffsets	no	
0x0112	Orientation	int16u	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical

			5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
0x0116	RowsPerStrip	no	
0x0117	StripByteCounts	no	
0x0118	RawDataOffset	no	
0x0119	DistortionInfo	-	--> <a href="#">PanasonicRaw DistortionInfo Tags</a>
0x011c	Gamma	int16u	
0x0120	CameralFD	-	--> <a href="#">PanasonicRaw CameralFD Tags</a>
0x0121	Multishot	int32u	0 = Off 65536 = Pixel Shift
0x0127	JpgFromRaw2	no	
0x013b	Artist	string	
0x02bc	ApplicationNotes	int8u!	--> <a href="#">XMP Tags</a>
0x8298	Copyright	string	
0x83bb	IPTC-NAA	int32u!	--> <a href="#">IPTC Tags</a>
0x8769	ExifOffset	-	--> <a href="#">EXIF Tags</a>
0x8825	GPSInfo	-	--> <a href="#">GPS Tags</a>

## PanasonicRaw CameralFD Tags

Tag ID	Tag Name	Writable	Values / Notes
0x1001	MultishotOn	no	0 = No 1 = Yes
0x1100	FocusStepNear	no	
0x1101	FocusStepCount	no	
0x1102	FlashFired	no	0 = No 1 = Yes
0x1105	ZoomPosition	no	(in the range 0-255 for most cameras)
0x1200	LensAttached	no	(many CameralFD tags are invalid if there is no lens attached) 0 = No 1 = Yes
0x1201	LensTypeMake	no	
0x1202	LensTypeModel	no	
0x1203	FocalLengthIn35mmFormat	no	
0x1301	ApertureValue	no	
0x1302	ShutterSpeedValue	no	
0x1303	SensitivityValue	no	
0x1305	HighISOMode	no	1 = On 2 = Off
0x1412	FacesDetected	no	0 = No 1 = Yes
0x3200	WB_CFA0_LevelDaylight	no	
0x3201	WB_CFA1_LevelDaylight	no	
0x3202	WB_CFA2_LevelDaylight	no	
0x3203	WB_CFA3_LevelDaylight	no	
0x3300	WhiteBalanceSet	no	--> <a href="#">PanasonicRaw WhiteBalance Values</a>
0x3420	WB_RedLevelAuto	no	
0x3421	WB_BlueLevelAuto	no	
0x3501	Orientation	no	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical 5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
0x3600	WhiteBalanceDetected	no	--> <a href="#">PanasonicRaw WhiteBalance Values</a>

# PanasonicRaw WhiteBalance Values

Value	WhiteBalance	Value	WhiteBalance	Value	WhiteBalance
0	= Auto	5	= Flash	10	= Custom#3
1	= Daylight	6	= n/a	11	= Custom#4
2	= Cloudy	7	= n/a	12	= Shade
3	= Tungsten	8	= Custom#1	13	= Kelvin
4	= n/a	9	= Custom#2	16	= AWBc

## PanasonicRaw WBInfo Tags

Index2	Tag Name	Writable	Values / Notes
0	NumWBEntries	int16u	
1	WBType1	int16u	--> <a href="#">EXIF LightSource Values</a>
2	WB_RBLevels1	int16u[2]	
4	WBType2	int16u	--> <a href="#">EXIF LightSource Values</a>
5	WB_RBLevels2	int16u[2]	
7	WBType3	int16u	--> <a href="#">EXIF LightSource Values</a>
8	WB_RBLevels3	int16u[2]	
10	WBType4	int16u	--> <a href="#">EXIF LightSource Values</a>
11	WB_RBLevels4	int16u[2]	
13	WBType5	int16u	--> <a href="#">EXIF LightSource Values</a>
14	WB_RBLevels5	int16u[2]	
16	WBType6	int16u	--> <a href="#">EXIF LightSource Values</a>
17	WB_RBLevels6	int16u[2]	
19	WBType7	int16u	--> <a href="#">EXIF LightSource Values</a>
20	WB_RBLevels7	int16u[2]	

## PanasonicRaw WBInfo2 Tags

Index2	Tag Name	Writable	Values / Notes
0	NumWBEntries	int16u	
1	WBType1	int16u	--> <a href="#">EXIF LightSource Values</a>
2	WB_RGBLevels1	int16u[3]	
5	WBType2	int16u	--> <a href="#">EXIF LightSource Values</a>
6	WB_RGBLevels2	int16u[3]	
9	WBType3	int16u	--> <a href="#">EXIF LightSource Values</a>
10	WB_RGBLevels3	int16u[3]	
13	WBType4	int16u	--> <a href="#">EXIF LightSource Values</a>
14	WB_RGBLevels4	int16u[3]	
17	WBType5	int16u	--> <a href="#">EXIF LightSource Values</a>
18	WB_RGBLevels5	int16u[3]	
21	WBType6	int16u	--> <a href="#">EXIF LightSource Values</a>
22	WB_RGBLevels6	int16u[3]	
25	WBType7	int16u	--> <a href="#">EXIF LightSource Values</a>
26	WB_RGBLevels7	int16u[3]	

## PanasonicRaw DistortionInfo Tags

Lens distortion correction information.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	DistortionParam02	int16s	
0x0004	DistortionParam04	int16s	
0x0005	DistortionScale	int16s	

7.1	DistortionCorrection	int16s	[val & 0xf] 0 = Off 1 = On
0x0008	DistortionParam08	int16s	
0x0009	DistortionParam09	int16s	
0x000b	DistortionParam11	int16s	
0x000c	DistortionN?	int16s	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Jul 11, 2024*

[<- ExifTool Tag Names](#)

# Parrot mett Tags

Streaming metadata found in Parrot drone videos. See <https://developer.parrot.com/docs/pdraw/metadata.html> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'P1'	ParrotV1	-	--> <a href="#">Parrot V1 Tags</a>
'P2'	ParrotV2	-	--> <a href="#">Parrot V2 Tags</a>
'P3'	ParrotV3	-	--> <a href="#">Parrot V3 Tags</a>
'E1'	ParrotTimeStamp	-	--> <a href="#">Parrot TimeStamp Tags</a>
'E2'	ParrotFollowMe	-	--> <a href="#">Parrot FollowMe Tags</a>
'E3'	ParrotAutomation	-	--> <a href="#">Parrot Automation Tags</a>
'application/arcore-accel'	ARCoreAccel	-	--> <a href="#">Parrot ARCoreAccel Tags</a>
'application/arcore-accel-0'	ARCoreAccel0	-	--> <a href="#">Parrot ARCoreAccel0 Tags</a>
'application/arcore-custom-event'	ARCoreCustom	-	--> <a href="#">Parrot ARCoreCustom Tags</a>
'application/arcore-gyro'	ARCoreGyro	-	--> <a href="#">Parrot ARCoreGyro Tags</a>
'application/arcore-gyro-0'	ARCoreGyro0	-	--> <a href="#">Parrot ARCoreGyro0 Tags</a>
'application/arcore-video-0'	ARCoreVideo	-	--> <a href="#">Parrot ARCoreVideo Tags</a>

## Parrot V1 Tags

Parrot version 1 streaming metadata.

Index1	Tag Name	Writable	Values / Notes
4	DroneYaw	no	
6	DronePitch	no	
8	DroneRoll	no	
10	CameraPan	no	
12	CameraTilt	no	
14	FrameView	no	
22	ExposureTime	no	
24	ISO	no	
26	WifiRSSI	no	
27	Battery	no	
28	GPSLatitude	no	
32	GPSLongitude	no	
36	GPSAltitude	no	[val >> 8 & 0xffff]
36.1	GPSSatellites	no	[val & 0xff]
40	AltitudeFromTakeOff	no	
44	DistanceFromHome	no	
48	SpeedX	no	
50	SpeedY	no	
52	SpeedZ	no	
54	Binning	no	[val >> 7 & 0x1]
54.1	FlyingState	no	[val & 0x7f] 0 = Landed      3 = Flying 1 = Taking Off    4 = Landing 2 = Hovering     5 = Emergency
55	Animation	no	[val >> 7 & 0x1]
55.1	PilotingMode	no	[val & 0x7f] 0 = Manual 1 = Return Home 2 = Flight Plan 3 = Follow Me

## Parrot V2 Tags

## Parrot version 2 basic streaming metadata.

Index1	Tag Name	Writable	Values / Notes
4	Elevation	no	(estimated distance from ground)
8	GPSLatitude	no	
12	GPSLongitude	no	
16	GPSAltitude	no	[val >> 8 & 0xffff]
16.1	GPSSatellites	no	[val & 0xff]
20	GPSVelocityNorth	no	
22	GPSVelocityEast	no	
24	GPSVelocityDown	no	
26	AirSpeed	no	
28	DroneQuaternion	no	
36	FrameView	no	
44	CameraPan	no	
46	CameraTilt	no	
48	ExposureTime	no	
50	ISO	no	
52	Binning	no	[val >> 7 & 0x1]
52.1	FlyingState	no	[val & 0x7f] 0 = Landed    5 = Emergency 1 = Taking Off    6 = User Takeoff 2 = Hovering    7 = Motor Ramping 3 = Flying    8 = Emergency Landing 4 = Landing
53	Animation	no	[val >> 7 & 0x1]
53.1	PilotingMode	no	[val & 0x7f] 0 = Manual 1 = Return Home 2 = Flight Plan 3 = Follow Me / Tracking 4 = Magic Carpet 5 = Move To
54	WifiRSSI	no	
55	Battery	no	
'Groups'	Groups	no	

## Parrot V3 Tags

### Parrot version 3 basic streaming metadata.

Index1	Tag Name	Writable	Values / Notes
4	Elevation	no	(estimated distance from ground)
8	GPSLatitude	no	
12	GPSLongitude	no	
16	GPSAltitude	no	[val >> 8 & 0xffff]
16.1	GPSSatellites	no	[val & 0xff]
20	GPSVelocityNorth	no	
22	GPSVelocityEast	no	
24	GPSVelocityDown	no	
26	AirSpeed	no	
28	DroneQuaternion	no	
36	FrameBaseView	no	
44	FrameView	no	
52	ExposureTime	no	
54	ISO	no	
56	RedBalance	no	
58	BlueBalance	no	

60	FOV	no	(horizontal and vertical field of view in degrees)
64	LinkGoodput	no	[val >> 8 & 0xffff]
64.1	LinkQuality	no	(0-5) [val & 0xff]
68	WifiRSSI	no	
69	Battery	no	
70	Binning	no	[val >> 7 & 0x1]
70.1	FlyingState	no	[val & 0x7f] 0 = Landed      5 = Emergency 1 = Taking Off    6 = User Takeoff 2 = Hovering     7 = Motor Ramping 3 = Flying        8 = Emergency Landing 4 = Landing
71	Animation	no	[val >> 7 & 0x1]
71.1	PilotingMode	no	[val & 0x7f] 0 = Manual 1 = Return Home 2 = Flight Plan 3 = Follow Me / Tracking 4 = Magic Carpet 5 = Move To

## Parrot TimeStamp Tags

Parrot streaming metadata timestamp extension.

Index	Tag Name	Writable	Values / Notes
4	TimeStamp	no	

## Parrot FollowMe Tags

Parrot streaming metadata follow-me extension.

Index	Tag Name	Writable	Values / Notes
4	GPSTargetLatitude	no	
8	GPSTargetLongitude	no	
12	GPSTargetAltitude	no	
16	Follow-meMode	no	Bit 0 = Follow-me enabled Bit 1 = Follow-me Bit 2 = Angle locked
17	Follow-meAnimation	no	0 = None 1 = Orbit 2 = Boomerang 3 = Parabola 4 = Zenith

## Parrot Automation Tags

Parrot streaming metadata automation extension.

Index	Tag Name	Writable	Values / Notes
4	GPSFramingLatitude	no	
8	GPSFramingLongitude	no	
12	GPSFramingAltitude	no	
16	GPSDestLatitude	no	
20	GPSDestLongitude	no	
24	GPSDestAltitude	no	
28	AutomationAnimation	no	0 = None                          8 = Candle 1 = Orbit                        9 = Flip Front 2 = Boomerang                10 = Flip Back 3 = Parabola                   11 = Flip Left 4 = Dolly Slide               12 = Flip Right 5 = Dolly Zoom

6 = Reveal Vertical    13 = Twist Up  
7 = Reveal Horizontal    14 = Position Twist Up

29	AutomationFlags	no	Bit 0 = Follow-me enabled Bit 1 = Look-at-me enabled Bit 2 = Angle locked
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## Parrot ARCoreAccel Tags

ARCore accelerometer data.

Index1	Tag Name	Writable	Values / Notes
4	AccelerometerUnknown?	no	
5	Accelerometer	no	

## Parrot ARCoreAccel0 Tags

ARCore accelerometer data.

Index1	Tag Name	Writable	Values / Notes
9	Accelerometer	no	

## Parrot ARCoreCustom Tags

Index1	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## Parrot ARCoreGyro Tags

ARCore gyro data.

Index1	Tag Name	Writable	Values / Notes
4	GyroscopeUnknown?	no	
5	Gyroscope	no	

## Parrot ARCoreGyro0 Tags

ARCore gyro data.

Index1	Tag Name	Writable	Values / Notes
9	Gyroscope	no	

## Parrot ARCoreVideo Tags

Index1	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

(This document generated automatically by Image::ExifTool::BuildTagLookup  
Last revised Apr 24, 2025)

[-- ExifTool Tag Names](#)

# Pentax Tags

These tags are used in Pentax/Asahi cameras.

Tag ID	Tag Name	Writable	Values / Notes	
0x0000	PentaxVersion	int8u[4]		
0x0001	PentaxModelType	int16u		
0x0002	PreviewImageSize	int16u[2]		
0x0003	PreviewImageLength	int32u*		
0x0004	PreviewImageStart	int32u*		
0x0005	PentaxModelID	int32u	--> <a href="#">Pentax PentaxModelID Values</a>	
0x0006	Date	undef[4]	(changing either Date or Time will affect ShutterCount decryption)	
0x0007	Time	undef[3]		
0x0008	Quality	int16u	0 = Good 1 = Better 2 = Best 3 = TIFF 4 = RAW	5 = Premium 7 = RAW (pixel shift enabled) 8 = Dynamic Pixel Shift 9 = Monochrome 65535 = n/a
0x0009	PentaxImageSize	int16u	0 = 640x480 1 = Full 2 = 1024x768 3 = 1280x960 4 = 1600x1200 5 = 2048x1536 8 = 2560x1920 or 2304x1728 9 = 3072x2304 10 = 3264x2448 19 = 320x240 20 = 2288x1712 21 = 2592x1944 22 = 2304x1728 or 2592x1944 23 = 3056x2296 25 = 2816x2212 or 2816x2112 27 = 3648x2736	29 = 4000x3000 30 = 4288x3216 31 = 4608x3456 129 = 1920x1080 135 = 4608x2592 257 = 3216x3216 '0 0' = 2304x1728 '4 0' = 1600x1200 '5 0' = 2048x1536 '8 0' = 2560x1920 '32 2' = 960x640 '33 2' = 1152x768 '34 2' = 1536x1024 '35 1' = 2400x1600 '36 0' = 3008x2008 or 3040x2024 '37 0' = 3008x2000
0x000b	PictureMode	int16u[n]	(1 or 2 values. Decimal values differentiate Optio 555 modes which are different from other models) [Value 0]	
			0 = Program 0.1 = Av 1 = Shutter Speed Priority 1.1 = M 2 = Program AE 2.1 = Tv 3 = Manual 3.1 = USER 5 = Portrait 6 = Landscape 8 = Sport 9 = Night Scene 11 = Soft 12 = Surf & Snow 13 = Candlelight 14 = Autumn 15 = Macro 17 = Fireworks 18 = Text 19 = Panorama 20 = 3-D 21 = Black & White 22 = Sepia 23 = Red 24 = Pink 25 = Purple 26 = Blue 27 = Green 28 = Yellow 30 = Self Portrait	31 = Illustrations 33 = Digital Filter 35 = Night Scene Portrait 37 = Museum 38 = Food 39 = Underwater 40 = Green Mode 49 = Light Pet 50 = Dark Pet 51 = Medium Pet 53 = Underwater 54 = Candlelight 55 = Natural Skin Tone 56 = Synchro Sound Record 58 = Frame Composite 59 = Report 60 = Kids 61 = Blur Reduction 63 = Panorama 2 65 = Half-length Portrait 66 = Portrait 2 74 = Digital Microscope 75 = Blue Sky 80 = Miniature 81 = HDR 83 = Fisheye 85 = Digital Filter 4 221 = P 255 = PICT
0x000c	FlashMode	int16u[n]	[Value 0] 0x0 = Auto, Did not fire 0x1 = Off, Did not fire 0x2 = On, Did not fire	

0x3 = Auto, Did not fire, Red-eye reduction  
 0x5 = On, Did not fire, Wireless (Master)  
 0x100 = Auto, Fired  
 0x102 = On, Fired  
 0x103 = Auto, Fired, Red-eye reduction  
 0x104 = On, Red-eye reduction  
 0x105 = On, Wireless (Master)  
 0x106 = On, Wireless (Control)  
 0x108 = On, Soft  
 0x109 = On, Slow-sync  
 0x10a = On, Slow-sync, Red-eye reduction  
 0x10b = On, Trailing-curtain Sync  
 [Value 1]  
 0x0 = n/a - Off-Auto-Aperture  
 0x3f = Internal  
 0x100 = External, Auto  
 0x23f = External, Flash Problem  
 0x300 = External, Manual  
 0x304 = External, P-TTL Auto  
 0x305 = External, Contrast-control Sync  
 0x306 = External, High-speed Sync  
 0x30c = External, Wireless  
 0x30d = External, Wireless, High-speed Sync

0x000d FocusMode	int16u	<p>(Pentax models)</p> <p>       0x0 = Normal        0x1 = Macro        0x2 = Infinity        0x3 = Manual        0x4 = Super Macro        0x5 = Pan Focus        0x6 = Auto-area        0x7 = Zone Select        0x8 = Select        0x9 = Pinpoint        0xa = Tracking        0xb = Continuous        0xc = Snap        0x10 = AF-S (Focus-priority)        0x11 = AF-C (Focus-priority)     </p> <p>(Asahi models)</p> <p>       0 = Normal        1 = Macro (1)        2 = Macro (2)        3 = Infinity     </p>	<p>0x12 = AF-A (Focus-priority)        0x20 = Contrast-detect (Focus-priority)        0x21 = Tracking Contrast-detect (Focus-priority)        0x110 = AF-S (Release-priority)        0x111 = AF-C (Release-priority)        0x112 = AF-A (Release-priority)        0x120 = Contrast-detect (Release-priority)        0x8003 = Manual (Macro)        0x8006 = Auto-area (Macro)        0x8007 = Zone Select (Macro)        0x8008 = Select (Macro)        0x8009 = Pinpoint (Macro)        0x800a = Tracking (Macro)        0x800b = Continuous (Macro)     </p>
0x000e AFPointSelected	int16u	<p>(K-1)</p> <p>[Value 0]</p> <p>       0 = None        1 = Top-left        2 = Top Near-left        3 = Top        4 = Top Near-right        5 = Top-right        6 = Upper Far-left        7 = Upper-left        8 = Upper Near-left        9 = Upper-middle        10 = Upper Near-right        11 = Upper-right        12 = Upper Far-right        13 = Far Far Left        14 = Far Left        15 = Left        16 = Near-left        17 = Center        18 = Near-right        19 = Right        20 = Far Right        21 = Far Far Right        22 = Lower Far-left        23 = Lower-left        24 = Lower Near-left        25 = Lower-middle        26 = Lower Near-right        27 = Lower-right     </p> <p>[Value 1]</p>	<p>28 = Lower Far-right        29 = Bottom-left        30 = Bottom Near-left        31 = Bottom        32 = Bottom Near-right        33 = Bottom-right        263 = Zone Select Upper-left        264 = Zone Select Upper Near-left        265 = Zone Select Upper Middle        266 = Zone Select Upper Near-right        267 = Zone Select Upper-right        270 = Zone Select Far Left        271 = Zone Select Left        272 = Zone Select Near-left        273 = Zone Select Center        274 = Zone Select Near-right        275 = Zone Select Right        276 = Zone Select Far Right        279 = Zone Select Lower-left        280 = Zone Select Lower Near-left        281 = Zone Select Lower-middle        282 = Zone Select Lower Near-right        283 = Zone Select Lower-right        65531 = AF Select        65532 = Face Detect AF        65533 = Automatic Tracking AF        65534 = Fixed Center        65535 = Auto     </p>

0 = Single Point	3 = Expanded Area 25-point (M)
1 = Expanded Area 9-point (S)	5 = Expanded Area 33-point (L)
(K-3)	
[Value 0]	
0 = None	259 = Zone Select Top
1 = Top-left	260 = Zone Select Top Near-right
2 = Top Near-left	261 = Zone Select Top-right
3 = Top	262 = Zone Select Upper-left
4 = Top Near-right	263 = Zone Select Upper Near-left
5 = Top-right	264 = Zone Select Upper-middle
6 = Upper-left	265 = Zone Select Upper Near-right
7 = Upper Near-left	266 = Zone Select Upper-right
8 = Upper-middle	267 = Zone Select Far Left
9 = Upper Near-right	268 = Zone Select Left
10 = Upper-right	269 = Zone Select Near-left
11 = Far Left	270 = Zone Select Center
12 = Left	271 = Zone Select Near-right
13 = Near-left	272 = Zone Select Right
14 = Center	273 = Zone Select Far Right
15 = Near-right	274 = Zone Select Lower-left
16 = Right	275 = Zone Select Lower Near-left
17 = Far Right	276 = Zone Select Lower-middle
18 = Lower-left	277 = Zone Select Lower Near-right
19 = Lower Near-left	278 = Zone Select Lower-right
20 = Lower-middle	279 = Zone Select Bottom-left
21 = Lower Near-right	280 = Zone Select Bottom Near-left
22 = Lower-right	281 = Zone Select Bottom
23 = Bottom-left	282 = Zone Select Bottom Near-right
24 = Bottom Near-left	283 = Zone Select Bottom-right
25 = Bottom	65531 = AF Select
26 = Bottom Near-right	65532 = Face Detect AF
27 = Bottom-right	65533 = Automatic Tracking AF
257 = Zone Select Top-left	65534 = Fixed Center
258 = Zone Select Top Near-left	65535 = Auto
[Value 1]	
0 = Single Point	3 = Expanded Area 25-point (M)
1 = Expanded Area 9-point (S)	5 = Expanded Area 27-point (L)
(other models)	
[Value 0]	
0 = None	9 = Lower-left
1 = Upper-left	10 = Bottom
2 = Top	11 = Lower-right
3 = Upper-right	65530 = Auto 2
4 = Left	65531 = AF Select
5 = Mid-left	65532 = Face Detect AF
6 = Center	65533 = Automatic Tracking AF
7 = Mid-right	65534 = Fixed Center
8 = Right	65535 = Auto
[Value 1]	
0 = Single Point	1 = Expanded Area

0x000f AFPointsInFocus  
AFPointsInFocus

int32u (K-3, K-S1 and K-S2 only)

int16u 0x0 = (none)

Bit 0 = Top-left

Bit 1 = Top Near-left

Bit 2 = Top

Bit 3 = Top Near-right

Bit 4 = Top-right

Bit 5 = Upper-left

Bit 6 = Upper Near-left

Bit 7 = Upper-middle

Bit 8 = Upper Near-right

Bit 9 = Upper-right

Bit 10 = Far Left

Bit 11 = Left

Bit 12 = Near-left

Bit 13 = Center

Bit 14 = Near-right

Bit 15 = Right

Bit 16 = Far Right

Bit 17 = Lower-left

Bit 18 = Lower Near-left

Bit 19 = Lower-middle

Bit 20 = Lower Near-right

Bit 21 = Lower-right

Bit 22 = Bottom-left  
Bit 23 = Bottom Near-left  
Bit 24 = Bottom  
Bit 25 = Bottom Near-right  
Bit 26 = Bottom-right  
(other models)  
0x0 = Fixed Center or Multiple  
0x1 = Top-left  
0x2 = Top-center  
0x3 = Top-right  
0x4 = Left  
0x5 = Center  
0x6 = Right  
0x7 = Bottom-left  
0x8 = Bottom-center  
0x9 = Bottom-right  
0xffff = None

0x001b	BlueBalance	int16u	
0x001c	RedBalance	int16u	
0x001d	FocalLength	int32u	
0x001e	DigitalZoom	int16u	
0x001f	Saturation	int16u[n]	(1 or 2 values) [Value 0] 0 = -2 (low) 5 = -3 (very low) 1 = 0 (normal) 6 = +3 (very high) 2 = +2 (high) 7 = -4 (minimum) 3 = -1 (medium low) 8 = +4 (maximum) 4 = +1 (medium high) 65535 = None
0x0020	Contrast	int16u[n]	(1 or 2 values) [Value 0] 0 = -2 (low) 5 = -3 (very low) 1 = 0 (normal) 6 = +3 (very high) 2 = +2 (high) 7 = -4 (minimum) 3 = -1 (medium low) 8 = +4 (maximum) 4 = +1 (medium high) 65535 = n/a
0x0021	Sharpness	int16u[n]	(1 or 2 values) [Value 0] 0 = -2 (soft) 5 = -3 (very soft) 1 = 0 (normal) 6 = +3 (very hard) 2 = +2 (hard) 7 = -4 (minimum) 3 = -1 (medium soft) 8 = +4 (maximum) 4 = +1 (medium hard)
0x0022	WorldTimeLocation	int16u	0 = Hometown 1 = Destination
0x0023	HometownCity	int16u	--> <a href="#">Pentax City Values</a>
0x0024	DestinationCity	int16u	--> <a href="#">Pentax City Values</a>
0x0025	HometownDST	int16u	0 = No 1 = Yes
0x0026	DestinationDST	int16u	0 = No 1 = Yes
0x0027	DSPFirmwareVersion	undef	
0x0028	CPUFirmwareVersion	undef	
0x0029	FrameNumber	int32u	
0x002d	EffectiveLV EffectiveLV	int16u int32u	(camera-calculated light value, but includes exposure compensation)
0x0032	ImageEditing	undef[4]	'0 0' = None '0 0 0' = None '0 0 0 4' = Digital Filter '1 0 0 0' = Resized '2 0 0 0' = Cropped '4 0 0 0' = Digital Filter 4 '6 0 0 0' = Digital Filter 6 '8 0 0 0' = Red-eye Correction '16 0 0 0' = Frame Synthesis?
0x0033	PictureMode	int8u[3]	[Values 0-1] '0 0' = Program '2 3' = MTF Program (HyP) '0 1' = Hi-speed Program '2 22' = Shallow DOF (HyP) '0 2' = DOF Program '3 0' = Green Mode '0 3' = MTF Program '4 0' = Shutter Speed Priority '0 4' = Standard '4 2' = Shutter Speed Priority 2 '0 5' = Portrait '4 31' = Shutter Speed Priority 31 '0 6' = Landscape '5 0' = Aperture Priority '0 7' = Macro '5 2' = Aperture Priority 2 '0 8' = Sport '5 31' = Aperture Priority 31 '0 9' = Night Scene Portrait '6 0' = Program Tv Shift '0 10' = No Flash '7 0' = Program Av Shift '0 11' = Night Scene '8 0' = Manual '0 12' = Surf & Snow '9 0' = Bulb '0 13' = Text '10 0' = Aperture Priority, Off-Auto-Aperture '0 14' = Sunset '11 0' = Manual, Off-Auto-Aperture '0 15' = Kids '12 0' = Bulb, Off-Auto-Aperture '0 16' = Pet '13 0' = Shutter & Aperture Priority AE '0 17' = Candlelight '14 0' = Shutter Priority AE '0 18' = Museum '0 19' = Food

'0 20' = Stage Lighting  
 '0 21' = Night Snap  
 '0 23' = Blue Sky  
 '0 24' = Sunset  
 '0 26' = Night Scene HDR  
 '0 27' = HDR  
 '0 28' = Quick Macro  
 '0 29' = Forest  
 '0 30' = Backlight Silhouette  
 '0 31' = Max. Aperture Priority  
 '0 32' = DOF (Standard)  
 '1 4' = Auto PICT (Portrait)  
 '1 5' = Auto PICT (Macro)  
 '1 6' = Auto PICT (Sport)  
 '2 0' = Program (HyP)  
 '2 1' = Hi-speed Program (HyP)  
 '2 2' = DOF Program (HyP)

'15 0' = Sensitivity Priority AE  
 '16 0' = Flash X-Sync Speed AE  
 '17 0' = Flash X-Sync Speed  
 '18 0' = Auto Program (Normal)  
 '18 1' = Auto Program (Hi-speed)  
 '18 2' = Auto Program (DOF)  
 '18 3' = Auto Program (MTF)  
 '18 22' = Auto Program (Shallow DOF)  
 '19 0' = Astrotracer  
 '20 22' = Blur Control  
 '24 0' = Aperture Priority (Adv.Hyp)  
 '25 0' = Manual Exposure (Adv.Hyp)  
 '26 0' = Shutter and Aperture Priority (TAv)  
 '249 0' = Movie (TAv)  
 '250 0' = Movie (TAv, Auto Aperture)  
 '251 0' = Movie (Manual)  
 '252 0' = Movie (Manual, Auto Aperture)  
 '253 0' = Movie (Av)  
 '254 0' = Movie (Av, Auto Aperture)  
 '255 0' = Movie (P, Auto Aperture)  
 '255 4' = Video (4)

[Value 2]

0 = 1/2 EV steps 1 = 1/3 EV steps

0x0034	DriveMode	int8u[4]	<p>[Value 0]</p> <p>0 = Single-frame      4 = Continuous (Medium)      1 = Continuous      5 = Continuous (Low)      2 = Continuous (Lo)      255 = Video      3 = Burst</p> <p>[Value 1]</p> <p>0 = No Timer      15 = Video      1 = Self-timer (12 s)      16 = Mirror Lock-up      2 = Self-timer (2 s)      255 = n/a</p> <p>[Value 2]</p> <p>0 = Shutter Button      1 = Remote Control (3 s delay)      2 = Remote Control      4 = Remote Continuous Shooting</p> <p>[Value 3]</p> <p>0 = Single Exposure      1 = Multiple Exposure      2 = Composite Average      3 = Composite Additive      4 = Composite Bright      8 = Interval Shooting      10 = Interval Composite Average      11 = Interval Composite Additive      12 = Interval Composite Bright      15 = Interval Movie      16 = HDR      32 = HDR Strong 1      48 = HDR Strong 2      64 = HDR Strong 3      80 = HDR Manual      224 = HDR Auto      255 = Video</p>
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0x0035	SensorSize	int16u[2]	(includes masked pixels)
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0x0037	ColorSpace	int16u	0 = sRGB 1 = Adobe RGB
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0x0038	ImageAreaOffset	int16u[2]	
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0x0039	RawImageSize	int16u[2]~	
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0x003c	AFPointsInFocus	no	(*istD only)
			0x0 = (none)      Bit 5 = Center Bit 0 = Upper-left      Bit 6 = Mid-right Bit 1 = Top      Bit 7 = Right Bit 2 = Upper-right      Bit 8 = Lower-left Bit 3 = Left      Bit 9 = Bottom Bit 4 = Mid-left      Bit 10 = Lower-right

0x003d	DataScaling	int16u	
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0x003e	PreviewImageBorders	int8u[4]	(top, bottom, left, right)
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0x003f	LensRec	-	--> <a href="#">Pentax LensRec Tags</a>
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0x0040	SensitivityAdjust	int16u	
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0x0041	ImageEditCount	int16u	
0x0047	CameraTemperature	int8s	
0x0048	AELock	int16u	0 = Off 1 = On
0x0049	NoiseReduction	int16u	0 = Off 1 = On
0x004d	FlashExposureComp	int32s	
	FlashExposureComp	int8s[2]	
0x004f	ImageTone	int16u	0 = Natural 1 = Bright 2 = Portrait 3 = Landscape 4 = Vibrant 5 = Monochrome 6 = Muted 7 = Reversal Film 8 = Bleach Bypass 9 = Radiant 10 = Cross Processing 11 = Flat 256 = Standard 257 = Vivid 258 = Monotone 259 = Soft Monotone 260 = Hard Monotone 261 = Hi-contrast B&W 262 = Positive Film 263 = Bleach Bypass 2 264 = Retro 265 = HDR Tone 266 = Cross Processing 2 267 = Negative Film 32768 = Standard 32769 = Hard 32770 = Soft
0x0050	ColorTemperature	int16u	
0x0053	ColorTempDaylight	undef[4]	(0x0053-0x005a are 3 numbers: Kelvin, shift AB, shift GM)
0x0054	ColorTempShade	undef[4]	
0x0055	ColorTempCloudy	undef[4]	
0x0056	ColorTempTungsten	undef[4]	
0x0057	ColorTempFluorescentD	undef[4]	
0x0058	ColorTempFluorescentN	undef[4]	
0x0059	ColorTempFluorescentW	undef[4]	
0x005a	ColorTempFlash	undef[4]	
0x005c	ShakeReductionInfo	-	--> <a href="#">Pentax SRInfo Tags</a> --> <a href="#">Pentax SRInfo2 Tags</a>
0x005d	ShutterCount	undef[4]	(Note: May be reset by servicing! Also, does not include shutter actuations for live view or video recording)
0x0060	FaceInfo	-	--> <a href="#">Pentax FaceInfo Tags</a>
0x0062	RawDevelopmentProcess	int16u	1 = 1 (K10D,K200D,K2000,K-m) 3 = 3 (K20D) 4 = 4 (K-7) 5 = 5 (K-x) 6 = 6 (645D) 7 = 7 (K-r) 8 = 8 (K-5,K-5II,K-5IIs) 9 = 9 (Q) 10 = 10 (K-01,K-30,K-50,K-500) 11 = 11 (Q10) 12 = 12 (MX-1,Q-S1,Q7) 13 = 13 (K-3,K-3II) 14 = 14 (645Z) 15 = 15 (K-S1,K-S2) 16 = 16 (K-1) 17 = 17 (K-70) 18 = 18 (KP) 19 = 19 (GR III) 20 = 20 (K-3III) 21 = 21 (K-3IIIMonochrome)
0x0067	Hue	int16u	0 = -2      5 = -3 1 = Normal    6 = 3 2 = 2      7 = -4 3 = -1      8 = 4 4 = 1      65535 = None
0x0068	AWBInfo	-	--> <a href="#">Pentax AWBInfo Tags</a>
0x0069	DynamicRangeExpansion	undef[4]	(called highlight correction by Pentax for the K20D, K-5, K-01 and maybe other models) [Value 0] 0 = Off 1 = On [Value 1] 0 = 0

			1 = Enabled 2 = Auto
0x006b	TimeInfo	-	--> <a href="#">Pentax TimeInfo Tags</a>
0x006c	HighLowKeyAdj	int16s[2]	'-1 0' = -1    '-4 0' = -4    '2 0' = 2 '-2 0' = -2    '0 0' = 0    '3 0' = 3 '-3 0' = -3    '1 0' = 1    '4 0' = 4
0x006d	ContrastHighlight	int16s[2]	'-1 0' = -1    '-4 0' = -4    '2 0' = 2 '-2 0' = -2    '0 0' = 0    '3 0' = 3 '-3 0' = -3    '1 0' = 1    '4 0' = 4
0x006e	ContrastShadow	int16s[2]	'-1 0' = -1    '-4 0' = -4    '2 0' = 2 '-2 0' = -2    '0 0' = 0    '3 0' = 3 '-3 0' = -3    '1 0' = 1    '4 0' = 4
0x006f	ContrastHighlightShadowAdj	int8u	0 = Off 1 = On
0x0070	FineSharpness	int8u[n]	[Value 0] 0 = Off 1 = On [Value 1] 0 = Normal 2 = Extra fine
0x0071	HighISONoiseReduction	int8u	[Value 0] 0 = Off      3 = Strong 1 = Weakest   4 = Medium 2 = Weak     255 = Auto [Value 1] 0 = Inactive 1 = Active 2 = Active (Weak) 3 = Active (Strong) 4 = Active (Medium) [Value 2] 48 = ISO>400 56 = ISO>800 64 = ISO>1600 72 = ISO>3200
0x0072	AFAdjustment	int16s	
0x0073	MonochromeFilterEffect	int16u	1 = Green      6 = Blue 2 = Yellow     7 = Cyan 3 = Orange     8 = Infrared 4 = Red       65535 = None 5 = Magenta
0x0074	MonochromeToning	int16u	0 = -4   5 = 1 1 = -3   6 = 2 2 = -2   7 = 3 3 = -1   8 = 4 4 = 0    65535 = None
0x0076	FaceDetect	int8u[2]	
0x0077	FaceDetectFrameSize	int16u[2]	
0x0079	ShadowCorrection	int8u[n]	0 = Off      '1 1' = Weak 1 = On       '1 2' = Normal 2 = Auto 2   '1 3' = Strong '0 0' = Off   '2 4' = Auto
0x007a	ISOAutoMinSpeed	int8u[2]	[Value 0] 1 = Shutter Speed Control 2 = Auto Slow 3 = Auto Standard 4 = Auto Fast
0x007b	CrossProcess	int8u	0 = Off      4 = Preset 3 1 = Random   33 = Favorite 1 2 = Preset 1   34 = Favorite 2 3 = Preset 2   35 = Favorite 3
0x007d	LensCorr	-	--> <a href="#">Pentax LensCorr Tags</a>
0x007e	WhiteLevel	int32u	
0x007f	BleachBypassToning	int16u	0 = Off      5 = Magenta 1 = Green     6 = Purple 2 = Yellow   7 = Blue 3 = Orange   8 = Cyan 4 = Red      65535 = n/a
0x0080	AspectRatio	yes	0 = 4:3 1 = 3:2

			2 = 16:9 3 = 1:1
0x0082	BlurControl	int8u[4]	[Value 0] 0 = Off 1 = Low 2 = Medium 3 = High
0x0085	HDR	int8u[4]	[Value 0] 0 = Off 3 = HDR 2 1 = HDR Auto 4 = HDR 3 2 = HDR 1 5 = HDR Advanced [Value 1] 0 = Auto-align Off 1 = Auto-align On [Value 2] 0 = n/a 4 = 1 EV 8 = 2 EV 12 = 3 EV
0x0087	ShutterType	int8u	0 = Normal 1 = Electronic
0x0088	NeutralDensityFilter	int8u[n]	0 = Off '0 2' = Off (Auto) 1 = On '1 1' = On (On) '0 0' = Off (Off) '1 2' = On (Auto)
0x008b	ISO	int32u	
0x0092	IntervalShooting	int16u[2]	(2 numbers: 1. Shot number 2. Total number of shots) '0 0' = Off
0x0095	SkinToneCorrection SkinToneCorrection	int8s[2] int8s[3]	'0 0' = Off '1 1' = On (type 1) '1 2' = On (type 2) '0 0 0' = Off
0x0096	ClarityControl	int8s[2]	'0 0' = Off
0x0200	BlackPoint	int16u[4]	
0x0201	WhitePoint	int16u[4]	
0x0203	ColorMatrixA	int16s[9]	
0x0204	ColorMatrixB	int16s[9]	
0x0205	CameraSettings CameraSettingsUnknown	-	--> <a href="#">Pentax CameraSettings Tags</a> --> <a href="#">Pentax CameraSettingsUnknown Tags</a>
0x0206	AEInfo AEInfo2 AEInfo3 AEInfoUnknown	-	--> <a href="#">Pentax AEInfo Tags</a> --> <a href="#">Pentax AEInfo2 Tags</a> --> <a href="#">Pentax AEInfo3 Tags</a> --> <a href="#">Pentax AEInfoUnknown Tags</a>
0x0207	LensInfo	-	--> <a href="#">Pentax LensInfo Tags</a> --> <a href="#">Pentax LensInfo2 Tags</a> --> <a href="#">Pentax LensInfo3 Tags</a> --> <a href="#">Pentax LensInfo4 Tags</a> --> <a href="#">Pentax LensInfo5 Tags</a>
0x0208	FlashInfo FlashInfoUnknown	-	--> <a href="#">Pentax FlashInfo Tags</a> --> <a href="#">Pentax FlashInfoUnknown Tags</a>
0x0209	AEMeteringSegments	int8u[n]	(measurements from each of the 16 AE metering segments for models such as the K10D, 77 metering segments for models such as the K-5, and 4050 metering segments for the K-3, converted to LV)
0x020a	FlashMeteringSegments	int8u[n]	
0x020b	SlaveFlashMeteringSegments	int8u[n]	(used in wireless control mode)
0x020d	WB_RGGBLevelsDaylight	int16u[4]	
0x020e	WB_RGGBLevelsShade	int16u[4]	
0x020f	WB_RGGBLevelsCloudy	int16u[4]	
0x0210	WB_RGGBLevelsTungsten	int16u[4]	
0x0211	WB_RGGBLevelsFluorescentD	int16u[4]	
0x0212	WB_RGGBLevelsFluorescentN	int16u[4]	
0x0213	WB_RGGBLevelsFluorescentW	int16u[4]	
0x0214	WB_RGGBLevelsFlash	int16u[4]	
0x0215	CameralInfo	-	--> <a href="#">Pentax CameralInfo Tags</a>

0x0216	BatteryInfo	-	--> <a href="#">Pentax BatteryInfo Tags</a>
0x021b	SaturationInfo?	no	(only in PEF and DNG images)
0x021c	ColorMatrixA2	undef[18]	
0x021d	ColorMatrixB2	undef[18]	
0x021f	AFInfo	-	--> <a href="#">Pentax AFInfo Tags</a>
0x0220	HuffmanTable?	no	(found in K10D, K20D and K2000 PEF images)
0x0221	KelvinWB	-	--> <a href="#">Pentax KelvinWB Tags</a>
0x0222	ColorInfo	-	--> <a href="#">Pentax ColorInfo Tags</a>
0x0224	EVStepInfo	-	--> <a href="#">Pentax EVStepInfo Tags</a>
0x0226	ShotInfo	-	--> <a href="#">Pentax ShotInfo Tags</a>
0x0227	FacePos	-	--> <a href="#">Pentax FacePos Tags</a>
0x0228	FaceSize	-	--> <a href="#">Pentax FaceSize Tags</a>
0x0229	SerialNumber	string	(left blank by some cameras)
0x022a	FilterInfo	-	--> <a href="#">Pentax FilterInfo Tags</a> --> <a href="#">Pentax FilterInfo Tags</a>
0x022b	LevellInfoK3III	-	--> <a href="#">Pentax LevellInfoK3III Tags</a>
	LevellInfo	-	--> <a href="#">Pentax LevellInfo Tags</a>
0x022d	WBLevels	-	--> <a href="#">Pentax WBLevels Tags</a>
0x022e	Artist	string	
0x022f	Copyright	string	
0x0230	FirmwareVersion	string	(only in videos)
0x0231	ContrastDetectAFArea	int16u[4]	(AF area of the most recent contrast-detect focus operation. Coordinates are left, top, width and height in a 720x480 frame, with Y downwards)
0x0235	CrossProcessParams	undef[10]	
0x0238	CAFPointInfo	-	--> <a href="#">Pentax CAFPointInfo Tags</a>
0x0239	LensInfoQ	-	--> <a href="#">Pentax LensInfoQ Tags</a>
0x023f	Model	string	
0x0243	PixelShiftInfo	-	--> <a href="#">Pentax PixelShiftInfo Tags</a>
0x0245	AFPointInfo	-	--> <a href="#">Pentax AFPointInfo Tags</a>
0x03fe	DataDump	no	
0x03ff	TempInfo	-	--> <a href="#">Pentax TempInfo Tags</a>
	UnknownInfo	-	--> <a href="#">Pentax UnknownInfo Tags</a>
0x0402	ToneCurve	yes~	
0x0403	ToneCurves	yes~	
0x0405	UnknownBlock?	undef	(large unknown data block in PEF/DNG images but not JPG images)
0x040b	FaceInfoK3III	-	--> <a href="#">Pentax FaceInfoK3III Tags</a>
0x040c	AFInfoK3III	-	--> <a href="#">Pentax AFInfoK3III Tags</a>
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>

## Pentax PentaxModelID Values

Value	PentaxModelID	Value	PentaxModelID	Value	PentaxModelID
0xd = Optio 330/430		0x12c32 = Optio M20		0x12e8a = Optio RS1000/RS1500	
0x12926 = Optio 230		0x12c3c = Optio W20		0x12e94 = Optio RZ10	
0x12958 = Optio 330GS		0x12c46 = Optio A20		0x12e9e = Optio LS1000	
0x12962 = Optio 450/550		0x12c78 = Optio E30		0x12ebc = Optio WG-1 GPS	
0x1296c = Optio S		0x12c7d = Optio E35		0x12ed0 = Optio S1	
0x12971 = Optio S V1.01		0x12c82 = Optio T30		0x12ee4 = Q	
0x12994 = *ist D		0x12c8c = Optio M30		0x12ef8 = K-01	
0x129b2 = Optio 33L		0x12c91 = Optio L30		0x12f0c = Optio RZ18	
0x129bc = Optio 33LF		0x12c96 = Optio W30		0x12f16 = Optio VS20	
0x129c6 = Optio 33WR/43WR/555		0x12ca0 = Optio A30		0x12f2a = Optio WG-2 GPS	
0x129d5 = Optio S4		0x12cb4 = Optio E40		0x12f48 = Optio LS465	
0x12a02 = Optio MX		0x12cbe = Optio M40		0x12f52 = K-30	
0x12a0c = Optio S40		0x12cc3 = Optio L40		0x12f5c = X-5	
0x12a16 = Optio S4i		0x12cc5 = Optio L36		0x12f66 = Q10	
0x12a34 = Optio 30		0x12cc8 = Optio Z10		0x12f70 = K-5 II	
0x12a52 = Optio S30		0x12cd2 = K20D		0x12f71 = K-5 II s	

0x12a66 = Optio 750Z	0x12cd4 = Samsung GX20	0x12f7a = Q7
0x12a70 = Optio SV	0x12cdc = Optio S10	0x12f84 = MX-1
0x12a75 = Optio SVi	0x12ce6 = Optio A40	0x12f8e = WG-3 GPS
0x12a7a = Optio X	0x12cf0 = Optio V10	0x12f98 = WG-3
0x12a8e = Optio S5i	0x12cfa = K200D	0x12fa2 = WG-10
0x12a98 = Optio S50	0x12d04 = Optio S12	0x12fb6 = K-50
0x12aa2 = *ist DS	0x12d0e = Optio E50	0x12fc0 = K-3
0x12ab6 = Optio MX4	0x12d18 = Optio M50	0x12fc4 = K-500
0x12ac0 = Optio S5n	0x12d22 = Optio L50	0x12fde = WG-4 GPS
0x12aca = Optio WP	0x12d2c = Optio V20	0x12fe8 = WG-4
0x12afc = Optio S55	0x12d40 = Optio W60	0x13006 = WG-20
0x12b10 = Optio S5z	0x12d4a = Optio M60	0x13010 = 645Z
0x12b1a = *ist DL	0x12d68 = Optio E60/M90	0x1301a = K-S1
0x12b24 = Optio S60	0x12d72 = K2000	0x13024 = K-S2
0x12b2e = Optio S45	0x12d73 = K-m	0x1302e = Q-S1
0x12b38 = Optio S6	0x12d86 = Optio P70	0x13056 = WG-30
0x12b4c = Optio WPi	0x12d90 = Optio L70	0x1307e = WG-30W
0x12b56 = BenQ DC X600	0x12d9a = Optio E70	0x13088 = WG-5 GPS
0x12b60 = *ist DS2	0x12dae = X70	0x13092 = K-1
0x12b62 = Samsung GX-1S	0x12db8 = K-7	0x1309c = K-3 II
0x12b6a = Optio A10	0x12dcc = Optio W80	0x131f0 = WG-M2
0x12b7e = *ist DL2	0x12dea = Optio P80	0x1320e = GR III
0x12b80 = Samsung GX-1L	0x12df4 = Optio WS80	0x13222 = K-70
0x12b9c = K100D	0x12dfe = K-x	0x1322c = KP
0x12b9d = K110D	0x12e08 = 645D	0x13240 = K-1 Mark II
0x12ba2 = K100D Super	0x12e12 = Optio E80	0x13254 = K-3 Mark III
0x12bb0 = Optio T10/T20	0x12e30 = Optio W90	0x13290 = WG-70
0x12be2 = Optio W10	0x12e3a = Optio I-10	0x1329a = GR IIIx
0x12bf6 = Optio M10	0x12e44 = Optio H90	0x132b8 = KF
0x12c1e = K10D	0x12e4e = Optio E90	0x132d6 = K-3 Mark III Monochrome
0x12c20 = Samsung GX10	0x12e58 = X90	0x132e0 = GR IV
0x12c28 = Optio S7	0x12e6c = K-r	
0x12c2d = Optio L20	0x12e76 = K-5	

## Pentax City Values

Value	City	Value	City	Value	City	Value	City	Value	City
0 = Pago Pago	15 = Halifax	30 = Jeddah	45 = Phnom Penh	60 = Wellington					
1 = Honolulu	16 = Buenos Aires	31 = Tehran	46 = Ho Chi Minh	61 = Auckland					
2 = Anchorage	17 = Sao Paulo	32 = Dubai	47 = Jakarta	62 = Lima					
3 = Vancouver	18 = Rio de Janeiro	33 = Karachi	48 = Hong Kong	63 = Dakar					
4 = San Francisco	19 = Madrid	34 = Kabul	49 = Perth	64 = Algiers					
5 = Los Angeles	20 = London	35 = Male	50 = Beijing	65 = Helsinki					
6 = Calgary	21 = Paris	36 = Delhi	51 = Shanghai	66 = Athens					
7 = Denver	22 = Milan	37 = Colombo	52 = Manila	67 = Nairobi					
8 = Mexico City	23 = Rome	38 = Kathmandu	53 = Taipei	68 = Amsterdam					
9 = Chicago	24 = Berlin	39 = Dacca	54 = Seoul	69 = Stockholm					
10 = Miami	25 = Johannesburg	40 = Yangon	55 = Adelaide	70 = Lisbon					
11 = Toronto	26 = Istanbul	41 = Bangkok	56 = Tokyo	71 = Copenhagen					
12 = New York	27 = Cairo	42 = Kuala Lumpur	57 = Guam	72 = Warsaw					
13 = Santiago	28 = Jerusalem	43 = Vientiane	58 = Sydney	73 = Prague					
14 = Caracas	29 = Moscow	44 = Singapore	59 = Noumea	74 = Budapest					

## Pentax LensRec Tags

This record stores the LensType, plus one or two unknown bytes for some models.

Index1	Tag Name	Writable	Values / Notes
0	LensType	int8u[2]	--> <a href="#">Pentax LensType Values</a>
3	ExtenderStatus	int8u	(not valid if a non-AF lens is used) 0 = Not attached 1 = Attached

## Pentax LensType Values

The first number gives the series of the lens, and the second identifies the lens model. Note that newer series numbers may not always be properly identified by cameras running older firmware versions.

Value	LensType
'0 0'	= M-42 or No Lens

'1 0' = K or M Lens  
'2 0' = A Series Lens  
'3 0' = Sigma  
'3 17' = smc PENTAX-FA SOFT 85mm F2.8  
'3 18' = smc PENTAX-F 1.7X AF ADAPTER  
'3 19' = smc PENTAX-F 24-50mm F4  
'3 20' = smc PENTAX-F 35-80mm F4-5.6  
'3 21' = smc PENTAX-F 80-200mm F4.7-5.6  
'3 22' = smc PENTAX-F FISH-EYE 17-28mm F3.5-4.5  
'3 23' = smc PENTAX-F 100-300mm F4.5-5.6 or Sigma Lens  
'3 23' = Sigma AF 28-300mm F3.5-5.6 DL IF  
'3 23' = Sigma AF 28-300mm F3.5-6.3 DG IF Macro  
'3 23' = Tokina 80-200mm F2.8 ATX-Pro  
'3 24' = smc PENTAX-F 35-135mm F3.5-4.5  
'3 25' = smc PENTAX-F 35-105mm F4-5.6 or Sigma or Tokina Lens  
'3 25' = Sigma 55-200mm F4-5.6 DC  
'3 25' = Sigma AF 28-300mm F3.5-5.6 DL IF  
'3 25' = Sigma AF 28-300mm F3.5-6.3 DL IF  
'3 25' = Sigma AF 28-300mm F3.5-6.3 DG IF Macro  
'3 25' = Tokina 80-200mm F2.8 ATX-Pro  
'3 26' = smc PENTAX-F\* 250-600mm F5.6 ED[IF]  
'3 27' = smc PENTAX-F 28-80mm F3.5-4.5 or Tokina Lens  
'3 27' = Tokina AT-X Pro AF 28-70mm F2.6-2.8  
'3 28' = smc PENTAX-F 35-70mm F3.5-4.5 or Tokina Lens  
'3 28' = Tokina 19-35mm F3.5-4.5 AF  
'3 28' = Tokina AT-X AF 400mm F5.6  
'3 29' = PENTAX-F 28-80mm F3.5-4.5 or Sigma or Tokina Lens  
'3 29' = Sigma AF 18-125mm F3.5-5.6 DC  
'3 29' = Tokina AT-X PRO 28-70mm F2.6-2.8  
'3 30' = PENTAX-F 70-200mm F4-5.6  
'3 31' = smc PENTAX-F 70-210mm F4-5.6 or Tokina or Takumar Lens  
'3 31' = Tokina AF 730 75-300mm F4.5-5.6  
'3 31' = Takumar-F 70-210mm F4-5.6  
'3 32' = smc PENTAX-F 50mm F1.4  
'3 33' = smc PENTAX-F 50mm F1.7  
'3 34' = smc PENTAX-F 135mm F2.8 [IF]  
'3 35' = smc PENTAX-F 28mm F2.8  
'3 36' = Sigma 20mm F1.8 EX DG Aspherical RF  
'3 38' = smc PENTAX-F\* 300mm F4.5 ED[IF]  
'3 39' = smc PENTAX-F\* 600mm F4 ED[IF]  
'3 40' = smc PENTAX-F Macro 100mm F2.8  
'3 41' = smc PENTAX-F Macro 50mm F2.8 or Sigma Lens  
'3 41' = Sigma 50mm F2.8 Macro  
'3 42' = Sigma 300mm F2.8 EX DG APO IF  
'3 44' = Sigma or Tamron Lens (3 44)  
'3 44' = Sigma AF 10-20mm F4-5.6 EX DC  
'3 44' = Sigma 12-24mm F4.5-5.6 EX DG  
'3 44' = Sigma 17-70mm F2.8-4.5 DC Macro  
'3 44' = Sigma 18-50mm F3.5-5.6 DC  
'3 44' = Sigma 17-35mm F2.8-4 EX DG  
'3 44' = Tamron 35-90mm F4-5.6 AF  
'3 44' = Sigma AF 18-35mm F3.5-4.5 Aspherical  
'3 46' = Sigma or Samsung Lens (3 46)  
'3 46' = Sigma APO 70-200mm F2.8 EX  
'3 46' = Sigma EX APO 100-300mm F4 IF  
'3 46' = Samsung/Schneider D-XENON 50-200mm F4-5.6 ED  
'3 50' = smc PENTAX-FA 28-70mm F4 AL  
'3 51' = Sigma 28mm F1.8 EX DG Aspherical Macro  
'3 52' = smc PENTAX-FA 28-200mm F3.8-5.6 AL[IF] or Tamron Lens  
'3 52' = Tamron AF LD 28-200mm F3.8-5.6 [IF] Aspherical (171D)  
'3 53' = smc PENTAX-FA 28-80mm F3.5-5.6 AL  
'3 247' = smc PENTAX-DA FISH-EYE 10-17mm F3.5-4.5 ED[IF]  
'3 248' = smc PENTAX-DA 12-24mm F4 ED AL[IF]  
'3 250' = smc PENTAX-DA 50-200mm F4-5.6 ED  
'3 251' = smc PENTAX-DA 40mm F2.8 Limited  
'3 252' = smc PENTAX-DA 18-55mm F3.5-5.6 AL  
'3 253' = smc PENTAX-DA 14mm F2.8 ED[IF]  
'3 254' = smc PENTAX-DA 16-45mm F4 ED AL  
'3 255' = Sigma Lens (3 255)  
'3 255' = Sigma 18-200mm F3.5-6.3 DC  
'3 255' = Sigma DL-II 35-80mm F4-5.6  
'3 255' = Sigma DL Zoom 75-300mm F4-5.6  
'3 255' = Sigma DF EX Aspherical 28-70mm F2.8  
'3 255' = Sigma AF Tele 400mm F5.6 Multi-coated  
'3 255' = Sigma 24-60mm F2.8 EX DG

'3 255' = Sigma 70-300mm F4-5.6 Macro  
'3 255' = Sigma 55-200mm F4-5.6 DC  
'3 255' = Sigma 18-50mm F2.8 EX DC  
'4 1' = smc PENTAX-FA SOFT 28mm F2.8  
'4 2' = smc PENTAX-FA 80-320mm F4.5-5.6  
'4 3' = smc PENTAX-FA 43mm F1.9 Limited  
'4 6' = smc PENTAX-FA 35-80mm F4-5.6  
'4 7' = Irix 45mm F1.4  
'4 8' = Irix 150mm F2.8 Macro  
'4 9' = Irix 11mm F4 Firefly  
'4 10' = Irix 15mm F2.4  
'4 12' = smc PENTAX-FA 50mm F1.4  
'4 15' = smc PENTAX-FA 28-105mm F4-5.6 [IF]  
'4 16' = Tamron AF 80-210mm F4-5.6 (178D)  
'4 19' = Tamron SP AF 90mm F2.8 (172E)  
'4 20' = smc PENTAX-FA 28-80mm F3.5-5.6  
'4 21' = Cosina AF 100-300mm F5.6-6.7  
'4 22' = Tokina 28-80mm F3.5-5.6  
'4 23' = smc PENTAX-FA 20-35mm F4 AL  
'4 24' = smc PENTAX-FA 77mm F1.8 Limited  
'4 25' = Tamron SP AF 14mm F2.8  
'4 26' = smc PENTAX-FA Macro 100mm F3.5 or Cosina Lens  
'4 26' = Cosina 100mm F3.5 Macro  
'4 27' = Tamron AF 28-300mm F3.5-6.3 LD Aspherical[IF] Macro (185D/285D)  
'4 28' = smc PENTAX-FA 35mm F2 AL  
'4 29' = Tamron AF 28-200mm F3.8-5.6 LD Super II Macro (371D)  
'4 34' = smc PENTAX-FA 24-90mm F3.5-4.5 AL[IF]  
'4 35' = smc PENTAX-FA 100-300mm F4.7-5.8  
'4 36' = Tamron AF 70-300mm F4-5.6 LD Macro 1:2  
'4 37' = Tamron SP AF 24-135mm F3.5-5.6 AD AL (190D)  
'4 38' = smc PENTAX-FA 28-105mm F3.2-4.5 AL[IF]  
'4 39' = smc PENTAX-FA 31mm F1.8 AL Limited  
'4 41' = Tamron AF 28-200mm Super Zoom F3.8-5.6 Aspherical XR [IF] Macro (A03)  
'4 43' = smc PENTAX-FA 28-90mm F3.5-5.6  
'4 44' = smc PENTAX-FA J 75-300mm F4.5-5.8 AL  
'4 45' = Tamron Lens (4 45)  
'4 45' = Tamron 28-300mm F3.5-6.3 Ultra zoom XR  
'4 45' = Tamron AF 28-300mm F3.5-6.3 XR Di LD Aspherical [IF] Macro  
'4 46' = smc PENTAX-FA J 28-80mm F3.5-5.6 AL  
'4 47' = smc PENTAX-FA J 18-35mm F4-5.6 AL  
'4 49' = Tamron SP AF 28-75mm F2.8 XR Di LD Aspherical [IF] Macro  
'4 51' = smc PENTAX-D FA 50mm F2.8 Macro  
'4 52' = smc PENTAX-D FA 100mm F2.8 Macro  
'4 55' = Samsung/Schneider D-XENOGON 35mm F2  
'4 56' = Samsung/Schneider D-XENON 100mm F2.8 Macro  
'4 75' = Tamron SP AF 70-200mm F2.8 Di LD [IF] Macro (A001)  
'4 214' = smc PENTAX-DA 35mm F2.4 AL  
'4 229' = smc PENTAX-DA 18-55mm F3.5-5.6 AL II  
'4 230' = Tamron SP AF 17-50mm F2.8 XR Di II  
'4 231' = smc PENTAX-DA 18-250mm F3.5-6.3 ED AL [IF]  
'4 237' = Samsung/Schneider D-XENOGON 10-17mm F3.5-4.5  
'4 239' = Samsung/Schneider D-XENON 12-24mm F4 ED AL [IF]  
'4 242' = smc PENTAX-DA\* 16-50mm F2.8 ED AL [IF] SDM (SDM unused)  
'4 243' = smc PENTAX-DA 70mm F2.4 Limited  
'4 244' = smc PENTAX-DA 21mm F3.2 AL Limited  
'4 245' = Samsung/Schneider D-XENON 50-200mm F4-5.6  
'4 246' = Samsung/Schneider D-XENON 18-55mm F3.5-5.6  
'4 247' = smc PENTAX-DA FISH-EYE 10-17mm F3.5-4.5 ED[IF]  
'4 248' = smc PENTAX-DA 12-24mm F4 ED AL [IF]  
'4 249' = Tamron XR Dill 18-200mm F3.5-6.3 (A14)  
'4 250' = smc PENTAX-DA 50-200mm F4-5.6 ED  
'4 251' = smc PENTAX-DA 40mm F2.8 Limited  
'4 252' = smc PENTAX-DA 18-55mm F3.5-5.6 AL  
'4 253' = smc PENTAX-DA 14mm F2.8 ED[IF]  
'4 254' = smc PENTAX-DA 16-45mm F4 ED AL  
'5 1' = smc PENTAX-FA\* 24mm F2 AL[IF]  
'5 2' = smc PENTAX-FA 28mm F2.8 AL  
'5 3' = smc PENTAX-FA 50mm F1.7  
'5 4' = smc PENTAX-FA 50mm F1.4  
'5 5' = smc PENTAX-FA\* 600mm F4 ED[IF]  
'5 6' = smc PENTAX-FA\* 300mm F4.5 ED[IF]  
'5 7' = smc PENTAX-FA 135mm F2.8 [IF]  
'5 8' = smc PENTAX-FA Macro 50mm F2.8  
'5 9' = smc PENTAX-FA Macro 100mm F2.8  
'5 10' = smc PENTAX-FA\* 85mm F1.4 [IF]

'5 11' = smc PENTAX-FA\* 200mm F2.8 ED[IF]  
'5 12' = smc PENTAX-FA 28-80mm F3.5-4.7  
'5 13' = smc PENTAX-FA 70-200mm F4-5.6  
'5 14' = smc PENTAX-FA\* 250-600mm F5.6 ED[IF]  
'5 15' = smc PENTAX-FA 28-105mm F4-5.6  
'5 16' = smc PENTAX-FA 100-300mm F4.5-5.6  
'5 98' = smc PENTAX-FA 100-300mm F4.5-5.6  
'6 1' = smc PENTAX-FA\* 85mm F1.4 [IF]  
'6 2' = smc PENTAX-FA\* 200mm F2.8 ED[IF]  
'6 3' = smc PENTAX-FA\* 300mm F2.8 ED[IF]  
'6 4' = smc PENTAX-FA\* 28-70mm F2.8 AL  
'6 5' = smc PENTAX-FA\* 80-200mm F2.8 ED[IF]  
'6 6' = smc PENTAX-FA\* 28-70mm F2.8 AL  
'6 7' = smc PENTAX-FA\* 80-200mm F2.8 ED[IF]  
'6 8' = smc PENTAX-FA 28-70mm F4AL  
'6 9' = smc PENTAX-FA 20mm F2.8  
'6 10' = smc PENTAX-FA\* 400mm F5.6 ED[IF]  
'6 13' = smc PENTAX-FA\* 400mm F5.6 ED[IF]  
'6 14' = smc PENTAX-FA\* Macro 200mm F4 ED[IF]  
'7 0' = smc PENTAX-DA 21mm F3.2 AL Limited  
'7 58' = smc PENTAX-D FA Macro 100mm F2.8 WR  
'7 75' = Tamron SP AF 70-200mm F2.8 Di LD [IF] Macro (A001)  
'7 201' = smc Pentax-DA L 50-200mm F4-5.6 ED WR  
'7 202' = smc PENTAX-DA L 18-55mm F3.5-5.6 AL WR  
'7 203' = HD PENTAX-DA 55-300mm F4-5.8 ED WR  
'7 204' = HD PENTAX-DA 15mm F4 ED AL Limited  
'7 205' = HD PENTAX-DA 35mm F2.8 Macro Limited  
'7 206' = HD PENTAX-DA 70mm F2.4 Limited  
'7 207' = HD PENTAX-DA 21mm F3.2 ED AL Limited  
'7 208' = HD PENTAX-DA 40mm F2.8 Limited  
'7 212' = smc PENTAX-DA 50mm F1.8  
'7 213' = smc PENTAX-DA 40mm F2.8 XS  
'7 214' = smc PENTAX-DA 35mm F2.4 AL  
'7 216' = smc PENTAX-DA L 55-300mm F4-5.8 ED  
'7 217' = smc PENTAX-DA 50-200mm F4-5.6 ED WR  
'7 218' = smc PENTAX-DA 18-55mm F3.5-5.6 AL WR  
'7 220' = Tamron SP AF 10-24mm F3.5-4.5 Di II LD Aspherical [IF]  
'7 221' = smc PENTAX-DA L 50-200mm F4-5.6 ED  
'7 222' = smc PENTAX-DA L 18-55mm F3.5-5.6  
'7 223' = Samsung/Schneider D-XENON 18-55mm F3.5-5.6 II  
'7 224' = smc PENTAX-DA 15mm F4 ED AL Limited  
'7 225' = Samsung/Schneider D-XENON 18-250mm F3.5-6.3  
'7 226' = smc PENTAX-DA\* 55mm F1.4 SDM (SDM unused)  
'7 227' = smc PENTAX-DA\* 60-250mm F4 [IF] SDM (SDM unused)  
'7 228' = Samsung 16-45mm F4 ED  
'7 229' = smc PENTAX-DA 18-55mm F3.5-5.6 AL II  
'7 230' = Tamron AF 17-50mm F2.8 XR Di-II LD (Model A16)  
'7 231' = smc PENTAX-DA 18-250mm F3.5-6.3 ED AL [IF]  
'7 233' = smc PENTAX-DA 35mm F2.8 Macro Limited  
'7 234' = smc PENTAX-DA\* 300mm F4 ED [IF] SDM (SDM unused)  
'7 235' = smc PENTAX-DA\* 200mm F2.8 ED [IF] SDM (SDM unused)  
'7 236' = smc PENTAX-DA 55-300mm F4-5.8 ED  
'7 238' = Tamron AF 18-250mm F3.5-6.3 Di II LD Aspherical [IF] Macro  
'7 241' = smc PENTAX-DA\* 50-135mm F2.8 ED [IF] SDM (SDM unused)  
'7 242' = smc PENTAX-DA\* 16-50mm F2.8 ED AL [IF] SDM (SDM unused)  
'7 243' = smc PENTAX-DA 70mm F2.4 Limited  
'7 244' = smc PENTAX-DA 21mm F3.2 AL Limited  
'8 0' = Sigma 50-150mm F2.8 II APO EX DC HSM  
'8 3' = Sigma 18-125mm F3.8-5.6 DC HSM  
'8 4' = Sigma 50mm F1.4 EX DG HSM  
'8 6' = Sigma 4.5mm F2.8 EX DC Fisheye  
'8 7' = Sigma 24-70mm F2.8 IF EX DG HSM  
'8 8' = Sigma 18-250mm F3.5-6.3 DC OS HSM  
'8 11' = Sigma 10-20mm F3.5 EX DC HSM  
'8 12' = Sigma 70-300mm F4-5.6 DG OS  
'8 13' = Sigma 120-400mm F4.5-5.6 APO DG OS HSM  
'8 14' = Sigma 17-70mm F2.8-4.0 DC Macro OS HSM  
'8 15' = Sigma 150-500mm F5-6.3 APO DG OS HSM  
'8 16' = Sigma 70-200mm F2.8 EX DG Macro HSM II  
'8 17' = Sigma 50-500mm F4.5-6.3 DG OS HSM  
'8 18' = Sigma 8-16mm F4.5-5.6 DC HSM  
'8 20' = Sigma 18-50mm F2.8-4.5 DC HSM  
'8 21' = Sigma 17-50mm F2.8 EX DC OS HSM  
'8 22' = Sigma 85mm F1.4 EX DG HSM  
'8 23' = Sigma 70-200mm F2.8 APO EX DG OS HSM

'8 24' = Sigma 17-70mm F2.8-4 DC Macro OS HSM  
'8 25' = Sigma 17-50mm F2.8 EX DC HSM  
'8 27' = Sigma 18-200mm F3.5-6.3 II DC HSM  
'8 28' = Sigma 18-250mm F3.5-6.3 DC Macro HSM  
'8 29' = Sigma 35mm F1.4 DG HSM  
'8 30' = Sigma 17-70mm F2.8-4 DC Macro HSM | C  
'8 31' = Sigma 18-35mm F1.8 DC HSM  
'8 32' = Sigma 30mm F1.4 DC HSM | A  
'8 33' = Sigma 18-200mm F3.5-6.3 DC Macro HSM  
'8 34' = Sigma 18-300mm F3.5-6.3 DC Macro HSM  
'8 59' = HD PENTAX-D FA 150-450mm F4.5-5.6 ED DC AW  
'8 60' = HD PENTAX-D FA\* 70-200mm F2.8 ED DC AW  
'8 61' = HD PENTAX-D FA 28-105mm F3.5-5.6 ED DC WR  
'8 62' = HD PENTAX-D FA 24-70mm F2.8 ED SDM WR  
'8 63' = HD PENTAX-D FA 15-30mm F2.8 ED SDM WR  
'8 64' = HD PENTAX-D FA\* 50mm F1.4 SDM AW  
'8 65' = HD PENTAX-D FA 70-210mm F4 ED SDM WR  
'8 66' = HD PENTAX-D FA 85mm F1.4 ED SDM AW  
'8 67' = HD PENTAX-D FA 21mm F2.4 ED Limited DC WR  
'8 195' = HD PENTAX DA\* 16-50mm F2.8 ED PLM AW  
'8 196' = HD PENTAX-DA\* 11-18mm F2.8 ED DC AW  
'8 197' = HD PENTAX-DA 55-300mm F4.5-6.3 ED PLM WR RE  
'8 198' = smc PENTAX-DA L 18-50mm F4-5.6 DC WR RE  
'8 199' = HD PENTAX-DA 18-50mm F4-5.6 DC WR RE  
'8 200' = HD PENTAX-DA 16-85mm F3.5-5.6 ED DC WR  
'8 209' = HD PENTAX-DA 20-40mm F2.8-4 ED Limited DC WR  
'8 210' = smc PENTAX-DA 18-270mm F3.5-6.3 ED SDM  
'8 211' = HD PENTAX-DA 560mm F5.6 ED AW  
'8 215' = smc PENTAX-DA 18-135mm F3.5-5.6 ED AL [IF] DC WR  
'8 226' = smc PENTAX-DA\* 55mm F1.4 SDM  
'8 227' = smc PENTAX-DA\* 60-250mm F4 [IF] SDM  
'8 232' = smc PENTAX-DA 17-70mm F4 AL [IF] SDM  
'8 234' = smc PENTAX-DA\* 300mm F4 ED [IF] SDM  
'8 235' = smc PENTAX-DA\* 200mm F2.8 ED [IF] SDM  
'8 241' = smc PENTAX-DA\* 50-135mm F2.8 ED [IF] SDM  
'8 242' = smc PENTAX-DA\* 16-50mm F2.8 ED AL [IF] SDM  
'8 255' = Sigma Lens (8 255)  
'8 255' = Sigma 70-200mm F2.8 EX DG Macro HSM II  
'8 255' = Sigma 150-500mm F5-6.3 DG APO [OS] HSM  
'8 255' = Sigma 50-150mm F2.8 II APO EX DC HSM  
'8 255' = Sigma 4.5mm F2.8 EX DC HSM Circular Fisheye  
'8 255' = Sigma 50-200mm F4-5.6 DC OS  
'8 255' = Sigma 24-70mm F2.8 EX DG HSM  
'9 0' = 645 Manual Lens  
'9 3' = HD PENTAX-FA 43mm F1.9 Limited  
'9 24' = HD PENTAX-FA 77mm F1.8 Limited  
'9 39' = HD PENTAX-FA 31mm F1.8 AL Limited  
'9 247' = HD PENTAX-DA FISH-EYE 10-17mm F3.5-4.5 ED [IF]  
'10 0' = 645 A Series Lens  
'11 1' = smc PENTAX-FA 645 75mm F2.8  
'11 2' = smc PENTAX-FA 645 45mm F2.8  
'11 3' = smc PENTAX-FA\* 645 300mm F4 ED [IF]  
'11 4' = smc PENTAX-FA 645 45-85mm F4.5  
'11 5' = smc PENTAX-FA 645 400mm F5.6 ED [IF]  
'11 7' = smc PENTAX-FA 645 Macro 120mm F4  
'11 8' = smc PENTAX-FA 645 80-160mm F4.5  
'11 9' = smc PENTAX-FA 645 200mm F4 [IF]  
'11 10' = smc PENTAX-FA 645 150mm F2.8 [IF]  
'11 11' = smc PENTAX-FA 645 35mm F3.5 AL [IF]  
'11 12' = smc PENTAX-FA 645 300mm F5.6 ED [IF]  
'11 14' = smc PENTAX-FA 645 55-110mm F5.6  
'11 16' = smc PENTAX-FA 645 33-55mm F4.5 AL  
'11 17' = smc PENTAX-FA 645 150-300mm F5.6 ED [IF]  
'11 21' = HD PENTAX-D FA 645 35mm F3.5 AL [IF]  
'13 18' = smc PENTAX-D FA 645 55mm F2.8 AL [IF] SDM AW  
'13 19' = smc PENTAX-D FA 645 25mm F4 AL [IF] SDM AW  
'13 20' = HD PENTAX-D FA 645 90mm F2.8 ED AW SR  
'13 253' = HD PENTAX-DA 645 28-45mm F4.5 ED AW SR  
'13 254' = smc PENTAX-DA 645 25mm F4 AL [IF] SDM AW  
'21 0' = Pentax Q Manual Lens  
'21 1' = 01 Standard Prime 8.5mm F1.9  
'21 2' = 02 Standard Zoom 5-15mm F2.8-4.5  
'21 6' = 06 Telephoto Zoom 15-45mm F2.8  
'21 7' = 07 Mount Shield 11.5mm F9  
'21 8' = 08 Wide Zoom 3.8-5.9mm F3.7-4

'21 233'	= Adapter Q for K-mount Lens
'22 3'	= 03 Fish-eye 3.2mm F5.6
'22 4'	= 04 Toy Lens Wide 6.3mm F7.1
'22 5'	= 05 Toy Lens Telephoto 18mm F8
'31 1'	= 18.3mm F2.8
'31 4'	= 26.1mm F2.8
'31 5'	= 26.1mm F2.8 GT-2 TC
'31 8'	= 18.3mm F2.8

## Pentax SRInfo Tags

Shake reduction information.

Index1	Tag Name	Writable	Values / Notes	
0	SRResult	int8u	0x0 = Not stabilized Bit 0 = Stabilized Bit 6 = Not ready	
1	ShakeReduction	int8u	0 = Off 1 = On 4 = Off (4) 5 = On but Disabled 6 = On (Video)	7 = On (7) 15 = On (15) 39 = On (mode 2) 135 = On (135) 167 = On (mode 1)
2	SRHalfPressTime	int8u	(time from when the shutter button was half pressed to when the shutter was released, including time for focusing. Not valid for some models)	
3	SRFocalLength	int8u		

## Pentax SRInfo2 Tags

Shake reduction information for the K-3.

Index1	Tag Name	Writable	Values / Notes
0	SRResult?	int8u	
1	ShakeReduction	int8u	0 = Off 1 = On 4 = Off (AA simulation off) 5 = On but Disabled 6 = On (Video) 7 = On (AA simulation off) 8 = Off (AA simulation type 1) (8) 12 = Off (AA simulation type 1) 15 = On (AA simulation type 1) 16 = Off (AA simulation type 2) (16) 20 = Off (AA simulation type 2) 23 = On (AA simulation type 2)

## Pentax FaceInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	FacesDetected	int8u	
2	FacePosition	int8u[2]	(X/Y coordinates of the center of the main face in percent of frame size, with positive Y downwards)

## Pentax AWBInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	WhiteBalanceAutoAdjustment	int8u	0 = Off 1 = On
1	TungstenAWB	int8u	0 = Subtle Correction 1 = Strong Correction

## Pentax TimeInfo Tags

Index1	Tag Name	Writable	Values / Notes
0.1	WorldTimeLocation	int8u	[val & 0x1] 0 = Hometown

1 = Destination			
0.2	HometownDST	int8u	[val >> 1 & 0x1] 0 = No 1 = Yes
0.3	DestinationDST	int8u	[val >> 2 & 0x1] 0 = No 1 = Yes
2	HometownCity	int8u	--> <a href="#">Pentax City Values</a>
3	DestinationCity	int8u	--> <a href="#">Pentax City Values</a>

## Pentax LensCorr Tags

Index1	Tag Name	Writable	Values / Notes
0	DistortionCorrection	int8u	0 = Off 1 = On
1	ChromaticAberrationCorrection	int8u	0 = Off 1 = On
2	PeripherallIlluminationCorr	int8u	0 = Off 1 = On
3	DiffractionCorrection	int8u	0 = Off 16 = On

## Pentax CameraSettings Tags

Camera settings information written by Pentax DSLR cameras.

Index1	Tag Name	Writable	Values / Notes
0	PictureMode2	int8u	0 = Scene Mode 1 = Auto PICT 2 = Program AE 3 = Green Mode 4 = Shutter Speed Priority 5 = Aperture Priority 6 = Program Tv Shift 7 = Program Av Shift 8 = Manual 9 = Bulb 10 = Aperture Priority, Off-Auto-Aperture 11 = Manual, Off-Auto-Aperture 12 = Bulb, Off-Auto-Aperture 13 = Shutter & Aperture Priority AE 15 = Sensitivity Priority AE 16 = Flash X-Sync Speed AE
1.1	ProgramLine	int8u	[val & 0x3] 0 = Normal 1 = Hi Speed 2 = Depth 3 = MTF
1.2	EVSteps	int8u	[val >> 5 & 0x1] 0 = 1/2 EV Steps 1 = 1/3 EV Steps
1.3	E-DialInProgram	int8u	[val >> 6 & 0x1] 0 = Tv or Av 1 = P Shift
1.4	ApertureRingUse	int8u	[val >> 7 & 0x1] 0 = Prohibited 1 = Permitted
2	FlashOptions	int8u	(the camera flash options settings, set even if the flash is off) [val >> 4 & 0xf] 0 = Normal 1 = Red-eye reduction 2 = Auto 3 = Auto, Red-eye reduction 5 = Wireless (Master) 6 = Wireless (Control) 8 = Slow-sync 9 = Slow-sync, Red-eye reduction 10 = Trailing-curtain Sync
2.1	MeteringMode2	int8u	(may not be valid for some models, eg. *ist D) [val & 0xf]

			0x0 = Multi-segment Bit 0 = Center-weighted average Bit 1 = Spot
3	AFPointMode	int8u	[val >> 4 & 0xf] 0x0 = Auto Bit 0 = Select Bit 1 = Fixed Center
3.1	FocusMode2	int8u	[val & 0xf] 0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A
4	AFPointSelected2	int16u	0x0 = Auto              Bit 5 = Center Bit 0 = Upper-left    Bit 6 = Mid-right Bit 1 = Top             Bit 7 = Right Bit 2 = Upper-right   Bit 8 = Lower-left Bit 3 = Left           Bit 9 = Bottom Bit 4 = Mid-left       Bit 10 = Lower-right
6	ISOFloor	int8u	
7	DriveMode2	int8u	0x0 = Single-frame Bit 0 = Continuous Bit 1 = Continuous (Lo) Bit 2 = Self-timer (12 s) Bit 3 = Self-timer (2 s) Bit 4 = Remote Control (3 s delay) Bit 5 = Remote Control Bit 6 = Exposure Bracket Bit 7 = Multiple Exposure
8	ExposureBracketStepSize	int8u	3 = 0.3    11 = 1.3 4 = 0.5    12 = 1.5 5 = 0.7    13 = 1.7 8 = 1.0    16 = 2.0
9	BracketShotNumber	int8u	0x0 = n/a    0x12 = 2 of 2    0x25 = 3 of 5 0x2 = 1 of 2    0x13 = 2 of 3    0x35 = 4 of 5 0x3 = 1 of 3    0x15 = 2 of 5    0x45 = 5 of 5 0x5 = 1 of 5    0x23 = 3 of 3
10	WhiteBalanceSet	int8u	[val >> 4 & 0xf] 0 = Auto 1 = Daylight 2 = Shade 3 = Cloudy 4 = Daylight Fluorescent 5 = Day White Fluorescent 6 = White Fluorescent 7 = Tungsten 8 = Flash 9 = Manual 12 = Set Color Temperature 1 13 = Set Color Temperature 2 14 = Set Color Temperature 3
10.1	MultipleExposureSet	int8u	[val & 0xf] 0 = Off 1 = On
13	RawAndJpgRecording	int8u	(K10D only) 0x1 = JPEG (Best) 0x4 = RAW (PEF, Best) 0x5 = RAW+JPEG (PEF, Best) 0x8 = RAW (DNG, Best) 0x9 = RAW+JPEG (DNG, Best) 0x21 = JPEG (Better) 0x24 = RAW (PEF, Better) 0x25 = RAW+JPEG (PEF, Better) 0x28 = RAW (DNG, Better) 0x29 = RAW+JPEG (DNG, Better) 0x41 = JPEG (Good) 0x44 = RAW (PEF, Good) 0x45 = RAW+JPEG (PEF, Good) 0x48 = RAW (DNG, Good) 0x49 = RAW+JPEG (DNG, Good)
14.1	JpgRecordedPixels	int8u	(K10D only) [val & 0x3] 0 = 10 MP 1 = 6 MP 2 = 2 MP

14.2	LinkAEToAFPoint	int8u	(K-5 only) [val & 0x1] 0 = Off 1 = On
14.3	SensitivitySteps	int8u	(K-5 only) [val >> 1 & 0x1] 0 = 1 EV Steps 1 = As EV Steps
14.4	ISOAuto	int8u	(K-5 only) [val >> 2 & 0x1] 0 = Off 1 = On
16	FlashOptions2	int8u	(K10D only; set even if the flash is off) [val >> 4 & 0xf] 0 = Normal 1 = Red-eye reduction 2 = Auto 3 = Auto, Red-eye reduction 5 = Wireless (Master) 6 = Wireless (Control) 8 = Slow-sync 9 = Slow-sync, Red-eye reduction 10 = Trailing-curtain Sync
16.1	MeteringMode3	int8u	(K10D only) [val & 0xf] 0x0 = Multi-segment Bit 0 = Center-weighted average Bit 1 = Spot
17.1	SRActive	int8u	(K10D only; SR is active only when ShakeReduction is On, DriveMode is not Remote or Self-timer, and Internal/ExternalFlashMode is not "On, Wireless") [val >> 7 & 0x1] 0 = No 1 = Yes
17.2	Rotation	int8u	(K10D only) [val >> 5 & 0x3] 0 = Horizontal (normal) 1 = Rotate 180 2 = Rotate 90 CW 3 = Rotate 270 CW
17.3	ISOSetting	int8u	(K10D only) [val >> 2 & 0x1] 0 = Manual 1 = Auto
17.4	SensitivitySteps	int8u	(K10D only) [val >> 1 & 0x1] 0 = 1 EV Steps 1 = As EV Steps
18	TvExposureTimeSetting	int8u	(K10D only)
19	AvApertureSetting	int8u	(K10D only)
20	SvISOSetting	int8u	(K10D only)
21	BaseExposureCompensation	int8u	(K10D only; exposure compensation without auto bracketing)

## Pentax CameraSettingsUnknown Tags

This information has not yet been decoded for models such as the K-01.

Index1	Tag Name	Writable	Values / Notes
[no tags known]			

## Pentax AEInfo Tags

Auto-exposure information for most Pentax models.

Index1	Tag Name	Writable	Values / Notes
0	AEEposureTime	int8u	(val = 24 * 2**((32-raw)/8))
1	AEAperture	int8u	(val = 2**((raw-68)/16))
2	AE_ISO	int8u	(val = 100 * 2**((raw-32)/8))

3	AEXv	int8u	(val = (raw-64)/8)
4	AEBXv	int8s	(val = raw / 8)
5	AEMinExposureTime	int8u	(val = 24 * 2**((32-raw)/8))
6	AEProgramMode	int8u	0 = M, P or TAv 1 = Av, B or X 2 = Tv 3 = Sv or Green Mode 8 = Hi-speed Program 11 = Hi-speed Program (P-Shift) 16 = DOF Program 19 = DOF Program (P-Shift) 24 = MTF Program 27 = MTF Program (P-Shift) 35 = Standard 43 = Portrait 51 = Landscape 59 = Macro 67 = Sport 75 = Night Scene Portrait 83 = No Flash 91 = Night Scene 99 = Surf & Snow 104 = Night Snap 107 = Text 115 = Sunset 123 = Kids 131 = Pet 139 = Candlelight 144 = SCN 147 = Museum 160 = Program 184 = Shallow DOF Program 216 = HDR
7	AEFlags	no	(indices after this are incremented by 1 for some models) Bit 3 = AE lock Bit 4 = Flash recommended? Bit 7 = Aperture wide open
8	AEApertureSteps	int8u	(number of steps the aperture has been stopped down from wide open. There are roughly 8 steps per F-stop for most lenses, or 18 steps for 645D lenses, but it varies slightly by lens)
9	AEMaxAperture	int8u	(val = 2**((raw-68)/16))
10	AEMaxAperture2	int8u	(val = 2**((raw-68)/16))
11	AEMinAperture	int8u	(val = 2**((raw-68)/16))
12	AEMeteringMode	int8u	0x0 = Multi-segment Bit 4 = Center-weighted average Bit 5 = Spot
13	AEWhiteBalance	int8u	(K7 and Kx) [val >> 4 & 0xf] 0 = Standard 1 = Daylight 2 = Shade 3 = Cloudy 4 = Daylight Fluorescent 5 = Day White Fluorescent 6 = White Fluorescent 7 = Tungsten 8 = Unknown
13.1	AEMeteringMode2	int8u	(K7 and Kx, override for an incompatible metering mode setting) [val & 0xf] 0x0 = Multi-segment Bit 0 = Center-weighted average Bit 1 = Spot
14	FlashExposureCompSet	int8s	(reports the camera setting, unlike tag 0x004d which reports 0 in Green mode or if flash was on but did not fire. Both this tag and 0x004d report the setting even if the flash is off)
21	LevelIndicator	int8u	

## Pentax AEInfo2 Tags

Auto-exposure information for the K-01.

Index1	Tag Name	Writable	Values / Notes
2	AEEposureTime	int8u	(val = 24 * 2**((32-raw)/8))
3	AEAperture	int8u	(val = 2**((raw-68)/16))
4	AE_ISO	int8u	(val = 100 * 2**((raw-32)/8))
5	AEXv	int8u	(val = (raw-64)/8)
6	AEBXv	int8s	(val = raw / 8)
8	AEError	int8s	
11	AEApertureSteps	int8u	(number of steps the aperture has been stopped down from wide open. There are roughly 8 steps per F-stop, but it varies slightly by lens)
15	SceneMode	int8u	0 = Off 1 = HDR 4 = Auto PICT 15 = Kids 16 = Pet 17 = Candlelight

5 = Portrait	18 = Museum
6 = Landscape	20 = Food
7 = Macro	21 = Stage Lighting
8 = Sport	22 = Night Snap
9 = Night Scene Portrait	25 = Night Scene HDR
10 = No Flash	26 = Blue Sky
11 = Night Scene	27 = Forest
12 = Surf & Snow	29 = Backlight Silhouette
14 = Sunset	

16 AEMaxAperture	int8u	(val = 2**((raw-68)/16))
17 AEMaxAperture2	int8u	(val = 2**((raw-68)/16))
18 AEMinAperture	int8u	(val = 2**((raw-68)/16))
19 AEMinExposureTime	int8u	(val = 24 * 2**((32-raw)/8))

## Pentax AEInfo3 Tags

Auto-exposure information for the K-1mkII, K-3, K-30, K-50, K-70, K-500 and KP.

Index1	Tag Name	Writable	Values / Notes
16	AEExposureTime	int8u	(val = 24 * 2**((32-raw)/8))
17	AEAperture	int8u	(val = 2**((raw-68)/16))
18	AE_ISO	int8u	(val = 100 * 2**((raw-32)/8))
28	AEMaxAperture	int8u	(val = 2**((raw-68)/16))
29	AEMaxAperture2	int8u	(val = 2**((raw-68)/16))
30	AEMinAperture	int8u	(val = 2**((raw-68)/16))
31	AEMinExposureTime	int8u	(val = 24 * 2**((32-raw)/8))

## Pentax AEInfoUnknown Tags

Index1	Tag Name	Writable	Values / Notes
[no tags known]			

## Pentax LensInfo Tags

Pentax lens information structure for models such as the \*istD.

Index1	Tag Name	Writable	Values / Notes
0	LensType	int8u[2]	--> <a href="#">Pentax LensType Values</a>
3	LensData	-	--> <a href="#">Pentax LensData Tags</a>

## Pentax LensData Tags

Pentax lens data information. Some of these tags require interesting binary gymnastics to decode them into useful values.

Index1	Tag Name	Writable	Values / Notes
0.1	AutoAperture	int8u	(not valid for the K-r, K-5 or K-5II) [val & 0x1] 0 = On 1 = Off
0.2	MinAperture	int8u	(not valid for the K-r, K-5 or K-5II) [val >> 1 & 0x3] 0 = 22 1 = 32 2 = 45 3 = 16
0.3	LensFStops	int8u	(not valid for the K-r, K-5 or K-5II) [val >> 4 & 0x7]
1	LensKind?	int8u	
2	LC1?	int8u	
3	MinFocusDistance	int8u	(minimum focus distance for the lens) [val >> 3 & 0x1f]

			0 = 0.13-0.19 m    11 = 1.1-1.2 m 1 = 0.20-0.24 m    12 = 1.4-1.5 m 2 = 0.25-0.28 m    13 = 1.5 m 3 = 0.28-0.30 m    14 = 2.0 m 4 = 0.35-0.38 m    15 = 2.0-2.1 m 5 = 0.40-0.45 m    16 = 2.1 m 6 = 0.49-0.50 m    17 = 2.2-2.9 m 7 = 0.6 m            18 = 3.0 m 8 = 0.7 m            19 = 4-5 m 9 = 0.8-0.9 m       20 = 5.6 m 10 = 1.0 m
3.1	FocusRangeIndex	int8u	[val & 0x7] 0 = 5                  4 = 2 1 = 4                  5 = 3 2 = 6 (far)           6 = 1 (close) 3 = 7 (very far)     7 = 0 (very close)
4	LC3?	int8u	
5	LC4?	int8u	
6	LC5?	int8u	
7	LC6?	int8u	
8	LC7?	int8u	
9	LensFocalLength	int8u	(focal length of lens alone, without adapter)
	LC8?	int8u	
10	NominalMaxAperture	int8u	[val >> 4 & 0xf]
10.1	NominalMinAperture	int8u	[val & 0xf]
11	LC10?	int8u	
12	LC11?	int8u	
13	LC12?	int8u	(ID's 13-16 are offset by 1 for the K-r, K-5 and K-5II)
14.1	MaxAperture	int8u	(effective wide open aperture for current focal length) [val & 0x7f]
15	LC14?	int8u	
16	LC15?	int8u	

## Pentax LensInfo2 Tags

Pentax lens information structure for models such as the K10D and K20D.

Index1	Tag Name	Writable	Values / Notes
0	LensType	int8u[4]	--> <a href="#">Pentax LensType Values</a>
4	LensData	-	--> <a href="#">Pentax LensData Tags</a>

## Pentax LensInfo3 Tags

Pentax lens information structure for 645D.

Index1	Tag Name	Writable	Values / Notes
1	LensType	int8u[4]	--> <a href="#">Pentax LensType Values</a>
13	LensData	-	--> <a href="#">Pentax LensData Tags</a>

## Pentax LensInfo4 Tags

Pentax lens information structure for models such as the K-5 and K-r.

Index1	Tag Name	Writable	Values / Notes
1	LensType	int8u[4]	--> <a href="#">Pentax LensType Values</a>
12	LensData	-	--> <a href="#">Pentax LensData Tags</a>

## Pentax LensInfo5 Tags

Pentax lens information structure for the K-01 and newer models.

Index1	Tag Name	Writable	Values / Notes
1	LensType	int8u[5]	--> <a href="#">Pentax LensType Values</a>
15	LensData	-	--> <a href="#">Pentax LensData Tags</a>

## Pentax FlashInfo Tags

Flash information tags for the K10D, K20D and K200D.

Index1	Tag Name	Writable	Values / Notes
0	FlashStatus	int8u	0x0 = Off 0x1 = Off (1) 0x2 = External, Did not fire 0x6 = External, Fired 0x8 = Internal, Did not fire (0x08) 0x9 = Internal, Did not fire 0xd = Internal, Fired
1	InternalFlashMode	int8u	0x0 = n/a - Off-Auto-Aperture 0x86 = Fired, Wireless (Control) 0x95 = Fired, Wireless (Master) 0xc0 = Fired 0xc1 = Fired, Red-eye reduction 0xc2 = Fired, Auto 0xc3 = Fired, Auto, Red-eye reduction 0xc6 = Fired, Wireless (Control), Fired normally not as control 0xc8 = Fired, Slow-sync 0xc9 = Fired, Slow-sync, Red-eye reduction 0xca = Fired, Trailing-curtain Sync 0xf0 = Did not fire, Normal 0xf1 = Did not fire, Red-eye reduction 0xf2 = Did not fire, Auto 0xf3 = Did not fire, Auto, Red-eye reduction 0xf4 = Did not fire, (Unknown 0xf4) 0xf5 = Did not fire, Wireless (Master) 0xf6 = Did not fire, Wireless (Control) 0xf8 = Did not fire, Slow-sync 0xf9 = Did not fire, Slow-sync, Red-eye reduction 0xfa = Did not fire, Trailing-curtain Sync
2	ExternalFlashMode	int8u	0x0 = n/a - Off-Auto-Aperture 0x3f = Off 0x40 = On, Auto 0xbf = On, Flash Problem 0xc0 = On, Manual 0xc4 = On, P-TTL Auto 0xc5 = On, Contrast-control Sync 0xc6 = On, High-speed Sync 0xcc = On, Wireless 0xcd = On, Wireless, High-speed Sync 0xf0 = Not Connected
3	InternalFlashStrength	int8u	(saved from the most recent flash picture, on a scale of about 0 to 100)
4	TTL_DA_AUp	int8u	
5	TTL_DA_ADown	int8u	
6	TTL_DA_BUp	int8u	
7	TTL_DA_BDown	int8u	
24.1	ExternalFlashGuideNumber	int8u	(val = 2**((raw/16 + 4), with a few exceptions) [val & 0x1f]
25	ExternalFlashExposureComp	int8u	0 = n/a 144 = n/a (Manual Mode) 164 = -3.0 167 = -2.5 168 = -2.0 171 = -1.5 172 = -1.0 175 = -0.5 176 = 0.0 179 = 0.5 180 = 1.0
26	ExternalFlashBounce	int8u	(saved from the most recent external flash picture) 0 = n/a 16 = Direct 48 = Bounce

## Pentax FlashInfoUnknown Tags

Index1	Tag Name	Writable	Values / Notes
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## Pentax CameraInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	PentaxModelID	int32u	--> <a href="#">Pentax PentaxModelID Values</a>
1	ManufactureDate	int32u	(this value, and the values of the tags below, may change if the camera is serviced)
2	ProductionCode	int32u[2]	
4	InternalSerialNumber	int32u	

## Pentax BatteryInfo Tags

Index1	Tag Name	Writable	Values / Notes
0.1	PowerSource	int8u	[val & 0xf] 1 = Camera Battery 2 = Body Battery 3 = Grip Battery 4 = External Power Supply (K-3III) [val & 0xf] 1 = Body Battery 2 = Grip Battery 4 = External Power Supply
0.2	PowerAvailable	int8u	(K-3III) [val >> 4 & 0xf] Bit 0 = Body Battery Bit 1 = Grip Battery Bit 3 = External Power Supply
1.1	BodyBatteryState	int8u	(*istD, K100D, K200D, K10D and K20D) [val >> 4 & 0xf] 1 = Empty or Missing 2 = Almost Empty 3 = Running Low 4 = Full (most other models except the K110D, K2000, K-m and K-3III) [val >> 4 & 0xf] 1 = Empty or Missing 2 = Almost Empty 3 = Running Low 4 = Close to Full 5 = Full
1.2	GripBatteryState	int8u	(K10D and K20D) [val & 0xf] 1 = Empty or Missing 2 = Almost Empty 3 = Running Low 4 = Full
2	BodyBatteryADNoLoad	int8u	(roughly calibrated for K10D with a new Pentax battery)
	BodyBatteryVoltage1	int16u	(K-3III)
	BodyBatteryState	int8u	0 = Empty or Missing    3 = Half Full 1 = Almost Empty    4 = Close to Full 2 = Running Low    5 = Full
3	BodyBatteryADLoad	int8u	(roughly calibrated for K10D with a new Pentax battery)
	BodyBatteryPercent	int8u	(K-3III)
4	GripBatteryADNoLoad	int8u	
	BodyBatteryVoltage2	int16u	
	BodyBatteryVoltage	int32u	
5	GripBatteryADLoad	int8u	
6	BodyBatteryVoltage3	int16u	(K-5, K-r and 645D only)
8	BodyBatteryVoltage4	int16u	(K-5 and K-r only)
16	GripBatteryState	int8u	(K-3III) 0 = Empty or Missing    3 = Half Full 1 = Almost Empty    4 = Close to Full 2 = Running Low    5 = Full
17	GripBatteryPercent	int8u	(K-3III)
18	GripBatteryVoltage	int32u	(K-3III)

# Pentax AFInfo Tags

Index1	Tag Name	Writable	Values / Notes	
0	AFPointsUnknown1?	int16u	0x0 = (none) 0x777 = Central 9 points 0x7ff = All Bit 0 = Upper-left Bit 1 = Top Bit 2 = Upper-right Bit 3 = Left	Bit 4 = Mid-left Bit 5 = Center Bit 6 = Mid-right Bit 7 = Right Bit 8 = Lower-left Bit 9 = Bottom Bit 10 = Lower-right
2	AFPointsUnknown2?	int16u	0x0 = Auto Bit 0 = Upper-left Bit 1 = Top Bit 2 = Upper-right Bit 3 = Left Bit 4 = Mid-left	Bit 5 = Center Bit 6 = Mid-right Bit 7 = Right Bit 8 = Lower-left Bit 9 = Bottom Bit 10 = Lower-right
4	AFPredictor	int16s		
6	AFDefocus	int8u		
7	AFIntegrationTime	int8u	(times less than 2 ms give a value of 0)	
11	AFPointsInFocus	int8u	(models other than the K-1, K-3, K-70, KP and K-S1/S2. May report two points in focus even though a single AFPoint has been selected, in which case the selected AFPoint is the first reported)  0 = None 1 = Lower-left, Bottom 2 = Bottom 3 = Lower-right, Bottom 4 = Mid-left, Center 5 = Center (horizontal) 6 = Mid-right, Center 7 = Upper-left, Top 8 = Top 9 = Upper-right, Top 10 = Right	11 = Lower-left, Mid-left 12 = Upper-left, Mid-left 13 = Bottom, Center 14 = Top, Center 15 = Lower-right, Mid-right 16 = Upper-right, Mid-right 17 = Left 18 = Mid-left 19 = Center (vertical) 20 = Mid-right
20	AFPointValues?	no	(some unknown values related to each AFPoint)	
298	AFPointsSelected	int8u[101]~	(K-3III only. 41 selectable AF points from a total of 101 available in a 13x9 grid. Columns are labelled A-M and rows are 1-9. The center point is G5. The exact meaning of this tag is not fully understood, although it does seem related to the selected AF point)	
399	AFPointsUnknown?	int8u[101]~		
506	LiveView	int8u	(decoded only for the K-3 III) 0 = Off 1 = On	
509	AFHold	int8u	(decoded only for the K-3 II) 0 = Off 1 = Short 2 = Medium 3 = Long	
543	FirstFrameActionInAFC	int8u	0 = Auto 1 = Release Priority 2 = Focus Priority	
544	ActionInAFCCont	int8u	0 = Auto 1 = Focus Priority 2 = FPS Priority	
545	AFCHold	int8u	[val & 0x3] 0 = Low 1 = Medium 2 = High 3 = Off	
545.1	AFCPointTracking	int8u	[val >> 2 & 0x3] 0 = Type 1 1 = Type 2 2 = Type 3	
545.2	AFCsensitivity	int8u	[val >> 4 & 0x7]	
2400	SubjectRecognition	int8u	0 = Off 1 = On	

# Pentax KelvinWB Tags

White balance Blue/Red gains as a function of color temperature.

Index2	Tag Name	Writable	Values / Notes
1	KelvinWB_Daylight	int16u[4]	
5	KelvinWB_01	int16u[4]	
9	KelvinWB_02	int16u[4]	
13	KelvinWB_03	int16u[4]	
17	KelvinWB_04	int16u[4]	
21	KelvinWB_05	int16u[4]	
25	KelvinWB_06	int16u[4]	
29	KelvinWB_07	int16u[4]	
33	KelvinWB_08	int16u[4]	
37	KelvinWB_09	int16u[4]	
41	KelvinWB_10	int16u[4]	
45	KelvinWB_11	int16u[4]	
49	KelvinWB_12	int16u[4]	
53	KelvinWB_13	int16u[4]	
57	KelvinWB_14	int16u[4]	
61	KelvinWB_15	int16u[4]	
65	KelvinWB_16	int16u[4]	

## Pentax ColorInfo Tags

Index1	Tag Name	Writable	Values / Notes
16	WBShiftAB	int8s	(positive is a shift toward blue)
17	WBShiftGM	int8s	(positive is a shift toward green)

## Pentax EVStepInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	EVSteps	int8u	0 = 1/2 EV Steps 1 = 1/3 EV Steps
1	SensitivitySteps	int8u	0 = 1 EV Steps 1 = As EV Steps
3	LiveView	int8u	0 = Off 1 = On

## Pentax ShotInfo Tags

Index1	Tag Name	Writable	Values / Notes
1	CameraOrientation	int8u	(K-5, K-7, K-r and K-x) 0x10 = Horizontal (normal) 0x20 = Rotate 180 0x30 = Rotate 90 CW 0x40 = Rotate 270 CW 0x50 = Upwards 0x60 = Downwards

## Pentax FacePos Tags

Index2	Tag Name	Writable	Values / Notes
0	Face1Position	int16u[2]	(X/Y coordinates of face center in full-sized image)
2	Face2Position	int16u[2]	
4	Face3Position	int16u[2]	
6	Face4Position	int16u[2]	
8	Face5Position	int16u[2]	
10	Face6Position	int16u[2]	
12	Face7Position	int16u[2]	
14	Face8Position	int16u[2]	

16	Face9Position	int16u[2]
18	Face10Position	int16u[2]
20	Face11Position	int16u[2]
22	Face12Position	int16u[2]
24	Face13Position	int16u[2]
26	Face14Position	int16u[2]
28	Face15Position	int16u[2]
30	Face16Position	int16u[2]
32	Face17Position	int16u[2]
34	Face18Position	int16u[2]
36	Face19Position	int16u[2]
38	Face20Position	int16u[2]
40	Face21Position	int16u[2]
42	Face22Position	int16u[2]
44	Face23Position	int16u[2]
46	Face24Position	int16u[2]
48	Face25Position	int16u[2]
50	Face26Position	int16u[2]
52	Face27Position	int16u[2]
54	Face28Position	int16u[2]
56	Face29Position	int16u[2]
58	Face30Position	int16u[2]
60	Face31Position	int16u[2]
62	Face32Position	int16u[2]

## Pentax FaceSize Tags

Index2	Tag Name	Writable	Values / Notes
0	Face1Size	int16u[2]	
2	Face2Size	int16u[2]	
4	Face3Size	int16u[2]	
6	Face4Size	int16u[2]	
8	Face5Size	int16u[2]	
10	Face6Size	int16u[2]	
12	Face7Size	int16u[2]	
14	Face8Size	int16u[2]	
16	Face9Size	int16u[2]	
18	Face10Size	int16u[2]	
20	Face11Size	int16u[2]	
22	Face12Size	int16u[2]	
24	Face13Size	int16u[2]	
26	Face14Size	int16u[2]	
28	Face15Size	int16u[2]	
30	Face16Size	int16u[2]	
32	Face17Size	int16u[2]	
34	Face18Size	int16u[2]	
36	Face19Size	int16u[2]	
38	Face20Size	int16u[2]	
40	Face21Size	int16u[2]	
42	Face22Size	int16u[2]	
44	Face23Size	int16u[2]	
46	Face24Size	int16u[2]	
48	Face25Size	int16u[2]	

50	Face26Size	int16u[2]
52	Face27Size	int16u[2]
54	Face28Size	int16u[2]
56	Face29Size	int16u[2]
58	Face30Size	int16u[2]
60	Face31Size	int16u[2]
62	Face32Size	int16u[2]

## Pentax FilterInfo Tags

The parameters associated with each type of digital filter are unique, and these settings are also extracted with the DigitalFilter tag. Information is not extracted for filters that are "Off" unless the [Unknown](#) option is used.

Index1	Tag Name	Writable	Values / Notes
0	SourceDirectoryIndex	int16u	
2	SourceFileIndex	int16u	
5	DigitalFilter01	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
22	DigitalFilter02	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
39	DigitalFilter03	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
56	DigitalFilter04	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
73	DigitalFilter05	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
90	DigitalFilter06	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
107	DigitalFilter07	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
124	DigitalFilter08	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
141	DigitalFilter09	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
158	DigitalFilter10	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
175	DigitalFilter11	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
192	DigitalFilter12	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
209	DigitalFilter13	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
226	DigitalFilter14	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
243	DigitalFilter15	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
260	DigitalFilter16	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
277	DigitalFilter17	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
294	DigitalFilter18	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
311	DigitalFilter19	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	
328	DigitalFilter20	undef[17] --> <a href="#">Pentax DigitalFilter Values</a>	

## Pentax DigitalFilter Values

Value	DigitalFilter	Value	DigitalFilter	Value	DigitalFilter
0	= Off	10	= Toy Camera	20	= Shading
1	= Base Parameter Adjust	11	= Retro	21	= Invert Color
2	= Soft Focus	12	= Pastel	23	= Tone Expansion
3	= High Contrast	13	= Water Color	27	= Unicolor Bold
4	= Color Filter	14	= HDR	28	= Bold Monochrome
5	= Extract Color	16	= Miniature	29	= Replace Color
6	= Monochrome	17	= Starburst	254	= Custom Filter
7	= Slim	18	= Posterization		
9	= Fisheye	19	= Sketch Filter		

## Pentax LevelInfoK3III Tags

Tags decoded from the electronic level information for the K-3 III.

Index1	Tag Name	Writable	Values / Notes			
1	CameraOrientation	int8s	0	= Horizontal (normal)	3	= Rotate 90 CW
			1	= Rotate 270 CW	4	= Upwards
			2	= Rotate 180	5	= Downwards

3	RollAngle	int16s	(converted to degrees of clockwise camera rotation)
5	PitchAngle	int16s	(converted to degrees of upward camera tilt)

## Pentax LevelInfo Tags

Tags decoded from the electronic level information for the K-5. May not be valid for other models.

Index1	Tag Name	Writable	Values / Notes
0	LevelOrientation	int8s	[val & 0xf] 0 = n/a 1 = Horizontal (normal) 2 = Rotate 180 3 = Rotate 90 CW 4 = Rotate 270 CW 9 = Horizontal; Off Level 10 = Rotate 180; Off Level 11 = Rotate 90 CW; Off Level 12 = Rotate 270 CW; Off Level 13 = Upwards 14 = Downwards
0.1	CompositionAdjust	int8s	[val >> 4 & 0xf] 0 = Off 2 = Composition Adjust 10 = Composition Adjust + Horizon Correction 12 = Horizon Correction
1	RollAngle	int8s	(converted to degrees of clockwise camera rotation)
2	PitchAngle	int8s	(converted to degrees of upward camera tilt)
5	CompositionAdjustX	int8s	(steps to the right, 1/16 mm per step)
6	CompositionAdjustY	int8s	(steps up, 1/16 mm per step)
7	CompositionAdjustRotation	int8s	(steps clockwise, 1/8 degree per step)

## Pentax WBLevels Tags

Index1	Tag Name	Writable	Values / Notes
2	WB_RGGBLevelsDaylight	int16u[4]	
11	WB_RGGBLevelsShade	int16u[4]	
20	WB_RGGBLevelsCloudy	int16u[4]	
29	WB_RGGBLevelsTungsten	int16u[4]	
38	WB_RGGBLevelsFluorescentD	int16u[4]	
47	WB_RGGBLevelsFluorescentN	int16u[4]	
56	WB_RGGBLevelsFluorescentW	int16u[4]	
65	WB_RGGBLevelsFlash	int16u[4]	
74	WB_RGGBLevelsFluorescentL	int16u[4]	
83	WB_RGGBLevelsUnknown?	int16u[4]	
92	WB_RGGBLevelsUserSelected	int16u[4]	

## Pentax CAFPointInfo Tags

Contrast-detect AF-point information for the K-01 and later models.

Index1	Tag Name	Writable	Values / Notes
1	NumCAFPoints	no	
1.1	CAFGridSize	no	
2	CAFPointsInFocus	no	
2.1	CAFPointsSelected	no	

## Pentax LensInfoQ Tags

More lens information stored by the Pentax Q.

Index1	Tag Name	Writable	Values / Notes
12	LensModel	string[30]	
42	LensInfo	string[20]	

## Pentax PixelShiftInfo Tags

Pixel shift information stored by the K-3 II.

Index1	Tag Name	Writable	Values / Notes
0	PixelShiftResolution	int8u	0 = Off 1 = On

## Pentax AFPointInfo Tags

AF point information written by the K-1.

Index1	Tag Name	Writable	Values / Notes
2	NumAFPoints	int16u	
4	AFPointsInFocus	no	
4.1	AFPointsSelected	no	
4.2	AFPointsSpecial	no	

## Pentax TempInfo Tags

A number of additional temperature readings are extracted from this 256-byte binary-data block in images from models such as the K-01, K-3, K-5, K-50 and K-500. It is currently not known where the corresponding temperature sensors are located in the camera.

Index1	Tag Name	Writable	Values / Notes
10	ShotNumber	no	
12	SensorTemperature	int16s	
14	SensorTemperature2	int16s	
20	CameraTemperature4	int16s	
22	CameraTemperature5	int16s	
42	SensorTemperature	int16s	

## Pentax UnknownInfo Tags

Index1	Tag Name	Writable	Values / Notes
[no tags known]			

## Pentax FaceInfoK3III Tags

Index4	Tag Name	Writable	Values / Notes
0	FaceImageSize	int32u[2]	
0.1	FaceInfoK3III?	int32u[\$size/4]	(entire FaceInfoK3III structure. Provides access to raw numerical values and facilitates the writing of the whole structure)
2	CAFArea	int32u[4]	(top, left, width, height)
6	FacesDetectedA	int32u	
8	FacesDetectedB	int32u	
10	Face1AArea	int32u[4]	
14	Face1AEye1	int32u[4]	
18	Face1AEye2	int32u[4]	
30	Face2AArea	int32u[4]	
34	Face2AEye1	int32u[4]	
38	Face2AEye2	int32u[4]	
50	Face3AArea	int32u[4]	

54	Face3AEye1	int32u[4]
58	Face3AEye2	int32u[4]
70	Face4AArea	int32u[4]
74	Face4AEye1	int32u[4]
78	Face4AEye2	int32u[4]
90	Face5AArea	int32u[4]
94	Face5AEye1	int32u[4]
98	Face5AEye2	int32u[4]
110	Face6AArea	int32u[4]
114	Face6AEye1	int32u[4]
118	Face6AEye2	int32u[4]
130	Face7AArea	int32u[4]
134	Face7AEye1	int32u[4]
138	Face7AEye2	int32u[4]
150	Face8AArea	int32u[4]
154	Face8AEye1	int32u[4]
158	Face8AEye2	int32u[4]
170	Face9AArea	int32u[4]
174	Face9AEye1	int32u[4]
178	Face9AEye2	int32u[4]
190	Face10AArea	int32u[4]
194	Face10AEye1	int32u[4]
198	Face10AEye2	int32u[4]
210	Face1BArea	int32u[4]
214	Face1BEye1	int32u[4]
218	Face1BEye2	int32u[4]
230	Face2BArea	int32u[4]
234	Face2BEye1	int32u[4]
238	Face2BEye2	int32u[4]
250	Face3BArea	int32u[4]
254	Face3BEye1	int32u[4]
258	Face3BEye2	int32u[4]
270	Face4BArea	int32u[4]
274	Face4BEye1	int32u[4]
278	Face4BEye2	int32u[4]
290	Face5BArea	int32u[4]
294	Face5BEye1	int32u[4]
298	Face5BEye2	int32u[4]
310	Face6BArea	int32u[4]
314	Face6BEye1	int32u[4]
318	Face6BEye2	int32u[4]
330	Face7BArea	int32u[4]
334	Face7BEye1	int32u[4]
338	Face7BEye2	int32u[4]
350	Face8BArea	int32u[4]
354	Face8BEye1	int32u[4]
358	Face8BEye2	int32u[4]
370	Face9BArea	int32u[4]
374	Face9BEye1	int32u[4]
378	Face9BEye2	int32u[4]
390	Face10BArea	int32u[4]
394	Face10BEye1	int32u[4]
398	Face10BEye2	int32u[4]

# Pentax AFInfoK3III Tags

AF tags written by the K-3 Mark III, GR III, GR IIIX and GR IV.

Index2	Tag Name	Writable	Values / Notes
0	0 AFInfo?	int16u[\$size/2]	(entire AFInfoK3III structure. Provides access to raw numerical values and facilitates the writing of the whole structure)
0.1	AFMode	int16u	0 = Phase Detect 2 = Contrast Detect 255 = Manual Focus
1	AFSelectionMode	int16u	0x0 = Manual Focus 0x1 = Spot 0x2 = Select (5-points) 0x3 = Expanded Area (S) 0x4 = Expanded Area (M) 0x5 = Expanded Area (L) 0x6 = Select (S) 0x7 = Zone Select (21-point) 0x8 = Select XS 0xff = Auto Area 0x2001 = Contrast-detect Auto Area 0x2002 = Contrast-detect Select 0x2003 = Pinpoint 0x2004 = Tracking 0x2005 = Continuous 0x2006 = Face Detection 0x2007 = Contrast-detect Select (S) 0x2008 = Contrast-detect Select (M) 0x2009 = Contrast-detect Select (L) 0x200a = Contrast-detect Zone Select 0x200b = Contrast-detect Spot
2	MaxNumAFPoints	int16u	
3	NumAFPoints	int16u	
7	AFFrameSize	no	
7.1	AFAreas	no+	(X,Y position of each AF area, width, with "in-focus" for points in focus, "central" for the center of the selected area, or "peripheral" for points outside the selected area)
11	AFAreaSize	no	(only for contrast-detect modes)

## Pentax Type2 Tags

These tags are used by the Pentax Optio 330 and 430, and are similar to the tags used by Casio.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	RecordingMode	int16u	0 = Auto 1 = Night Scene 2 = Manual
0x0002	Quality	int16u	0 = Good 1 = Better 2 = Best
0x0003	FocusMode	int16u	2 = Custom 3 = Auto
0x0004	FlashMode	int16u	1 = Auto 2 = On 4 = Off 6 = Red-eye reduction
0x0007	WhiteBalance	int16u	0 = Auto      3 = Tungsten 1 = Daylight    4 = Fluorescent 2 = Shade      5 = Manual
0x000a	DigitalZoom	int32u	
0x000b	Sharpness	int16u	0 = Normal 1 = Soft 2 = Hard
0x000c	Contrast	int16u	0 = Normal 1 = Low 2 = High
0x000d	Saturation	int16u	0 = Normal 1 = Low 2 = High

0x0014	ISO	int16u	10 = 100 16 = 200 50 = 50 100 = 100	200 = 200 400 = 400 800 = 800 1600 = 1600	3200 = 3200 65534 = Auto 2 65535 = Auto
0x0017	ColorFilter	int16u	1 = Full 2 = Black & White 3 = Sepia		
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>		
0x1000	HometownCityCode	undef[4]			
0x1001	DestinationCityCode	undef[4]			

## Pentax Type4 Tags

The following few tags are extracted from the wealth of information available in maker notes of the Optio E20 and E25. These maker notes are stored as ASCII text in a format very similar to some HP models.

Tag ID	Tag Name	Writable	Values / Notes
'F/W Version'	FirmwareVersion	no	

## Pentax S1 Tags

Tags extracted from the maker notes of AVI videos from the Optio S1.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	MakerNoteVersion	no	

## Pentax Junk Tags

Tags found in the JUNK chunk of AVI videos from the RS1000.

Index1	Tag Name	Writable	Values / Notes
12	Model	no	

## Pentax Junk2 Tags

This information is found in AVI videos from the Optio RZ18.

Index1	Tag Name	Writable	Values / Notes
18	Make	no	
44	Model	no	
94	FNumber	no	
131	DateTime1	no	
157	DateTime2	no	
299	ThumbnailWidth	no	
301	ThumbnailHeight	no	
303	ThumbnailLength	no	
307	ThumbnailImage	no	(160x120 JPEG thumbnail image)

## Pentax AVI Tags

Pentax-specific RIFF tags found in AVI videos.

Tag ID	Tag Name	Writable	Values / Notes
'hymn'	MakerNotes	-	--> <a href="#">Pentax Tags</a>
'mknt'	MakerNotes	-	--> <a href="#">Pentax Tags</a>

## Pentax PENT Tags

Tags found in the PENT atom of MOV videos from the Optio WG-2 GPS.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
26	Model	no	
56	ExposureTime	no	
60	FNumber	no	
68	ExposureCompensation	no	
84	FocalLength	no	
113	DateTime1	no	
139	DateTime2	no	
167	ISO	no	
199	GPSVersionID	no	
207	GPSLatitudeRef	no	'N' = North 'S' = South
209	GPSLatitude	no	
233	GPSLongitudeRef	no	'E' = East 'W' = West
235	GPSLongitude	no	
259	GPSAltitudeRef	no	0 = Above Sea Level 1 = Below Sea Level
260	GPSAltitude	no	
284	GPSTimeStamp	no	
308	GPSSatellites	no	
311	GPSStatus	no	'A' = Measurement Active 'V' = Measurement Void
313	GPSMeasureMode	no	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
315	GPSMapDatum	no	
322	GPSDateStamp	no	
371	AudioCodecID	no	
2003	PreviewImage	no	(640x480 JPEG preview image)

## Pentax PXTH Tags

Tags found in the PXTH atom of MOV videos from the K-01.

Index1	Tag Name	Writable	Values / Notes
0	PreviewImageLength	no	
4	PreviewImage	no	(640-pixel-wide JPEG preview)

## Pentax MOV Tags

This information is found in MOV videos from cameras such as the Optio WP.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
38	ExposureTime	no	
42	FNumber	no	
50	ExposureCompensation	no	
68	WhiteBalance	no	0 = Auto      3 = Fluorescent 1 = Daylight    4 = Tungsten 2 = Shade      5 = Manual
72	FocalLength	no	
175	ISO	no	

# PhaseOne Tags

These tags are extracted from the maker notes of Phase One images.

Tag ID	Tag Name	Writable	Values / Notes
0x0100	CameraOrientation	no	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW 3 = Rotate 180
0x0102	SerialNumber	string	
0x0105	ISO	int32s	
0x0106	ColorMatrix1	float[9]	
0x0107	WB_RGBLevels	float[3]	
0x0108	SensorWidth	int32s	
0x0109	SensorHeight	int32s	
0x010a	SensorLeftMargin	int32s	
0x010b	SensorTopMargin	int32s	
0x010c	ImageWidth	int32s	
0x010d	ImageHeight	int32s	
0x010e	RawFormat	int32s	0 = Uncompressed 1 = RAW 1 2 = RAW 2 3 = IIQ L 5 = IIQ S 6 = IIQ Sv2 8 = IIQ L16
0x010f	RawData	no	
0x0110	SensorCalibration	-	--> <a href="#">PhaseOne SensorCalibration Tags</a>
0x0112	DateTimeOriginal	no	(may be used as a key to encrypt the raw data)
0x0113	ImageNumber	int32s	
0x0203	Software	string	
0x0204	System	string	
0x0210	SensorTemperature	float	
0x0211	SensorTemperature2	float	
0x0212	UnknownDate?	int32u	
0x021c	StripOffsets	no	
0x021d	BlackLevel	int32s	
0x0222	SplitColumn	int32s	
0x0223	BlackLevelData	int16u[n]	
0x0226	ColorMatrix2	float[9]	
0x0267	AFAdjustment	float	
0x0301	FirmwareVersions	string	
0x0400	ShutterSpeedValue	float	
0x0401	ApertureValue	float	
0x0402	ExposureCompensation	float	
0x0403	FocalLength	float	
0x0410	CameraModel	string	
0x0412	LensModel	string	
0x0414	MaxApertureValue	float	
0x0415	MinApertureValue	float	
0x0455	Viewfinder	string	

## PhaseOne SensorCalibration Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0400	SensorDefects	no	
0x0401	AllColorFlatField1?	no	
0x0407	SerialNumber	string	

0x040b	RedBlueFlatField?	no
0x0410	AllColorFlatField2?	no
0x0416	AllColorFlatField3?	no
0x0419	LinearizationCoefficients1	no
0x041a	LinearizationCoefficients2	no

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Oct 29, 2024*

[<-- ExifTool Tag Names](#)

# PhotoCD Tags

Tags extracted from Kodak Photo CD Image Pac (PCD) files.

Index1	Tag Name	Writable	Values / Notes
7	SpecificationVersion	no	
9	AuthoringSoftwareRelease	no	
11	ImageMagnificationDescriptor	no	
13	CreateDate	no	
17	ModifyDate	no	
21	ImageMedium	no	0 = Color negative 1 = Color reversal 2 = Color hard copy 3 = Thermal hard copy 4 = Black and white negative 5 = Black and white reversal 6 = Black and white hard copy 7 = Internegative 8 = Synthetic image
22	ProductType	no	
42	ScannerVendorID	no	
62	ScannerProductID	no	
78	ScannerFirmwareVersion	no	
82	ScannerFirmwareDate	no	
90	ScannerSerialNumber	no	
110	ScannerPixelSize	no	
112	ImageWorkstationMake	no	
132	CharacterSet	no	1 = 38 characters ISO 646 2 = 65 characters ISO 646 3 = 95 characters ISO 646 4 = 191 characters ISO 8850-1 5 = ISO 2022 6 = Includes characters not ISO 2375 registered
133	CharacterEscapeSequence?	no	
165	PhotoFinisherName	no	
228	SceneBalanceAlgorithmRevision	no	
230	SceneBalanceAlgorithmCommand	no	0 = Neutral SBA On, Color SBA On 1 = Neutral SBA Off, Color SBA Off 2 = Neutral SBA On, Color SBA Off 3 = Neutral SBA Off, Color SBA On
325	SceneBalanceAlgorithmFilmID	no	1 = 3M ScotchColor AT 100 2 = 3M ScotchColor AT 200 3 = 3M ScotchColor HR2 400 7 = 3M Scotch HR 200 Gen 2 9 = 3M Scotch HR 400 Gen 2 16 = Agfa Agfacolor XRS 400 Gen 1 17 = Agfa Agfacolor XRG/XRS 400 18 = Agfa Agfacolor XRG/XRS 200 19 = Agfa Agfacolor XRS 1000 Gen 2 20 = Agfa Agfacolor XRS 400 Gen 2 21 = Agfa Agfacolor XRS/XRC 100 26 = Fuji Realia 100 (JAPAN) 27 = Fuji Realia 100 Gen 1 28 = Fuji Realia 100 Gen 2 29 = Fuji SHR 400 Gen 2 30 = Fuji Super HG 100 31 = Fuji Super HG 1600 Gen 1 32 = Fuji Super HG 200 33 = Fuji Super HG 400 34 = Fuji Super HG 100 Gen 2 35 = Fuji Super HR 100 Gen 1 36 = Fuji Super HR 100 Gen 2 37 = Fuji Super HR 1600 Gen 2 38 = Fuji Super HR 200 Gen 1 39 = Fuji Super HR 200 Gen 2 40 = Fuji Super HR 400 Gen 1 43 = Fuji NSP 160S (Pro) 45 = Kodak Kodacolor VR 100 Gen 2

47 = Kodak Gold 400 Gen 3  
55 = Kodak Ektar 100 Gen 1  
56 = Kodak Ektar 1000 Gen 1  
57 = Kodak Ektar 125 Gen 1  
58 = Kodak Royal Gold 25 RZ  
60 = Kodak Gold 1600 Gen 1  
61 = Kodak Gold 200 Gen 2  
62 = Kodak Gold 400 Gen 2  
65 = Kodak Kodacolor VR 100 Gen 1  
66 = Kodak Kodacolor VR 1000 Gen 2  
67 = Kodak Kodacolor VR 1000 Gen 1  
68 = Kodak Kodacolor VR 200 Gen 1  
69 = Kodak Kodacolor VR 400 Gen 1  
70 = Kodak Kodacolor VR 200 Gen 2  
71 = Kodak Kodacolor VRG 100 Gen 1  
72 = Kodak Gold 100 Gen 2  
73 = Kodak Kodacolor VRG 200 Gen 1  
74 = Kodak Gold 400 Gen 1  
87 = Kodak Ektacolor Gold 160  
88 = Kodak Ektapress 1600 Gen 1 PPC  
89 = Kodak Ektapress Gold 100 Gen 1 PPA  
90 = Kodak Ektapress Gold 400 PPB-3  
92 = Kodak Ektar 25 Professional PHR  
97 = Kodak T-Max 100 Professional  
98 = Kodak T-Max 3200 Professional  
99 = Kodak T-Max 400 Professional  
101 = Kodak Vericolor 400 Prof VPH  
102 = Kodak Vericolor III Pro  
121 = Konika Konica Color SR-G 3200  
122 = Konika Konica Color Super SR100  
123 = Konika Konica Color Super SR 400  
138 = Kodak Gold Unknown  
139 = Kodak Unknown Neg A- Normal SBA  
143 = Kodak Ektar 100 Gen 2  
147 = Kodak Kodacolor CII  
148 = Kodak Kodacolor II  
149 = Kodak Gold Plus 200 Gen 3  
150 = Kodak Internegative +10% Contrast  
151 = Agfa Agfacolor Ultra 50  
152 = Fuji NHG 400  
153 = Agfa Agfacolor XRG 100  
154 = Kodak Gold Plus 100 Gen 3  
155 = Konika Konica Color Super SR200 Gen 1  
156 = Konika Konica Color SR-G 160  
157 = Agfa Agfacolor Optima 125  
158 = Agfa Agfacolor Portrait 160  
162 = Kodak Kodacolor VRG 400 Gen 1  
163 = Kodak Gold 200 Gen 1  
164 = Kodak Kodacolor VRG 100 Gen 2  
174 = Kodak Internegative +20% Contrast  
175 = Kodak Internegative +30% Contrast  
176 = Kodak Internegative +40% Contrast  
184 = Kodak TMax-100 D-76 CI = .40  
185 = Kodak TMax-100 D-76 CI = .50  
186 = Kodak TMax-100 D-76 CI = .55  
187 = Kodak TMax-100 D-76 CI = .70  
188 = Kodak TMax-100 D-76 CI = .80  
189 = Kodak TMax-100 TMax CI = .40  
190 = Kodak TMax-100 TMax CI = .50  
191 = Kodak TMax-100 TMax CI = .55  
192 = Kodak TMax-100 TMax CI = .70  
193 = Kodak TMax-100 TMax CI = .80  
195 = Kodak TMax-400 D-76 CI = .40  
196 = Kodak TMax-400 D-76 CI = .50  
197 = Kodak TMax-400 D-76 CI = .55  
198 = Kodak TMax-400 D-76 CI = .70  
214 = Kodak TMax-400 D-76 CI = .80  
215 = Kodak TMax-400 TMax CI = .40  
216 = Kodak TMax-400 TMax CI = .50  
217 = Kodak TMax-400 TMax CI = .55  
218 = Kodak TMax-400 TMax CI = .70  
219 = Kodak TMax-400 TMax CI = .80  
224 = 3M ScotchColor ATG 400/EXL 400  
266 = Agfa Agfacolor Optima 200  
267 = Konika Impressa 50  
268 = Polaroid Polaroid CP 200  
269 = Konika Konica Color Super SR200 Gen 2  
270 = ILFORD XP2 400  
271 = Polaroid Polaroid Color HD2 100  
272 = Polaroid Polaroid Color HD2 400

273 = Polaroid Polaroid Color HD2 200  
282 = 3M ScotchColor ATG-1 200  
284 = Konika XG 400  
307 = Kodak Universal Reversal B/W  
308 = Kodak RPC Copy Film Gen 1  
312 = Kodak Universal E6  
324 = Kodak Gold Ultra 400 Gen 4  
328 = Fuji Super G 100  
329 = Fuji Super G 200  
330 = Fuji Super G 400 Gen 2  
333 = Kodak Universal K14  
334 = Fuji Super G 400 Gen 1  
366 = Kodak Vericolor HC 6329 VHC  
367 = Kodak Vericolor HC 4329 VHC  
368 = Kodak Vericolor L 6013 VPL  
369 = Kodak Vericolor L 4013 VPL  
418 = Kodak Ektacolor Gold II 400 Prof  
430 = Kodak Royal Gold 1000  
431 = Kodak Kodacolor VR 200 / 5093  
432 = Kodak Gold Plus 100 Gen 4  
443 = Kodak Royal Gold 100  
444 = Kodak Royal Gold 400  
445 = Kodak Universal E6 auto-balance  
446 = Kodak Universal E6 illum. corr.  
447 = Kodak Universal K14 auto-balance  
448 = Kodak Universal K14 illum. corr.  
449 = Kodak Ektar 100 Gen 3 SY  
456 = Kodak Ektar 25  
457 = Kodak Ektar 100 Gen 3 CX  
458 = Kodak Ektapress Plus 100 Prof PJA-1  
459 = Kodak Ektapress Gold II 100 Prof  
460 = Kodak Pro 100 PRN  
461 = Kodak Vericolor HC 100 Prof VHC-2  
462 = Kodak Prof Color Neg 100  
463 = Kodak Ektar 1000 Gen 2  
464 = Kodak Ektapress Plus 1600 Pro PJC-1  
465 = Kodak Ektapress Gold II 1600 Prof  
466 = Kodak Super Gold 1600 GF Gen 2  
467 = Kodak Kodacolor 100 Print Gen 4  
468 = Kodak Super Gold 100 Gen 4  
469 = Kodak Gold 100 Gen 4  
470 = Kodak Gold III 100 Gen 4  
471 = Kodak Funtime 100 FA  
472 = Kodak Funtime 200 FB  
473 = Kodak Kodacolor VR 200 Gen 4  
474 = Kodak Gold Super 200 Gen 4  
475 = Kodak Kodacolor 200 Print Gen 4  
476 = Kodak Super Gold 200 Gen 4  
477 = Kodak Gold 200 Gen 4  
478 = Kodak Gold III 200 Gen 4  
479 = Kodak Gold Ultra 400 Gen 5  
480 = Kodak Super Gold 400 Gen 5  
481 = Kodak Gold 400 Gen 5  
482 = Kodak Gold III 400 Gen 5  
483 = Kodak Kodacolor 400 Print Gen 5  
484 = Kodak Ektapress Plus 400 Prof PJB-2  
485 = Kodak Ektapress Gold II 400 Prof G5  
486 = Kodak Pro 400 PPF-2  
487 = Kodak Ektacolor Gold II 400 EGP-4  
488 = Kodak Ektacolor Gold 400 Prof EGP-4  
489 = Kodak Ektapress Gold II Multspd PJM  
490 = Kodak Pro 400 MC PMC  
491 = Kodak Vericolor 400 Prof VPH-2  
492 = Kodak Vericolor 400 Plus Prof VPH-2  
493 = Kodak Unknown Neg Product Code 83  
505 = Kodak Ektacolor Pro Gold 160 GPX  
508 = Kodak Royal Gold 200  
517 = Kodak 4050000000  
519 = Kodak Gold Plus 100 Gen 5  
520 = Kodak Gold 800 Gen 1  
521 = Kodak Gold Super 200 Gen 5  
522 = Kodak Ektapress Plus 200 Prof  
523 = Kodak 4050 E6 auto-balance  
524 = Kodak 4050 E6 illum. corr.  
525 = Kodak 4050 K14  
526 = Kodak 4050 K14 auto-balance  
527 = Kodak 4050 K14 illum. corr.  
528 = Kodak 4050 Reversal B&W  
532 = Kodak Advantix 200  
533 = Kodak Advantix 400

			534 = Kodak Advantix 100 535 = Kodak Ektapress Multspd Prof PJM-2 536 = Kodak Kodacolor VR 200 Gen 5 537 = Kodak Funtime 200 FB Gen 2 538 = Kodak Commercial 200 539 = Kodak Royal Gold 25 Copystand 540 = Kodak Kodacolor DA 100 Gen 5 545 = Kodak Kodacolor VR 400 Gen 2 546 = Kodak Gold 100 Gen 6 547 = Kodak Gold 200 Gen 6 548 = Kodak Gold 400 Gen 6 549 = Kodak Royal Gold 100 Gen 2 550 = Kodak Royal Gold 200 Gen 2 551 = Kodak Royal Gold 400 Gen 2 552 = Kodak Gold Max 800 Gen 2 554 = Kodak 4050 E6 high contrast 555 = Kodak 4050 E6 low saturation high contrast 556 = Kodak 4050 E6 low saturation 557 = Kodak Universal E-6 Low Saturation 558 = Kodak T-Max T400 CN 563 = Kodak Ektapress PJ100 564 = Kodak Ektapress PJ400 565 = Kodak Ektapress PJ800 567 = Kodak Portra 160NC 568 = Kodak Portra 160VC 569 = Kodak Portra 400NC 570 = Kodak Portra 400VC 575 = Kodak Advantix 100-2 576 = Kodak Advantix 200-2 577 = Kodak Advantix Black & White + 400 578 = Kodak Ektapress PJ800-2
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331 CopyrightStatus	no	1 = Restrictions apply 255 = Not specified
332 CopyrightFileName	no	
1538 Orientation	no	[val & 0x3] 0 = Horizontal (normal) 1 = Rotate 270 CW 2 = Rotate 180 3 = Rotate 90 CW
1538.1 ImageWidth	no	[val >> 2 & 0x3]
1538.2 ImageHeight	no	[val >> 2 & 0x3]
1538.3 CompressionClass	no	[val >> 5 & 0x3] 0 = Class 1 - 35mm film; Pictoral hard copy 1 = Class 2 - Large format film 2 = Class 3 - Text and graphics, high resolution 3 = Class 4 - Text and graphics, high dynamic range

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*Last revised Oct 24, 2018*

[-- ExifTool Tag Names](#)

# PhotoMechanic Tags

The Photo Mechanic trailer contains data in an IPTC-format structure, with soft edit information stored under record number 2.

Record	Tag Name	Writable	Values / Notes
2	SoftEdit	-	--> <a href="#">PhotoMechanic SoftEdit Tags</a>

## PhotoMechanic SoftEdit Tags

Tag ID	Tag Name	Writable	Values / Notes
209	RawCropLeft	int32s	
210	RawCropTop	int32s	
211	RawCropRight	int32s	
212	RawCropBottom	int32s	
213	ConstrainedCropWidth	int32s	
214	ConstrainedCropHeight	int32s	
215	FrameNum	int32s	
216	Rotation	int32s	0 = 0 1 = 90 2 = 180 3 = 270
217	CropLeft	int32s	
218	CropTop	int32s	
219	CropRight	int32s	
220	CropBottom	int32s	
221	Tagged	int32s	0 = No 1 = Yes
222	ColorClass	int32s	0 = 0 (None) 5 = 5 (Typical) 1 = 1 (Winner) 6 = 6 (Typical alt) 2 = 2 (Winner alt) 7 = 7 (Extras) 3 = 3 (Superior) 8 = 8 (Trash) 4 = 4 (Superior alt)
223	Rating	int32s	
236	PreviewCropLeft	int32s	
237	PreviewCropTop	int32s	
238	PreviewCropRight	int32s	
239	PreviewCropBottom	int32s	

## PhotoMechanic XMP Tags

Below is a list of the observed PhotoMechanic XMP tags. The actual namespace prefix is "photomechanic" but ExifTool shortens this in the family 1 group name.

These tags belong to the ExifTool XMP-photomech family 1 group.

Tag Name	Writable	Values / Notes
ColorClass	integer	0 = 0 (None) 5 = 5 (Typical) 1 = 1 (Winner) 6 = 6 (Typical alt) 2 = 2 (Winner alt) 7 = 7 (Extras) 3 = 3 (Superior) 8 = 8 (Trash) 4 = 4 (Superior alt)
CountryCode	string/	
CreatorIdentity	string+	
EditStatus	string	
PMVersion	string	
Prefs	string	(format is "Tagged:0, ColorClass:1, Rating:2, FrameNum:3")
Tagged	boolean	'False' = No 'True' = Yes
TimeCreated	string/	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Oct 26, 2023*

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# Photoshop Tags

Photoshop tags are found in PSD and PSB files, as well as inside embedded Photoshop information in many other file types (JPEG, TIFF, PDF, PNG to name a few).

Many Photoshop tags are marked as Unknown (indicated by a question mark after the tag name) because the information they provide is not very useful under normal circumstances. These unknown tags are not extracted unless the [Unknown](#) (-u) option is used. See <http://www.adobe.com/devnet-apps/photoshop/fileformatashtml/> for the official specification

Photoshop path tags (Tag ID's 0x7d0 to 0xbb5) are not defined by default, but a config file included in the full ExifTool distribution (config\_files/photoshop\_paths.config) contains the tag definitions to allow access to this information.

Tag ID	Tag Name	Writable	Values / Notes
0x03e8	Photoshop2Info?	no	
0x03e9	MacintoshPrintInfo?	no	
0x03ea	XMLData?	no	
0x03eb	Photoshop2ColorTable?	no	
0x03ed	ResolutionInfo	-	--> <a href="#">Photoshop Resolution Tags</a>
0x03ee	AlphaChannelsNames	no	
0x03ef	DisplayInfo?	no	
0x03f0	PStringCaption?	no	
0x03f1	BorderInformation?	no	
0x03f2	BackgroundColor?	no	
0x03f3	PrintFlags?	no	Byte 0 = Labels Byte 1 = Corner crop marks Byte 2 = Color bars Byte 3 = Registration marks Byte 4 = Negative Byte 5 = Emulsion down Byte 6 = Interpolate Byte 7 = Description Byte 8 = Print flags
0x03f4	BW_HalftoningInfo?	no	
0x03f5	ColorHalftoningInfo?	no	
0x03f6	DuotoneHalftoningInfo?	no	
0x03f7	BW_TransferFunc?	no	
0x03f8	ColorTransferFuncs?	no	
0x03f9	DuotoneTransferFuncs?	no	
0x03fa	DuotoneImageInfo?	no	
0x03fb	EffectiveBW?	no	
0x03fc	ObsoletePhotoshopTag1?	no	
0x03fd	EPSOptions?	no	
0x03fe	QuickMaskInfo?	no	
0x03ff	ObsoletePhotoshopTag2?	no	
0x0400	TargetLayerID?	no	
0x0401	WorkingPath?	no	
0x0402	LayersGroupInfo?	no	
0x0403	ObsoletePhotoshopTag3?	no	
0x0404	IPTCData	-	--> <a href="#">IPTC Tags</a>
0x0405	RawImageMode?	no	
0x0406	JPEG_Quality	-	--> <a href="#">Photoshop JPEG Quality Tags</a>
0x0408	GridGuidesInfo?	no	
0x0409	PhotoshopBGRThumbnail	undef!	(this is a JPEG image, but in BGR format instead of RGB)
0x040a	CopyrightFlag	int8u	0 = False 1 = True
0x040b	URL	string	
0x040c	PhotoshopThumbnail	undef!	
0x040d	GlobalAngle	int32u	

0x040e	ColorSamplersResource?	no	
0x040f	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>
0x0410	Watermark?	no	
0x0411	ICC_Untagged?	no	
0x0412	EffectsVisible?	no	
0x0413	SpotHalftone?	no	
0x0414	IDsBaseValue?	no	
0x0415	UnicodeAlphaNames?	no	
0x0416	IndexedColorTableCount?	no	
0x0417	TransparentIndex?	no	
0x0419	GlobalAltitude	int32u	
0x041a	SliceInfo	-	--> <a href="#">Photoshop SliceInfo Tags</a>
0x041b	WorkflowURL	no	
0x041c	JumpToXPEP?	no	
0x041d	Alphahdentifier?	no	
0x041e	URL_List	no+	
0x0421	VersionInfo	-	--> <a href="#">Photoshop VersionInfo Tags</a>
0x0422	EXIFInfo	-	--> <a href="#">EXIF Tags</a>
0x0423	ExifInfo2?	no	
0x0424	XMP	-	--> <a href="#">XMP Tags</a>
0x0425	IPTCDigest	string!	(this tag indicates provides a way for XMP-aware applications to indicate that the XMP is synchronized with the IPTC. The MWG recommendation is to ignore the XMP if IPTCDigest exists and doesn't match the CurrentIPTCDigest. When writing, special values of "new" and "old" represent the digests of the IPTC from the edited and original files respectively, and are undefined if the IPTC does not exist in the respective file. Set this to "new" as an indication that the XMP is synchronized with the IPTC)
0x0426	PrintScaleInfo	-	--> <a href="#">Photoshop PrintScaleInfo Tags</a>
0x0428	PixelInfo	-	--> <a href="#">Photoshop PixelInfo Tags</a>
0x0429	LayerComps?	no	
0x042a	AlternateDuotoneColors?	no	
0x042b	AlternateSpotColors?	no	
0x042d	LayerSelectionIDs?	no	
0x042e	HDRTonningInfo?	no	
0x042f	PrintInfo?	no	
0x0430	LayerGroupsEnabledID?	no	
0x0431	ColorSamplersResource2?	no	
0x0432	MeasurementScale?	no	
0x0433	TimelineInfo?	no	
0x0434	SheetDisclosure?	no	
0x0435	ChannelOptions	-	--> <a href="#">Photoshop ChannelOptions Tags</a>
0x0436	OnionSkins?	no	
0x0438	CountInfo?	no	
0x043a	PrintInfo2?	no	
0x043b	PrintStyle?	no	
0x043c	MacintoshNSPrintInfo?	no	
0x043d	WindowsDEVMODE?	no	
0x043e	AutoSaveFilePath?	no	
0x043f	AutoSaveFormat?	no	
0x0440	PathSelectionState?	no	
0x0bb7	ClippingPathName	no	
0x0bb8	OriginPathInfo?	no	
0x1b58	ImageReadyVariables?	no	
0x1b59	ImageReadyDataSets?	no	
0x1f40	LightroomWorkflow?	no	

## Photoshop Resolution Tags

Index2	Tag Name	Writable	Values / Notes
0	XResolution	int32u	
2	DisplayedUnitsX	int16u	1 = inches 2 = cm
4	YResolution	int32u	
6	DisplayedUnitsY	int16u	1 = inches 2 = cm

## Photoshop JPEG\_Quality Tags

Index2	Tag Name	Writable	Values / Notes
0	PhotoshopQuality	int16s	
1	PhotoshopFormat	no	0 = Standard 1 = Optimized 257 = Progressive
2	ProgressiveScans	no	1 = 3 Scans 2 = 4 Scans 3 = 5 Scans

## Photoshop SliceInfo Tags

Index1	Tag Name	Writable	Values / Notes
20	SlicesGroupName	no	
24	NumSlices	no	

## Photoshop VersionInfo Tags

Index1	Tag Name	Writable	Values / Notes
4	HasRealMergedData	no	0 = No 1 = Yes
5	WriterName	no	
9	ReaderName	no	

## Photoshop PrintScaleInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	PrintStyle	no	0 = Centered 1 = Size to Fit 2 = User Defined
2	PrintPosition	no	
10	PrintScale	no	

## Photoshop PixelInfo Tags

Index1	Tag Name	Writable	Values / Notes
4	PixelAspectRatio	no	

## Photoshop ChannelOptions Tags

These tags relate only to the appearance of a channel.

Index1	Tag Name	Writable	Values / Notes
0	ChannelColorSpace	no	0 = RGB 1 = HSB 2 = CMYK

7 = Lab  
8 = Grayscale

2	ChannelColorData	no	
11	ChannelOpacity	no	
12	ChannelColorIndicates	no	0 = Selected Areas 1 = Masked Areas 2 = Spot Color

## Photoshop DocumentData Tags

Tag ID	Tag Name	Writable	Values / Notes
'Layr'	Layers	-	--> <a href="#">Photoshop Layers Tags</a>
'Lr16'	Layers	-	--> <a href="#">Photoshop Layers Tags</a>

## Photoshop Layers Tags

Tags extracted from Photoshop layer information.

Tag ID	Tag Name	Writable	Values / Notes
'_xbnd'	LayerBlendModes	no+	'colr' = Color 'dark' = Darken 'diff' = Difference 'diss' = Dissolve 'div' = Color Dodge 'dkCl' = Darker Color 'fdiv' = Divide 'fsub' = Subtract 'hLit' = Hard Light 'hMix' = Hard Mix 'hue' = Hue 'idiv' = Color Burn 'lLit' = Linear Light 'lbrn' = Linear Burn 'lddg' = Linear Dodge 'lgCl' = Lighter Color 'lite' = Lighten 'lum' = Luminosity 'mul' = Multiply 'norm' = Normal 'over' = Overlay 'pLit' = Pin Light 'pass' = Pass Through 'sLit' = Soft Light 'sat' = Saturation 'scrn' = Screen 'smud' = Exclusion 'vLit' = Vivid Light
'_xcnt'	LayerCount	no	
'_xnam'	LayerNames	no+	
'_xopc'	LayerOpacities	no+	
'_xrct'	LayerRectangles	no+	(top left bottom right)
'_xvis'	LayerVisible	no+	0 = Yes 2 = No
'lclr'	LayerColors	no+	0 = None    4 = Green 1 = Red      5 = Blue 2 = Orange    6 = Violet 3 = Yellow    7 = Gray
'lsct'	LayerSections	no+	0 = Layer 1 = Folder (open) 2 = Folder (closed) 3 = Divider
'luni'	LayerUnicodeNames	no+	
'lyid'	LayerIDs?	no+	
'shmd'	LayerModifyDates	no+	

## Photoshop Header Tags

This information is found in the PSD file header.

Index2	Tag Name	Writable	Values / Notes
6	NumChannels	no	
7	ImageHeight	no	
9	ImageWidth	no	
11	BitDepth	no	

12 ColorMode	no	0 = Bitmap	4 = CMYK
		1 = Grayscale	7 = Multichannel
		2 = Indexed	8 = Duotone
		3 = RGB	9 = Lab

## Photoshop ImageData Tags

Index	Tag Name	Writable	Values / Notes
0	Compression	no	0 = Uncompressed 1 = RLE 2 = ZIP without prediction 3 = ZIP with prediction

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Last revised Dec 20, 2024

[-- ExifTool Tag Names](#)

# PostScript Tags

Tag ID	Tag Name	Writable	Values / Notes
'AI12_BuildNumber'	AIBuildNumber	no	
'AI3_ColorUsage'	AIColorUsage	no	
'AI5_FileFormat'	AIFileFormat	no	
'AI5_NumLayers'	AINumLayers	no	
'AI5_RulerUnits'	AIRulerUnits	no	0 = Inches      3 = Picas 1 = Millimeters    4 = Centimeters 2 = Points        6 = Pixels
'AI5_TargetResolution'	AITargetResolution	no	
'AI8_CreatorVersion'	AICreatorVersion	no	
'AI9_ColorModel'	AIColorModel	no	1 = RGB 2 = CMYK
'Author'	Author	string	
'BeginDocument'	EmbeddedFile	-	--> <a href="#">PostScript Tags</a> (extracted with <a href="#">ExtractEmbedded</a> option)
'BeginICCProfile'	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>
'BeginPhotoshop'	PhotoshopData	-	--> <a href="#">Photoshop Tags</a>
'BoundingBox'	BoundingBox	no	
'Copyright'	Copyright	string	
'CreationDate'	CreateDate	string	
'Creator'	Creator	string	
'EmbeddedFileName'	EmbeddedFileName	no	(not a real tag ID, but the file name from a BeginDocument statement. Extracted with document metadata when <a href="#">ExtractEmbedded</a> option is used)
'For'	For	string	(for whom the document was prepared)
'ImageData'	ImageData	no	
'Keywords'	Keywords	string	
'ModDate'	ModifyDate	string	
'Pages'	Pages	no	
'Routing'	Routing	string	
'Subject'	Subject	string	
'TIFFPreview'	TIFFPreview	no	(not a real tag ID, but used to represent the TIFF preview extracted from DOS EPS images)
'Title'	Title	string	
'Version'	Version	string	
'begin_xml_packet'	XMP	-	--> <a href="#">XMP Tags</a>

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Last revised Apr 13, 2018

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# PrintIM Tags

The format of the PrintIM information is known, however no PrintIM tags have been decoded. Use the [Unknown](#) (-u) option to extract PrintIM information.

Tag ID	Tag Name	Writable	Values / Notes
'PrintIMVersion'	PrintIMVersion	no	

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*Last revised Mar 19, 2010*

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# Qualcomm Tags

The tags below have been observed in the JPEG APP7 "Qualcomm Camera Attributes" segment written by some cameras such as the HP iPAQ Voice Messenger. ExifTool will extract any information found from this segment, even if it is not listed in this table.

Tag Name	Writable	Values / Notes
AECAggressiveness	no	
AECCurrentExplIndex	no	
AECCurrentSensorLuma	no	
ACEEnable	no	
AECExposureIndexAdjStep	no	
AECHighLumaRegionCount	no	
AECHighLumaRegionThreshold	no	
AECDoorIdx	no	
AECLumaTarget	no	
AECLumaTolerance	no	
AECMode	no	
AECDoorIdx	no	
AECOutdoorBrightDiscarded	no	
AECOutdoorBrightEnable	no	
AECOutdoorBrightReduction	no	
AECOutdoorBrightThresholdHI	no	
AECOutdoorBrightThresholdLO	no	
AECOutdoorGammaIndex	no	
AECSnapshotDigitalGain	no	
AECSnapshotExposureTimeMs	no	
AECSnapshotLineCount	no	
AECSnapshotSensorGain	no	
AECVfeLuma	no	
AFBoundary	no	
AFCollectEndStat	no	
AFEnable	no	
AFFarEnd	no	
AFFineSrchPoints	no	
AFFineStep	no	
AFFocusTime	no	
AGrossStep	no	
AFMode	no	
AFNearEnd	no	
AFPosDefMacro	no	
AFPosDefNorm	no	
AFPosition	no	
AFProcess	no	
AFREnable	no	
AFRFaster0ExpMod	no	
AFRFaster0Trigger	no	
AFRFaster1ExpMod	no	
AFRFaster1Trigger	no	
AFRFaster2ExpMod	no	
AFRFaster2Trigger	no	
AFRFaster3ExpMod	no	
AFRFaster3Trigger	no	
AFRFaster4ExpMod	no	

AFRFaster4Trigger	no	
AFRPossibleFrameCnt	no	
AFRSlower0ExpMod	no	
AFRSlower0Trigger	no	
AFRSlower1ExpMod	no	
AFRSlower1Trigger	no	
AFRSlower2ExpMod	no	
AFRSlower2Trigger	no	
AFRSlower3ExpMod	no	
AFRSlower3Trigger	no	
AFRSlower4ExpMod	no	
AFRSlower4Trigger	no	
AFResetLensAfterSnap	no	
AFStepsNearFar	no	
AFStepsNearInfinity	no	
AFTestMode	no	
AFTracePositions00	no	
AFTracePositions01	no	
AFTracePositions02	no	
AFTracePositions03	no	
AFTracePositions04	no	
AFTracePositions05	no	
AFTracePositions06	no	
AFTracePositions07	no	
AFTracePositions08	no	
AFTracePositions09	no	
AFTracePositions10	no	
AFTracePositions11	no	
AFTracePositions12	no	
AFTracePositions13	no	
AFTracePositions14	no	
AFTracePositions15	no	
AFTracePositions16	no	
AFTracePositions17	no	
AFTracePositions18	no	
AFTracePositions19	no	
AFTracePositions20	no	
AFTracePositions21	no	
AFTracePositions22	no	
AFTracePositions23	no	
AFTracePositions24	no	
AFTracePositions25	no	
AFTracePositions26	no	
AFTracePositions27	no	
AFTracePositions28	no	
AFTracePositions29	no	
AFTracePositions30	no	
AFTracePositions31	no	
AFTracePositions32	no	
AFTracePositions33	no	
AFTracePositions34	no	
AFTracePositions35	no	
AFTracePositions36	no	

AFTracePositions37	no	
AFTracePositions38	no	
AFTracePositions39	no	
AFTracePositions40	no	
AFTracePositions41	no	
AFTracePositions42	no	
AFTracePositions43	no	
AFTracePositions44	no	
AFTracePositions45	no	
AFTracePositions46	no	
AFTracePositions47	no	
AFTracePositions48	no	
AFTracePositions49	no	
AFTraceStats00	no	
AFTraceStats01	no	
AFTraceStats02	no	
AFTraceStats03	no	
AFTraceStats04	no	
AFTraceStats05	no	
AFTraceStats06	no	
AFTraceStats07	no	
AFTraceStats08	no	
AFTraceStats09	no	
AFTraceStats10	no	
AFTraceStats11	no	
AFTraceStats12	no	
AFTraceStats13	no	
AFTraceStats14	no	
AFTraceStats15	no	
AFTraceStats16	no	
AFTraceStats17	no	
AFTraceStats18	no	
AFTraceStats19	no	
AFTraceStats20	no	
AFTraceStats21	no	
AFTraceStats22	no	
AFTraceStats23	no	
AFTraceStats24	no	
AFTraceStats25	no	
AFTraceStats26	no	
AFTraceStats27	no	
AFTraceStats28	no	
AFTraceStats29	no	
AFTraceStats30	no	
AFTraceStats31	no	
AFTraceStats32	no	
AFTraceStats33	no	
AFTraceStats34	no	
AFTraceStats35	no	
AFTraceStats36	no	
AFTraceStats37	no	
AFTraceStats38	no	
AFTraceStats39	no	

AFTraceStats40	no	
AFTraceStats41	no	
AFTraceStats42	no	
AFTraceStats43	no	
AFTraceStats44	no	
AFTraceStats45	no	
AFTraceStats46	no	
AFTraceStats47	no	
AFTraceStats48	no	
AFTraceStats49	no	
AFUndershootProtect	no	
AFVfeHorzOffset	no	
AFVfeHorzWidth	no	
AFVfeMetricMax	no	
AFVfeVertHeight	no	
AFVfeVertOffset	no	
ASF3EdgeDetect	no	
ASF3EdgeFilterA11	no	
ASF3EdgeFilterA12	no	
ASF3EdgeFilterA13	no	
ASF3EdgeFilterA21	no	
ASF3EdgeFilterA22	no	
ASF3EdgeFilterA23	no	
ASF3EdgeFilterA31	no	
ASF3EdgeFilterA32	no	
ASF3EdgeFilterA33	no	
ASF3Enable	no	
ASF3LowerThreshold	no	
ASF3NoiseFilterA11	no	
ASF3NoiseFilterA12	no	
ASF3NoiseFilterA13	no	
ASF3NoiseFilterA21	no	
ASF3NoiseFilterA22	no	
ASF3NoiseFilterA23	no	
ASF3NoiseFilterA31	no	
ASF3NoiseFilterA32	no	
ASF3NoiseFilterA33	no	
ASF3UpperThreshold	no	
ASF5BrtLoThres	no	
ASF5BrtShrpDegF1	no	
ASF5BrtShrpDegF2	no	
ASF5BrtSmthPercent	no	
ASF5BrtUpThres	no	
ASF5Enable	no	
ASF5ExposureIndex1	no	
ASF5ExposureIndex2	no	
ASF5Filter1A11	no	
ASF5Filter1A12	no	
ASF5Filter1A13	no	
ASF5Filter1A14	no	
ASF5Filter1A15	no	
ASF5Filter1A21	no	
ASF5Filter1A22	no	

ASF5Filter1A23	no	
ASF5Filter1A24	no	
ASF5Filter1A25	no	
ASF5Filter1A31	no	
ASF5Filter1A32	no	
ASF5Filter1A33	no	
ASF5Filter1A34	no	
ASF5Filter1A35	no	
ASF5Filter1A41	no	
ASF5Filter1A42	no	
ASF5Filter1A43	no	
ASF5Filter1A44	no	
ASF5Filter1A45	no	
ASF5Filter1A51	no	
ASF5Filter1A52	no	
ASF5Filter1A53	no	
ASF5Filter1A54	no	
ASF5Filter1A55	no	
ASF5Filter2A11	no	
ASF5Filter2A12	no	
ASF5Filter2A13	no	
ASF5Filter2A14	no	
ASF5Filter2A15	no	
ASF5Filter2A21	no	
ASF5Filter2A22	no	
ASF5Filter2A23	no	
ASF5Filter2A24	no	
ASF5Filter2A25	no	
ASF5Filter2A31	no	
ASF5Filter2A32	no	
ASF5Filter2A33	no	
ASF5Filter2A34	no	
ASF5Filter2A35	no	
ASF5Filter2A41	no	
ASF5Filter2A42	no	
ASF5Filter2A43	no	
ASF5Filter2A44	no	
ASF5Filter2A45	no	
ASF5Filter2A51	no	
ASF5Filter2A52	no	
ASF5Filter2A53	no	
ASF5Filter2A54	no	
ASF5Filter2A55	no	
ASF5FilterMode	no	
ASF5LowLoThres	no	
ASF5LowShrpDegF1	no	
ASF5LowShrpDegF2	no	
ASF5LowSmthPrcnt	no	
ASF5LowUpThres	no	
ASF5LumaFilter00	no	
ASF5LumaFilter01	no	
ASF5LumaFilter02	no	
ASF5LumaFilter03	no	

ASF5LumaFilter04	no	
ASF5LumaFilter05	no	
ASF5LumaFilter06	no	
ASF5LumaFilter07	no	
ASF5LumaFilter08	no	
ASF5MaxExposureIndex	no	
ASF5NrmLoThres	no	
ASF5NrmShrpDegF1	no	
ASF5NrmShrpDegF2	no	
ASF5NrmSmthPrcnt	no	
ASF5NrmUpThres	no	
ASF5NrmizeFactor1	no	
ASF5NrmizeFactor2	no	
AWBAggressiveness	no	
AWBAgwGridDist2Thresh	no	
AWBAlgorithm	no	
AWBAveBgRatio	no	
AWBAveRgRatio	no	
AWBBlueGainAdjRef1	no	
AWBBlueGainAdjRef2	no	
AWBBlueGainAdjRef3	no	
AWBBlueGainAdjRef4	no	
AWBBlueGainAdjRef5	no	
AWBBlueGainAdjRef6	no	
AWBBlueGainAdjRef7	no	
AWBBlueGainAdjRef8	no	
AWBBlueGainRef1	no	
AWBBlueGainRef2	no	
AWBBlueGainRef3	no	
AWBBlueGainRef4	no	
AWBBlueGainRef5	no	
AWBBlueGainRef6	no	
AWBBlueGainRef7	no	
AWBBlueGainRef8	no	
AWBCcBias	no	
AWBCompactClusterR2	no	
AWBEnable	no	
AWBGreenOffsetBg	no	
AWBGreenOffsetRg	no	
AWBIndoorSampleInfluence	no	
AWBLoVfeC1	no	
AWBLoVfeC2	no	
AWBLoVfeC3	no	
AWBLoVfeC4	no	
AWBLoVfeM1	no	
AWBLoVfeM2	no	
AWBLoVfeM3	no	
AWBLoVfeM4	no	
AWBLoVfeMaxY	no	
AWBLoVfeMinY	no	
AWBLowLigColCorEna	no	
AWBMaxBGain	no	
AWBMaxGGain	no	

AWBMaxRGain	no	
AWBMinBGain	no	
AWBMinGGain	no	
AWBMinRGain	no	
AWBNormVfeC1	no	
AWBNormVfeC2	no	
AWBNormVfeC3	no	
AWBNormVfeC4	no	
AWBNormVfeM1	no	
AWBNormVfeM2	no	
AWBNormVfeM3	no	
AWBNormVfeM4	no	
AWBNormVfeMaxY	no	
AWBNormVfeMinY	no	
AWBOudorVfeC1	no	
AWBOudorVfeC2	no	
AWBOudorVfeC3	no	
AWBOudorVfeC4	no	
AWBOudorVfeM1	no	
AWBOudorVfeM2	no	
AWBOudorVfeM3	no	
AWBOudorVfeM4	no	
AWBOudorVfeMaxY	no	
AWBOudorVfeMinY	no	
AWBOutdoorSampleInfluence	no	
AWBPrevWbBgain	no	
AWBPrevWbGgain	no	
AWBPrevWbRgain	no	
AWBRedGainAdjRef1	no	
AWBRedGainAdjRef2	no	
AWBRedGainAdjRef3	no	
AWBRedGainAdjRef4	no	
AWBRedGainAdjRef5	no	
AWBRedGainAdjRef6	no	
AWBRedGainAdjRef7	no	
AWBRedGainAdjRef8	no	
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AWBSnapshotRGain	no	
AntiBadingPixelClk	no	
AntiBadingPixelClkPerLine	no	
AntibandingEnable	no	
BlckLvlEvenCols	no	
BlckLvlOddCols	no	
CamMclkHz	no	

ChroSupChroThres1	no	
ChroSupChroThres2	no	
ChroSupLumaThres1	no	
ChroSupLumaThres2	no	
ChroSupLumaThres3	no	
ChroSupLumaThres4	no	
ChromSupress	no	
ClipToAfRato	no	
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DefCorK1	no	
DefCorK2	no	
DefLumaGammaMode	no	
DefRgbGammaMode	no	
DefectPixCorEnable	no	
DefectPixMaxThresh	no	

DefectPixMinThresh	no
DiscardFrstFrm	no
FrmSkipPtrn	no
GammaEnable	no
HJREnable	no
HJRMaxNumFrames	no
HJROneToTwoOffset	no
HJRTexureThreshold	no
HJR_NReductionFlat	no
HJR_NReductionTexture	no
IncandConvChrmA_M	no
IncandConvChrmA_P	no
IncandConvChrmB_M	no
IncandConvChrmB_P	no
IncandConvChrmC_M	no
IncandConvChrmC_P	no
IncandConvChrmD_M	no
IncandConvChrmD_P	no
IncandConvChrmKCb	no
IncandConvChrmKCr	no
IncandConvLumaK	no
IncandConvLumaV0	no
IncandConvLumaV1	no
IncandConvLumaV2	no
LADetect	no
LAEnable	no
MaxPrviewFps	no
MaxVideoFps	no
NghtshtFps	no
NightshotMode	no
OutlierDistance	no
PclkInvert	no
PrviewFps	no
PrviewResol	no
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R2TL84GreenStbl11	no	
R2TL84GreenStbl12	no	
R2TL84GreenStbl13	no	
R2TL84GreenStbl14	no	
R2TL84GreenStbl15	no	
R2TL84GreenStbl16	no	
R2TL84GreenStbl17	no	
R2TL84GreenStbl18	no	
R2TL84GreenStbl19	no	
R2TL84GreenStbl20	no	
R2TL84GreenStbl21	no	
R2TL84GreenStbl22	no	
R2TL84GreenStbl23	no	
R2TL84GreenStbl24	no	
R2TL84GreenStbl25	no	
R2TL84GreenStbl26	no	
R2TL84GreenStbl27	no	
R2TL84GreenStbl28	no	
R2TL84GreenStbl29	no	
R2TL84GreenStbl30	no	
R2TL84GreenStbl31	no	
R2TL84Height	no	
R2TL84Intervals	no	
R2TL84RedCtbl00	no	
R2TL84RedCtbl01	no	
R2TL84RedCtbl02	no	
R2TL84RedCtbl03	no	
R2TL84RedCtbl04	no	
R2TL84RedCtbl05	no	
R2TL84RedCtbl06	no	
R2TL84RedCtbl07	no	
R2TL84RedCtbl08	no	
R2TL84RedCtbl09	no	
R2TL84RedCtbl10	no	
R2TL84RedCtbl11	no	

R2TL84RedCtbl12	no
R2TL84RedCtbl13	no
R2TL84RedCtbl14	no
R2TL84RedCtbl15	no
R2TL84RedCtbl16	no
R2TL84RedCtbl17	no
R2TL84RedCtbl18	no
R2TL84RedCtbl19	no
R2TL84RedCtbl20	no
R2TL84RedCtbl21	no
R2TL84RedCtbl22	no
R2TL84RedCtbl23	no
R2TL84RedCtbl24	no
R2TL84RedCtbl25	no
R2TL84RedCtbl26	no
R2TL84RedCtbl27	no
R2TL84RedCtbl28	no
R2TL84RedCtbl29	no
R2TL84RedCtbl30	no
R2TL84RedCtbl31	no
R2TL84RedStbl00	no
R2TL84RedStbl01	no
R2TL84RedStbl02	no
R2TL84RedStbl03	no
R2TL84RedStbl04	no
R2TL84RedStbl05	no
R2TL84RedStbl06	no
R2TL84RedStbl07	no
R2TL84RedStbl08	no
R2TL84RedStbl09	no
R2TL84RedStbl10	no
R2TL84RedStbl11	no
R2TL84RedStbl12	no
R2TL84RedStbl13	no
R2TL84RedStbl14	no
R2TL84RedStbl15	no
R2TL84RedStbl16	no
R2TL84RedStbl17	no
R2TL84RedStbl18	no
R2TL84RedStbl19	no
R2TL84RedStbl20	no
R2TL84RedStbl21	no
R2TL84RedStbl22	no
R2TL84RedStbl23	no
R2TL84RedStbl24	no
R2TL84RedStbl25	no
R2TL84RedStbl26	no
R2TL84RedStbl27	no
R2TL84RedStbl28	no
R2TL84RedStbl29	no
R2TL84RedStbl30	no
R2TL84RedStbl31	no
R2TL84Tbl00	no

R2TL84Tbl01	no	
R2TL84Tbl02	no	
R2TL84Tbl03	no	
R2TL84Tbl04	no	
R2TL84Tbl05	no	
R2TL84Tbl06	no	
R2TL84Tbl07	no	
R2TL84Tbl08	no	
R2TL84Tbl09	no	
R2TL84Tbl10	no	
R2TL84Tbl11	no	
R2TL84Tbl12	no	
R2TL84Tbl13	no	
R2TL84Tbl14	no	
R2TL84Tbl15	no	
R2TL84Tbl16	no	
R2TL84Tbl17	no	
R2TL84Tbl18	no	
R2TL84Tbl19	no	
R2TL84Tbl20	no	
R2TL84Tbl21	no	
R2TL84Tbl22	no	
R2TL84Tbl23	no	
R2TL84Tbl24	no	
R2TL84Tbl25	no	
R2TL84Tbl26	no	
R2TL84Tbl27	no	
R2TL84Tbl28	no	
R2TL84Tbl29	no	
R2TL84Tbl30	no	
R2TL84Tbl31	no	
R2TL84Width	no	
RolloffEnable	no	
SensorFmt	no	
SensorType	no	
SensrFulHght	no	
SensrFulWdth	no	
SensrQtrHght	no	
SensrQtrWdth	no	
SnapshotResol	no	
TL84ConvChrmA_M	no	
TL84ConvChrmA_P	no	
TL84ConvChrmB_M	no	
TL84ConvChrmB_P	no	
TL84ConvChrmC_M	no	
TL84ConvChrmC_P	no	
TL84ConvChrmD_M	no	
TL84ConvChrmD_P	no	
TL84ConvChrmKCb	no	
TL84ConvChrmKCr	no	
TL84ConvLumaK	no	
TL84ConvLumaV0	no	
TL84ConvLumaV1	no	

TL84ConvLumaV2	no
VideoFps	no
YhiYloConvChrmA_M	no
YhiYloConvChrmA_P	no
YhiYloConvChrmB_M	no
YhiYloConvChrmB_P	no
YhiYloConvChrmC_M	no
YhiYloConvChrmC_P	no
YhiYloConvChrmD_M	no
YhiYloConvChrmD_P	no
YhiYloConvChrmKCb	no
YhiYloConvChrmKCr	no
YhiYloConvLumaK	no
YhiYloConvLumaV0	no
YhiYloConvLumaV1	no
YhiYloConvLumaV2	no
YhiYloCorC0	no
YhiYloCorC1	no
YhiYloCorC2	no
YhiYloCorC3	no
YhiYloCorC4	no
YhiYloCorC5	no
YhiYloCorC6	no
YhiYloCorC7	no
YhiYloCorC8	no
YhiYloCorK0	no
YhiYloCorK1	no
YhiYloCorK2	no

## Qualcomm DualCamera Tags

Found in JPEG APP4 "Qualcomm Dual Camera Attributes" written by some Nokia phones.

Tag Name	Writable	Values / Notes
AF_ROIHeight	no	
AF_ROILeft	no	
AF_ROITop	no	
AF_ROIWidth	no	
CAMIFCropHeight	no	
CAMIFCropLeft	no	
CAMIFCropTop	no	
CAMIFCropWidth	no	
CAMIF_ROIMapHeight	no	
CAMIF_ROIMapLeft	no	
CAMIF_ROIMapTop	no	
CAMIF_ROIMapWidth	no	
CPPCropHeight	no	
CPPCropLeft	no	
CPPCropTop	no	
CPPCropWidth	no	
CPP_ROIMapHeight	no	
CPP_ROIMapLeft	no	
CPP_ROIMapTop	no	
CPP_ROIMapWidth	no	

CurrentPipelineMirrorFlipSetting	no
CurrentPipelineRotationSetting	no
DDMCropHeight	no
DDMCropLeft	no
DDMCropTop	no
DDMCropWidth	no
FocalLengthRatio	no
ISPCropHeight	no
ISPCropLeft	no
ISPCropTop	no
ISPCropWidth	no
ISP_ROIMapHeight	no
ISP_ROIMapLeft	no
ISP_ROIMapTop	no
ISP_ROIMapWidth	no
SensorCropHeight	no
SensorCropLeft	no
SensorCropTop	no
SensorCropWidth	no
SensorROIMapHeight	no
SensorROIMapLeft	no
SensorROIMapTop	no
SensorROIMapWidth	no

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Mar 6, 2025*

[<-- ExifTool Tag Names](#)

# QuickTime Tags

The QuickTime format is used for many different types of audio, video and image files (most notably, MOV/MP4 videos and HEIC/CR3 images). ExifTool extracts standard meta information and a variety of audio, video and image parameters, as well as proprietary information written by many camera models. Tags with a question mark after their name are not extracted unless the [Unknown](#) option is set.

When writing video files, ExifTool creates both QuickTime and XMP tags by default, but the group may be specified to write one or the other separately. If no location is specified, newly created QuickTime tags are added in the [ItemList](#) location if possible, otherwise in [UserData](#), and finally in [Keys](#), but this order may be changed by setting the PREFERRED level of the appropriate table in the config file (see [example.config](#) in the full distribution for an example). Note that some tags with the same name but different ID's may exist in the same location, but the family 7 group names may be used to differentiate these.

ExifTool currently writes [ItemList](#) and [UserData](#) only as top-level metadata, but select Keys tags are may be written to the audio or video track. See the [AudioKeys](#) and [VideoKeys](#) tags for more information.

Alternate language tags may be accessed for [ItemList](#) and [Keys](#) tags by adding a 3-character ISO 639-2 language code and an optional ISO 3166-1 alpha 2 country code to the tag name (eg. "ItemList:Artist-deu" or "ItemList::Artist-deu-DE"). Most [UserData](#) tags support a language code, but without a country code. If no language code is specified when writing, the default language is written and alternate languages for the tag are deleted. Use the "und" language code to write the default language without deleting alternate languages. Note that when reading, "eng" is also treated as the default language if there is no country code.

According to the specification, integer-format QuickTime date/time tags should be stored as UTC. Unfortunately, digital cameras often store local time values instead (presumably because they don't know the time zone). For this reason, by default ExifTool does not assume a time zone for these values. However, if the API [QuickTimeUTC](#) option is set, then ExifTool will assume these values are properly stored as UTC, and will convert them to local time when extracting.

When writing string-based date/time tags, the system time zone is added if the PrintConv option is enabled and no time zone is specified. This is because Apple software may display crazy values if the time zone is missing for some tags.

By default ExifTool will remove null padding from some QuickTime containers in Canon CR3 files when writing, but the [QuickTimePad](#) option may be used to preserve the original size by padding with nulls if necessary.

See <https://developer.apple.com/library/archive/documentation/QuickTime/QTFF/> for the official QuickTime specification.

Tag ID	Tag Name	Writable	Values / Notes
'GPS'	GPSDataList2?	no	
'IDIT'	DateTimeOriginal	string	
'PICT'	PreviewPICT	no	
'SEAL'	SEAL	-	--> <a href="#">XMP SEAL Tags</a>
'_htc'	HTCInfo	-	--> <a href="#">QuickTime HTCInfo Tags</a>
'ardt'	ARDroneFile	no	
'cust'	CustomInfo	no	
'frea'	Kodak_frea	-	--> <a href="#">Kodak frea Tags</a>
'free'	KodakFree	-	--> <a href="#">Kodak Free Tags</a>
	Pittasoft	-	--> <a href="#">QuickTime Pittasoft Tags</a>
	ThumbnailImage	no	
	Free?	no	
'ftyp'	FileType	-	--> <a href="#">QuickTime FileType Tags</a>
'mdat'	GPSData	-	--> <a href="#">QuickTime Stream Tags</a>
'gps0'	GPSTrack	-	--> <a href="#">QuickTime Stream Tags</a>
'gsen'	GSensor	-	--> <a href="#">QuickTime Stream Tags</a>
'inst'	Insta360Info	-	--> <a href="#">QuickTime Stream Tags</a>
'junk'	Junk?	no	
'mdat'	MediaData?	no	
'mdat-offset'	MediaDataOffset	no	
'mdat-size'	MediaContentSize	no	(not a real tag ID, this tag represents the size of the 'mdat' data in bytes and is used in the AvgBitrate calculation)

'meco'	OtherMeta	-	--> <a href="#">QuickTime OtherMeta Tags</a>
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>
'moof'	MovieFragment	-	--> <a href="#">QuickTime MovieFragment Tags</a>
'moov'	Movie	-	--> <a href="#">QuickTime Movie Tags</a>
'mpvd'	MotionPhotoVideo	undef	(MP4-format video saved in Samsung motion-photo HEIC images.)
'nbmt'	NextbaseMeta	-	--> <a href="#">QuickTime Stream Tags</a>
'pict'	PreviewPICT	no	
'pnot'	Preview	-	--> <a href="#">QuickTime Preview Tags</a>
'prrt'	ARDroneTelemetry	no	(telemetry information for each video frame: status1, status2, time, pitch, roll, yaw, speed, altitude)
'sefd'	SamsungTrailer	-	--> <a href="#">Samsung Trailer Tags</a>
'skip'	CanonSkip	-	--> <a href="#">Canon Skip Tags</a>
	PreviewImage	no	--> <a href="#">QuickTime SkipInfo Tags</a>
	SkipInfo	-	--> <a href="#">QuickTime Stream Tags</a>
	LigoGPSInfo	-	
'thm '	Skip?	no	
	ThumbnailImage	no	
'thum'	ThumbnailImage	no	
'udat'	GPSLog	no	(parsed to extract GPS separately when ExtractEmbedded is used)
'udta'	KenwoodData	-	--> <a href="#">QuickTime Stream Tags</a>
	LigoJSON	-	--> <a href="#">QuickTime Stream Tags</a>
	GKUData	-	--> <a href="#">QuickTime Stream Tags</a>
	FLIRData	-	--> <a href="#">FLIR UserData Tags</a>
'uuid'	XMP	-	--> <a href="#">XMP Tags</a>
	UUID-PROF	-	--> <a href="#">QuickTime Profile Tags</a>
	UUID-Flip	-	--> <a href="#">QuickTime Flip Tags</a>
	UUID-Canon2	-	--> <a href="#">Canon uuid2 Tags</a>
	SensorData	-	--> <a href="#">QuickTime Tags360Fly Tags</a>
	SensorData	no	(raw 360Fly sensor data without ExtractEmbedded option)
	JUMBF	-	--> <a href="#">Jpeg2000 Tags</a>
	CBOR	-	--> <a href="#">CBOR Tags</a>
	PreviewImage	no	
'wide'	ThumbnailImage	no	
	UUID-Unknown?	no	
'wide'	Wide?	no	

## QuickTime Stream Tags

The tags below are extracted from timed metadata in QuickTime and other formats of video files when the ExtractEmbedded option is used. Although most of these tags are combined into the single table below, ExifTool currently reads 116 different types of timed GPS metadata from video files.

Tag ID	Tag Name	Writable	Values / Notes
'Accelerometer'	Accelerometer	no	(3-axis acceleration, usually in units of g)
'AccelerometerData'	AccelerometerData	no	
'AngularVelocity'	AngularVelocity	no	
'CTMD'	CTMD	-	--> <a href="#">Canon CTMD Tags</a>
'CameraDateTime'	CameraDateTime	no	
'CameraModel'	CameraModel	no	
'Car'	Car	no	
'DateTimeOriginal'	DateTimeOriginal	no	
'DateTimeStamp'	DateTimeStamp	no	
'Distance'	Distance	no	
'ExposureCompensation'	ExposureCompensation	no	
'ExposureTime'	ExposureTime	no	
'FNumber'	FNumber	no	
'FrameNumber'	FrameNumber	no	
'GPSAltitude'	GPSAltitude	no	
'GPSDOP'	GPSDOP	no	

'GPSDateTime'	GPSDateTime	no	
'GPSLatitude'	GPSLatitude	no	
'GPSLatitude2'	GPSLatitude2	no	
'GPSLongitude'	GPSLongitude	no	
'GPSLongitude2'	GPSLongitude2	no	
'GPSSatellites'	GPSSatellites	no	
'GPSSpeed'	GPSSpeed	no	(in km/h unless GPSSpeedRef says otherwise)
'GPSSpeedRef'	GPSSpeedRef	no	'K' = km/h 'M' = mph 'N' = knots
'GPSTimeStamp'	GPSTimeStamp	no	
'GPSTrack'	GPSTrack	no	(relative to true north unless GPSTrackRef says otherwise)
'GPSTrackRef'	GPSTrackRef	no	'M' = Magnetic North 'T' = True North
'GSensor'	GSensor	no	
'INSV'	INSV	-	--> <a href="#">QuickTime INSV_MakerNotes Tags</a>
'ISO'	ISO	no	
'JPEG'	JpgFromRaw	no	
'KiloCalories'	KiloCalories	no	
'MagneticVariation'	MagneticVariation	no	
'RVMI'	RVMI_gReV	-	--> <a href="#">QuickTime RVMI_gReV Tags</a>
	RVMI_sReV	-	--> <a href="#">QuickTime RVMI_sReV Tags</a>
'RawGSensor'	RawGSensor	no	
'SampleDateTime'	SampleDateTime	no	
'SampleDuration'	SampleDuration	no	
'SampleTime'	SampleTime	no	(sample decoding time)
'Text'	Text	no	
'TimeCode'	TimeCode	no	
'Unknown00'	Unknown00?	no	
'Unknown01'	Unknown01?	no	
'Unknown02'	Unknown02?	no	
'Unknown03'	Unknown03?	no	
'UserLabel'	UserLabel	no	
'VerticalSpeed'	VerticalSpeed	no	
'VideoTimeStamp'	VideoTimeStamp	no	
'camm'	camm0 camm1 camm2 camm3 camm4 camm5 camm6 camm7	-	--> <a href="#">QuickTime camm0 Tags</a> --> <a href="#">QuickTime camm1 Tags</a> --> <a href="#">QuickTime camm2 Tags</a> --> <a href="#">QuickTime camm3 Tags</a> --> <a href="#">QuickTime camm4 Tags</a> --> <a href="#">QuickTime camm5 Tags</a> --> <a href="#">QuickTime camm6 Tags</a> --> <a href="#">QuickTime camm7 Tags</a>
'dbg1'	DJIDebug?	-	--> <a href="#">DJI Protobuf Tags</a> (extracted only if Unknown option is 2 or greater)
'djmd'	DJIMetadata	-	--> <a href="#">DJI Protobuf Tags</a>
'fdsc'	fdsc	-	--> <a href="#">GoPro fdsc Tags</a>
'gpm'	gpm_Kingslim gpm_Rove gpm_FMAS gpm_Wolfbox gpm_GoPro	-	--> <a href="#">QuickTime Stream Tags</a> --> <a href="#">QuickTime Stream Tags</a> --> <a href="#">QuickTime Stream Tags</a> --> <a href="#">QuickTime Stream Tags</a> --> <a href="#">GoPro GPMF Tags</a>
'marl'	marl	-	--> <a href="#">GM marl Tags</a>
'mebx'	mebx	-	--> <a href="#">QuickTime Keys Tags</a>
'mett'	mett	-	--> <a href="#">Parrot mett Tags</a>
'rtmd'	rtmd	-	--> <a href="#">Sony rtmd Tags</a>

'ssmd'	RoveGPS Accelerometer PreviewImage	- no no	--> <a href="#">QuickTime RoveGPS Tags</a>
'text'	PreviewInfo	-	--> <a href="#">QuickTime PreviewInfo Tags</a>
'tx3g'	tx3g	-	--> <a href="#">QuickTime tx3g Tags</a>

## QuickTime INSV\_MakerNotes Tags

Tag ID	Tag Name	Writable	Values / Notes
0x000a	SerialNumber	no	
0x0012	Model	no	
0x001a	Firmware	no	
0x002a	Parameters	no	(number of lenses, 6-axis orientation of each lens, raw resolution)

## QuickTime RVMI\_gReV Tags

GPS information extracted from the RVMI box of MOV videos.

Index1	Tag Name	Writable	Values / Notes
4	GPSLatitude	no	
8	GPSLongitude	no	
16	GPSSpeed	no	
18	GPSTrack	no	

## QuickTime RVMI\_sReV Tags

G-sensor information extracted from the RVMI box of MOV videos.

Index1	Tag Name	Writable	Values / Notes
4	GSensor	no	

## QuickTime camm0 Tags

The camm0 through camm7 tables define tags extracted from the Google Street View Camera Motion Metadata of MP4 videos. See <https://developers.google.com/streetview/publish/camm-spec> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
0x0004	AngleAxis	no	(angle axis orientation in radians in local coordinate system)

## QuickTime camm1 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	PixelExposureTime	no	
0x0008	RollingShutterSkewTime	no	

## QuickTime camm2 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	AngularVelocity	no	(gyro angular velocity about X, Y and Z axes in rad/s)

## QuickTime camm3 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	Acceleration	no	(acceleration in the X, Y and Z directions in m/s^2)

## QuickTime camm4 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	Position	no	(X, Y, Z position in local coordinate system)

## QuickTime camm5 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	GPSLatitude	no	
0x000c	GPSLongitude	no	
0x0014	GPSAltitude	no	

## QuickTime camm6 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	GPSDateTime	no	
0x000c	GPSMeasureMode	no	0 = No Measurement 2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
0x0010	GPSLatitude	no	
0x0018	GPSLongitude	no	
0x0020	GPSAltitude	no	
0x0024	GPSHorizontalAccuracy	no	(metres)
0x0028	GPSVerticalAccuracy	no	
0x002c	GPSVelocityEast	no	(m/s)
0x0030	GPSVelocityNorth	no	
0x0034	GPSVelocityUp	no	
0x0038	GPSSpeedAccuracy	no	

## QuickTime camm7 Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	MagneticField	no	(microtesla)

## QuickTime Keys Tags

This directory contains a list of key names which are used to decode tags written by the "mdta" handler. Also in this table are a few tags found in timed metadata that are not yet writable by ExifTool. The prefix of "com.apple.quicktime." has been removed from the TagID's below. These tags support alternate languages in the same way as the [ItemList](#) tags. Note that by default, [ItemList](#) and [UserData](#) tags are preferred when writing, so to create a tag when a same-named tag exists in either of these tables, either the "Keys" location must be specified (eg. `-Keys:Author=Phil` on the command line), or the PREFERRED level must be changed via [the config file](#).

Tag ID	Tag Name	Writable	Values / Notes
'Encoded_With'	EncodedWith	yes	
'album'	Album	yes	
'apple.photos.variation-identifier'	ApplePhotosVariationIdentifier	int64s	
'artist'	Artist	yes	
'artwork'	Artwork	yes	
'author'	Author	yes	
'collection.user'	UserCollection	yes	
'com.android.capture.fps'	AndroidCaptureFPS	float	
'com.android.manufacturer'	AndroidMake	yes	
'com.android.model'	AndroidModel	yes	
'com.android.version'	AndroidVersion	yes	
'com.xiaomi.hdr10'	XiaomiHDR10	int32s	
'com.xiaomi.preview_video_cover'	XiaomiPreviewVideoCover	int32s	
'comment'	Comment	yes	

'compatible_brands'	CompatibleBrands	yes/	
'content.identifier'	ContentIdentifier	yes	
'copyright'	Copyright	yes	
'creation_time'	CreationTime	yes/	
'creationdate'	CreationDate	yes	
'description'	Description	yes	
'detected-face'	FaceInfo	-	--> <a href="#">QuickTime FaceInfo Tags</a>
'detected-face.bounds'	DetectedFaceBounds	no	
'detected-face.face-id'	DetectedFaceID	no	
'detected-face.roll-angle'	DetectedFaceRollAngle	no	
'detected-face.yaw-angle'	DetectedFaceYawAngle	no	
'direction.facing'	CameraDirection	yes	
'direction.motion'	CameraMotion	yes	
'director'	Director	yes	
'displayname'	DisplayName	yes	
'encoder'	Encoder	yes	
'full-frame-rate-playback-intent'	FullFrameRatePlaybackIntent	yes	
'genre'	Genre	yes	
'information'	Information	yes	
'keywords'	Keywords	yes	
'live-photo-info'	LivePhotoInfo	no	
'live-photo.auto'	LivePhotoAuto	int8u	
'live-photo.vitality-score'	LivePhotoVitalityScore	float	
'live-photo.vitality-scoring-version'	LivePhotoVitalityScoringVersion	int64s	
'location.ISO6709'	GPSCoordinates	yes	(Google Photos may ignore this if the coordinates have more than 5 digits after the decimal)
'location.accuracy.horizontal'	LocationAccuracyHorizontal	yes	
'location.body'	LocationBody	yes	
'location.date'	LocationDate	yes	
'location.name'	LocationName	yes	
'location.note'	LocationNote	yes	
'location.role'	LocationRole	yes	0 = Shooting Location 1 = Real Location 2 = Fictional Location
'major_brand'	MajorBrand	yes/	
'make'	Make	yes	
'minor_version'	MinorVersion	yes/	
'model'	Model	yes	
'player.movie.audio.balance'	Balance	yes	
'player.movie.audio.bass'	Bass	yes	
'player.movie.audio.gain'	AudioGain	yes	
'player.movie.audio.mute'	Mute	int8u	0 = Off 1 = On
'player.movie.audio.pitchshift'	PitchShift	yes	
'player.movie.audio.treble'	Treble	yes	
'player.movie.visual.brightness'	Brightness	yes	
'player.movie.visual.color'	Color	yes	
'player.movie.visual.contrast'	Contrast	yes	
'player.movie.visual.tint'	Tint	yes	
'player.version'	PlayerVersion	yes	
'producer'	Producer	yes	
'publisher'	Publisher	yes	
'rating.user'	UserRating	yes	
'scene-illuminance'	Scenellluminance	no	(milli-lux)

'software'	Software	yes	
'still-image-time'	StillImageTime	no	(this tag always has a value of -1; the time of the still image is obtained from the associated SampleTime)
'title'	Title	yes	
'version'	Version	yes	
'video-orientation'	VideoOrientation	no	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical 5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
'xiaomi.exifInfo.videoinfo'	XiaomiExifInfo	yes	
'year'	Year	yes	

## QuickTime AudioKeys Tags

Keys tags written in the audio track by some Apple devices. These tags belong to the ExifTool AudioKeys family 1 group.

Tag ID	Tag Name	Writable	Values / Notes
'player.movie.audio.balance'	Balance	yes	
'player.movie.audio.bass'	Bass	yes	
'player.movie.audio.gain'	AudioGain	yes	
'player.movie.audio.mute'	Mute	int8u	0 = Off 1 = On
'player.movie.audio.pitchshift'	PitchShift	yes	
'player.movie.audio.treble'	Treble	yes	

## QuickTime VideoKeys Tags

Keys tags written in the video track. These tags belong to the ExifTool VideoKeys family 1 group.

Tag ID	Tag Name	Writable	Values / Notes
'camera.focal_length.35mm_equivalent'	FocalLengthIn35mmFormat	yes	
'camera.readouttimeinmicroseconds'	FrameReadoutTime	yes	
'camera.identifier'	CameralIdentifier	yes	
'camera.lens_model'	LensModel	yes	
'com.apple.photos.captureMode'	CaptureMode	yes	

## QuickTime FaceInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'crec'	FaceRec	-	--> <a href="#">QuickTime FaceRec Tags</a>

## QuickTime FaceRec Tags

Tag ID	Tag Name	Writable	Values / Notes
'cits'	FacelItem	-	--> <a href="#">QuickTime Keys Tags</a>

## QuickTime RoveGPS Tags

Index1	Tag Name	Writable	Values / Notes
0	GPSLatitude	no	
8	GPSLongitude	no	

20	GPSSpeed	no
22	GPSDateTime	no

## QuickTime PreviewInfo Tags

Preview stored by TomTom Bandit ActionCam.

Index1	Tag Name	Writable	Values / Notes
8	PreviewImage	no	

## QuickTime tx3g Tags

Tags extracted from the tx3g sbtl timed metadata of Yuneec and Autel drones, and subtitle text in some other videos.

Tag ID	Tag Name	Writable	Values / Notes
'Alt'	GPSAltitude	no	
'DateTime'	DateTime	no	
'EV'	ExposureCompensation	no	
'F-NUM'	FNumber	no	
'GPSDateTime'	GPSDateTime	no	
'GimPitch'	GimbalPitch	no	
'GimRoll'	GimbalRoll	no	
'GimYaw'	GimbalYaw	no	
'HomeLat'	GPSHomeLatitude	no	
'HomeLon'	GPSHomeLongitude	no	
'ISO'	ISO	no	
'Lat'	GPSLatitude	no	
'Lon'	GPSLongitude	no	
'Pitch'	Pitch	no	
'Roll'	Roll	no	
'SHUTTER'	ExposureTime	no	
'Text'	Text	no	
'Yaw'	Yaw	no	

## QuickTime HTCInfo Tags

Tags written by some HTC camera phones.

Tag ID	Tag Name	Writable	Values / Notes
'slmt'	Unknown_slmt?	no	

## QuickTime Pittasoft Tags

Tags found in Pittasoft Blackvue dashcam "free" data.

Tag ID	Tag Name	Writable	Values / Notes
'3gf'	AccelData	-	--> <a href="#">QuickTime Stream Tags</a>
'cpt'	Copyright	no	
'gps'	GPSLog	no	(parsed to extract GPS separately when ExtractEmbedded is used)
'ptnm'	OriginalFileName	no	
'ptrh'	Ptrh	-	--> <a href="#">QuickTime Pittasoft Tags</a>
'sttm'	StartTime	no	
'thum'	PreviewImage	no	

## QuickTime FileType Tags

Index4	Tag Name	Writable	Values / Notes
0	MajorBrand	no	<p>'3g2a' = 3GPP2 Media (.3G2) compliant with 3GPP2 C.S0050-0 V1.0          '3g2b' = 3GPP2 Media (.3G2) compliant with 3GPP2 C.S0050-A V1.0.0          '3g2c' = 3GPP2 Media (.3G2) compliant with 3GPP2 C.S0050-B v1.0          '3ge6' = 3GPP (.3GP) Release 6 MBMS Extended Presentations          '3ge7' = 3GPP (.3GP) Release 7 MBMS Extended Presentations          '3gg6' = 3GPP Release 6 General Profile          '3gp1' = 3GPP Media (.3GP) Release 1 (probably non-existent)          '3gp2' = 3GPP Media (.3GP) Release 2 (probably non-existent)          '3gp3' = 3GPP Media (.3GP) Release 3 (probably non-existent)          '3gp4' = 3GPP Media (.3GP) Release 4          '3gp5' = 3GPP Media (.3GP) Release 5          '3gp6' = 3GPP Media (.3GP) Release 6 Streaming Servers          '3gs7' = 3GPP Media (.3GP) Release 7 Streaming Servers          'CAEP' = Canon Digital Camera          'CDes' = Convergent Design          'F4A' = Audio for Adobe Flash Player 9+ (.F4A)          'F4B' = Audio Book for Adobe Flash Player 9+ (.F4B)          'F4P' = Protected Video for Adobe Flash Player 9+ (.F4P)          'F4V' = Video for Adobe Flash Player 9+ (.F4V)          'JP2' = JPEG 2000 Image (.JP2) [ISO 15444-1 ?]          'JP20' = Unknown, from GPAC samples (prob non-existent)          'KDDI' = 3GPP2 EZmovie for KDDI 3G cellphones          'M4A' = Apple iTunes AAC-LC (.M4A) Audio          'M4B' = Apple iTunes AAC-LC (.M4B) Audio Book          'M4P' = Apple iTunes AAC-LC (.M4P) AES Protected Audio          'M4V' = Apple iTunes Video (.M4V) Video          'M4VH' = Apple TV (.M4V)          'M4VP' = Apple iPhone (.M4V)          'MPPI' = Photo Player, MAF [ISO/IEC 23000-3]          'MSNV' = MPEG-4 (.MP4) for SonyPSP          'NDAS' = MP4 v2 [ISO 14496-14] Nero Digital AAC Audio          'NDSC' = MPEG-4 (.MP4) Nero Cinema Profile          'NDSH' = MPEG-4 (.MP4) Nero HDTV Profile          'NDSM' = MPEG-4 (.MP4) Nero Mobile Profile          'NDSP' = MPEG-4 (.MP4) Nero Portable Profile          'NDSS' = MPEG-4 (.MP4) Nero Standard Profile          'NDXC' = H.264/MPEG-4 AVC (.MP4) Nero Cinema Profile          'NDXH' = H.264/MPEG-4 AVC (.MP4) Nero HDTV Profile          'NDXM' = H.264/MPEG-4 AVC (.MP4) Nero Mobile Profile          'NDXP' = H.264/MPEG-4 AVC (.MP4) Nero Portable Profile          'NDXS' = H.264/MPEG-4 AVC (.MP4) Nero Standard Profile          'ROSS' = Ross Video          'XAVC' = Sony XAVC          'aax' = Audible Enhanced Audiobook (.AAX)          'avc1' = MP4 Base w/ AVC ext [ISO 14496-12:2005]          'avif' = AV1 Image File Format (.AVIF)          'caqv' = Casio Digital Camera          'crx' = Canon Raw (.CRX)          'da0a' = DMB MAF w/ MPEG Layer II aud, MOT slides, DLS, JPG/PNG/MNG images          'da0b' = DMB MAF, extending DA0A, with 3GPP timed text, DID, TVA, REL, IPMP          'da1a' = DMB MAF audio with ER-BSAC audio, JPG/PNG/MNG images          'da1b' = DMB MAF, extending da1a, with 3GPP timed text, DID, TVA, REL, IPMP          'da2a' = DMB MAF aud w/ HE-AAC v2 aud, MOT slides, DLS, JPG/PNG/MNG images          'da2b' = DMB MAF, extending da2a, with 3GPP timed text, DID, TVA, REL, IPMP          'da3a' = DMB MAF aud with HE-AAC aud, JPG/PNG/MNG images          'da3b' = DMB MAF, extending da3a w/ BIFS, 3GPP timed text, DID, TVA, REL, IPMP          'dmb1' = DMB MAF supporting all the components defined in the specification          'dmpf' = Digital Media Project          'drc1' = Dirac (wavelet compression), encapsulated in ISO base media (MP4)          'dv1a' = DMB MAF vid w/ AVC vid, ER-BSAC aud, BIFS, JPG/PNG/MNG images, TS          'dv1b' = DMB MAF, extending dv1a, with 3GPP timed text, DID, TVA, REL, IPMP          'dv2a' = DMB MAF vid w/ AVC vid, HE-AAC v2 aud, BIFS, JPG/PNG/MNG images, TS          'dv2b' = DMB MAF, extending dv2a, with 3GPP timed text, DID, TVA, REL, IPMP          'dv3a' = DMB MAF vid w/ AVC vid, HE-AAC aud, BIFS, JPG/PNG/MNG images, TS          'dv3b' = DMB MAF, extending dv3a, with 3GPP timed text, DID, TVA, REL, IPMP          'dvr1' = DVB (.DVB) over RTP          'dvt1' = DVB (.DVB) over MPEG-2 Transport Stream          'heic' = High Efficiency Image Format HEVC still image (.HEIC)          'heix' = High Efficiency Image Format still image (.HEIF)          'hevc' = High Efficiency Image Format HEVC sequence (.HEICS)          'isc2' = ISMACryp 2.0 Encrypted File          'iso2' = MP4 Base Media v2 [ISO 14496-12:2005]          'iso3' = MP4 Base Media v3          'iso4' = MP4 Base Media v4          'iso5' = MP4 Base Media v5          'iso6' = MP4 Base Media v6       </p>

'iso7' = MP4 Base Media v7  
 'iso8' = MP4 Base Media v8  
 'iso9' = MP4 Base Media v9  
 'isom' = MP4 Base Media v1 [ISO 14496-12:2003]  
 'jpm' = JPEG 2000 Compound Image (.JPM) [ISO 15444-6]  
 'jpx' = JPEG 2000 with extensions (.JPX) [ISO 15444-2]  
 'mif1' = High Efficiency Image Format still image (.HEIF)  
 'mj2s' = Motion JPEG 2000 [ISO 15444-3] Simple Profile  
 'mjp2' = Motion JPEG 2000 [ISO 15444-3] General Profile  
 'mmp4' = MPEG-4/3GPP Mobile Profile (.MP4/3GP) (for NTT)  
 'mp21' = MPEG-21 [ISO/IEC 21000-9]  
 'mp41' = MP4 v1 [ISO 14496-1:ch13]  
 'mp42' = MP4 v2 [ISO 14496-14]  
 'mp71' = MP4 w/ MPEG-7 Metadata [per ISO 14496-12]  
 'mqt' = Sony / Mobile QuickTime (.MQV) US Patent 7,477,830 (Sony Corp)  
 'msf1' = High Efficiency Image Format sequence (.HEIFS)  
 'odcf' = OMA DCF DRM Format 2.0 (OMA-TS-DRM-DCF-V2\_0-20060303-A)  
 'opf2' = OMA PDCF DRM Format 2.1 (OMA-TS-DRM-DCF-V2\_1-20070724-C)  
 'opx2' = OMA PDCF DRM + XBS extensions (OMA-TS-DRM\_XBS-V1\_0-20070529-C)  
 'pana' = Panasonic Digital Camera  
 'qt' = Apple QuickTime (.MOV/QT)  
 'sdv' = SD Memory Card Video  
 'ssc1' = Samsung stereoscopic, single stream  
 'ssc2' = Samsung stereoscopic, dual stream

1	MinorVersion	no
2	CompatibleBrands	no+

## QuickTime OtherMeta Tags

Tag ID	Tag Name	Writable	Values / Notes
'mere'	MetaRelation	-	--> <a href="#">QuickTime MetaRelation Tags</a>
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>

## QuickTime MetaRelation Tags

Index	Tag Name	Writable	Values / Notes
[no tags known]			

## QuickTime Meta Tags

Tag ID	Tag Name	Writable	Values / Notes
'bxml'	BinaryXML?	no	
'dinf'	DataInfo	-	--> <a href="#">QuickTime DataInfo Tags</a>
'free'	Free?	no	
'grpl'	Unknown_grpl	-	--> <a href="#">QuickTime grpl Tags</a>
'hdlr'	Handler	-	--> <a href="#">QuickTime Handler Tags</a>
'idat'	MetalImageSize	no	
'iinf'	ItemInformation	-	--> <a href="#">QuickTime ItemInfo Tags</a> --> <a href="#">QuickTime ItemInfo Tags</a>
'iloc'	ItemLocation	no	(parsed, but not extracted as a tag)
'ilst'	ItemList	-	--> <a href="#">QuickTime ItemList Tags</a>
'ipmc'	IPMPControl?	no	
'ipro'	ItemProtection?	no	
'iprp'	ItemProperties	-	--> <a href="#">QuickTime ItemProp Tags</a>
'iref'	ItemReference	-	--> <a href="#">QuickTime ItemRef Tags</a>
'keys'	AudioKeys	-	--> <a href="#">QuickTime AudioKeys Tags</a>
	VideoKeys	-	--> <a href="#">QuickTime VideoKeys Tags</a>
	Keys	-	--> <a href="#">QuickTime Keys Tags</a>
'pitm'	PrimaryItemReference	no	
'uuid'	MetaVersion	no	
	UUID-Unknown?	no	
'xml '	XML	-	--> <a href="#">XMP XML Tags</a>

# QuickTime DataInfo Tags

MP4 data information box.

Tag ID	Tag Name	Writable	Values / Notes
'dref'	DataRef	-	--> <a href="#">QuickTime DataRef Tags</a>

## QuickTime DataRef Tags

MP4 data reference box.

Tag ID	Tag Name	Writable	Values / Notes
"url\0"	URL	no	
'url '	URL	no	
'urn '	URN	no	

## QuickTime grpl Tags

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## QuickTime Handler Tags

Index1	Tag Name	Writable	Values / Notes
4	HandlerClass	no	'dhlr' = Data Handler 'mhlr' = Media Handler
8	HandlerType	no	'alis' = Alias Data 'camm' = Camera Metadata 'crsm' = Clock Reference 'data' = Data 'hint' = Hint Track 'ipsm' = IPMP 'm7sm' = MPEG-7 Stream 'mdir' = Metadata 'mdta' = Metadata Tags 'meta' = NRT Metadata 'mjsm' = MPEG-J 'nrtm' = Non-Real Time Metadata 'ocsm' = Object Content
12	HandlerVendorID	no	--> <a href="#">QuickTime VendorID Values</a>
24	HandlerDescription	no	

## QuickTime VendorID Values

Value	VendorID	Value	VendorID	Value	VendorID
'KD '	= Kodak	'ZORA'	= Zoran Corporation	'olym'	= Olympus
'AR.D'	= Parrot AR.Drone	'appl'	= Apple	'pana'	= Panasonic
'FFMP'	= FFmpeg	'fe20'	= Olympus (fe20)	'pent'	= Pentax
'GIC '	= General Imaging Co.	'kdak'	= Kodak	'pr01'	= Olympus (pr01)
'KMPI'	= Konica-Minolta	'leic'	= Leica	'sany'	= Sanyo
'NIKO'	= Nikon	'mino'	= Minolta		
'SMI '	= Sorenson Media Inc.	'niko'	= Nikon		

## QuickTime ItemInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'infe'	ItemInfoEntry	no	(parsed, but not extracted as a tag)

## QuickTime ItemList Tags

This is the preferred location for creating new QuickTime tags. Tags in this table support alternate languages which are accessed by adding a 3-character ISO 639-2 language code and an optional ISO 3166-1 alpha 2 country code to

the tag name (eg. "ItemList:Title-fra" or "ItemList::Title-fra-FR"). When creating a new Meta box to contain the itemList directory, by default ExifTool adds an 'mdir' (Metadata) Handler box because Apple software may ignore itemList tags otherwise, but the API [QuickTimeHandler](#) option may be set to 0 to avoid this.

Tag ID	Tag Name	Writable	Values / Notes
'----'	iTunesInfo	-	--> <a href="#">QuickTime iTunesInfo Tags</a>
'@PST'	ParentShortTitle	string	
'@ppi'	ParentProductID	string	
'@pti'	ParentTitle	string	
'@sti'	ShortTitle	string	
'AACR'	Unknown_AACR?	string	
'CDEK'	Unknown_CDEK?	string	
'CDET'	Unknown_CDET?	string	
'GUID'	GUID	string	
'VERS'	ProductVersion	string	
'aART'	AlbumArtist	string	
'akID'	AppleStoreAccountType	int8s	0 = iTunes 1 = AOL
'albm'	Album	string/	
'apID'	AppleStoreAccount	string	
'atID'	ArtistID	int32s	
'auth'	Author	string	
'catg'	Category	string	
'cmID'	ComposerID	string	
'cnID'	AppleStoreCatalogID	int32s	
'covr'	CoverArt	string	
'cpil'	Compilation	int8s	0 = No 1 = Yes
'cprt'	Copyright	string	
'desc'	Description	string/	
'disk'	DiskNumber	undef	
'dscp'	Description	string/	
'egid'	EpisodeGlobalUniqueID	string	
'geID'	GenreID	int32s	--> <a href="#">QuickTime GenreID Values</a>
'gnre'	Genre	undef/	
'grup'	Grouping	string/	
'gshh'	GoogleHostHeader	string	
'gspm'	GooglePingMessage	string	
'gspu'	GooglePingURL	string	
'gssd'	GoogleSourceData	string	
'gsst'	GoogleStartTime	string	
'gstd'	GoogleTrackDuration	string	
'hdvd'	HDVideo	int8s	0 = No 1 = Yes
'itnu'	iTunesU	int8s	0 = No 1 = Yes
'keyw'	Keyword	string	
'ldes'	LongDescription	string	
'ownr'	Owner	string	
'pcst'	Podcast	int8s	0 = No 1 = Yes
'perf'	Performer	string	
'pgap'	PlayGap	int8s	0 = Insert Gap 1 = No Gap
'plID'	AlbumID	int32s[2]	
'prID'	ProductID	string	
'purd'	PurchaseDate	string	

'purl'	PodcastURL	string	
'rate'	RatingPercent	string	
'rldt'	ReleaseDate	string	
'rtng'	Rating	int8s	0 = none 1 = Explicit 2 = Clean 4 = Explicit (old)
'sdes'	StoreDescription	string	
'sfID'	AppleStoreCountry	int32s	--> <a href="#">QuickTime AppleStoreCountry Values</a>
'shwm'	ShowMovement	int8s	0 = No 1 = Yes
'snal'	PreviewImage	string	
'soaa'	SortAlbumArtist	string	
'soal'	SortAlbum	string	
'soar'	SortArtist	string	
'soco'	SortComposer	string	
'sonm'	SortName	string	
'sosn'	SortShow	string	
'stik'	MediaType	int8s	0 = Movie (old) 1 = Normal (Music) 2 = Audiobook 5 = Whacked Bookmark 6 = Music Video 9 = Movie 10 = TV Show 11 = Booklet 14 = Ringtone 21 = Podcast 23 = iTunes U
'titl'	Title	string/	
'tmpo'	BeatsPerMinute	int16s	
'tnal'	ThumbnailImage	string	
'trkn'	TrackNumber	undef	
'tven'	TVEpisodeID	string	
'tves'	TVEpisode	int32s	
'tvnn'	TVNetworkName	string	
'tvsh'	TVShow	string	
'tvsn'	TVSeason	int32u	
'xid '	ISRC	string	
'yrrc'	Year	string	
"©ART"	Artist	string	
"©alb"	Album	string	
"©ard"	ArtDirector	string	
"©arg"	Arranger	string	
"©aut"	Author	string/	
"©cmt"	Comment	string	
"©com"	Composer	string/	
"©con"	Conductor	string	
"©cpy"	Copyright	string/	
"©day"	ContentCreateDate	string	
"©des"	Description	string	
"©dir"	Director	string	
"©enc"	EncodedBy	string	
"©gen"	Genre	string	
"©grp"	Grouping	string	
"©lyr"	Lyrics	string	
"©mvc"	MovementCount	int16s	
"©mvi"	MovementNumber	int16s	
"©mvn"	MovementName	string	
"©nam"	Title	string	
"©nrt"	Narrator	string	

"@cope"	OriginalArtist	string
"@prd"	Producer	string
"@pub"	Publisher	string
"@sne"	SoundEngineer	string
"@sol"	Soloist	string
"@st3"	Subtitle	string
"@too"	Encoder	string
"@trk"	Track	string
"@wrk"	Work	string
"@wrt"	Composer	string
"@xpd"	ExecutiveProducer	string
"@xyz"	GPSCoordinates	string

## QuickTime GenreID Values

Value	GenreID
2	= Music Blues
3	= Music Comedy
4	= Music Children's Music
5	= Music Classical
6	= Music Country
7	= Music Electronic
8	= Music Holiday
9	= Music Classical Opera
10	= Music Singer/Songwriter
11	= Music Jazz
12	= Music Latino
13	= Music New Age
14	= Music Pop
15	= Music R&B/Soul
16	= Music Soundtrack
17	= Music Dance
18	= Music Hip-Hop/Rap
19	= Music World
20	= Music Alternative
21	= Music Rock
22	= Music Christian & Gospel
23	= Music Vocal
24	= Music Reggae
25	= Music Easy Listening
26	= Podcasts
27	= Music J-Pop
28	= Music Enka
29	= Music Anime
30	= Music Kayokyoku
31	= Music Videos
32	= TV Shows
33	= Movies
34	= Music
35	= iPod Games
36	= App Store
37	= Tones
38	= Books
39	= Mac App Store
40	= Textbooks
50	= Music Fitness & Workout
51	= Music Pop K-Pop
52	= Music Karaoke
53	= Music Instrumental
74	= Audiobooks News
75	= Audiobooks Programs & Performances
500	= Fitness Music
501	= Fitness Music Pop
502	= Fitness Music Dance
503	= Fitness Music Hip-Hop
504	= Fitness Music Rock
505	= Fitness Music Alt/Indie
506	= Fitness Music Latino

507 = Fitness Music|Country  
508 = Fitness Music|World  
509 = Fitness Music|New Age  
510 = Fitness Music|Classical  
1001 = Music|Alternative|College Rock  
1002 = Music|Alternative|Goth Rock  
1003 = Music|Alternative|Grunge  
1004 = Music|Alternative|Indie Rock  
1005 = Music|Alternative|New Wave  
1006 = Music|Alternative|Punk  
1007 = Music|Blues|Chicago Blues  
1009 = Music|Blues|Classic Blues  
1010 = Music|Blues|Contemporary Blues  
1011 = Music|Blues|Country Blues  
1012 = Music|Blues|Delta Blues  
1013 = Music|Blues|Electric Blues  
1014 = Music|Children's Music|Lullabies  
1015 = Music|Children's Music|Sing-Along  
1016 = Music|Children's Music|Stories  
1017 = Music|Classical|Avant-Garde  
1018 = Music|Classical|Baroque Era  
1019 = Music|Classical|Chamber Music  
1020 = Music|Classical|Chant  
1021 = Music|Classical|Choral  
1022 = Music|Classical|Classical Crossover  
1023 = Music|Classical|Early Music  
1024 = Music|Classical|Impressionist  
1025 = Music|Classical|Medieval Era  
1026 = Music|Classical|Minimalism  
1027 = Music|Classical|Modern Era  
1028 = Music|Classical|Opera  
1029 = Music|Classical|Orchestral  
1030 = Music|Classical|Renaissance  
1031 = Music|Classical|Romantic Era  
1032 = Music|Classical|Wedding Music  
1033 = Music|Country|Alternative Country  
1034 = Music|Country|Americana  
1035 = Music|Country|Bluegrass  
1036 = Music|Country|Contemporary Bluegrass  
1037 = Music|Country|Contemporary Country  
1038 = Music|Country|Country Gospel  
1039 = Music|Country|Honky Tonk  
1040 = Music|Country|Outlaw Country  
1041 = Music|Country|Traditional Bluegrass  
1042 = Music|Country|Traditional Country  
1043 = Music|Country|Urban Cowboy  
1044 = Music|Dance|Breakbeat  
1045 = Music|Dance|Exercise  
1046 = Music|Dance|Garage  
1047 = Music|Dance|Hardcore  
1048 = Music|Dance|House  
1049 = Music|Dance|Jungle/Drum'n'bass  
1050 = Music|Dance|Techno  
1051 = Music|Dance|Trance  
1052 = Music|Jazz|Big Band  
1053 = Music|Jazz|Bop  
1054 = Music|Easy Listening|Lounge  
1055 = Music|Easy Listening|Swing  
1056 = Music|Electronic|Ambient  
1057 = Music|Electronic|Downtempo  
1058 = Music|Electronic|Electronica  
1060 = Music|Electronic|IDM/Experimental  
1061 = Music|Electronic|Industrial  
1062 = Music|Singer/Songwriter|Alternative Folk  
1063 = Music|Singer/Songwriter|Contemporary Folk  
1064 = Music|Singer/Songwriter|Contemporary Singer/Songwriter  
1065 = Music|Singer/Songwriter|Folk-Rock  
1066 = Music|Singer/Songwriter|New Acoustic  
1067 = Music|Singer/Songwriter|Traditional Folk  
1068 = Music|Hip-Hop|Rap|Alternative Rap  
1069 = Music|Hip-Hop|Rap|Dirty South  
1070 = Music|Hip-Hop|Rap|East Coast Rap  
1071 = Music|Hip-Hop|Rap|Gangsta Rap  
1072 = Music|Hip-Hop|Rap|Hardcore Rap  
1073 = Music|Hip-Hop|Rap|Hip-Hop

1074 = Music|Hip-Hop/Rap|Latin Rap  
1075 = Music|Hip-Hop/Rap|Old School Rap  
1076 = Music|Hip-Hop/Rap|Rap  
1077 = Music|Hip-Hop/Rap|Underground Rap  
1078 = Music|Hip-Hop/Rap|West Coast Rap  
1079 = Music|Holiday|Chanukah  
1080 = Music|Holiday|Christmas  
1081 = Music|Holiday|Christmas: Children's  
1082 = Music|Holiday|Christmas: Classic  
1083 = Music|Holiday|Christmas: Classical  
1084 = Music|Holiday|Christmas: Jazz  
1085 = Music|Holiday|Christmas: Modern  
1086 = Music|Holiday|Christmas: Pop  
1087 = Music|Holiday|Christmas: R&B  
1088 = Music|Holiday|Christmas: Religious  
1089 = Music|Holiday|Christmas: Rock  
1090 = Music|Holiday|Easter  
1091 = Music|Holiday|Halloween  
1092 = Music|Holiday|Holiday: Other  
1093 = Music|Holiday|Thanksgiving  
1094 = Music|Christian & Gospel|CCM  
1095 = Music|Christian & Gospel|Christian Metal  
1096 = Music|Christian & Gospel|Christian Pop  
1097 = Music|Christian & Gospel|Christian Rap  
1098 = Music|Christian & Gospel|Christian Rock  
1099 = Music|Christian & Gospel|Classic Christian  
1100 = Music|Christian & Gospel|Contemporary Gospel  
1101 = Music|Christian & Gospel|Gospel  
1103 = Music|Christian & Gospel|Praise & Worship  
1104 = Music|Christian & Gospel|Southern Gospel  
1105 = Music|Christian & Gospel|Traditional Gospel  
1106 = Music|Jazz|Avant-Garde Jazz  
1107 = Music|Jazz|Contemporary Jazz  
1108 = Music|Jazz|Crossover Jazz  
1109 = Music|Jazz|Dixieland  
1110 = Music|Jazz|Fusion  
1111 = Music|Jazz|Latin Jazz  
1112 = Music|Jazz>Mainstream Jazz  
1113 = Music|Jazz|Ragtime  
1114 = Music|Jazz|Smooth Jazz  
1115 = Music|Latino|Latin Jazz  
1116 = Music|Latino|Contemporary Latin  
1117 = Music|Latino|Pop Latino  
1118 = Music|Latino|Raices  
1119 = Music|Latino|Urbano latino  
1120 = Music|Latino|Baladas y Boleros  
1121 = Music|Latino|Rock y Alternativo  
1122 = Music|Brazilian  
1123 = Music|Latino|Musica Mexicana  
1124 = Music|Latino|Musica tropical  
1125 = Music|New Age|Environmental  
1126 = Music|New Age|Healing  
1127 = Music|New Age|Meditation  
1128 = Music|New Age|Nature  
1129 = Music|New Age|Relaxation  
1130 = Music|New Age|Travel  
1131 = Music|Pop|Adult Contemporary  
1132 = Music|Pop|Britpop  
1133 = Music|Pop|Pop/Rock  
1134 = Music|Pop|Soft Rock  
1135 = Music|Pop|Teen Pop  
1136 = Music|R&B/Soul|Contemporary R&B  
1137 = Music|R&B/Soul|Disco  
1138 = Music|R&B/Soul|Doo Wop  
1139 = Music|R&B/Soul|Funk  
1140 = Music|R&B/Soul|Motown  
1141 = Music|R&B/Soul|Neo-Soul  
1142 = Music|R&B/Soul|Quiet Storm  
1143 = Music|R&B/Soul|Soul  
1144 = Music|Rock|Adult Alternative  
1145 = Music|Rock|American Trad Rock  
1146 = Music|Rock|Arena Rock  
1147 = Music|Rock|Blues-Rock  
1148 = Music|Rock|British Invasion  
1149 = Music|Rock|Death Metal/Black Metal

1150 = Music|Rock|Glam Rock  
1151 = Music|Rock|Hair Metal  
1152 = Music|Rock|Hard Rock  
1153 = Music|Rock|Metal  
1154 = Music|Rock|Jam Bands  
1155 = Music|Rock|Prog-Rock/Art Rock  
1156 = Music|Rock|Psychedelic  
1157 = Music|Rock|Rock & Roll  
1158 = Music|Rock|Rockabilly  
1159 = Music|Rock|Roots Rock  
1160 = Music|Rock|Singer/Songwriter  
1161 = Music|Rock|Southern Rock  
1162 = Music|Rock|Surf  
1163 = Music|Rock|Tex-Mex  
1165 = Music|Soundtrack|Foreign Cinema  
1166 = Music|Soundtrack|Musicals  
1167 = Music|Comedy|Novelty  
1168 = Music|Soundtrack|Original Score  
1169 = Music|Soundtrack|Soundtrack  
1171 = Music|Comedy|Standup Comedy  
1172 = Music|Soundtrack|TV Soundtrack  
1173 = Music|Vocal|Standards  
1174 = Music|Vocal|Traditional Pop  
1175 = Music|Jazz|Vocal Jazz  
1176 = Music|Vocal|Vocal Pop  
1177 = Music|African|Afro-Beat  
1178 = Music|African|Afro-Pop  
1179 = Music|World|Cajun  
1180 = Music|World|Celtic  
1181 = Music|World|Celtic Folk  
1182 = Music|World|Contemporary Celtic  
1183 = Music|Reggae|Modern Dancehall  
1184 = Music|World|Drinking Songs  
1185 = Music|Indian|Indian Pop  
1186 = Music|World|Japanese Pop  
1187 = Music|World|Klezmer  
1188 = Music|World|Polka  
1189 = Music|World|Traditional Celtic  
1190 = Music|World|Worldbeat  
1191 = Music|World|Zydeco  
1192 = Music|Reggae|Roots Reggae  
1193 = Music|Reggae|Dub  
1194 = Music|Reggae|Ska  
1195 = Music|World|Caribbean  
1196 = Music|World|South America  
1197 = Music|Arabic  
1198 = Music|World|North America  
1199 = Music|World|Hawaii  
1200 = Music|World|Australia  
1201 = Music|World|Japan  
1202 = Music|World|France  
1203 = Music|African  
1204 = Music|World|Asia  
1205 = Music|World|Europe  
1206 = Music|World|South Africa  
1207 = Music|Jazz|Hard Bop  
1208 = Music|Jazz|Trad Jazz  
1209 = Music|Jazz|Cool Jazz  
1210 = Music|Blues|Acoustic Blues  
1211 = Music|Classical|High Classical  
1220 = Music|Brazilian|Axe  
1221 = Music|Brazilian|Bossa Nova  
1222 = Music|Brazilian|Choro  
1223 = Music|Brazilian|Forro  
1224 = Music|Brazilian|Frevo  
1225 = Music|Brazilian|MPB  
1226 = Music|Brazilian|Pagode  
1227 = Music|Brazilian|Samba  
1228 = Music|Brazilian|Sertanejo  
1229 = Music|Brazilian|Baile Funk  
1230 = Music|Alternative|Chinese Alt  
1231 = Music|Alternative|Korean Indie  
1232 = Music|Chinese  
1233 = Music|Chinese|Chinese Classical  
1234 = Music|Chinese|Chinese Flute

1235 = Music|Chinese|Chinese Opera  
1236 = Music|Chinese|Chinese Orchestral  
1237 = Music|Chinese|Chinese Regional Folk  
1238 = Music|Chinese|Chinese Strings  
1239 = Music|Chinese|Taiwanese Folk  
1240 = Music|Chinese|Tibetan Native Music  
1241 = Music|Hip-Hop/Rap|Chinese Hip-Hop  
1242 = Music|Hip-Hop/Rap|Korean Hip-Hop  
1243 = Music|Korean  
1244 = Music|Korean|Korean Classical  
1245 = Music|Korean|Korean Trad Song  
1246 = Music|Korean|Korean Trad Instrumental  
1247 = Music|Korean|Korean Trad Theater  
1248 = Music|Rock|Chinese Rock  
1249 = Music|Rock|Korean Rock  
1250 = Music|Pop|C-Pop  
1251 = Music|Pop|Cantopop/HK-Pop  
1252 = Music|Pop|Korean Folk-Pop  
1253 = Music|Pop|Mandopop  
1254 = Music|Pop|Tai-Pop  
1255 = Music|Pop|Malaysian Pop  
1256 = Music|Pop|Pinoy Pop  
1257 = Music|Pop|Original Pilipino Music  
1258 = Music|Pop|Manilla Sound  
1259 = Music|Pop|Indo Pop  
1260 = Music|Pop|Thai Pop  
1261 = Music|Vocal|Trot  
1262 = Music|Indian  
1263 = Music|Indian|Bollywood  
1264 = Music|Indian|Regional Indian|Tamil  
1265 = Music|Indian|Regional Indian|Telugu  
1266 = Music|Indian|Regional Indian  
1267 = Music|Indian|Devotional & Spiritual  
1268 = Music|Indian|Sufi  
1269 = Music|Indian|Indian Classical  
1270 = Music|Russian|Russian Chanson  
1271 = Music|World|Dini  
1272 = Music|Turkish|Halk  
1273 = Music|Turkish|Sanat  
1274 = Music|World|Dangdut  
1275 = Music|World|Indonesian Religious  
1276 = Music|World|Calypso  
1277 = Music|World|Soca  
1278 = Music|Indian|Ghazals  
1279 = Music|Indian|Indian Folk  
1280 = Music|Turkish|Arabesque  
1281 = Music|African|Afrikaans  
1282 = Music|World|Farsi  
1283 = Music|World|Israeli  
1284 = Music|Arabic|Khaleeji  
1285 = Music|Arabic|North African  
1286 = Music|Arabic|Arabic Pop  
1287 = Music|Arabic|Islamic  
1288 = Music|Soundtrack|Sound Effects  
1289 = Music|Folk  
1290 = Music|Orchestral  
1291 = Music|Marching  
1293 = Music|Pop|Oldies  
1294 = Music|Country|Thai Country  
1295 = Music|World|Flamenco  
1296 = Music|World|Tango  
1297 = Music|World|Fado  
1298 = Music|World|Iberia  
1299 = Music|Russian  
1300 = Music|Turkish  
1301 = Podcasts|Arts  
1302 = Podcasts|Society & Culture|Personal Journals  
1303 = Podcasts|Comedy  
1304 = Podcasts|Education  
1305 = Podcasts|Kids & Family  
1306 = Podcasts|Arts|Food  
1307 = Podcasts|Health  
1309 = Podcasts|TV & Film  
1310 = Podcasts|Music  
1311 = Podcasts|News & Politics

1314 = Podcasts|Religion & Spirituality  
1315 = Podcasts|Science & Medicine  
1316 = Podcasts|Sports & Recreation  
1318 = Podcasts|Technology  
1320 = Podcasts|Society & Culture|Places & Travel  
1321 = Podcasts|Business  
1323 = Podcasts|Games & Hobbies  
1324 = Podcasts|Society & Culture  
1325 = Podcasts|Government & Organizations  
1337 = Music Videos|Classical|Piano  
1401 = Podcasts|Arts|Literature  
1402 = Podcasts|Arts|Design  
1404 = Podcasts|Games & Hobbies|Video Games  
1405 = Podcasts|Arts|Performing Arts  
1406 = Podcasts|Arts|Visual Arts  
1410 = Podcasts|Business|Careers  
1412 = Podcasts|Business|Investing  
1413 = Podcasts|Business|Management & Marketing  
1415 = Podcasts|Education|K-12  
1416 = Podcasts|Education|Higher Education  
1417 = Podcasts|Health|Fitness & Nutrition  
1420 = Podcasts|Health|Self-Help  
1421 = Podcasts|Health|Sexuality  
1438 = Podcasts|Religion & Spirituality|Buddhism  
1439 = Podcasts|Religion & Spirituality|Christianity  
1440 = Podcasts|Religion & Spirituality|Islam  
1441 = Podcasts|Religion & Spirituality|Judaism  
1443 = Podcasts|Society & Culture|Philosophy  
1444 = Podcasts|Religion & Spirituality|Spirituality  
1446 = Podcasts|Technology|Gadgets  
1448 = Podcasts|Technology|Tech News  
1450 = Podcasts|Technology|Podcasting  
1454 = Podcasts|Games & Hobbies|Automotive  
1455 = Podcasts|Games & Hobbies|Aviation  
1456 = Podcasts|Sports & Recreation|Outdoor  
1459 = Podcasts|Arts|Fashion & Beauty  
1460 = Podcasts|Games & Hobbies|Hobbies  
1461 = Podcasts|Games & Hobbies|Other Games  
1462 = Podcasts|Society & Culture|History  
1463 = Podcasts|Religion & Spirituality|Hinduism  
1464 = Podcasts|Religion & Spirituality|Other  
1465 = Podcasts|Sports & Recreation|Professional  
1466 = Podcasts|Sports & Recreation|College & High School  
1467 = Podcasts|Sports & Recreation|Amateur  
1468 = Podcasts|Education|Educational Technology  
1469 = Podcasts|Education|Language Courses  
1470 = Podcasts|Education|Training  
1471 = Podcasts|Business|Business News  
1472 = Podcasts|Business|Shopping  
1473 = Podcasts|Government & Organizations|National  
1474 = Podcasts|Government & Organizations|Regional  
1475 = Podcasts|Government & Organizations|Local  
1476 = Podcasts|Government & Organizations|Non-Profit  
1477 = Podcasts|Science & Medicine|Natural Sciences  
1478 = Podcasts|Science & Medicine|Medicine  
1479 = Podcasts|Science & Medicine|Social Sciences  
1480 = Podcasts|Technology|Software How-To  
1481 = Podcasts|Health|Alternative Health  
1482 = Podcasts|Arts|Books  
1483 = Podcasts|Fiction  
1484 = Podcasts|Fiction|Drama  
1485 = Podcasts|Fiction|Science Fiction  
1486 = Podcasts|Fiction|Comedy Fiction  
1487 = Podcasts|History  
1488 = Podcasts|True Crime  
1489 = Podcasts|News  
1490 = Podcasts|News|Business News  
1491 = Podcasts|Business|Management  
1492 = Podcasts|Business|Marketing  
1493 = Podcasts|Business|Entrepreneurship  
1494 = Podcasts|Business|Non-Profit  
1495 = Podcasts|Comedy|Improv  
1496 = Podcasts|Comedy|Comedy Interviews  
1497 = Podcasts|Comedy|Stand-Up  
1498 = Podcasts|Education|Language Learning

1499 = Podcasts|Education|How To  
1500 = Podcasts|Education|Self-Improvement  
1501 = Podcasts|Education|Courses  
1502 = Podcasts|Leisure  
1503 = Podcasts|Leisure|Automotive  
1504 = Podcasts|Leisure|Aviation  
1505 = Podcasts|Leisure|Hobbies  
1506 = Podcasts|Leisure|Crafts  
1507 = Podcasts|Leisure|Games  
1508 = Podcasts|Leisure|Home & Garden  
1509 = Podcasts|Leisure|Video Games  
1510 = Podcasts|Leisure|Animation & Manga  
1511 = Podcasts|Government  
1512 = Podcasts|Health & Fitness  
1513 = Podcasts|Health & Fitness|Alternative Health  
1514 = Podcasts|Health & Fitness|Fitness  
1515 = Podcasts|Health & Fitness|Nutrition  
1516 = Podcasts|Health & Fitness|Sexuality  
1517 = Podcasts|Health & Fitness|Mental Health  
1518 = Podcasts|Health & Fitness|Medicine  
1519 = Podcasts|Kids & Family|Education for Kids  
1520 = Podcasts|Kids & Family|Stories for Kids  
1521 = Podcasts|Kids & Family|Parenting  
1522 = Podcasts|Kids & Family|Pets & Animals  
1523 = Podcasts|Music|Music Commentary  
1524 = Podcasts|Music|Music History  
1525 = Podcasts|Music|Music Interviews  
1526 = Podcasts|News|Daily News  
1527 = Podcasts|News|Politics  
1528 = Podcasts|News|Tech News  
1529 = Podcasts|News|Sports News  
1530 = Podcasts|News|News Commentary  
1531 = Podcasts|News|Entertainment News  
1532 = Podcasts|Religion & Spirituality|Religion  
1533 = Podcasts|Science  
1534 = Podcasts|Science|Natural Sciences  
1535 = Podcasts|Science|Social Sciences  
1536 = Podcasts|Science|Mathematics  
1537 = Podcasts|Science|Nature  
1538 = Podcasts|Science|Astronomy  
1539 = Podcasts|Science|Chemistry  
1540 = Podcasts|Science|Earth Sciences  
1541 = Podcasts|Science|Life Sciences  
1542 = Podcasts|Science|Physics  
1543 = Podcasts|Society & Culture|Documentary  
1544 = Podcasts|Society & Culture|Relationships  
1545 = Podcasts|Sports  
1546 = Podcasts|Sports|Soccer  
1547 = Podcasts|Sports|Football  
1548 = Podcasts|Sports|Basketball  
1549 = Podcasts|Sports|Baseball  
1550 = Podcasts|Sports|Hockey  
1551 = Podcasts|Sports|Running  
1552 = Podcasts|Sports|Rugby  
1553 = Podcasts|Sports|Golf  
1554 = Podcasts|Sports|Cricket  
1555 = Podcasts|Sports|Wrestling  
1556 = Podcasts|Sports|Tennis  
1557 = Podcasts|Sports|Volleyball  
1558 = Podcasts|Sports|Swimming  
1559 = Podcasts|Sports|Wilderness  
1560 = Podcasts|Sports|Fantasy Sports  
1561 = Podcasts|TV & Film|TV Reviews  
1562 = Podcasts|TV & Film|After Shows  
1563 = Podcasts|TV & Film|Film Reviews  
1564 = Podcasts|TV & Film|Film History  
1565 = Podcasts|TV & Film|Film Interviews  
1602 = Music Videos|Blues  
1603 = Music Videos|Comedy  
1604 = Music Videos|Children's Music  
1605 = Music Videos|Classical  
1606 = Music Videos|Country  
1607 = Music Videos|Electronic  
1608 = Music Videos|Holiday  
1609 = Music Videos|Classical|Opera

1610 = Music Videos|Singer/Songwriter  
1611 = Music Videos|Jazz  
1612 = Music Videos|Latin  
1613 = Music Videos|New Age  
1614 = Music Videos|Pop  
1615 = Music Videos|R&B/Soul  
1616 = Music Videos|Soundtrack  
1617 = Music Videos|Dance  
1618 = Music Videos|Hip-Hop/Rap  
1619 = Music Videos|World  
1620 = Music Videos|Alternative  
1621 = Music Videos|Rock  
1622 = Music Videos|Christian & Gospel  
1623 = Music Videos|Vocal  
1624 = Music Videos|Reggae  
1625 = Music Videos|Easy Listening  
1626 = Music Videos|Podcasts  
1627 = Music Videos|J-Pop  
1628 = Music Videos|Enka  
1629 = Music Videos|Anime  
1630 = Music Videos|Kayokyoku  
1631 = Music Videos|Disney  
1632 = Music Videos|French Pop  
1633 = Music Videos|German Pop  
1634 = Music Videos|German Folk  
1635 = Music Videos|Alternative|Chinese Alt  
1636 = Music Videos|Alternative|Korean Indie  
1637 = Music Videos|Chinese  
1638 = Music Videos|Chinese|Chinese Classical  
1639 = Music Videos|Chinese|Chinese Flute  
1640 = Music Videos|Chinese|Chinese Opera  
1641 = Music Videos|Chinese|Chinese Orchestral  
1642 = Music Videos|Chinese|Chinese Regional Folk  
1643 = Music Videos|Chinese|Chinese Strings  
1644 = Music Videos|Chinese|Taiwanese Folk  
1645 = Music Videos|Chinese|Tibetan Native Music  
1646 = Music Videos|Hip-Hop/Rap|Chinese Hip-Hop  
1647 = Music Videos|Hip-Hop/Rap|Korean Hip-Hop  
1648 = Music Videos|Korean  
1649 = Music Videos|Korean|Korean Classical  
1650 = Music Videos|Korean|Korean Trad Song  
1651 = Music Videos|Korean|Korean Trad Instrumental  
1652 = Music Videos|Korean|Korean Trad Theater  
1653 = Music Videos|Rock|Chinese Rock  
1654 = Music Videos|Rock|Korean Rock  
1655 = Music Videos|Pop|C-Pop  
1656 = Music Videos|Pop|Cantopop/HK-Pop  
1657 = Music Videos|Pop|Korean Folk-Pop  
1658 = Music Videos|Pop|Mandopop  
1659 = Music Videos|Pop|Tai-Pop  
1660 = Music Videos|Pop|Malaysian Pop  
1661 = Music Videos|Pop|Pinoy Pop  
1662 = Music Videos|Pop|Original Pilipino Music  
1663 = Music Videos|Pop|Manilla Sound  
1664 = Music Videos|Pop|Indo Pop  
1665 = Music Videos|Pop|Thai Pop  
1666 = Music Videos|Vocal|Trot  
1671 = Music Videos|Brazilian  
1672 = Music Videos|Brazilian|Axe  
1673 = Music Videos|Brazilian|Baile Funk  
1674 = Music Videos|Brazilian|Bossa Nova  
1675 = Music Videos|Brazilian|Choro  
1676 = Music Videos|Brazilian|Forro  
1677 = Music Videos|Brazilian|Frevo  
1678 = Music Videos|Brazilian|MPB  
1679 = Music Videos|Brazilian|Pagode  
1680 = Music Videos|Brazilian|Samba  
1681 = Music Videos|Brazilian|Sertanejo  
1682 = Music Videos|Classical|High Classical  
1683 = Music Videos|Fitness & Workout  
1684 = Music Videos|Instrumental  
1685 = Music Videos|Jazz|Big Band  
1686 = Music Videos|Pop|K-Pop  
1687 = Music Videos|Karaoke  
1688 = Music Videos|Rock|Heavy Metal

1689 = Music Videos|Spoken Word  
1690 = Music Videos|Indian  
1691 = Music Videos|Indian|Bollywood  
1692 = Music Videos|Indian|Regional Indian|Tamil  
1693 = Music Videos|Indian|Regional Indian|Telugu  
1694 = Music Videos|Indian|Regional Indian  
1695 = Music Videos|Indian|Devotional & Spiritual  
1696 = Music Videos|Indian|Sufi  
1697 = Music Videos|Indian|Indian Classical  
1698 = Music Videos|Russian|Russian Chanson  
1699 = Music Videos|World|Dini  
1700 = Music Videos|Turkish|Halk  
1701 = Music Videos|Turkish|Sanat  
1702 = Music Videos|World|Dangdut  
1703 = Music Videos|World|Indonesian Religious  
1704 = Music Videos|Indian|Indian Pop  
1705 = Music Videos|World|Calypso  
1706 = Music Videos|World|Soca  
1707 = Music Videos|Indian|Ghazals  
1708 = Music Videos|Indian|Indian Folk  
1709 = Music Videos|Turkish|Arabesque  
1710 = Music Videos|African|Afrikaans  
1711 = Music Videos|World|Farsi  
1712 = Music Videos|World|Israeli  
1713 = Music Videos|Arabic  
1714 = Music Videos|Arabic|Khaleeji  
1715 = Music Videos|Arabic|North African  
1716 = Music Videos|Arabic|Arabic Pop  
1717 = Music Videos|Arabic|Islamic  
1718 = Music Videos|Soundtrack|Sound Effects  
1719 = Music Videos|Folk  
1720 = Music Videos|Orchestral  
1721 = Music Videos|Marching  
1723 = Music Videos|Pop|Oldies  
1724 = Music Videos|Country|Thai Country  
1725 = Music Videos|World|Flamenco  
1726 = Music Videos|World|Tango  
1727 = Music Videos|World|Fado  
1728 = Music Videos|World|Iberia  
1729 = Music Videos|Russian  
1730 = Music Videos|Turkish  
1731 = Music Videos|Alternative|College Rock  
1732 = Music Videos|Alternative|Goth Rock  
1733 = Music Videos|Alternative|Grunge  
1734 = Music Videos|Alternative|Indie Rock  
1735 = Music Videos|Alternative|New Wave  
1736 = Music Videos|Alternative|Punk  
1737 = Music Videos|Blues|Acoustic Blues  
1738 = Music Videos|Blues|Chicago Blues  
1739 = Music Videos|Blues|Classic Blues  
1740 = Music Videos|Blues|Contemporary Blues  
1741 = Music Videos|Blues|Country Blues  
1742 = Music Videos|Blues|Delta Blues  
1743 = Music Videos|Blues|Electric Blues  
1744 = Music Videos|Children's Music|Lullabies  
1745 = Music Videos|Children's Music|Sing-Along  
1746 = Music Videos|Children's Music|Stories  
1747 = Music Videos|Christian & Gospel|CCM  
1748 = Music Videos|Christian & Gospel|Christian Metal  
1749 = Music Videos|Christian & Gospel|Christian Pop  
1750 = Music Videos|Christian & Gospel|Christian Rap  
1751 = Music Videos|Christian & Gospel|Christian Rock  
1752 = Music Videos|Christian & Gospel|Classic Christian  
1753 = Music Videos|Christian & Gospel|Contemporary Gospel  
1754 = Music Videos|Christian & Gospel|Gospel  
1755 = Music Videos|Christian & Gospel|Praise & Worship  
1756 = Music Videos|Christian & Gospel|Southern Gospel  
1757 = Music Videos|Christian & Gospel|Traditional Gospel  
1758 = Music Videos|Classical|Avant-Garde  
1759 = Music Videos|Classical|Baroque Era  
1760 = Music Videos|Classical|Chamber Music  
1761 = Music Videos|Classical|Chant  
1762 = Music Videos|Classical|Choral  
1763 = Music Videos|Classical|Classical Crossover  
1764 = Music Videos|Classical|Early Music

1765 = Music Videos|Classical|Impressionist  
1766 = Music Videos|Classical|Medieval Era  
1767 = Music Videos|Classical|Minimalism  
1768 = Music Videos|Classical|Modern Era  
1769 = Music Videos|Classical|Orchestral  
1770 = Music Videos|Classical|Renaissance  
1771 = Music Videos|Classical|Romantic Era  
1772 = Music Videos|Classical|Wedding Music  
1773 = Music Videos|Comedy|Novelty  
1774 = Music Videos|Comedy|Standup Comedy  
1775 = Music Videos|Country|Alternative Country  
1776 = Music Videos|Country|Americana  
1777 = Music Videos|Country|Bluegrass  
1778 = Music Videos|Country|Contemporary Bluegrass  
1779 = Music Videos|Country|Contemporary Country  
1780 = Music Videos|Country|Country Gospel  
1781 = Music Videos|Country|Honky Tonk  
1782 = Music Videos|Country|Outlaw Country  
1783 = Music Videos|Country|Traditional Bluegrass  
1784 = Music Videos|Country|Traditional Country  
1785 = Music Videos|Country|Urban Cowboy  
1786 = Music Videos|Dance|Breakbeat  
1787 = Music Videos|Dance|Exercise  
1788 = Music Videos|Dance|Garage  
1789 = Music Videos|Dance|Hardcore  
1790 = Music Videos|Dance|House  
1791 = Music Videos|Dance|Jungle/Drum'n'bass  
1792 = Music Videos|Dance|Techno  
1793 = Music Videos|Dance|Trance  
1794 = Music Videos|Easy Listening|Lounge  
1795 = Music Videos|Easy Listening|Swing  
1796 = Music Videos|Electronic|Ambient  
1797 = Music Videos|Electronic|Downtempo  
1798 = Music Videos|Electronic|Electronica  
1799 = Music Videos|Electronic|IDM/Experimental  
1800 = Music Videos|Electronic|Industrial  
1801 = Music Videos|Hip-Hop/Rap|Alternative Rap  
1802 = Music Videos|Hip-Hop/Rap|Dirty South  
1803 = Music Videos|Hip-Hop/Rap|East Coast Rap  
1804 = Music Videos|Hip-Hop/Rap|Gangsta Rap  
1805 = Music Videos|Hip-Hop/Rap|Hardcore Rap  
1806 = Music Videos|Hip-Hop/Rap|Hip-Hop  
1807 = Music Videos|Hip-Hop/Rap|Latin Rap  
1808 = Music Videos|Hip-Hop/Rap|Old School Rap  
1809 = Music Videos|Hip-Hop/Rap|Rap  
1810 = Music Videos|Hip-Hop/Rap|Underground Rap  
1811 = Music Videos|Hip-Hop/Rap|West Coast Rap  
1812 = Music Videos|Holiday|Chanukah  
1813 = Music Videos|Holiday|Christmas  
1814 = Music Videos|Holiday|Christmas: Children's  
1815 = Music Videos|Holiday|Christmas: Classic  
1816 = Music Videos|Holiday|Christmas: Classical  
1817 = Music Videos|Holiday|Christmas: Jazz  
1818 = Music Videos|Holiday|Christmas: Modern  
1819 = Music Videos|Holiday|Christmas: Pop  
1820 = Music Videos|Holiday|Christmas: R&B  
1821 = Music Videos|Holiday|Christmas: Religious  
1822 = Music Videos|Holiday|Christmas: Rock  
1823 = Music Videos|Holiday|Easter  
1824 = Music Videos|Holiday|Halloween  
1825 = Music Videos|Holiday|Thanksgiving  
1826 = Music Videos|Jazz|Avant-Garde Jazz  
1828 = Music Videos|Jazz|Bop  
1829 = Music Videos|Jazz|Contemporary Jazz  
1830 = Music Videos|Jazz|Cool Jazz  
1831 = Music Videos|Jazz|Crossover Jazz  
1832 = Music Videos|Jazz|Dixieland  
1833 = Music Videos|Jazz|Fusion  
1834 = Music Videos|Jazz|Hard Bop  
1835 = Music Videos|Jazz|Latin Jazz  
1836 = Music Videos|Jazz|Mainstream Jazz  
1837 = Music Videos|Jazz|Ragtime  
1838 = Music Videos|Jazz|Smooth Jazz  
1839 = Music Videos|Jazz|Trad Jazz  
1840 = Music Videos|Latin|Alternative & Rock in Spanish

1841 = Music Videos|Latin|Baladas y Boleros  
1842 = Music Videos|Latin|Contemporary Latin  
1843 = Music Videos|Latin|Latin Jazz  
1844 = Music Videos|Latin|Latin Urban  
1845 = Music Videos|Latin|Pop in Spanish  
1846 = Music Videos|Latin|Raices  
1847 = Music Videos|Latin|Musica Mexicana  
1848 = Music Videos|Latin|Salsa y Tropical  
1849 = Music Videos|New Age|Healing  
1850 = Music Videos|New Age|Meditation  
1851 = Music Videos|New Age|Nature  
1852 = Music Videos|New Age|Relaxation  
1853 = Music Videos|New Age|Travel  
1854 = Music Videos|Pop|Adult Contemporary  
1855 = Music Videos|Pop|Britpop  
1856 = Music Videos|Pop|Pop/Rock  
1857 = Music Videos|Pop|Soft Rock  
1858 = Music Videos|Pop|Teen Pop  
1859 = Music Videos|R&B/Soul|Contemporary R&B  
1860 = Music Videos|R&B/Soul|Disco  
1861 = Music Videos|R&B/Soul|Doo Wop  
1862 = Music Videos|R&B/Soul|Funk  
1863 = Music Videos|R&B/Soul|Motown  
1864 = Music Videos|R&B/Soul|Neo-Soul  
1865 = Music Videos|R&B/Soul|Soul  
1866 = Music Videos|Reggae|Modern Dancehall  
1867 = Music Videos|Reggae|Dub  
1868 = Music Videos|Reggae|Roots Reggae  
1869 = Music Videos|Reggae|Ska  
1870 = Music Videos|Rock|Adult Alternative  
1871 = Music Videos|Rock|American Trad Rock  
1872 = Music Videos|Rock|Arena Rock  
1873 = Music Videos|Rock|Blues-Rock  
1874 = Music Videos|Rock|British Invasion  
1875 = Music Videos|Rock|Death Metal/Black Metal  
1876 = Music Videos|Rock|Glam Rock  
1877 = Music Videos|Rock|Hair Metal  
1878 = Music Videos|Rock|Hard Rock  
1879 = Music Videos|Rock|Jam Bands  
1880 = Music Videos|Rock|Prog-Rock/Art Rock  
1881 = Music Videos|Rock|Psychedelic  
1882 = Music Videos|Rock|Rock & Roll  
1883 = Music Videos|Rock|Rockabilly  
1884 = Music Videos|Rock|Roots Rock  
1885 = Music Videos|Rock|Singer/Songwriter  
1886 = Music Videos|Rock|Southern Rock  
1887 = Music Videos|Rock|Surf  
1888 = Music Videos|Rock|Tex-Mex  
1889 = Music Videos|Singer/Songwriter|Alternative Folk  
1890 = Music Videos|Singer/Songwriter|Contemporary Folk  
1891 = Music Videos|Singer/Songwriter|Contemporary Singer/Songwriter  
1892 = Music Videos|Singer/Songwriter|Folk-Rock  
1893 = Music Videos|Singer/Songwriter|New Acoustic  
1894 = Music Videos|Singer/Songwriter|Traditional Folk  
1895 = Music Videos|Soundtrack|Foreign Cinema  
1896 = Music Videos|Soundtrack|Musicals  
1897 = Music Videos|Soundtrack|Original Score  
1898 = Music Videos|Soundtrack|Soundtrack  
1899 = Music Videos|Soundtrack|TV Soundtrack  
1900 = Music Videos|Vocal|Standards  
1901 = Music Videos|Vocal|Traditional Pop  
1902 = Music Videos|Jazz|Vocal Jazz  
1903 = Music Videos|Vocal|Vocal Pop  
1904 = Music Videos|African  
1905 = Music Videos|African|Afro-Beat  
1906 = Music Videos|African|Afro-Pop  
1907 = Music Videos|World|Asia  
1908 = Music Videos|World|Australia  
1909 = Music Videos|World|Cajun  
1910 = Music Videos|World|Caribbean  
1911 = Music Videos|World|Celtic  
1912 = Music Videos|World|Celtic Folk  
1913 = Music Videos|World|Contemporary Celtic  
1914 = Music Videos|World|Europe  
1915 = Music Videos|World|France

1916 = Music Videos|World|Hawaii  
1917 = Music Videos|World|Japan  
1918 = Music Videos|World|Klezmer  
1919 = Music Videos|World|North America  
1920 = Music Videos|World|Polka  
1921 = Music Videos|World|South Africa  
1922 = Music Videos|World|South America  
1923 = Music Videos|World|Traditional Celtic  
1924 = Music Videos|World|Worldbeat  
1925 = Music Videos|World|Zydeco  
1926 = Music Videos|Christian & Gospel  
1928 = Music Videos|Classical|Art Song  
1929 = Music Videos|Classical|Brass & Woodwinds  
1930 = Music Videos|Classical|Solo Instrumental  
1931 = Music Videos|Classical|Contemporary Era  
1932 = Music Videos|Classical|Oratorio  
1933 = Music Videos|Classical|Cantata  
1934 = Music Videos|Classical|Electronic  
1935 = Music Videos|Classical|Sacred  
1936 = Music Videos|Classical|Guitar  
1938 = Music Videos|Classical|Violin  
1939 = Music Videos|Classical|Cello  
1940 = Music Videos|Classical|Percussion  
1941 = Music Videos|Electronic|Dubstep  
1942 = Music Videos|Electronic|Bass  
1943 = Music Videos|Hip-Hop|Rap|UK Hip-Hop  
1944 = Music Videos|Reggae|Lovers Rock  
1945 = Music Videos|Alternative|EMO  
1946 = Music Videos|Alternative|Pop Punk  
1947 = Music Videos|Alternative|Indie Pop  
1948 = Music Videos|New Age|Yoga  
1949 = Music Videos|Pop|Tribute  
1950 = Music Videos|Pop|Shows  
1951 = Music Videos|Cuban  
1952 = Music Videos|Cuban|Mambo  
1953 = Music Videos|Cuban|Chachacha  
1954 = Music Videos|Cuban|Guajira  
1955 = Music Videos|Cuban|Son  
1956 = Music Videos|Cuban|Bolero  
1957 = Music Videos|Cuban|Guaracha  
1958 = Music Videos|Cuban|Timba  
1959 = Music Videos|Soundtrack|Video Game  
1960 = Music Videos|Indian|Regional Indian|Punjabi|Punjabi Pop  
1961 = Music Videos|Indian|Regional Indian|Bengali|Rabindra Sangeet  
1962 = Music Videos|Indian|Regional Indian|Malayalam  
1963 = Music Videos|Indian|Regional Indian|Kannada  
1964 = Music Videos|Indian|Regional Indian|Marathi  
1965 = Music Videos|Indian|Regional Indian|Gujarati  
1966 = Music Videos|Indian|Regional Indian|Assamese  
1967 = Music Videos|Indian|Regional Indian|Bhojpuri  
1968 = Music Videos|Indian|Regional Indian|Haryanvi  
1969 = Music Videos|Indian|Regional Indian|Odia  
1970 = Music Videos|Indian|Regional Indian|Rajasthani  
1971 = Music Videos|Indian|Regional Indian|Urdu  
1972 = Music Videos|Indian|Regional Indian|Punjabi  
1973 = Music Videos|Indian|Regional Indian|Bengali  
1974 = Music Videos|Indian|Indian Classical|Carnatic Classical  
1975 = Music Videos|Indian|Indian Classical|Hindustani Classical  
1976 = Music Videos|African|Afro House  
1977 = Music Videos|African|Afro Soul  
1978 = Music Videos|African|Afrobeats  
1979 = Music Videos|African|Benga  
1980 = Music Videos|African|Bongo-Flava  
1981 = Music Videos|African|Coupe-Decale  
1982 = Music Videos|African|Gqom  
1983 = Music Videos|African|Highlife  
1984 = Music Videos|African|Kuduro  
1985 = Music Videos|African|Kizomba  
1986 = Music Videos|African|Kwaito  
1987 = Music Videos|African|Mbalax  
1988 = Music Videos|African|Ndombolo  
1989 = Music Videos|African|Shangaan Electro  
1990 = Music Videos|African|Soukous  
1991 = Music Videos|African|Taarab  
1992 = Music Videos|African|Zouglou

1993 = Music Videos|Turkish|Ozgun  
1994 = Music Videos|Turkish|Fantezi  
1995 = Music Videos|Turkish|Religious  
1996 = Music Videos|Pop|Turkish Pop  
1997 = Music Videos|Rock|Turkish Rock  
1998 = Music Videos|Alternative|Turkish Alternative  
1999 = Music Videos|Hip-Hop/Rap|Turkish Hip-Hop/Rap  
2000 = Music Videos|African|Maskandi  
2001 = Music Videos|Russian|Russian Romance  
2002 = Music Videos|Russian|Russian Bard  
2003 = Music Videos|Russian|Russian Pop  
2004 = Music Videos|Russian|Russian Rock  
2005 = Music Videos|Russian|Russian Hip-Hop  
2006 = Music Videos|Arabic|Levant  
2007 = Music Videos|Arabic|Levant|Dabke  
2008 = Music Videos|Arabic|Maghreb Rai  
2009 = Music Videos|Arabic|Khaleeji|Khaleeji Jalsat  
2010 = Music Videos|Arabic|Khaleeji|Khaleeji Shailat  
2011 = Music Videos|Tarab  
2012 = Music Videos|Tarab|Iraqi Tarab  
2013 = Music Videos|Tarab|Egyptian Tarab  
2014 = Music Videos|Tarab|Khaleeji Tarab  
2015 = Music Videos|Pop|Levant Pop  
2016 = Music Videos|Pop|Iraqi Pop  
2017 = Music Videos|Pop|Egyptian Pop  
2018 = Music Videos|Pop|Maghreb Pop  
2019 = Music Videos|Pop|Khaleeji Pop  
2020 = Music Videos|Hip-Hop/Rap|Levant Hip-Hop  
2021 = Music Videos|Hip-Hop/Rap|Egyptian Hip-Hop  
2022 = Music Videos|Hip-Hop/Rap|Maghreb Hip-Hop  
2023 = Music Videos|Hip-Hop/Rap|Khaleeji Hip-Hop  
2024 = Music Videos|Alternative|Indie Levant  
2025 = Music Videos|Alternative|Indie Egyptian  
2026 = Music Videos|Alternative|Indie Maghreb  
2027 = Music Videos|Electronic|Levant Electronic  
2028 = Music Videos|Electronic|Electro-Cha'abi  
2029 = Music Videos|Electronic|Maghreb Electronic  
2030 = Music Videos|Folk|Iraqi Folk  
2031 = Music Videos|Folk|Khaleeji Folk  
2032 = Music Videos|Dance|Maghreb Dance  
4000 = TV Shows|Comedy  
4001 = TV Shows|Drama  
4002 = TV Shows|Animation  
4003 = TV Shows|Action & Adventure  
4004 = TV Shows|Classics  
4005 = TV Shows|Kids & Family  
4006 = TV Shows|Nonfiction  
4007 = TV Shows|Reality TV  
4008 = TV Shows|Sci-Fi & Fantasy  
4009 = TV Shows|Sports  
4010 = TV Shows|Teens  
4011 = TV Shows|Latino TV  
4401 = Movies>Action & Adventure  
4402 = Movies|Anime  
4403 = Movies|Classics  
4404 = Movies|Comedy  
4405 = Movies|Documentary  
4406 = Movies|Drama  
4407 = Movies|Foreign  
4408 = Movies|Horror  
4409 = Movies|Independent  
4410 = Movies|Kids & Family  
4411 = Movies|Musicals  
4412 = Movies|Romance  
4413 = Movies|Sci-Fi & Fantasy  
4414 = Movies|Short Films  
4415 = Movies|Special Interest  
4416 = Movies|Thriller  
4417 = Movies|Sports  
4418 = Movies|Western  
4419 = Movies|Urban  
4420 = Movies|Holiday  
4421 = Movies|Made for TV  
4422 = Movies|Concert Films  
4423 = Movies|Music Documentaries

4424 = Movies|Music Feature Films  
4425 = Movies|Japanese Cinema  
4426 = Movies|Jidaigeki  
4427 = Movies|Tokusatsu  
4428 = Movies|Korean Cinema  
4429 = Movies|Russian  
4430 = Movies|Turkish  
4431 = Movies|Bollywood  
4432 = Movies|Regional Indian  
4433 = Movies|Middle Eastern  
4434 = Movies|African  
6000 = App Store|Business  
6001 = App Store|Weather  
6002 = App Store|Utilities  
6003 = App Store|Travel  
6004 = App Store|Sports  
6005 = App Store|Social Networking  
6006 = App Store|Reference  
6007 = App Store|Productivity  
6008 = App Store|Photo & Video  
6009 = App Store|News  
6010 = App Store|Navigation  
6011 = App Store|Music  
6012 = App Store|Lifestyle  
6013 = App Store|Health & Fitness  
6014 = App Store|Games  
6015 = App Store|Finance  
6016 = App Store|Entertainment  
6017 = App Store|Education  
6018 = App Store|Books  
6020 = App Store|Medical  
6021 = App Store|Magazines & Newspapers  
6022 = App Store|Catalogs  
6023 = App Store|Food & Drink  
6024 = App Store|Shopping  
6025 = App Store|Stickers  
6026 = App Store|Developer Tools  
6027 = App Store|Graphics & Design  
7001 = App Store|Games>Action  
7002 = App Store|Games|Adventure  
7003 = App Store|Games|Casual  
7004 = App Store|Games|Board  
7005 = App Store|Games|Card  
7006 = App Store|Games|Casino  
7007 = App Store|Games|Dice  
7008 = App Store|Games|Educational  
7009 = App Store|Games|Family  
7011 = App Store|Games|Music  
7012 = App Store|Games|Puzzle  
7013 = App Store|Games|Racing  
7014 = App Store|Games|Role Playing  
7015 = App Store|Games|Simulation  
7016 = App Store|Games|Sports  
7017 = App Store|Games|Strategy  
7018 = App Store|Games|Trivia  
7019 = App Store|Games|Word  
8001 = Tones|Ringtones|Alternative  
8002 = Tones|Ringtones|Blues  
8003 = Tones|Ringtones|Children's Music  
8004 = Tones|Ringtones|Classical  
8005 = Tones|Ringtones|Comedy  
8006 = Tones|Ringtones|Country  
8007 = Tones|Ringtones|Dance  
8008 = Tones|Ringtones|Electronic  
8009 = Tones|Ringtones|Enka  
8010 = Tones|Ringtones|French Pop  
8011 = Tones|Ringtones|German Folk  
8012 = Tones|Ringtones|German Pop  
8013 = Tones|Ringtones|Hip-Hop/Rap  
8014 = Tones|Ringtones|Holiday  
8015 = Tones|Ringtones|Inspirational  
8016 = Tones|Ringtones|J-Pop  
8017 = Tones|Ringtones|Jazz  
8018 = Tones|Ringtones|Kayokyoku  
8019 = Tones|Ringtones|Latin

8020 = Tones|Ringtones|New Age  
8021 = Tones|Ringtones|Classical|Opera  
8022 = Tones|Ringtones|Pop  
8023 = Tones|Ringtones|R&B/Soul  
8024 = Tones|Ringtones|Reggae  
8025 = Tones|Ringtones|Rock  
8026 = Tones|Ringtones|Singer/Songwriter  
8027 = Tones|Ringtones|Soundtrack  
8028 = Tones|Ringtones|Spoken Word  
8029 = Tones|Ringtones|Vocal  
8030 = Tones|Ringtones|World  
8050 = Tones|Alert Tones|Sound Effects  
8051 = Tones|Alert Tones|Dialogue  
8052 = Tones|Alert Tones|Music  
8053 = Tones|Ringtones  
8054 = Tones|Alert Tones  
8055 = Tones|Ringtones|Alternative|Chinese Alt  
8056 = Tones|Ringtones|Alternative|College Rock  
8057 = Tones|Ringtones|Alternative|Goth Rock  
8058 = Tones|Ringtones|Alternative|Grunge  
8059 = Tones|Ringtones|Alternative|Indie Rock  
8060 = Tones|Ringtones|Alternative|Korean Indie  
8061 = Tones|Ringtones|Alternative|New Wave  
8062 = Tones|Ringtones|Alternative|Punk  
8063 = Tones|Ringtones|Anime  
8064 = Tones|Ringtones|Arabic  
8065 = Tones|Ringtones|Arabic|Arabic Pop  
8066 = Tones|Ringtones|Arabic|Islamic  
8067 = Tones|Ringtones|Arabic|Khaleeji  
8068 = Tones|Ringtones|Arabic|North African  
8069 = Tones|Ringtones|Blues|Acoustic Blues  
8070 = Tones|Ringtones|Blues|Chicago Blues  
8071 = Tones|Ringtones|Blues|Classic Blues  
8072 = Tones|Ringtones|Blues|Contemporary Blues  
8073 = Tones|Ringtones|Blues|Country Blues  
8074 = Tones|Ringtones|Blues|Delta Blues  
8075 = Tones|Ringtones|Blues|Electric Blues  
8076 = Tones|Ringtones|Brazilian  
8077 = Tones|Ringtones|Brazilian|Axe  
8078 = Tones|Ringtones|Brazilian|Baile Funk  
8079 = Tones|Ringtones|Brazilian|Bossa Nova  
8080 = Tones|Ringtones|Brazilian|Choro  
8081 = Tones|Ringtones|Brazilian|Forro  
8082 = Tones|Ringtones|Brazilian|Frevo  
8083 = Tones|Ringtones|Brazilian|MPB  
8084 = Tones|Ringtones|Brazilian|Pagode  
8085 = Tones|Ringtones|Brazilian|Samba  
8086 = Tones|Ringtones|Brazilian|Sertanejo  
8087 = Tones|Ringtones|Children's Music|Lullabies  
8088 = Tones|Ringtones|Children's Music|Sing-Along  
8089 = Tones|Ringtones|Children's Music|Stories  
8090 = Tones|Ringtones|Chinese  
8091 = Tones|Ringtones|Chinese|Chinese Classical  
8092 = Tones|Ringtones|Chinese|Chinese Flute  
8093 = Tones|Ringtones|Chinese|Chinese Opera  
8094 = Tones|Ringtones|Chinese|Chinese Orchestral  
8095 = Tones|Ringtones|Chinese|Chinese Regional Folk  
8096 = Tones|Ringtones|Chinese|Chinese Strings  
8097 = Tones|Ringtones|Chinese|Taiwanese Folk  
8098 = Tones|Ringtones|Chinese|Tibetan Native Music  
8099 = Tones|Ringtones|Christian & Gospel  
8100 = Tones|Ringtones|Christian & Gospel|CCM  
8101 = Tones|Ringtones|Christian & Gospel|Christian Metal  
8102 = Tones|Ringtones|Christian & Gospel|Christian Pop  
8103 = Tones|Ringtones|Christian & Gospel|Christian Rap  
8104 = Tones|Ringtones|Christian & Gospel|Christian Rock  
8105 = Tones|Ringtones|Christian & Gospel|Classic Christian  
8106 = Tones|Ringtones|Christian & Gospel|Contemporary Gospel  
8107 = Tones|Ringtones|Christian & Gospel|Gospel  
8108 = Tones|Ringtones|Christian & Gospel|Praise & Worship  
8109 = Tones|Ringtones|Christian & Gospel|Southern Gospel  
8110 = Tones|Ringtones|Christian & Gospel|Traditional Gospel  
8111 = Tones|Ringtones|Classical|Avant-Garde  
8112 = Tones|Ringtones|Classical|Baroque Era  
8113 = Tones|Ringtones|Classical|Chamber Music

8114 = Tones|Ringtones|Classical|Chant  
8115 = Tones|Ringtones|Classical|Choral  
8116 = Tones|Ringtones|Classical|Classical Crossover  
8117 = Tones|Ringtones|Classical|Early Music  
8118 = Tones|Ringtones|Classical|High Classical  
8119 = Tones|Ringtones|Classical|Impressionist  
8120 = Tones|Ringtones|Classical|Medieval Era  
8121 = Tones|Ringtones|Classical|Minimalism  
8122 = Tones|Ringtones|Classical|Modern Era  
8123 = Tones|Ringtones|Classical|Orchestral  
8124 = Tones|Ringtones|Classical|Renaissance  
8125 = Tones|Ringtones|Classical|Romantic Era  
8126 = Tones|Ringtones|Classical|Wedding Music  
8127 = Tones|Ringtones|Comedy|Novelty  
8128 = Tones|Ringtones|Comedy|Standup Comedy  
8129 = Tones|Ringtones|Country|Alternative Country  
8130 = Tones|Ringtones|Country|Americana  
8131 = Tones|Ringtones|Country|Bluegrass  
8132 = Tones|Ringtones|Country|Contemporary Bluegrass  
8133 = Tones|Ringtones|Country|Contemporary Country  
8134 = Tones|Ringtones|Country|Country Gospel  
8135 = Tones|Ringtones|Country|Honky Tonk  
8136 = Tones|Ringtones|Country|Outlaw Country  
8137 = Tones|Ringtones|Country|Thai Country  
8138 = Tones|Ringtones|Country|Traditional Bluegrass  
8139 = Tones|Ringtones|Country|Traditional Country  
8140 = Tones|Ringtones|Country|Urban Cowboy  
8141 = Tones|Ringtones|Dance|Breakbeat  
8142 = Tones|Ringtones|Dance|Exercise  
8143 = Tones|Ringtones|Dance|Garage  
8144 = Tones|Ringtones|Dance|Hardcore  
8145 = Tones|Ringtones|Dance|House  
8146 = Tones|Ringtones|Dance|Jungle/Drum'n'bass  
8147 = Tones|Ringtones|Dance|Techno  
8148 = Tones|Ringtones|Dance|Trance  
8149 = Tones|Ringtones|Disney  
8150 = Tones|Ringtones|Easy Listening  
8151 = Tones|Ringtones|Easy Listening|Lounge  
8152 = Tones|Ringtones|Easy Listening|Swing  
8153 = Tones|Ringtones|Electronic|Ambient  
8154 = Tones|Ringtones|Electronic|Downtempo  
8155 = Tones|Ringtones|Electronic|Electronica  
8156 = Tones|Ringtones|Electronic|IDM/Experimental  
8157 = Tones|Ringtones|Electronic|Industrial  
8158 = Tones|Ringtones|Fitness & Workout  
8159 = Tones|Ringtones|Folk  
8160 = Tones|Ringtones|Hip-Hop/Rap|Alternative Rap  
8161 = Tones|Ringtones|Hip-Hop/Rap|Chinese Hip-Hop  
8162 = Tones|Ringtones|Hip-Hop/Rap|Dirty South  
8163 = Tones|Ringtones|Hip-Hop/Rap|East Coast Rap  
8164 = Tones|Ringtones|Hip-Hop/Rap|Gangsta Rap  
8165 = Tones|Ringtones|Hip-Hop/Rap|Hardcore Rap  
8166 = Tones|Ringtones|Hip-Hop/Rap|Hip-Hop  
8167 = Tones|Ringtones|Hip-Hop/Rap|Korean Hip-Hop  
8168 = Tones|Ringtones|Hip-Hop/Rap|Latin Rap  
8169 = Tones|Ringtones|Hip-Hop/Rap|Old School Rap  
8170 = Tones|Ringtones|Hip-Hop/Rap|Rap  
8171 = Tones|Ringtones|Hip-Hop/Rap|Underground Rap  
8172 = Tones|Ringtones|Hip-Hop/Rap|West Coast Rap  
8173 = Tones|Ringtones|Holiday|Chanukah  
8174 = Tones|Ringtones|Holiday|Christmas  
8175 = Tones|Ringtones|Holiday|Christmas: Children's  
8176 = Tones|Ringtones|Holiday|Christmas: Classic  
8177 = Tones|Ringtones|Holiday|Christmas: Classical  
8178 = Tones|Ringtones|Holiday|Christmas: Jazz  
8179 = Tones|Ringtones|Holiday|Christmas: Modern  
8180 = Tones|Ringtones|Holiday|Christmas: Pop  
8181 = Tones|Ringtones|Holiday|Christmas: R&B  
8182 = Tones|Ringtones|Holiday|Christmas: Religious  
8183 = Tones|Ringtones|Holiday|Christmas: Rock  
8184 = Tones|Ringtones|Holiday|Easter  
8185 = Tones|Ringtones|Holiday|Halloween  
8186 = Tones|Ringtones|Holiday|Thanksgiving  
8187 = Tones|Ringtones|Indian  
8188 = Tones|Ringtones|Indian|Bollywood

8189 = Tones|Ringtones|Indian|Devotional & Spiritual  
8190 = Tones|Ringtones|Indian|Ghazals  
8191 = Tones|Ringtones|Indian|Indian Classical  
8192 = Tones|Ringtones|Indian|Indian Folk  
8193 = Tones|Ringtones|Indian|Indian Pop  
8194 = Tones|Ringtones|Indian|Regional Indian  
8195 = Tones|Ringtones|Indian|Sufi  
8196 = Tones|Ringtones|Indian|Regional Indian|Tamil  
8197 = Tones|Ringtones|Indian|Regional Indian|Telugu  
8198 = Tones|Ringtones|Instrumental  
8199 = Tones|Ringtones|Jazz|Avant-Garde Jazz  
8201 = Tones|Ringtones|Jazz|Big Band  
8202 = Tones|Ringtones|Jazz|Bop  
8203 = Tones|Ringtones|Jazz|Contemporary Jazz  
8204 = Tones|Ringtones|Jazz|Cool Jazz  
8205 = Tones|Ringtones|Jazz|Crossover Jazz  
8206 = Tones|Ringtones|Jazz|Dixieland  
8207 = Tones|Ringtones|Jazz|Fusion  
8208 = Tones|Ringtones|Jazz|Hard Bop  
8209 = Tones|Ringtones|Jazz|Latin Jazz  
8210 = Tones|Ringtones|Jazz>Mainstream Jazz  
8211 = Tones|Ringtones|Jazz|Ragtime  
8212 = Tones|Ringtones|Jazz|Smooth Jazz  
8213 = Tones|Ringtones|Jazz|Trad Jazz  
8214 = Tones|Ringtones|Pop|K-Pop  
8215 = Tones|Ringtones|Karaoke  
8216 = Tones|Ringtones|Korean  
8217 = Tones|Ringtones|Korean|Korean Classical  
8218 = Tones|Ringtones|Korean|Korean Trad Instrumental  
8219 = Tones|Ringtones|Korean|Korean Trad Song  
8220 = Tones|Ringtones|Korean|Korean Trad Theater  
8221 = Tones|Ringtones|Latin|Alternative & Rock in Spanish  
8222 = Tones|Ringtones|Latin|Baladas y Boleros  
8223 = Tones|Ringtones|Latin|Contemporary Latin  
8224 = Tones|Ringtones|Latin|Latin Jazz  
8225 = Tones|Ringtones|Latin|Latin Urban  
8226 = Tones|Ringtones|Latin|Pop in Spanish  
8227 = Tones|Ringtones|Latin|Raices  
8228 = Tones|Ringtones|Latin|Musica Mexicana  
8229 = Tones|Ringtones|Latin|Salsa y Tropical  
8230 = Tones|Ringtones|Marching Bands  
8231 = Tones|Ringtones|New Age|Healing  
8232 = Tones|Ringtones|New Age|Meditation  
8233 = Tones|Ringtones|New Age|Nature  
8234 = Tones|Ringtones|New Age|Relaxation  
8235 = Tones|Ringtones|New Age|Travel  
8236 = Tones|Ringtones|Orchestral  
8237 = Tones|Ringtones|Pop|Adult Contemporary  
8238 = Tones|Ringtones|Pop|Britpop  
8239 = Tones|Ringtones|Pop|C-Pop  
8240 = Tones|Ringtones|Pop|Cantopop/HK-Pop  
8241 = Tones|Ringtones|Pop|Indo Pop  
8242 = Tones|Ringtones|Pop|Korean Folk-Pop  
8243 = Tones|Ringtones|Pop|Malaysian Pop  
8244 = Tones|Ringtones|Pop|Mandopop  
8245 = Tones|Ringtones|Pop|Manilla Sound  
8246 = Tones|Ringtones|Pop|Oldies  
8247 = Tones|Ringtones|Pop|Original Pilipino Music  
8248 = Tones|Ringtones|Pop|Pinoy Pop  
8249 = Tones|Ringtones|Pop|Pop/Rock  
8250 = Tones|Ringtones|Pop|Soft Rock  
8251 = Tones|Ringtones|Pop|Tai-Pop  
8252 = Tones|Ringtones|Pop|Teen Pop  
8253 = Tones|Ringtones|Pop|Thai Pop  
8254 = Tones|Ringtones|R&B/Soul|Contemporary R&B  
8255 = Tones|Ringtones|R&B/Soul|Disco  
8256 = Tones|Ringtones|R&B/Soul|Doo Wop  
8257 = Tones|Ringtones|R&B/Soul|Funk  
8258 = Tones|Ringtones|R&B/Soul|Motown  
8259 = Tones|Ringtones|R&B/Soul|Neo-Soul  
8260 = Tones|Ringtones|R&B/Soul|Soul  
8261 = Tones|Ringtones|Reggae|Modern Dancehall  
8262 = Tones|Ringtones|Reggae|Dub  
8263 = Tones|Ringtones|Reggae|Roots Reggae  
8264 = Tones|Ringtones|Reggae|Ska

8265 = Tones|Ringtones|Rock|Adult Alternative  
8266 = Tones|Ringtones|Rock|American Trad Rock  
8267 = Tones|Ringtones|Rock|Arena Rock  
8268 = Tones|Ringtones|Rock|Blues-Rock  
8269 = Tones|Ringtones|Rock|British Invasion  
8270 = Tones|Ringtones|Rock|Chinese Rock  
8271 = Tones|Ringtones|Rock|Death Metal/Black Metal  
8272 = Tones|Ringtones|Rock|Glam Rock  
8273 = Tones|Ringtones|Rock|Hair Metal  
8274 = Tones|Ringtones|Rock|Hard Rock  
8275 = Tones|Ringtones|Rock|Metal  
8276 = Tones|Ringtones|Rock|Jam Bands  
8277 = Tones|Ringtones|Rock|Korean Rock  
8278 = Tones|Ringtones|Rock|Prog-Rock/Art Rock  
8279 = Tones|Ringtones|Rock|Psychedelic  
8280 = Tones|Ringtones|Rock|Rock & Roll  
8281 = Tones|Ringtones|Rock|Rockabilly  
8282 = Tones|Ringtones|Rock|Roots Rock  
8283 = Tones|Ringtones|Rock|Singer/Songwriter  
8284 = Tones|Ringtones|Rock|Southern Rock  
8285 = Tones|Ringtones|Rock|Surf  
8286 = Tones|Ringtones|Rock|Tex-Mex  
8287 = Tones|Ringtones|Singer/Songwriter|Alternative Folk  
8288 = Tones|Ringtones|Singer/Songwriter|Contemporary Folk  
8289 = Tones|Ringtones|Singer/Songwriter|Contemporary Singer/Songwriter  
8290 = Tones|Ringtones|Singer/Songwriter|Folk-Rock  
8291 = Tones|Ringtones|Singer/Songwriter|New Acoustic  
8292 = Tones|Ringtones|Singer/Songwriter|Traditional Folk  
8293 = Tones|Ringtones|Soundtrack|Foreign Cinema  
8294 = Tones|Ringtones|Soundtrack|Musicals  
8295 = Tones|Ringtones|Soundtrack|Original Score  
8296 = Tones|Ringtones|Soundtrack|Sound Effects  
8297 = Tones|Ringtones|Soundtrack|Soundtrack  
8298 = Tones|Ringtones|Soundtrack|TV Soundtrack  
8299 = Tones|Ringtones|Vocal|Standards  
8300 = Tones|Ringtones|Vocal|Traditional Pop  
8301 = Tones|Ringtones|Vocal|Trot  
8302 = Tones|Ringtones|Jazz|Vocal Jazz  
8303 = Tones|Ringtones|Vocal|Vocal Pop  
8304 = Tones|Ringtones|African  
8305 = Tones|Ringtones|African|Afrikaans  
8306 = Tones|Ringtones|African|Afro-Beat  
8307 = Tones|Ringtones|African|Afro-Pop  
8308 = Tones|Ringtones|Turkish|Arabesque  
8309 = Tones|Ringtones|World|Asia  
8310 = Tones|Ringtones|World|Australia  
8311 = Tones|Ringtones|World|Cajun  
8312 = Tones|Ringtones|World|Calypso  
8313 = Tones|Ringtones|World|Caribbean  
8314 = Tones|Ringtones|World|Celtic  
8315 = Tones|Ringtones|World|Celtic Folk  
8316 = Tones|Ringtones|World|Contemporary Celtic  
8317 = Tones|Ringtones|World|Dangdut  
8318 = Tones|Ringtones|World|Dini  
8319 = Tones|Ringtones|World|Europe  
8320 = Tones|Ringtones|World|Fado  
8321 = Tones|Ringtones|World|Farsi  
8322 = Tones|Ringtones|World|Flamenco  
8323 = Tones|Ringtones|World|France  
8324 = Tones|Ringtones|Turkish|Halk  
8325 = Tones|Ringtones|World|Hawaii  
8326 = Tones|Ringtones|World|Iberia  
8327 = Tones|Ringtones|World|Indonesian Religious  
8328 = Tones|Ringtones|World|Israeli  
8329 = Tones|Ringtones|World|Japan  
8330 = Tones|Ringtones|World|Klezmer  
8331 = Tones|Ringtones|World|North America  
8332 = Tones|Ringtones|World|Polka  
8333 = Tones|Ringtones|Russian  
8334 = Tones|Ringtones|Russian|Russian Chanson  
8335 = Tones|Ringtones|Turkish|Sanat  
8336 = Tones|Ringtones|World|Soca  
8337 = Tones|Ringtones|World|South Africa  
8338 = Tones|Ringtones|World|South America  
8339 = Tones|Ringtones|World|Tango

8340 = Tones|Ringtones|World|Traditional Celtic  
8341 = Tones|Ringtones|Turkish  
8342 = Tones|Ringtones|World|Worldbeat  
8343 = Tones|Ringtones|World|Zydeco  
8345 = Tones|Ringtones|Classical|Art Song  
8346 = Tones|Ringtones|Classical|Brass & Woodwinds  
8347 = Tones|Ringtones|Classical|Solo Instrumental  
8348 = Tones|Ringtones|Classical|Contemporary Era  
8349 = Tones|Ringtones|Classical|Oratorio  
8350 = Tones|Ringtones|Classical|Cantata  
8351 = Tones|Ringtones|Classical|Electronic  
8352 = Tones|Ringtones|Classical|Sacred  
8353 = Tones|Ringtones|Classical|Guitar  
8354 = Tones|Ringtones|Classical|Piano  
8355 = Tones|Ringtones|Classical|Violin  
8356 = Tones|Ringtones|Classical|Cello  
8357 = Tones|Ringtones|Classical|Percussion  
8358 = Tones|Ringtones|Electronic|Dubstep  
8359 = Tones|Ringtones|Electronic|Bass  
8360 = Tones|Ringtones|Hip-Hop/Rap|UK Hip Hop  
8361 = Tones|Ringtones|Reggae|Lovers Rock  
8362 = Tones|Ringtones|Alternative|EMO  
8363 = Tones|Ringtones|Alternative|Pop Punk  
8364 = Tones|Ringtones|Alternative|Indie Pop  
8365 = Tones|Ringtones|New Age|Yoga  
8366 = Tones|Ringtones|Pop|Tribute  
8367 = Tones|Ringtones|Pop|Shows  
8368 = Tones|Ringtones|Cuban  
8369 = Tones|Ringtones|Cuban|Mambo  
8370 = Tones|Ringtones|Cuban|Chachacha  
8371 = Tones|Ringtones|Cuban|Guajira  
8372 = Tones|Ringtones|Cuban|Son  
8373 = Tones|Ringtones|Cuban|Bolero  
8374 = Tones|Ringtones|Cuban|Guaracha  
8375 = Tones|Ringtones|Cuban|Timba  
8376 = Tones|Ringtones|Soundtrack|Video Game  
8377 = Tones|Ringtones|Indian|Regional Indian|Punjabi|Punjabi Pop  
8378 = Tones|Ringtones|Indian|Regional Indian|Bengali|Rabindra Sangeet  
8379 = Tones|Ringtones|Indian|Regional Indian|Malayalam  
8380 = Tones|Ringtones|Indian|Regional Indian|Kannada  
8381 = Tones|Ringtones|Indian|Regional Indian|Marathi  
8382 = Tones|Ringtones|Indian|Regional Indian|Gujarati  
8383 = Tones|Ringtones|Indian|Regional Indian|Assamese  
8384 = Tones|Ringtones|Indian|Regional Indian|Bhojpuri  
8385 = Tones|Ringtones|Indian|Regional Indian|Haryanvi  
8386 = Tones|Ringtones|Indian|Regional Indian|Odia  
8387 = Tones|Ringtones|Indian|Regional Indian|Rajasthani  
8388 = Tones|Ringtones|Indian|Regional Indian|Urdu  
8389 = Tones|Ringtones|Indian|Regional Indian|Punjabi  
8390 = Tones|Ringtones|Indian|Regional Indian|Bengali  
8391 = Tones|Ringtones|Indian|Indian Classical|Carnatic Classical  
8392 = Tones|Ringtones|Indian|Indian Classical|Hindustani Classical  
8393 = Tones|Ringtones|African|Afro House  
8394 = Tones|Ringtones|African|Afro Soul  
8395 = Tones|Ringtones|African|Afrobeats  
8396 = Tones|Ringtones|African|Benga  
8397 = Tones|Ringtones|African|Bongo-Flava  
8398 = Tones|Ringtones|African|Coupe-Decale  
8399 = Tones|Ringtones|African|Gqom  
8400 = Tones|Ringtones|African|Highlife  
8401 = Tones|Ringtones|African|Kuduro  
8402 = Tones|Ringtones|African|Kizomba  
8403 = Tones|Ringtones|African|Kwaito  
8404 = Tones|Ringtones|African|Mbalax  
8405 = Tones|Ringtones|African|Ndombolo  
8406 = Tones|Ringtones|African|Shangaan Electro  
8407 = Tones|Ringtones|African|Soukous  
8408 = Tones|Ringtones|African|Taarab  
8409 = Tones|Ringtones|African|Zouglou  
8410 = Tones|Ringtones|Turkish|Ozgun  
8411 = Tones|Ringtones|Turkish|Fantezi  
8412 = Tones|Ringtones|Turkish|Religious  
8413 = Tones|Ringtones|Pop|Turkish Pop  
8414 = Tones|Ringtones|Rock|Turkish Rock  
8415 = Tones|Ringtones|Alternative|Turkish Alternative

8416 = Tones|Ringtones|Hip-Hop/Rap|Turkish Hip-Hop/Rap  
8417 = Tones|Ringtones|African|Maskandi  
8418 = Tones|Ringtones|Russian|Russian Romance  
8419 = Tones|Ringtones|Russian|Russian Bard  
8420 = Tones|Ringtones|Russian|Russian Pop  
8421 = Tones|Ringtones|Russian|Russian Rock  
8422 = Tones|Ringtones|Russian|Russian Hip-Hop  
8423 = Tones|Ringtones|Arabic|Levant  
8424 = Tones|Ringtones|Arabic|Levant|Dabke  
8425 = Tones|Ringtones|Arabic|Maghreb Rai  
8426 = Tones|Ringtones|Arabic|Khaleeji|Khaleeji Jalsat  
8427 = Tones|Ringtones|Arabic|Khaleeji|Khaleeji Shailat  
8428 = Tones|Ringtones|Tarab  
8429 = Tones|Ringtones|Tarab|Iraqi Tarab  
8430 = Tones|Ringtones|Tarab|Egyptian Tarab  
8431 = Tones|Ringtones|Tarab|Khaleeji Tarab  
8432 = Tones|Ringtones|Pop|Levant Pop  
8433 = Tones|Ringtones|Pop|Iraqi Pop  
8434 = Tones|Ringtones|Pop|Egyptian Pop  
8435 = Tones|Ringtones|Pop|Maghreb Pop  
8436 = Tones|Ringtones|Pop|Khaleeji Pop  
8437 = Tones|Ringtones|Hip-Hop/Rap|Levant Hip-Hop  
8438 = Tones|Ringtones|Hip-Hop/Rap|Egyptian Hip-Hop  
8439 = Tones|Ringtones|Hip-Hop/Rap|Maghreb Hip-Hop  
8440 = Tones|Ringtones|Hip-Hop/Rap|Khaleeji Hip-Hop  
8441 = Tones|Ringtones|Alternative|Indie Levant  
8442 = Tones|Ringtones|Alternative|Indie Egyptian  
8443 = Tones|Ringtones|Alternative|Indie Maghreb  
8444 = Tones|Ringtones|Electronic|Levant Electronic  
8445 = Tones|Ringtones|Electronic|Electro-Cha'abi  
8446 = Tones|Ringtones|Electronic|Maghreb Electronic  
8447 = Tones|Ringtones|Folk|Iraqi Folk  
8448 = Tones|Ringtones|Folk|Khaleeji Folk  
8449 = Tones|Ringtones|Dance|Maghreb Dance  
9002 = Books|Nonfiction  
9003 = Books|Romance  
9004 = Books|Travel & Adventure  
9007 = Books|Arts & Entertainment  
9008 = Books|Biographies & Memoirs  
9009 = Books|Business & Personal Finance  
9010 = Books|Children & Teens  
9012 = Books|Humor  
9015 = Books|History  
9018 = Books|Religion & Spirituality  
9019 = Books|Science & Nature  
9020 = Books|Sci-Fi & Fantasy  
9024 = Books|Lifestyle & Home  
9025 = Books|Self-Development  
9026 = Books|Comics & Graphic Novels  
9027 = Books|Computers & Internet  
9028 = Books|Cookbooks, Food & Wine  
9029 = Books|Professional & Technical  
9030 = Books|Parenting  
9031 = Books|Fiction & Literature  
9032 = Books|Mysteries & Thrillers  
9033 = Books|Reference  
9034 = Books|Politics & Current Events  
9035 = Books|Sports & Outdoors  
10001 = Books|Lifestyle & Home|Antiques & Collectibles  
10002 = Books|Arts & Entertainment|Art & Architecture  
10003 = Books|Religion & Spirituality|Bibles  
10004 = Books|Self-Development|Spirituality  
10005 = Books|Business & Personal Finance|Industries & Professions  
10006 = Books|Business & Personal Finance|Marketing & Sales  
10007 = Books|Business & Personal Finance|Small Business & Entrepreneurship  
10008 = Books|Business & Personal Finance|Personal Finance  
10009 = Books|Business & Personal Finance|Reference  
10010 = Books|Business & Personal Finance|Careers  
10011 = Books|Business & Personal Finance|Economics  
10012 = Books|Business & Personal Finance|Investing  
10013 = Books|Business & Personal Finance|Finance  
10014 = Books|Business & Personal Finance|Management & Leadership  
10015 = Books|Comics & Graphic Novels|Graphic Novels  
10016 = Books|Comics & Graphic Novels|Manga  
10017 = Books|Computers & Internet|Computers

10018 = Books|Computers & Internet|Databases  
10019 = Books|Computers & Internet|Digital Media  
10020 = Books|Computers & Internet|Internet  
10021 = Books|Computers & Internet|Network  
10022 = Books|Computers & Internet|Operating Systems  
10023 = Books|Computers & Internet|Programming  
10024 = Books|Computers & Internet|Software  
10025 = Books|Computers & Internet|System Administration  
10026 = Books|Cookbooks, Food & Wine|Beverages  
10027 = Books|Cookbooks, Food & Wine|Courses & Dishes  
10028 = Books|Cookbooks, Food & Wine|Special Diet  
10029 = Books|Cookbooks, Food & Wine|Special Occasions  
10030 = Books|Cookbooks, Food & Wine|Methods  
10031 = Books|Cookbooks, Food & Wine|Reference  
10032 = Books|Cookbooks, Food & Wine|Regional & Ethnic  
10033 = Books|Cookbooks, Food & Wine|Specific Ingredients  
10034 = Books|Lifestyle & Home|Crafts & Hobbies  
10035 = Books|Professional & Technical|Design  
10036 = Books|Arts & Entertainment|Theater  
10037 = Books|Professional & Technical|Education  
10038 = Books|Nonfiction|Family & Relationships  
10039 = Books|Fiction & Literature|Action & Adventure  
10040 = Books|Fiction & Literature|African American  
10041 = Books|Fiction & Literature|Religious  
10042 = Books|Fiction & Literature|Classics  
10043 = Books|Fiction & Literature|Erotica  
10044 = Books|Sci-Fi & Fantasy|Fantasy  
10045 = Books|Fiction & Literature|Gay  
10046 = Books|Fiction & Literature|Ghost  
10047 = Books|Fiction & Literature|Historical  
10048 = Books|Fiction & Literature|Horror  
10049 = Books|Fiction & Literature|Literary  
10050 = Books|Mysteries & Thrillers|Hard-Boiled  
10051 = Books|Mysteries & Thrillers|Historical  
10052 = Books|Mysteries & Thrillers|Police Procedural  
10053 = Books|Mysteries & Thrillers|Short Stories  
10054 = Books|Mysteries & Thrillers|British Detectives  
10055 = Books|Mysteries & Thrillers|Women Sleuths  
10056 = Books|Romance|Erotic Romance  
10057 = Books|Romance|Contemporary  
10058 = Books|Romance|Paranormal  
10059 = Books|Romance|Historical  
10060 = Books|Romance|Short Stories  
10061 = Books|Romance|Suspense  
10062 = Books|Romance|Western  
10063 = Books|Sci-Fi & Fantasy|Science Fiction  
10064 = Books|Sci-Fi & Fantasy|Science Fiction & Literature  
10065 = Books|Fiction & Literature|Short Stories  
10066 = Books|Reference|Foreign Languages  
10067 = Books|Arts & Entertainment|Games  
10068 = Books|Lifestyle & Home|Gardening  
10069 = Books|Self-Development|Health & Fitness  
10070 = Books|History|Africa  
10071 = Books|History|Americas  
10072 = Books|History|Ancient  
10073 = Books|History|Asia  
10074 = Books|History|Australia & Oceania  
10075 = Books|History|Europe  
10076 = Books|History|Latin America  
10077 = Books|History|Middle East  
10078 = Books|History|Military  
10079 = Books|History|United States  
10080 = Books|History|World  
10081 = Books|Children & Teens|Children's Fiction  
10082 = Books|Children & Teens|Children's Nonfiction  
10083 = Books|Professional & Technical|Law  
10084 = Books|Fiction & Literature|Literary Criticism  
10085 = Books|Science & Nature|Mathematics  
10086 = Books|Professional & Technical|Medical  
10087 = Books|Arts & Entertainment|Music  
10088 = Books|Science & Nature|Nature  
10089 = Books|Arts & Entertainment|Performing Arts  
10090 = Books|Lifestyle & Home|Pets  
10091 = Books|Nonfiction|Philosophy  
10092 = Books|Arts & Entertainment|Photography

10093 = Books|Fiction & Literature|Poetry  
10094 = Books|Self-Development|Psychology  
10095 = Books|Reference|Almanacs & Yearbooks  
10096 = Books|Reference|Atlases & Maps  
10097 = Books|Reference|Catalogs & Directories  
10098 = Books|Reference|Consumer Guides  
10099 = Books|Reference|Dictionaries & Thesauruses  
10100 = Books|Reference|Encyclopedias  
10101 = Books|Reference|Etiquette  
10102 = Books|Reference|Quotations  
10103 = Books|Reference|Words & Language  
10104 = Books|Reference|Writing  
10105 = Books|Religion & Spirituality|Bible Studies  
10106 = Books|Religion & Spirituality|Buddhism  
10107 = Books|Religion & Spirituality|Christianity  
10108 = Books|Religion & Spirituality|Hinduism  
10109 = Books|Religion & Spirituality|Islam  
10110 = Books|Religion & Spirituality|Judaism  
10111 = Books|Science & Nature|Astronomy  
10112 = Books|Science & Nature|Chemistry  
10113 = Books|Science & Nature|Earth Sciences  
10114 = Books|Science & Nature|Essays  
10115 = Books|Science & Nature|History  
10116 = Books|Science & Nature|Life Sciences  
10117 = Books|Science & Nature|Physics  
10118 = Books|Science & Nature|Reference  
10119 = Books|Self-Development|Self-Improvement  
10120 = Books|Nonfiction|Social Science  
10121 = Books|Sports & Outdoors|Baseball  
10122 = Books|Sports & Outdoors|Basketball  
10123 = Books|Sports & Outdoors|Coaching  
10124 = Books|Sports & Outdoors|Extreme Sports  
10125 = Books|Sports & Outdoors|Football  
10126 = Books|Sports & Outdoors|Golf  
10127 = Books|Sports & Outdoors|Hockey  
10128 = Books|Sports & Outdoors|Mountaineering  
10129 = Books|Sports & Outdoors|Outdoors  
10130 = Books|Sports & Outdoors|Racket Sports  
10131 = Books|Sports & Outdoors|Reference  
10132 = Books|Sports & Outdoors|Soccer  
10133 = Books|Sports & Outdoors|Training  
10134 = Books|Sports & Outdoors|Water Sports  
10135 = Books|Sports & Outdoors|Winter Sports  
10136 = Books|Reference|Study Aids  
10137 = Books|Professional & Technical|Engineering  
10138 = Books|Nonfiction|Transportation  
10139 = Books|Travel & Adventure|Africa  
10140 = Books|Travel & Adventure|Asia  
10141 = Books|Travel & Adventure|Specialty Travel  
10142 = Books|Travel & Adventure|Canada  
10143 = Books|Travel & Adventure|Caribbean  
10144 = Books|Travel & Adventure|Latin America  
10145 = Books|Travel & Adventure|Essays & Memoirs  
10146 = Books|Travel & Adventure|Europe  
10147 = Books|Travel & Adventure|Middle East  
10148 = Books|Travel & Adventure|United States  
10149 = Books|Nonfiction|True Crime  
11001 = Books|Sci-Fi & Fantasy|Fantasy|Contemporary  
11002 = Books|Sci-Fi & Fantasy|Fantasy|Epic  
11003 = Books|Sci-Fi & Fantasy|Fantasy|Historical  
11004 = Books|Sci-Fi & Fantasy|Fantasy|Paranormal  
11005 = Books|Sci-Fi & Fantasy|Fantasy|Short Stories  
11006 = Books|Sci-Fi & Fantasy|Science Fiction & Literature|Adventure  
11007 = Books|Sci-Fi & Fantasy|Science Fiction & Literature|High Tech  
11008 = Books|Sci-Fi & Fantasy|Science Fiction & Literature|Short Stories  
11009 = Books|Professional & Technical|Education|Language Arts & Disciplines  
11010 = Books|Communications & Media  
11011 = Books|Communications & Media|Broadcasting  
11012 = Books|Communications & Media|Digital Media  
11013 = Books|Communications & Media|Journalism  
11014 = Books|Communications & Media|Photojournalism  
11015 = Books|Communications & Media|Print  
11016 = Books|Communications & Media|Speech  
11017 = Books|Communications & Media|Writing  
11018 = Books|Arts & Entertainment|Art & Architecture|Urban Planning

11019 = Books|Arts & Entertainment|Dance  
11020 = Books|Arts & Entertainment|Fashion  
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11024 = Books|Arts & Entertainment|Radio  
11025 = Books|Arts & Entertainment|TV  
11026 = Books|Arts & Entertainment|Visual Arts  
11027 = Books|Biographies & Memoirs|Arts & Entertainment  
11028 = Books|Biographies & Memoirs|Business  
11029 = Books|Biographies & Memoirs|Culinary  
11030 = Books|Biographies & Memoirs|Gay & Lesbian  
11031 = Books|Biographies & Memoirs|Historical  
11032 = Books|Biographies & Memoirs|Literary  
11033 = Books|Biographies & Memoirs|Media & Journalism  
11034 = Books|Biographies & Memoirs|Military  
11035 = Books|Biographies & Memoirs|Politics  
11036 = Books|Biographies & Memoirs|Religious  
11037 = Books|Biographies & Memoirs|Science & Technology  
11038 = Books|Biographies & Memoirs|Sports  
11039 = Books|Biographies & Memoirs|Women  
11040 = Books|Romance|New Adult  
11042 = Books|Romance|Romantic Comedy  
11043 = Books|Romance|Gay & Lesbian  
11044 = Books|Fiction & Literature|Essays  
11045 = Books|Fiction & Literature|Anthologies  
11046 = Books|Fiction & Literature|Comparative Literature  
11047 = Books|Fiction & Literature|Drama  
11049 = Books|Fiction & Literature|Fairy Tales, Myths & Fables  
11050 = Books|Fiction & Literature|Family  
11051 = Books|Comics & Graphic Novels|Manga|School Drama  
11052 = Books|Comics & Graphic Novels|Manga|Human Drama  
11053 = Books|Comics & Graphic Novels|Manga|Family Drama  
11054 = Books|Sports & Outdoors|Boxing  
11055 = Books|Sports & Outdoors|Cricket  
11056 = Books|Sports & Outdoors|Cycling  
11057 = Books|Sports & Outdoors|Equestrian  
11058 = Books|Sports & Outdoors|Martial Arts & Self Defense  
11059 = Books|Sports & Outdoors|Motor Sports  
11060 = Books|Sports & Outdoors|Rugby  
11061 = Books|Sports & Outdoors|Running  
11062 = Books|Self-Development|Diet & Nutrition  
11063 = Books|Science & Nature|Agriculture  
11064 = Books|Science & Nature|Atmosphere  
11065 = Books|Science & Nature|Biology  
11066 = Books|Science & Nature|Ecology  
11067 = Books|Science & Nature|Environment  
11068 = Books|Science & Nature|Geography  
11069 = Books|Science & Nature|Geology  
11070 = Books|Nonfiction|Social Science|Anthropology  
11071 = Books|Nonfiction|Social Science|Archaeology  
11072 = Books|Nonfiction|Social Science|Civics  
11073 = Books|Nonfiction|Social Science|Government  
11074 = Books|Nonfiction|Social Science|Social Studies  
11075 = Books|Nonfiction|Social Science|Social Welfare  
11076 = Books|Nonfiction|Social Science|Society  
11077 = Books|Nonfiction|Philosophy|Aesthetics  
11078 = Books|Nonfiction|Philosophy|Epistemology  
11079 = Books|Nonfiction|Philosophy|Ethics  
11080 = Books|Nonfiction|Philosophy|Language  
11081 = Books|Nonfiction|Philosophy|Logic  
11082 = Books|Nonfiction|Philosophy|Metaphysics  
11083 = Books|Nonfiction|Philosophy|Political  
11084 = Books|Nonfiction|Philosophy|Religion  
11085 = Books|Reference|Manuals  
11086 = Books|Kids  
11087 = Books|Kids|Animals  
11088 = Books|Kids|Basic Concepts  
11089 = Books|Kids|Basic Concepts|Alphabet  
11090 = Books|Kids|Basic Concepts|Body  
11091 = Books|Kids|Basic Concepts|Colors  
11092 = Books|Kids|Basic Concepts|Counting & Numbers  
11093 = Books|Kids|Basic Concepts|Date & Time  
11094 = Books|Kids|Basic Concepts|General  
11095 = Books|Kids|Basic Concepts|Money

11096 = Books|Kids|Basic Concepts|Opposites  
11097 = Books|Kids|Basic Concepts|Seasons  
11098 = Books|Kids|Basic Concepts|Senses & Sensation  
11099 = Books|Kids|Basic Concepts|Size & Shape  
11100 = Books|Kids|Basic Concepts|Sounds  
11101 = Books|Kids|Basic Concepts|Words  
11102 = Books|Kids|Biography  
11103 = Books|Kids|Careers & Occupations  
11104 = Books|Kids|Computers & Technology  
11105 = Books|Kids|Cooking & Food  
11106 = Books|Kids|Arts & Entertainment  
11107 = Books|Kids|Arts & Entertainment|Art  
11108 = Books|Kids|Arts & Entertainment|Crafts  
11109 = Books|Kids|Arts & Entertainment|Music  
11110 = Books|Kids|Arts & Entertainment|Performing Arts  
11111 = Books|Kids|Family  
11112 = Books|Kids|Fiction  
11113 = Books|Kids|Fiction|Action & Adventure  
11114 = Books|Kids|Fiction|Animals  
11115 = Books|Kids|Fiction|Classics  
11116 = Books|Kids|Fiction|Comics & Graphic Novels  
11117 = Books|Kids|Fiction|Culture, Places & People  
11118 = Books|Kids|Fiction|Family & Relationships  
11119 = Books|Kids|Fiction|Fantasy  
11120 = Books|Kids|Fiction|Fairy Tales, Myths & Fables  
11121 = Books|Kids|Fiction|Favorite Characters  
11122 = Books|Kids|Fiction|Historical  
11123 = Books|Kids|Fiction|Holidays & Celebrations  
11124 = Books|Kids|Fiction|Monsters & Ghosts  
11125 = Books|Kids|Fiction|Mysteries  
11126 = Books|Kids|Fiction|Nature  
11127 = Books|Kids|Fiction|Religion  
11128 = Books|Kids|Fiction|Sci-Fi  
11129 = Books|Kids|Fiction|Social Issues  
11130 = Books|Kids|Fiction|Sports & Recreation  
11131 = Books|Kids|Fiction|Transportation  
11132 = Books|Kids|Games & Activities  
11133 = Books|Kids|General Nonfiction  
11134 = Books|Kids|Health  
11135 = Books|Kids|History  
11136 = Books|Kids|Holidays & Celebrations  
11137 = Books|Kids|Holidays & Celebrations|Birthdays  
11138 = Books|Kids|Holidays & Celebrations|Christmas & Advent  
11139 = Books|Kids|Holidays & Celebrations|Easter & Lent  
11140 = Books|Kids|Holidays & Celebrations|General  
11141 = Books|Kids|Holidays & Celebrations|Halloween  
11142 = Books|Kids|Holidays & Celebrations|Hanukkah  
11143 = Books|Kids|Holidays & Celebrations|Other  
11144 = Books|Kids|Holidays & Celebrations|Passover  
11145 = Books|Kids|Holidays & Celebrations|Patriotic Holidays  
11146 = Books|Kids|Holidays & Celebrations|Ramadan  
11147 = Books|Kids|Holidays & Celebrations|Thanksgiving  
11148 = Books|Kids|Holidays & Celebrations|Valentine's Day  
11149 = Books|Kids|Humor  
11150 = Books|Kids|Humor|Jokes & Riddles  
11151 = Books|Kids|Poetry  
11152 = Books|Kids|Learning to Read  
11153 = Books|Kids|Learning to Read|Chapter Books  
11154 = Books|Kids|Learning to Read|Early Readers  
11155 = Books|Kids|Learning to Read|Intermediate Readers  
11156 = Books|Kids|Nursery Rhymes  
11157 = Books|Kids|Government  
11158 = Books|Kids|Reference  
11159 = Books|Kids|Religion  
11160 = Books|Kids|Science & Nature  
11161 = Books|Kids|Social Issues  
11162 = Books|Kids|Social Studies  
11163 = Books|Kids|Sports & Recreation  
11164 = Books|Kids|Transportation  
11165 = Books|Young Adult  
11166 = Books|Young Adult|Animals  
11167 = Books|Young Adult|Biography  
11168 = Books|Young Adult|Careers & Occupations  
11169 = Books|Young Adult|Computers & Technology  
11170 = Books|Young Adult|Cooking & Food

11171 = Books|Young Adult|Arts & Entertainment  
11172 = Books|Young Adult|Arts & Entertainment|Art  
11173 = Books|Young Adult|Arts & Entertainment|Crafts  
11174 = Books|Young Adult|Arts & Entertainment|Music  
11175 = Books|Young Adult|Arts & Entertainment|Performing Arts  
11176 = Books|Young Adult|Family  
11177 = Books|Young Adult|Fiction  
11178 = Books|Young Adult|Fiction|Action & Adventure  
11179 = Books|Young Adult|Fiction|Animals  
11180 = Books|Young Adult|Fiction|Classics  
11181 = Books|Young Adult|Fiction|Comics & Graphic Novels  
11182 = Books|Young Adult|Fiction|Culture, Places & People  
11183 = Books|Young Adult|Fiction|Dystopian  
11184 = Books|Young Adult|Fiction|Family & Relationships  
11185 = Books|Young Adult|Fiction|Fantasy  
11186 = Books|Young Adult|Fiction|Fairy Tales, Myths & Fables  
11187 = Books|Young Adult|Fiction|Favorite Characters  
11188 = Books|Young Adult|Fiction|Historical  
11189 = Books|Young Adult|Fiction|Holidays & Celebrations  
11190 = Books|Young Adult|Fiction|Horror, Monsters & Ghosts  
11191 = Books|Young Adult|Fiction|Crime & Mystery  
11192 = Books|Young Adult|Fiction|Nature  
11193 = Books|Young Adult|Fiction|Religion  
11194 = Books|Young Adult|Fiction|Romance  
11195 = Books|Young Adult|Fiction|Sci-Fi  
11196 = Books|Young Adult|Fiction|Coming of Age  
11197 = Books|Young Adult|Fiction|Sports & Recreation  
11198 = Books|Young Adult|Fiction|Transportation  
11199 = Books|Young Adult|Games & Activities  
11200 = Books|Young Adult|General Nonfiction  
11201 = Books|Young Adult|Health  
11202 = Books|Young Adult|History  
11203 = Books|Young Adult|Holidays & Celebrations  
11204 = Books|Young Adult|Holidays & Celebrations|Birthdays  
11205 = Books|Young Adult|Holidays & Celebrations|Christmas & Advent  
11206 = Books|Young Adult|Holidays & Celebrations|Easter & Lent  
11207 = Books|Young Adult|Holidays & Celebrations|General  
11208 = Books|Young Adult|Holidays & Celebrations|Halloween  
11209 = Books|Young Adult|Holidays & Celebrations|Hanukkah  
11210 = Books|Young Adult|Holidays & Celebrations|Other  
11211 = Books|Young Adult|Holidays & Celebrations|Passover  
11212 = Books|Young Adult|Holidays & Celebrations|Patriotic Holidays  
11213 = Books|Young Adult|Holidays & Celebrations|Ramadan  
11214 = Books|Young Adult|Holidays & Celebrations|Thanksgiving  
11215 = Books|Young Adult|Holidays & Celebrations|Valentine's Day  
11216 = Books|Young Adult|Humor  
11217 = Books|Young Adult|Humor|Jokes & Riddles  
11218 = Books|Young Adult|Poetry  
11219 = Books|Young Adult|Politics & Government  
11220 = Books|Young Adult|Reference  
11221 = Books|Young Adult|Religion  
11222 = Books|Young Adult|Science & Nature  
11223 = Books|Young Adult|Coming of Age  
11224 = Books|Young Adult|Social Studies  
11225 = Books|Young Adult|Sports & Recreation  
11226 = Books|Young Adult|Transportation  
11227 = Books|Communications & Media  
11228 = Books|Military & Warfare  
11229 = Books|Romance|Inspirational  
11231 = Books|Romance|Holiday  
11232 = Books|Romance|Wholesome  
11233 = Books|Romance|Military  
11234 = Books|Arts & Entertainment|Art History  
11236 = Books|Arts & Entertainment|Design  
11243 = Books|Business & Personal Finance|Accounting  
11244 = Books|Business & Personal Finance|Hospitality  
11245 = Books|Business & Personal Finance|Real Estate  
11246 = Books|Humor|Jokes & Riddles  
11247 = Books|Religion & Spirituality|Comparative Religion  
11255 = Books|Cookbooks, Food & Wine|Culinary Arts  
11259 = Books|Mysteries & Thrillers|Cozy  
11260 = Books|Politics & Current Events|Current Events  
11261 = Books|Politics & Current Events|Foreign Policy & International Relations  
11262 = Books|Politics & Current Events|Local Government  
11263 = Books|Politics & Current Events|National Government

11264 = Books|Politics & Current Events|Political Science  
11265 = Books|Politics & Current Events|Public Administration  
11266 = Books|Politics & Current Events|World Affairs  
11273 = Books|Nonfiction|Family & Relationships|Family & Childcare  
11274 = Books|Nonfiction|Family & Relationships|Love & Romance  
11275 = Books|Sci-Fi & Fantasy|Fantasy|Urban  
11276 = Books|Reference|Foreign Languages|Arabic  
11277 = Books|Reference|Foreign Languages|Bilingual Editions  
11278 = Books|Reference|Foreign Languages|African Languages  
11279 = Books|Reference|Foreign Languages|Ancient Languages  
11280 = Books|Reference|Foreign Languages|Chinese  
11281 = Books|Reference|Foreign Languages|English  
11282 = Books|Reference|Foreign Languages|French  
11283 = Books|Reference|Foreign Languages|German  
11284 = Books|Reference|Foreign Languages|Hebrew  
11285 = Books|Reference|Foreign Languages|Hindi  
11286 = Books|Reference|Foreign Languages|Italian  
11287 = Books|Reference|Foreign Languages|Japanese  
11288 = Books|Reference|Foreign Languages|Korean  
11289 = Books|Reference|Foreign Languages|Linguistics  
11290 = Books|Reference|Foreign Languages|Other Languages  
11291 = Books|Reference|Foreign Languages|Portuguese  
11292 = Books|Reference|Foreign Languages|Russian  
11293 = Books|Reference|Foreign Languages|Spanish  
11294 = Books|Reference|Foreign Languages|Speech Pathology  
11295 = Books|Science & Nature|Mathematics|Advanced Mathematics  
11296 = Books|Science & Nature|Mathematics|Algebra  
11297 = Books|Science & Nature|Mathematics|Arithmetic  
11298 = Books|Science & Nature|Mathematics|Calculus  
11299 = Books|Science & Nature|Mathematics|Geometry  
11300 = Books|Science & Nature|Mathematics|Statistics  
11301 = Books|Professional & Technical|Medical|Veterinary  
11302 = Books|Professional & Technical|Medical|Neuroscience  
11303 = Books|Professional & Technical|Medical|Immunology  
11304 = Books|Professional & Technical|Medical|Nursing  
11305 = Books|Professional & Technical|Medical|Pharmacology & Toxicology  
11306 = Books|Professional & Technical|Medical|Anatomy & Physiology  
11307 = Books|Professional & Technical|Medical|Dentistry  
11308 = Books|Professional & Technical|Medical|Emergency Medicine  
11309 = Books|Professional & Technical|Medical|Genetics  
11310 = Books|Professional & Technical|Medical|Psychiatry  
11311 = Books|Professional & Technical|Medical|Radiology  
11312 = Books|Professional & Technical|Medical|Alternative Medicine  
11317 = Books|Nonfiction|Philosophy|Political Philosophy  
11319 = Books|Nonfiction|Philosophy|Philosophy of Language  
11320 = Books|Nonfiction|Philosophy|Philosophy of Religion  
11327 = Books|Nonfiction|Social Science|Sociology  
11329 = Books|Professional & Technical|Engineering|Aeronautics  
11330 = Books|Professional & Technical|Engineering|Chemical & Petroleum Engineering  
11331 = Books|Professional & Technical|Engineering|Civil Engineering  
11332 = Books|Professional & Technical|Engineering|Computer Science  
11333 = Books|Professional & Technical|Engineering|Electrical Engineering  
11334 = Books|Professional & Technical|Engineering|Environmental Engineering  
11335 = Books|Professional & Technical|Engineering|Mechanical Engineering  
11336 = Books|Professional & Technical|Engineering|Power Resources  
11337 = Books|Comics & Graphic Novels|Manga|Boys  
11338 = Books|Comics & Graphic Novels|Manga|Men  
11339 = Books|Comics & Graphic Novels|Manga|Girls  
11340 = Books|Comics & Graphic Novels|Manga|Women  
11341 = Books|Comics & Graphic Novels|Manga|Other  
11342 = Books|Comics & Graphic Novels|Manga|Yaoi  
11343 = Books|Comics & Graphic Novels|Manga|Comic Essays  
12001 = Mac App Store|Business  
12002 = Mac App Store|Developer Tools  
12003 = Mac App Store|Education  
12004 = Mac App Store|Entertainment  
12005 = Mac App Store|Finance  
12006 = Mac App Store|Games  
12007 = Mac App Store|Health & Fitness  
12008 = Mac App Store|Lifestyle  
12010 = Mac App Store|Medical  
12011 = Mac App Store|Music  
12012 = Mac App Store|News  
12013 = Mac App Store|Photography  
12014 = Mac App Store|Productivity

12015 = Mac App Store|Reference  
12016 = Mac App Store|Social Networking  
12017 = Mac App Store|Sports  
12018 = Mac App Store|Travel  
12019 = Mac App Store|Utilities  
12020 = Mac App Store|Video  
12021 = Mac App Store|Weather  
12022 = Mac App Store|Graphics & Design  
12201 = Mac App Store|Games>Action  
12202 = Mac App Store|Games|Adventure  
12203 = Mac App Store|Games|Casual  
12204 = Mac App Store|Games|Board  
12205 = Mac App Store|Games|Card  
12206 = Mac App Store|Games|Casino  
12207 = Mac App Store|Games|Dice  
12208 = Mac App Store|Games|Educational  
12209 = Mac App Store|Games|Family  
12210 = Mac App Store|Games|Kids  
12211 = Mac App Store|Games|Music  
12212 = Mac App Store|Games|Puzzle  
12213 = Mac App Store|Games|Racing  
12214 = Mac App Store|Games|Role Playing  
12215 = Mac App Store|Games|Simulation  
12216 = Mac App Store|Games|Sports  
12217 = Mac App Store|Games|Strategy  
12218 = Mac App Store|Games|Trivia  
12219 = Mac App Store|Games|Word  
13001 = App Store|Magazines & Newspapers|News & Politics  
13002 = App Store|Magazines & Newspapers|Fashion & Style  
13003 = App Store|Magazines & Newspapers|Home & Garden  
13004 = App Store|Magazines & Newspapers|Outdoors & Nature  
13005 = App Store|Magazines & Newspapers|Sports & Leisure  
13006 = App Store|Magazines & Newspapers|Automotive  
13007 = App Store|Magazines & Newspapers|Arts & Photography  
13008 = App Store|Magazines & Newspapers|Brides & Weddings  
13009 = App Store|Magazines & Newspapers|Business & Investing  
13010 = App Store|Magazines & Newspapers|Children's Magazines  
13011 = App Store|Magazines & Newspapers|Computers & Internet  
13012 = App Store|Magazines & Newspapers|Cooking, Food & Drink  
13013 = App Store|Magazines & Newspapers|Crafts & Hobbies  
13014 = App Store|Magazines & Newspapers|Electronics & Audio  
13015 = App Store|Magazines & Newspapers|Entertainment  
13017 = App Store|Magazines & Newspapers|Health, Mind & Body  
13018 = App Store|Magazines & Newspapers|History  
13019 = App Store|Magazines & Newspapers|Literary Magazines & Journals  
13020 = App Store|Magazines & Newspapers|Men's Interest  
13021 = App Store|Magazines & Newspapers|Movies & Music  
13023 = App Store|Magazines & Newspapers|Parenting & Family  
13024 = App Store|Magazines & Newspapers|Pets  
13025 = App Store|Magazines & Newspapers|Professional & Trade  
13026 = App Store|Magazines & Newspapers|Regional News  
13027 = App Store|Magazines & Newspapers|Science  
13028 = App Store|Magazines & Newspapers|Teens  
13029 = App Store|Magazines & Newspapers|Travel & Regional  
13030 = App Store|Magazines & Newspapers|Women's Interest  
15000 = Textbooks|Arts & Entertainment  
15001 = Textbooks|Arts & Entertainment|Art & Architecture  
15002 = Textbooks|Arts & Entertainment|Art & Architecture|Urban Planning  
15003 = Textbooks|Arts & Entertainment|Art History  
15004 = Textbooks|Arts & Entertainment|Dance  
15005 = Textbooks|Arts & Entertainment|Design  
15006 = Textbooks|Arts & Entertainment|Fashion  
15007 = Textbooks|Arts & Entertainment|Film  
15008 = Textbooks|Arts & Entertainment|Games  
15009 = Textbooks|Arts & Entertainment|Interior Design  
15010 = Textbooks|Arts & Entertainment|Media Arts  
15011 = Textbooks|Arts & Entertainment|Music  
15012 = Textbooks|Arts & Entertainment|Performing Arts  
15013 = Textbooks|Arts & Entertainment|Photography  
15014 = Textbooks|Arts & Entertainment|Theater  
15015 = Textbooks|Arts & Entertainment|TV  
15016 = Textbooks|Arts & Entertainment|Visual Arts  
15017 = Textbooks|Biographies & Memoirs  
15018 = Textbooks|Business & Personal Finance  
15019 = Textbooks|Business & Personal Finance|Accounting

15020 = Textbooks|Business & Personal Finance|Careers  
15021 = Textbooks|Business & Personal Finance|Economics  
15022 = Textbooks|Business & Personal Finance|Finance  
15023 = Textbooks|Business & Personal Finance|Hospitality  
15024 = Textbooks|Business & Personal Finance|Industries & Professions  
15025 = Textbooks|Business & Personal Finance|Investing  
15026 = Textbooks|Business & Personal Finance|Management & Leadership  
15027 = Textbooks|Business & Personal Finance|Marketing & Sales  
15028 = Textbooks|Business & Personal Finance|Personal Finance  
15029 = Textbooks|Business & Personal Finance|Real Estate  
15030 = Textbooks|Business & Personal Finance|Reference  
15031 = Textbooks|Business & Personal Finance|Small Business & Entrepreneurship  
15032 = Textbooks|Children & Teens  
15033 = Textbooks|Children & Teens|Fiction  
15034 = Textbooks|Children & Teens|Nonfiction  
15035 = Textbooks|Comics & Graphic Novels  
15036 = Textbooks|Comics & Graphic Novels|Graphic Novels  
15037 = Textbooks|Comics & Graphic Novels|Manga  
15038 = Textbooks|Communications & Media  
15039 = Textbooks|Communications & Media|Broadcasting  
15040 = Textbooks|Communications & Media|Digital Media  
15041 = Textbooks|Communications & Media|Journalism  
15042 = Textbooks|Communications & Media|Photojournalism  
15043 = Textbooks|Communications & Media|Print  
15044 = Textbooks|Communications & Media|Speech  
15045 = Textbooks|Communications & Media|Writing  
15046 = Textbooks|Computers & Internet  
15047 = Textbooks|Computers & Internet|Computers  
15048 = Textbooks|Computers & Internet|Databases  
15049 = Textbooks|Computers & Internet|Digital Media  
15050 = Textbooks|Computers & Internet|Internet  
15051 = Textbooks|Computers & Internet|Network  
15052 = Textbooks|Computers & Internet|Operating Systems  
15053 = Textbooks|Computers & Internet|Programming  
15054 = Textbooks|Computers & Internet|Software  
15055 = Textbooks|Computers & Internet|System Administration  
15056 = Textbooks|Cookbooks, Food & Wine  
15057 = Textbooks|Cookbooks, Food & Wine|Beverages  
15058 = Textbooks|Cookbooks, Food & Wine|Courses & Dishes  
15059 = Textbooks|Cookbooks, Food & Wine|Culinary Arts  
15060 = Textbooks|Cookbooks, Food & Wine|Methods  
15061 = Textbooks|Cookbooks, Food & Wine|Reference  
15062 = Textbooks|Cookbooks, Food & Wine|Regional & Ethnic  
15063 = Textbooks|Cookbooks, Food & Wine|Special Diet  
15064 = Textbooks|Cookbooks, Food & Wine|Special Occasions  
15065 = Textbooks|Cookbooks, Food & Wine|Specific Ingredients  
15066 = Textbooks|Engineering  
15067 = Textbooks|Engineering|Aeronautics  
15068 = Textbooks|Engineering|Chemical & Petroleum Engineering  
15069 = Textbooks|Engineering|Civil Engineering  
15070 = Textbooks|Engineering|Computer Science  
15071 = Textbooks|Engineering|Electrical Engineering  
15072 = Textbooks|Engineering|Environmental Engineering  
15073 = Textbooks|Engineering|Mechanical Engineering  
15074 = Textbooks|Engineering|Power Resources  
15075 = Textbooks|Fiction & Literature  
15076 = Textbooks|Fiction & Literature|Latino  
15077 = Textbooks|Fiction & Literature|Action & Adventure  
15078 = Textbooks|Fiction & Literature|African American  
15079 = Textbooks|Fiction & Literature|Anthologies  
15080 = Textbooks|Fiction & Literature|Classics  
15081 = Textbooks|Fiction & Literature|Comparative Literature  
15082 = Textbooks|Fiction & Literature|Erotica  
15083 = Textbooks|Fiction & Literature|Gay  
15084 = Textbooks|Fiction & Literature|Ghost  
15085 = Textbooks|Fiction & Literature|Historical  
15086 = Textbooks|Fiction & Literature|Horror  
15087 = Textbooks|Fiction & Literature|Literary  
15088 = Textbooks|Fiction & Literature|Literary Criticism  
15089 = Textbooks|Fiction & Literature|Poetry  
15090 = Textbooks|Fiction & Literature|Religious  
15091 = Textbooks|Fiction & Literature|Short Stories  
15092 = Textbooks|Health, Mind & Body  
15093 = Textbooks|Health, Mind & Body|Fitness  
15094 = Textbooks|Health, Mind & Body|Self-Improvement

15095 = Textbooks|History  
15096 = Textbooks|History|Africa  
15097 = Textbooks|History|Americas  
15098 = Textbooks|History|Americas|Canada  
15099 = Textbooks|History|Americas|Latin America  
15100 = Textbooks|History|Americas|United States  
15101 = Textbooks|History|Ancient  
15102 = Textbooks|History|Asia  
15103 = Textbooks|History|Australia & Oceania  
15104 = Textbooks|History|Europe  
15105 = Textbooks|History|Middle East  
15106 = Textbooks|History|Military  
15107 = Textbooks|History|World  
15108 = Textbooks|Humor  
15109 = Textbooks|Language Studies  
15110 = Textbooks|Language Studies|African Languages  
15111 = Textbooks|Language Studies|Ancient Languages  
15112 = Textbooks|Language Studies|Arabic  
15113 = Textbooks|Language Studies|Bilingual Editions  
15114 = Textbooks|Language Studies|Chinese  
15115 = Textbooks|Language Studies|English  
15116 = Textbooks|Language Studies|French  
15117 = Textbooks|Language Studies|German  
15118 = Textbooks|Language Studies|Hebrew  
15119 = Textbooks|Language Studies|Hindi  
15120 = Textbooks|Language Studies|Indigenous Languages  
15121 = Textbooks|Language Studies|Italian  
15122 = Textbooks|Language Studies|Japanese  
15123 = Textbooks|Language Studies|Korean  
15124 = Textbooks|Language Studies|Linguistics  
15125 = Textbooks|Language Studies|Other Language  
15126 = Textbooks|Language Studies|Portuguese  
15127 = Textbooks|Language Studies|Russian  
15128 = Textbooks|Language Studies|Spanish  
15129 = Textbooks|Language Studies|Speech Pathology  
15130 = Textbooks|Lifestyle & Home  
15131 = Textbooks|Lifestyle & Home|Antiques & Collectibles  
15132 = Textbooks|Lifestyle & Home|Crafts & Hobbies  
15133 = Textbooks|Lifestyle & Home|Gardening  
15134 = Textbooks|Lifestyle & Home|Pets  
15135 = Textbooks|Mathematics  
15136 = Textbooks|Mathematics|Advanced Mathematics  
15137 = Textbooks|Mathematics|Algebra  
15138 = Textbooks|Mathematics|Arithmetic  
15139 = Textbooks|Mathematics|Calculus  
15140 = Textbooks|Mathematics|Geometry  
15141 = Textbooks|Mathematics|Statistics  
15142 = Textbooks|Medicine  
15143 = Textbooks|Medicine|Anatomy & Physiology  
15144 = Textbooks|Medicine|Dentistry  
15145 = Textbooks|Medicine|Emergency Medicine  
15146 = Textbooks|Medicine|Genetics  
15147 = Textbooks|Medicine|Immunology  
15148 = Textbooks|Medicine|Neuroscience  
15149 = Textbooks|Medicine|Nursing  
15150 = Textbooks|Medicine|Pharmacology & Toxicology  
15151 = Textbooks|Medicine|Psychiatry  
15152 = Textbooks|Medicine|Psychology  
15153 = Textbooks|Medicine|Radiology  
15154 = Textbooks|Medicine|Veterinary  
15155 = Textbooks|Mysteries & Thrillers  
15156 = Textbooks|Mysteries & Thrillers|British Detectives  
15157 = Textbooks|Mysteries & Thrillers|Hard-Boiled  
15158 = Textbooks|Mysteries & Thrillers|Historical  
15159 = Textbooks|Mysteries & Thrillers|Police Procedural  
15160 = Textbooks|Mysteries & Thrillers|Short Stories  
15161 = Textbooks|Mysteries & Thrillers|Women Sleuths  
15162 = Textbooks|Nonfiction  
15163 = Textbooks|Nonfiction|Family & Relationships  
15164 = Textbooks|Nonfiction|Transportation  
15165 = Textbooks|Nonfiction|True Crime  
15166 = Textbooks|Parenting  
15167 = Textbooks|Philosophy  
15168 = Textbooks|Philosophy|Aesthetics  
15169 = Textbooks|Philosophy|Epistemology

15170 = Textbooks|Philosophy|Ethics  
15171 = Textbooks|Philosophy|Philosophy of Language  
15172 = Textbooks|Philosophy|Logic  
15173 = Textbooks|Philosophy|Metaphysics  
15174 = Textbooks|Philosophy|Political Philosophy  
15175 = Textbooks|Philosophy|Philosophy of Religion  
15176 = Textbooks|Politics & Current Events  
15177 = Textbooks|Politics & Current Events|Current Events  
15178 = Textbooks|Politics & Current Events|Foreign Policy & International Relations  
15179 = Textbooks|Politics & Current Events|Local Governments  
15180 = Textbooks|Politics & Current Events|National Governments  
15181 = Textbooks|Politics & Current Events|Political Science  
15182 = Textbooks|Politics & Current Events|Public Administration  
15183 = Textbooks|Politics & Current Events|World Affairs  
15184 = Textbooks|Professional & Technical  
15185 = Textbooks|Professional & Technical|Design  
15186 = Textbooks|Professional & Technical|Language Arts & Disciplines  
15187 = Textbooks|Professional & Technical|Engineering  
15188 = Textbooks|Professional & Technical|Law  
15189 = Textbooks|Professional & Technical|Medical  
15190 = Textbooks|Reference  
15191 = Textbooks|Reference|Almanacs & Yearbooks  
15192 = Textbooks|Reference|Atlases & Maps  
15193 = Textbooks|Reference|Catalogs & Directories  
15194 = Textbooks|Reference|Consumer Guides  
15195 = Textbooks|Reference|Dictionaries & Thesauruses  
15196 = Textbooks|Reference|Encyclopedias  
15197 = Textbooks|Reference|Etiquette  
15198 = Textbooks|Reference|Quotations  
15199 = Textbooks|Reference|Study Aids  
15200 = Textbooks|Reference|Words & Language  
15201 = Textbooks|Reference|Writing  
15202 = Textbooks|Religion & Spirituality  
15203 = Textbooks|Religion & Spirituality|Bible Studies  
15204 = Textbooks|Religion & Spirituality|Bibles  
15205 = Textbooks|Religion & Spirituality|Buddhism  
15206 = Textbooks|Religion & Spirituality|Christianity  
15207 = Textbooks|Religion & Spirituality|Comparative Religion  
15208 = Textbooks|Religion & Spirituality|Hinduism  
15209 = Textbooks|Religion & Spirituality|Islam  
15210 = Textbooks|Religion & Spirituality|Judaism  
15211 = Textbooks|Religion & Spirituality|Spirituality  
15212 = Textbooks|Romance  
15213 = Textbooks|Romance|Contemporary  
15214 = Textbooks|Romance|Erotic Romance  
15215 = Textbooks|Romance|Paranormal  
15216 = Textbooks|Romance|Historical  
15217 = Textbooks|Romance|Short Stories  
15218 = Textbooks|Romance|Suspense  
15219 = Textbooks|Romance|Western  
15220 = Textbooks|Sci-Fi & Fantasy  
15221 = Textbooks|Sci-Fi & Fantasy|Fantasy  
15222 = Textbooks|Sci-Fi & Fantasy|Fantasy|Contemporary  
15223 = Textbooks|Sci-Fi & Fantasy|Fantasy|Epic  
15224 = Textbooks|Sci-Fi & Fantasy|Fantasy|Historical  
15225 = Textbooks|Sci-Fi & Fantasy|Fantasy|Paranormal  
15226 = Textbooks|Sci-Fi & Fantasy|Fantasy|Short Stories  
15227 = Textbooks|Sci-Fi & Fantasy|Science Fiction  
15228 = Textbooks|Sci-Fi & Fantasy|Science Fiction & Literature  
15229 = Textbooks|Sci-Fi & Fantasy|Science Fiction & Literature|Adventure  
15230 = Textbooks|Sci-Fi & Fantasy|Science Fiction & Literature|High Tech  
15231 = Textbooks|Sci-Fi & Fantasy|Science Fiction & Literature|Short Stories  
15232 = Textbooks|Science & Nature  
15233 = Textbooks|Science & Nature|Agriculture  
15234 = Textbooks|Science & Nature|Astronomy  
15235 = Textbooks|Science & Nature|Atmosphere  
15236 = Textbooks|Science & Nature|Biology  
15237 = Textbooks|Science & Nature|Chemistry  
15238 = Textbooks|Science & Nature|Earth Sciences  
15239 = Textbooks|Science & Nature|Ecology  
15240 = Textbooks|Science & Nature|Environment  
15241 = Textbooks|Science & Nature|Essays  
15242 = Textbooks|Science & Nature|Geography  
15243 = Textbooks|Science & Nature|Geology  
15244 = Textbooks|Science & Nature|History

15245 = Textbooks|Science & Nature|Life Sciences  
15246 = Textbooks|Science & Nature|Nature  
15247 = Textbooks|Science & Nature|Physics  
15248 = Textbooks|Science & Nature|Reference  
15249 = Textbooks|Social Science  
15250 = Textbooks|Social Science|Anthropology  
15251 = Textbooks|Social Science|Archaeology  
15252 = Textbooks|Social Science|Civics  
15253 = Textbooks|Social Science|Government  
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15255 = Textbooks|Social Science|Social Welfare  
15256 = Textbooks|Social Science|Society  
15257 = Textbooks|Social Science|Society|African Studies  
15258 = Textbooks|Social Science|Society|American Studies  
15259 = Textbooks|Social Science|Society|Asia Pacific Studies  
15260 = Textbooks|Social Science|Society|Cross-Cultural Studies  
15261 = Textbooks|Social Science|Society|European Studies  
15262 = Textbooks|Social Science|Society|Immigration & Emigration  
15263 = Textbooks|Social Science|Society|Indigenous Studies  
15264 = Textbooks|Social Science|Society|Latin & Caribbean Studies  
15265 = Textbooks|Social Science|Society|Middle Eastern Studies  
15266 = Textbooks|Social Science|Society|Race & Ethnicity Studies  
15267 = Textbooks|Social Science|Society|Sexuality Studies  
15268 = Textbooks|Social Science|Society|Women's Studies  
15269 = Textbooks|Social Science|Sociology  
15270 = Textbooks|Sports & Outdoors  
15271 = Textbooks|Sports & Outdoors|Baseball  
15272 = Textbooks|Sports & Outdoors|Basketball  
15273 = Textbooks|Sports & Outdoors|Coaching  
15274 = Textbooks|Sports & Outdoors|Equestrian  
15275 = Textbooks|Sports & Outdoors|Extreme Sports  
15276 = Textbooks|Sports & Outdoors|Football  
15277 = Textbooks|Sports & Outdoors|Golf  
15278 = Textbooks|Sports & Outdoors|Hockey  
15279 = Textbooks|Sports & Outdoors|Motor Sports  
15280 = Textbooks|Sports & Outdoors|Mountaineering  
15281 = Textbooks|Sports & Outdoors|Outdoors  
15282 = Textbooks|Sports & Outdoors|Racket Sports  
15283 = Textbooks|Sports & Outdoors|Reference  
15284 = Textbooks|Sports & Outdoors|Soccer  
15285 = Textbooks|Sports & Outdoors|Training  
15286 = Textbooks|Sports & Outdoors|Water Sports  
15287 = Textbooks|Sports & Outdoors|Winter Sports  
15288 = Textbooks|Teaching & Learning  
15289 = Textbooks|Teaching & Learning|Adult Education  
15290 = Textbooks|Teaching & Learning|Curriculum & Teaching  
15291 = Textbooks|Teaching & Learning|Educational Leadership  
15292 = Textbooks|Teaching & Learning|Educational Technology  
15293 = Textbooks|Teaching & Learning|Family & Childcare  
15294 = Textbooks|Teaching & Learning|Information & Library Science  
15295 = Textbooks|Teaching & Learning|Learning Resources  
15296 = Textbooks|Teaching & Learning|Psychology & Research  
15297 = Textbooks|Teaching & Learning|Special Education  
15298 = Textbooks|Travel & Adventure  
15299 = Textbooks|Travel & Adventure|Africa  
15300 = Textbooks|Travel & Adventure|Americas  
15301 = Textbooks|Travel & Adventure|Americas|Canada  
15302 = Textbooks|Travel & Adventure|Americas|Latin America  
15303 = Textbooks|Travel & Adventure|Americas|United States  
15304 = Textbooks|Travel & Adventure|Asia  
15305 = Textbooks|Travel & Adventure|Caribbean  
15306 = Textbooks|Travel & Adventure|Essays & Memoirs  
15307 = Textbooks|Travel & Adventure|Europe  
15308 = Textbooks|Travel & Adventure|Middle East  
15309 = Textbooks|Travel & Adventure|Oceania  
15310 = Textbooks|Travel & Adventure|Specialty Travel  
15311 = Textbooks|Comics & Graphic Novels|Comics  
15312 = Textbooks|Reference|Manuals  
16001 = App Store|Stickers|Emoji & Expressions  
16003 = App Store|Stickers|Animals & Nature  
16005 = App Store|Stickers|Art  
16006 = App Store|Stickers|Celebrations  
16007 = App Store|Stickers|Celebrities  
16008 = App Store|Stickers|Comics & Cartoons  
16009 = App Store|Stickers|Eating & Drinking

16010 = App Store|Stickers|Gaming  
16014 = App Store|Stickers|Movies & TV  
16015 = App Store|Stickers|Music  
16017 = App Store|Stickers|People  
16019 = App Store|Stickers|Places & Objects  
16021 = App Store|Stickers|Sports & Activities  
16025 = App Store|Stickers|Kids & Family  
16026 = App Store|Stickers|Fashion  
100000 = Music|Christian & Gospel  
100001 = Music|Classical|Art Song  
100002 = Music|Classical|Brass & Woodwinds  
100003 = Music|Classical|Solo Instrumental  
100004 = Music|Classical|Contemporary Era  
100005 = Music|Classical|Oratorio  
100006 = Music|Classical|Cantata  
100007 = Music|Classical|Electronic  
100008 = Music|Classical|Sacred  
100009 = Music|Classical|Guitar  
100010 = Music|Classical|Piano  
100011 = Music|Classical|Violin  
100012 = Music|Classical|Cello  
100013 = Music|Classical|Percussion  
100014 = Music|Electronic|Dubstep  
100015 = Music|Electronic|Bass  
100016 = Music|Hip-Hop/Rap|UK Hip-Hop  
100017 = Music|Reggae|Lovers Rock  
100018 = Music|Alternative|EMO  
100019 = Music|Alternative|Pop Punk  
100020 = Music|Alternative|Indie Pop  
100021 = Music|New Age|Yoga  
100022 = Music|Pop|Tribute  
100023 = Music|Pop|Shows  
100024 = Music|Cuban  
100025 = Music|Cuban|Mambo  
100026 = Music|Cuban|Chachacha  
100027 = Music|Cuban|Guajira  
100028 = Music|Cuban|Son  
100029 = Music|Cuban|Bolero  
100030 = Music|Cuban|Guaracha  
100031 = Music|Cuban|Timba  
100032 = Music|Soundtrack|Video Game  
100033 = Music|Indian|Regional Indian|Punjabi|Punjabi Pop  
100034 = Music|Indian|Regional Indian|Bengali|Rabindra Sangeet  
100035 = Music|Indian|Regional Indian|Malayalam  
100036 = Music|Indian|Regional Indian|Kannada  
100037 = Music|Indian|Regional Indian|Marathi  
100038 = Music|Indian|Regional Indian|Gujarati  
100039 = Music|Indian|Regional Indian|Assamese  
100040 = Music|Indian|Regional Indian|Bhojpuri  
100041 = Music|Indian|Regional Indian|Haryanvi  
100042 = Music|Indian|Regional Indian|Odia  
100043 = Music|Indian|Regional Indian|Rajasthani  
100044 = Music|Indian|Regional Indian|Urdu  
100045 = Music|Indian|Regional Indian|Punjabi  
100046 = Music|Indian|Regional Indian|Bengali  
100047 = Music|Indian|Indian Classical|Carnatic Classical  
100048 = Music|Indian|Indian Classical|Hindustani Classical  
100049 = Music|African|Afro House  
100050 = Music|African|Afro Soul  
100051 = Music|African|Afrobeats  
100052 = Music|African|Benga  
100053 = Music|African|Bongo-Flava  
100054 = Music|African|Coupe-Decale  
100055 = Music|African|Gqom  
100056 = Music|African|Highlife  
100057 = Music|African|Kuduro  
100058 = Music|African|Kizomba  
100059 = Music|African|Kwaito  
100060 = Music|African|Mbalax  
100061 = Music|African|Ndombolo  
100062 = Music|African|Shangaan Electro  
100063 = Music|African|Soukous  
100064 = Music|African|Taarab  
100065 = Music|African|Zouglou  
100066 = Music|Turkish|Ozgun

100067 = Music|Turkish|Fantezi  
100068 = Music|Turkish|Religious  
100069 = Music|Pop|Turkish Pop  
100070 = Music|Rock|Turkish Rock  
100071 = Music|Alternative|Turkish Alternative  
100072 = Music|Hip-Hop/Rap|Turkish Hip-Hop/Rap  
100073 = Music|African|Maskandi  
100074 = Music|Russian|Russian Romance  
100075 = Music|Russian|Russian Bard  
100076 = Music|Russian|Russian Pop  
100077 = Music|Russian|Russian Rock  
100078 = Music|Russian|Russian Hip-Hop  
100079 = Music|Arabic|Levant  
100080 = Music|Arabic|Levant|Dabke  
100081 = Music|Arabic|Maghreb Rai  
100082 = Music|Arabic|Khaleeji|Khaleeji Jalsat  
100083 = Music|Arabic|Khaleeji|Khaleeji Shailat  
100084 = Music|Tarab  
100085 = Music|Tarab|Iraqi Tarab  
100086 = Music|Tarab|Egyptian Tarab  
100087 = Music|Tarab|Khaleeji Tarab  
100088 = Music|Pop|Levant Pop  
100089 = Music|Pop|Iraqi Pop  
100090 = Music|Pop|Egyptian Pop  
100091 = Music|Pop|Maghreb Pop  
100092 = Music|Pop|Khaleeji Pop  
100093 = Music|Hip-Hop/Rap|Levant Hip-Hop  
100094 = Music|Hip-Hop/Rap|Egyptian Hip-Hop  
100095 = Music|Hip-Hop/Rap|Maghreb Hip-Hop  
100096 = Music|Hip-Hop/Rap|Khaleeji Hip-Hop  
100097 = Music|Alternative|Indie Levant  
100098 = Music|Alternative|Indie Egyptian  
100099 = Music|Alternative|Indie Maghreb  
100100 = Music|Electronic|Levant Electronic  
100101 = Music|Electronic|Electro-Cha'abi  
100102 = Music|Electronic|Maghreb Electronic  
100103 = Music|Folk|Iraqi Folk  
100104 = Music|Folk|Khaleeji Folk  
100105 = Music|Dance|Maghreb Dance  
40000000 = iTunes U  
40000001 = iTunes U|Business & Economics  
40000002 = iTunes U|Business & Economics|Economics  
40000003 = iTunes U|Business & Economics|Finance  
40000004 = iTunes U|Business & Economics|Hospitality  
40000005 = iTunes U|Business & Economics|Management  
40000006 = iTunes U|Business & Economics|Marketing  
40000007 = iTunes U|Business & Economics|Personal Finance  
40000008 = iTunes U|Business & Economics|Real Estate  
40000009 = iTunes U|Engineering  
40000010 = iTunes U|Engineering|Chemical & Petroleum Engineering  
40000011 = iTunes U|Engineering|Civil Engineering  
40000012 = iTunes U|Engineering|Computer Science  
40000013 = iTunes U|Engineering|Electrical Engineering  
40000014 = iTunes U|Engineering|Environmental Engineering  
40000015 = iTunes U|Engineering|Mechanical Engineering  
40000016 = iTunes U|Music, Art, & Design  
40000017 = iTunes U|Music, Art, & Design|Architecture  
40000019 = iTunes U|Music, Art, & Design|Art History  
40000020 = iTunes U|Music, Art, & Design|Dance  
40000021 = iTunes U|Music, Art, & Design|Film  
40000022 = iTunes U|Music, Art, & Design|Design  
40000023 = iTunes U|Music, Art, & Design|Interior Design  
40000024 = iTunes U|Music, Art, & Design|Music  
40000025 = iTunes U|Music, Art, & Design|Theater  
40000026 = iTunes U|Health & Medicine  
40000027 = iTunes U|Health & Medicine|Anatomy & Physiology  
40000028 = iTunes U|Health & Medicine|Behavioral Science  
40000029 = iTunes U|Health & Medicine|Dentistry  
40000030 = iTunes U|Health & Medicine|Diet & Nutrition  
40000031 = iTunes U|Health & Medicine|Emergency Medicine  
40000032 = iTunes U|Health & Medicine|Genetics  
40000033 = iTunes U|Health & Medicine|Gerontology  
40000034 = iTunes U|Health & Medicine|Health & Exercise Science  
40000035 = iTunes U|Health & Medicine|Immunology  
40000036 = iTunes U|Health & Medicine|Neuroscience

40000037 = iTunes U|Health & Medicine|Pharmacology & Toxicology  
40000038 = iTunes U|Health & Medicine|Psychiatry  
40000039 = iTunes U|Health & Medicine|Global Health  
40000040 = iTunes U|Health & Medicine|Radiology  
40000041 = iTunes U|History  
40000042 = iTunes U|History|Ancient History  
40000043 = iTunes U|History|Medieval History  
40000044 = iTunes U|History|Military History  
40000045 = iTunes U|History|Modern History  
40000046 = iTunes U|History|African History  
40000047 = iTunes U|History|Asia-Pacific History  
40000048 = iTunes U|History|European History  
40000049 = iTunes U|History|Middle Eastern History  
40000050 = iTunes U|History|North American History  
40000051 = iTunes U|History|South American History  
40000053 = iTunes U|Communications & Journalism  
40000054 = iTunes U|Philosophy  
40000055 = iTunes U|Religion & Spirituality  
40000056 = iTunes U|Languages  
40000057 = iTunes U|Languages|African Languages  
40000058 = iTunes U|Languages|Ancient Languages  
40000061 = iTunes U|Languages|English  
40000063 = iTunes U|Languages|French  
40000064 = iTunes U|Languages|German  
40000065 = iTunes U|Languages|Italian  
40000066 = iTunes U|Languages|Linguistics  
40000068 = iTunes U|Languages|Spanish  
40000069 = iTunes U|Languages|Speech Pathology  
40000070 = iTunes U|Writing & Literature  
40000071 = iTunes U|Writing & Literature|Anthologies  
40000072 = iTunes U|Writing & Literature|Biography  
40000073 = iTunes U|Writing & Literature|Classics  
40000074 = iTunes U|Writing & Literature|Literary Criticism  
40000075 = iTunes U|Writing & Literature|Fiction  
40000076 = iTunes U|Writing & Literature|Poetry  
40000077 = iTunes U|Mathematics  
40000078 = iTunes U|Mathematics|Advanced Mathematics  
40000079 = iTunes U|Mathematics|Algebra  
40000080 = iTunes U|Mathematics|Arithmetic  
40000081 = iTunes U|Mathematics|Calculus  
40000082 = iTunes U|Mathematics|Geometry  
40000083 = iTunes U|Mathematics|Statistics  
40000084 = iTunes U|Science  
40000085 = iTunes U|Science|Agricultural  
40000086 = iTunes U|Science|Astronomy  
40000087 = iTunes U|Science|Atmosphere  
40000088 = iTunes U|Science|Biology  
40000089 = iTunes U|Science|Chemistry  
40000090 = iTunes U|Science|Ecology  
40000091 = iTunes U|Science|Geography  
40000092 = iTunes U|Science|Geology  
40000093 = iTunes U|Science|Physics  
40000094 = iTunes U|Social Science  
40000095 = iTunes U|Law & Politics|Law  
40000096 = iTunes U|Law & Politics|Political Science  
40000097 = iTunes U|Law & Politics|Public Administration  
40000098 = iTunes U|Social Science|Psychology  
40000099 = iTunes U|Social Science|Social Welfare  
40000100 = iTunes U|Social Science|Sociology  
40000101 = iTunes U|Society  
40000103 = iTunes U|Society|Asia Pacific Studies  
40000104 = iTunes U|Society|European Studies  
40000105 = iTunes U|Society|Indigenous Studies  
40000106 = iTunes U|Society|Latin & Caribbean Studies  
40000107 = iTunes U|Society|Middle Eastern Studies  
40000108 = iTunes U|Society|Women's Studies  
40000109 = iTunes U|Teaching & Learning  
40000110 = iTunes U|Teaching & Learning|Curriculum & Teaching  
40000111 = iTunes U|Teaching & Learning|Educational Leadership  
40000112 = iTunes U|Teaching & Learning|Family & Childcare  
40000113 = iTunes U|Teaching & Learning|Learning Resources  
40000114 = iTunes U|Teaching & Learning|Psychology & Research  
40000115 = iTunes U|Teaching & Learning|Special Education  
40000116 = iTunes U|Music, Art, & Design|Culinary Arts  
40000117 = iTunes U|Music, Art, & Design|Fashion

40000118 = iTunes U|Music, Art, & Design|Media Arts  
40000119 = iTunes U|Music, Art, & Design|Photography  
40000120 = iTunes U|Music, Art, & Design|Visual Art  
40000121 = iTunes U|Business & Economics|Entrepreneurship  
40000122 = iTunes U|Communications & Journalism|Broadcasting  
40000123 = iTunes U|Communications & Journalism|Digital Media  
40000124 = iTunes U|Communications & Journalism|Journalism  
40000125 = iTunes U|Communications & Journalism|Photojournalism  
40000126 = iTunes U|Communications & Journalism|Print  
40000127 = iTunes U|Communications & Journalism|Speech  
40000128 = iTunes U|Communications & Journalism|Writing  
40000129 = iTunes U|Health & Medicine|Nursing  
40000130 = iTunes U|Languages|Arabic  
40000131 = iTunes U|Languages|Chinese  
40000132 = iTunes U|Languages|Hebrew  
40000133 = iTunes U|Languages|Hindi  
40000134 = iTunes U|Languages|Indigenous Languages  
40000135 = iTunes U|Languages|Japanese  
40000136 = iTunes U|Languages|Korean  
40000137 = iTunes U|Languages|Other Languages  
40000138 = iTunes U|Languages|Portuguese  
40000139 = iTunes U|Languages|Russian  
40000140 = iTunes U|Law & Politics  
40000141 = iTunes U|Law & Politics|Foreign Policy & International Relations  
40000142 = iTunes U|Law & Politics|Local Governments  
40000143 = iTunes U|Law & Politics|National Governments  
40000144 = iTunes U|Law & Politics|World Affairs  
40000145 = iTunes U|Writing & Literature|Comparative Literature  
40000146 = iTunes U|Philosophy|Aesthetics  
40000147 = iTunes U|Philosophy|Epistemology  
40000148 = iTunes U|Philosophy|Ethics  
40000149 = iTunes U|Philosophy|Metaphysics  
40000150 = iTunes U|Philosophy|Political Philosophy  
40000151 = iTunes U|Philosophy|Logic  
40000152 = iTunes U|Philosophy|Philosophy of Language  
40000153 = iTunes U|Philosophy|Philosophy of Religion  
40000154 = iTunes U|Social Science|Archaeology  
40000155 = iTunes U|Social Science|Anthropology  
40000156 = iTunes U|Religion & Spirituality|Buddhism  
40000157 = iTunes U|Religion & Spirituality|Christianity  
40000158 = iTunes U|Religion & Spirituality|Comparative Religion  
40000159 = iTunes U|Religion & Spirituality|Hinduism  
40000160 = iTunes U|Religion & Spirituality|Islam  
40000161 = iTunes U|Religion & Spirituality|Judaism  
40000162 = iTunes U|Religion & Spirituality|Other Religions  
40000163 = iTunes U|Religion & Spirituality|Spirituality  
40000164 = iTunes U|Science|Environment  
40000165 = iTunes U|Society|African Studies  
40000166 = iTunes U|Society|American Studies  
40000167 = iTunes U|Society|Cross-cultural Studies  
40000168 = iTunes U|Society|Immigration & Emigration  
40000169 = iTunes U|Society|Race & Ethnicity Studies  
40000170 = iTunes U|Society|Sexuality Studies  
40000171 = iTunes U|Teaching & Learning|Educational Technology  
40000172 = iTunes U|Teaching & Learning|Information/Library Science  
40000173 = iTunes U|Languages|Dutch  
40000174 = iTunes U|Languages|Luxembourgish  
40000175 = iTunes U|Languages|Swedish  
40000176 = iTunes U|Languages|Norwegian  
40000177 = iTunes U|Languages|Finnish  
40000178 = iTunes U|Languages|Danish  
40000179 = iTunes U|Languages|Polish  
40000180 = iTunes U|Languages|Turkish  
40000181 = iTunes U|Languages|Flemish  
50000024 = Audiobooks  
50000040 = Audiobooks|Fiction  
50000041 = Audiobooks|Arts & Entertainment  
50000042 = Audiobooks|Biographies & Memoirs  
50000043 = Audiobooks|Business & Personal Finance  
50000044 = Audiobooks|Kids & Young Adults  
50000045 = Audiobooks|Classics  
50000046 = Audiobooks|Comedy  
50000047 = Audiobooks|Drama & Poetry  
50000048 = Audiobooks|Speakers & Storytellers  
50000049 = Audiobooks|History

50000050 = Audiobooks|Languages  
 50000051 = Audiobooks|Mysteries & Thrillers  
 50000052 = Audiobooks|Nonfiction  
 50000053 = Audiobooks|Religion & Spirituality  
 50000054 = Audiobooks|Science & Nature  
 50000055 = Audiobooks|Sci Fi & Fantasy  
 50000056 = Audiobooks|Self-Development  
 50000057 = Audiobooks|Sports & Outdoors  
 50000058 = Audiobooks|Technology  
 50000059 = Audiobooks|Travel & Adventure  
 50000061 = Music|Spoken Word  
 50000063 = Music|Disney  
 50000064 = Music|French Pop  
 50000066 = Music|German Pop  
 50000068 = Music|German Folk  
 50000069 = Audiobooks|Romance  
 50000070 = Audiobooks|Audiobooks Latino  
 50000071 = Books|Comics & Graphic Novels|Manga|Action  
 50000072 = Books|Comics & Graphic Novels|Manga|Comedy  
 50000073 = Books|Comics & Graphic Novels|Manga|Erotica  
 50000074 = Books|Comics & Graphic Novels|Manga|Fantasy  
 50000075 = Books|Comics & Graphic Novels|Manga|Four Cell Manga  
 50000076 = Books|Comics & Graphic Novels|Manga|Gay & Lesbian  
 50000077 = Books|Comics & Graphic Novels|Manga|Hard-Boiled  
 50000078 = Books|Comics & Graphic Novels|Manga|Heroes  
 50000079 = Books|Comics & Graphic Novels|Manga|Historical Fiction  
 50000080 = Books|Comics & Graphic Novels|Manga|Mecha  
 50000081 = Books|Comics & Graphic Novels|Manga|Mystery  
 50000082 = Books|Comics & Graphic Novels|Manga|Nonfiction  
 50000083 = Books|Comics & Graphic Novels|Manga|Religious  
 50000084 = Books|Comics & Graphic Novels|Manga|Romance  
 50000085 = Books|Comics & Graphic Novels|Manga|Romantic Comedy  
 50000086 = Books|Comics & Graphic Novels|Manga|Science Fiction  
 50000087 = Books|Comics & Graphic Novels|Manga|Sports  
 50000088 = Books|Fiction & Literature|Light Novels  
 50000089 = Books|Comics & Graphic Novels|Manga|Horror  
 50000090 = Books|Comics & Graphic Novels|Comics  
 50000091 = Books|Romance|Multicultural  
 50000092 = Audiobooks|Erotica  
 50000093 = Audiobooks|Light Novels

## QuickTime AppleStoreCountry Values

Value	AppleStoreCountry	Value	AppleStoreCountry
143441	= United States	143523	= Moldova
143442	= France	143524	= Armenia
143443	= Germany	143525	= Botswana
143444	= United Kingdom	143526	= Bulgaria
143445	= Austria	143528	= Jordan
143446	= Belgium	143529	= Kenya
143447	= Finland	143530	= Macedonia
143448	= Greece	143531	= Madagascar
143449	= Ireland	143532	= Mali
143450	= Italy	143533	= Mauritius
143451	= Luxembourg	143534	= Niger
143452	= Netherlands	143535	= Senegal
143453	= Portugal	143536	= Tunisia
143454	= Spain	143537	= Uganda
143455	= Canada	143538	= Anguilla
143456	= Sweden	143539	= Bahamas
143457	= Norway	143540	= Antigua and Barbuda
143458	= Denmark	143541	= Barbados
143459	= Switzerland	143542	= Bermuda
143460	= Australia	143543	= British Virgin Islands
143461	= New Zealand	143544	= Cayman Islands
143462	= Japan	143545	= Dominica
143463	= Hong Kong	143546	= Grenada
143464	= Singapore	143547	= Montserrat
143465	= China	143548	= St. Kitts and Nevis
143466	= Republic of Korea	143549	= St. Lucia
143467	= India	143550	= St. Vincent and The Grenadines
143468	= Mexico	143551	= Trinidad and Tobago

143469 = Russia	143552 = Turks and Caicos
143470 = Taiwan	143553 = Guyana
143471 = Vietnam	143554 = Suriname
143472 = South Africa	143555 = Belize
143473 = Malaysia	143556 = Bolivia
143474 = Philippines	143557 = Cyprus
143475 = Thailand	143558 = Iceland
143476 = Indonesia	143559 = Bahrain
143477 = Pakistan	143560 = Brunei Darussalam
143478 = Poland	143561 = Nigeria
143479 = Saudi Arabia	143562 = Oman
143480 = Turkey	143563 = Algeria
143481 = United Arab Emirates	143564 = Angola
143482 = Hungary	143565 = Belarus
143483 = Chile	143566 = Uzbekistan
143484 = Nepal	143568 = Azerbaijan
143485 = Panama	143571 = Yemen
143486 = Sri Lanka	143572 = Tanzania
143487 = Romania	143573 = Ghana
143489 = Czech Republic	143575 = Albania
143491 = Israel	143576 = Benin
143492 = Ukraine	143577 = Bhutan
143493 = Kuwait	143578 = Burkina Faso
143494 = Croatia	143579 = Cambodia
143495 = Costa Rica	143580 = Cape Verde
143496 = Slovakia	143581 = Chad
143497 = Lebanon	143582 = Republic of the Congo
143498 = Qatar	143583 = Fiji
143499 = Slovenia	143584 = Gambia
143501 = Colombia	143585 = Guinea-Bissau
143502 = Venezuela	143586 = Kyrgyzstan
143503 = Brazil	143587 = Lao People's Democratic Republic
143504 = Guatemala	143588 = Liberia
143505 = Argentina	143589 = Malawi
143506 = El Salvador	143590 = Mauritania
143507 = Peru	143591 = Federated States of Micronesia
143508 = Dominican Republic	143592 = Mongolia
143509 = Ecuador	143593 = Mozambique
143510 = Honduras	143594 = Namibia
143511 = Jamaica	143595 = Palau
143512 = Nicaragua	143597 = Papua New Guinea
143513 = Paraguay	143598 = Sao Tome and Principe
143514 = Uruguay	143599 = Seychelles
143515 = Macau	143600 = Sierra Leone
143516 = Egypt	143601 = Solomon Islands
143517 = Kazakhstan	143602 = Swaziland
143518 = Estonia	143603 = Tajikistan
143519 = Latvia	143604 = Turkmenistan
143520 = Lithuania	143605 = Zimbabwe
143521 = Malta	

## QuickTime iTunesInfo Tags

ExifTool will extract any iTunesInfo tags that exist, even if they are not defined in this table. These tags belong to the family 1 "iTunes" group, and are not currently writable.

Tag ID	Tag Name	Writable	Values / Notes
'ARTISTS'	Artists	no	
'Actors'	Actors	no	
'BARCODE'	Barcode	no	
'CATALOGNUMBER'	CatalogNumber	no	
'COSTUME_DESIGNER'	CostumeDesigner	no	
'DIRECTOR'	Director	no	
'DIRECTOR_OF_PHOTOGRAPHY'	DirectorOfPhotography	no	
'DISCNUMBER'	DiscNumber	no	
'Dynamic Range (DR)'	DynamicRange	no	
'Dynamic Range (R128)'	DynamicRangeR128	no	
'EDITED_BY'	EditedBy	no	

'Encoding Params'	EncodingParams	-	--> <a href="#">QuickTime EncodingParams Tags</a>
'IMDB_ID'	IMDB_ID	no	
'LABEL'	Label	no	
'MEDIA'	Media	no	
'MOOD'	Mood	no	
'PRODUCER'	Producer	no	
'PRODUCTION_DESIGNER'	ProductionDesigner	no	
'Peak Level (R128)'	PeakLevelR128	no	
'Peak Level (Sample)'	PeakLevelSample	no	
'RATING'	Rating	no	
'SCREENPLAY_BY'	ScreenplayBy	no	
'SCRIPT'	Script	no	
'TIPL'	TIPL	no	
'TMDB_ID'	TMDB_ID	no	
'TRACKNUMBER'	TrackNumber	no	
'Volume Level (R128)'	VolumeLevelR128	no	
'Volume Level (ReplayGain)'	ReplayVolumeLevel	no	
'iTunEXTC'	ContentRating	no	(standard   rating   score   reasons)
'iTunMOVI'	iTunMOVI	-	--> <a href="#">PLIST Tags</a>
'iTunNORM'	VolumeNormalization	no	
'iTunSMPB'	iTunSMPB	no	
'iTunes_CDDB_1'	CDDB1Info	no	
'iTunes_CDDB_TrackNumber'	CDDBTrackNumber	no	
'initialkey'	InitialKey	no	
'originaldate'	OriginalDate	no	
'originalyear'	OriginalYear	no	
'popularimeter'	Popularimeter	no	
'replaygain_track_gain'	ReplayTrackGain	no	
'replaygain_track_peak'	ReplayTrackPeak	no	
'tool'	iTunTool	no	
'~length'	Length	no	

## QuickTime EncodingParams Tags

Tag ID	Tag Name	Writable	Values / Notes
'abrt'	AudioAvailableBitRateRange	no	
'acbf'	AudioBitRateControlMode	no	
'acef'	AudioExtendFrequencies	no	
'brat'	AudioCurrentTargetBitRate	no	
'cdcv'	AudioComponentVersion	no	
'cmnc'	AudioAvailableNumberChannels	no	
'init'	AudiolsInitialized	no	
'Imrc'	AudioDoesSampleRateConversion	no	
'mdel'	AudioMinimumDelayMode	no	
'mnip'	AudioMinimumNumberInputPackets	no	
'mnop'	AudioMinimumNumberOutputPackets	no	
'oppr'	AudioOutputPrecedence	no	
'pad0'	AudioZeroFramesPadded	no	
'pakk'	AudioMaximumPacketByteSize	no	
'pakd'	AudioRequiresPacketDescription	no	
'pafk'	AudioPacketFrameSize	no	
'prmm'	AudioCodecPrimeMethod	no	
'srcq'	AudioQualitySetting	no	

'tbuf'	AudioInputBufferSize	no
'ubuf'	AudioUsedInputBufferSize	no
'usr'	AudioUseRecommendedSampleRate	no
'vbrq'	AudioVBRQuality	no
'vers'	AudioEncodingParamsVersion	no
'vpk?'	AudioHasVariablePacketByteSizes	no

## QuickTime ItemProp Tags

Tag ID	Tag Name	Writable	Values / Notes
'ipco'	ItemPropertyContainer	-	--> <a href="#">QuickTime ItemPropCont Tags</a>
'ipma'	ItemPropertyAssociation	no	(parsed, but not extracted as a tag)

## QuickTime ItemPropCont Tags

Tag ID	Tag Name	Writable	Values / Notes
'auxC'	AuxiliaryImageType	no	
'av1C'	AV1Configuration	-	--> <a href="#">QuickTime AV1Config Tags</a>
'clap'	CleanAperture	no	(4 numbers: width, height, left and top)
'clli'	ContentLightLevel	-	--> <a href="#">QuickTime ContentLightLevel Tags</a>
'colr'	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>
	ColorRepresentation	-	--> <a href="#">QuickTime ColorRep Tags</a>
'hvcC'	HEVCCConfiguration	-	--> <a href="#">QuickTime HEVCCConfig Tags</a>
'irot'	Rotation	int8u!	0 = Horizontal (normal) 1 = Rotate 270 CW 2 = Rotate 180 3 = Rotate 90 CW
'ispe'	ImageSpatialExtent	no	
'pasp'	PixelAspectRatio	int32u[2]!	
'pixi'	ImagePixelDepth	no	
'rloc'	RelativeLocation	no	

## QuickTime AV1Config Tags

Index1	Tag Name	Writable	Values / Notes
0	AV1ConfigurationVersion	no	[val & 0x7f]
1	SeqProfile?	no	[val >> 5 & 0x7]
1.1	SeqLevelIdx0?	no	[val & 0x1f]
2	SeqTier0?	no	[val >> 7 & 0x1]
2.1	HighBitDepth?	no	[val >> 6 & 0x1]
2.2	TwelveBit?	no	[val >> 5 & 0x1]
2.3	ChromaFormat	no	(bits: 0x04 = Monochrome, 0x02 = SubSamplingX, 0x01 = SubSamplingY) [val >> 2 & 0x7] 0 = YUV 4:4:4 2 = YUV 4:2:2 3 = YUV 4:2:0 7 = Monochrome 4:0:0
2.4	ChromaSamplePosition	no	[val & 0x3] 0 = Unknown 1 = Vertical 2 = Colocated 3 = (reserved)
3	InitialDelaySamples?	no	

## QuickTime ContentLightLevel Tags

Index2	Tag Name	Writable	Values / Notes
0	MaxContentLightLevel	no	

## QuickTime ColorRep Tags

Index1	Tag Name	Writable	Values / Notes
0	ColorProfiles	no	
4	ColorPrimaries	no	1 = BT.709 2 = Unspecified 4 = BT.470 System M (historical) 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 8 = Generic film (color filters using illuminant C) 9 = BT.2020, BT.2100 10 = SMPTE 428 (CIE 1931 XYZ) 11 = SMPTE RP 431-2 12 = SMPTE EG 432-1 22 = EBU Tech. 3213-E
6	TransferCharacteristics	no	0 = For future use (0) 1 = BT.709 2 = Unspecified 3 = For future use (3) 4 = BT.470 System M (historical) 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 M 8 = Linear 9 = Logarithmic (100 : 1 range) 10 = Logarithmic (100 * Sqrt(10) : 1 range) 11 = IEC 61966-2-4 12 = BT.1361 13 = sRGB or sYCC 14 = BT.2020 10-bit systems 15 = BT.2020 12-bit systems 16 = SMPTE ST 2084, ITU BT.2100 PQ 17 = SMPTE ST 428 18 = BT.2100 HLG, ARIB STD-B67
8	MatrixCoefficients	no	0 = Identity matrix 1 = BT.709 2 = Unspecified 3 = For future use (3) 4 = US FCC 73.628 5 = BT.470 System B, G (historical) 6 = BT.601 7 = SMPTE 240 M 8 = YCgCo 9 = BT.2020 non-constant luminance, BT.2100 YCbCr 10 = BT.2020 constant luminance 11 = SMPTE ST 2085 YDzDx 12 = Chromaticity-derived non-constant luminance 13 = Chromaticity-derived constant luminance 14 = BT.2100 ICtCp
10	VideoFullRangeFlag	no	$[val >> 7 \& 0x1]$ 0 = Limited 1 = Full

## QuickTime HEVCCConfig Tags

Index1	Tag Name	Writable	Values / Notes
0	HEVCCConfigurationVersion	no	
1	GeneralProfileSpace	no	$[val >> 6 \& 0x3]$ 0 = Conforming
1.1	GeneralTierFlag	no	$[val >> 5 \& 0x1]$ 0 = Main Tier 1 = High Tier
1.2	GeneralProfileIDC	no	$[val \& 0x1f]$ 0 = No Profile 1 = Main 2 = Main 10 3 = Main Still Picture 4 = Format Range Extensions 5 = High Throughput

			6 = Multiview Main 7 = Scalable Main 8 = 3D Main 9 = Screen Content Coding Extensions 10 = Scalable Format Range Extensions 11 = High Throughput Screen Content Coding Extensions
--	--	--	--

2	GenProfileCompatibilityFlags	no	Bit 20 = High Throughput Screen Content Coding Extensions Bit 21 = Scalable Format Range Extensions Bit 22 = Screen Content Coding Extensions Bit 23 = 3D Main Bit 24 = Scalable Main Bit 25 = Multiview Main Bit 26 = High Throughput Bit 27 = Format Range Extensions Bit 28 = Main Still Picture Bit 29 = Main 10 Bit 30 = Main Bit 31 = No Profile
6	ConstraintIndicatorFlags	no	
12	GeneralLevelIDC	no	
13	MinSpatialSegmentationIDC	no	[val & 0xffff]
15	ParallelismType	no	[val & 0x3]
16	ChromaFormat	no	[val & 0x3] 0 = Monochrome 1 = 4:2:0 2 = 4:2:2 3 = 4:4:4
17	BitDepthLuma	no	[val & 0x7]
18	BitDepthChroma	no	[val & 0x7]
19	AverageFrameRate	no	
21	ConstantFrameRate	no	[val >> 6 & 0x3] 0 = Unknown 1 = Constant Frame Rate 2 = Each Temporal Layer is Constant Frame Rate
21.1	NumTemporalLayers	no	[val >> 3 & 0x7]
21.2	TemporalIDNested	no	[val >> 2 & 0x1] 0 = No 1 = Yes

## QuickTime ItemRef Tags

The Item reference entries listed in the table below contain information about the associations between items in the file. This information is used by ExifTool, but these entries are not extracted as tags.

Tag ID	Tag Name	Writable	Values / Notes
'auxl'	AuxiliaryImageRef	no	
'cdsc'	ContentDescribes	no	
'dimg'	DerivedImageRef	no	
'thmb'	ThumbnailRef	no	

## QuickTime MovieFragHdR Tags

Tag ID	Tag Name	Writable	Values / Notes
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>
'mfhd'	MovieFragmentHeader	-	--> <a href="#">QuickTime MovieFragHdR Tags</a>
'traf'	TrackFragment	-	--> <a href="#">QuickTime TrackFragment Tags</a>

## QuickTime MovieFragHdR Tags

Index4	Tag Name	Writable	Values / Notes
1	MovieFragmentSequence	no	

## QuickTime TrackFragment Tags

Tag ID	Tag Name	Writable	Values / Notes
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>

## QuickTime Movie Tags

Tag ID	Tag Name	Writable	Values / Notes
'cmov'	CompressedMovie	-	--> <a href="#">QuickTime CMovie Tags</a>
'gps'	GPSDataList?	no	
'htka'	HTCTrack	-	--> <a href="#">QuickTime Track Tags</a>
'iods'	InitialObjectDescriptor?	no	
'meco'	OtherMeta	-	--> <a href="#">QuickTime OtherMeta Tags</a>
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>
'mvhd'	MovieHeader	-	--> <a href="#">QuickTime MovieHeader Tags</a>
'trak'	Track	-	--> <a href="#">QuickTime Track Tags</a>
'udta'	UserData	-	--> <a href="#">QuickTime UserData Tags</a>
'uuid'	UUID-USMT	-	--> <a href="#">QuickTime UserMedia Tags</a>
	UUID-Canon	-	--> <a href="#">Canon uuid Tags</a>
	GarminGPS	-	--> <a href="#">QuickTime Stream Tags</a>
	GarminGPS	no	(Garmin GPS sensor data)
	UUID-Unknown?	no	

## QuickTime CMovie Tags

Tag ID	Tag Name	Writable	Values / Notes
'dcom'	Compression	no	

## QuickTime Track Tags

Tag ID	Tag Name	Writable	Values / Notes
'mdia'	Media	-	--> <a href="#">QuickTime Media Tags</a>
'meco'	OtherMeta	-	--> <a href="#">QuickTime OtherMeta Tags</a>
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>
'tapt'	TrackAperture	-	--> <a href="#">QuickTime TrackAperture Tags</a>
'tkhd'	TrackHeader	-	--> <a href="#">QuickTime TrackHeader Tags</a>
'tref'	TrackRef	-	--> <a href="#">QuickTime TrackRef Tags</a>
'udta'	UserData	-	--> <a href="#">QuickTime UserData Tags</a>
'uuid'	UUID-USMT	-	--> <a href="#">QuickTime UserMedia Tags</a>
	SphericalVideoXML	-	--> <a href="#">XMP Tags</a>
	UUID-Unknown?	no	

## QuickTime Media Tags

MP4 media box.

Tag ID	Tag Name	Writable	Values / Notes
'elng'	ExtendedLanguageTag	no	
'hdlr'	Handler	-	--> <a href="#">QuickTime Handler Tags</a>
'mdhd'	MediaHeader	-	--> <a href="#">QuickTime MediaHeader Tags</a>
'minf'	MediaInfo	-	--> <a href="#">QuickTime MediaInfo Tags</a>

## QuickTime MediaHeader Tags

Index4	Tag Name	Writable	Values / Notes
0	MediaHeaderVersion	no	

1	MediaCreateDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
2	MediaModifyDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
3	MediaTimeScale	no	
4	MediaDuration	no	
5	MediaLanguageCode	no	

## QuickTime MediaInfo Tags

MP4 media info box.

Tag ID	Tag Name	Writable	Values / Notes
'dinf'	DataInfo	-	--> <a href="#">QuickTime DataInfo Tags</a>
'gmhd'	GenMediaHeader	-	--> <a href="#">QuickTime GenMediaHeader Tags</a>
'hdlr'	Handler	-	--> <a href="#">QuickTime Handler Tags</a>
'hmhd'	HintHeader	-	--> <a href="#">QuickTime HintHeader Tags</a>
'nmhd'	NullMediaHeader?	no	
'smhd'	AudioHeader	-	--> <a href="#">QuickTime AudioHeader Tags</a>
'stbl'	SampleTable	-	--> <a href="#">QuickTime SampleTable Tags</a>
'vmhd'	VideoHeader	-	--> <a href="#">QuickTime VideoHeader Tags</a>

## QuickTime GenMediaHeader Tags

Tag ID	Tag Name	Writable	Values / Notes
'gmin'	GenMediaInfo	-	--> <a href="#">QuickTime GenMediaInfo Tags</a>
'text'	Text?	no	
'tmcd'	TimeCode	-	--> <a href="#">QuickTime TimeCode Tags</a>

## QuickTime GenMediaInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	GenMediaVersion	no	
1	GenFlags	no	
4	GenGraphicsMode	no	--> <a href="#">QuickTime GraphicsMode Values</a>
6	GenOpColor	no	
12	GenBalance	no	

## QuickTime GraphicsMode Values

Value	GraphicsMode	Value	GraphicsMode	Value	GraphicsMode
0x0	= srcCopy	0xb	= patBic	0x26	= subOver
0x1	= srcOr	0xc	= notPatCopy	0x27	= addMin
0x2	= srcXor	0xd	= notPatOr	0x31	= grayishTextOr
0x3	= srcBic	0xe	= notPatXor	0x32	= hilite
0x4	= notSrcCopy	0xf	= notPatBic	0x40	= ditherCopy
0x5	= notSrcOr	0x20	= blend	0x100	= Alpha
0x6	= notSrcXor	0x21	= addPin	0x101	= White Alpha
0x7	= notSrcBic	0x22	= addOver	0x102	= Pre-multiplied Black Alpha
0x8	= patCopy	0x23	= subPin	0x110	= Component Alpha
0x9	= patOr	0x24	= transparent		
0xa	= patXor	0x25	= addMax		

## QuickTime TimeCode Tags

Tag ID	Tag Name	Writable	Values / Notes
'tcmi'	TCMediaInfo	-	--> <a href="#">QuickTime TCMediaInfo Tags</a>

# QuickTime TCMediaInfo Tags

Index1	Tag Name	Writable	Values / Notes	
4	TextFont	no	0 = System	
6	TextFace	no	0x0 = Plain Bit 0 = Bold Bit 1 = Italic Bit 2 = Underline	Bit 3 = Outline Bit 4 = Shadow Bit 5 = Condense Bit 6 = Extend
8	TextSize	no		
12	TextColor	no		
18	BackgroundColor	no		
24	FontName	no		

## QuickTime HintHeader Tags

MP4 hint media header.

Index2	Tag Name	Writable	Values / Notes
2	MaxPDUSize	no	
3	AvgPDUSize	no	
4	MaxBitrate	no	
6	AvgBitrate	no	

## QuickTime AudioHeader Tags

MP4 audio media header.

Index2	Tag Name	Writable	Values / Notes
2	Balance	no	

## QuickTime SampleTable Tags

MP4 sample table box.

Tag ID	Tag Name	Writable	Values / Notes	
'co64'	ChunkOffset64?	no		
'cslg'	CompositionToDecodeTimelineMapping?	no		
'ctts'	CompositionTimeToSample?	no		
'padb'	SamplePaddingBits?	no		
'sbgp'	SampleToGroup?	no		
'sdtp'	IdependentAndDisposableSamples?	no		
'sgpd'	SampleGroupDescription?	no		
'stco'	ChunkOffset?	no		
'stdp'	SampleDegradationPriority?	no		
'stps'	PartialSyncSamples	no		
'stsc'	SampleToChunk?	no		
'stsdesc'	AudioSampleDesc VisualSampleDesc HintSampleDesc MetaSampleDesc OtherSampleDesc	-	--> <a href="#">QuickTime AudioSampleDesc Tags</a> --> <a href="#">QuickTime VisualSampleDesc Tags</a> --> <a href="#">QuickTime HintSampleDesc Tags</a> --> <a href="#">QuickTime MetaSampleDesc Tags</a> --> <a href="#">QuickTime OtherSampleDesc Tags</a>	
'stsh'	ShadowSyncSampleTable?	no		
'stss'	SyncSampleTable?	no		
'sts2'	SampleSizes?	no		
'stts'	VideoFrameRate TimeToSampleTable?	no no	(average rate calculated from time-to-sample table for video media)	
'stz2'	CompactSampleSizes?	no		

# QuickTime AudioSampleDesc Tags

MP4 audio sample description. This hybrid atom contains both data and child atoms.

ID/Index	Tag Name	Writable	Values / Notes
4	AudioFormat	no	
20	AudioVendorID	no	--> <a href="#">QuickTime VendorID Values</a>
24	AudioChannels	no	
26	AudioBitsPerSample	no	
32	AudioSampleRate	no	
'SA3D'	SpatialAudio	-	--> <a href="#">QuickTime SpatialAudio Tags</a>
'btrt'	BitrateInfo	-	--> <a href="#">QuickTime Bitrate Tags</a>
'chan'	AudioChannelLayout	-	--> <a href="#">QuickTime ChannelLayout Tags</a>
'damr'	DecodeConfig	-	--> <a href="#">QuickTime DecodeConfig Tags</a>
'pinf'	PurchaseInfo	-	--> <a href="#">QuickTime ProtectionInfo Tags</a>
'sinf'	ProtectionInfo	-	--> <a href="#">QuickTime ProtectionInfo Tags</a>
'wave'	Wave	-	--> <a href="#">QuickTime Wave Tags</a>

## QuickTime SpatialAudio Tags

Spatial Audio tags.

Index1	Tag Name	Writable	Values / Notes
0	SpatialAudioVersion	no	
1	AmbisonicType	no	0 = Periphonic
2	AmbisonicOrder	no	
6	AmbisonicChannelOrdering	no	0 = ACN
7	AmbisonicNormalization	no	0 = SN3D
8	AmbisonicChannels	no	
12	AmbisonicChannelMap	no	

## QuickTime Bitrate Tags

Index4	Tag Name	Writable	Values / Notes
0	BufferSize	no	
1	MaxBitrate	no	
2	AverageBitrate	no	

## QuickTime ChannelLayout Tags

Audio channel layout.

Index1	Tag Name	Writable	Values / Notes
4	LayoutFlags	no	0 = UseDescriptions 1 = UseBitmap 100 = Mono 101 = Stereo 102 = StereoHeadphones 103 = MatrixStereo 104 = MidSide 105 = XY 106 = Binaural 107 = Ambisonic_B_Format 108 = Quadraphonic 109 = Pentagonal 110 = Hexagonal 111 = Octagonal 112 = Cube 142 = AAC_6_1 143 = AAC_7_0 144 = AAC_Octagonal 145 = TMH_10_2_std 146 = TMH_10_2_full 147 = DiscreteInOrder 148 = AudioUnit_7_0_Front 149 = AC3_1_0_1 150 = AC3_3_0 151 = AC3_3_1 152 = AC3_3_0_1 153 = AC3_2_1_1 154 = AC3_3_1_1 155 = EAC_6_0_A 156 = EAC_7_0_A

113 = MPEG_3_0_A	157 = EAC3_6_1_A
114 = MPEG_3_0_B	158 = EAC3_6_1_B
115 = MPEG_4_0_A	159 = EAC3_6_1_C
116 = MPEG_4_0_B	160 = EAC3_7_1_A
117 = MPEG_5_0_A	161 = EAC3_7_1_B
118 = MPEG_5_0_B	162 = EAC3_7_1_C
119 = MPEG_5_0_C	163 = EAC3_7_1_D
120 = MPEG_5_0_D	164 = EAC3_7_1_E
121 = MPEG_5_1_A	165 = EAC3_7_1_F
122 = MPEG_5_1_B	166 = EAC3_7_1_G
123 = MPEG_5_1_C	167 = EAC3_7_1_H
124 = MPEG_5_1_D	168 = DTS_3_1
125 = MPEG_6_1_A	169 = DTS_4_1
126 = MPEG_7_1_A	170 = DTS_6_0_A
127 = MPEG_7_1_B	171 = DTS_6_0_B
128 = MPEG_7_1_C	172 = DTS_6_0_C
129 = Emagic_Default_7_1	173 = DTS_6_1_A
130 = SMPTE_DTV	174 = DTS_6_1_B
131 = ITU_2_1	175 = DTS_6_1_C
132 = ITU_2_2	176 = DTS_7_0
133 = DVD_4	177 = DTS_7_1
134 = DVD_5	178 = DTS_8_0_A
135 = DVD_6	179 = DTS_8_0_B
136 = DVD_10	180 = DTS_8_1_A
137 = DVD_11	181 = DTS_8_1_B
138 = DVD_18	182 = DTS_6_1_D
139 = AudioUnit_6_0	183 = AAC_7_1_B
140 = AudioUnit_7_0	65535 = Unknown
141 = AAC_6_0	

6	AudioChannels	no	
8	AudioChannelTypes	no	Bit 0 = Left Bit 1 = Right Bit 2 = Center Bit 3 = LFEScreen Bit 4 = LeftSurround Bit 5 = RightSurround Bit 6 = LeftCenter Bit 7 = RightCenter Bit 8 = CenterSurround Bit 9 = LeftSurroundDirect Bit 10 = RightSurroundDirect Bit 11 = TopCenterSurround Bit 12 = VerticalHeightLeft Bit 13 = VerticalHeightCenter Bit 14 = VerticalHeightRight Bit 15 = TopBackLeft Bit 16 = TopBackCenter Bit 17 = TopBackRight
12	NumChannelDescriptions	no	
16	Channel1Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
20	Channel1Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
24	Channel1Coordinates	no	(3 numbers: for rectangular coordinates left/right, back/front, down/up; for spherical coordinates left/right degrees, down/up degrees, distance)
36	Channel2Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
40	Channel2Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
44	Channel2Coordinates	no	
56	Channel3Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
60	Channel3Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
64	Channel3Coordinates	no	
76	Channel4Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
80	Channel4Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
84	Channel4Coordinates	no	
96	Channel5Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>

100	Channel5Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
104	Channel5Coordinates	no	
116	Channel6Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
120	Channel6Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
124	Channel6Coordinates	no	
136	Channel7Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
140	Channel7Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
144	Channel7Coordinates	no	
156	Channel8Label	no	--> <a href="#">QuickTime ChannelLabel Values</a>
160	Channel8Flags	no	Bit 0 = Rectangular Bit 1 = Spherical Bit 2 = Meters
164	Channel8Coordinates	no	

## QuickTime ChannelLabel Values

Value	ChannelLabel	Value	ChannelLabel	Value	ChannelLabel
0	Unused	36	RightWide	305	ForeignLanguage
1	Left	37	LFE2	400	Discrete
2	Right	38	LeftTotal	65536	Discrete_0
3	Center	39	RightTotal	65537	Discrete_1
4	LFEScreen	40	HearingImpaired	65538	Discrete_2
5	LeftSurround	41	Narration	65539	Discrete_3
6	RightSurround	42	Mono	65540	Discrete_4
7	LeftCenter	43	DialogCentricMix	65541	Discrete_5
8	RightCenter	44	CenterSurroundDirect	65542	Discrete_6
9	CenterSurround	45	Haptic	65543	Discrete_7
10	LeftSurroundDirect	100	UseCoordinates	65544	Discrete_8
11	RightSurroundDirect	200	Ambisonic_W	65545	Discrete_9
12	TopCenterSurround	201	Ambisonic_X	65546	Discrete_10
13	VerticalHeightLeft	202	Ambisonic_Y	65547	Discrete_11
14	VerticalHeightCenter	203	Ambisonic_Z	65548	Discrete_12
15	VerticalHeightRight	204	MS_Mid	65549	Discrete_13
16	TopBackLeft	205	MS_Side	65550	Discrete_14
17	TopBackCenter	206	XY_X	65551	Discrete_15
18	TopBackRight	207	XY_Y	131071	Discrete_65535
33	RearSurroundLeft	301	HeadphonesLeft	4294967295	Unknown
34	RearSurroundRight	302	HeadphonesRight		
35	LeftWide	304	ClickTrack		

## QuickTime DecodeConfig Tags

Index1	Tag Name	Writable	Values / Notes
0	EncoderVendor	no	
4	EncoderVersion	no	

## QuickTime ProtectionInfo Tags

Child atoms found in "sinf" and/or "pinf" atoms.

Tag ID	Tag Name	Writable	Values / Notes
'enda'	Endianness	no	0 = Big-endian (Motorola, MM) 1 = Little-endian (Intel, II)
'frma'	OriginalFormat	no	
'schi'	SchemeInfo	-	--> <a href="#">QuickTime SchemeInfo Tags</a>
'schm'	SchemeType	-	--> <a href="#">QuickTime SchemeType Tags</a>

## QuickTime SchemeInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'cert'	Certificate	no	
'iviv'	InitializationVector	no	
'key '	KeyID	no	
'name'	UserName	no	
'righ'	Rights	-	--> <a href="#">QuickTime Rights Tags</a>
'user'	UserID	no	

## QuickTime Rights Tags

Tag ID	Tag Name	Writable	Values / Notes
'aver'	VersionRestrictions	no	
'medi'	MediaFlags	no	
'mode'	ModeFlags	no	
'plat'	Platform	no	
'song'	ItemID	no	
'tool'	ItemTool	no	
'tran'	TransactionID	no	
'veld'	ItemVendorID	no	

## QuickTime SchemeType Tags

Index1	Tag Name	Writable	Values / Notes
4	SchemeType	no	
8	SchemeVersion	no	
10	SchemeURL	no	

## QuickTime Wave Tags

Tag ID	Tag Name	Writable	Values / Notes
'enda'	Endianness	no	0 = Big-endian (Motorola, MM) 1 = Little-endian (Intel, II)
'frma'	PurchaseFileFormat	no	

## QuickTime VisualSampleDesc Tags

ID/Index	Tag Name	Writable	Values / Notes
2	CompressorID	no	
10	VendorID	no	--> <a href="#">QuickTime VendorID Values</a>
16	SourceImageWidth	no	
17	SourceImageHeight	no	
18	XResolution	no	
20	YResolution	no	
25	CompressorName	no	
41	BitDepth	no	
'CDI1'	CDI1	-	--> <a href="#">Canon CDI1 Tags</a>
'CMP1'	CMP1	-	--> <a href="#">Canon CMP1 Tags</a>
'JPEG'	JPEGInfo?	no	
'avcC'	AVCConfiguration?	no	
'btrt'	BitrateInfo	-	--> <a href="#">QuickTime Bitrate Tags</a>
'clap'	CleanAperture	-	--> <a href="#">QuickTime CleanAperture Tags</a>
'colr'	ColorRepresentation	-	--> <a href="#">QuickTime ColorRep Tags</a>
'fiel'	VideoFieldOrder	no	[Value 0] 1 = Progressive 2 = 2:1 Interlaced

'gama'	Gamma	no	
'pasp'	PixelAspectRatio	no	
'st3d'	Stereoscopic3D	no	0 = Monoscopic 1 = Stereoscopic Top-Bottom 2 = Stereoscopic Left-Right 3 = Stereoscopic Stereo-Custom 4 = Stereoscopic Right-Left
'sv3d'	SphericalVideo	-	--> <a href="#">QuickTime sv3d Tags</a>

## QuickTime CleanAperture Tags

Index8	Tag Name	Writable	Values / Notes
0	CleanApertureWidth	no	
1	CleanApertureHeight	no	
2	CleanApertureOffsetX	no	
3	CleanApertureOffsetY	no	

## QuickTime sv3d Tags

Tags defined by the Spherical Video V2 specification. See <https://github.com/google/spatial-media/blob/master/docs/spherical-video-v2-rfc.md> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'proj'	Projection	-	--> <a href="#">QuickTime proj Tags</a>
'svhd'	MetadataSource	no	

## QuickTime proj Tags

Tag ID	Tag Name	Writable	Values / Notes
'cbmp'	CubemapProj	-	--> <a href="#">QuickTime cbmp Tags</a>
'equi'	EquirectangularProj	-	--> <a href="#">QuickTime equi Tags</a>
'prhd'	ProjectionHeader	-	--> <a href="#">QuickTime prhd Tags</a>

## QuickTime cbmp Tags

Index4	Tag Name	Writable	Values / Notes
1	Layout	no	
2	Padding	no	

## QuickTime equi Tags

Index4	Tag Name	Writable	Values / Notes
1	ProjectionBoundsTop	no	
2	ProjectionBoundsBottom	no	
3	ProjectionBoundsLeft	no	
4	ProjectionBoundsRight	no	

## QuickTime prhd Tags

Index4	Tag Name	Writable	Values / Notes
1	PoseYawDegrees	no	
2	PosePitchDegrees	no	
3	PoseRollDegrees	no	

## QuickTime HintSampleDesc Tags

MP4 hint sample description.

ID/Index	Tag Name	Writable	Values / Notes
4	HintFormat	no	
16	HintTrackVersion	no	
20	MaxPacketSize	no	
'snro'	SequenceNumberRandomOffset	no	
'tims'	RTPTimeScale	no	
'tsro'	TimestampRandomOffset	no	

## QuickTime MetaSampleDesc Tags

MP4 metadata sample description.

Tag ID	Tag Name	Writable	Values / Notes
0x0004	MetaFormat	no	
0x0008	MetaType	no	
'btr'	BitrateInfo	-	--> <a href="#">QuickTime Bitrate Tags</a>
'keys'	Keys	-	--> <a href="#">QuickTime Keys Tags</a>

## QuickTime OtherSampleDesc Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	OtherFormat	no	
0x0018	PlaybackFrameRate	no	
'ftab'	FontTable	no	
'mrld'	MarlinDictionary	-	--> <a href="#">GM mrld Tags</a>
'mrlh'	MarlinHeader	-	--> <a href="#">GM mrlh Tags</a>
'mrlv'	MarlinValues	-	--> <a href="#">GM mrlv Tags</a>
'name'	OtherName	no	

## QuickTime VideoHeader Tags

MP4 video media header.

Index2	Tag Name	Writable	Values / Notes
2	GraphicsMode	no	--> <a href="#">QuickTime GraphicsMode Values</a>
3	OpColor	no	

## QuickTime TrackAperture Tags

Tag ID	Tag Name	Writable	Values / Notes
'clef'	CleanApertureDimensions	no	
'enof'	EncodedPixelsDimensions	no	
'prof'	ProductionApertureDimensions	no	

## QuickTime TrackHeader Tags

Index4	Tag Name	Writable	Values / Notes
0	TrackHeaderVersion	no	
1	TrackCreateDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
2	TrackModifyDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
3	TrackID	no	
5	TrackDuration	no	

8	TrackLayer	no
9	TrackVolume	no
10	MatrixStructure	fixed32s[9]! (writable for the video track via the Composite Rotation tag)
19	ImageWidth	no
20	ImageHeight	no

## QuickTime TrackRef Tags

Tag ID	Tag Name	Writable	Values / Notes
'cdsc'	ContentDescribes	no	
'chap'	ChapterListTrackID	no	
'clcp'	ClosedCaptionTrack	no	
'fall'	AlternateFormatTrack	no	
'folw'	SubtitleTrack	no	
'forc'	ForcedSubtitleTrack	no	
'mpod'	ElementaryStreamTrack	no	
'scpt'	TranscriptTrack	no	
'ssrc'	Non-primarySourceTrack	no	
'sync'	SyncronizedTrack	no	
'tmcd'	TimecodeTrack	no	

## QuickTime UserData Tags

Tag ID's beginning with the copyright symbol (hex 0xa9) are multi-language text. Alternate language tags are accessed by adding a dash followed by a 3-character ISO 639-2 language code to the tag name. ExifTool will extract any multi-language user data tags found, even if they aren't in this table. Note when creating new tags, [ItemList](#) tags are preferred over these, so to create the tag when a same-named [ItemList](#) tag exists, either "UserData" must be specified (eg. `-UserData:Artist=Monet` on the command line), or the PREFERRED level must be changed via [the config file](#).

Tag ID	Tag Name	Writable	Values / Notes
'@day'	ContentCreateDate	string/	(some stupid Ricoh programmer used the '@' symbol instead of the copyright symbol in these tag ID's for the Ricoh Theta Z1 and maybe other models)
'@mak'	Make	string/	
'@mod'	Model	string/	
'@sec'	SamsungSec	-	--> <a href="#">Samsung sec Tags</a>
'@swr'	SoftwareVersion	string/	
'@xyz'	GPSCoordinates	string/	
'AlIF'	PlayAllFrames	int8u	
'CAME'	SerialNumberHash	string	
'CNCV'	CompressorVersion	string	
'CNFV'	FirmwareVersion	string	
'CNMN'	Model	string/	
'CNOP'	CanonCNOP	-	--> <a href="#">Canon CNOP Tags</a>
'CNTH'	CanonCNTH	-	--> <a href="#">Canon CNTH Tags</a>
'DcMD'	KodakDcMD	-	--> <a href="#">Kodak DcMD Tags</a>
'FFMV'	FujiFilmFFMV	-	--> <a href="#">FujiFilm FFMV Tags</a>
'FIRM'	FirmwareVersion	string/	
"FOV\0"	FieldOfView	string	
'GPMF'	GoProGPMF	-	--> <a href="#">GoPro GPMF Tags</a>
'GoPr'	GoProType	string	
'INFO'	SamsungINFO	-	--> <a href="#">Samsung INFO Tags</a>
'LEIC'	LeicaLEIC	-	--> <a href="#">Panasonic PANA Tags</a>
'LENS'	LensSerialNumber	string	

'LOOP'	LoopStyle	int32u	1 = Normal 2 = Palindromic
'LvIm'	LevelMeter?	rational64s	
'MMA0'	MinoltaMMA0	-	--> <a href="#">Minolta MMA Tags</a>
'MMA1'	MinoltaMMA1	-	--> <a href="#">Minolta MMA Tags</a>
'MUID'	MediaUID	no	
'MVTG'	FujiFilmMVTG	-	--> <a href="#">EXIF Tags</a>
'NCDT'	NikonNCDT	-	--> <a href="#">Nikon NCDT Tags</a>
'PANA'	PanasonicPANA	-	--> <a href="#">Panasonic PANA Tags</a>
'PENT'	PentaxPENT	-	--> <a href="#">Pentax PENT Tags</a>
'PXMN'	MakerNotePentax5b	-	--> <a href="#">Pentax Tags</a>
	MakerNotePentax5c	-	--> <a href="#">Pentax Tags</a>
	MakerNoteRicohPentax2	-	--> <a href="#">Pentax Tags</a>
	MakerNoteRicohPentax3	-	--> <a href="#">Pentax Tags</a>
	MakerNotePentaxUnknown	string	
'PXTH'	PentaxPreview	-	--> <a href="#">Pentax PXTH Tags</a>
'QVMI'	CasioQVMI	-	--> <a href="#">EXIF Tags</a>
'RDTA'	RicohRDTA	-	--> <a href="#">Ricoh RDTA Tags</a>
'RDTB'	RicohRDTB	-	--> <a href="#">Ricoh RDTB Tags</a>
'RDTC'	RicohRDTC	-	--> <a href="#">Ricoh RDTC Tags</a>
'RDTG'	RicohRDTG	-	--> <a href="#">Ricoh RDTG Tags</a>
'RDTL'	RicohRDTL	-	--> <a href="#">Ricoh RDTL Tags</a>
'RICO'	RicohInfo	-	--> <a href="#">JPEG Tags</a>
'RMKN'	RicohRMKN	-	--> <a href="#">EXIF Tags</a>
'RTHU'	PreviewImage	no	
'SDLN'	PlayMode	string	
'SIGM'	SigmaEXIF	-	--> <a href="#">EXIF Tags</a>
	PreviewImage	string	
'SNum'	SerialNumber	string/	
'SelO'	PlaySelection	int8u	
'TAGS'	FujiFilmTags	-	--> <a href="#">FujiFilm MOV Tags</a>
	KodakTags	-	--> <a href="#">Kodak MOV Tags</a>
	KonicaMinoltaTags	-	--> <a href="#">Minolta MOV1 Tags</a>
	MinoltaTags	-	--> <a href="#">Minolta MOV2 Tags</a>
	NikonTags	-	--> <a href="#">Nikon MOV Tags</a>
	OlympusTags1	-	--> <a href="#">Olympus MOV1 Tags</a>
	OlympusTags2	-	--> <a href="#">Olympus MOV2 Tags</a>
	OlympusTags3	-	--> <a href="#">Olympus MP4 Tags</a>
	OlympusTags4	-	--> <a href="#">Olympus MOV3 Tags</a>
	PentaxTags	-	--> <a href="#">Pentax MOV Tags</a>
	SamsungTags	-	--> <a href="#">Samsung MP4 Tags</a>
	SanyoMOV	-	--> <a href="#">Sanyo MOV Tags</a>
	SanyoMP4	-	--> <a href="#">Sanyo MP4 Tags</a>
	UnknownTags?	string	
'TTMD'	TomTomMetaData	-	--> <a href="#">QuickTime TomTom Tags</a>
'WLOC'	WindowLocation	int16u	
'XMP_'	XMP	-	--> <a href="#">XMP Tags</a>
'Xtra'	MicrosoftXtra	-	--> <a href="#">Microsoft Xtra Tags</a>
'_cx_'	CX?	rational64s	
'_cy_'	CY?	rational64s	
'_yaw'	Yaw	rational64s/	
'albm'	Album	string/	(used in 3gp videos)
'albr'	AlbumArtist	string	
'angl'	CameraAngle	string	
'apmd'	ApertureMode	undef	
'auth'	Author	string/	(used in 3gp videos)
'btec'	GlamourSettings	-	--> <a href="#">DJI Glamour Tags</a>
'ccid'	ContentID	string	

'cdis'	ContentDistributorID	string	
'chpl'	ChapterList	no	
'clfn'	ClipFileName	string	
'clid'	ClipID	string	
'clsf'	Classification	undef/	(string in the form "Entity=XXXX Index=### XXXXX", used in 3gp videos)
'cmid'	CameraID	string	
'cmnm'	Model	string/	
'coll'	CollectionName	string/	(used in 3gp videos)
'cprt'	Copyright	string/	(used in 3gp videos)
'cver'	CodeVersion	string	
'cvru'	CoverURI	string	
'date'	DateTimeOriginal	string	(Apple Photos has been reported to show a crazy date/time for some MP4 files containing this tag, but perhaps only if it is missing a time zone)
'dscp'	Description	string/	(used in 3gp videos)
'finm'	OriginalFileName	no	
'fsid'	OriginalFilePath	string	
'gnre'	Genre	string/	(used in 3gp videos)
'hinf'	HintTrackInfo	-	--> <a href="#">QuickTime HintTrackInfo Tags</a>
'hinv'	HintVersion	string	
'hnti'	HintInfo	-	--> <a href="#">QuickTime HintInfo Tags</a>
'htcb'	HTCBinary	-	--> <a href="#">QuickTime HTCBinary Tags</a>
'icnu'	IconURI	string	
'infi'	CameraInfo	-	--> <a href="#">QuickTime Nextbase Tags</a>
'info'	FirmwareVersion	string	
'infu'	InfoURL	string	
'kgtt'	TrackType	string	
'kywd'	Keywords	no	(not writable because Apple doesn't follow the 3gp specification)
'loci'	LocationInformation	undef/	(string in the form "XXXXX Role=XXX Lat=XXX Lon=XXX Alt=XXX Body=XXX Notes=XXX", used in 3gp videos)
'lrcu'	LyricsURI	string	
'lvlm'	LevelMeter?	rational64s	
'manu'	Make	no	
'mcvr'	PreviewImage	string	
'meta'	Meta	-	--> <a href="#">QuickTime Meta Tags</a>
'modl'	Model	no	
'nail'	ThumbnailTIFF	no	(image found in some Insta360 videos, converted to TIFF format)
'name'	Name	string	
'perf'	Performer	string/	(used in 3gp videos)
'pmcc'	GarminSettings	string	
'pose'	pose	-	--> <a href="#">Kodak pose Tags</a>
'ptch'	Pitch	rational64s/	
'ptv '	PrintToVideo	-	--> <a href="#">QuickTime Video Tags</a>
'rads'	Rads?	rational64s	
'reel'	ReelName	string	
'roll'	Roll	rational64s/	
'rtng'	Rating	undef/	(string in the form "Entity=XXXX Criteria=XXXX XXXXX", used in 3gp videos)
'scen'	Scene	string	
'scrn'	OlympusPreview	-	--> <a href="#">Olympus scrn Tags</a>
'shot'	ShotName	string	
'slno'	SerialNumber	string	
'smta'	SamsungSmta	-	--> <a href="#">Samsung smta Tags</a>
'tags'	Audible_tags	-	--> <a href="#">Audible tags Tags</a>

'thmb'	MakerNotePentax5a OlympusThumbnail ThumbnailImage ThumbnailPNG UnknownThumbnail	- - string string string	--> <a href="#">Pentax Tags</a> --> <a href="#">Olympus thmb Tags</a>
'time'	TimeStamp	no	
'titl'	Title	string/	(used in 3gp videos)
'tnam'	TrackName	string	
'urat'	UserRating	undef/	(used in 3gp videos)
'uuid'	GarminSoftware GarminModel UUID-Unknown?	string no no	
'vndr'	Vendor	string	
'vrot'	AccelerometerData	no	(accelerometer readings for each frame of the video, expressed as sets of yaw, pitch and roll angles in degrees)
'yrc'	Year	undef/	(used in 3gp videos)
"©ART"	Artist	string	
"©TIM"	StartTimecode	string	
"©TSC"	StartTimeScale	string	
"©TSZ"	StartTimeSampleSize	string	
"©alb"	Album	string	
"©arg"	Arranger	string	
"©ark"	ArrangerKeywords	string	
"©cmt"	Comment	string	
"©cok"	ComposerKeywords	string	
"©com"	Composer	string	
"©cpy"	Copyright	string	
"©day"	ContentCreateDate	string	
"©dir"	Director	string	
"©ed1"	Edit1	string	
"©ed2"	Edit2	string	
"©ed3"	Edit3	string	
"©ed4"	Edit4	string	
"©ed5"	Edit5	string	
"©ed6"	Edit6	string	
"©ed7"	Edit7	string	
"©ed8"	Edit8	string	
"©ed9"	Edit9	string	
"©enc"	EncoderID	string	
"©fmt"	Format	string	
"©fpt"	Pitch	string	
"©frl"	Roll	string	
"©fyw"	Yaw	string	
"©gen"	Genre	string	
"©gpt"	CameraPitch	string	
"©grl"	CameraRoll	string	
"©grp"	Grouping	string	
"©gyw"	CameraYaw	string	
"©inf"	Information	string	
"©isr"	ISRCCode	string	
"©lab"	RecordLabelName	string	
"©lal"	RecordLabelURL	string	
"©lyr"	Lyrics	string	
"©mak"	Make	string	
"©mal"	MakerURL	string	

"@mdl"	Model	string/	(non-standard-format DJI tag)
"@mod"	Model	string	
"@nam"	Title	string	
"@pdk"	ProducerKeywords	string	
"@phg"	RecordingCopyright	string	
"@prd"	Producer	string	
"@prf"	Performers	string	
"@prk"	PerformerKeywords	string	
"@prl"	PerformerURL	string	
"@req"	Requirements	string	
"@snk"	SubtitleKeywords	string	
"@snm"	Subtitle	string	
"@src"	SourceCredits	string	
"@swf"	SongWriter	string	
"@swk"	SongWriterKeywords	string	
"@swr"	SoftwareVersion	string	
"@too"	Encoder	string	
"@trk"	Track	string	
"@wrt"	Composer	string/	
"@xsp"	SpeedX	string	
"@xyz"	GPSCoordinates	string	
"@ysp"	SpeedY	string	
"@zsp"	SpeedZ	string	

## QuickTime TomTom Tags

Tags found in TomTom Bandit Action Cam MP4 videos.

Tag ID	Tag Name	Writable	Values / Notes
'TTAD'	TomTomAD	-	--> <a href="#">QuickTime Stream Tags</a>
'TTHL'	TomTomHL?	no	
'TTID'	TomTomID	no	
'TTVD'	TomTomVD	no+	
'TTVI'	TomTomVI?	no	

## QuickTime HintTrackInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'dimm'	ImmediateDataBytes	no	
'dmax'	LargestPacketDuration	no	
'dmed'	MediaTrackBytes	no	
'drep'	RepeatedDataBytes	no	
'maxr'	MaxDataRate	no	
'npck'	NumPackets	no	
'nump'	NumPackets	no	
'payt'	PayloadType	no	
'pmax'	LargestPacketSize	no	
'tmax'	MaxTransmissionTime	no	
'tmin'	MinTransmissionTime	no	
'totl'	TotalBytes	no	
'tpaY'	TotalBytesNoRTPHeaders	no	
'tpay'	TotalBytesNoRTPHeaders	no	
'tpyl'	TotalBytesNoRTPHeaders	no	
'trpY'	TotalBytes	no	

## QuickTime HintInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'rtp'	RealtimeStreamingProtocol	no	
'sdp'	StreamingDataProtocol	no	

## QuickTime HTCBinary Tags

Index4	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## QuickTime Nextbase Tags

Tags found in 'infi' atom from some Nextbase videos. As well as these tags, other existing tags are also extracted. These tags are not currently writable but they may all be removed by deleting the Nextbase group.

Tag ID	Tag Name	Writable	Values / Notes
'2nd Cam'	SecondCam	no	
'Alerts'	Alerts	no	
'Alexa'	Alexa	no	
'Alexa - Paired Device Name'	Alexa-PairedDeviceName	no	
'Alexa - Pairing'	Alexa-Pairing	no	
'Alexa - Privacy Mode'	Alexa-PrivacyMode	no	
'Alexa - Wake Word Language'	Alexa-WakeWordLanguage	no	
'Audio'	Audio	no	
'Auto Power Off'	AutoPowerOff	no	
'Battery Status'	BatteryStatus	no	
'Bluetooth MAC Address'	BluetoothMACAddress	no	
'Bluetooth Name'	BluetoothName	no	
'Country'	Country	no	
'Default Settings'	DefaultSettings	no	
'Device Sounds'	DeviceSounds	no	
'Dual Files'	DualFiles	no	
'Emergency SOS'	EmergencySOS	no	
'Exposure'	Exposure	no	
'Extreme Weather Mode'	ExtremeWeatherMode	no	
'FCC-ID'	FCC-ID	no	
'Firmware'	Firmware	no	
'Firmware Version'	FirmwareVersion	no	
'Format SD Card'	FormatSDCard	no	
'G Sensor'	GSensor	no	
'GPS Stamp'	GPSStamp	no	
'Image Stabilisation'	ImageStabilisation	no	
'Keep User Settings'	KeepUserSettings	no	
'Language'	Language	no	
'Linux'	Linux	no	
'Model'	Model	no	
'Model Stamp'	ModelStamp	no	
'MyNextbase - Paired Device Name'	MyNextbase-PairedDeviceName	no	
'MyNextbase - Pairing'	MyNextbase-Pairing	no	
'NBDCD'	NBCD	no	
'Number / License Plate'	NumberLicensePlate	no	

'Parking Mode'	ParkingMode	no
'RTOS'	RTOS	no
'Recording History'	RecordingHistory	no
'Resolution'	Resolution	no
'Reversing Camera'	ReversingCamera	no
'SD Card Class'	SDCardClass	no
'SD Card Format'	SDCardFormat	no
'SD Card Manf Date'	SDCardManfDate	no
'SD Card Manf ID'	SDCardManfID	no
'SD Card Model No'	SDCardModelNo	no
'SD Card OEM ID'	SDCardOEMID	no
'SD Card Serial No'	SDCardSerialNo	no
'SD Card Size'	SDCardSize	no
'SD Card Type'	SDCardType	no
'SD Card Used Space'	SDCardUsedSpace	no
'Screen Dimming'	ScreenDimming	no
'Screen Saver'	ScreenSaver	no
'Serial No'	SerialNumber	no
'Speed Stamp'	SpeedStamp	no
'Speed Units'	SpeedUnits	no
'System Info'	SystemInfo	no
'Time & Date'	TimeAndDate	no
'Time Lapse'	TimeLapse	no
'Time Stamp'	VideoTimeStamp	no
'Time Zone / DST'	TimeZoneDST	no
'Video Length'	VideoLength	no
'Wi-Fi MAC Address'	Wi-Fi MAC Address	no
'Wi-Fi Password'	Wi-Fi Password	no
'Wi-Fi SSID'	Wi-Fi SSID	no
'what3words'	What3Words	no

## QuickTime Video Tags

Index	Tag Name	Writable	Values / Notes
0	DisplaySize	no	0 = Normal 1 = Double Size 2 = Half Size 3 = Full Screen 4 = Current Size
6	SlideShow	no	0 = No 1 = Yes

## QuickTime UserMedia Tags

Tag ID	Tag Name	Writable	Values / Notes
'MTDT'	MetaData	-	--> <a href="#">QuickTime MetaData Tags</a>

## QuickTime MetaData Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Title	no	
0x0003	ProductionDate	no	
0x0004	Software	no	
0x0005	Product	no	
0x000a	TrackProperty	no	[Value 0] 0x0 = No presentation

Bit 0 = Main track  
 [Value 1]  
 0x0 = No attributes  
 Bit 15 = Read only

0x000b	TimeZone	no
0x000c	ModifyDate	no

## QuickTime MovieHeader Tags

Index4	Tag Name	Writable	Values / Notes
0	MovieHeaderVersion	no	
1	CreateDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
2	ModifyDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
3	TimeScale	no	
4	Duration	no	
5	PreferredRate	no	
6	PreferredVolume	no	
9	MatrixStructure	no	
18	PreviewTime	no	
19	PreviewDuration	no	
20	PosterTime	no	
21	SelectionTime	no	
22	SelectionDuration	no	
23	CurrentTime	no	
24	NextTrackID	no	

## QuickTime Preview Tags

Index2	Tag Name	Writable	Values / Notes
0	PreviewDate	int32u	(converted from UTC to local time if the QuickTimeUTC option is set. This tag is part of a binary data structure so it may not be deleted -- instead the value is set to zero if the tag is deleted individually)
2	PreviewVersion	no	
3	PreviewAtomType	no	
5	PreviewAtomIndex	no	

## QuickTime SkipInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
'thma'	ThumbnailImage	no	
'ver '	Version	no	

## QuickTime Profile Tags

Tag ID	Tag Name	Writable	Values / Notes
'APRF'	AudioProfile	-	--> <a href="#">QuickTime AudioProf Tags</a>
'FPRF'	FileGlobalProfile	-	--> <a href="#">QuickTime FileProf Tags</a>
'OLYM'	OlympusOLYM	-	--> <a href="#">Olympus OLYM Tags</a>
'VPRF'	VideoProfile	-	--> <a href="#">QuickTime VideoProf Tags</a>

## QuickTime AudioProf Tags

Index4	Tag Name	Writable	Values / Notes

0	AudioProfileVersion?	no	
1	AudioTrackID	no	
2	AudioCodec	no	
3	AudioCodecInfo?	no	
4	AudioAttributes	no	Bit 0 = Encrypted Bit 1 = Variable bitrate Bit 2 = Dual mono
5	AudioAvgBitrate	no	
6	AudioMaxBitrate	no	
7	AudioSampleRate	no	
8	AudioChannels	no	

## QuickTime FileProf Tags

Index	Tag Name	Writable	Values / Notes
0	FileProfileVersion?	no	
1	FileFunctionFlags	no	Bit 28 = Fragmented Bit 29 = Additional tracks Bit 30 = Edited

## QuickTime VideoProf Tags

Index	Tag Name	Writable	Values / Notes
0	VideoProfileVersion?	no	
1	VideoTrackID	no	
2	VideoCodec	no	
3	VideoCodecInfo?	no	
4	VideoAttributes	no	Bit 0 = Encrypted Bit 1 = Variable bitrate Bit 2 = Variable frame rate Bit 3 = Interlaced
5	VideoAvgBitrate	no	
6	VideoMaxBitrate	no	
7	VideoAvgFrameRate	no	
8	VideoMaxFrameRate	no	
9	VideoSize	no	
10	PixelAspectRatio	no	

## QuickTime Flip Tags

Found in MP4 files from Flip Video cameras.

Index	Tag Name	Writable	Values / Notes
1	PreviewImageWidth	no	
2	PreviewImageHeight	no	
13	PreviewImageLength	no	
14	SerialNumber	no	
28	PreviewImage	no	

## QuickTime Tags360Fly Tags

Timed metadata found in MP4 videos from the 360Fly.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Accel360Fly	-	--> <a href="#">QuickTime Accel360Fly Tags</a>
0x0002	Gyro360Fly	-	--> <a href="#">QuickTime Gyro360Fly Tags</a>
0x0003	Mag360Fly	-	--> <a href="#">QuickTime Mag360Fly Tags</a>

0x0005	GPS360Fly	-	--> <a href="#">QuickTime GPS360Fly Tags</a>
0x0006	Rot360Fly	-	--> <a href="#">QuickTime Rot360Fly Tags</a>
0x00fa	Fusion360Fly	-	--> <a href="#">QuickTime Fusion360Fly Tags</a>

## QuickTime Accel360Fly Tags

Index1	Tag Name	Writable	Values / Notes
1	AccelMode?	no	
2	SampleTime	no	
10	AccelYPR	no	

## QuickTime Gyro360Fly Tags

Index1	Tag Name	Writable	Values / Notes
1	GyroMode?	no	
2	SampleTime	no	
10	GyroYPR	no	

## QuickTime Mag360Fly Tags

Index1	Tag Name	Writable	Values / Notes
1	MagMode?	no	
2	SampleTime	no	
10	MagnetometerXYZ	no	

## QuickTime GPS360Fly Tags

Index1	Tag Name	Writable	Values / Notes
1	GPSMode?	no	
2	SampleTime	no	
10	GPSLatitude	no	
14	GPSLongitude	no	
18	GPSAltitude	no	
22	GPSSpeed	no	(converted to km/hr)
24	GPSTrack	no	
26	Acceleration	no	

## QuickTime Rot360Fly Tags

Index1	Tag Name	Writable	Values / Notes
1	RotMode?	no	
2	SampleTime	no	
10	RotationXYZ	no	

## QuickTime Fusion360Fly Tags

Index1	Tag Name	Writable	Values / Notes
1	FusionMode?	no	
2	SampleTime	no	
10	FusionYPR	no	

## QuickTime ImageFile Tags

Tags used in QTIF QuickTime Image Files.

Tag ID	Tag Name	Writable	Values / Notes
'idat'	ImageData	no	
'idsc'	ImageDescription	-	--> <a href="#">QuickTime VisualSampleDesc Tags</a>
'iicc'	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a>

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Oct 7, 2025*

[-- ExifTool Tag Names](#)

# RIFF Tags

The RIFF container format is used various types of files including AVI, WAV, WEBP, LA, OFR, PAC and WV. According to the EXIF specification, Meta information is embedded in two types of RIFF [LIST](#) chunks: [INFO](#) and [exif](#), and information about the audio content is stored in the [fmt](#) chunk. As well as this information, some video information and proprietary manufacturer-specific information is also extracted.

Large AVI videos may be a concatenation of two or more RIFF chunks. For these files, information is extracted from subsequent RIFF chunks as sub-documents, but the Duration is calculated for the full video.

ExifTool currently has the ability to write EXIF, XMP and ICC\_Profile metadata to WEBP images, but can't yet write to other RIFF-based formats.

Tag ID	Tag Name	Writable	Values / Notes
'ALPH'	ALPH	-	--> <a href="#">RIFF ALPH Tags</a>
'ANIM'	ANIM	-	--> <a href="#">RIFF ANIM Tags</a>
'ANMF'	ANMF	-	--> <a href="#">RIFF ANMF Tags</a>
'C2PA'	JUMBF	-	--> <a href="#">Jpeg2000 Tags</a>
'CSET'	CharacterSet	-	--> <a href="#">RIFF CSET Tags</a>
'EXIF'	EXIF	-	(WebP files)
	UnknownEXIF	no	--> <a href="#">EXIF Tags</a> --> <a href="#">EXIF Tags</a>
'ICCP'	ICC_Profile	-	--> <a href="#">ICC_Profile Tags</a> (WebP files)
'ID3 '	ID3-2	-	--> <a href="#">ID3 Tags</a>
'IDIT'	DateTimeOriginal	no	
'JUNK'	OlympusJunk	-	--> <a href="#">Olympus AVI Tags</a>
	CasioJunk	-	--> <a href="#">EXIF Tags</a>
	RicohJunk	-	--> <a href="#">Ricoh AVI Tags</a>
	PentaxJunk	-	--> <a href="#">Pentax Junk Tags</a>
	PentaxJunk2	-	--> <a href="#">Pentax Junk2 Tags</a>
	LucasJunk	-	--> <a href="#">QuickTime Stream Tags</a>
	TextJunk	no	
'JUNQ'	OldXMP	no	
'LIST_INFO'	Info	-	--> <a href="#">RIFF Info Tags</a>
'LIST_INFO'	Info	-	--> <a href="#">RIFF Info Tags</a>
'LIST_Tdat'	Tdat	-	--> <a href="#">RIFF Tdat Tags</a>
'LIST_adtl'	AssociatedDataList	-	--> <a href="#">RIFF Tags</a>
'LIST_exif'	Exif	-	--> <a href="#">RIFF Exif Tags</a>
'LIST_hdrl'	Hdrl	-	--> <a href="#">RIFF Hdrl Tags</a>
'LIST_hydt'	PentaxData	-	--> <a href="#">Pentax AVI Tags</a>
'LIST_ncdt'	NikonData	-	--> <a href="#">Nikon AVI Tags</a>
'LIST_pntx'	PentaxData2	-	--> <a href="#">Pentax AVI Tags</a>
'SEAL'	SEAL	-	--> <a href="#">XMP SEAL Tags</a>
'SGLT'	BikeBroAccel	-	--> <a href="#">QuickTime Stream Tags</a>
'SLLT'	BikeBroGPS	-	--> <a href="#">QuickTime Stream Tags</a>
'VP8 '	VP8Bitstream	-	--> <a href="#">RIFF VP8 Tags</a>
'VP8L'	VP8L	-	--> <a href="#">RIFF VP8L Tags</a>
'VP8X'	VP8X	-	--> <a href="#">RIFF VP8X Tags</a>
"XMP\0"	XMP	-	--> <a href="#">XMP Tags</a> (incorrectly written WebP files)
'XMP '	XMP	-	--> <a href="#">XMP Tags</a> (WebP files)
'_PMX'	XMP	-	--> <a href="#">XMP Tags</a> (AVI and WAV files)
'aXML'	AXML	-	--> <a href="#">XMP XML Tags</a>
'acid'	Acidizer	-	--> <a href="#">RIFF Acidizer Tags</a>
'afsp'	Afsp	no	
'bext'	BroadcastExtension	-	--> <a href="#">RIFF BroadcastExt Tags</a>

'cue'	CuePoints	no	(config_files/cutepointlist.config from full distribution will decode this and generate a list of cue points with labels)
'ds64'	ContentSize64	-	--> <a href="#">RIFF DS64 Tags</a>
'fact'	NumberOfSamples	no	
'fmt '	AudioFormat	-	--> <a href="#">RIFF AudioFormat Tags</a>
'gps0'	GPSTrack	-	--> <a href="#">QuickTime Stream Tags</a>
'gsen'	GSensor	-	--> <a href="#">QuickTime Stream Tags</a>
'guan'	Guano	no	
'iXML'	IXML	-	--> <a href="#">XMP XML Tags</a>
'id3 '	ID3	-	--> <a href="#">ID3 Tags</a>
'inst'	Instrument	-	--> <a href="#">RIFF Instrument Tags</a>
'labl'	CuePointLabel	no	
'list'	ListType	no	
'ltxt'	LabeledText	no	(CuePointID Length Purpose Country Language Dialect Codepage Text)
'note'	CuePointNote	no	
'olym'	Olym	-	--> <a href="#">Olympus WAV Tags</a>
'plst'	Playlist	no	
'smpl'	Sampler	-	--> <a href="#">RIFF Sampler Tags</a>
'tx_USER'	UserText	-	--> <a href="#">RIFF UserText Tags</a>
'tx_Unknown'	Text	no	(streamed text, extracted when the ExtractEmbedded option is used)

## RIFF ALPH Tags

WebP alpha chunk.

Index1	Tag Name	Writable	Values / Notes
0	AlphaPreprocessing	no	[val & 0x3] 0 = none 1 = Level Reduction
0.1	AlphaFiltering	no	[val & 0x3] 0 = none 1 = Horizontal 2 = Vertical 3 = Gradient
0.2	AlphaCompression	no	[val & 0x3] 0 = none 1 = Lossless

## RIFF ANIM Tags

WebP animation chunk.

Index1	Tag Name	Writable	Values / Notes
0	BackgroundColor	no	
4	AnimationLoopCount	no	

## RIFF ANMF Tags

WebP animation frame chunk.

Index1	Tag Name	Writable	Values / Notes
12	Duration	no	(extracted as the sum of durations of all animation frames)

## RIFF CSET Tags

Index2	Tag Name	Writable	Values / Notes
0	CodePage	no	
1	CountryCode	no	
2	LanguageCode	no	

3	Dialect	no
---	---------	----

## RIFF Info Tags

RIFF INFO tags found in AVI video and WAV audio files. Tags which are part of the EXIF 2.3 specification have an underlined Tag Name in the HTML version of this documentation. Other tags are found in AVI files generated by some software.

Tag ID	Tag Name	Writable	Values / Notes
'AGES'	Rated	no	
'CMNT'	Comment	no	
'CODE'	EncodedBy	no	
'COMM'	Comments	no	
'DIRC'	Directory	no	
'DISP'	SoundSchemeTitle	no	
'DTIM'	DateTimeOriginal	no	
'GENR'	Genre	no	
'IARL'	<u>ArchivalLocation</u>	no	
'IART'	<u>Artist</u>	no	
'IAS1'	FirstLanguage	no	
'IAS2'	SecondLanguage	no	
'IAS3'	ThirdLanguage	no	
'IAS4'	FourthLanguage	no	
'IAS5'	FifthLanguage	no	
'IAS6'	SixthLanguage	no	
'IAS7'	SeventhLanguage	no	
'IAS8'	EighthLanguage	no	
'IAS9'	NinthLanguage	no	
'IBSU'	BaseUrl	no	
'ICAS'	DefaultAudioStream	no	
'ICDS'	CostumeDesigner	no	
'ICMS'	<u>Commissioned</u>	no	
'ICMT'	<u>Comment</u>	no	
'ICNM'	Cinematographer	no	
'ICNT'	Country	no	
'ICOP'	<u>Copyright</u>	no	
'ICRD'	<u>DateCreated</u>	no	
'ICRP'	<u>Cropped</u>	no	
'IDIM'	<u>Dimensions</u>	no	
'IDIT'	DateTimeOriginal	no	
'IDPI'	<u>DotsPerInch</u>	no	
'IDST'	DistributedBy	no	
'IEDT'	EditedBy	no	
'IENC'	EncodedBy	no	
'IENG'	<u>Engineer</u>	no	
'IGNR'	<u>Genre</u>	no	
'IKEY'	<u>Keywords</u>	no	
'ILGT'	<u>Lightness</u>	no	
'ILGU'	LogoURL	no	
'ILIU'	LogolconURL	no	
'ILNG'	Language	no	
'IMBI'	MoreInfoBannerImage	no	
'IMBU'	MoreInfoBannerURL	no	
'IMED'	<u>Medium</u>	no	

'IMIT'	MoreInfoText	no	
'IMIU'	MoreInfoURL	no	
'IMUS'	MusicBy	no	
'INAM'	<u>Title</u>	no	
'IPDS'	ProductionDesigner	no	
'IPLT'	<u>NumColors</u>	no	
'IPRD'	<u>Product</u>	no	
'IPRO'	ProducedBy	no	
'IRIP'	RippedBy	no	
'IRTD'	Rating	no	
'ISBJ'	<u>Subject</u>	no	
'ISFT'	<u>Software</u>	no	
'ISGN'	SecondaryGenre	no	
'ISHP'	<u>Sharpness</u>	no	
'ISMP'	TimeCode	no	
'ISRC'	<u>Source</u>	no	
'ISRF'	<u>SourceForm</u>	no	
'ISTD'	ProductionStudio	no	
'ISTR'	Starring	no	
'ITCH'	<u>Technician</u>	no	
'ITRK'	TrackNumber	no	
'IWMU'	WatermarkURL	no	
'IWRI'	WrittenBy	no	
'LANG'	Language	no	
'LOCA'	Location	no	
'PRT1'	Part	no	
'PRT2'	NumberOfParts	no	
'RATE'	Rate	no	
'STAR'	Starring	no	
'STAT'	Statistics	no	[Value 3] 0 = Bad 1 = OK
'TAPE'	TapeName	no	
'TCDO'	EndTimecode	no	
'TCOD'	StartTimecode	no	
'TITL'	Title	no	
'TLEN'	Length	no	
'TORG'	Organization	no	
'TRCK'	TrackNumber	no	
'TURL'	URL	no	
'TVER'	Version	no	
'VMAJ'	VegasVersionMajor	no	
'VMIN'	VegasVersionMinor	no	
'YEAR'	Year	no	

## RIFF Tdat Tags

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

## RIFF Exif Tags

These tags are part of the EXIF 2.3 specification for WAV audio files.

Tag ID	Tag Name	Writable	Values / Notes
--------	----------	----------	----------------

'ecor'	Make	no
'emdl'	Model	no
'emnt'	MakerNotes	no
'erel'	RelatedImageFile	no
'etim'	TimeCreated	no
'eucm'	UserComment	no
'ever'	ExifVersion	no

## RIFF Hdr Tags

Tag ID	Tag Name	Writable	Values / Notes
'IDIT'	DateTimeOriginal	no	
'ISMP'	TimeCode	no	
'LIST_odml'	OpenDML	-	--> <a href="#">RIFF OpenDML Tags</a>
'LIST_strl'	Stream	-	--> <a href="#">RIFF Stream Tags</a>
'avih'	AVIHeader	-	--> <a href="#">RIFF AVIHeader Tags</a>

## RIFF OpenDML Tags

Tag ID	Tag Name	Writable	Values / Notes
'dmlh'	ExtendedAVIHeader	-	--> <a href="#">RIFF ExtAVIHdr Tags</a>

## RIFF ExtAVIHdr Tags

Index4	Tag Name	Writable	Values / Notes
0	TotalFrameCount	no	

## RIFF Stream Tags

Tag ID	Tag Name	Writable	Values / Notes
'strd'	StreamData	-	--> <a href="#">RIFF StreamData Tags</a>
'strf'	AudioFormat	-	--> <a href="#">RIFF AudioFormat Tags</a>
	VideoFormat	-	--> <a href="#">BMP Tags</a>
'strh'	StreamHeader	-	--> <a href="#">RIFF StreamHeader Tags</a>
'strn'	StreamName	no	

## RIFF StreamData Tags

This chunk is used to store proprietary information in AVI videos from some cameras. The first 4 characters of the data are used as the Tag ID below.

Tag ID	Tag Name	Writable	Values / Notes
'AVIF'	AVIF	-	--> <a href="#">EXIF Tags</a>
'CASI'	CasioData	-	--> <a href="#">Casio AVI Tags</a>
'Zora'	VendorName	no	
'unknown'	UnknownData	no	

## RIFF AudioFormat Tags

Index2	Tag Name	Writable	Values / Notes
0	Encoding	no	--> <a href="#">RIFF AudioEncoding Values</a>
1	NumChannels	no	
2	SampleRate	no	
4	AvgBytesPerSec	no	
7	BitsPerSample	no	

# RIFF AudioEncoding Values

These "TwoCC" audio encoding codes are used in RIFF and ASF files.

Value	AudioEncoding
0x1	= Microsoft PCM
0x2	= Microsoft ADPCM
0x3	= Microsoft IEEE float
0x4	= Compaq VSELP
0x5	= IBM CVSD
0x6	= Microsoft a-Law
0x7	= Microsoft u-Law
0x8	= Microsoft DTS
0x9	= DRM
0xa	= WMA 9 Speech
0xb	= Microsoft Windows Media RT Voice
0x10	= OKI-ADPCM
0x11	= Intel IMA/DVI-ADPCM
0x12	= Videologic Mediaspace ADPCM
0x13	= Sierra ADPCM
0x14	= Antex G.723 ADPCM
0x15	= DSP Solutions DIGISTD
0x16	= DSP Solutions DIGIFIX
0x17	= Dialic OKI ADPCM
0x18	= Media Vision ADPCM
0x19	= HP CU
0x1a	= HP Dynamic Voice
0x20	= Yamaha ADPCM
0x21	= SONARC Speech Compression
0x22	= DSP Group True Speech
0x23	= Echo Speech Corp.
0x24	= Virtual Music Audiofile AF36
0x25	= Audio Processing Tech.
0x26	= Virtual Music Audiofile AF10
0x27	= Aculab Prosody 1612
0x28	= Merging Tech. LRC
0x30	= Dolby AC2
0x31	= Microsoft GSM610
0x32	= MSN Audio
0x33	= Antex ADPCME
0x34	= Control Resources VQLPC
0x35	= DSP Solutions DIGIREAL
0x36	= DSP Solutions DIGIADPCM
0x37	= Control Resources CR10
0x38	= Natural MicroSystems VBX ADPCM
0x39	= Crystal Semiconductor IMA ADPCM
0x3a	= Echo Speech ECHOSC3
0x3b	= Rockwell ADPCM
0x3c	= Rockwell DIGITALK
0x3d	= Xebec Multimedia
0x40	= Antex G.721 ADPCM
0x41	= Antex G.728 CELP
0x42	= Microsoft MSG723
0x43	= IBM AVC ADPCM
0x45	= ITU-T G.726
0x50	= Microsoft MPEG
0x51	= RT23 or PAC
0x52	= InSoft RT24
0x53	= InSoft PAC
0x55	= MP3
0x59	= Cirrus
0x60	= Cirrus Logic
0x61	= ESS Tech. PCM
0x62	= Voxware Inc.
0x63	= Canopus ATRAC
0x64	= APICOM G.726 ADPCM
0x65	= APICOM G.722 ADPCM
0x66	= Microsoft DSAT
0x67	= Microsoft DSAT DISPLAY
0x69	= Voxware Byte Aligned
0x70	= Voxware AC8
0x71	= Voxware AC10
0x72	= Voxware AC16

0x73 = Voxware AC20  
0x74 = Voxware MetaVoice  
0x75 = Voxware MetaSound  
0x76 = Voxware RT29HW  
0x77 = Voxware VR12  
0x78 = Voxware VR18  
0x79 = Voxware TQ40  
0x7a = Voxware SC3  
0x7b = Voxware SC3  
0x80 = Soundsoft  
0x81 = Voxware TQ60  
0x82 = Microsoft MSRT24  
0x83 = AT&T G.729A  
0x84 = Motion Pixels MVI MV12  
0x85 = DataFusion G.726  
0x86 = DataFusion GSM610  
0x88 = Iterated Systems Audio  
0x89 = Onlive  
0x8a = Multitude, Inc. FT SX20  
0x8b = Infocom ITS A/S G.721 ADPCM  
0x8c = Convedia G729  
0x8d = Not specified congruency, Inc.  
0x91 = Siemens SBC24  
0x92 = Sonic Foundry Dolby AC3 APDIF  
0x93 = MediaSonic G.723  
0x94 = Aculab Prosody 8kbps  
0x97 = ZyXEL ADPCM  
0x98 = Philips LPCBB  
0x99 = Studer Professional Audio Packed  
0xa0 = Malden PhonyTalk  
0xa1 = Racal Recorder GSM  
0xa2 = Racal Recorder G720.a  
0xa3 = Racal G723.1  
0xa4 = Racal Tetra ACELP  
0xb0 = NEC AAC NEC Corporation  
0xff = AAC  
0x100 = Rhetorex ADPCM  
0x101 = IBM u-Law  
0x102 = IBM a-Law  
0x103 = IBM ADPCM  
0x111 = Vivo G.723  
0x112 = Vivo Siren  
0x120 = Philips Speech Processing CELP  
0x121 = Philips Speech Processing GRUNDIG  
0x123 = Digital G.723  
0x125 = Sanyo LD ADPCM  
0x130 = Sipro Lab ACEPLNET  
0x131 = Sipro Lab ACELP4800  
0x132 = Sipro Lab ACELP8V3  
0x133 = Sipro Lab G.729  
0x134 = Sipro Lab G.729A  
0x135 = Sipro Lab Kelvin  
0x136 = VoiceAge AMR  
0x140 = Dictaphone G.726 ADPCM  
0x150 = Qualcomm PureVoice  
0x151 = Qualcomm HalfRate  
0x155 = Ring Zero Systems TUBGSM  
0x160 = Microsoft Audio1  
0x161 = Windows Media Audio V2 V7 V8 V9 / DivX audio (WMA) / Alex AC3 Audio  
0x162 = Windows Media Audio Professional V9  
0x163 = Windows Media Audio Lossless V9  
0x164 = WMA Pro over S/PDIF  
0x170 = UNISYS NAP ADPCM  
0x171 = UNISYS NAP ULAW  
0x172 = UNISYS NAP ALAW  
0x173 = UNISYS NAP 16K  
0x174 = MM SYCOM ACM SYC008 SyCom Technologies  
0x175 = MM SYCOM ACM SYC701 G726L SyCom Technologies  
0x176 = MM SYCOM ACM SYC701 CELP54 SyCom Technologies  
0x177 = MM SYCOM ACM SYC701 CELP68 SyCom Technologies  
0x178 = Knowledge Adventure ADPCM  
0x180 = Fraunhofer IIS MPEG2AAC  
0x190 = Digital Theater Systems DTS DS  
0x200 = Creative Labs ADPCM  
0x202 = Creative Labs FASTSPEECH8

0x203 = Creative Labs FASTSPEECH10  
0x210 = UHER ADPCM  
0x215 = Ulead DV ACM  
0x216 = Ulead DV ACM  
0x220 = Quarterdeck Corp.  
0x230 = I-Link VC  
0x240 = Aureal Semiconductor Raw Sport  
0x241 = ESST AC3  
0x250 = Interactive Products HSX  
0x251 = Interactive Products RPELP  
0x260 = Consistent CS2  
0x270 = Sony SCX  
0x271 = Sony SCY  
0x272 = Sony ATRAC3  
0x273 = Sony SPC  
0x280 = TELUM Telum Inc.  
0x281 = TELUMIA Telum Inc.  
0x285 = Norcom Voice Systems ADPCM  
0x300 = Fujitsu FM TOWNS SND  
0x301 = Fujitsu (not specified)  
0x302 = Fujitsu (not specified)  
0x303 = Fujitsu (not specified)  
0x304 = Fujitsu (not specified)  
0x305 = Fujitsu (not specified)  
0x306 = Fujitsu (not specified)  
0x307 = Fujitsu (not specified)  
0x308 = Fujitsu (not specified)  
0x350 = Micronas Semiconductors, Inc. Development  
0x351 = Micronas Semiconductors, Inc. CELP833  
0x400 = Brooktree Digital  
0x401 = Intel Music Coder (IMC)  
0x402 = Ligos Indeo Audio  
0x450 = QDesign Music  
0x500 = On2 VP7 On2 Technologies  
0x501 = On2 VP6 On2 Technologies  
0x680 = AT&T VME VMPCM  
0x681 = AT&T TCP  
0x700 = YMPEG Alpha (dummy for MPEG-2 compressor)  
0x8ae = ClearJump LiteWave (lossless)  
0x1000 = Olivetti GSM  
0x1001 = Olivetti ADPCM  
0x1002 = Olivetti CELP  
0x1003 = Olivetti SBC  
0x1004 = Olivetti OPR  
0x1100 = Lernout & Hauspie  
0x1101 = Lernout & Hauspie CELP codec  
0x1102 = Lernout & Hauspie SBC codec  
0x1103 = Lernout & Hauspie SBC codec  
0x1104 = Lernout & Hauspie SBC codec  
0x1400 = Norris Comm. Inc.  
0x1401 = ISIAudio  
0x1500 = AT&T Soundspace Music Compression  
0x181c = VoxWare RT24 speech codec  
0x181e = Lucent elemedia AX24000P Music codec  
0x1971 = Sonic Foundry LOSSLESS  
0x1979 = Innings Telecom Inc. ADPCM  
0x1c07 = Lucent SX8300P speech codec  
0x1c0c = Lucent SX5363S G.723 compliant codec  
0x1f03 = CUseeMe DigiTalk (ex-Rocwell)  
0x1fc4 = NCT Soft ALF2CD ACM  
0x2000 = FAST Multimedia DVM  
0x2001 = Dolby DTS (Digital Theater System)  
0x2002 = RealAudio 1 / 2 14.4  
0x2003 = RealAudio 1 / 2 28.8  
0x2004 = RealAudio G2 / 8 Cook (low bitrate)  
0x2005 = RealAudio 3 / 4 / 5 Music (DNET)  
0x2006 = RealAudio 10 AAC (RAAC)  
0x2007 = RealAudio 10 AAC+ (RACP)  
0x2500 = Reserved range to 0x2600 Microsoft  
0x3313 = makeAVIS (ffvfw fake AVI sound from AviSynth scripts)  
0x4143 = Divio MPEG-4 AAC audio  
0x4201 = Nokia adaptive multirate  
0x4243 = Divio G726 Divio, Inc.  
0x434c = LEAD Speech  
0x564c = LEAD Vorbis

0x5756 = WavPack Audio  
 0x674f = Ogg Vorbis (mode 1)  
 0x6750 = Ogg Vorbis (mode 2)  
 0x6751 = Ogg Vorbis (mode 3)  
 0x676f = Ogg Vorbis (mode 1+)  
 0x6770 = Ogg Vorbis (mode 2+)  
 0x6771 = Ogg Vorbis (mode 3+)  
 0x7000 = 3COM NBX 3Com Corporation  
 0x706d = FAAD AAC  
 0x7a21 = GSM-AMR (CBR, no SID)  
 0x7a22 = GSM-AMR (VBR, including SID)  
 0xa100 = Converse Infosys Ltd. G723 1  
 0xa101 = Converse Infosys Ltd. AVQSBC  
 0xa102 = Converse Infosys Ltd. OLDSBC  
 0xa103 = Symbol Technologies G729A  
 0xa104 = VoiceAge AMR WB VoiceAge Corporation  
 0xa105 = Ingenient Technologies Inc. G726  
 0xa106 = ISO/MPEG-4 advanced audio Coding  
 0xa107 = Encore Software Ltd G726  
 0xa109 = Speex ACM Codec xiph.org  
 0xdfac = DebugMode SonicFoundry Vegas FrameServer ACM Codec  
 0xe708 = Unknown -  
 0xf1ac = Free Lossless Audio Codec FLAC  
 0xffffe = Extensible  
 0xfffff = Development

## RIFF StreamHeader Tags

Index4	Tag Name	Writable	Values / Notes
0	StreamType	no	'auds' = Audio 'iavs' = Interleaved Audio+Video 'mids' = MIDI 'txts' = Text 'vids' = Video
1	AudioCodec VideoCodec Codec	no no no	
5	AudioSampleRate VideoFrameRate StreamSampleRate	no no no	
8	AudioSampleCount VideoFrameCount StreamSampleCount	no no no	
10	Quality	no	
11	SampleSize	no	

## RIFF AVIHeader Tags

Index4	Tag Name	Writable	Values / Notes
0	FrameRate	no	
1	MaxDataRate	no	(converted using SI byte prefixes unless the API ByteUnit option is set to "Binary")
4	FrameCount	no	
6	StreamCount	no	
8	ImageWidth	no	
9	ImageHeight	no	

## RIFF VP8 Tags

This chunk is found in simple-format (lossy) WebP files. See [https://developers.google.com/speed/webp/docs/riff\\_container](https://developers.google.com/speed/webp/docs/riff_container) for the WebP container specification.

Index1	Tag Name	Writable	Values / Notes
0	VP8Version	no	[val >> 1 & 0x7] 0 = 0 (bicubic reconstruction, normal loop) 1 = 1 (bilinear reconstruction, simple loop)

2 = 2 (bilinear reconstruction, no loop)  
 3 = 3 (no reconstruction, no loop)

6	ImageWidth	no	[val & 0x3fff]
6.1	HorizontalScale	no	[val >> 14 & 0x3]
8	ImageHeight	no	[val & 0x3fff]
8.1	VerticalScale	no	[val >> 14 & 0x3]

## RIFF VP8L Tags

This chunk is found in lossless WebP files.

Index1	Tag Name	Writable	Values / Notes
1	ImageWidth	no	
2	ImageHeight	no	
4	AlphalsUsed	no	[val >> 4 & 0x1] 0 = No 1 = Yes

## RIFF VP8X Tags

This chunk is found in extended WebP files.

Index1	Tag Name	Writable	Values / Notes
0	WebP_Flags	no	(flags used in Extended WebP images) Bit 1 = Animation Bit 2 = XMP Bit 3 = EXIF Bit 4 = Alpha Bit 5 = ICC Profile
4	ImageWidth	no	
6	ImageHeight	no	

## RIFF Acidizer Tags

Index1	Tag Name	Writable	Values / Notes
0	AcidizerFlags	no	Bit 0 = One shot Bit 1 = Root note set Bit 2 = Stretch Bit 3 = Disk-based Bit 4 = High octave
4	RootNote	no	48 = C    56 = G#    64 = High E 49 = C#    57 = A    65 = High F 50 = D    58 = A#    66 = High F# 51 = D#    59 = B    67 = High G 52 = E    60 = High C    68 = High G# 53 = F    61 = High C#    69 = High A 54 = F#    62 = High D    70 = High A# 55 = G    63 = High D#    71 = High B
12	Beats	no	
16	Meter	no	
20	Tempo	no	

## RIFF BroadcastExt Tags

Information found in the Broadcast Audio Extension chunk (see <http://tech.ebu.ch/docs/tech/tech3285.pdf>).

Index1	Tag Name	Writable	Values / Notes
0	Description	no	
256	Originator	no	
288	OriginatorReference	no	
320	DateTimeOriginal	no	
338	TimeReference	no	(first sample count since midnight)

346	BWFVersion	no
348	BWF_UMID	no
602	CodingHistory	no

## RIFF DS64 Tags

64-bit data sizes for MBWF/RF64 files. See <https://tech.ebu.ch/docs/tech/tech3306-2009.pdf> for the specification.

Index8	Tag Name	Writable	Values / Notes
0	RIFFSize64	no	
1	DataSize64	no	
2	NumberOfSamples64	no	

## RIFF Instrument Tags

Index1	Tag Name	Writable	Values / Notes
0	UnshiftedNote	no	
1	FineTune	no	
2	Gain	no	
3	LowNote	no	
4	HighNote	no	
5	LowVelocity	no	
6	HighVelocity	no	

## RIFF Sampler Tags

Index4	Tag Name	Writable	Values / Notes
0	Manufacturer	no	
1	Product	no	
2	SamplePeriod	no	
3	MIDIUnityNote	no	
4	MIDIPitchFraction	no	
5	SMPTEFormat	no	0 = none 24 = 24 fps 25 = 25 fps 29 = 29 fps 30 = 30 fps
6	SMPTEOffset	no	(HH:MM:SS:FF)
7	NumSampleLoops	no	
8	SamplerDataLen	no	
9	SamplerData	no	

## RIFF UserText Tags

Tags decoded from the USER-format txts stream written by Momento M6 dashcam. Extracted only if the ExtractEmbedded option is used.

Index1	Tag Name	Writable	Values / Notes
28	GPSAltitude	no	
40	Accelerometer	no	
56	GPSSpeed	no	
60	GPSLatitude	no	
64	GPSLongitude	no	
68	GPSDateTime	no	

[<-- ExifTool Tag Names](#)

# RSRC Tags

Tags extracted from Mac OS resource files, DFONT files and ".\_" sidecar files. These tags may also be extracted from the resource fork of any file in OS X, either by adding "..namedfork/rsrc" to the filename to process the resource fork alone, or by using the [ExtractEmbedded](#) (-ee) option to process the resource fork as a sub-document of the main file. When writing, ExifTool preserves the Mac OS resource fork by default, but it may be deleted with [-rsrc:all=](#) on the command line.

Tag ID	Tag Name	Writable	Values / Notes
'8BIM'	PhotoshopInfo	-	--> <a href="#">Photoshop Tags</a>
'POST_0x01f5'	PostscriptFont	-	--> <a href="#">PostScript Tags</a>
'STR _0xbff3'	ApplicationMissingMsg	no	
'STR _0xbff4'	CreatorApplication	no	
'STR#_0x0080'	Keywords	no	
'TEXT_0x0080'	Description	no	
'sfnt'	Font	-	--> <a href="#">Font Name Tags</a>
'usro_0x0000'	OpenWithApplication	no	
'vers_0x0001'	ApplicationVersion	no	

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*Last revised Oct 15, 2020*

[--> ExifTool Tag Names](#)

# RTF Tags

This table lists standard tags of the RTF information group, but ExifTool will also extract any non-standard tags found in this group. As well, ExifTool will extract any custom properties that are found. See <http://www.microsoft.com/en-ca/download/details.aspx?id=10725> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'author'	Author	no	
'buptim'	BackupTime	no	
'category'	Category	no	
'comment'	Comment	no	
'company'	Company	no	
'copyright'	Copyright	no	
'creatim'	CreateDate	no	
'doccomm'	Comments	no	
'edmins'	TotalEditTime	no	
'hlinkbase'	HyperlinkBase	no	
'id'	InternalIDNumber	no	
'keywords'	Keywords	no	
'manager'	Manager	no	
'nofchars'	Characters	no	
'nofcharsws'	CharactersWithSpaces	no	(according to the 2007 Microsoft RTF specification this is clearly the number of characters NOT including spaces, but Microsoft Word writes this as the number WITH spaces, so ExifTool names this tag according to the de facto standard)
'nofpages'	Pages	no	
'nofwords'	Words	no	
'operator'	LastModifiedBy	no	
'printim'	LastPrinted	no	
'revtim'	ModifyDate	no	
'subject'	Subject	no	
'title'	Title	no	
'vern'	InternalVersionNumber	no	
'version'	RevisionNumber	no	

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Last revised Jun 30, 2012

[--> ExifTool Tag Names](#)

# Radiance Tags

Information extracted from Radiance RGBE HDR images. Tag ID's are all uppercase as stored in the file, but converted to lowercase by when extracting to avoid conflicts with internal ExifTool variables. See <http://radsite.lbl.gov/radiance/refer/filefmts.pdf> and <http://www.graphics.cornell.edu/online/formats/rge/> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'_command'	Command	no	
'_comment'	Comment	no	
'_orient'	Orientation	no	<p>'+X +Y' = Rotate 90 CW '+X -Y' = Mirror horizontal and rotate 270 CW '+Y +X' = Mirror vertical '+Y -X' = Rotate 180 '-X +Y' = Mirror horizontal and rotate 90 CW '-X -Y' = Rotate 270 CW '-Y +X' = Horizontal (normal) '-Y -X' = Mirror horizontal</p>
'colorcorr'	ColorCorrection	no	
'exposure'	Exposure	no	(divide pixel values by this to get watts/steradian/meter^2)
'format'	Format	no	
'gamma'	Gamma	no	
'pixaspect'	PixelAspectRatio	no	
'primaries'	ColorPrimaries	no	
'software'	Software	no	
'view'	View	no	

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Last revised Oct 29, 2020

[-- ExifTool Tag Names](#)

# Rawzor Tags

Rawzor files store compressed images of other formats. As well as the information listed below, exiftool uncompresses and extracts the meta information from the original image.

Tag Name	Writable	Values / Notes
CompressionFactor	no	
OriginalFileSize	no	
OriginalFileType	no	
RawzorCreatorVersion	no	
RawzorRequiredVersion	no	

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*Last revised Jun 8, 2010*

[<-- ExifTool Tag Names](#)

# Real Tags

ExifTool recognizes three basic types of Real audio/video files: 1) RealMedia (RM, RV and RMVB), 2) RealAudio (RA), and 3) Real Metafile (RAM and RPM).

## Real Media Tags

These **Tag ID's** are Chunk ID's used in RealMedia and RealVideo (RM, RV and RMVB) files.

Tag ID	Tag Name	Writable	Values / Notes
'CONT'	CONT	-	--> <a href="#">Real ContentDescr Tags</a>
'MDPR'	MDPR	-	--> <a href="#">Real MediaProps Tags</a>
'PROP'	PROP	-	--> <a href="#">Real Properties Tags</a>
'RJMD'	RJMD	-	--> <a href="#">Real Metadata Tags</a>

## Real ContentDescr Tags

Sequence	Tag Name	Writable	Values / Notes
0	TitleLen?	no	
1	Title	no	
2	AuthorLen?	no	
3	Author	no	
4	CopyrightLen?	no	
5	Copyright	no	
6	CommentLen?	no	
7	Comment	no	

## Real MediaProps Tags

Sequence	Tag Name	Writable	Values / Notes
0	StreamNumber	no	
1	StreamMaxBitrate	no	
2	StreamAvgBitrate	no	
3	StreamMaxPacketSize	no	
4	StreamAvgPacketSize	no	
5	StreamStartTime	no	
6	StreamPreroll	no	
7	StreamDuration	no	
8	StreamNameLen?	no	
9	StreamName	no	
10	StreamMimeLen?	no	
11	StreamMimeType	no	
12	FileInfoLen?	no	
13	FileInfoLen2?	no	
14	FileInfoVersion	no	
15	PhysicalStreams?	no	
16	PhysicalStreamNumbers?	no	
17	DataOffsets?	no	
18	NumRules?	no	
19	PhysicalStreamNumberMap?	no	
20	NumProperties?	no	
21	FileInfoProperties	-	--> <a href="#">Real FileInfo Tags</a>

## Real FileInfo Tags

The following tags have been observed in the FileInfo properties, but any other existing information will also be extracted.

Tag ID	Tag Name	Writable	Values / Notes
'Audiences'	Audiences	no	
'Audio Format'	AudioFormat	no	
'Content Rating'	ContentRating	no	0 = No Rating 1 = All Ages 2 = Older Children 3 = Younger Teens 4 = Older Teens 5 = Adult Supervision Recommended 6 = Adults Only
'Creation Date'	CreateDate	no	
'Description'	Description	no	
'File ID'	FileID	no	
'Generated By'	Software	no	
'Indexable'	Indexable	no	0 = False 1 = True
'Keywords'	Keywords	no	
'Modification Date'	ModifyDate	no	
'Target Audiences'	TargetAudiences	no	
'Video Quality'	VideoQuality	no	
'audioMode'	AudioMode	no	
'videoMode'	VideoMode	no	

## Real Properties Tags

Sequence	Tag Name	Writable	Values / Notes
0	MaxBitrate	no	
1	AvgBitrate	no	
2	MaxPacketSize	no	
3	AvgPacketSize	no	
4	NumPackets	no	
5	Duration	no	
6	Preroll	no	
7	IndexOffset?	no	
8	DataOffset?	no	
9	NumStreams	no	
10	Flags	no	Bit 0 = Allow Recording Bit 1 = Perfect Play Bit 2 = Live Bit 3 = Allow Download

## Real Metadata Tags

The tags below represent information which has been observed in the Real Metadata format, but ExifTool will extract any information it finds in this format. (As far as I can tell from the referenced documentation, string values should be plain text, but this is not the case for the only sample file I have been able to obtain containing this information. These tags could also be split into separate sub-directories, but this will wait until I have better documentation or a more complete set of samples.)

Tag ID	Tag Name	Writable	Values / Notes
'Album/Name'	AlbumName	no	
'Track/Category'	TrackCategory	no	
'Track/Comments'	TrackComments	no	
'Track/Lyrics'	TrackLyrics	no	

## Real Audio Tags

Tags in the following table reference information extracted from various versions of RealAudio (RA) files.

Tag ID	Tag Name	Writable	Values / Notes
'.ra3'	RA3	-	--> <a href="#">Real AudioV3 Tags</a>
'.ra4'	RA4	-	--> <a href="#">Real AudioV4 Tags</a>
'.ra5'	RA5	-	--> <a href="#">Real AudioV5 Tags</a>

## Real AudioV3 Tags

Sequence	Tag Name	Writable	Values / Notes
0	Channels	no	
1	Unknown?	no	
2	BytesPerMinute	no	
3	AudioBytes	no	
4	TitleLen?	no	
5	Title	no	
6	ArtistLen?	no	
7	Artist	no	
8	CopyrightLen?	no	
9	Copyright	no	
10	CommentLen?	no	
11	Comment	no	

## Real AudioV4 Tags

Sequence	Tag Name	Writable	Values / Notes
0	FourCC1?	no	
1	AudioFileSize?	no	
2	Version2?	no	
3	HeaderSize?	no	
4	CodecFlavorID?	no	
5	CodedFrameSize?	no	
6	AudioBytes	no	
7	BytesPerMinute	no	
8	Unknown?	no	
9	SubPacketH?	no	
10	AudioFrameSize	no	
11	SubPacketSize?	no	
12	Unknown?	no	
13	SampleRate	no	
14	Unknown?	no	
15	BitsPerSample	no	
16	Channels	no	
17	FourCC2Len?	no	
18	FourCC2?	no	
19	FourCC3Len?	no	
20	FourCC3?	no	
21	Unknown?	no	
22	Unknown?	no	
23	TitleLen?	no	
24	Title	no	
25	ArtistLen?	no	
26	Artist	no	
27	CopyrightLen?	no	

28	Copyright	no
29	CommentLen?	no
30	Comment	no

## Real AudioV5 Tags

Sequence	Tag Name	Writable	Values / Notes
0	FourCC1?	no	
1	AudioFileSize?	no	
2	Version2?	no	
3	HeaderSize?	no	
4	CodecFlavorID?	no	
5	CodedFrameSize?	no	
6	AudioBytes	no	
7	BytesPerMinute	no	
8	Unknown?	no	
9	SubPacketH?	no	
10	FrameSize?	no	
11	SubPacketSize?	no	
12	SampleRate	no	
13	SampleRate2?	no	
14	BitsPerSample	no	
15	Channels	no	
16	Genr?	no	
17	FourCC3?	no	

## Real Metafile Tags

Tags representing information extracted from Real Audio Metafile and RealMedia Plug-in Metafile (RAM and RPM) files.

Tag ID	Tag Name	Writable	Values / Notes
'txt'	Text	no	
'url'	URL	no	

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*Last revised Jul 29, 2010*

[--> ExifTool Tag Names](#)

# Reconyx HyperFire Tags

The following tags are extracted from the maker notes of Reconyx RapidFire and HyperFire models such as the HC500, HC600 and PC900.

Index2	Tag Name	Writable	Values / Notes	
0	MakerNoteVersion	no		
1	FirmwareVersion	no		
4	FirmwareDate	int16u[2]		
6	TriggerMode	string[2]	'C' = CodeLoc Not Entered 'E' = External Sensor 'M' = Motion Detection 'T' = Time Lapse	
7	Sequence	int16u[2]		
9	EventNumber	int16u[2]		
11	DateTimeOriginal	int16u[6]		
18	MoonPhase	int16u	0 = New 1 = New Crescent 2 = First Quarter 3 = Waxing Gibbous	4 = Full 5 = Waning Gibbous 6 = Last Quarter 7 = Old Crescent
19	AmbientTemperatureFahrenheit	int16s		
20	AmbientTemperature	int16s		
21	SerialNumber	unicode[15]		
36	Contrast	int16u		
37	Brightness	int16u		
38	Sharpness	int16u		
39	Saturation	int16u		
40	InfraredIlluminator	int16u	0 = Off 1 = On	
41	MotionSensitivity	int16u		
42	BatteryVoltage	int16u		
43	UserLabel	string[22]		

# Reconyx UltraFire Tags

Maker notes tags for Reconyx UltraFire models.

Index1	Tag Name	Writable	Values / Notes	
24	FirmwareVersion	undef[7]		
31	Micro1Version	undef[7]		
38	BootLoaderVersion	undef[7]		
45	Micro2Version	undef[7]		
52	TriggerMode	undef[1]	'M' = Motion Detection 'P' = Point and Shoot 'T' = Time Lapse	
53	Sequence	int8u[2]		
55	EventNumber	int32u		
59	DateTimeOriginal	int8u[7]		
66	DayOfWeek	int8u	0 = Sunday 1 = Monday 2 = Tuesday 3 = Wednesday	4 = Thursday 5 = Friday 6 = Saturday
67	MoonPhase	int8u	0 = New 1 = New Crescent 2 = First Quarter 3 = Waxing Gibbous	4 = Full 5 = Waning Gibbous 6 = Last Quarter 7 = Old Crescent
68	AmbientTemperatureFahrenheit	int16s		
70	AmbientTemperature	int16s		
72	Illumination	int8u	0 = Off 1 = On	

73	BatteryVoltage	int16u
75	SerialNumber	string[15]
90	UserLabel	string[21]

## Reconyx HyperFire2 Tags

Maker notes tags for Reconyx HyperFire 2 models.

Index1	Tag Name	Writable	Values / Notes	
16	FileNumber	int16u		
18	DirectoryNumber	int16u		
20	DirectoryCreateDate	int16u[2]		
42	FirmwareVersion	int16u[3]		
48	FirmwareDate	int16u[2]		
52	TriggerMode	string[2]	'M' = Motion Detection 'P' = Point and Shoot 'T' = Time Lapse	
54	Sequence	int16u[2]		
58	EventNumber	int16u[2]		
62	DateTimeOriginal	int16u[6]		
74	DayOfWeek	int16u	0 = Sunday 1 = Monday 2 = Tuesday 3 = Wednesday	4 = Thursday 5 = Friday 6 = Saturday 7 = Wednesday
76	MoonPhase	int16u	0 = New 1 = New Crescent 2 = First Quarter 3 = Waxing Gibbous	4 = Full 5 = Waning Gibbous 6 = Last Quarter 7 = Old Crescent
78	AmbientTemperatureFahrenheit	int16s		
80	AmbientTemperature	int16s		
82	Contrast	int16u		
84	Brightness	int16u		
86	Sharpness	int16u		
88	Saturation	int16u		
90	Flash	int16u	0 = Off 1 = On	
92	AmbientInfrared	int16u		
94	AmbientLight	int16u		
96	MotionSensitivity	int16u		
98	BatteryVoltage	int16u		
100	BatteryVoltageAvg	int16u		
102	BatteryType	int16u		
104	UserLabel	string[22]		
126	SerialNumber	unicode[15]		

## Reconyx MicroFire Tags

Maker notes tags for Reconyx MicroFire cameras.

Index1	Tag Name	Writable	Values / Notes
16	FileNumber	int16u	
18	DirectoryNumber	int16u	
20	DirectoryCreateDate	int16u[2]	
24	SDCardID	int16u[8]~	
42	FirmwareVersion	int16u[3]	
48	FirmwareDate	int16u[2]	
52	BluetoothFirmwareVersion	int16u[3]	

58	BluetoothFirmwareDate	int16u		
60	WifiFirmwareVersion	int16u[3]		
66	WifiFirmwareDate	int16u		
68	TriggerMode	string[2]	'C' = CodeLoc Not Entered 'E' = External Sensor 'M' = Motion Sensor 'T' = Time Lapse	
70	Sequence	int16u[2]		
74	EventNumber	int16u[2]		
78	DateTimeOriginal	int16u[6]		
90	DayOfWeek	int16u	1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	
92	MoonPhase	int16u	0 = New 1 = New Crescent 2 = First Quarter 3 = Waxing Gibbous 4 = Full 5 = Waning Gibbous 6 = Last Quarter 7 = Old Crescent	
94	AmbientTemperatureFahrenheit	int16s		
96	AmbientTemperature	int16s		
98	Contrast	int16u		
100	Brightness	int16u		
102	Sharpness	int16u		
104	Saturation	int16u		
106	Flash	int8u	0 = Off 1 = On	
108	AmbientInfrared	int16u		
110	AmbientLight	int16u		
112	MotionSensitivity	int16u		
114	BatteryVoltage	int16u		
116	BatteryType	int16u	0 = Lithium 1 = NiMH 2 = Alkaline 3 = Lead Acid	
118	UserLabel	string[22]		
140	SerialNumber	unicode[15]		

## Reconyx HyperFire4K Tags

Maker notes tags for Reconyx HyperFire 4K models.

Index1	Tag Name	Writable	Values / Notes	
26	FirmwareVersion	undef[7]		
33	UIBFirmwareVersion	undef[7]		
40	TriggerMode	undef[1]	'C' = CodeLoc Not Entered 'E' = External Sensor 'L' = Cell Live View 'M' = Motion Sensor 'S' = Cell Status 'T' = Time Lapse	
41	Sequence	int8u[2]		
43	EventNumber	int32u		
47	DateTimeOriginal	undef[7]		
54	DayOfWeek	int8u	1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	
55	MoonPhase	int8u	0 = New 1 = New Crescent 2 = First Quarter 3 = Waxing Gibbous 4 = Full 5 = Waning Gibbous 6 = Last Quarter 7 = Old Crescent	
56	AmbientTemperatureFahrenheit	int16s		

58	AmbientTemperature	int16s	
60	Contrast	int16u	
62	Brightness	int16u	
64	Sharpness	int16u	
66	Saturation	int16u	
68	Flash	int8u	0 = Off 1 = On
69	AmbientLight	int32u	
73	MotionSensitivity	int16u	
75	BatteryVoltage	int16u	
77	BatteryVoltageAvg	int16u	
79	BatteryType	int16u	1 = NiMH 2 = Lithium 3 = External 4 = SC10 Solar
81	UserLabel	string[51]	
132	SerialNumber	string[15]	
147	DirectoryNumber	int16u	
149	FileNumber	int16u	

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*Last revised Sep 21, 2025*

[<-- ExifTool Tag Names](#)

# Red Tags

Tags extracted from Redcode R3D video files.

Tag ID	Tag Name	Writable	Values / Notes
'RED1'	Red1Header	-	--> <a href="#">Red RED1 Tags</a>
'RED2'	Red2Header	-	--> <a href="#">Red RED2 Tags</a>
0x1000	StartEdgeCode	no	
0x1001	StartTimecode	no	
0x1002	OtherDate1	no	
0x1003	OtherDate2	no	
0x1004	OtherDate3	no	
0x1005	DateTimeOriginal	no	
0x1006	SerialNumber	no	
0x1019	CameraType	no	
0x101a	ReelNumber	no	
0x101b	Take	no	
0x1023	DateCreated	no	
0x1024	TimeCreated	no	
0x1025	FirmwareVersion	no	
0x1029	ReelTimecode	no	
0x102a	StorageType	no	
0x1030	StorageFormatDate	no	
0x1031	StorageFormatTime	no	
0x1032	StorageSerialNumber	no	
0x1033	StorageModel	no	
0x1036	AspectRatio	no	
0x1042	Revision	no	
0x1056	OriginalFileName	no	
0x106e	LensMake	no	
0x106f	LensNumber	no	
0x1070	LensModel	no	
0x1071	Model	no	
0x107c	CameraOperator	no	
0x1086	VideoFormat	no	
0x1096	Filter	no	
0x10a0	Brain	no	
0x10a1	Sensor	no	
0x200d	ColorTemperature	no	
0x204b	RGBCurves	no	
0x2066	OriginalFrameRate	no	
0x4037	CropArea	no	
0x403b	ISO	no	
0x406a	FNumber	no	
0x406b	FocalLength	no	
0x606c	FocusDistance	no	

## Red RED1 Tags

Redcode version 1 header.

Index1	Tag Name	Writable	Values / Notes
7	RedcodeVersion	no	
54	ImageWidth	no	

58	ImageHeight	no
62	FrameRate	no
67	OriginalFileName	no

## Red RED2 Tags

Redcode version 2 header.

Index1	Tag Name	Writable	Values / Notes
7	RedcodeVersion	no	
76	ImageWidth	no	
80	ImageHeight	no	
86	FrameRate	no	

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*Last revised Jan 30, 2018*

[← ExifTool Tag Names](#)

# Ricoh Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0001	MakerNoteType	string	
0x0002	FirmwareVersion	string	
0x0005	SerialNumber InternalSerialNumber	undef[16] undef[16]	(the serial number stamped on the camera begins with 2 model-specific letters followed by the last 8 digits of this value. For the GXR, this is the serial number of the lens unit)
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>
0x1000	RecordingFormat	int16u	2 = JPEG 3 = DNG
0x1001	ImageInfo ExposureProgram	- int16u	--> <a href="#">Ricoh ImageInfo Tags</a> (GR) 1 = Auto 2 = Program AE 3 = Aperture-priority AE 4 = Shutter speed priority AE 5 = Shutter/aperture priority AE 6 = Manual 7 = Movie
0x1002	DriveMode	int16u	(valid only for some models) 0 = Single-frame 1 = Continuous 8 = AF-priority Continuous
0x1003	Sharpness WhiteBalance	int32u int16u	0 = Sharp 1 = Normal 2 = Soft (GR) 0 = Auto 1 = Multi-P Auto 2 = Daylight 3 = Cloudy 4 = Incandescent 1 5 = Incandescent 2 6 = Daylight Fluorescent 7 = Neutral White Fluorescent 8 = Cool White Fluorescent 9 = Warm White Fluorescent 10 = Manual 11 = Kelvin 12 = Shade
0x1004	WhiteBalanceFineTune	int16u	(2 numbers: amount of adjustment towards Amber and Green. Not valid for all models)
0x1006	FocusMode	int16u	1 = Manual    7 = Face Detect 2 = Multi AF    8 = Subject Tracking 3 = Spot AF    9 = Pinpoint AF 4 = Snap    10 = Movie 5 = Infinity
0x1007	AutoBracketing	int16u	0 = Off    17 = Contrast 9 = AE    18 = WB2 11 = WB    19 = Effect 16 = DR
0x1009	MacroMode	int16u	0 = Off 1 = On
0x100a	FlashMode	int16u	0 = Off 1 = Auto, Fired 2 = On 3 = Auto, Fired, Red-eye reduction 4 = Slow Sync 5 = Manual 6 = On, Red-eye reduction 7 = Synchro, Red-eye reduction 8 = Auto, Did not fire
0x100b	FlashExposureComp	rational64s	
0x100c	ManualFlashOutput	rational64s	-288 = 1/64   -168 = 1/11   -72 = 1/2.8 -240 = 1/32   -144 = 1/8   -48 = 1/2 -216 = 1/22   -120 = 1/5.6   -24 = 1/1.4 -192 = 1/16   -96 = 1/4   0 = Full
0x100d	FullPressSnap	int16u	0 = Off 1 = On

0x100e	DynamicRangeExpansion	int16u	0 = Off 3 = Weak 4 = Medium 5 = Strong
0x100f	NoiseReduction	int16u	0 = Off 1 = Weak 2 = Medium 3 = Strong
0x1010	ImageEffects	int16u	0 = Standard 1 = Vivid 3 = Black & White 5 = B&W Toning Effect 6 = Setting 1 7 = Setting 2 9 = High-contrast B&W 10 = Cross Process 11 = Positive Film 12 = Bleach Bypass 13 = Retro 15 = Miniature 17 = High Key
0x1011	Vignetting	int16u	0 = Off 1 = Low 2 = Medium 3 = High
0x1012	Contrast	int32u	2147483647 = MAX
0x1013	Saturation	int32u	
0x1014	Sharpness	int32u	
0x1015	ToningEffect	int16u	0 = Off      4 = Blue 1 = Sepia    5 = Purple 2 = Red      6 = B&W 3 = Green    7 = Color
0x1016	HueAdjust	int16u	0 = Off      4 = Normal 1 = Basic    5 = Warm 2 = Magenta 6 = Cool 3 = Yellow
0x1017	WideAdapter	int16u	0 = Not Attached 2 = Attached
0x1018	CropMode	int16u	0 = Off 1 = On (35mm) 2 = On (47mm)
0x1019	NDFilter	int16u	0 = Off 1 = On
0x101a	WBBracketShotNumber	int16u	
0x1200	AFStatus	int16u	0 = Out of Focus 1 = In Focus
0x1201	AFAreaXPosition1	int32u	(manual AF area position in a 1280x864 image)
0x1202	AFAreaYPosition1	int32u	
0x1203	AFAreaXPosition	int32u	(manual AF area position in the full image)
0x1204	AFAreaYPosition	int32u	
0x1205	AFAreaMode	int16u	0 = Auto 2 = Manual
0x1307	ColorTempKelvin	int32u	
0x1308	ColorTemperature	int32u	
0x1500	FocalLength	rational64u	
0x1601	SensorWidth	int32u	
0x1602	SensorHeight	int32u	
0x1603	CroppedImageWidth	int32u	
0x1604	CroppedImageHeight	int32u	
0x2001	RicohSubdir	-	--> <a href="#">Ricoh Subdir Tags</a>
	RicohSubdirIFD	-	--> <a href="#">Ricoh Subdir Tags</a>
	RicohRR1Subdir	-	--> <a href="#">Ricoh Subdir Tags</a>
0x4001	ThetaSubdir	-	--> <a href="#">Ricoh ThetaSubdir Tags</a>

## Ricoh ImageInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	RicohImageWidth	int16u	
2	RicohImageHeight	int16u	

6	RicohDate	int8u[7]	
28	PreviewImageStart	int16u*	
30	PreviewImageLength	int16u*	
32	FlashMode	int8u	0 = Off 1 = Auto 2 = On
33	Macro	int8u	0 = Off 1 = On
34	Sharpness	int8u	0 = Sharp 1 = Normal 2 = Soft
38	WhiteBalance	int8u	0 = Auto      4 = Fluorescent 1 = Daylight    5 = Manual 2 = Cloudy     7 = Detail 3 = Tungsten   9 = Multi-pattern Auto
39	ISOSetting	int8u	0 = Auto    6 = 400    10 = 3200 1 = 64       7 = 800    11 = 100 (Low) 2 = 100      8 = 1600 4 = 200      9 = Auto
40	Saturation	int8u	0 = High      6 = Toning Effect 1 = Normal    9 = Vivid 2 = Low       10 = Natural 3 = B&W

## Ricoh Subdir Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0004	ManufactureDate1	string[20]	
0x0005	ManufactureDate2	string[20]	
0x001a	FaceInfo	-	--> <a href="#">Ricoh FaceInfo Tags</a>
0x0029	FirmwareInfo	-	--> <a href="#">Ricoh FirmwareInfo Tags</a>
0x002a	NoiseReduction	int32u	0 = Off 1 = Weak 2 = Strong 3 = Max
0x002c	SerialInfo	-	--> <a href="#">Ricoh SerialInfo Tags</a>

## Ricoh FaceInfo Tags

Index1	Tag Name	Writable	Values / Notes
181	FacesDetected	int8u	
182	FaceDetectFrameSize	int16u[2]	
188	Face1Position	int16u[4]	(left, top, width and height of detected face in coordinates of FaceDetectFrameSize with increasing Y downwards)
200	Face2Position	int16u[4]	
212	Face3Position	int16u[4]	
224	Face4Position	int16u[4]	
236	Face5Position	int16u[4]	
248	Face6Position	int16u[4]	
260	Face7Position	int16u[4]	
272	Face8Position	int16u[4]	

## Ricoh FirmwareInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	FirmwareRevision	string[12]	
12	FirmwareRevision2	string[12]	

## Ricoh SerialInfo Tags

This information is found in images from the GXR.

Index1	Tag Name	Writable	Values / Notes
0	BodyFirmware	string[16]	
16	BodySerialNumber	string[16]	
32	LensFirmware	string[16]	
48	LensSerialNumber	string[16]	

## Ricoh ThetaSubdir Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0003	Accelerometer	rational64s[2]	
0x0004	Compass	rational64u	
0x000a	TimeZone	string	

## Ricoh Type2 Tags

Tags written by models such as the Ricoh HZ15 and the Pentax XG-1. These are not writable due to numerous formatting errors as written by these cameras.

Tag ID	Tag Name	Writable	Values / Notes
0x0207	RicohModel	no	
0x0300	RicohMake	no	

## Ricoh Text Tags

Some Ricoh DC and RDC models use a text-based format for their maker notes instead of the IFD format used by the Caplio models. Below is a list of known tags in this information.

Tag ID	Tag Name	Writable	Values / Notes
'Bg'	BlueGain	no	
'Gg'	GreenGain	no	
'Rev'	FirmwareVersion	no	
'Rg'	RedGain	no	
'Rv'	FirmwareVersion	no	

## Ricoh RMETA Tags

The Ricoh Caplio Pro G3 has the ability to add custom fields to the APP5 "RMETA" segment of JPEG images. While only a few observed tags have been defined below, ExifTool will extract any information found here.

Tag ID	Tag Name	Writable	Values / Notes
'Azimuth'	Azimuth	no	1 = N    5 = E    9 = S    13 = W 2 = NNE    6 = ESE    10 = SSW    14 = WNW 3 = NE    7 = SE    11 = SW    15 = NW 4 = ENE    8 = SSE    12 = WSW    16 = NNW
'Condition'	Condition	no	1 = Good 2 = Fair 3 = Poor 4 = Damaged
'Lit'	Lit	no	1 = Yes 2 = No
'Location'	Location	no	1 = Verge 2 = Gantry 3 = Central reservation 4 = Roundabout
'Sign type'	SignType	no	1 = Directional 2 = Warning 3 = Information
'_audio'	SoundFile	no	(audio data recorded in JPEG images by the G700SE)
'_barcode'	Barcodes	no+	

# Ricoh AVI Tags

Tag ID	Tag Name	Writable	Values / Notes
'mnrt'	MakerNoteRicoh	-	--> <a href="#">Ricoh Tags</a>
'rdc2'	RicohRDC2?	no	
'thum'	ThumbnailImage	no	
'ucmt'	Comment	no	

## Ricoh RDTA Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Accelerometer	no	
0x0010	TimeStamp	no	

## Ricoh RDTB Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Gyroscope	no	(rad/s)
0x0010	TimeStamp	no	

## Ricoh RDTC Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	MagneticField	no	
0x0010	TimeStamp	no	

## Ricoh RDTG Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	TimeStamp	no	
0x0064	FrameNumber	no	(generated internally)

## Ricoh RDTL Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0000	GPSDateTime	no	
0x0008	GPSLatitude	no	
0x0010	GPSLongitude	no	
0x0018	GPSAltitude	no	

## Ricoh LensID Values

Lens units available for the GXR, used by the Ricoh Composite LensID tag. Note that unlike lenses for all other makes of cameras, the focal lengths in these model names have already been scaled to include the 35mm crop factor.

Value	LensID	Value	LensID
'RL1'	= GR Lens A12 50mm F2.5 Macro	'RL5'	= GR Lens A12 28mm F2.5
'RL2'	= Ricoh Lens S10 24-70mm F2.5-4.4 VC	'RL6'	= Ricoh Lens A16 24-85mm F3.5-5.5
'RL3'	= Ricoh Lens P10 28-300mm F3.5-5.6 VC	'RL8'	= Mount A12

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
Last revised Mar 24, 2025

[<- ExifTool Tag Names](#)

# Samsung Tags

Tags found in the binary "STMN" format maker notes written by a number of Samsung models.

Index4	Tag Name	Writable	Values / Notes
0	MakerNoteVersion	undef[8]	
2	PreviewImageStart	int32u*	
3	PreviewImageLength	int32u*	
11	SamsungIFD	-	--> <a href="#">Samsung IFD Tags</a>

## Samsung IFD Tags

This is a standard-format IFD found in the maker notes of some Samsung models, except that the entry count is a 4-byte integer and the offsets are relative to the end of the IFD. Currently, no tags in this IFD are known, so the [Unknown](#) (-u) or [Verbose](#) (-v) option must be used to see this information.

Tag ID	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## Samsung Type2 Tags

Tags found in the EXIF-format maker notes of newer Samsung models.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	MakerNoteVersion	undef[4]	
0x0002	DeviceType	int32u	0x1000 = Compact Digital Camera 0x2000 = High-end NX Camera 0x3000 = HXM Video Camera 0x12000 = Cell Phone 0x300000 = SMX Video Camera
0x0003	SamsungModelID	int32u	0x100101c = NX10 0x1001226 = HMX-S15BP 0x1001233 = HMX-Q10 0x1001234 = HMX-H304 0x100130c = NX100 0x1001327 = NX11 0x170104b = ES65, ES67 / VLUU ES65, ES67 / SL50 0x170104e = ES70, ES71 / VLUU ES70, ES71 / SL600 0x1701052 = ES73 / VLUU ES73 / SL605 0x1701055 = ES25, ES27 / VLUU ES25, ES27 / SL45 0x1701300 = ES28 / VLUU ES28 0x1701303 = ES74,ES75,ES78 / VLUU ES75,ES78 0x2001046 = PL150 / VLUU PL150 / TL210 / PL151 0x2001048 = PL100 / TL205 / VLUU PL100 / PL101 0x2001311 = PL120,PL121 / VLUU PL120,PL121 0x2001315 = PL170,PL171 / VLUUPL170,PL171 0x200131e = PL210, PL211 / VLUU PL210, PL211 0x2701317 = PL20,PL21 / VLUU PL20,PL21 0x2a0001b = WP10 / VLUU WP10 / AQ100 0x3000000 = Various Models (0x3000000) 0x3a00018 = Various Models (0x3a00018) 0x400101f = ST1000 / ST1100 / VLUU ST1000 / CL65 0x4001022 = ST550 / VLUU ST550 / TL225 0x4001025 = Various Models (0x4001025) 0x400103e = VLUU ST5500, ST5500, CL80 0x4001041 = VLUU ST5000, ST5000, TL240 0x4001043 = ST70 / VLUU ST70 / ST71 0x400130a = Various Models (0x400130a) 0x400130e = ST90,ST91 / VLUU ST90,ST91 0x4001313 = VLUU ST95, ST95 0x4a00015 = VLUU ST60 0x4a0135b = ST30, ST65 / VLUU ST65 / ST67 0x50000000 = Various Models (0x50000000) 0x5001038 = Various Models (0x5001038) 0x500103a = WB650 / VLUU WB650 / WB660 0x500103c = WB600 / VLUU WB600 / WB610 0x500133e = WB150 / WB150F / WB152 / WB152F / WB151 0x5a0000f = WB5000 / HZ25W 0x5a0001e = WB5500 / VLUU WB5500 / HZ50W 0x6001036 = EX1

			0x700131c = VLUU SH100, SH100 0x27127002 = SMX-C20N
0x0011	OrientationInfo	-	--> <a href="#">Samsung OrientationInfo Tags</a>
0x0020	SmartAlbumColor	int16u[2]	'0 0' = n/a [Value 0] 0 = Red 4 = Magenta 1 = Yellow 5 = Black 2 = Green 6 = White 3 = Blue 7 = Various
0x0021	PictureWizard	int16u	--> <a href="#">Samsung PictureWizard Tags</a>
0x0030	LocalLocationName	string	
0x0031	LocationName	string	
0x0035	PreviewIFD	-	--> <a href="#">Nikon PreviewIFD Tags</a> --> <a href="#">Nikon PreviewIFD Tags</a>
0x0040	RawDataByteOrder	yes	0 = Little-endian (Intel, II) 1 = Big-endian (Motorola, MM)
0x0041	WhiteBalanceSetup	int32u	0 = Auto 1 = Manual
0x0043	CameraTemperature	rational64s	
0x0050	RawDataCFAPattern	yes	0 = Unchanged 1 = Swap 65535 = Roll
0x0100	FaceDetect	int16u	0 = Off 1 = On
0x0120	FaceRecognition	int32u	0 = Off 1 = On
0x0123	FaceName	string	
0xa001	FirmwareName	string	
0xa002	SerialNumber	string	
0xa003	LensType	int16u[n]	[Value 0] 0 = Built-in or Manual Lens 1 = Samsung NX 30mm F2 Pancake 2 = Samsung NX 18-55mm F3.5-5.6 OIS 3 = Samsung NX 50-200mm F4-5.6 ED OIS 4 = Samsung NX 20-50mm F3.5-5.6 ED 5 = Samsung NX 20mm F2.8 Pancake 6 = Samsung NX 18-200mm F3.5-6.3 ED OIS 7 = Samsung NX 60mm F2.8 Macro ED OIS SSA 8 = Samsung NX 16mm F2.4 Pancake 9 = Samsung NX 85mm F1.4 ED SSA 10 = Samsung NX 45mm F1.8 11 = Samsung NX 45mm F1.8 2D/3D 12 = Samsung NX 12-24mm F4-5.6 ED 13 = Samsung NX 16-50mm F2-2.8 S ED OIS 14 = Samsung NX 10mm F3.5 Fisheye 15 = Samsung NX 16-50mm F3.5-5.6 Power Zoom ED OIS 20 = Samsung NX 50-150mm F2.8 S ED OIS 21 = Samsung NX 300mm F2.8 ED OIS
0xa004	LensFirmware	string	
0xa005	InternalLensSerialNumber	string	
0xa010	SensorAreas	int32u[8]	(full and valid sensor areas)
0xa011	ColorSpace	int16u	0 = sRGB 1 = Adobe RGB
0xa012	SmartRange	int16u	0 = Off 1 = On
0xa013	ExposureCompensation	rational64s	
0xa014	ISO	int32u	
0xa018	ExposureTime	rational64u	
0xa019	FNumber	rational64u	
0xa01a	FocalLengthIn35mmFormat	int32u	
0xa020	EncryptionKey	int32u[11]!	(key used to decrypt the tags below)
0xa021	WB_RGGBLevelsUncorrected	int32u[4]	(these tags not corrected for WB_RGGBLevelsBlack)
0xa022	WB_RGGBLevelsAuto	int32u[4]	
0xa023	WB_RGGBLevelsIlluminator1	int32u[4]	
0xa024	WB_RGGBLevelsIlluminator2	int32u[4]	

0xa025	HighlightLinearityLimit	int32u	
0xa028	WB_RGGBLevelsBlack	int32s[4]	
0xa030	ColorMatrix	int32s[9]	
0xa031	ColorMatrixSRGB	int32s[9]	
0xa032	ColorMatrixAdobeRGB	int32s[9]	
0xa033	CbCrMatrixDefault	int32s[4]	
0xa034	CbCrMatrix	int32s[4]	
0xa035	CbCrGainDefault	int32u[2]	
0xa036	CbCrGain	int32u[2]	
0xa040	ToneCurveSRGBDefault	int32u[23]	(first value gives the number of tone curve entries. This is followed by an array of X coordinates then an array of Y coordinates)
0xa041	ToneCurveAdobeRGBDefault	int32u[23]	
0xa042	ToneCurveSRGB	int32u[23]	
0xa043	ToneCurveAdobeRGB	int32u[23]	
0xa048	RawData?	int32s[12]	
0xa050	Distortion?	int32s[8]	
0xa051	ChromaticAberration?	int16u[22]	
0xa052	Vignetting?	int16u[15]	
0xa053	VignettingCorrection?	int16u[15]	
0xa054	VignettingSetting?	int16u[15]	

## Samsung OrientationInfo Tags

Camera orientation information written by the Gear 360 (SM-C200).

Index	Tag Name	Writable	Values / Notes
0	YawAngle?	rational64s	(always zero)
1	PitchAngle	rational64s	(upward tilt of rear camera in degrees)
2	RollAngle	rational64s	(clockwise rotation of rear camera in degrees)

## Samsung PictureWizard Tags

Index	Tag Name	Writable	Values / Notes
0	PictureWizardMode	int16u	0 = Standard    5 = Retro    10 = Custom2 1 = Vivid        6 = Cool     11 = Custom3 2 = Portrait     7 = Calm    255 = n/a 3 = Landscape    8 = Classic 4 = Forest       9 = Custom1
1	PictureWizardColor	int16u	
2	PictureWizardSaturation	int16u	
3	PictureWizardSharpness	int16u	
4	PictureWizardContrast	int16u	

## Samsung APP5 Tags

Tag ID	Tag Name	Writable	Values / Notes
'ssuniqueid'	UniqueId	no	

## Samsung Trailer Tags

Tags extracted from the SEFT trailer of JPEG and PNG images written when using certain features (such as "Sound & Shot" or "Shot & More") from Samsung models such as the Galaxy S4 and Tab S, and from the 'sefd' atom in HEIC images from models such as the S10+.

Tag Name	Writable	Values / Notes
DepthMapData	no	
DepthMapData2	no	

DepthMapName	no	
DualCameralmage	no	
DualCameralimageName	no	
DualShotExtra	-	--> <a href="#">Samsung DualShotExtra Tags</a>
EmbeddedAudioFile	no	
EmbeddedAudioFileName	no	
EmbeddedImage	no	
EmbeddedImage2	no	
EmbeddedImageName	no	
EmbeddedVideoFile	no	
EmbeddedVideoType	no	
MCCData	no	202 = Greece (202) 204 = Netherlands (204) 206 = Belgium (206) 208 = France (208) 212 = Monaco (212) 213 = Andorra (213) 214 = Spain (214) 216 = Hungary (216) 218 = Bosnia & Herzegov. (218) 219 = Croatia (219) 220 = Serbia (220) 221 = Kosovo (221) 222 = Italy (222) 226 = Romania (226) 228 = Switzerland (228) 230 = Czech Rep. (230) 231 = Slovakia (231) 232 = Austria (232) 234 = United Kingdom (234) 235 = United Kingdom (235) 238 = Denmark (238) 240 = Sweden (240) 242 = Norway (242) 244 = Finland (244) 246 = Lithuania (246) 247 = Latvia (247) 248 = Estonia (248) 250 = Russian Federation (250) 255 = Ukraine (255) 257 = Belarus (257) 259 = Moldova (259) 260 = Poland (260) 262 = Germany (262) 266 = Gibraltar (266) 268 = Portugal (268) 270 = Luxembourg (270) 272 = Ireland (272) 274 = Iceland (274) 276 = Albania (276) 278 = Malta (278) 280 = Cyprus (280) 282 = Georgia (282) 283 = Armenia (283) 284 = Bulgaria (284) 286 = Turkey (286) 288 = Faroe Islands (288) 289 = Abkhazia (289) 290 = Greenland (290) 292 = San Marino (292) 293 = Slovenia (293) 294 = Macedonia (294) 295 = Liechtenstein (295) 297 = Montenegro (297) 302 = Canada (302) 308 = St. Pierre & Miquelon (308) 310 = United States / Guam (310) 311 = United States / Guam (311) 312 = United States (312) 316 = United States (316) 330 = Puerto Rico (330) 334 = Mexico (334) 338 = Jamaica (338) 340 = French Guiana / Guadeloupe / Martinique (340) 342 = Barbados (342)

344 = Antigua and Barbuda (344)  
346 = Cayman Islands (346)  
348 = British Virgin Islands (348)  
350 = Bermuda (350)  
352 = Grenada (352)  
354 = Montserrat (354)  
356 = Saint Kitts and Nevis (356)  
358 = Saint Lucia (358)  
360 = St. Vincent & Gren. (360)  
362 = Bonaire, Sint Eustatius and Saba / Curacao / Netherlands Antilles (362)  
363 = Aruba (363)  
364 = Bahamas (364)  
365 = Anguilla (365)  
366 = Dominica (366)  
368 = Cuba (368)  
370 = Dominican Republic (370)  
372 = Haiti (372)  
374 = Trinidad and Tobago (374)  
376 = Turks and Caicos Islands / US Virgin Islands (376)  
400 = Azerbaijan (400)  
401 = Kazakhstan (401)  
402 = Bhutan (402)  
404 = India (404)  
405 = India (405)  
410 = Pakistan (410)  
412 = Afghanistan (412)  
413 = Sri Lanka (413)  
414 = Myanmar (Burma) (414)  
415 = Lebanon (415)  
416 = Jordan (416)  
417 = Syrian Arab Republic (417)  
418 = Iraq (418)  
419 = Kuwait (419)  
420 = Saudi Arabia (420)  
421 = Yemen (421)  
422 = Oman (422)  
424 = United Arab Emirates (424)  
425 = Israel / Palestinian Territory (425)  
426 = Bahrain (426)  
427 = Qatar (427)  
428 = Mongolia (428)  
429 = Nepal (429)  
430 = United Arab Emirates (430)  
431 = United Arab Emirates (431)  
432 = Iran (432)  
434 = Uzbekistan (434)  
436 = Tajikistan (436)  
437 = Kyrgyzstan (437)  
438 = Turkmenistan (438)  
440 = Japan (440)  
441 = Japan (441)  
450 = South Korea (450)  
452 = Viet Nam (452)  
454 = Hongkong, China (454)  
455 = Macao, China (455)  
456 = Cambodia (456)  
457 = Laos P.D.R. (457)  
460 = China (460)  
466 = Taiwan (466)  
467 = North Korea (467)  
470 = Bangladesh (470)  
472 = Maldives (472)  
502 = Malaysia (502)  
505 = Australia (505)  
510 = Indonesia (510)  
514 = Timor-Leste (514)  
515 = Philippines (515)  
520 = Thailand (520)  
525 = Singapore (525)  
528 = Brunei Darussalam (528)  
530 = New Zealand (530)  
537 = Papua New Guinea (537)  
539 = Tonga (539)  
540 = Solomon Islands (540)  
541 = Vanuatu (541)  
542 = Fiji (542)  
544 = American Samoa (544)  
545 = Kiribati (545)  
546 = New Caledonia (546)  
547 = French Polynesia (547)

548 = Cook Islands (548)  
549 = Samoa (549)  
550 = Micronesia (550)  
552 = Palau (552)  
553 = Tuvalu (553)  
555 = Niue (555)  
602 = Egypt (602)  
603 = Algeria (603)  
604 = Morocco (604)  
605 = Tunisia (605)  
606 = Libya (606)  
607 = Gambia (607)  
608 = Senegal (608)  
609 = Mauritania (609)  
610 = Mali (610)  
611 = Guinea (611)  
612 = Ivory Coast (612)  
613 = Burkina Faso (613)  
614 = Niger (614)  
615 = Togo (615)  
616 = Benin (616)  
617 = Mauritius (617)  
618 = Liberia (618)  
619 = Sierra Leone (619)  
620 = Ghana (620)  
621 = Nigeria (621)  
622 = Chad (622)  
623 = Central African Rep. (623)  
624 = Cameroon (624)  
625 = Cape Verde (625)  
626 = Sao Tome & Principe (626)  
627 = Equatorial Guinea (627)  
628 = Gabon (628)  
629 = Congo, Republic (629)  
630 = Congo, Dem. Rep. (630)  
631 = Angola (631)  
632 = Guinea-Bissau (632)  
633 = Seychelles (633)  
634 = Sudan (634)  
635 = Rwanda (635)  
636 = Ethiopia (636)  
637 = Somalia (637)  
638 = Djibouti (638)  
639 = Kenya (639)  
640 = Tanzania (640)  
641 = Uganda (641)  
642 = Burundi (642)  
643 = Mozambique (643)  
645 = Zambia (645)  
646 = Madagascar (646)  
647 = Reunion (647)  
648 = Zimbabwe (648)  
649 = Namibia (649)  
650 = Malawi (650)  
651 = Lesotho (651)  
652 = Botswana (652)  
653 = Swaziland (653)  
654 = Comoros (654)  
655 = South Africa (655)  
657 = Eritrea (657)  
659 = South Sudan (659)  
702 = Belize (702)  
704 = Guatemala (704)  
706 = El Salvador (706)  
708 = Honduras (708)  
710 = Nicaragua (710)  
712 = Costa Rica (712)  
714 = Panama (714)  
716 = Peru (716)  
722 = Argentina Republic (722)  
724 = Brazil (724)  
730 = Chile (730)  
732 = Colombia (732)  
734 = Venezuela (734)  
736 = Bolivia (736)  
738 = Guyana (738)  
740 = Ecuador (740)  
744 = Paraguay (744)  
746 = Suriname (746)  
748 = Uruguay (748)

PEg_Info	-	--> <a href="#">JSON Tags</a>
RemasterInfo	no	
SamsungCaptureInfo	no	
SingleShotDepthMap	no	
SingleShotMeta	-	--> <a href="#">Samsung SingleShotMeta Tags</a>
SurroundShotVideo	no	
SurroundShotVideoName	no	
TimeStamp	no	

## Samsung DualShotExtra Tags

Index4	Tag Name	Writable	Values / Notes
16	DepthMapWidth	no	(index varies depending on model)
17	DepthMapHeight	no	(index varies depending on model)

## Samsung SingleShotMeta Tags

Tag ID	Tag Name	Writable	Values / Notes
'beautyColorLevel'	BeautyColorLevel	no	
'beautyRetouchLevel'	BeautyRetouchLevel	no	
'blurStrength'	BlurStrength	no	
'bokehShape'	BokehShape	no	
'colorpopStrength'	ColorpopStrength	no	
'depthHWHeight'	DepthHWHeight	no	
'depthHWWWidth'	DepthHWWWidth	no	
'depthSWHeight'	DepthSWHeight	no	
'depthSWWidth'	DepthSWWidth	no	
'deviceOrientation'	DeviceOrientation	no	
'effectStrength'	EffectStrength	no	
'effectType'	EffectType	no	
'flipStatus'	FlipStatus	no	
'inputHeight'	InputHeight	no	
'inputWidth'	InputWidth	no	
'isArtBokeh'	IsArtBokeh	no	
'lensFacing'	LensFacing	no	
'monoStrength'	MonoStrength	no	
'objectOrientation'	ObjectOrientation	no	
'outputHeight'	OutputHeight	no	
'outputWidth'	OutputWidth	no	
'perfMode'	PerfMode	no	
'segHeight'	SegHeight	no	
'segWidth'	SegWidth	no	
'sidelightStrength'	SidelightStrength	no	
'spinStrength'	SpinStrength	no	
'vintageStrength'	VintageStrength	no	
'zoomStrength'	ZoomStrength	no	

## Samsung sec Tags

This information is found in the @sec atom of Samsung MP4 videos from models such as the WB30F.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	

32	Model	no
512	ThumbnailWidth	no
516	ThumbnailHeight	no
520	ThumbnailLength	no
524	ThumbnailImage	no (the THM image, embedded metadata is extracted as the first sub-document)

## Samsung INFO Tags

This information is found in MP4 videos from Samsung models such as the SMX-C20N.

Tag ID	Tag Name	Writable	Values / Notes
'EFCT'	Effect	no	
'QLTY'	Quality	no	

## Samsung MP4 Tags

This information is found in Samsung MP4 videos from models such as the WP10.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	
46	ExposureTime	no	
50	FNumber	no	
58	ExposureCompensation	no	
106	ISO	no	
125	Software	no	
244	Thumbnail	-	--> <a href="#">Samsung Thumbnail Tags</a>

## Samsung Thumbnail Tags

Index4	Tag Name	Writable	Values / Notes
1	ThumbnailWidth	no	
2	ThumbnailHeight	no	
3	ThumbnailLength	no	
4	ThumbnailOffset	no	

## Samsung smta Tags

This information is found in the smta atom of Samsung MP4 videos from models such as the Galaxy S4.

Tag ID	Tag Name	Writable	Values / Notes
'mdln'	SamsungModel	no	
'svss'	SamsungSvss	-	--> <a href="#">Samsung svss Tags</a>

## Samsung svss Tags

This information is found in the svss atom of Samsung MP4 videos from models such as the Galaxy S4.

Tag ID	Tag Name	Writable	Values / Notes
[no tags known]			

# Sanyo Tags

Tag ID	Tag Name	Writable	Values / Notes
0x00ff	MakerNoteOffset	int32u	
0x0100	SanyoThumbnail	undef	
0x0200	SpecialMode	int32u[3]	
0x0201	SanyoQuality	int16u	0x0 = Normal/Very Low 0x1 = Normal/Low 0x2 = Normal/Medium Low 0x3 = Normal/Medium 0x4 = Normal/Medium High 0x5 = Normal/High 0x6 = Normal/Very High 0x7 = Normal/Super High 0x100 = Fine/Very Low 0x101 = Fine/Low 0x102 = Fine/Medium Low 0x103 = Fine/Medium 0x104 = Fine/Medium High 0x105 = Fine/High 0x106 = Fine/Very High 0x107 = Fine/Super High 0x200 = Super Fine/Very Low 0x201 = Super Fine/Low 0x202 = Super Fine/Medium Low 0x203 = Super Fine/Medium 0x204 = Super Fine/Medium High 0x205 = Super Fine/High 0x206 = Super Fine/Very High 0x207 = Super Fine/Super High
0x0202	Macro	int16u	0 = Normal 1 = Macro 2 = View 3 = Manual
0x0204	DigitalZoom	rational64u	
0x0207	SoftwareVersion	yes	
0x0208	PictInfo	yes	
0x0209	CameralID	yes	
0x020e	SequentialShot	int16u	0 = None 1 = Standard 2 = Best 3 = Adjust Exposure
0x020f	WideRange	int16u	0 = Off 1 = On
0x0210	ColorAdjustmentMode	int16u	0 = Off 1 = On
0x0213	QuickShot	int16u	0 = Off 1 = On
0x0214	SelfTimer	int16u	0 = Off 1 = On
0x0216	VoiceMemo	int16u	0 = Off 1 = On
0x0217	RecordShutterRelease	int16u	0 = Record while down 1 = Press start, press stop
0x0218	FlickerReduce	int16u	0 = Off 1 = On
0x0219	OpticalZoomOn	int16u	0 = Off 1 = On
0x021b	DigitalZoomOn	int16u	0 = Off 1 = On
0x021d	LightSourceSpecial	int16u	0 = Off 1 = On
0x021e	Resaved	int16u	0 = No 1 = Yes
0x021f	SceneSelect	int16u	0 = Off    4 = User 1 1 = Sport    5 = User 2 2 = TV    6 = Lamp 3 = Night

0x0223 ManualFocusDistance rational64u Sanyo FaceInfo  
FaceInfo -

0x0224	SequenceShotInterval	int16u	0 = 5 frames/s 1 = 10 frames/s 2 = 15 frames/s 3 = 20 frames/s
--------	----------------------	--------	---

0x0225	FlashMode	int16u	0 = Auto 1 = Force 2 = Disabled 3 = Red eye
--------	-----------	--------	--

0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>
--------	---------	---	----------------------------------

0x0f00	DataDump	no	
--------	----------	----	--

## Sanyo FaceInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	FacesDetected	int32u	
4	FacePosition	int32u[4]	(left, top, right and bottom coordinates of detected face in an unrotated 640-pixel-wide image, with increasing Y downwards)

## Sanyo MOV Tags

This information is found in Sanyo MOV videos.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	
38	ExposureTime	no	
42	FNumber	no	
50	ExposureCompensation	no	
68	WhiteBalance	no	0 = Auto 1 = Daylight 2 = Shade 3 = Fluorescent 4 = Tungsten 5 = Manual
72	FocalLength	no	

## Sanyo MP4 Tags

This information is found in Sanyo MP4 videos.

Index1	Tag Name	Writable	Values / Notes
0	Make	no	
24	Model	no	
50	FNumber	no	
58	ExposureCompensation	no	
106	ISO	no	
209	Software	no	(these tags are shifted up by 1 byte for some models like the HD1A)
210	Software	no	
241	Thumbnail	-	--> <a href="#">Sanyo Thumbnail Tags</a>
242	Thumbnail	-	--> <a href="#">Sanyo Thumbnail Tags</a>

## Sanyo Thumbnail Tags

Index4	Tag Name	Writable	Values / Notes
1	ThumbnailWidth	no	
2	ThumbnailHeight	no	
3	ThumbnailLength	no	
4	ThumbnailOffset	no	

[<-- ExifTool Tag Names](#)

# Scalado Tags

Tags extracted from the JPEG APP4 "SCALADO" segment found in images from HTC, LG and Samsung phones.  
(Presumably written by Scalado mobile software, <http://www.scalado.com/>.)

Tag ID	Tag Name	Writable	Values / Notes
'HGHT'	PreviewImageHeight	no	
'QUAL'	PreviewQuality	no	
'SPMO'	DataLength?	no	
'WDTH'	PreviewImageWidth	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Sep 13, 2013*

[-- ExifTool Tag Names](#)

# Shortcuts Tags

Shortcut tags are convenience tags that represent one or more other tag names. They are used like regular tags to read and write the information for a specified set of tags.

The shortcut tags below have been pre-defined, but user-defined shortcuts may be added via the %Image::ExifTool::UserDefined::Shortcuts lookup in the `~/.ExifTool_config` file. See the `Image::ExifTool::Shortcuts` documentation for more details.

Tag Name	Writable	Refers To	Values / Notes
AllDates	yes	DateTimeOriginal CreateDate ModifyDate	(contrary to the shortcut name, this represents only the common EXIF date/time tags. To access all date/time tags, use Time:All instead)
Canon	yes	FileName Model DateTimeOriginal ShootingMode ShutterSpeed Aperture MeteringMode ExposureCompensation ISO Lens FocalLength ImageSize Quality Flash FlashType ConditionalFEC RedEyeReduction ShutterCurtainHack WhiteBalance FocusMode Contrast Sharpness Saturation ColorTone ColorSpace LongExposureNoiseReduction FileSize FileNumber DriveMode OwnerName SerialNumber	
ColorSpaceTags	yes	ExifIFD:ColorSpace ExifIFD:Gamma InteropIFD:InteropIndex ICC_Profile	(standard tags which carry color space information. Useful for preserving color space when deleting all other metadata)
Common	yes	FileName FileSize Model DateTimeOriginal ImageSize Quality FocalLength ShutterSpeed Aperture ISO WhiteBalance Flash	
CommonIFD0	yes	IFD0:ImageDescription IFD0:Make IFD0:Model IFD0:Software IFD0:ModifyDate IFD0:Artist IFD0:Copyright	(common metadata tags found in IFD0 of TIFF-format images. Used to simplify deletion of all metadata from these images. See <a href="#">FAQ number 7</a> for details)

IFD0:Rating  
 IFD0:RatingPercent  
 IFD0:DNGLensInfo  
 IFD0:PanasonicTitle  
 IFD0:PanasonicTitle2  
 IFD0:XPTitle  
 IFD0:XPCComment  
 IFD0:XPAuthor  
 IFD0:XPKeywords  
 IFD0:XPSubject

ImageDataMD5	yes	ImageDataHash	
LargeTags	yes	CanonVRD DLOData EXIF ICC_Profile IDCPreviewImage ImageData IPTC JpgFromRaw OriginalRawImage OtherImage PreviewImage ThumbnailImage TIFFPreview XML XMP ZoomedPreviewImage	(large binary data tags which may be excluded to reduce memory usage if memory limitations are a problem)
MakerNotes	yes	MakerNotes MakerNoteApple MakerNoteCanon MakerNoteCasio MakerNoteCasio2 MakerNoteDJI MakerNoteDJIInfo MakerNoteFLIR MakerNoteFujiFilm MakerNoteGE MakerNoteGE2 MakerNoteGoogle MakerNoteHasselblad MakerNoteHP MakerNoteHP2 MakerNoteHP4 MakerNoteHP6 MakerNoteISL MakerNoteJVC MakerNoteJVCText MakerNoteKodak1a MakerNoteKodak1b MakerNoteKodak2 MakerNoteKodak3 MakerNoteKodak4 MakerNoteKodak5 MakerNoteKodak6a MakerNoteKodak6b MakerNoteKodak7 MakerNoteKodak8a MakerNoteKodak8b MakerNoteKodak8c MakerNoteKodak9 MakerNoteKodak10 MakerNoteKodak11 MakerNoteKodak12 MakerNoteKodakUnknown MakerNoteKyocera MakerNoteMinolta MakerNoteMinolta2 MakerNoteMinolta3 MakerNoteMotorola	(useful when copying tags between files to either copy the maker notes as a block or prevent it from being copied)

MarkerNoteNikon  
MarkerNoteNikon2  
MarkerNoteNikon3  
MarkerNoteNintendo  
MarkerNoteOlympus  
MarkerNoteOlympus2  
MarkerNoteOlympus3  
MarkerNoteLeica  
MarkerNoteLeica2  
MarkerNoteLeica3  
MarkerNoteLeica4  
MarkerNoteLeica5  
MarkerNoteLeica6  
MarkerNoteLeica7  
MarkerNoteLeica8  
MarkerNoteLeica9  
MarkerNoteLeica10  
MarkerNotePanasonic  
MarkerNotePanasonic2  
MarkerNotePanasonic3  
MarkerNotePentax  
MarkerNotePentax2  
MarkerNotePentax3  
MarkerNotePentax4  
MarkerNotePentax5  
MarkerNotePentax6  
MarkerNotePhaseOne  
MarkerNoteReconyxHyperFire  
MarkerNoteReconyxUltraFire  
MarkerNoteReconyxHyperFire2  
MarkerNoteReconyxMicroFire  
MarkerNoteReconyxHyperFire4K  
MarkerNoteRicohPentax  
MarkerNoteRicoh  
MarkerNoteRicoh2  
MarkerNoteRicohText  
MarkerNoteSamsung1a  
MarkerNoteSamsung1b  
MarkerNoteSamsung2  
MarkerNoteSanyo  
MarkerNoteSanyoC4  
MarkerNoteSanyoPatch  
MarkerNoteSigma  
MarkerNoteSony  
MarkerNoteSony2  
MarkerNoteSony3  
MarkerNoteSony4  
MarkerNoteSony5  
MarkerNoteSonyEricsson  
MarkerNoteSonySRF  
MarkerNoteUnknownText  
MarkerNoteUnknownBinary  
MarkerNoteUnknown

Nikon	yes	Model SubSecDateTimeOriginal ShutterCount LensSpec FocalLength ImageSize ShutterSpeed Aperture ISO NoiseReduction ExposureProgram ExposureCompensation WhiteBalance WhiteBalanceFineTune ShootingMode Quality
-------	-----	--

MeteringMode  
 FocusMode  
 ImageOptimization  
 ToneComp  
 ColorHue  
 ColorSpace  
 HueAdjustment  
 Saturation  
 Sharpness  
 Flash  
 FlashMode  
 FlashExposureComp

Unsafe	yes	IFD0:YCbCrPositioning IFD0:YCbCrCoefficients IFD0:TransferFunction ExifIFD:ComponentsConfiguration ExifIFD:CompressedBitsPerPixel InteropIFD:InteropIndex InteropIFD:InteropVersion InteropIFD:RelatedImageWidth InteropIFD:RelatedImageHeight	(Unsafe tags in JPEG images which are normally not copied. Defined here as a shortcut to use when rebuilding JPEG EXIF from scratch. See <a href="#">FAQ number 20</a> for more information)
ls-l	yes	FilePermissions FileHardLinks FileUserID FileGroupID FileSize# FileModifyDate FileName	(mimics columns shown by Unix "ls -l" command. Includes some tags which are extracted only if the API <a href="#">SystemTags</a> option is enabled)

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Sep 21, 2025*

[-- ExifTool Tag Names](#)

# Sigma Tags

These tags are written by Sigma/Foveon cameras. In the early days Sigma was a class leader by releasing their maker note specification to the public, but since then they have deviated from this standard and newer camera models are less than consistent about their metadata formats.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	SerialNumber	string	
0x0003	DriveMode	string	
0x0004	ResolutionMode	string	
0x0005	AFMode	string	
0x0006	FocusSetting	string	
0x0007	WhiteBalance	string	
0x0008	ExposureMode	string	'A' = Aperture-priority AE 'M' = Manual 'P' = Program AE 'S' = Shutter speed priority AE
0x0009	MeteringMode	string	8 = Multi-segment 'A' = Average 'C' = Center-weighted average
0x000a	LensFocalRange	string	
0x000b	ColorSpace	string	
0x000c	ExposureCompensation	string	
	ExposureAdjust?	rational64s	
0x000d	Contrast	string	
	Contrast	rational64s	
0x000e	Shadow	string	
	Shadow	rational64s	
0x000f	Highlight	string	
	Highlight	rational64s	
0x0010	Saturation	string	
	Saturation	rational64s	
0x0011	Sharpness	string	
	Sharpness	rational64s	
0x0012	X3FillLight	string	
	X3FillLight	rational64s	
0x0014	ColorAdjustment	string	
	ColorAdjustment	rational64s[3]	
0x0015	AdjustmentMode	string	
0x0016	Quality	string	
0x0017	Firmware	string	
0x0018	Software	string	
0x0019	AutoBracket	string	
0x001a	PreviewImageStart	int32u*	(Sigma Photo Pro writes ChrominanceNoiseReduction here, but various models use this for PreviewImageStart)
	ChrominanceNoiseReduction	string	
0x001b	PreviewImageLength	int32u*	(Sigma Photo Pro writes LuminanceNoiseReduction here, but various models use this for PreviewImageLength)
	LuminanceNoiseReduction	string	
0x001c	PreviewImageSize	int16u[2]	(PreviewImageStart for the SD1 and Merrill/Quattro models, and PreviewImageSize for others)
	PreviewImageStart	int32u*	
0x001d	MakerNoteVersion	undef	(PreviewImageLength for the SD1 and Merrill/Quattro models, and MakerNoteVersion for others)
	PreviewImageLength	int32u*	
0x001e	PreviewImageSize	int16u[2]	(only valid for some models)
0x001f	AFPoint	string	(MakerNoteVersion for the SD1 and Merrill/Quattro models, and AFPoint for others)
	MakerNoteVersion	undef	
0x0022	FileFormat	string	(models other than the SD1 and Merrill/Quattro models)
0x0024	Calibration	string	(models other than the SD1 and Merrill/Quattro models)
0x0026	FileFormat	string	(some newer models only)
0x0027	LensType	string	(some newer models only)
	LensType	int16u	--> <a href="#">Sigma LensType Values</a>

(some other models like the fp)  
--> [Sigma LensType Values](#)

0x002a	LensFocalRange	rational64u[2]	(some newer models only)
0x002b	LensMaxApertureRange	rational64u[2]	(some newer models only)
0x002c	ColorMode	int32u	(not valid for some models) 0 = n/a      5 = Neutral 1 = Sepia     6 = Portrait 2 = B&W      7 = Landscape 3 = Standard   8 = FOV Classic Blue 4 = Vivid
0x0030	LensApertureRange Calibration	string string	(Calibration for the SD1 and Merrill/Quattro models, and LensApertureRange for others. Note that LensApertureRange changes with focal length, and some models report the maximum aperture here)
0x0031	FNumber	rational64u	(models other than the SD1 and Merrill/Quattro models)
0x0032	ExposureTime	rational64u	(models other than the SD1 and Merrill/Quattro models)
0x0033	ExposureTime2	string	(only valid for some models)
0x0034	BurstShot	int32u	(models other than the SD1 and Merrill/Quattro models)
0x0035	ExposureCompensation	rational64s	(models other than the SD1 and Merrill/Quattro models)
0x0039	SensorTemperature	string	(models other than the SD1 and Merrill/Quattro models)
0x003a	FlashExposureComp	rational64s	(models other than the SD1 and Merrill/Quattro models)
0x003b	Firmware	string	(models other than the SD1 and Merrill/Quattro models)
0x003c	WhiteBalance	string	(models other than the SD1 and Merrill/Quattro models)
0x003d	PictureMode	string	(same as ColorMode, but "Standard" when ColorMode is Sepia or B&W)
0x0047	ExposureCompensation	rational64s	
0x0048	LensApertureRange	string	(some newer models only)
0x0049	FNumber	rational64u	(some newer models only)
0x004a	ExposureTime	rational64u	(some newer models only)
0x004b	ExposureTime2	string	(SD1 and DP Merrill models only) (DP Quattro models only)
0x004d	ExposureCompensation	rational64s	(some newer models only)
0x0055	SensorTemperature	string	(some newer models only)
0x0056	FlashExposureComp	rational64s	(some newer models only)
0x0057	Firmware2	string	(some newer models only)
0x0058	WhiteBalance	string	(some newer models only)
0x0059	DigitalFilter	string	(some newer models only)
0x0084	Model	string	
0x0086	ISO	int16u	
0x0087	ResolutionMode	string	
0x0088	WhiteBalance	string	
0x008c	Firmware	string	
0x0113	PictureModeStrength	int32s	
0x011f	CameraCalibration	float[9]	
0x0120	WBSettings	-	--> <a href="#">Sigma WBSettings Tags</a>
0x0121	WBSettings2	-	--> <a href="#">Sigma WBSettings2 Tags</a>
0x0138	Fade	rational64u	
0x0139	Vignette	rational64u	

## Sigma LensType Values

Sigma LensType values are hexadecimal numbers stored as a string (without the leading "0x").

Value	LensType	Value	LensType
0x10	= Sigma 50mm F2.8 EX DG MACRO	0x589	= Sigma APO 70-200mm F2.8 EX DG OS HSM
0x10	= Sigma 70mm F2.8 EX DG Macro	0x594	= Sigma 300-800mm F5.6 EX HSM IF APO
0x10	= Sigma 105mm F2.8 EX DG Macro	0x595	= Sigma 300-800mm F5.6 EX DG APO HSM
0x16	= Sigma 18-50mm F3.5-5.6 DC	0x597	= Sigma 200-500mm F2.8 APO EX DG
0x103	= Sigma 180mm F3.5 EX IF HSM APO Macro	0x5a8	= Sigma 70-300mm F4-5.6 APO DG Macro (Motorized)

0x104	= Sigma 150mm F2.8 EX DG HSM APO Macro	0x5a9	= Sigma 70-300mm F4-5.6 DG Macro (Motorized)
0x105	= Sigma 180mm F3.5 EX DG HSM APO Macro	0x605	= Sigma 24-70mm F3.5-5.6 ASP HF
0x106	= Sigma 150mm F2.8 EX DG OS HSM APO Macro	0x633	= Sigma 28-70mm F2.8-4 HS
0x107	= Sigma 180mm F2.8 EX DG OS HSM APO Macro	0x634	= Sigma 28-70mm F2.8-4 DG
0x129	= Sigma Lens (0x129)	0x635	= Sigma 24-105mm F4 DG OS HSM   A
0x129	= Sigma 14mm F2.8 EX Aspherical	0x644	= Sigma 28-80mm F3.5-5.6 ASP HF Macro
0x129	= Sigma 30mm F1.4	0x659	= Sigma 28-80mm F3.5-5.6 Mini Zoom Macro II ASP
0x131	= Sigma Lens (0x131)	0x661	= Sigma 28-105mm F2.8-4 IF ASP
0x131	= Sigma 17-70mm F2.8-4.5 DC Macro	0x663	= Sigma 28-105mm F3.8-5.6 IF UC-III ASP
0x131	= Sigma 70-200mm F2.8 APO EX HSM	0x664	= Sigma 28-105mm F2.8-4 IF DG ASP
0x131	= Sigma 120-300mm F2.8 APO EX IF HSM	0x667	= Sigma 24-135mm F2.8-4.5 IF ASP
0x134	= Sigma 100-300mm F4 EX DG HSM APO	0x668	= Sigma 17-70mm F2.8-4 DC Macro OS HSM
0x135	= Sigma 120-300mm F2.8 EX DG HSM APO	0x669	= Sigma 17-70mm F2.8-4.5 DC HSM Macro
0x136	= Sigma 120-300mm F2.8 EX DG OS HSM APO	0x684	= Sigma 55-200mm F4-5.6 DC
0x137	= Sigma 120-300mm F2.8 DG OS HSM   S	0x686	= Sigma 50-200mm F4-5.6 DC OS HSM
0x143	= Sigma 600mm F8 Mirror	0x689	= Sigma 17-70mm F2.8-4.5 DC Macro
0x145	= Sigma Lens (0x145)	0x690	= Sigma 50-150mm F2.8 EX DC HSM APO
0x145	= Sigma 15-30mm F3.5-4.5 EX DG Aspherical	0x691	= Sigma 50-150mm F2.8 EX DC APO HSM II
0x145	= Sigma 18-50mm F2.8 EX DG	0x692	= Sigma APO 50-150mm F2.8 EX DC OS HSM
0x145	= Sigma 20-40mm F2.8 EX DG	0x693	= Sigma 50-100mm F1.8 DC HSM   A
0x150	= Sigma 30mm F1.4 DC HSM	0x709	= Sigma 28-135mm F3.8-5.6 IF ASP Macro
0x152	= Sigma Lens (0x152)	0x723	= Sigma 135-400mm F4.5-5.6 ASP APO
0x152	= Sigma APO 800mm F5.6 EX DG HSM	0x725	= Sigma 80-400mm F4.5-5.6 EX OS
0x152	= Sigma 12-24mm F4.5-5.6 EX DG ASP HSM	0x726	= Sigma 80-400mm F4.5-5.6 EX DG OS APO
0x152	= Sigma 10-20mm F4.5-5.6 EX DC HSM	0x727	= Sigma 135-400mm F4.5-5.6 DG ASP APO
0x165	= Sigma 70-200mm F2.8 EX	0x728	= Sigma 120-400mm F4.5-5.6 DG APO OS HSM
0x169	= Sigma 18-50mm F2.8 EX DC	0x729	= Sigma 100-400mm F5-6.3 DG OS HSM   C
0x183	= Sigma 500mm F4.5 EX HSM APO	0x730	= Sigma 60-600mm F4.5-6.3 DG OS HSM   S
0x184	= Sigma 500mm F4.5 EX DG HSM APO	0x733	= Sigma 170-500mm F5-6.3 ASP APO
0x185	= Sigma 500mm F4 DG OS HSM   S	0x734	= Sigma 170-500mm F5-6.3 DG ASP APO
0x194	= Sigma 300mm F2.8 EX HSM APO	0x735	= Sigma 50-500mm F4-6.3 EX RF HSM APO
0x195	= Sigma 300mm F2.8 EX DG HSM APO	0x736	= Sigma 50-500mm F4-6.3 EX DG HSM APO
0x200	= Sigma 12-24mm F4.5-5.6 EX DG ASP HSM	0x737	= Sigma 150-500mm F5-6.3 APO DG OS HSM
0x201	= Sigma 10-20mm F4.5-5.6 EX DC HSM	0x738	= Sigma 50-500mm F4.5-6.3 APO DG OS HSM
0x202	= Sigma 10-20mm F3.5 EX DC HSM	0x740	= Sigma 150-600mm F5-6.3 DG OS HSM   S
0x203	= Sigma 8-16mm F4.5-5.6 DC HSM	0x745	= Sigma 150-600mm F5-6.3 DG OS HSM   C
0x204	= Sigma 12-24mm F4.5-5.6 DG HSM II	0x777	= Sigma 18-200mm F3.5-6.3 DC
0x205	= Sigma 12-24mm F4 DG HSM   A	0x77d	= Sigma 18-200mm F3.5-6.3 DC (Motorized)
0x210	= Sigma 18-35mm F1.8 DC HSM   A	0x785	= Sigma 28-200mm F3.5-5.6 DL ASP IF HZM Macro
0x240	= Sigma 135mm F1.8 DG HSM   A	0x787	= Sigma 28-200mm F3.5-5.6 Compact ASP HZ Macro
0x256	= Sigma 105mm F2.8 EX Macro	0x789	= Sigma 18-125mm F3.5-5.6 DC
0x257	= Sigma 105mm F2.8 EX DG Macro	0x790	= Sigma 28-300mm F3.5-6.3 DL ASP IF HZM
0x258	= Sigma 105mm F2.8 EX DG OS HSM Macro	0x793	= Sigma 28-300mm F3.5-6.3 Macro
0x259	= Sigma 105mm F1.4 DG HSM   A	0x794	= Sigma 28-200mm F3.5-5.6 DG Compact ASP HZ Macro
0x270	= Sigma 70mm F2.8 EX DG Macro	0x795	= Sigma 28-300mm F3.5-6.3 DG Macro
0x271	= Sigma 70mm F2.8 DG Macro   A	0x823	= Sigma 1.4X TC EX APO
0x300	= Sigma 30mm F1.4 EX DC HSM	0x824	= Sigma 1.4X Teleconverter EX APO DG
0x301	= Sigma 30mm F1.4 DC HSM   A	0x853	= Sigma 18-125mm F3.8-5.6 DC OS HSM
0x302	= Sigma 30mm F1.4 DC DN   C	0x861	= Sigma 18-50mm F2.8-4.5 DC OS HSM
0x310	= Sigma 50mm F1.4 EX DG HSM	0x870	= Sigma 2.0X Teleconverter TC-2001
0x311	= Sigma 50mm F1.4 DG HSM   A	0x875	= Sigma 2.0X TC EX APO
0x320	= Sigma 85mm F1.4 EX DG HSM	0x876	= Sigma 2.0X Teleconverter EX APO DG
0x321	= Sigma 85mm F1.4 DG HSM   A	0x879	= Sigma 1.4X Teleconverter TC-1401
0x330	= Sigma 30mm F2.8 EX DN	0x880	= Sigma 18-250mm F3.5-6.3 DC OS HSM
0x340	= Sigma 35mm F1.4 DG HSM	0x882	= Sigma 18-200mm F3.5-6.3 II DC OS HSM
0x345	= Sigma 50mm F2.8 EX Macro	0x883	= Sigma 18-250mm F3.5-6.3 DC Macro OS HSM
0x346	= Sigma 50mm F2.8 EX DG Macro	0x884	= Sigma 17-70mm F2.8-4 DC OS HSM Macro   C
0x350	= Sigma 60mm F2.8 DN   A	0x885	= Sigma 18-200mm F3.5-6.3 DC OS HSM Macro   C
0x400	= Sigma 19mm F2.8 EX DN	0x886	= Sigma 18-300mm F3.5-6.3 DC OS HSM Macro   C
0x401	= Sigma 24mm F1.4 DG HSM   A	0x888	= Sigma 18-200mm F3.5-6.3 DC OS
0x411	= Sigma 20mm F1.8 EX DG ASP RF	0x890	= Sigma Mount Converter MC-11
0x412	= Sigma 20mm F1.4 DG HSM   A	0x929	= Sigma 60mm F2.8 DN   A
0x432	= Sigma 24mm F1.8 EX DG ASP Macro	0x1003	= Sigma 19mm F2.8
0x440	= Sigma 28mm F1.8 EX DG ASP Macro	0x1004	= Sigma 30mm F2.8
0x450	= Sigma 14mm F1.8 DH HSM   A	0x1005	= Sigma 50mm F2.8 Macro
0x461	= Sigma 14mm F2.8 EX ASP HSM	0x1006	= Sigma 19mm F2.8
0x475	= Sigma 15mm F2.8 EX Diagonal FishEye	0x1007	= Sigma 30mm F2.8
0x476	= Sigma 15mm F2.8 EX DG Diagonal Fisheye	0x1008	= Sigma 50mm F2.8 Macro
0x477	= Sigma 10mm F2.8 EX DC HSM Fisheye	0x1009	= Sigma 14mm F4
0x483	= Sigma 8mm F4 EX Circular Fisheye	0x4001	= Lumix S 24-105mm F4 Macro OIS (S-R24105)
0x484	= Sigma 8mm F4 EX DG Circular Fisheye	0x4002	= Lumix S 70-200mm F4 OIS (S-R70200)
0x485	= Sigma 8mm F3.5 EX DG Circular Fisheye	0x4003	= Lumix S 50mm F1.4 (S-X50)
0x486	= Sigma 4.5mm F2.8 EX DC HSM Circular Fisheye	0x4006	= Lumix S 24-70mm F2.8 (S-E2470)
0x504	= Sigma 70-300mm F4-5.6 Macro Super	0x4007	= Lumix S 16-35mm F4 (S-R1635)
0x505	= Sigma APO 70-300mm F4-5.6 Macro Super	0x4008	= Lumix S 70-200mm F2.8 OIS (S-E70200)

0x506	= Sigma 70-300mm F4-5.6 APO Macro Super II	0x400b = Lumix S 20-60mm F3.5-5.6 (S-R2060)
0x507	= Sigma 70-300mm F4-5.6 DL Macro Super II	0x400c = Lumix S 85mm F1.8 (S-S85)
0x508	= Sigma 70-300mm F4-5.6 DG APO Macro	0x400d = Lumix S 70-300 F4.5-5.6 Macro OIS (S-R70300)
0x509	= Sigma 70-300mm F4-5.6 DG Macro	0x400f = Lumix S 24mm F1.8 (S-S24)
0x510	= Sigma 17-35 F2.8-4 EX DG ASP	0x4010 = Lumix S 35mm F1.8 (S-S35)
0x512	= Sigma 15-30mm F3.5-4.5 EX DG ASP DF	0x4011 = LUMIX S 18mm F1.8 (S-S18)
0x513	= Sigma 20-40mm F2.8 EX DG	0x6001 = Sigma 150-600mm F5-6.3 DG OS HSM   S
0x519	= Sigma 17-35 F2.8-4 EX ASP HSM	0x6003 = Sigma 45mm F2.8 DG DN   C
0x520	= Sigma 100-300mm F4.5-6.7 DL	0x6005 = Sigma 14-24mm F2.8 DG DN   A
0x521	= Sigma 18-50mm F3.5-5.6 DC Macro	0x6006 = Sigma 50mm F1.4 DG HSM   A
0x527	= Sigma 100-300mm F4 EX IF HSM	0x6011 = Sigma 24-70mm F2.8 DG DN   A
0x529	= Sigma 120-300mm F2.8 EX HSM IF APO	0x6012 = Sigma 100-400mm F5-6.3 DG DN OS   C
0x545	= Sigma 28-70mm F2.8 EX ASP DF	0x6013 = Sigma 100-400mm F5-6.3 DG DN OS   C + TC-1411
0x547	= Sigma 24-60mm F2.8 EX DG	0x6015 = Sigma 85mm F1.4 DG DN   A
0x548	= Sigma 24-70mm F2.8 EX DG Macro	0x6017 = Sigma 65mm F2 DG DN   C
0x549	= Sigma 28-70mm F2.8 EX DG	0x6018 = Sigma 35mm F2 DG DN   C
0x566	= Sigma 70-200mm F2.8 EX IF APO	0x601a = Sigma 28-70mm F2.8 DG DN   C
0x567	= Sigma 70-200mm F2.8 EX IF HSM APO	0x601b = Sigma 150-600mm F5-6.3 DG DN OS   S
0x568	= Sigma 70-200mm F2.8 EX DG IF HSM APO	0x6020 = Sigma 35mm F1.4 DG DN   A
0x569	= Sigma 70-200 F2.8 EX DG HSM APO Macro	0x6021 = Sigma 90mm F2.8 DG DN   C
0x571	= Sigma 24-70mm F2.8 IF EX DG HSM	0x6023 = Sigma 20mm F2 DG DN   C
0x572	= Sigma 70-300mm F4-5.6 DG OS	0x6025 = Sigma 20mm F1.4 DG DN   A
0x576	= Sigma 24-70mm F2.8 DG OS HSM   A	0x6026 = Sigma 24mm F1.4 DG DN   A
0x579	= Sigma 70-200mm F2.8 EX DG HSM APO Macro	0x602c = Sigma 50mm F1.4 DG DN   A (2023)
0x580	= Sigma 18-50mm F2.8 EX DC	0x8005 = Sigma 35mm F1.4 DG HSM   A
0x581	= Sigma 18-50mm F2.8 EX DC Macro	0x8009 = Sigma 18-35mm F1.8 DC HSM   A
0x582	= Sigma 18-50mm F2.8 EX DC HSM Macro	0x8900 = Sigma 70-300mm F4-5.6 DG OS
0x583	= Sigma 17-50mm F2.8 EX DC OS HSM	0xa100 = Sigma 24-70mm F2.8 DG Macro
0x588	= Sigma 24-35mm F2 DG HSM   A	

## Sigma WBSettings Tags

Index4	Tag Name	Writable	Values / Notes
0	WB_RGBLevelsAuto	float[3]	
3	WB_RGBLevelsDaylight	float[3]	
6	WB_RGBLevelsShade	float[3]	
9	WB_RGBLevelsOvercast	float[3]	
12	WB_RGBLevelsIncandescent	float[3]	
15	WB_RGBLevelsFluorescent	float[3]	
18	WB_RGBLevelsFlash	float[3]	
21	WB_RGBLevelsCustom1	float[3]	
24	WB_RGBLevelsCustom2	float[3]	
27	WB_RGBLevelsCustom3	float[3]	

## Sigma WBSettings2 Tags

Index4	Tag Name	Writable	Values / Notes
0	WB_RGBLevelsUnknown0?	float[3]	
3	WB_RGBLevelsUnknown1?	float[3]	
6	WB_RGBLevelsUnknown2?	float[3]	
9	WB_RGBLevelsUnknown3?	float[3]	
12	WB_RGBLevelsUnknown4?	float[3]	
15	WB_RGBLevelsUnknown5?	float[3]	
18	WB_RGBLevelsUnknown6?	float[3]	
21	WB_RGBLevelsUnknown7?	float[3]	
24	WB_RGBLevelsUnknown8?	float[3]	
27	WB_RGBLevelsUnknown9?	float[3]	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
Last revised Jun 3, 2025

# SigmaRaw Tags

These tags are used in Sigma and Foveon RAW (.X3F) images. Metadata is also extracted from the JpgFromRaw image if it exists (all models but the SD9 and SD10). Currently, metadata may only be written to the embedded JpgFromRaw.

Tag ID	Tag Name	Writable	Values / Notes
'Header'	Header	-	--> <a href="#">SigmaRaw Header Tags</a>
'Header4'	Header4	-	--> <a href="#">SigmaRaw Header4 Tags</a>
'HeaderExt'	HeaderExt	-	--> <a href="#">SigmaRaw HeaderExt Tags</a>
'IMA2'	PreviewImage JpgFromRaw	no no	
'IMAG'	PreviewImage	no	
'PROP'	Properties	-	--> <a href="#">SigmaRaw Properties Tags</a>

## SigmaRaw Header Tags

Information extracted from the header of an X3F file.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	FileVersion	no	
0x0002	ImageUniqueID	no	
0x0006	MarkBits	no	
0x0007	ImageWidth	no	
0x0008	ImageHeight	no	
0x0009	Rotation	no	
0x000a	WhiteBalance	no	
0x0012	SceneCaptureType	no	

## SigmaRaw Header4 Tags

Header information for version 4.0 or greater X3F.

Index4	Tag Name	Writable	Values / Notes
1	FileVersion	no	
10	ImageWidth	no	
11	ImageHeight	no	
12	Rotation	no	

## SigmaRaw HeaderExt Tags

Extended header data found in version 2.1 and 2.2 files

Tag ID	Tag Name	Writable	Values / Notes
0x0000	Unused	no	
0x0001	ExposureAdjust	no	
0x0002	Contrast	no	
0x0003	Shadow	no	
0x0004	Highlight	no	
0x0005	Saturation	no	
0x0006	Sharpness	no	
0x0007	RedAdjust	no	
0x0008	GreenAdjust	no	
0x0009	BlueAdjust	no	
0x000a	X3FillLight	no	

# SigmaRaw Properties Tags

Tag ID	Tag Name	Writable	Values / Notes	
'AEMODE'	MeteringMode	no	'8' = 8-segment 'A' = Average 'C' = Center-weighted average	
'AFAREA'	AFArea	no		
'AFINFOCUS'	AFInFocus	no		
'AFMODE'	FocusMode	no		
'APERTURE'	FNumber	no		
'AP_DESC'	ApertureDisplayed	no		
'BRACKET'	BracketShot	no		
'BURST'	BurstShot	no		
'CAMMANUF'	Make	no		
'CAMMODEL'	Model	no		
'CAMNAME'	CameraName	no		
'CAMSERIAL'	SerialNumber	no		
'CM_DESC'	SceneCaptureType	no		
'COLORSPACE'	ColorSpace	no		
'DRIVE'	DriveMode	no	'10S' = 10 s Timer '2S' = 2 s Timer 'AB' = Auto Bracket 'MULTI' = Multi Shot	'OFF' = Off 'SINGLE' = Single Shot 'UP' = Mirror Up
'EVAL_STATE'	EvalState	no		
'EXPCOMP'	ExposureCompensation	no		
'EXPNET'	NetExposureCompensation	no		
'EXPTIME'	IntegrationTime	no		
'FIRMVERS'	FirmwareVersion	no		
'FLASH'	FlashMode	no		
'FLASHEXPCOMP'	FlashExpComp	no		
'FLASHPOWER'	FlashPower	no		
'FLASHTTLMODE'	FlashTTLMode	no		
'FLASHTYPE'	FlashType	no		
'FLENGTH'	FocalLength	no		
'FLEQ35MM'	FocalLengthIn35mmFormat	no		
'FOCUS'	Focus	no	'AF' = Auto-focus Locked 'M' = Manual 'NO LOCK' = Auto-focus Didn't Lock	
'IMAGEBOARDID'	ImageBoardID	no		
'IMAGERBOARDID'	ImagerBoardID	no		
'IMAGERTEMP'	SensorTemperature	no		
'ISO'	ISO	no		
'LENSARANGE'	LensApertureRange	no		
'LENSFRANGE'	LensFocalRange	no		
'LENSMODEL'	LensType	no	--> <a href="#">Sigma LensType Values</a>	
'PMODE'	ExposureProgram	no	'A' = Aperture Priority 'M' = Manual 'P' = Program 'S' = Shutter Priority	
'RESOLUTION'	Quality	no	'HI' = High 'LOW' = Low 'MED' = Medium	
'SENSORID'	SensorID	no		
'SHUTTER'	ExposureTime	no		
'SH_DESC'	ShutterSpeedDisplayed	no		
'TIME'	DateTimeOriginal	no		
'VERSION_BF'	VersionBF	no		

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*Last revised Jul 2, 2014*

[<-- ExifTool Tag Names](#)

# Sony Tags

The following information has been decoded from the MakerNotes of Sony cameras. Some of these tags have been inherited from the Minolta MakerNotes.

Tag ID	Tag Name	Writable	Values / Notes
0x0010	CameralInfo	-	--> <a href="#">Sony CameralInfo Tags</a>
	CameralInfo2	-	--> <a href="#">Sony CameralInfo2 Tags</a>
	CameralInfo3	-	--> <a href="#">Sony CameralInfo3 Tags</a>
	CameralInfoUnknown	-	--> <a href="#">Sony CameralInfoUnknown Tags</a>
0x0020	FocusInfo	-	--> <a href="#">Sony FocusInfo Tags</a>
	MoreInfo	-	--> <a href="#">Sony MoreInfo Tags</a>
0x0102	Quality	int32u	0 = RAW 1 = Super Fine 2 = Fine 3 = Standard 4 = Economy 5 = Extra Fine 6 = RAW + JPEG/HEIF 7 = Compressed RAW 8 = Compressed RAW + JPEG 9 = Light 4294967295 = n/a
0x0104	FlashExposureComp	rational64s	
0x0105	Teleconverter	int32u	0x0 = None 0x4 = Minolta/Sony AF 1.4x APO (D) (0x04) 0x5 = Minolta/Sony AF 2x APO (D) (0x05) 0x48 = Minolta/Sony AF 2x APO (D) 0x50 = Minolta AF 2x APO II 0x60 = Minolta AF 2x APO 0x88 = Minolta/Sony AF 1.4x APO (D) 0x90 = Minolta AF 1.4x APO II 0xa0 = Minolta AF 1.4x APO
0x0112	WhiteBalanceFineTune	int32u	
0x0114	CameraSettings	-	--> <a href="#">Sony CameraSettings Tags</a>
	CameraSettings2	-	--> <a href="#">Sony CameraSettings2 Tags</a>
	CameraSettings3	-	--> <a href="#">Sony CameraSettings3 Tags</a>
	CameraSettingsUnknown	-	--> <a href="#">Sony CameraSettingsUnknown Tags</a>
0x0115	WhiteBalance	int32u	0x0 = Auto 0x1 = Color Temperature/Color Filter 0x10 = Daylight 0x20 = Cloudy 0x30 = Shade 0x40 = Tungsten 0x50 = Flash 0x60 = Fluorescent 0x70 = Custom 0x80 = Underwater
0x0116	ExtraInfo	-	--> <a href="#">Sony ExtraInfo Tags</a>
	ExtraInfo2	-	--> <a href="#">Sony ExtraInfo2 Tags</a>
	ExtraInfo3	-	--> <a href="#">Sony ExtraInfo3 Tags</a>
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>
0x1000	MultiBurstMode	undef	(MultiBurst tags valid only for models with this feature, like the F88) 0 = Off 1 = On
0x1001	MultiBurstImageWidth	int16u	
0x1002	MultiBurstImageHeight	int16u	
0x1003	Panorama	-	--> <a href="#">Sony Panorama Tags</a>
0x2001	PreviewImage	undef	(HD-size preview in JPEG images from almost all DSLR/SLT/ILCA/NEX/ILCE.)
0x2002	Rating	int32u	
0x2004	Contrast	int32s	
0x2005	Saturation	int32s	
0x2006	Sharpness	int32s	
0x2007	Brightness	int32s	

0x2008	LongExposureNoiseReduction	int32u	0x0 = Off 0x1 = On (unused) 0x10001 = On (dark subtracted) 0xffff0000 = Off (65535) 0xffff0001 = On (65535) 0xffffffff = n/a
0x2009	HighISONoiseReduction	int16u	0 = Off      3 = High 1 = Low      256 = Auto 2 = Normal    65535 = n/a
0x200a	HDR	int32u	(stored as a 32-bit integer, but read as two 16-bit integers) [Value 0] 0x0 = Off      0x13 = 2.5 EV    0x18 = 5.0 EV 0x1 = Auto      0x14 = 3.0 EV    0x19 = 5.5 EV 0x10 = 1.0 EV   0x15 = 3.5 EV   0x1a = 6.0 EV 0x11 = 1.5 EV   0x16 = 4.0 EV 0x12 = 2.0 EV   0x17 = 4.5 EV [Value 1] 0x0 = Uncorrected image 0x1 = HDR image (good) 0x2 = HDR image (fail 1) 0x3 = HDR image (fail 2)
0x200b	MultiFrameNoiseReduction	int32u	(may not be valid for RS100) 0 = Off 1 = On 255 = n/a
0x200e	PictureEffect	int16u	0 = Off 1 = Toy Camera 2 = Pop Color 3 = Posterization 4 = Posterization B/W 5 = Retro Photo 6 = Soft High Key 7 = Partial Color (red) 8 = Partial Color (green) 9 = Partial Color (blue) 10 = Partial Color (yellow) 13 = High Contrast Monochrome 16 = Toy Camera (normal) 17 = Toy Camera (cool) 18 = Toy Camera (warm) 19 = Toy Camera (green) 20 = Toy Camera (magenta) 32 = Soft Focus (low) 33 = Soft Focus 34 = Soft Focus (high) 48 = Miniature (auto) 49 = Miniature (top) 50 = Miniature (middle horizontal) 51 = Miniature (bottom) 52 = Miniature (left) 53 = Miniature (middle vertical) 54 = Miniature (right) 64 = HDR Painting (low) 65 = HDR Painting 66 = HDR Painting (high) 80 = Rich-tone Monochrome 97 = Water Color 98 = Water Color 2 112 = Illustration (low) 113 = Illustration 114 = Illustration (high)
0x200f	SoftSkinEffect	int32u	0 = Off 1 = Low 2 = Mid 3 = High 4294967295 = n/a
0x2010	Tag2010a Tag2010b Tag2010c Tag2010d Tag2010e Tag2010f Tag2010g Tag2010h Tag2010i	-	--> <a href="#">Sony Tag2010a Tags</a> --> <a href="#">Sony Tag2010b Tags</a> --> <a href="#">Sony Tag2010c Tags</a> --> <a href="#">Sony Tag2010d Tags</a> --> <a href="#">Sony Tag2010e Tags</a> --> <a href="#">Sony Tag2010f Tags</a> --> <a href="#">Sony Tag2010g Tags</a> --> <a href="#">Sony Tag2010h Tags</a> --> <a href="#">Sony Tag2010i Tags</a>

0x2011	VignettingCorrection	int32u	0 = Off 2 = Auto 4294967295 = n/a
0x2012	LateralChromaticAberration	int32u	0 = Off 2 = Auto 4294967295 = n/a
0x2013	DistortionCorrectionSetting	int32u	0 = Off 2 = Auto 4294967295 = n/a
0x2014	WBShiftAB_GM	int32s[2]	(2 numbers: 1. positive is a shift toward amber, 2. positive is a shift toward magenta)
0x2016	AutoPortraitFramed	int16u	("Yes" if this image was created by the Auto Portrait Framing feature) 0 = No 1 = Yes
0x2017	FlashAction	int32u	0 = Did not fire 1 = Flash Fired 2 = External Flash Fired 3 = Wireless Controlled Flash Fired
0x201a	ElectronicFrontCurtainShutter	int32u	0 = Off 1 = On
0x201b	FocusMode	int8u	0 = Manual 4 = AF-A 2 = AF-S 6 = DMF 3 = AF-C 7 = AF-D
0x201c	AFAreaModeSetting	int8u	(SLT models) 0 = Wide 4 = Local 8 = Zone 9 = Spot (NEX, ILCE and some DSC models) 0 = Wide 1 = Center 3 = Flexible Spot 4 = Flexible Spot (LA-EA4) 9 = Center (LA-EA4) 11 = Zone 12 = Expanded Flexible Spot 13 = Custom AF Area (ILCA models) 0 = Wide 4 = Flexible Spot 8 = Zone 9 = Center 12 = Expanded Flexible Spot
0x201d	FlexibleSpotPosition	int16u[2]	(X and Y coordinates of the AF point, valid only when AFAreaMode is Flexible Spot)
0x201e	AFPointSelected	int8u	(SLT models or ILCE with LA-EA2/EA4) 0 = Auto 10 = Far Right 1 = Center 11 = Far Left 2 = Top 12 = Upper-middle 3 = Upper-right 13 = Near Right 4 = Right 14 = Lower-middle 5 = Lower-right 15 = Near Left 6 = Bottom 16 = Upper Far Right 7 = Lower-left 17 = Lower Far Right 8 = Left 18 = Lower Far Left 9 = Upper-left 19 = Upper Far Left (ILCA-68 and ILCA-77M2) -1 = Auto 15 = C4 31 = D9 47 = F3 63 = G8 0 = A5 16 = C5 32 = D10 48 = F4 64 = G9 1 = A6 17 = C6 33 = D11 49 = F5 65 = G10 2 = A7 18 = C7 34 = E1 50 = F6 66 = G11 3 = B2 19 = C8 35 = E2 51 = F7 67 = H2 4 = B3 20 = C9 36 = E3 52 = F8 68 = H3 5 = B4 21 = C10 37 = E4 53 = F9 69 = H4 6 = B5 22 = C11 38 = E5 54 = F10 70 = H5 7 = B6 23 = D1 39 = E6 (Center) 55 = F11 71 = H6 8 = B7 24 = D2 40 = E7 56 = G1 72 = H7 9 = B8 25 = D3 41 = E8 57 = G2 73 = H8 10 = B9 26 = D4 42 = E9 58 = G3 74 = H9 11 = B10 27 = D5 43 = E10 59 = G4 75 = H10 12 = C1 28 = D6 44 = E11 60 = G5 76 = I5 13 = C2 29 = D7 45 = F1 61 = G6 77 = I6 14 = C3 30 = D8 46 = F2 62 = G7 78 = I7 (ILCA-99M2 when AFAreaModeSetting is not Zone)

0 = Auto	131 = C8	162 = E6 (162, Center)	193 = G4 (193)
93 = A5 (93)	(131)	163 = E7 (163)	195 = G5 (195)
94 = A6 (94)	132 = C9	165 = E8 (165)	196 = G6 (196)
95 = A7 (95)	(132)	166 = E9 (166)	197 = G7 (197)
106 = B2 (106)	133 = C10	167 = E10 (167)	199 = G8 (199)
107 = B3 (107)	134 = C11	168 = E11 (168)	200 = G9 (200)
108 = B4 (108)	139 = D1	173 = F1 (173)	201 = G10 (201)
110 = B5 (110)	140 = D2	174 = F2 (174)	202 = G11 (202)
111 = B6 (111)	141 = D3	175 = F3 (175)	208 = H2 (208)
112 = B7 (112)	142 = D4	176 = F4 (176)	209 = H3 (209)
114 = B8 (114)	144 = D5	178 = F5 (178)	210 = H4 (210)
115 = B9 (115)	145 = D6	179 = F6 (179)	212 = H5 (212)
116 = B10 (116)	146 = D7	180 = F7 (180)	213 = H6 (213)
122 = C1 (122)	148 = D8	182 = F8 (182)	214 = H7 (214)
123 = C2 (123)	149 = D9	183 = F9 (183)	215 = H8 (215)
124 = C3 (124)	150 = D10	184 = F10 (184)	217 = H9 (217)
125 = C4 (125)	151 = D11	185 = F11 (185)	218 = H10 (218)
127 = C5 (127)	156 = E1	190 = G1 (190)	229 = I5 (229)
128 = C6 (128)	157 = E2	191 = G2 (191)	230 = I6 (230)
129 = C7 (129)	158 = E3	192 = G3 (192)	231 = I7 (231)

(ILCA models when AFAreaModeSetting is set to Zone)

0 = n/a	5 = Center Zone
1 = Top Left Zone	6 = Right Zone
2 = Top Zone	7 = Bottom Left Zone
3 = Top Right Zone	8 = Bottom Zone
4 = Left Zone	9 = Bottom Right Zone

(NEX and ILCE models)

0 = n/a	5 = Bottom Zone
1 = Center Zone	6 = Bottom Right Zone
2 = Top Zone	7 = Bottom Left Zone
3 = Right Zone	8 = Top Left Zone
4 = Left Zone	9 = Top Right Zone

## 0x2020 AFPointsUsed

### no

(SLT models, or NEX/ILCE with A-mount lenses)

0x0 = (none)	Bit 9 = Far Right	Bit 39 = E6	Bit 59 = G4
Bit 0 = Center	Bit 10 = Far Left	Bit 40 = E7	Bit 60 = G5
Bit 1 = Top	Bit 11 = Upper-middle	Bit 41 = E8	Bit 61 = G6
Bit 2 = Upper-right	Bit 12 = Near Right	Bit 42 = E9	Bit 62 = G7
Bit 3 = Right	Bit 13 = Lower-middle	Bit 43 = E10	Bit 63 = G8
Bit 4 = Lower-right	Bit 14 = Near Left	Bit 44 = E11	Bit 64 = G9
Bit 5 = Bottom	Bit 15 = Upper Far Right	Bit 45 = F1	Bit 65 = G10
Bit 6 = Lower-left	Bit 16 = Lower Far Right	Bit 46 = F2	Bit 66 = G11
Bit 7 = Left	Bit 17 = Lower Far Left	Bit 47 = F3	Bit 67 = H2
Bit 8 = Upper-left	Bit 18 = Upper Far Left	Bit 48 = F4	Bit 68 = H3
(ILCA models)			
0x0 = (none)	Bit 19 = C8	Bit 39 = E6	Bit 59 = G4
Bit 0 = A5	Bit 20 = C9	Bit 40 = E7	Bit 60 = G5
Bit 1 = A6	Bit 21 = C10	Bit 41 = E8	Bit 61 = G6
Bit 2 = A7	Bit 22 = C11	Bit 42 = E9	Bit 62 = G7
Bit 3 = B2	Bit 23 = D1	Bit 43 = E10	Bit 63 = G8
Bit 4 = B3	Bit 24 = D2	Bit 44 = E11	Bit 64 = G9
Bit 5 = B4	Bit 25 = D3	Bit 45 = F1	Bit 65 = G10
Bit 6 = B5	Bit 26 = D4	Bit 46 = F2	Bit 66 = G11
Bit 7 = B6	Bit 27 = D5	Bit 47 = F3	Bit 67 = H2
Bit 8 = B7	Bit 28 = D6	Bit 48 = F4	Bit 68 = H3
Bit 9 = B8	Bit 29 = D7	Bit 49 = F5	Bit 69 = H4
Bit 10 = B9	Bit 30 = D8	Bit 50 = F6	Bit 70 = H5
Bit 11 = B10	Bit 31 = D9	Bit 51 = F7	Bit 71 = H6
Bit 12 = C1	Bit 32 = D10	Bit 52 = F8	Bit 72 = H7

				Bit 13 = C2 Bit 14 = C3 Bit 15 = C4 Bit 16 = C5 Bit 17 = C6 Bit 18 = C7	Bit 33 = D11 Bit 34 = E1 Bit 35 = E2 Bit 36 = E3 Bit 37 = E4 Bit 38 = E5	Bit 53 = F9 Bit 54 = F10 Bit 55 = F11 Bit 56 = G1 Bit 57 = G2 Bit 58 = G3	Bit 73 = H8 Bit 74 = H9 Bit 75 = H10 Bit 76 = I5 Bit 77 = I6 Bit 78 = I7
0x2021	AFTacking	int8u		0 = Off 1 = Face tracking 2 = Lock On AF			
0x2022	FocalPlaneAFPointsUsed	no		(On-sensor/focal-plane phase AF points for ILCE with hybrid AF) 0x0 = (none) 0x0 = (none)			
0x2023	MultiFrameNREffect	int32u		0 = Normal 1 = High			
0x2026	WBShiftAB_GM_Precise	int32s[2]~		(2 numbers: 1. positive is a shift toward amber, 2. positive is a shift toward magenta)			
0x2027	FocusLocation	int16u[4]					
0x2028	VariableLowPassFilter	int16u[2]		'0 0' = n/a '1 0' = Off '1 1' = Standard '1 2' = High '65535 65535' = n/a			
0x2029	RAWFileType	int16u		0 = Compressed RAW 1 = Uncompressed RAW 2 = Lossless Compressed RAW 65535 = n/a			
0x202a	Tag202a	-		--> <a href="#">Sony Tag202a Tags</a>			
0x202b	PrioritySetInAWB	int8u		0 = Standard 1 = Ambience 2 = White			
0x202c	MeteringMode2	int16u		0x100 = Multi-segment 0x200 = Center-weighted average 0x301 = Spot (Standard) 0x302 = Spot (Large) 0x400 = Average 0x500 = Highlight			
0x202d	ExposureStandardAdjustment	rational64s					
0x202e	Quality	int16u[2]		'0 0' = n/a '0 1' = Standard '0 2' = Fine '0 3' = Extra Fine '0 4' = Light '1 0' = RAW '1 1' = RAW + Standard '1 2' = RAW + Fine '1 3' = RAW + Extra Fine '1 4' = RAW + Light '2 0' = S-size RAW '3 0' = M-size RAW '3 2' = M-size RAW + Fine '3 3' = M-size RAW + Extra Fine			
0x202f	PixelShiftInfo	undef		'00000000 0 0 0x0' = n/a			
0x2031	SerialNumber	string					
0x2032	Shadows	int32s					
0x2033	Highlights	int32s					
0x2034	Fade	int32s					
0x2035	SharpnessRange	int32s					
0x2036	Clarity	int32s					
0x2037	FocusFrameSize	no		(width and height of FocusFrame, centered on FocusLocation)			
0x2039	JPEG-HEIFSwitch	int16u		0 = JPEG 1 = HEIF 65535 = n/a			
0x2044	HiddenInfo	-		--> <a href="#">Sony HiddenInfo Tags</a>			
0x204a	FocusLocation2	int16u[4]					
0x205c	StepCropShooting	int8u		0 = 35mm (Off) 1 = 50mm 2 = 70mm			
0x3000	ShotInfo	-		--> <a href="#">Sony ShotInfo Tags</a>			

0x900b	Tag900b	-	---> <a href="#">Sony Tag900b Tags</a>
0x9050	Tag9050a Tag9050b Tag9050c Tag9050d	-	---> <a href="#">Sony Tag9050a Tags</a> ---> <a href="#">Sony Tag9050b Tags</a> ---> <a href="#">Sony Tag9050c Tags</a> ---> <a href="#">Sony Tag9050d Tags</a>
0x9400	Tag9400a Tag9400b Tag9400c	-	---> <a href="#">Sony Tag9400a Tags</a> ---> <a href="#">Sony Tag9400b Tags</a> ---> <a href="#">Sony Tag9400c Tags</a>
0x9401	Tag9401	-	---> <a href="#">Sony Tag9401 Tags</a>
0x9402	Tag9402	-	---> <a href="#">Sony Tag9402 Tags</a>
0x9403	Tag9403	-	---> <a href="#">Sony Tag9403 Tags</a>
0x9404	Tag9404a Tag9404b Tag9404c	-	---> <a href="#">Sony Tag9404a Tags</a> ---> <a href="#">Sony Tag9404b Tags</a> ---> <a href="#">Sony Tag9404c Tags</a>
0x9405	Tag9405a Tag9405b	-	---> <a href="#">Sony Tag9405a Tags</a> ---> <a href="#">Sony Tag9405b Tags</a>
0x9406	Tag9406 Tag9406b	-	---> <a href="#">Sony Tag9406 Tags</a> ---> <a href="#">Sony Tag9406b Tags</a>
0x940a	Tag940a	-	---> <a href="#">Sony Tag940a Tags</a>
0x940c	Tag940c	-	---> <a href="#">Sony Tag940c Tags</a>
0x940e	AFInfo Tag940e	-	---> <a href="#">Sony AFInfo Tags</a> ---> <a href="#">Sony Tag940e Tags</a>
0x9416	Sony_0x9416	-	---> <a href="#">Sony Tag9416 Tags</a>
0xb000	FileFormat	int8u[4]	'0 0 0 2' = JPEG '1 0 0 0' = SR2 '2 0 0 0' = ARW 1.0 '3 0 0 0' = ARW 2.0 '3 1 0 0' = ARW 2.1 '3 2 0 0' = ARW 2.2 '3 3 0 0' = ARW 2.3 '3 3 1 0' = ARW 2.3.1 '3 3 2 0' = ARW 2.3.2 '3 3 3 0' = ARW 2.3.3 '3 3 5 0' = ARW 2.3.5 '4 0 0 0' = ARW 4.0 '4 0 1 0' = ARW 4.0.1 '5 0 0 0' = ARW 5.0 '5 0 1 0' = ARW 5.0.1
0xb001	SonyModelID	int16u	2 = DSC-R1 256 = DSLR-A100 257 = DSLR-A900 258 = DSLR-A700 259 = DSLR-A200 260 = DSLR-A350 261 = DSLR-A300 262 = DSLR-A900 (APS-C mode) 263 = DSLR-A380/A390 264 = DSLR-A330 265 = DSLR-A230 266 = DSLR-A290 269 = DSLR-A850 270 = DSLR-A850 (APS-C mode) 273 = DSLR-A550 274 = DSLR-A500 275 = DSLR-A450 278 = NEX-5 279 = NEX-3 280 = SLT-A33 281 = SLT-A55 / SLT-A55V 282 = DSLR-A560 283 = DSLR-A580 284 = NEX-C3 285 = SLT-A35 286 = SLT-A65 / SLT-A65V 287 = SLT-A77 / SLT-A77V 288 = NEX-5N 289 = NEX-7 290 = NEX-VG20E 291 = SLT-A37 292 = SLT-A57 293 = NEX-F3 294 = SLT-A99 / SLT-A99V 295 = NEX-6 296 = NEX-5R 297 = DSC-RX100 298 = DSC-RX1 299 = NEX-VG900 300 = NEX-VG30E 341 = DSC-RX100M4 342 = DSC-RX10M2 344 = DSC-RX1RM2 346 = ILCE-QX1 347 = ILCE-7RM2 350 = ILCE-7SM2 353 = ILCA-68 354 = ILCA-99M2 355 = DSC-RX10M3 356 = DSC-RX100M5 357 = ILCE-6300 358 = ILCE-9 360 = ILCE-6500 362 = ILCE-7RM3 363 = ILCE-7M3 364 = DSC-RX0 365 = DSC-RX10M4 366 = DSC-RX100M6 367 = DSC-HX99 369 = DSC-RX100M5A 371 = ILCE-6400 372 = DSC-RX0M2 373 = DSC-HX95 374 = DSC-RX100M7 375 = ILCE-7RM4 376 = ILCE-9M2 378 = ILCE-6600 379 = ILCE-6100 380 = ZV-1 381 = ILCE-7C 382 = ZV-E10 383 = ILCE-7SM3 384 = ILCE-1 385 = ILME-FX3 386 = ILCE-7RM3A 387 = ILCE-7RM4A 388 = ILCE-7M4 389 = ZV-1F 390 = ILCE-7RM5 391 = ILME-FX30

302 = ILCE-3000 / ILCE-3500	392 = ILCE-9M3
303 = SLT-A58	393 = ZV-E1
305 = NEX-3N	394 = ILCE-6700
306 = ILCE-7	395 = ZV-1M2
307 = NEX-5T	396 = ILCE-7CR
308 = DSC-RX100M2	397 = ILCE-7CM2
309 = DSC-RX10	398 = ILX-LR1
310 = DSC-RX1R	399 = ZV-E10M2
311 = ILCE-7R	400 = ILCE-1M2
312 = ILCE-6000	401 = DSC-RX1RM3
313 = ILCE-5000	402 = ILCE-6400A
317 = DSC-RX100M3	403 = ILCE-6100A
318 = ILCE-7S	404 = DSC-RX100M7A
319 = ILCA-77M2	406 = ILME-FX2
339 = ILCE-5100	408 = ZV-1A
340 = ILCE-7M2	

0xb020	CreativeStyle	string	'AdobeRGB' = Adobe RGB 'Autumnleaves' = Autumn Leaves 'BW' = B&W 'Clear' = Clear 'Deep' = Deep 'FL' = FL 'IN' = IN 'Landscape' = Landscape 'Light' = Light 'Neutral' = Neutral 'Nightview' = Night View/Portrait 'None' = None 'Portrait' = Portrait 'Real' = Real 'SH' = SH 'Sepia' = Sepia 'Standard' = Standard 'Sunset' = Sunset 'VV2' = Vivid 2 'Vivid' = Vivid
0xb021	ColorTemperature	int32u	
0xb022	ColorCompensationFilter	int32u	(negative is green, positive is magenta)
0xb023	SceneMode	int32u	0 = Standard                          19 = Handheld Night Shot 1 = Portrait                            20 = Anti Motion Blur 2 = Text                                21 = Cont. Priority AE 3 = Night Scene                      22 = Auto+ 4 = Sunset                             23 = 3D Sweep Panorama 5 = Sports                            24 = Superior Auto 6 = Landscape                        25 = High Sensitivity 7 = Night Portrait                 26 = Fireworks 8 = Macro                            27 = Food 9 = Super Macro                    28 = Pet 16 = Auto                            33 = HDR 17 = Night View/Portrait        65535 = n/a 18 = Sweep Panorama
0xb024	ZoneMatching	int32u	0 = ISO Setting Used 1 = High Key 2 = Low Key
0xb025	DynamicRangeOptimizer	int32u	0 = Off                            11 = Advanced Lv4 1 = Standard                      12 = Advanced Lv5 2 = Advanced Auto                16 = Lv1 3 = Auto                            17 = Lv2 8 = Advanced Lv1                18 = Lv3 9 = Advanced Lv2                19 = Lv4 10 = Advanced Lv3               20 = Lv5
0xb026	ImageStabilization	int32u	0 = Off 1 = On 4294967295 = n/a
0xb027	LensType	int32u	--> <a href="#">Sony LensType Values</a>
0xb028	MinoltaMakerNote	-	--> <a href="#">Minolta Tags</a>
0xb029	ColorMode	int32u	0 = Standard                    18 = FL 1 = Vivid                        19 = Vivid 2 2 = Portrait                    20 = IN 3 = Landscape                   21 = SH 4 = Sunset                      22 = FL2 5 = Night View/Portrait     23 = FL3 6 = B&W                        100 = Neutral 7 = Adobe RGB                   101 = Clear 12 = Neutral                    102 = Deep

			13 = Clear 14 = Deep 15 = Light 16 = Autumn Leaves 17 = Sepia	103 = Light 104 = Night View 105 = Autumn Leaves 255 = Off 4294967295 = n/a
0xb02a	LensSpec	int8u[8]	(like LensInfo, but also specifies lens features: DT, E, ZA, G, SSM, SAM, OSS, STF, Reflex, Macro and Fisheye)	
0xb02b	FullImageSize	int32u[2]		
0xb02c	PreviewImageSize	int32u[2]		
0xb040	Macro	int16u	0 = Off 1 = On 2 = Close Focus 65535 = n/a	
0xb041	ExposureMode	int16u	0 = Program AE 1 = Portrait 2 = Beach 3 = Sports 4 = Snow 5 = Landscape 6 = Auto 7 = Aperture-priority AE 8 = Shutter speed priority AE 9 = Night Scene / Twilight 10 = Hi-Speed Shutter 11 = Twilight Portrait 12 = Soft Snap/Portrait 13 = Fireworks 14 = Smile Shutter 15 = Manual	18 = High Sensitivity 19 = Macro 20 = Advanced Sports Shooting 29 = Underwater 33 = Food 34 = Sweep Panorama 35 = Handheld Night Shot 36 = Anti Motion Blur 37 = Pet 38 = Backlight Correction HDR 39 = Superior Auto 40 = Background Defocus 41 = Soft Skin 42 = 3D Image 65535 = n/a
0xb042	FocusMode	int16u	(not valid for all models) 1 = AF-S 2 = AF-C 4 = Permanent-AF 65535 = n/a	
0xb043	AFAreaMode	int16u	(older models) 0 = Default 1 = Multi 2 = Center 3 = Spot 4 = Flexible Spot (DSC-HX9V generation cameras) 0 = Multi 1 = Center 2 = Spot 3 = Flexible Spot 10 = Selective (for Miniature effect) 14 = Tracking 15 = Face Tracking 255 = Manual	6 = Touch 14 = Tracking 15 = Face Tracking 65535 = n/a
0xb044	AFIlluminator	int16u	0 = Off 1 = Auto 65535 = n/a	
0xb047	JPEGQuality	int16u	0 = Standard 1 = Fine 2 = Extra Fine 65535 = n/a	
0xb048	FlashLevel	int16s	-32768 = Low -9 = -9/3 -8 = -8/3 -7 = -7/3 -6 = -6/3 -5 = -5/3 -4 = -4/3	-3 = -3/3 -2 = -2/3 -1 = -1/3 0 = Normal 1 = +1/3 2 = +2/3 3 = +3/3 4 = +4/3 5 = +5/3 6 = +6/3 9 = +9/3 128 = n/a 32767 = High
0xb049	ReleaseMode	int16u	0 = Normal 2 = Continuous 5 = Exposure Bracketing 6 = White Balance Bracketing 8 = DRO Bracketing 65535 = n/a	
0xb04a	SequenceNumber	int16u	(shot number in continuous burst) 0 = Single 65535 = n/a	

0xb04b	Anti-Blur	int16u	0 = Off 1 = On (Continuous) 2 = On (Shooting) 65535 = n/a
0xb04e	FocusMode	int16u	(valid for DSC-HX9V generation and newer) 0 = Manual 2 = AF-S 3 = AF-C 5 = Semi-manual 6 = DMF
0xb04f	DynamicRangeOptimizer	int16u	0 = Off 1 = Standard 2 = Plus
0xb050	HighISONoiseReduction2	int16u	(DSC models only) 0 = Normal 1 = High 2 = Low 3 = Off 65535 = n/a
0xb052	IntelligentAuto	int16u	0 = Off 1 = On 2 = Advanced
0xb054	WhiteBalance	int16u	(decoding of the Fluorescent settings matches the EXIF standard, which is different than the names used by Sony for some models) 0 = Auto 4 = Custom 5 = Daylight 6 = Cloudy 7 = Cool White Fluorescent 8 = Day White Fluorescent 9 = Daylight Fluorescent 10 = Incandescent2 11 = Warm White Fluorescent 14 = Incandescent 15 = Flash 17 = Underwater 1 (Blue Water) 18 = Underwater 2 (Green Water) 19 = Underwater Auto

## Sony LensType Values

"New" or "II" appear in brackets if the original version of the lens has the same LensType. Special logic is employed to identify the attached lens when a Metabones Canon EF adapter is used.

Value	LensType
0	= Minolta AF 28-85mm F3.5-4.5 New
1	= Minolta AF 80-200mm F2.8 HS-APO G
2	= Minolta AF 28-70mm F2.8 G
3	= Minolta AF 28-80mm F4-5.6
4	= Minolta AF 85mm F1.4G
5	= Minolta AF 35-70mm F3.5-4.5 [II]
6	= Minolta AF 24-85mm F3.5-4.5 [New]
7	= Minolta AF 100-300mm F4.5-5.6 APO [New] or 100-400mm or Sigma Lens
7	= Minolta AF 100-400mm F4.5-6.7 APO
7	= Sigma AF 100-300mm F4 EX DG IF
8	= Minolta AF 70-210mm F4.5-5.6 [II]
9	= Minolta AF 50mm F3.5 Macro
10	= Minolta AF 28-105mm F3.5-4.5 [New]
11	= Minolta AF 300mm F4 HS-APO G
12	= Minolta AF 100mm F2.8 Soft Focus
13	= Minolta AF 75-300mm F4.5-5.6 (New or II)
14	= Minolta AF 100-400mm F4.5-6.7 APO
15	= Minolta AF 400mm F4.5 HS-APO G
16	= Minolta AF 17-35mm F3.5 G
17	= Minolta AF 20-35mm F3.5-4.5
18	= Minolta AF 28-80mm F3.5-5.6 II
19	= Minolta AF 35mm F1.4 G
20	= Minolta/Sony 135mm F2.8 [T4.5] STF
22	= Minolta AF 35-80mm F4-5.6 II
23	= Minolta AF 200mm F4 Macro APO G
24	= Minolta/Sony AF 24-105mm F3.5-4.5 (D) or Sigma or Tamron Lens
24	= Sigma 18-50mm F2.8
24	= Sigma 17-70mm F2.8-4.5 DC Macro

24 = Sigma 20-40mm F2.8 EX DG Aspherical IF  
24 = Sigma 18-200mm F3.5-6.3 DC  
24 = Sigma DC 18-125mm F4-5.6 D  
24 = Tamron SP AF 28-75mm F2.8 XR Di LD Aspherical [IF] Macro  
24 = Sigma 15-30mm F3.5-4.5 EX DG Aspherical  
25 = Minolta AF 100-300mm F4.5-5.6 APO (D) or Sigma Lens  
25 = Sigma 100-300mm F4 EX (APO (D) or D IF)  
25 = Sigma 70mm F2.8 EX DG Macro  
25 = Sigma 20mm F1.8 EX DG Aspherical RF  
25 = Sigma 30mm F1.4 EX DC  
25 = Sigma 24mm F1.8 EX DG ASP Macro  
27 = Minolta AF 85mm F1.4 G (D)  
28 = Minolta/Sony AF 100mm F2.8 Macro (D) or Tamron Lens  
28 = Tamron SP AF 90mm F2.8 Di Macro  
28 = Tamron SP AF 180mm F3.5 Di LD [IF] Macro  
29 = Minolta/Sony AF 75-300mm F4.5-5.6 (D)  
30 = Minolta AF 28-80mm F3.5-5.6 (D) or Sigma Lens  
30 = Sigma AF 10-20mm F4-5.6 EX DC  
30 = Sigma AF 12-24mm F4.5-5.6 EX DG  
30 = Sigma 28-70mm EX DG F2.8  
30 = Sigma 55-200mm F4-5.6 DC  
31 = Minolta/Sony AF 50mm F2.8 Macro (D) or F3.5  
31 = Minolta/Sony AF 50mm F3.5 Macro  
32 = Minolta/Sony AF 300mm F2.8 G or 1.5x Teleconverter  
33 = Minolta/Sony AF 70-200mm F2.8 G  
35 = Minolta AF 85mm F1.4 G (D) Limited  
36 = Minolta AF 28-100mm F3.5-5.6 (D)  
38 = Minolta AF 17-35mm F2.8-4 (D)  
39 = Minolta AF 28-75mm F2.8 (D)  
40 = Minolta/Sony AF DT 18-70mm F3.5-5.6 (D)  
41 = Minolta/Sony AF DT 11-18mm F4.5-5.6 (D) or Tamron Lens  
41 = Tamron SP AF 11-18mm F4.5-5.6 Di II LD Aspherical IF  
42 = Minolta/Sony AF DT 18-200mm F3.5-6.3 (D)  
43 = Sony 35mm F1.4 G (SAL35F14G)  
44 = Sony 50mm F1.4 (SAL50F14)  
45 = Carl Zeiss Planar T\* 85mm F1.4 ZA (SAL85F14Z)  
46 = Carl Zeiss Vario-Sonnar T\* DT 16-80mm F3.5-4.5 ZA (SAL1680Z)  
47 = Carl Zeiss Sonnar T\* 135mm F1.8 ZA (SAL135F18Z)  
48 = Carl Zeiss Vario-Sonnar T\* 24-70mm F2.8 ZA SSM (SAL2470Z) or Other Lens  
48 = Carl Zeiss Vario-Sonnar T\* 24-70mm F2.8 ZA SSM II (SAL2470Z2)  
48 = Tamron SP 24-70mm F2.8 Di USD  
49 = Sony DT 55-200mm F4-5.6 (SAL55200)  
50 = Sony DT 18-250mm F3.5-6.3 (SAL18250)  
51 = Sony DT 16-105mm F3.5-5.6 (SAL16105)  
52 = Sony 70-300mm F4.5-5.6 G SSM (SAL70300G) or G SSM II or Tamron Lens  
52 = Sony 70-300mm F4.5-5.6 G SSM II (SAL70300G2)  
52 = Tamron SP 70-300mm F4-5.6 Di USD  
53 = Sony 70-400mm F4-5.6 G SSM (SAL70400G)  
54 = Carl Zeiss Vario-Sonnar T\* 16-35mm F2.8 ZA SSM (SAL1635Z) or ZA SSM II  
54 = Carl Zeiss Vario-Sonnar T\* 16-35mm F2.8 ZA SSM II (SAL1635Z2)  
55 = Sony DT 18-55mm F3.5-5.6 SAM (SAL1855) or SAM II  
55 = Sony DT 18-55mm F3.5-5.6 SAM II (SAL18552)  
56 = Sony DT 55-200mm F4-5.6 SAM (SAL55200-2)  
57 = Sony DT 50mm F1.8 SAM (SAL50F18) or Tamron Lens or Commelite CM-EF-NEX adapter  
57 = Tamron SP AF 60mm F2 Di II LD [IF] Macro 1:1  
57 = Tamron 18-270mm F3.5-6.3 Di II PZD  
58 = Sony DT 30mm F2.8 Macro SAM (SAL30M28)  
59 = Sony 28-75mm F2.8 SAM (SAL2875)  
60 = Carl Zeiss Distagon T\* 24mm F2 ZA SSM (SAL24F20Z)  
61 = Sony 85mm F2.8 SAM (SAL85F28)  
62 = Sony DT 35mm F1.8 SAM (SAL35F18)  
63 = Sony DT 16-50mm F2.8 SSM (SAL1650)  
64 = Sony 500mm F4 G SSM (SAL500F40G)  
65 = Sony DT 18-135mm F3.5-5.6 SAM (SAL18135)  
66 = Sony 300mm F2.8 G SSM II (SAL300F28G2)  
67 = Sony 70-200mm F2.8 G SSM II (SAL70200G2)  
68 = Sony DT 55-300mm F4.5-5.6 SAM (SAL55300)  
69 = Sony 70-400mm F4-5.6 G SSM II (SAL70400G2)  
70 = Carl Zeiss Planar T\* 50mm F1.4 ZA SSM (SAL50F14Z)  
128 = Tamron or Sigma Lens (128)  
128 = Tamron AF 18-200mm F3.5-6.3 XR Di II LD Aspherical [IF] Macro  
128 = Tamron AF 28-300mm F3.5-6.3 XR Di LD Aspherical [IF] Macro  
128 = Tamron AF 28-200mm F3.8-5.6 XR Di Aspherical [IF] Macro  
128 = Tamron SP AF 17-35mm F2.8-4 Di LD Aspherical IF  
128 = Sigma AF 50-150mm F2.8 EX DC APO HSM II

128 = Sigma 10-20mm F3.5 EX DC HSM  
128 = Sigma 70-200mm F2.8 II EX DG APO MACRO HSM  
128 = Sigma 10mm F2.8 EX DC HSM Fisheye  
128 = Sigma 50mm F1.4 EX DG HSM  
128 = Sigma 85mm F1.4 EX DG HSM  
128 = Sigma 24-70mm F2.8 IF EX DG HSM  
128 = Sigma 18-250mm F3.5-6.3 DC OS HSM  
128 = Sigma 17-50mm F2.8 EX DC HSM  
128 = Sigma 17-70mm F2.8-4 DC Macro HSM  
128 = Sigma 150mm F2.8 EX DG OS HSM APO Macro  
128 = Sigma 150-500mm F5-6.3 APO DG OS HSM  
128 = Tamron AF 28-105mm F4-5.6 [IF]  
128 = Sigma 35mm F1.4 DG HSM  
128 = Sigma 18-35mm F1.8 DC HSM  
128 = Sigma 50-500mm F4.5-6.3 APO DG OS HSM  
128 = Sigma 24-105mm F4 DG HSM | A  
128 = Sigma 30mm F1.4  
128 = Sigma 35mm F1.4 DG HSM | A  
128 = Sigma 105mm F2.8 EX DG OS HSM Macro  
128 = Sigma 180mm F2.8 EX DG OS HSM APO Macro  
128 = Sigma 18-300mm F3.5-6.3 DC Macro HSM | C  
128 = Sigma 18-50mm F2.8-4.5 DC HSM  
129 = Tamron Lens (129)  
129 = Tamron 200-400mm F5.6 LD  
129 = Tamron 70-300mm F4-5.6 LD  
131 = Tamron 20-40mm F2.7-3.5 SP Aspherical IF  
135 = Vivitar 28-210mm F3.5-5.6  
136 = Tokina EMZ M100 AF 100mm F3.5  
137 = Cosina 70-210mm F2.8-4 AF  
138 = Soligor 19-35mm F3.5-4.5  
139 = Tokina AF 28-300mm F4-6.3  
142 = Cosina AF 70-300mm F4.5-5.6 MC  
146 = Voigtlander Macro APO-Lanthar 125mm F2.5 SL  
194 = Tamron SP AF 17-50mm F2.8 XR Di II LD Aspherical [IF]  
202 = Tamron SP AF 70-200mm F2.8 Di LD [IF] Macro  
203 = Tamron SP 70-200mm F2.8 Di USD  
204 = Tamron SP 24-70mm F2.8 Di USD  
212 = Tamron 28-300mm F3.5-6.3 Di PZD  
213 = Tamron 16-300mm F3.5-6.3 Di II PZD Macro  
214 = Tamron SP 150-600mm F5-6.3 Di USD  
215 = Tamron SP 15-30mm F2.8 Di USD  
216 = Tamron SP 45mm F1.8 Di USD  
217 = Tamron SP 35mm F1.8 Di USD  
218 = Tamron SP 90mm F2.8 Di Macro 1:1 USD (F017)  
220 = Tamron SP 150-600mm F5-6.3 Di USD G2  
224 = Tamron SP 90mm F2.8 Di Macro 1:1 USD (F004)  
255 = Tamron Lens (255)  
255 = Tamron SP AF 17-50mm F2.8 XR Di II LD Aspherical  
255 = Tamron AF 18-250mm F3.5-6.3 XR Di II LD  
255 = Tamron AF 55-200mm F4-5.6 Di II LD Macro  
255 = Tamron AF 70-300mm F4-5.6 Di LD Macro 1:2  
255 = Tamron SP AF 200-500mm F5.0-6.3 Di LD IF  
255 = Tamron SP AF 10-24mm F3.5-4.5 Di II LD Aspherical IF  
255 = Tamron SP AF 70-200mm F2.8 Di LD IF Macro  
255 = Tamron SP AF 28-75mm F2.8 XR Di LD Aspherical IF  
255 = Tamron AF 90-300mm F4.5-5.6 Telemacro  
1868 = Sigma MC-11 SA-E Mount Converter with not-supported Sigma lens  
2550 = Minolta AF 50mm F1.7  
2551 = Minolta AF 35-70mm F4 or Other Lens  
2551 = Sigma UC AF 28-70mm F3.5-4.5  
2551 = Sigma AF 28-70mm F2.8  
2551 = Sigma M-AF 70-200mm F2.8 EX Aspherical  
2551 = Quantaray M-AF 35-80mm F4-5.6  
2551 = Tokina 28-70mm F2.8-4.5 AF  
2552 = Minolta AF 28-85mm F3.5-4.5 or Other Lens  
2552 = Tokina 19-35mm F3.5-4.5  
2552 = Tokina 28-70mm F2.8 AT-X  
2552 = Tokina 80-400mm F4.5-5.6 AT-X AF II 840  
2552 = Tokina AF PRO 28-80mm F2.8 AT-X 280  
2552 = Tokina AT-X PRO [II] AF 28-70mm F2.6-2.8 270  
2552 = Tamron AF 19-35mm F3.5-4.5  
2552 = Angenieux AF 28-70mm F2.6  
2552 = Tokina AT-X 17 AF 17mm F3.5  
2552 = Tokina 20-35mm F3.5-4.5 II AF  
2553 = Minolta AF 28-135mm F4-4.5 or Other Lens

2553 = Sigma ZOOM-alpha 35-135mm F3.5-4.5  
2553 = Sigma 28-105mm F2.8-4 Aspherical  
2553 = Sigma 28-105mm F4-5.6 UC  
2553 = Tokina AT-X 242 AF 24-200mm F3.5-5.6  
2554 = Minolta AF 35-105mm F3.5-4.5  
2555 = Minolta AF 70-210mm F4 Macro or Sigma Lens  
2555 = Sigma 70-210mm F4-5.6 APO  
2555 = Sigma M-AF 70-200mm F2.8 EX APO  
2555 = Sigma 75-200mm F2.8-3.5  
2556 = Minolta AF 135mm F2.8  
2557 = Minolta/Sony AF 28mm F2.8  
2558 = Minolta AF 24-50mm F4  
2560 = Minolta AF 100-200mm F4.5  
2561 = Minolta AF 75-300mm F4.5-5.6 or Sigma Lens  
2561 = Sigma 70-300mm F4-5.6 DL Macro  
2561 = Sigma 300mm F4 APO Macro  
2561 = Sigma AF 500mm F4.5 APO  
2561 = Sigma AF 170-500mm F5-6.3 APO Aspherical  
2561 = Tokina AT-X AF 300mm F4  
2561 = Tokina AT-X AF 400mm F5.6 SD  
2561 = Tokina AF 730 II 75-300mm F4.5-5.6  
2561 = Sigma 800mm F5.6 APO  
2561 = Sigma AF 400mm F5.6 APO Macro  
2561 = Sigma 1000mm F8 APO  
2562 = Minolta AF 50mm F1.4 [New]  
2563 = Minolta AF 300mm F2.8 APO or Sigma Lens  
2563 = Sigma AF 50-500mm F4-6.3 EX DG APO  
2563 = Sigma AF 170-500mm F5-6.3 APO Aspherical  
2563 = Sigma AF 500mm F4.5 EX DG APO  
2563 = Sigma 400mm F5.6 APO  
2564 = Minolta AF 50mm F2.8 Macro or Sigma Lens  
2564 = Sigma 50mm F2.8 EX Macro  
2565 = Minolta AF 600mm F4 APO  
2566 = Minolta AF 24mm F2.8 or Sigma Lens  
2566 = Sigma 17-35mm F2.8-4 EX Aspherical  
2572 = Minolta/Sony AF 500mm F8 Reflex  
2578 = Minolta/Sony AF 16mm F2.8 Fisheye or Sigma Lens  
2578 = Sigma 8mm F4 EX [DG] Fisheye  
2578 = Sigma 14mm F3.5  
2578 = Sigma 15mm F2.8 Fisheye  
2579 = Minolta/Sony AF 20mm F2.8 or Tokina Lens  
2579 = Tokina AT-X Pro DX 11-16mm F2.8  
2581 = Minolta AF 100mm F2.8 Macro [New] or Sigma or Tamron Lens  
2581 = Sigma AF 90mm F2.8 Macro  
2581 = Sigma AF 105mm F2.8 EX [DG] Macro  
2581 = Sigma 180mm F5.6 Macro  
2581 = Sigma 180mm F3.5 EX DG Macro  
2581 = Tamron 90mm F2.8 Macro  
2585 = Minolta AF 35-105mm F3.5-4.5 New or Tamron Lens  
2585 = Beroflex 35-135mm F3.5-4.5  
2585 = Tamron 24-135mm F3.5-5.6  
2588 = Minolta AF 70-210mm F3.5-4.5  
2589 = Minolta AF 80-200mm F2.8 APO or Tokina Lens  
2589 = Tokina 80-200mm F2.8  
2590 = Minolta AF 200mm F2.8 G APO + Minolta AF 1.4x APO or Other Lens + 1.4x  
2590 = Minolta AF 600mm F4 HS-APO G + Minolta AF 1.4x APO  
2591 = Minolta AF 35mm F1.4  
2592 = Minolta AF 85mm F1.4 G (D)  
2593 = Minolta AF 200mm F2.8 APO  
2594 = Minolta AF 3x-1x F1.7-2.8 Macro  
2596 = Minolta AF 28mm F2  
2597 = Minolta AF 35mm F2 [New]  
2598 = Minolta AF 100mm F2  
2601 = Minolta AF 200mm F2.8 G APO + Minolta AF 2x APO or Other Lens + 2x  
2601 = Minolta AF 600mm F4 HS-APO G + Minolta AF 2x APO  
2604 = Minolta AF 80-200mm F4.5-5.6  
2605 = Minolta AF 35-80mm F4-5.6  
2606 = Minolta AF 100-300mm F4.5-5.6  
2607 = Minolta AF 35-80mm F4-5.6  
2608 = Minolta AF 300mm F2.8 HS-APO G  
2609 = Minolta AF 600mm F4 HS-APO G  
2612 = Minolta AF 200mm F2.8 HS-APO G  
2613 = Minolta AF 50mm F1.7 New  
2615 = Minolta AF 28-105mm F3.5-4.5 xi  
2616 = Minolta AF 35-200mm F4.5-5.6 xi

2618 = Minolta AF 28-80mm F4-5.6 xi  
2619 = Minolta AF 80-200mm F4.5-5.6 xi  
2620 = Minolta AF 28-70mm F2.8 G  
2621 = Minolta AF 100-300mm F4.5-5.6 xi  
2624 = Minolta AF 35-80mm F4-5.6 Power Zoom  
2628 = Minolta AF 80-200mm F2.8 HS-APO G  
2629 = Minolta AF 85mm F1.4 New  
2631 = Minolta AF 100-300mm F4.5-5.6 APO  
2632 = Minolta AF 24-50mm F4 New  
2638 = Minolta AF 50mm F2.8 Macro New  
2639 = Minolta AF 100mm F2.8 Macro  
2641 = Minolta/Sony AF 20mm F2.8 New  
2642 = Minolta AF 24mm F2.8 New  
2644 = Minolta AF 100-400mm F4.5-6.7 APO  
2662 = Minolta AF 50mm F1.4 New  
2667 = Minolta AF 35mm F2 New  
2668 = Minolta AF 28mm F2 New  
2672 = Minolta AF 24-105mm F3.5-4.5 (D)  
3046 = Metabones Canon EF Speed Booster  
4567 = Tokina 70-210mm F4-5.6  
4568 = Tokina AF 35-200mm F4-5.6 Zoom SD  
4570 = Tamron AF 35-135mm F3.5-4.5  
4571 = Vivitar 70-210mm F4.5-5.6  
4574 = 2x Teleconverter or Tamron or Tokina Lens  
4574 = Tamron SP AF 90mm F2.5  
4574 = Tokina RF 500mm F8.0 x2  
4574 = Tokina 300mm F2.8 x2  
4575 = 1.4x Teleconverter  
4585 = Tamron SP AF 300mm F2.8 LD IF  
4586 = Tamron SP AF 35-105mm F2.8 LD Aspherical IF  
4587 = Tamron AF 70-210mm F2.8 SP LD  
4812 = Metabones Canon EF Speed Booster Ultra  
6118 = Canon EF Adapter  
6528 = Sigma 16mm F2.8 Filtermatic Fisheye  
6553 = E-Mount, T-Mount, Other Lens or no lens  
6553 = Arax MC 35mm F2.8 Tilt+Shift  
6553 = Arax MC 80mm F2.8 Tilt+Shift  
6553 = Zenitar MF 16mm F2.8 Fisheye M42  
6553 = Samyang 500mm Mirror F8.0  
6553 = Pentacon Auto 135mm F2.8  
6553 = Pentacon Auto 29mm F2.8  
6553 = Helios 44-2 58mm F2.0  
18688 = Sigma MC-11 SA-E Mount Converter with not-supported Sigma lens  
25501 = Minolta AF 50mm F1.7  
25511 = Minolta AF 35-70mm F4 or Other Lens  
25511 = Sigma UC AF 28-70mm F3.5-4.5  
25511 = Sigma AF 28-70mm F2.8  
25511 = Sigma M-AF 70-200mm F2.8 EX Aspherical  
25511 = Quantaray M-AF 35-80mm F4-5.6  
25511 = Tokina 28-70mm F2.8-4.5 AF  
25521 = Minolta AF 28-85mm F3.5-4.5 or Other Lens  
25521 = Tokina 19-35mm F3.5-4.5  
25521 = Tokina 28-70mm F2.8 AT-X  
25521 = Tokina 80-400mm F4.5-5.6 AT-X AF II 840  
25521 = Tokina AF PRO 28-80mm F2.8 AT-X 280  
25521 = Tokina AT-X PRO [II] AF 28-70mm F2.6-2.8 270  
25521 = Tamron AF 19-35mm F3.5-4.5  
25521 = Angenieux AF 28-70mm F2.6  
25521 = Tokina AT-X 17 AF 17mm F3.5  
25521 = Tokina 20-35mm F3.5-4.5 II AF  
25531 = Minolta AF 28-135mm F4-4.5 or Other Lens  
25531 = Sigma ZOOM-alpha 35-135mm F3.5-4.5  
25531 = Sigma 28-105mm F2.8-4 Aspherical  
25531 = Sigma 28-105mm F4-5.6 UC  
25531 = Tokina AT-X 242 AF 24-200mm F3.5-5.6  
25541 = Minolta AF 35-105mm F3.5-4.5  
25551 = Minolta AF 70-210mm F4 Macro or Sigma Lens  
25551 = Sigma 70-210mm F4-5.6 APO  
25551 = Sigma M-AF 70-200mm F2.8 EX APO  
25551 = Sigma 75-200mm F2.8-3.5  
25561 = Minolta AF 135mm F2.8  
25571 = Minolta/Sony AF 28mm F2.8  
25581 = Minolta AF 24-50mm F4  
25601 = Minolta AF 100-200mm F4.5  
25611 = Minolta AF 75-300mm F4.5-5.6 or Sigma Lens

25611 = Sigma 70-300mm F4-5.6 DL Macro  
25611 = Sigma 300mm F4 APO Macro  
25611 = Sigma AF 500mm F4.5 APO  
25611 = Sigma AF 170-500mm F5-6.3 APO Aspherical  
25611 = Tokina AT-X AF 300mm F4  
25611 = Tokina AT-X AF 400mm F5.6 SD  
25611 = Tokina AF 730 II 75-300mm F4.5-5.6  
25611 = Sigma 800mm F5.6 APO  
25611 = Sigma AF 400mm F5.6 APO Macro  
25611 = Sigma 1000mm F8 APO  
25621 = Minolta AF 50mm F1.4 [New]  
25631 = Minolta AF 300mm F2.8 APO or Sigma Lens  
25631 = Sigma AF 50-500mm F4-6.3 EX DG APO  
25631 = Sigma AF 170-500mm F5-6.3 APO Aspherical  
25631 = Sigma AF 500mm F4.5 EX DG APO  
25631 = Sigma 400mm F5.6 APO  
25641 = Minolta AF 50mm F2.8 Macro or Sigma Lens  
25641 = Sigma 50mm F2.8 EX Macro  
25651 = Minolta AF 600mm F4 APO  
25661 = Minolta AF 24mm F2.8 or Sigma Lens  
25661 = Sigma 17-35mm F2.8-4 EX Aspherical  
25721 = Minolta/Sony AF 500mm F8 Reflex  
25781 = Minolta/Sony AF 16mm F2.8 Fisheye or Sigma Lens  
25781 = Sigma 8mm F4 EX [DG] Fisheye  
25781 = Sigma 14mm F3.5  
25781 = Sigma 15mm F2.8 Fisheye  
25791 = Minolta/Sony AF 20mm F2.8 or Tokina Lens  
25791 = Tokina AT-X Pro DX 11-16mm F2.8  
25811 = Minolta AF 100mm F2.8 Macro [New] or Sigma or Tamron Lens  
25811 = Sigma AF 90mm F2.8 Macro  
25811 = Sigma AF 105mm F2.8 EX [DG] Macro  
25811 = Sigma 180mm F5.6 Macro  
25811 = Sigma 180mm F3.5 EX DG Macro  
25811 = Tamron 90mm F2.8 Macro  
25851 = Beroflex 35-135mm F3.5-4.5  
25858 = Minolta AF 35-105mm F3.5-4.5 New or Tamron Lens  
25858 = Tamron 24-135mm F3.5-5.6  
25881 = Minolta AF 70-210mm F3.5-4.5  
25891 = Minolta AF 80-200mm F2.8 APO or Tokina Lens  
25891 = Tokina 80-200mm F2.8  
25901 = Minolta AF 200mm F2.8 G APO + Minolta AF 1.4x APO or Other Lens + 1.4x  
25901 = Minolta AF 600mm F4 HS-APO G + Minolta AF 1.4x APO  
25911 = Minolta AF 35mm F1.4  
25921 = Minolta AF 85mm F1.4 G (D)  
25931 = Minolta AF 200mm F2.8 APO  
25941 = Minolta AF 3x-1x F1.7-2.8 Macro  
25961 = Minolta AF 28mm F2  
25971 = Minolta AF 35mm F2 [New]  
25981 = Minolta AF 100mm F2  
26011 = Minolta AF 200mm F2.8 G APO + Minolta AF 2x APO or Other Lens + 2x  
26011 = Minolta AF 600mm F4 HS-APO G + Minolta AF 2x APO  
26041 = Minolta AF 80-200mm F4.5-5.6  
26051 = Minolta AF 35-80mm F4-5.6  
26061 = Minolta AF 100-300mm F4.5-5.6  
26071 = Minolta AF 35-80mm F4-5.6  
26081 = Minolta AF 300mm F2.8 HS-APO G  
26091 = Minolta AF 600mm F4 HS-APO G  
26121 = Minolta AF 200mm F2.8 HS-APO G  
26131 = Minolta AF 50mm F1.7 New  
26151 = Minolta AF 28-105mm F3.5-4.5 xi  
26161 = Minolta AF 35-200mm F4.5-5.6 xi  
26181 = Minolta AF 28-80mm F4-5.6 xi  
26191 = Minolta AF 80-200mm F4.5-5.6 xi  
26201 = Minolta AF 28-70mm F2.8 G  
26211 = Minolta AF 100-300mm F4.5-5.6 xi  
26241 = Minolta AF 35-80mm F4-5.6 Power Zoom  
26281 = Minolta AF 80-200mm F2.8 HS-APO G  
26291 = Minolta AF 85mm F1.4 New  
26311 = Minolta AF 100-300mm F4.5-5.6 APO  
26321 = Minolta AF 24-50mm F4 New  
26381 = Minolta AF 50mm F2.8 Macro New  
26391 = Minolta AF 100mm F2.8 Macro  
26411 = Minolta/Sony AF 20mm F2.8 New  
26421 = Minolta AF 24mm F2.8 New  
26441 = Minolta AF 100-400mm F4.5-6.7 APO

26621 = Minolta AF 50mm F1.4 New  
 26671 = Minolta AF 35mm F2 New  
 26681 = Minolta AF 28mm F2 New  
 26721 = Minolta AF 24-105mm F3.5-4.5 (D)  
 30464 = Metabones Canon EF Speed Booster  
 45671 = Tokina 70-210mm F4-5.6  
 45681 = Tokina AF 35-200mm F4-5.6 Zoom SD  
 45701 = Tamron AF 35-135mm F3.5-4.5  
 45711 = Vivitar 70-210mm F4.5-5.6  
 45741 = 2x Teleconverter or Tamron or Tokina Lens  
 45741 = Tamron SP AF 90mm F2.5  
 45741 = Tokina RF 500mm F8.0 x2  
 45741 = Tokina 300mm F2.8 x2  
 45751 = 1.4x Teleconverter  
 45851 = Tamron SP AF 300mm F2.8 LD IF  
 45861 = Tamron SP AF 35-105mm F2.8 LD Aspherical IF  
 45871 = Tamron AF 70-210mm F2.8 SP LD  
 48128 = Metabones Canon EF Speed Booster Ultra  
 61184 = Canon EF Adapter  
 65280 = Sigma 16mm F2.8 Filtermatic Fisheye  
 65535 = E-Mount, T-Mount, Other Lens or no lens  
 65535 = Arax MC 35mm F2.8 Tilt+Shift  
 65535 = Arax MC 80mm F2.8 Tilt+Shift  
 65535 = Zenitar MF 16mm F2.8 Fisheye M42  
 65535 = Samyang 500mm Mirror F8.0  
 65535 = Pentacon Auto 135mm F2.8  
 65535 = Pentacon Auto 29mm F2.8  
 65535 = Helios 44-2 58mm F2.0

## Sony CameraInfo Tags

Camera information for the A700, A850 and A900.

Index1	Tag Name	Writable	Values / Notes	
0	LensSpec	undef[8]		
20	FocusModeSetting	int8u	(FocusModeSetting for the A700, A850 and A900) 0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A 4 = DMF	
21	AFPointSelected	int8u	0 = Auto 1 = Center 2 = Top 3 = Upper-right 4 = Right 5 = Lower-right	6 = Bottom 7 = Lower-left 8 = Left 9 = Upper-left 10 = Far Right 11 = Far Left
25	AFPoint	int8u	0 = Upper-left 1 = Left 2 = Lower-left 3 = Far Left 4 = Bottom Assist-left 5 = Bottom 6 = Bottom Assist-right 7 = Center (7) 8 = Center (horizontal)	12 = Center (12) 13 = Center (vertical) 14 = Center (14) 15 = Top Assist-left 16 = Top 17 = Top Assist-right 18 = Far Right 19 = Upper-right 20 = Right 21 = Lower-right 22 = Center F2.8
30	AFStatusActiveSensor	int16s	-32768 = Out of Focus	0 = In Focus
32	AFStatusUpper-left	int16s	-32768 = Out of Focus	0 = In Focus
34	AFStatusLeft	int16s	-32768 = Out of Focus	0 = In Focus
36	AFStatusLower-left	int16s	-32768 = Out of Focus	0 = In Focus
38	AFStatusFarLeft	int16s	-32768 = Out of Focus	0 = In Focus
40	AFStatusBottomAssist-left	int16s	-32768 = Out of Focus	0 = In Focus
42	AFStatusBottom	int16s	-32768 = Out of Focus	0 = In Focus
44	AFStatusBottomAssist-right	int16s	-32768 = Out of Focus	0 = In Focus
46	AFStatusCenter-7	int16s	-32768 = Out of Focus	0 = In Focus

48	AFStatusCenter-horizontal	int16s	-32768 = Out of Focus 0 = In Focus
50	AFStatusCenter-9	int16s	-32768 = Out of Focus 0 = In Focus
52	AFStatusCenter-10	int16s	-32768 = Out of Focus 0 = In Focus
54	AFStatusCenter-11	int16s	-32768 = Out of Focus 0 = In Focus
56	AFStatusCenter-12	int16s	-32768 = Out of Focus 0 = In Focus
58	AFStatusCenter-vertical	int16s	-32768 = Out of Focus 0 = In Focus
60	AFStatusCenter-14	int16s	-32768 = Out of Focus 0 = In Focus
62	AFStatusTopAssist-left	int16s	-32768 = Out of Focus 0 = In Focus
64	AFStatusTop	int16s	-32768 = Out of Focus 0 = In Focus
66	AFStatusTopAssist-right	int16s	-32768 = Out of Focus 0 = In Focus
68	AFStatusFarRight	int16s	-32768 = Out of Focus 0 = In Focus
70	AFStatusUpper-right	int16s	-32768 = Out of Focus 0 = In Focus
72	AFStatusRight	int16s	-32768 = Out of Focus 0 = In Focus
74	AFStatusLower-right	int16s	-32768 = Out of Focus 0 = In Focus
76	AFStatusCenterF2-8	int16s	-32768 = Out of Focus 0 = In Focus
304	AFMicroAdjValue	int8u	
305	AFMicroAdjMode	int8u	[val >> 7 & 0x1] 0 = Off 1 = On
305.1	AFMicroAdjRegisteredLenses	int8u	(number of registered lenses with a non-zero AFMicroAdjValue) [val & 0x7f]

## Sony CameraInfo2 Tags

Camera information for the DSLR-A200, A230, A290, A300, A330, A350, A380 and A390.

Index1	Tag Name	Writable	Values / Notes
0	LensSpec	undef[8]	
20	AFPointSelected	int8u	0 = Auto 5 = Lower-right 1 = Center 6 = Bottom 2 = Top 7 = Lower-left 3 = Upper-right 8 = Left 4 = Right 9 = Upper-left
21	FocusModeSetting	int8u	(FocusModeSetting for other models) 0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A 4 = DMF
24	AFPoint	int8u	0 = Top-right 4 = Center Vertical 1 = Bottom-right 5 = Top 2 = Bottom 6 = Top-left 3 = Middle Horizontal 7 = Bottom-left
27	AFStatusActiveSensor	int16s	-32768 = Out of Focus 0 = In Focus
29	AFStatusTop-right	int16s	-32768 = Out of Focus 0 = In Focus
31	AFStatusBottom-right	int16s	-32768 = Out of Focus 0 = In Focus
33	AFStatusBottom	int16s	-32768 = Out of Focus 0 = In Focus
35	AFStatusMiddleHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
37	AFStatusCenterVertical	int16s	-32768 = Out of Focus 0 = In Focus
39	AFStatusTop	int16s	-32768 = Out of Focus 0 = In Focus
41	AFStatusTop-left	int16s	-32768 = Out of Focus 0 = In Focus
43	AFStatusBottom-left	int16s	-32768 = Out of Focus 0 = In Focus
45	AFStatusLeft	int16s	-32768 = Out of Focus 0 = In Focus
47	AFStatusCenterHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
49	AFStatusRight	int16s	-32768 = Out of Focus 0 = In Focus

# Sony CameraInfo3 Tags

Camera information stored by the A33, A35, A55, A450, A500, A550, A560, A580, NEX-3/5/5C/C3 and VG10E. Some tags are valid only for some of these models.

Index1	Tag Name	Writable	Values / Notes
0	LensSpec	undef[8]	
14	FocalLength	int16u	
16	FocalLengthTeleZoom	int16u	
20	AFPointSelected	int8u	0 = Auto            5 = Lower-right 1 = Center        6 = Bottom 2 = Top            7 = Lower-left 3 = Upper-right    8 = Left 4 = Right          9 = Upper-left
21	FocusMode	int8u	0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A
24	AFPoint	int8u	0 = Top-right        4 = Center Vertical 1 = Bottom-right     5 = Top 2 = Bottom            6 = Top-left 3 = Middle Horizontal 7 = Bottom-left
25	FocusStatus	int8u	(not valid with Contrast AF or for NEX models) 0 = Manual - Not confirmed (0) 4 = Manual - Not confirmed (4) 16 = AF-C - Confirmed 24 = AF-C - Not Confirmed 64 = AF-S - Confirmed
27	AFStatusActiveSensor	int16s	-32768 = Out of Focus 0 = In Focus
28	AFPointSelected	int8u	(not valid for Contrast AF) 0 = Auto            8 = Left 1 = Center        9 = Upper-left 2 = Top            10 = Far Right 3 = Upper-right    11 = Far Left 4 = Right          12 = Upper-middle 5 = Lower-right    13 = Near Right 6 = Bottom        14 = Lower-middle 7 = Lower-left     15 = Near Left
29	FocusMode AFStatusTop-right	int8u int16s	0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A  -32768 = Out of Focus 0 = In Focus
31	AFStatusBottom-right	int16s	-32768 = Out of Focus 0 = In Focus
32	AFPoint	int8u	(the AF sensor used for focusing. Not valid for Contrast AF) 0 = Upper-left        10 = Center (vertical) 1 = Left              11 = Bottom (vertical) 2 = Lower-left       12 = Far Right 3 = Far Left         13 = Upper-right 4 = Top (horizontal) 14 = Right 5 = Near Right      15 = Lower-right 6 = Center (horizontal) 16 = Upper-middle 7 = Near Left       17 = Lower-middle 8 = Bottom (horizontal) 255 = (none) 9 = Top (vertical)
33	AFStatusActiveSensor AFStatusBottom	int16s int16s	-32768 = Out of Focus 0 = In Focus -32768 = Out of Focus 0 = In Focus
35	AFStatus15 AFStatusMiddleHorizontal	- int16s	--> <a href="#">Sony AFStatus15 Tags</a> -32768 = Out of Focus 0 = In Focus
37	AFStatusCenterVertical	int16s	-32768 = Out of Focus 0 = In Focus
39	AFStatusTop	int16s	-32768 = Out of Focus 0 = In Focus
41	AFStatusTop-left	int16s	-32768 = Out of Focus 0 = In Focus
43	AFStatusBottom-left	int16s	-32768 = Out of Focus 0 = In Focus
45	AFStatusLeft	int16s	-32768 = Out of Focus 0 = In Focus
47	AFStatusCenterHorizontal	int16s	-32768 = Out of Focus 0 = In Focus

## Sony AFStatus15 Tags

AF Status information for models with 15-point AF.

Index1	Tag Name	Writable	Values / Notes	
0	AFStatusUpper-left	int16s	-32768 = Out of Focus	0 = In Focus
2	AFStatusLeft	int16s	-32768 = Out of Focus	0 = In Focus
4	AFStatusLower-left	int16s	-32768 = Out of Focus	0 = In Focus
6	AFStatusFarLeft	int16s	-32768 = Out of Focus	0 = In Focus
8	AFStatusTopHorizontal	int16s	-32768 = Out of Focus	0 = In Focus
10	AFStatusNearRight	int16s	-32768 = Out of Focus	0 = In Focus
12	AFStatusCenterHorizontal	int16s	-32768 = Out of Focus	0 = In Focus
14	AFStatusNearLeft	int16s	-32768 = Out of Focus	0 = In Focus
16	AFStatusBottomHorizontal	int16s	-32768 = Out of Focus	0 = In Focus
18	AFStatusTopVertical	int16s	-32768 = Out of Focus	0 = In Focus
20	AFStatusCenterVertical	int16s	-32768 = Out of Focus	0 = In Focus
22	AFStatusBottomVertical	int16s	-32768 = Out of Focus	0 = In Focus
24	AFStatusFarRight	int16s	-32768 = Out of Focus	0 = In Focus
26	AFStatusUpper-right	int16s	-32768 = Out of Focus	0 = In Focus
28	AFStatusRight	int16s	-32768 = Out of Focus	0 = In Focus
30	AFStatusLower-right	int16s	-32768 = Out of Focus	0 = In Focus
32	AFStatusUpper-middle	int16s	-32768 = Out of Focus	0 = In Focus
34	AFStatusLower-middle	int16s	-32768 = Out of Focus	0 = In Focus

## Sony CameraInfoUnknown Tags

Index1	Tag Name	Writable	Values / Notes
[no tags known]			

## Sony FocusInfo Tags

More camera settings and focus information decoded for models such as the A200, A230, A290, A300, A330, A350, A380, A390, A700, A850 and A900.

Index1	Tag Name	Writable	Values / Notes
14	DriveMode2	int8u	(A230, A290, A330, A380 and A390) 0x1 = Single Frame 0x2 = Continuous High 0x4 = Self-timer 10 sec 0x5 = Self-timer 2 sec, Mirror Lock-up 0x7 = Continuous Bracketing 0xa = Remote Commander 0xb = Continuous Self-timer (A200, A300, A350, A700, A850 and A900) 0x1 = Single Frame 0x2 = Continuous High 0x4 = Self-timer 10 sec 0x5 = Self-timer 2 sec, Mirror Lock-up 0x6 = Single-frame Bracketing 0x7 = Continuous Bracketing 0xa = Remote Commander 0xb = Mirror Lock-up 0x12 = Continuous Low 0x18 = White Balance Bracketing Low 0x19 = D-Range Optimizer Bracketing Low 0x28 = White Balance Bracketing High 0x29 = D-Range Optimizer Bracketing High

16	Rotation	int8u	0 = Horizontal (normal) 1 = Rotate 270 CW 2 = Rotate 90 CW
20	ImageStabilizationSetting	int8u	0 = Off 1 = On
21	DynamicRangeOptimizerMode	int8u	0 = Off 1 = Standard 2 = Advanced Auto 3 = Advanced Level
43	BracketShotNumber	int8u	(WB and DRO bracketing)
44	WhiteBalanceBracketing	int8u	0 = Off 1 = Low 2 = High
45	BracketShotNumber2	int8u	
46	DynamicRangeOptimizerBracket	int8u	0 = Off 1 = Low 2 = High
47	ExposureBracketShotNumber	int8u	
63	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram Values</a>
65	CreativeStyle	int8u	1 = Standard 2 = Vivid 3 = Portrait 4 = Landscape 5 = Sunset 6 = Night View/Portrait 8 = B&W 9 = Adobe RGB 11 = Neutral 12 = Clear 13 = Deep 14 = Light 15 = Autumn Leaves 16 = Sepia
109	ISOSetting	int8u	
111	ISO	int8u	
119	DynamicRangeOptimizerMode	int8u	0 = Off 1 = Standard 2 = Advanced Auto 3 = Advanced Level
121	DynamicRangeOptimizerLevel	int8u	
2118	ShutterCount	int32u	(only valid for some DSLR models)
2491	FocusPosition	int8u	(only valid for some DSLR models)
4368	TiffMeteringImage	no	(13-bit RBGG (?) 40x30 pixels, presumably metering info, extracted as a 16-bit TIFF image;)

## Sony ExposureProgram Values

Value	ExposureProgram	Value	ExposureProgram	Value	ExposureProgram
0 = Auto		8 = Program Shift A		19 = Night Portrait	
1 = Manual		9 = Program Shift S		20 = Landscape	
2 = Program AE		16 = Portrait		21 = Macro	
3 = Aperture-priority AE		17 = Sports		35 = Auto No Flash	
4 = Shutter speed priority AE		18 = Sunset			

## Sony MoreInfo Tags

More camera settings information decoded for the A450, A500, A550, A560, A580, A33, A35, A55, NEX-3/5/C3 and VG10E.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	MoreSettings	-	--> <a href="#">Sony MoreSettings Tags</a>
0x0002	FaceInfo	-	--> <a href="#">Sony FaceInfo Tags</a>
	FaceInfoA	-	--> <a href="#">Sony FaceInfoA Tags</a>
0x0107	TiffMeteringImage	no	(10-bit RGB data from the 1200 AE metering segments, extracted as a 16-bit TIFF image)
0x0201	MoreInfo0201	-	--> <a href="#">Sony MoreInfo0201 Tags</a>
0x0401	MoreInfo0401	-	--> <a href="#">Sony MoreInfo0401 Tags</a>

## Sony MoreSettings Tags

Index1	Tag Name	Writable	Values / Notes
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1	DriveMode2	int8u	0x10 = Single Frame 0x21 = Continuous High 0x22 = Continuous Low 0x30 = Speed Priority Continuous 0x51 = Self-timer 10 sec 0x52 = Self-timer 2 sec, Mirror Lock-up 0x71 = Continuous Bracketing 0.3 EV 0x75 = Continuous Bracketing 0.7 EV 0x91 = White Balance Bracketing Low 0x92 = White Balance Bracketing High 0xc0 = Remote Commander
2	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram2 Values</a>
3	MeteringMode	int8u	1 = Multi-segment 2 = Center-weighted average 3 = Spot
4	DynamicRangeOptimizerSetting	int8u	1 = Off 16 = On (Auto) 17 = On (Manual)
5	DynamicRangeOptimizerLevel	int8u	
6	ColorSpace	int8u	1 = sRGB 2 = Adobe RGB
7	CreativeStyleSetting	int8u	16 = Standard 80 = Landscape 32 = Vivid 96 = B&W 64 = Portrait 160 = Sunset
8	ContrastSetting	int8s	
9	SaturationSetting	int8s	
10	SharpnessSetting	int8s	
13	WhiteBalanceSetting	int8u	--> <a href="#">Sony WhiteBalanceSetting Values</a>
14	ColorTemperatureSetting	int8u	
15	ColorCompensationFilterSet	int8s	(negative is green, positive is magenta)
16	FlashMode	int8u	1 = Flash Off 18 = Slow Sync 16 = Autoflash 19 = Rear Sync 17 = Fill-flash 20 = Wireless
17	LongExposureNoiseReduction	int8u	1 = Off 16 = On
18	HighISONoiseReduction	int8u	16 = Low 17 = High 19 = Auto
19	FocusMode	int8u	17 = AF-S 18 = AF-C 19 = AF-A 32 = Manual 48 = DMF
21	MultiFrameNoiseReduction	int8u	0 = n/a 1 = Off 16 = On 255 = None
22	HDRSetting	int8u	1 = Off 16 = On (Auto) 17 = On (Manual)
23	HDRLevel	int8u	33 = 1 EV 36 = 2.5 EV 39 = 4 EV 34 = 1.5 EV 37 = 3 EV 40 = 5 EV 35 = 2 EV 38 = 3.5 EV 41 = 6 EV
24	ViewingMode	int8u	16 = ViewFinder 33 = Focus Check Live View 34 = Quick AF Live View
25	FaceDetection	int8u	1 = Off 16 = On
26	CustomWB_RBLevels	int16uRev[2]	
30	BrightnessValue	int8u	(A450, A500 and A550)
	ExposureCompensationSet	int8u	(other models)
31	ISO	int8u	(A450, A500 and A550)
	FlashExposureCompSet	int8u	(other models)
32	FNumber	int8u	(A450, A500 and A550)
	LiveViewAFMethod	int8u	(other models except the NEX-3/5/5C)
			0 = n/a
			1 = Phase-detect AF
			2 = Contrast AF

33	ExposureTime ISO	int8u int8u	(A450, A500 and A550) (NEX-3/5/5C)
34	FNumber	int8u	(NEX-3/5/5C only)
35	FocalLength2 ExposureTime	int8u int8u	(A450, A500 and A550) (NEX-3/5/5C)
36	ExposureCompensation2	int16s	(A450, A500 and A550)
37	FocalLength2 ISO	int8u int8u	(NEX-3/5/5C) (other models except the A450, A500 and A550)
38	FlashExposureCompSet2 ExposureCompensation2 FNumber	int16s int16s int8u	(A450, A500 and A550) (NEX-3/5/5C) (other models)
39	ExposureTime	int8u	(models other than the A450, A500, A550 and NEX-3/5/5C)
40	Orientation2	int8u	(A450, A500 and A550) 1 = Horizontal (normal) 2 = Rotate 180 6 = Rotate 90 CW 8 = Rotate 270 CW
41	FocusPosition2 FocalLength2	int8u int8u	(A450, A500 and A550) (other models except the NEX-3/5/5C)
42	FlashAction ExposureCompensation2	int8u int16s	(A450, A500 and A550) 0 = Did not fire 1 = Fired (other models except the NEX-3/5/5C)
43	FocusPosition2	int8u	(NEX-3/5/5C only)
44	FocusMode2 FlashAction FlashExposureCompSet2	int8u int8u int16s	(A450, A500 and A550) 0 = AF 1 = MF (NEX-3/5/5C FlashAction2) 0 = Did not fire 1 = Fired (other models FlashExposureCompSet2)
46	FocusMode2 Orientation2	int8u int8u	(NEX-3/5/5C) 0 = AF 1 = MF (other models except the A450, A500 and A550) 1 = Horizontal (normal) 2 = Rotate 180 6 = Rotate 90 CW 8 = Rotate 270 CW
47	FocusPosition2	int8u	(models other than the A450, A500, A550 and NEX-3/5/5C)
48	FlashAction	int8u	(models other than the A450, A500, A550 and NEX-3/5/5C) 0 = Did not fire 1 = Fired
50	FocusMode2	int8u	(models other than the A450, A500, A550 and NEX-3/5/5C) 0 = AF 1 = MF
119	FlashAction2	int8u	0 = Did not fire 2 = External Flash fired (2) 3 = Built-in Flash fired 4 = External Flash fired (4)
120	FlashActionExternal	int8u	121 = Fired 122 = Fired 136 = Did not fire
124	FlashActionExternal	int8u	136 = Did not fire 167 = Fired 182 = Fired, HSS
130	FlashStatus	int8u	0 = None 2 = External
134	FlashStatus	int8u	0 = None 1 = Built-in 2 = External

## Sony ExposureProgram2 Values

Value	ExposureProgram2	Value	ExposureProgram2	Value	ExposureProgram2
1	= Program AE	52	= Sports	129	= Pop Color
2	= Aperture-priority AE	53	= Sunset	130	= Posterization
3	= Shutter speed priority AE	54	= Night view	131	= Posterization B/W

4 = Manual	55 = Night view/portrait	132 = Retro Photo
5 = Cont. Priority AE	56 = Handheld Night Shot	133 = High-key
16 = Auto	57 = 3D Sweep Panorama	134 = Partial Color Red
17 = Auto (no flash)	64 = Auto 2	135 = Partial Color Green
18 = Auto+	65 = Auto 2 (no flash)	136 = Partial Color Blue
49 = Portrait	80 = Sweep Panorama	137 = Partial Color Yellow
50 = Landscape	96 = Anti Motion Blur	138 = High Contrast Monochrome
51 = Macro	128 = Toy Camera	

## Sony WhiteBalanceSetting Values

Value	WhiteBalanceSetting	Value	WhiteBalanceSetting
0x10 = Auto (-3)		0x45 = Cloudy (+2)	
0x11 = Auto (-2)		0x46 = Cloudy (+3)	
0x12 = Auto (-1)		0x50 = Tungsten (-3)	
0x13 = Auto (0)		0x51 = Tungsten (-2)	
0x14 = Auto (+1)		0x52 = Tungsten (-1)	
0x15 = Auto (+2)		0x53 = Tungsten (0)	
0x16 = Auto (+3)		0x54 = Tungsten (+1)	
0x20 = Daylight (-3)		0x55 = Tungsten (+2)	
0x21 = Daylight (-2)		0x56 = Tungsten (+3)	
0x22 = Daylight (-1)		0x60 = Fluorescent (-3)	
0x23 = Daylight (0)		0x61 = Fluorescent (-2)	
0x24 = Daylight (+1)		0x62 = Fluorescent (-1)	
0x25 = Daylight (+2)		0x63 = Fluorescent (0)	
0x26 = Daylight (+3)		0x64 = Fluorescent (+1)	
0x30 = Shade (-3)		0x65 = Fluorescent (+2)	
0x31 = Shade (-2)		0x66 = Fluorescent (+3)	
0x32 = Shade (-1)		0x70 = Flash (-3)	
0x33 = Shade (0)		0x71 = Flash (-2)	
0x34 = Shade (+1)		0x72 = Flash (-1)	
0x35 = Shade (+2)		0x73 = Flash (0)	
0x36 = Shade (+3)		0x74 = Flash (+1)	
0x40 = Cloudy (-3)		0x75 = Flash (+2)	
0x41 = Cloudy (-2)		0x76 = Flash (+3)	
0x42 = Cloudy (-1)		0xa3 = Custom	
0x43 = Cloudy (0)		0xf3 = Color Temperature/Color Filter	
0x44 = Cloudy (+1)			

## Sony FaceInfo Tags

Index2	Tag Name	Writable	Values / Notes
0	FacesDetected	int16s	-1 = n/a
1	Face1Position	int16u[4]	(re-ordered and scaled to return the top, left, height and width of detected face, with coordinates relative to the full-sized unrotated image and increasing Y downwards)
6	Face2Position	int16u[4]	
11	Face3Position	int16u[4]	
16	Face4Position	int16u[4]	
21	Face5Position	int16u[4]	
26	Face6Position	int16u[4]	
31	Face7Position	int16u[4]	
36	Face8Position	int16u[4]	

## Sony FaceInfoA Tags

Index2	Tag Name	Writable	Values / Notes
3	FacesDetected		no
11	PotentialFace1Position	int16u[4]	
21	PotentialFace2Position	int16u[4]	
31	PotentialFace3Position	int16u[4]	
41	PotentialFace4Position	int16u[4]	
51	PotentialFace5Position	int16u[4]	
61	PotentialFace6Position	int16u[4]	
71	PotentialFace7Position	int16u[4]	

81 PotentialFace8Position int16u[4]

91 Face1Position int16u[4]

101 Face2Position int16u[4]

111 Face3Position int16u[4]

121 Face4Position int16u[4]

## Sony MoreInfo0201 Tags

Index1	Tag Name	Writable	Values / Notes
283	ImageCount	int32u	(not valid for the A450, A500 or A550)
293	ShutterCount	int32u	(not valid for the A450, A500 or A550)
330	ShutterCount	int32u	(A450, A500 and A550 only)

## Sony MoreInfo0401 Tags

Index1	Tag Name	Writable	Values / Notes
1102	ShotNumberSincePowerUp	int32u	(Not valid for the NEX-3 or NEX-5)

## Sony CameraSettings Tags

Camera settings for the A200, A300, A350, A700, A850 and A900.

Index2	Tag Name	Writable	Values / Notes
0	ExposureTime	int16u	
1	FNumber	int16u	
2	HighSpeedSync	int16u	0 = Off 1 = On
3	ExposureCompensationSet	int16u	
4	DriveMode	int16u	[val & 0xff] 0x1 = Single Frame 0x2 = Continuous High 0x4 = Self-timer 10 sec 0x5 = Self-timer 2 sec, Mirror Lock-up 0x6 = Single-frame Bracketing 0x7 = Continuous Bracketing 0xa = Remote Commander 0xb = Mirror Lock-up 0x12 = Continuous Low 0x18 = White Balance Bracketing Low 0x19 = D-Range Optimizer Bracketing Low 0x28 = White Balance Bracketing High 0x29 = D-Range Optimizer Bracketing High
5	WhiteBalanceSetting	int16u	2 = Auto 4 = Daylight 5 = Fluorescent 6 = Tungsten 7 = Flash 16 = Cloudy 17 = Shade 18 = Color Temperature/Color Filter 32 = Custom 1 33 = Custom 2 34 = Custom 3
6	WhiteBalanceFineTune	int16u	
7	ColorTemperatureSet	int16u	
8	ColorCompensationFilterSet	int16u	(negative is green, positive is magenta)
12	ColorTemperatureCustom	int16u	
13	ColorCompensationFilterCustom	int16u	(negative is green, positive is magenta)
15	WhiteBalance	int16u	2 = Auto            12 = Color Temperature 4 = Daylight        13 = Color Filter 5 = Fluorescent    14 = Custom 6 = Tungsten       16 = Cloudy 7 = Flash           17 = Shade

16	FocusModeSetting	int16u	0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A 4 = DMF
17	AFAreaMode	int16u	0 = Wide 1 = Local 2 = Spot
18	AFPointSetting	int16u	1 = Center      7 = Lower-left 2 = Top          8 = Left 3 = Upper-right   9 = Upper-left 4 = Right        10 = Far Right 5 = Lower-right   11 = Far Left 6 = Bottom
19	FlashMode	int16u	0 = Autoflash    4 = Fill-flash 2 = Rear Sync    5 = Flash Off 3 = Wireless     6 = Slow Sync
20	FlashExposureCompSet	int16u	
21	MeteringMode	int16u	1 = Multi-segment 2 = Center-weighted average 4 = Spot
22	ISOSetting	int16u	
24	DynamicRangeOptimizerMode	int16u	0 = Off 1 = Standard 2 = Advanced Auto 3 = Advanced Level
25	DynamicRangeOptimizerLevel	int16u	
26	CreativeStyle	int16u	1 = Standard      9 = Adobe RGB 2 = Vivid          11 = Neutral 3 = Portrait       12 = Clear 4 = Landscape      13 = Deep 5 = Sunset          14 = Light 6 = Night View/Portrait   15 = Autumn Leaves 8 = B&W           16 = Sepia
27	ColorSpace	int16u	0 = sRGB 1 = Adobe RGB 5 = Adobe RGB (A700)
28	Sharpness	int16u	
29	Contrast	int16u	
30	Saturation	int16u	
31	ZoneMatchingValue	int16u	
34	Brightness	int16u	
35	FlashControl	int16u	0 = ADI 1 = Pre-flash TTL 2 = Manual
40	PrioritySetupShutterRelease	int16u	0 = AF 1 = Release
41	AFllluminator	int16u	0 = Auto 1 = Off
42	AFWithShutter	int16u	0 = On 1 = Off
43	LongExposureNoiseReduction	int16u	0 = Off 1 = On
44	HighISONoiseReduction	int16u	0 = Normal 1 = Low 2 = High 3 = Off
45	ImageStyle	int16u	1 = Standard      11 = Neutral 2 = Vivid          129 = StyleBox1 3 = Portrait       130 = StyleBox2 4 = Landscape      131 = StyleBox3 5 = Sunset          132 = StyleBox4 7 = Night View/Portrait   133 = StyleBox5 8 = B&W           134 = StyleBox6 9 = Adobe RGB
46	FocusModeSwitch	int16u	0 = AF 1 = Manual
47	ShutterSpeedSetting	int16u	(used in M, S and Program Shift S modes)

48	ApertureSetting	int16u	(used in M, A and Program Shift A modes)
60	ExposureProgram	int16u	--> <a href="#">Sony ExposureProgram Values</a>
61	ImageStabilizationSetting	int16u	0 = Off 1 = On
62	FlashAction	int16u	0 = Did not fire 1 = Fired 2 = External Flash, Did not fire 3 = External Flash, Fired
63	Rotation	int16u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
64	AELock	int16u	1 = Off 2 = On
76	FlashAction2	int16u	1 = Fired, Autoflash 2 = Fired, Fill-flash 3 = Fired, Rear Sync 4 = Fired, Wireless 5 = Did not fire 6 = Fired, Slow Sync 17 = Fired, Autoflash, Red-eye reduction 18 = Fired, Fill-flash, Red-eye reduction 34 = Fired, Fill-flash, HSS
77	FocusMode	int16u	0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A 4 = DMF
80	BatteryState	int16u	2 = Empty 3 = Very Low 4 = Low 5 = Sufficient 6 = Full
81	BatteryLevel	int16u	
83	FocusStatus	int16u	0x0 = Not confirmed 0x4 = Not confirmed, Tracking Bit 0 = Confirmed Bit 1 = Failed Bit 2 = Tracking
84	SonyImageSize	int16u	1 = Large 2 = Medium 3 = Small
85	AspectRatio	int16u	1 = 3:2 2 = 16:9
86	Quality	int16u	0 = RAW                  34 = RAW + JPEG 2 = CRAW                35 = CRAW + JPEG 16 = Extra Fine      48 = Standard 32 = Fine
88	ExposureLevelIncrements	int16u	33 = 1/3 EV 50 = 1/2 EV
106	RedEyeReduction	int16u	0 = Off 1 = On
154	FolderNumber	int16u	[val & 0x3ff]
155	ImageNumber	int16u	[val & 0x3fff]

## Sony CameraSettings2 Tags

Camera settings for the A230, A290, A330, A380 and A390.

Index2	Tag Name	Writable	Values / Notes
0	ExposureTime	int16u	
1	FNumber	int16u	
2	HighSpeedSync	int16u	0 = Off 1 = On
3	ExposureCompensationSet	int16u	
4	WhiteBalanceSetting	int16u	2 = Auto 4 = Daylight 5 = Fluorescent 6 = Tungsten

7 = Flash  
 16 = Cloudy  
 17 = Shade  
 18 = Color Temperature/Color Filter  
 32 = Custom 1  
 33 = Custom 2  
 34 = Custom 3

5	WhiteBalanceFineTune	int16u	
6	ColorTemperatureSet	int16u	
7	ColorCompensationFilterSet	int16u	(negative is green, positive is magenta)
8	CustomWB_RGBLevels	int16u[3]	
11	ColorTemperatureCustom	int16u	
12	ColorCompensationFilterCustom	int16u	(negative is green, positive is magenta)
14	WhiteBalance	int16u	2 = Auto            12 = Color Temperature 4 = Daylight        13 = Color Filter 5 = Fluorescent    14 = Custom 6 = Tungsten       16 = Cloudy 7 = Flash           17 = Shade
15	FocusModeSetting	int16u	0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A
16	AFAreaMode	int16u	0 = Wide 1 = Local 2 = Spot
17	AFPointSetting	int16u	1 = Center        6 = Bottom 2 = Top            7 = Lower-left 3 = Upper-right   8 = Left 4 = Right          9 = Upper-left 5 = Lower-right
18	FlashExposureCompSet	int16u	
19	MeteringMode	int16u	1 = Multi-segment 2 = Center-weighted average 4 = Spot
20	ISOSetting	int16u	
22	DynamicRangeOptimizerMode	int16u	0 = Off 1 = Standard 2 = Advanced Auto 3 = Advanced Level
23	DynamicRangeOptimizerLevel	int16u	
24	CreativeStyle	int16u	1 = Standard      5 = Sunset 2 = Vivid           6 = Night View/Portrait 3 = Portrait       8 = B&W 4 = Landscape
25	Sharpness	int16u	
26	Contrast	int16u	
27	Saturation	int16u	
31	FlashControl	int16u	0 = ADI 1 = Pre-flash TTL 2 = Manual
37	LongExposureNoiseReduction	int16u	0 = Off 1 = On
38	HighISONoiseReduction	int16u	0 = Off 1 = Low 2 = Normal 3 = High
39	ImageStyle	int16u	1 = Standard      5 = Sunset 2 = Vivid           7 = Night View/Portrait 3 = Portrait       8 = B&W 4 = Landscape
40	ShutterSpeedSetting	int16u	(used in M, S and Program Shift S modes)
41	ApertureSetting	int16u	(used in M, A and Program Shift A modes)
60	ExposureProgram	int16u	--> <a href="#">Sony ExposureProgram Values</a>
61	ImageStabilizationSetting	int16u	0 = Off 1 = On

62	FlashAction	int16u	0 = Did not fire 1 = Fired 2 = External Flash, Did not fire 3 = External Flash, Fired
63	Rotation	int16u	0 = Horizontal (normal) 1 = Rotate 90 CW 2 = Rotate 270 CW
64	AELock	int16u	1 = Off 2 = On
76	FlashAction2	int16u	1 = Fired, Autoflash 2 = Fired, Fill-flash 3 = Fired, Rear Sync 4 = Fired, Wireless 5 = Did not fire 6 = Fired, Slow Sync 17 = Fired, Autoflash, Red-eye reduction 18 = Fired, Fill-flash, Red-eye reduction 34 = Fired, Fill-flash, HSS
77	FocusMode	int16u	0 = Manual 1 = AF-S 2 = AF-C 3 = AF-A
83	FocusStatus	int16u	0x0 = Not confirmed 0x4 = Not confirmed, Tracking Bit 0 = Confirmed Bit 1 = Failed Bit 2 = Tracking
84	SonyImageSize	int16u	1 = Large 2 = Medium 3 = Small
85	AspectRatio	int16u	1 = 3:2 2 = 16:9
86	Quality	int16u	0 = RAW                  34 = RAW + JPEG 2 = CRAW                35 = CRAW + JPEG 16 = Extra Fine      48 = Standard 32 = Fine
88	ExposureLevelIncrements	int16u	33 = 1/3 EV 50 = 1/2 EV
126	DriveMode	int16u	[val & 0xff] 1 = Single Frame 2 = Continuous High 4 = Self-timer 10 sec 5 = Self-timer 2 sec, Mirror Lock-up 7 = Continuous Bracketing 10 = Remote Commander 11 = Continuous Self-timer
127	FlashMode	int16u	0 = Autoflash    4 = Fill-flash 2 = Rear Sync     5 = Flash Off 3 = Wireless      6 = Slow Sync
131	ColorSpace	int16u	5 = Adobe RGB 6 = sRGB

## Sony CameraSettings3 Tags

Camera settings for models such as the A33, A35, A55, A450, A500, A550, A560, A580, NEX-3, NEX-5, NEX-C3 and NEX-VG10E.

Index1	Tag Name	Writable	Values / Notes
0	ShutterSpeedSetting	int8u	(used only in M and S exposure modes)
1	ApertureSetting	int8u	(used only in M and A exposure modes)
2	ISOSetting	int8u	0 = Auto 254 = n/a
3	ExposureCompensationSet	int8u	
4	DriveModeSetting	int8u	0x10 = Single Frame 0x21 = Continuous High 0x22 = Continuous Low 0x30 = Speed Priority Continuous 0x51 = Self-timer 10 sec 0x52 = Self-timer 2 sec, Mirror Lock-up 0x71 = Continuous Bracketing 0.3 EV

0x75 = Continuous Bracketing 0.7 EV  
 0x91 = White Balance Bracketing Low  
 0x92 = White Balance Bracketing High  
 0xc0 = Remote Commander

5	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram2 Values</a>
6	FocusModeSetting	int8u	17 = AF-S 18 = AF-C 19 = AF-A 32 = Manual 48 = DMF
7	MeteringMode	int8u	1 = Multi-segment 2 = Center-weighted average 3 = Spot
9	SonyImageSize	int8u	21 = Large (3:2)    25 = Large (16:9) 22 = Medium (3:2)    26 = Medium (16:9) 23 = Small (3:2)    27 = Small (16:9)
10	AspectRatio	int8u	4 = 3:2 8 = 16:9
11	Quality	int8u	2 = RAW 4 = RAW + JPEG 6 = Fine 7 = Standard
12	DynamicRangeOptimizerSetting	int8u	1 = Off 16 = On (Auto) 17 = On (Manual)
13	DynamicRangeOptimizerLevel	int8u	
14	ColorSpace	int8u	1 = sRGB 2 = Adobe RGB
15	CreativeStyleSetting	int8u	16 = Standard    80 = Landscape 32 = Vivid    96 = B&W 64 = Portrait    160 = Sunset
16	ContrastSetting	int8s	
17	SaturationSetting	int8s	
18	SharpnessSetting	int8s	
22	WhiteBalanceSetting	int8u	--> <a href="#">Sony WhiteBalanceSetting Values</a>
23	ColorTemperatureSetting	int8u	
24	ColorCompensationFilterSet	int8s	(negative is green, positive is magenta)
25	CustomWB_RGBLevels	int16uRev[3]	
32	FlashMode	int8u	1 = Flash Off    18 = Slow Sync 16 = Autoflash    19 = Rear Sync 17 = Fill-flash    20 = Wireless
33	FlashControl	int8u	1 = ADI Flash 2 = Pre-flash TTL
35	FlashExposureCompSet	int8u	
36	AFAreaMode	int8u	1 = Wide 2 = Spot 3 = Local 4 = Flexible
37	LongExposureNoiseReduction	int8u	1 = Off 16 = On
38	HighISONoiseReduction	int8u	16 = Low 17 = High 19 = Auto
39	SmileShutterMode	int8u	17 = Slight Smile 18 = Normal Smile 19 = Big Smile
40	RedEyeReduction	int8u	1 = Off 16 = On
45	HDRSetting	int8u	1 = Off 16 = On (Auto) 17 = On (Manual)
46	HDRLevel	int8u	33 = 1 EV    36 = 2.5 EV    39 = 4 EV 34 = 1.5 EV    37 = 3 EV    40 = 5 EV 35 = 2 EV    38 = 3.5 EV    41 = 6 EV
47	ViewingMode	int8u	16 = ViewFinder 33 = Focus Check Live View 34 = Quick AF Live View

48	FaceDetection	int8u	1 = Off 16 = On
49	SmileShutter	int8u	1 = Off 16 = On
50	SweepPanoramaSize	int8u	1 = Standard 2 = Wide
51	SweepPanoramaDirection	int8u	1 = Right 2 = Left 3 = Up 4 = Down
52	DriveMode	int8u	0x10 = Single Frame 0x21 = Continuous High 0x22 = Continuous Low 0x30 = Speed Priority Continuous 0x51 = Self-timer 10 sec 0x52 = Self-timer 2 sec, Mirror Lock-up 0x71 = Continuous Bracketing 0.3 EV 0x75 = Continuous Bracketing 0.7 EV 0x91 = White Balance Bracketing Low 0x92 = White Balance Bracketing High 0xc0 = Remote Commander 0xd1 = Continuous - HDR 0xd2 = Continuous - Multi Frame NR 0xd3 = Continuous - Handheld Night Shot 0xd4 = Continuous - Anti Motion Blur 0xd5 = Continuous - Sweep Panorama 0xd6 = Continuous - 3D Sweep Panorama
53	MultiFrameNoiseReduction	int8u	0 = n/a 1 = Off 16 = On 255 = None
54	LiveViewAFSetting	int8u	0 = n/a 1 = Phase-detect AF 2 = Contrast AF
56	PanoramaSize3D	int8u	0 = n/a 1 = Standard 2 = Wide 3 = 16:9
131	AFButtonPressed	int8u	1 = No 16 = Yes
132	LiveViewMetering	int8u	0 = n/a 16 = 40 Segment 32 = 1200-zone Evaluative
133	ViewingMode2	int8u	0 = n/a 16 = Viewfinder 33 = Focus Check Live View 34 = Quick AF Live View
134	AELock	int8u	1 = On 2 = Off
135	FlashStatusBuilt-in	int8u	1 = Off 2 = On
136	FlashStatusExternal	int8u	1 = None 2 = Off 3 = On
139	LiveViewFocusMode	int8u	0 = n/a 1 = AF 16 = Manual
153	LensMount	int8u	1 = Unknown 16 = A-mount 17 = E-mount
268	SequenceNumber	int8u	0 = Single 255 = n/a
276	FolderNumber	int32u	[val >> 14 & 0x3ff]
276.1	ImageNumber	int32u	[val & 0x3fff]
512	ShotNumberSincePowerUp2	int32u	(same as ShotNumberSincePowerUp for single-shot images, but includes all shots of the current image in multi-shot modes like HDR, panorama, and multi-frame noise reduction)
643	AFButtonPressed	int8u	1 = No 16 = Yes

644	LiveViewMetering	int8u	0 = n/a 16 = 40 Segment 32 = 1200-zone Evaluative
645	ViewingMode2	int8u	0 = n/a 16 = Viewfinder 33 = Focus Check Live View 34 = Quick AF Live View
646	AELock	int8u	1 = On 2 = Off
647	FlashStatusBuilt-in	int8u	(A450, A500 and A550) 1 = Off 2 = On
648	FlashStatusExternal	int8u	(A450, A500 and A550) 1 = None 2 = Off 3 = On
651	LiveViewFocusMode	int8u	0 = n/a 1 = AF 16 = Manual
780	SequenceNumber	int8u	(A450, A500 and A550) 0 = Single 255 = n/a
788	ImageNumber	int16u	(A450, A500 and A550) [val & 0x3fff]
790	FolderNumber	int16u	(A450, A500 and A550) [val & 0x3ff]
1008	LensE-mountVersion	int16u	
1011	LensFirmwareVersion	int16u~	
1015	LensType2	int16u	--> <a href="#">Sony LensType2 Values</a>
1024	ImageNumber	int16u	(A450, A500 and A550) [val & 0x3fff]
1026	FolderNumber	int16u	(A450, A500 and A550) [val & 0x3ff]

## Sony LensType2 Values

Lens type numbers for Sony E-mount lenses used by NEX/ILCE models.

Value	LensType2
0	= Unknown E-mount lens or other lens
0	= Sigma 19mm F2.8 [EX] DN
0	= Sigma 30mm F2.8 [EX] DN
0	= Sigma 60mm F2.8 DN
0	= Sony E 18-200mm F3.5-6.3 OSS LE
0	= Tamron 18-200mm F3.5-6.3 Di III VC
0	= Tokina FiRIN 20mm F2 FE AF
0	= Tokina FiRIN 20mm F2 FE MF
0	= Zeiss Touit 12mm F2.8
0	= Zeiss Touit 32mm F1.8
0	= Zeiss Touit 50mm F2.8 Macro
0	= Zeiss Loxia 50mm F2
0	= Zeiss Loxia 35mm F2
0	= Viltrox 85mm F1.8
1	= Sony LA-EA1 or Sigma MC-11 Adapter
2	= Sony LA-EA2 Adapter
3	= Sony LA-EA3 Adapter
6	= Sony LA-EA4 Adapter
7	= Sony LA-EA5 Adapter
13	= Samyang AF 35-150mm F2-2.8
17	= Samyang RS 21mm F3.5
18	= Samyang RS 28mm F3.5
19	= Samyang RS 32mm F2.8
20	= Samyang AF 35mm F1.4 P FE
21	= Samyang AF 14-24mm F2.8
44	= Metabones Canon EF Smart Adapter
78	= Metabones Canon EF Smart Adapter Mark III or Other Adapter
184	= Metabones Canon EF Speed Booster Ultra
234	= Metabones Canon EF Smart Adapter Mark IV
239	= Metabones Canon EF Speed Booster
24593	= LA-EA4r MonsterAdapter

32784 = Sony E 16mm F2.8  
32785 = Sony E 18-55mm F3.5-5.6 OSS  
32786 = Sony E 55-210mm F4.5-6.3 OSS  
32787 = Sony E 18-200mm F3.5-6.3 OSS  
32788 = Sony E 30mm F3.5 Macro  
32789 = Sony E 24mm F1.8 ZA or Samyang AF 50mm F1.4  
32789 = Samyang AF 50mm F1.4  
32790 = Sony E 50mm F1.8 OSS or Samyang AF 14mm F2.8  
32790 = Samyang AF 14mm F2.8  
32791 = Sony E 16-70mm F4 ZA OSS  
32792 = Sony E 10-18mm F4 OSS  
32793 = Sony E PZ 16-50mm F3.5-5.6 OSS  
32794 = Sony FE 35mm F2.8 ZA or Samyang Lens  
32794 = Samyang AF 24mm F2.8  
32794 = Samyang AF 35mm F2.8  
32795 = Sony FE 24-70mm F4 ZA OSS  
32796 = Sony FE 85mm F1.8 or Viltrox PFU RBMH 85mm F1.8  
32796 = Viltrox PFU RBMH 85mm F1.8  
32797 = Sony E 18-200mm F3.5-6.3 OSS LE  
32798 = Sony E 20mm F2.8  
32799 = Sony E 35mm F1.8 OSS  
32800 = Sony E PZ 18-105mm F4 G OSS  
32801 = Sony FE 12-24mm F4 G  
32802 = Sony FE 90mm F2.8 Macro G OSS  
32803 = Sony E 18-50mm F4-5.6  
32804 = Sony FE 24mm F1.4 GM  
32805 = Sony FE 24-105mm F4 G OSS  
32807 = Sony E PZ 18-200mm F3.5-6.3 OSS  
32808 = Sony FE 55mm F1.8 ZA  
32810 = Sony FE 70-200mm F4 G OSS  
32811 = Sony FE 16-35mm F4 ZA OSS  
32812 = Sony FE 50mm F2.8 Macro  
32813 = Sony FE 28-70mm F3.5-5.6 OSS  
32814 = Sony FE 35mm F1.4 ZA  
32815 = Sony FE 24-240mm F3.5-6.3 OSS  
32816 = Sony FE 28mm F2  
32817 = Sony FE PZ 28-135mm F4 G OSS  
32819 = Sony FE 100mm F2.8 STF GM OSS  
32820 = Sony E PZ 18-110mm F4 G OSS  
32821 = Sony FE 24-70mm F2.8 GM  
32822 = Sony FE 50mm F1.4 ZA  
32823 = Sony FE 85mm F1.4 GM or Samyang AF 85mm F1.4  
32823 = Samyang AF 85mm F1.4  
32824 = Sony FE 50mm F1.8  
32826 = Sony FE 21mm F2.8 (SEL28F20 + SEL075UWC)  
32827 = Sony FE 16mm F3.5 Fisheye (SEL28F20 + SEL057FEC)  
32828 = Sony FE 70-300mm F4.5-5.6 G OSS  
32829 = Sony FE 100-400mm F4.5-5.6 GM OSS  
32830 = Sony FE 70-200mm F2.8 GM OSS  
32831 = Sony FE 16-35mm F2.8 GM  
32848 = Sony FE 400mm F2.8 GM OSS  
32849 = Sony E 18-135mm F3.5-5.6 OSS  
32850 = Sony FE 135mm F1.8 GM  
32851 = Sony FE 200-600mm F5.6-6.3 G OSS  
32852 = Sony FE 600mm F4 GM OSS  
32853 = Sony E 16-55mm F2.8 G  
32854 = Sony E 70-350mm F4.5-6.3 G OSS  
32855 = Sony FE C 16-35mm T3.1 G  
32858 = Sony FE 35mm F1.8  
32859 = Sony FE 20mm F1.8 G  
32860 = Sony FE 12-24mm F2.8 GM  
32862 = Sony FE 50mm F1.2 GM  
32863 = Sony FE 14mm F1.8 GM  
32864 = Sony FE 28-60mm F4-5.6  
32865 = Sony FE 35mm F1.4 GM  
32866 = Sony FE 24mm F2.8 G  
32867 = Sony FE 40mm F2.5 G  
32868 = Sony FE 50mm F2.5 G  
32871 = Sony FE PZ 16-35mm F4 G  
32873 = Sony E PZ 10-20mm F4 G  
32874 = Sony FE 70-200mm F2.8 GM OSS II  
32875 = Sony FE 24-70mm F2.8 GM II  
32876 = Sony E 11mm F1.8  
32877 = Sony E 15mm F1.4 G  
32878 = Sony FE 20-70mm F4 G

32879 = Sony FE 50mm F1.4 GM  
32880 = Sony FE 16mm F1.8 G  
32881 = Sony FE 24-50mm F2.8 G  
32882 = Sony FE 16-25mm F2.8 G  
32884 = Sony FE 70-200mm F4 Macro G OSS II  
32885 = Sony FE 16-35mm F2.8 GM II  
32886 = Sony FE 300mm F2.8 GM OSS  
32887 = Sony E PZ 16-50mm F3.5-5.6 OSS II  
32888 = Sony FE 85mm F1.4 GM II  
32889 = Sony FE 28-70mm F2 GM  
32890 = Sony FE 400-800mm F6.3-8 G OSS  
32891 = Sony FE 50-150mm F2 GM  
32893 = Sony FE 100mm F2.8 Macro GM OSS  
33072 = Sony FE 70-200mm F2.8 GM OSS + 1.4X Teleconverter  
33073 = Sony FE 70-200mm F2.8 GM OSS + 2X Teleconverter  
33076 = Sony FE 100mm F2.8 STF GM OSS (macro mode)  
33077 = Sony FE 100-400mm F4.5-5.6 GM OSS + 1.4X Teleconverter  
33078 = Sony FE 100-400mm F4.5-5.6 GM OSS + 2X Teleconverter  
33079 = Sony FE 400mm F2.8 GM OSS + 1.4X Teleconverter  
33080 = Sony FE 400mm F2.8 GM OSS + 2X Teleconverter  
33081 = Sony FE 200-600mm F5.6-6.3 G OSS + 1.4X Teleconverter  
33082 = Sony FE 200-600mm F5.6-6.3 G OSS + 2X Teleconverter  
33083 = Sony FE 600mm F4 GM OSS + 1.4X Teleconverter  
33084 = Sony FE 600mm F4 GM OSS + 2X Teleconverter  
33085 = Sony FE 70-200mm F2.8 GM OSS II + 1.4X Teleconverter  
33086 = Sony FE 70-200mm F2.8 GM OSS II + 2X Teleconverter  
33087 = Sony FE 70-200mm F4 Macro G OSS II + 1.4X Teleconverter  
33088 = Sony FE 70-200mm F4 Macro G OSS II + 2X Teleconverter  
33089 = Sony FE 300mm F2.8 GM OSS + 1.4X Teleconverter  
33090 = Sony FE 300mm F2.8 GM OSS + 2X Teleconverter  
33091 = Sony FE 400-800mm F6.3-8 G OSS + 1.4X Teleconverter  
33092 = Sony FE 400-800mm F6.3-8 G OSS + 2X Teleconverter  
33093 = Sony FE 100mm F2.8 Macro GM OSS + 1.4X Teleconverter  
33094 = Sony FE 100mm F2.8 Macro GM OSS + 2X Teleconverter  
49201 = Zeiss Touit 12mm F2.8 or other Touit lens  
49201 = Zeiss Touit 32mm F1.8  
49201 = Zeiss Touit 50mm F2.8  
49202 = Zeiss Touit 32mm F1.8  
49203 = Zeiss Touit 50mm F2.8 Macro  
49216 = Zeiss Batis 25mm F2  
49217 = Zeiss Batis 85mm F1.8  
49218 = Zeiss Batis 18mm F2.8  
49219 = Zeiss Batis 135mm F2.8  
49220 = Zeiss Batis 40mm F2 CF  
49232 = Zeiss Loxia 50mm F2  
49233 = Zeiss Loxia 35mm F2  
49234 = Zeiss Loxia 21mm F2.8  
49235 = Zeiss Loxia 85mm F2.4  
49236 = Zeiss Loxia 25mm F2.4  
49456 = Tamron E 18-200mm F3.5-6.3 Di III VC  
49457 = Tamron 28-75mm F2.8 Di III RXD  
49458 = Tamron 17-28mm F2.8 Di III RXD  
49459 = Tamron 35mm F2.8 Di III OSD M1:2  
49460 = Tamron 24mm F2.8 Di III OSD M1:2  
49461 = Tamron 20mm F2.8 Di III OSD M1:2  
49462 = Tamron 70-180mm F2.8 Di III VXD  
49463 = Tamron 28-200mm F2.8-5.6 Di III RXD  
49464 = Tamron 70-300mm F4.5-6.3 Di III RXD  
49465 = Tamron 17-70mm F2.8 Di III-A VC RXD  
49466 = Tamron 150-500mm F5-6.7 Di III VC VXD  
49467 = Tamron 11-20mm F2.8 Di III-A RXD  
49468 = Tamron 18-300mm F3.5-6.3 Di III-A VC VXD  
49469 = Tamron 35-150mm F2-F2.8 Di III VXD  
49470 = Tamron 28-75mm F2.8 Di III VXD G2  
49471 = Tamron 50-400mm F4.5-6.3 Di III VC VXD  
49472 = Tamron 20-40mm F2.8 Di III VXD  
49473 = Tamron 17-50mm F4 Di III VXD or Tokina or Viltrox lens  
49473 = Tokina atx-m 85mm F1.8 FE  
49473 = Viltrox 23mm F1.4 E  
49473 = Viltrox 56mm F1.4 E  
49473 = Viltrox 85mm F1.8 II FE  
49474 = Tamron 70-180mm F2.8 Di III VXD G2 or Viltrox lens  
49474 = Viltrox 13mm F1.4 E  
49474 = Viltrox 16mm F1.8 FE  
49474 = Viltrox 23mm F1.4 E

49474 = Viltrox 24mm F1.8 FE  
49474 = Viltrox 28mm F1.8 FE  
49474 = Viltrox 33mm F1.4 E  
49474 = Viltrox 35mm F1.8 FE  
49474 = Viltrox 50mm F1.8 FE  
49474 = Viltrox 75mm F1.2 E  
49474 = Viltrox 20mm F2.8 FE  
49474 = Viltrox AF 135/1.8 LAB FE  
49475 = Tamron 50-300mm F4.5-6.3 Di III VC VXD  
49476 = Tamron 28-300mm F4-7.1 Di III VC VXD  
49477 = Tamron 90mm F2.8 Di III Macro VXD  
49478 = Tamron 16-30mm F2.8 Di III VXD G2  
49712 = Tokina FiRIN 20mm F2 FE AF  
49713 = Tokina FiRIN 100mm F2.8 FE MACRO  
49714 = Tokina atx-m 11-18mm F2.8 E  
50480 = Sigma 30mm F1.4 DC DN | C  
50481 = Sigma 50mm F1.4 DG HSM | A  
50482 = Sigma 18-300mm F3.5-6.3 DC MACRO OS HSM | C + MC-11  
50483 = Sigma 18-35mm F1.8 DC HSM | A + MC-11  
50484 = Sigma 24-35mm F2 DG HSM | A + MC-11  
50485 = Sigma 24mm F1.4 DG HSM | A + MC-11  
50486 = Sigma 150-600mm F5-6.3 DG OS HSM | C + MC-11  
50487 = Sigma 20mm F1.4 DG HSM | A + MC-11  
50488 = Sigma 35mm F1.4 DG HSM | A  
50489 = Sigma 150-600mm F5-6.3 DG OS HSM | S + MC-11  
50490 = Sigma 120-300mm F2.8 DG OS HSM | S + MC-11  
50492 = Sigma 24-105mm F4 DG OS HSM | A + MC-11  
50493 = Sigma 17-70mm F2.8-4 DC MACRO OS HSM | C + MC-11  
50495 = Sigma 50-100mm F1.8 DC HSM | A + MC-11  
50499 = Sigma 85mm F1.4 DG HSM | A  
50501 = Sigma 100-400mm F5-6.3 DG OS HSM | C + MC-11  
50503 = Sigma 16mm F1.4 DC DN | C  
50507 = Sigma 105mm F1.4 DG HSM | A  
50508 = Sigma 56mm F1.4 DC DN | C  
50512 = Sigma 70-200mm F2.8 DG OS HSM | S + MC-11  
50513 = Sigma 70mm F2.8 DG MACRO | A  
50514 = Sigma 45mm F2.8 DG DN | C  
50515 = Sigma 35mm F1.2 DG DN | A  
50516 = Sigma 14-24mm F2.8 DG DN | A  
50517 = Sigma 24-70mm F2.8 DG DN | A  
50518 = Sigma 100-400mm F5-6.3 DG DN OS | C  
50521 = Sigma 85mm F1.4 DG DN | A  
50522 = Sigma 105mm F2.8 DG DN MACRO | A  
50523 = Sigma 65mm F2 DG DN | C  
50524 = Sigma 35mm F2 DG DN | C  
50525 = Sigma 24mm F3.5 DG DN | C  
50526 = Sigma 28-70mm F2.8 DG DN | C  
50527 = Sigma 150-600mm F5-6.3 DG DN OS | S  
50528 = Sigma 35mm F1.4 DG DN | A  
50529 = Sigma 90mm F2.8 DG DN | C  
50530 = Sigma 24mm F2 DG DN | C  
50531 = Sigma 18-50mm F2.8 DC DN | C  
50532 = Sigma 20mm F2 DG DN | C  
50533 = Sigma 16-28mm F2.8 DG DN | C  
50534 = Sigma 20mm F1.4 DG DN | A  
50535 = Sigma 24mm F1.4 DG DN | A  
50536 = Sigma 60-600mm F4.5-6.3 DG DN OS | S  
50537 = Sigma 50mm F2 DG DN | C  
50538 = Sigma 17mm F4 DG DN | C  
50539 = Sigma 50mm F1.4 DG DN | A  
50540 = Sigma 14mm F1.4 DG DN | A  
50543 = Sigma 70-200mm F2.8 DG DN OS | S  
50544 = Sigma 23mm F1.4 DC DN | C  
50545 = Sigma 24-70mm F2.8 DG DN II | A  
50546 = Sigma 500mm F5.6 DG DN OS | S  
50547 = Sigma 10-18mm F2.8 DC DN | C  
50548 = Sigma 15mm F1.4 DG DN DIAGONAL FISHEYE | A  
50549 = Sigma 50mm F1.2 DG DN | A  
50550 = Sigma 28-105mm F2.8 DG DN | A  
50551 = Sigma 28-45mm F1.8 DG DN | A  
50552 = Sigma 35mm F1.2 DG II | A  
50553 = Sigma 300-600mm F4 DG OS | S  
50554 = Sigma 16-300mm F3.5-6.7 DC OS | C  
50555 = Sigma 12mm F1.4 DC | C  
50556 = Sigma 17-40mm F1.8 DC | A

50557	= Sigma 200mm F2 DG OS   S
50558	= Sigma 20-200mm F3.5-6.3 DG   C
50559	= Sigma 135mm F1.4 DG   A
50992	= Voigtlander SUPER WIDE-HELIAR 15mm F4.5 III
50993	= Voigtlander HELIAR-HYPER WIDE 10mm F5.6
50994	= Voigtlander ULTRA WIDE-HELIAR 12mm F5.6 III
50995	= Voigtlander MACRO APO-LANTHAR 65mm F2 Aspherical
50996	= Voigtlander NOKTON 40mm F1.2 Aspherical
50997	= Voigtlander NOKTON classic 35mm F1.4
50998	= Voigtlander MACRO APO-LANTHAR 110mm F2.5
50999	= Voigtlander COLOR-SKOPAR 21mm F3.5 Aspherical
51000	= Voigtlander NOKTON 50mm F1.2 Aspherical
51001	= Voigtlander NOKTON 21mm F1.4 Aspherical
51002	= Voigtlander APO-LANTHAR 50mm F2 Aspherical
51003	= Voigtlander NOKTON 35mm F1.2 Aspherical SE
51006	= Voigtlander APO-LANTHAR 35mm F2 Aspherical
51007	= Voigtlander NOKTON 50mm F1 Aspherical
51008	= Voigtlander NOKTON 75mm F1.5 Aspherical
51009	= Voigtlander NOKTON 28mm F1.5 Aspherical
51072	= ZEISS Otus ML 50mm F1.4
51073	= ZEISS Otus ML 85mm F1.4
51504	= Samyang AF 50mm F1.4
51505	= Samyang AF 14mm F2.8 or Samyang AF 35mm F2.8
51505	= Samyang AF 35mm F2.8
51507	= Samyang AF 35mm F1.4
51508	= Samyang AF 45mm F1.8
51510	= Samyang AF 18mm F2.8 or Samyang AF 35mm F1.8
51510	= Samyang AF 35mm F1.8
51512	= Samyang AF 75mm F1.8
51513	= Samyang AF 35mm F1.8
51514	= Samyang AF 24mm F1.8
51515	= Samyang AF 12mm F2.0
51516	= Samyang AF 24-70mm F2.8
51517	= Samyang AF 50mm F1.4 II
51518	= Samyang AF 135mm F1.8
61569	= LAOWA FFII 10mm F2.8 C&D Dreamer
61761	= Viltrox 28mm F4.5 FE
61767	= Viltrox 50mm F2.0 FE

## Sony CameraSettingsUnknown Tags

Index2	Tag Name	Writable	Values / Notes
<i>[no tags known]</i>			

## Sony ExtraInfo Tags

Extra hardware information for the A850 and A900.

Index1	Tag Name	Writable	Values / Notes
1	BatteryTemperature	int8u	
2	BatteryUnknown?	no	
8	BatteryVoltage?	no	
10	ImageStabilization2?	int8u	191 = On (191) 207 = On (207) 210 = On (210) 213 = On 246 = Off
12	BatteryLevel	int8u	
26	ExtraInfoVersion	int8u[4]	

## Sony ExtraInfo2 Tags

Extra hardware information for the A230/290/330/380/390.

Index1	Tag Name	Writable	Values / Notes
4	BatteryLevel	int8u	

18	ImageStabilization	int8u	0 = Off 64 = On
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## Sony ExtraInfo3 Tags

Extra hardware information for the A33, A35, A55, A450, A500, A550, A560, A580 and NEX-3/5/C3/VG10.

Index1	Tag Name	Writable	Values / Notes
0	BatteryUnknown?	int16u	
2	BatteryTemperature	int8u	
4	BatteryLevel	int8u	
6	BatteryVoltage1	int16u	
8	BatteryVoltage2	int16u	
17	ImageStabilization	int8u	0 = Off 64 = On
20	BatteryState	int8u	(BatteryState for SLT models)
	ExposureProgram	int8u	1 = Empty
	ModeDialPosition	int8u	2 = Low 3 = Half full 4 = Almost full 5 = Full
			(ExposureProgram for the A450, A500 and A550) 241 = Landscape 243 = Aperture-priority AE 245 = Portrait 246 = Auto 247 = Program AE 249 = Macro 252 = Sunset 253 = Sports 255 = Manual
			(ModeDialPosition for other DSLR models) 248 = No Flash 249 = Aperture-priority AE 250 = SCN 251 = Shutter speed priority AE 252 = Auto 253 = Program AE 254 = Panorama 255 = Manual
22	MemoryCardConfiguration	int8u	244 = MemoryStick in use, SD card present
	CameraOrientation	int8u	245 = MemoryStick in use, SD slot empty
			252 = SD card in use, MemoryStick present
			254 = SD card in use, MemoryStick slot empty
			[val >> 6 & 0x3]
			0 = Horizontal (normal)
			1 = Rotate 90 CW
			2 = Rotate 270 CW
			3 = Rotate 180
24	CameraOrientation	int8u	[val >> 4 & 0x3]
			0 = Horizontal (normal)
			1 = Rotate 90 CW
			2 = Rotate 270 CW
			3 = Rotate 180

## Sony Panorama Tags

Tags found in panorama images from various Sony DSC, NEX, SLT and DSLR cameras. The width/height values of these tags are not affected by camera rotation -- the width is always the longer dimension.

Index4	Tag Name	Writable	Values / Notes
1	PanoramaFullWidth	int32u	
2	PanoramaFullHeight	int32u	
3	PanoramaDirection	int32u	0 = Left or Up 1 = Right or Down
4	PanoramaCropLeft	int32u	
5	PanoramaCropTop	int32u	
6	PanoramaCropRight	int32u	

7	PanoramaCropBottom	int32u
8	PanoramaFrameWidth	int32u
9	PanoramaFrameHeight	int32u
10	PanoramaSourceWidth	int32u
11	PanoramaSourceHeight	int32u

## Sony Tag2010a Tags

Valid for NEX-5N.

Index1	Tag Name	Writable	Values / Notes
1200	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
4392	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
4396	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
4404	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
4408	FlashMode	int8u	0 = Autoflash 3 = Slow Sync 1 = Fill-flash 4 = Rear Sync 2 = Flash Off 6 = Wireless
4414	StopsAboveBaseISO	int16u	
4416	BrightnessValue	int16u	
4420	DynamicRangeOptimizer	int8u	0 = Off 5 = Lv3 1 = Auto 6 = Lv4 3 = Lv1 7 = Lv5 4 = Lv2 8 = n/a
4424	HDRSetting	int8u	0 = Off 7 = HDR 3 EV 1 = HDR Auto 9 = HDR 4 EV 3 = HDR 1 EV 11 = HDR 5 EV 5 = HDR 2 EV 13 = HDR 6 EV
4428	ExposureCompensation	int16s	
4446	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4447	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear

			6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4451	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
4464	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
4468	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
4469	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
4476	WB_RGBLevels	int16u[3]	

## Sony ReleaseMode2 Values

Value	ReleaseMode2	Value	ReleaseMode2
0	Normal	16	Continuous - 3D Image
1	Continuous	17	Continuous - Burst 2
2	Continuous - Exposure Bracketing	18	Normal - iAuto+
3	DRO or White Balance Bracketing	19	Continuous - Speed/Advance Priority
5	Continuous - Burst	20	Continuous - Multi Frame NR
6	Single Frame - Capture During Movie	23	Single-frame - Exposure Bracketing
7	Continuous - Sweep Panorama	26	Continuous Low
8	Continuous - Anti-Motion Blur, Hand-held Twilight	27	Continuous - High Sensitivity
9	Continuous - HDR	28	Smile Shutter
10	Continuous - Background defocus	29	Continuous - Tele-zoom Advance Priority
13	Continuous - 3D Sweep Panorama	146	Single Frame - Movie Capture
15	Continuous - High Resolution Sweep Panorama		

## Sony PictureEffect2 Values

Value	PictureEffect2	Value	PictureEffect2	Value	PictureEffect2
0	Off	5	Soft High Key	10	Rich-tone Monochrome
1	Toy Camera	6	Partial Color	11	Miniature
2	Pop Color	7	High Contrast Monochrome	12	Water Color
3	Posterization	8	Soft Focus	13	Illustration
4	Retro Photo	9	HDR Painting		

## Sony ExposureProgram3 Values

Value	ExposureProgram3	Value	ExposureProgram3	Value	ExposureProgram3
0	Program AE	11	Twilight Portrait	27	Gourmet
1	Aperture-priority AE	12	Sunset	28	Pet
2	Shutter speed priority AE	14	Action (High speed)	29	Macro
3	Manual	16	Sports	30	Backlight Correction HDR
4	Auto	17	Handheld Night Shot	33	Sweep Panorama
5	iAuto	18	Anti Motion Blur	36	Background Defocus
6	Superior Auto	19	High Sensitivity	37	Soft Skin
7	iAuto+	21	Beach	42	3D Image

8 = Portrait

22 = Snow

43 = Cont. Priority AE

9 = Landscape

23 = Fireworks

45 = Document

10 = Twilight

26 = Underwater

46 = Party

## Sony MeterInfo Tags

Information possibly related to metering. Extracted only if the Unknown option is used.

Index1	Tag Name	Writable	Values / Notes
0	MeterInfo1Row1	int32u[27]	
108	MeterInfo1Row2	int32u[27]	
216	MeterInfo1Row3	int32u[27]	
324	MeterInfo1Row4	int32u[27]	
432	MeterInfo1Row5	int32u[27]	
540	MeterInfo1Row6	int32u[27]	
648	MeterInfo1Row7	int32u[27]	
756	MeterInfo2Row1	int32u[33]	
888	MeterInfo2Row2	int32u[33]	
1020	MeterInfo2Row3	int32u[33]	
1152	MeterInfo2Row4	int32u[33]	
1284	MeterInfo2Row5	int32u[33]	
1416	MeterInfo2Row6	int32u[33]	
1548	MeterInfo2Row7	int32u[33]	
1680	MeterInfo2Row8	int32u[33]	
1812	MeterInfo2Row9	int32u[33]	

## Sony Tag2010b Tags

Valid for SLT-A65/A77, NEX-7/VG20E.

Index1	Tag Name	Writable	Values / Notes
0	SequenceImageNumber	int32u	(number of images captured in burst sequence)
4	SequenceFileNumber	int32u	(file number in burst sequence)
8	ReleaseMode2	int32u	--> <a href="#">Sony ReleaseMode2 Values</a>
438	SonyDateTime	undef[7]	
804	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
1204	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
4392	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
4396	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
4404	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
4408	FlashMode	int8u	0 = Autoflash    3 = Slow Sync 1 = Fill-flash    4 = Rear Sync 2 = Flash Off    6 = Wireless
4414	StopsAboveBaseISO	int16u	
4416	BrightnessValue	int16u	
4420	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a

4424	HDRSetting	int8u	0 = Off 1 = HDR Auto 3 = HDR 1 EV 5 = HDR 2 EV 7 = HDR 3 EV 9 = HDR 4 EV 11 = HDR 5 EV 13 = HDR 6 EV
4428	ExposureCompensation	int16s	
4450	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4451	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4455	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
4468	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
4472	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
4473	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
4480	WB_RGBLevels	int16u[3]	
4632	SonyISO	int16u	
6691	DistortionCorrParams	int16s[16]	

# Sony Tag2010c Tags

Valid for SLT-A37/A57 and NEX-F3.

Index1	Tag Name	Writable	Values / Notes
0	SequenceImageNumber	int32u	(number of images captured in burst sequence)
4	SequenceFileNumber	int32u	(file number in burst sequence)
8	ReleaseMode2	int32u	--> <a href="#">Sony ReleaseMode2 Values</a>
512	DigitalZoomRatio	int8u	
528	SonyDateTime	undef[7]	
768	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
1168	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
4356	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
4360	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
4368	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
4372	FlashMode	int8u	0 = Autoflash    3 = Slow Sync 1 = Fill-flash    4 = Rear Sync 2 = Flash Off    6 = Wireless
4378	StopsAboveBaseISO	int16u	
4380	BrightnessValue	int16u	
4384	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
4388	HDRSetting	int8u	0 = Off              7 = HDR 3 EV 1 = HDR Auto        9 = HDR 4 EV 3 = HDR 1 EV        11 = HDR 5 EV 5 = HDR 2 EV        13 = HDR 6 EV
4392	ExposureCompensation	int16s	
4414	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4415	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait

			3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4419	PictureEffect2	int8u	--> <a href="#">Sony_PictureEffect2 Values</a>
4432	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
4436	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
4437	ExposureProgram	int8u	--> <a href="#">Sony_ExposureProgram3 Values</a>
4444	WB_RGBLevels	int16u[3]	
4596	SonyISO	int16u	

## Sony Tag2010d Tags

Valid for DSC-HX10V/HX20V/HX200V/TX66/TX200V/TX300V/WX50/WX100/WX150, but not valid for panorama images.

Index1	Tag Name	Writable	Values / Notes
0	SequenceImageNumber	int32u	(number of images captured in burst sequence)
4	SequenceFileNumber	int32u	(file number in burst sequence)
8	ReleaseMode2	int32u	--> <a href="#">Sony_ReleaseMode2 Values</a>
510	SonyDateTime	undef[7]	
892	DynamicRangeOptimizer	int8u	0 = Off 5 = Lv3 1 = Auto 6 = Lv4 3 = Lv1 7 = Lv5 4 = Lv2 8 = n/a
1292	MeterInfo?	-	--> <a href="#">Sony_MeterInfo Tags</a>
4480	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
4484	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
4492	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
4496	FlashMode	int8u	0 = Autoflash 3 = Slow Sync 1 = Fill-flash 4 = Rear Sync 2 = Flash Off 6 = Wireless
4502	StopsAboveBaseISO	int16u	

4504	BrightnessValue	int16u	
4508	DynamicRangeOptimizer	int8u	0 = Off      5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1      7 = Lv5 4 = Lv2      8 = n/a
4512	HDRSetting	int8u	0 = Off      7 = HDR 3 EV 1 = HDR Auto 9 = HDR 4 EV 3 = HDR 1 EV 11 = HDR 5 EV 5 = HDR 2 EV 13 = HDR 6 EV
4538	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4539	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4543	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
4560	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
4561	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
4568	WB_RGBLevels	int16u[3]	
4720	SonyISO	int16u	

# Sony Tag2010e Tags

Valid for SLT-A58/A99, ILCE-3000/3500, NEX-3N/5R/5T/6/VG30E/VG900, DSC-RX100, DSC-RX1/RX1R. Also valid for DSC-HX300/HX50V/TX30/WX60/WX200/ WX300, but not for panorama images.

Index1	Tag Name	Writable	Values / Notes
0	SequenceImageNumber	int32u	(number of images captured in burst sequence)
4	SequenceFileName	int32u	(file number in burst sequence)
8	ReleaseMode2	int32u	--> <a href="#">Sony ReleaseMode2 Values</a>
540	DigitalZoomRatio	int8u	
556	SonyDateTime	undef[7]	
808	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
1208	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
4444	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
4448	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
4456	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
4460	FlashMode	int8u	0 = Autoflash    3 = Slow Sync 1 = Fill-flash    4 = Rear Sync 2 = Flash Off    6 = Wireless
4466	StopsAboveBaseISO	int16u	
4468	BrightnessValue	int16u	
4472	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
4476	HDRSetting	int8u	0 = Off    7 = HDR 3 EV 1 = HDR Auto    9 = HDR 4 EV 3 = HDR 1 EV    11 = HDR 5 EV 5 = HDR 2 EV    13 = HDR 6 EV
4480	ExposureCompensation	int16s	
4502	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3

4503	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4507	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
4520	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
4524	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
4525	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
4532	WB_RGBLevels	int16u[3]	
4692	SonyISO	int16u	
4696	SonyISO	int16u	
4728	FocalLength	int16u	
4730	MinFocalLength	int16u	
4732	MaxFocalLength	int16u	
4736	SonyISO	int16u	
6256	DistortionCorrParams	int16s[16]	
6289	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
6290	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
6291	LensType2	int16u	--> <a href="#">Sony LensType2 Values</a>
6294	LensType	int16u	--> <a href="#">Sony LensType Values</a>
6296	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
6297	DistortionCorrParamsNumber	int8u	11 = 11 (APS-C) 16 = 16 (Full-frame)
6444	AspectRatio	int8u	0 = 16:9 1 = 4:3 2 = 3:2 3 = 1:1 5 = Panorama
6792	AspectRatio	int8u	0 = 16:9 1 = 4:3 2 = 3:2 3 = 1:1 5 = Panorama

## Sony Tag2010f Tags

Index1	Tag Name	Writable	Values / Notes
4	ReleaseMode2	int32u	--> <a href="#">Sony ReleaseMode2 Values</a>
80	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
480	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
4116	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
4120	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
4128	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
4132	FlashMode	int8u	0 = Autoflash    3 = Slow Sync 1 = Fill-flash    4 = Rear Sync 2 = Flash Off    6 = Wireless
4138	StopsAboveBaseISO	int16u	
4140	BrightnessValue	int16u	
4144	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
4148	HDRSetting	int8u	0 = Off              7 = HDR 3 EV 1 = HDR Auto        9 = HDR 4 EV 3 = HDR 1 EV        11 = HDR 5 EV 5 = HDR 2 EV        13 = HDR 6 EV
4152	ExposureCompensation	int16s	
4174	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4175	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1)

			22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
4179	PictureEffect2	int8u	--> <a href="#">Sony_PictureEffect2 Values</a>
4192	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
4196	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
4197	ExposureProgram	int8u	--> <a href="#">Sony_ExposureProgram3 Values</a>
4204	WB_RGBLevels	int16u[3]	
4404	FocalLength	int16u	
4406	MinFocalLength	int16u	
4408	MaxFocalLength	int16u	
4412	SonyISO	int16u	
6444	AspectRatio	int8u	0 = 16:9 1 = 4:3 2 = 3:2 3 = 1:1 5 = Panorama

## Sony Tag2010g Tags

Valid for DSC-HX60V/HX350/HX400V/QX30/RX10/RX100M3/WX220/WX350, ILCE-7/7R/7S/7M2/5000/5100/6000/QX1, ILCA-68/77M2.

Index1	Tag Name	Writable	Values / Notes
4	ReleaseMode2	int32u	--> <a href="#">Sony_ReleaseMode2 Values</a>
80	DynamicRangeOptimizer	int8u	0 = Off 5 = Lv3 1 = Auto 6 = Lv4 3 = Lv1 7 = Lv5 4 = Lv2 8 = n/a
524	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
528	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
536	SelfTimer	int8u	0 = Off 1 = Self-timer 10 s 2 = Self-timer 2 s
540	FlashMode	int8u	0 = Autoflash 3 = Slow Sync 1 = Fill-flash 4 = Rear Sync 2 = Flash Off 6 = Wireless
546	StopsAboveBaseISO	int16u	
548	BrightnessValue	int16u	
552	DynamicRangeOptimizer	int8u	0 = Off 5 = Lv3 1 = Auto 6 = Lv4

3 = Lv1    7 = Lv5  
4 = Lv2    8 = n/a

556	HDRSetting	int8u	0 = Off              7 = HDR 3 EV 1 = HDR Auto       9 = HDR 4 EV 3 = HDR 1 EV       11 = HDR 5 EV 5 = HDR 2 EV       13 = HDR 6 EV
560	ExposureCompensation	int16s	
582	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
583	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
587	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
600	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
604	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
605	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
612	WB_RGBLevels	int16u[3]	
812	FocalLength	int16u	
814	MinFocalLength	int16u	

816	MaxFocalLength	int16u	
836	SonyISO	int16u	
904	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
6300	DistortionCorrParams	int16s[16]	
6333	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
6334	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
6335	LensType2	int16u	--> <a href="#">Sony LensType2 Values</a>
6338	LensType	int16u	--> <a href="#">Sony LensType Values</a>
6340	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
6341	DistortionCorrParamsNumber	int8u	11 = 11 (APS-C) 16 = 16 (Full-frame)
6488	AspectRatio	int8u	0 = 16:9 1 = 4:3 2 = 3:2 3 = 1:1 5 = Panorama

## Sony Tag2010h Tags

Valid for DSC-HX80/HX90V/RX0/RX1RM2/RX10M2/RX10M3/RX100M4/RX100M5/WX500, ILCE-6300/6500/7RM2/7SM2, ILCA-99M2.

Index1	Tag Name	Writable	Values / Notes
4	ReleaseMode2	int32u	--> <a href="#">Sony ReleaseMode2 Values</a>
80	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
524	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
528	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
536	SelfTimer	int8u	0 = Off 1 = Self-timer 5 or 10 s 2 = Self-timer 2 s
540	FlashMode	int8u	0 = Autoflash    3 = Slow Sync 1 = Fill-flash    4 = Rear Sync 2 = Flash Off    6 = Wireless
546	StopsAboveBaseISO	int16u	
548	BrightnessValue	int16u	
552	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
556	HDRSetting	int8u	0 = Off    7 = HDR 3 EV 1 = HDR Auto    9 = HDR 4 EV 3 = HDR 1 EV    11 = HDR 5 EV 5 = HDR 2 EV    13 = HDR 6 EV
560	ExposureCompensation	int16s	
582	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real

			10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
583	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
587	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
600	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
604	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
605	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
612	WB_RGBLevels	int16u[3]	
812	FocalLength	int16u	
814	MinFocalLength	int16u	
816	MaxFocalLength	int16u	
838	SonyISO	int16u	
904	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
920	MeterInfo?	-	--> <a href="#">Sony MeterInfo Tags</a>
6348	DistortionCorrParams	int16s[16]	
6381	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
6382	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
6383	LensType2	int16u	--> <a href="#">Sony LensType2 Values</a>
6386	LensType	int16u	--> <a href="#">Sony LensType Values</a>

6388	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
6389	DistortionCorrParamsNumber	int8u	11 = 11 (APS-C) 16 = 16 (Full-frame)
6444	AspectRatio	int8u	0 = 16:9 1 = 4:3 2 = 3:2 3 = 1:1 5 = Panorama

## Sony Tag2010i Tags

Valid for ILCE-6100/6400/6600/7C/7M3/7RM3/7RM4/9/9M2, DSC-RX0M2/RX10M4/RX100M6/RX100M5A/RX100M7/HX99.

Index1	Tag Name	Writable	Values / Notes
4	ReleaseMode2	int32u	--> <a href="#">Sony ReleaseMode2 Values</a>
78	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
516	ReleaseMode3	int8u	0 = Normal 1 = Continuous 2 = Bracketing 4 = Continuous - Burst 5 = Continuous - Speed/Advance Priority 6 = Normal - Self-timer 9 = Single Burst Shooting
520	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
528	SelfTimer	int8u	0 = Off 1 = Self-timer 5 or 10 s 2 = Self-timer 2 s
529	FlashMode	int8u	0 = Autoflash    3 = Slow Sync 1 = Fill-flash    4 = Rear Sync 2 = Flash Off    6 = Wireless
535	StopsAboveBaseISO	int16u	
537	BrightnessValue	int16u	
539	DynamicRangeOptimizer	int8u	0 = Off    5 = Lv3 1 = Auto    6 = Lv4 3 = Lv1    7 = Lv5 4 = Lv2    8 = n/a
543	HDRSetting	int8u	0 = Off    7 = HDR 3 EV 1 = HDR Auto    9 = HDR 4 EV 3 = HDR 1 EV    11 = HDR 5 EV 5 = HDR 2 EV    13 = HDR 6 EV
547	ExposureCompensation	int16s	
567	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN

			40 = SH 48 = FL2 49 = FL3
568	PictureProfile	int8u	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
572	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
583	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG
587	MeteringMode	int8u	0 = Multi-segment 2 = Center-weighted average 3 = Spot 4 = Average 5 = Highlight
588	ExposureProgram	int8u	--> <a href="#">Sony_ExposureProgram3 Values</a>
594	WB_RGBLevels	int16u[3]	
778	FocalLength	int16u	
780	MinFocalLength	int16u	
782	MaxFocalLength	int16u	
800	SonyISO	int16u	
877	MeterInfo?	-	--> <a href="#">Sony MeterInfo9 Tags</a>
6096	DistortionCorrParams	int16s[16]	
6129	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
6130	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
6131	LensType2	int16u	--> <a href="#">Sony_LensType2 Values</a>
6134	LensType	int16u	--> <a href="#">Sony_LensType Values</a>
6136	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
6137	DistortionCorrParamsNumber	int8u	11 = 11 (APS-C) 16 = 16 (Full-frame)
6284	AspectRatio	int8u	0 = 16:9 1 = 4:3 2 = 3:2 3 = 1:1 5 = Panorama

## Sony MeterInfo9 Tags

Information possibly related to metering. Extracted only if the Unknown option is used.

Index1	Tag Name	Writable	Values / Notes
0	MeterInfo1Row1	no	
90	MeterInfo1Row2	no	
180	MeterInfo1Row3	no	
270	MeterInfo1Row4	no	
360	MeterInfo1Row5	no	
450	MeterInfo1Row6	no	
540	MeterInfo1Row7	no	
630	MeterInfo2Row1	no	
740	MeterInfo2Row2	no	
850	MeterInfo2Row3	no	
960	MeterInfo2Row4	no	
1070	MeterInfo2Row5	no	
1180	MeterInfo2Row6	no	
1290	MeterInfo2Row7	no	
1400	MeterInfo2Row8	no	
1510	MeterInfo2Row9	no	

## Sony Tag202a Tags

Index1	Tag Name	Writable	Values / Notes
1	FocalPlaneAFPointsUsed	int8u	
2	FocalPlaneAFPointArea	int16u[2]	
6	FocalPlaneAFPointLocation1	int16u[2]	
10	FocalPlaneAFPointLocation2	int16u[2]	
14	FocalPlaneAFPointLocation3	int16u[2]	
18	FocalPlaneAFPointLocation4	int16u[2]	
22	FocalPlaneAFPointLocation5	int16u[2]	
26	FocalPlaneAFPointLocation6	int16u[2]	
30	FocalPlaneAFPointLocation7	int16u[2]	
34	FocalPlaneAFPointLocation8	int16u[2]	
38	FocalPlaneAFPointLocation9	int16u[2]	
42	FocalPlaneAFPointLocation10	int16u[2]	
46	FocalPlaneAFPointLocation11	int16u[2]	
50	FocalPlaneAFPointLocation12	int16u[2]	
54	FocalPlaneAFPointLocation13	int16u[2]	
58	FocalPlaneAFPointLocation14	int16u[2]	
62	FocalPlaneAFPointLocation15	int16u[2]	

## Sony HiddenInfo Tags

Index4	Tag Name	Writable	Values / Notes
0	HiddenDataOffset	int32u	
1	HiddenDataLength	int32u	

## Sony ShotInfo Tags

Index1	Tag Name	Writable	Values / Notes
2	FaceInfoOffset	no	
6	SonyDateTime	string[20]	
26	SonyImageHeight	int16u	
28	SonyImageWidth	int16u	
48	FacesDetected	int16u	

50	FaceInfoLength	no
52	MetaVersion	string[16]
72	FaceInfo1	- --> <a href="#">Sony FaceInfo1 Tags</a>
94	FaceInfo2	- --> <a href="#">Sony FaceInfo2 Tags</a>

## Sony FaceInfo1 Tags

Index1	Tag Name	Writable	Values / Notes
0	Face1Position	int16u[4]	(top, left, height and width of detected face. Coordinates are relative to the full-sized unrotated image, with increasing Y downwards)
32	Face2Position	int16u[4]	
64	Face3Position	int16u[4]	
96	Face4Position	int16u[4]	
128	Face5Position	int16u[4]	
160	Face6Position	int16u[4]	
192	Face7Position	int16u[4]	
224	Face8Position	int16u[4]	

## Sony FaceInfo2 Tags

Index1	Tag Name	Writable	Values / Notes
0	Face1Position	int16u[4]	(top, left, height and width of detected face. Coordinates are relative to the full-sized unrotated image, with increasing Y downwards)
37	Face2Position	int16u[4]	
74	Face3Position	int16u[4]	
111	Face4Position	int16u[4]	
148	Face5Position	int16u[4]	
185	Face6Position	int16u[4]	
222	Face7Position	int16u[4]	
259	Face8Position	int16u[4]	

## Sony Tag900b Tags

Index1	Tag Name	Writable	Values / Notes
2	FacesDetected	no	0 = 0    77 = 4    115 = 8 33 = 5    93 = 3    168 = 6 57 = 2    98 = 1    241 = 7
189	FaceDetection	no	0 = Off 98 = On

## Sony Tag9050a Tags

Data for tags 0x9050, 0x94xx and 0x2010 is encrypted by a simple substitution cipher, but the deciphered values are listed below.

Index1	Tag Name	Writable	Values / Notes
0	SonyMaxAperture	int8u	
1	SonyMinAperture	int8u	
32	Shutter	int16u[3]	'0 0 0' = Silent / Electronic (0 0 0)
49	FlashStatus	int8u	0 = No Flash present 2 = Flash Inhibited 64 = Built-in Flash present 65 = Built-in Flash Fired 66 = Built-in Flash Inhibited 128 = External Flash present 129 = External Flash Fired
50	ShutterCount	int32u	(total number of image exposures made by the camera, modulo 65536 for some models)
58	SonyExposureTime	int16u	

60	SonyFNumber	int16u	
63	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
76	ShutterCount2	int32u	
81	SonyDateTime2	undef[6]	
103	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
124	InternalSerialNumber	int8u[4]~	
240	InternalSerialNumber	int8u[5]	
261	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
262	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
263	LensType2	int16u	--> <a href="#">Sony_LensType2 Values</a>
265	LensType	int16u	--> <a href="#">Sony_LensType Values</a> (SLT models, and NEX with A-mount lenses)
267	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
276	APS-CSizeCapture	int8u	0 = Off 1 = On
277	LensSpecFeatures	undef[2]	
278	LensSpecFeatures	undef[2]	
416	ShutterCount3	int32u	
426	ShutterCount3	int32u	
445	ShutterCount3	int32u	

## Sony Tag9050b Tags

Valid from July 2015 for ILCE-6100/6300/6400/6500/6600/7C/7M3/7RM2/7RM3/7RM4/ 7SM2/9/9M2, ILCA-99M2.

Index1	Tag Name	Writable	Values / Notes
0	SonyMaxAperture	int8u	
1	SonyMinAperture	int8u	
38	Shutter	int16u[3]	'0 0 0' = Silent / Electronic (0 0 0)
57	FlashStatus	int8u	0 = No Flash present 2 = Flash Inhibited 64 = Built-in Flash present 65 = Built-in Flash Fired 66 = Built-in Flash Inhibited 128 = External Flash present 129 = External Flash Fired
58	ShutterCount	int32u	(total number of image exposures made by the camera)
70	SonyExposureTime	int16u	
72	SonyFNumber	int16u	
75	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
80	ShutterCount2	int32u	
82	ShutterCount2	int32u	
88	ShutterCount2	int32u	
97	SonyTimeMinSec	no	
107	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
109	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
115	ReleaseMode2	int8u	--> <a href="#">Sony_ReleaseMode2 Values</a>
136	InternalSerialNumber	int8u[6]~	
261	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
262	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
263	LensType2	int16u	--> <a href="#">Sony_LensType2 Values</a>

265	LensType	int16u	--> <a href="#">Sony LensType Values</a> (SLT models, and NEX with A-mount lenses)
267	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
276	APS-CSizeCapture	int8u	0 = Off 1 = On
278	LensSpecFeatures	undef[2]	
415	ShutterCount3	int32u	
459	ShutterCount3	int32u	
461	ShutterCount3	int32u	
491	APS-CSizeCapture	int8u	0 = Off 1 = On
493	LensSpecFeatures	undef[2]	
494	APS-CSizeCapture	int8u	0 = Off 1 = On
496	LensSpecFeatures	undef[2]	
538	APS-CSizeCapture	int8u	0 = Off 1 = On
540	LensSpecFeatures APS-CSizeCapture	undef[2] int8u	0 = Off 1 = On
542	LensSpecFeatures	undef[2]	

## Sony Tag9050c Tags

Valid from July 2020 for ILCE-1/7SM3, ILME-FX3.

Index1	Tag Name	Writable	Values / Notes
38	Shutter	int16u[3]	'0 0 0' = Silent / Electronic (0 0 0)
57	FlashStatus	int8u	0 = No Flash present 2 = Flash Inhibited 64 = Built-in Flash present 65 = Built-in Flash Fired 66 = Built-in Flash Inhibited 128 = External Flash present 129 = External Flash Fired
58	ShutterCount	int32u~	(total number of image exposures made by the camera)
70	SonyExposureTime	int16u	
72	SonyFNumber	int16u	
75	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
80	ShutterCount2	int32u	
102	SonyExposureTime	int16u	
104	SonyFNumber	int16u	
107	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
136	InternalSerialNumber	int8u[6]~	
138	InternalSerialNumber	int8u[6]~	

## Sony Tag9050d Tags

Valid for ILCE-6700/7CM2/7CR/ZV-E1. Also for ILCE-1M2 when using mechanical shutter.

Index1	Tag Name	Writable	Values / Notes
10	ShutterCount	int32u	(total number of mechanical shutter actuations)
26	SonyExposureTime	int16u	
28	SonyFNumber	int16u	
31	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
56	InternalSerialNumber	int8u[6]~	

## Sony Tag9400a Tags

Valid for many DSC, NEX and SLT models

Index1	Tag Name	Writable	Values / Notes
8	SequenceImageNumber	int32u	(number of images captured in burst sequence)
12	SequenceFileNumber	int32u	(file number in burst sequence)
16	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
18	DigitalZoom	int8u	0 = No 1 = Yes
26	ShotNumberSincePowerUp	int32u	
34	SequenceLength	int8u	0 = Continuous 1 = 1 shot 2 = 2 shots 3 = 3 shots 4 = 4 shots 5 = 5 shots 6 = 6 shots 10 = 10 shots 100 = Continuous - iSweep Panorama 200 = Continuous - Sweep Panorama
40	CameraOrientation	int8u	1 = Horizontal (normal) 3 = Rotate 180 6 = Rotate 90 CW 8 = Rotate 270 CW
41	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG 3 = JPEG + MPO
68	SonyImageHeight	int16u~	
82	ModelReleaseYear	int8u~	

## Sony Tag9400b Tags

Valid for NEX-3N, ILCE-3000/3500, SLT-A58, DSC-WX60, DSC-WX300, DSC-RX100M2, DSC-HX50V, DSC-QX10/QX100.

Index1	Tag Name	Writable	Values / Notes
8	SequenceImageNumber	int32u	(number of images captured in burst sequence)
12	SequenceFileNumber	int32u	(file number in burst sequence)
16	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
18	DigitalZoom	int8u	0 = No 1 = Yes
22	ShotNumberSincePowerUp	int32u	
30	SequenceLength	int8u	0 = Continuous 1 = 1 shot 2 = 2 shots 3 = 3 shots 4 = 4 shots 5 = 5 shots 6 = 6 shots 10 = 10 shots 100 = Continuous - iSweep Panorama 200 = Continuous - Sweep Panorama
36	CameraOrientation	int8u	1 = Horizontal (normal) 3 = Rotate 180 6 = Rotate 90 CW 8 = Rotate 270 CW
37	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG 3 = JPEG + MPO
63	SonyImageHeight	int16u~	
70	ModelReleaseYear	int8u~	

## Sony Tag9400c Tags

Valid for DSC-HX60V/HX80/HX90V/HX99/HX350/HX400V/QX30/RX0/RX1RM2/RX10/RX10M2/RX10M3/RX10M4/RX100M3/RX100M4/RX100M5/RX100M5A/RX100M6/RX100M7/WX220/

Index1	Tag Name	Writable	Values / Notes	
9	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>	
10	ShotNumberSincePowerUp	int32u	(valid only for some models)	
18	SequenceImageNumber	int32u	(number of images captured in burst sequence)	
22	SequenceLength	int8u	0 = Continuous 1 = 1 shot 2 = 2 shots 3 = 3 shots 4 = 4 shots 5 = 5 shots 6 = 6 shots 7 = 7 shots 9 = 9 shots 10 = 10 shots 12 = 12 shots 16 = 16 shots 100 = Continuous - iSweep Panorama 200 = Continuous - Sweep Panorama	
26	SequenceFileName	int32u	(file number in burst sequence)	
30	SequenceLength	int8u	0 = Continuous	5 = 5 files
			1 = 1 file	7 = 7 files
			2 = 2 files	9 = 9 files
			3 = 3 files	10 = 10 files
41	CameraOrientation	int8u	1 = Horizontal (normal) 3 = Rotate 180 6 = Rotate 90 CW 8 = Rotate 270 CW	
42	Quality2	int8u	0 = JPEG 1 = RAW 2 = RAW + JPEG 3 = JPEG + MPO 1 = JPEG 2 = RAW 3 = RAW + JPEG 4 = HEIF 6 = RAW + HEIF	
83	ModelReleaseYear	int8u~		
307	ShutterType	int8u	7 = Electronic 23 = Mechanical	
313	ShutterType	int8u	7 = Electronic 23 = Mechanical	
319	ShutterType	int8u	7 = Electronic 23 = Mechanical	

## Sony Tag9401 Tags

Index1	Tag Name	Writable	Values / Notes	
994	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1012	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1102	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1176	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1181	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1182	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1185	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1186	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1210	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1437	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1588	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1590	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1612	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	
1619	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>	

1656	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>
1720	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>
1758	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>
1767	ISOInfo	-	--> <a href="#">Sony ISOInfo Tags</a>

## Sony ISOInfo Tags

Index1	Tag Name	Writable	Values / Notes
0	ISOSetting	int8u	
2	ISOAutoMin	int8u	
4	ISOAutoMax	int8u	

## Sony Tag9402 Tags

Index1	Tag Name	Writable	Values / Notes
4	AmbientTemperature	int8s	
22	FocusMode	int8u	[val & 0x7f] 0 = Manual 2 = AF-S 3 = AF-C 4 = AF-A 6 = DMF
23	AFAreaMode	int8u	0 = Multi 1 = Center 2 = Spot 3 = Flexible Spot 10 = Selective (for Miniature effect) 11 = Zone 12 = Expanded Flexible Spot 13 = Custom AF Area 14 = Tracking 15 = Face Tracking 20 = Animal Eye Tracking 21 = Human Eye Tracking 255 = Manual
45	FocusPosition2	int8u	

## Sony Tag9403 Tags

Index1	Tag Name	Writable	Values / Notes
5	CameraTemperature	int8s	

## Sony Tag9404a Tags

Index1	Tag Name	Writable	Values / Notes
11	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
13	IntelligentAuto	int8u	0 = Off 1 = On
25	LensZoomPosition	int16u	

## Sony Tag9404b Tags

Index1	Tag Name	Writable	Values / Notes
12	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
14	IntelligentAuto	int8u	0 = Off 1 = On
30	LensZoomPosition	int16u	
32	FocusPosition2	int8u	

## Sony Tag9404c Tags

Index1	Tag Name	Writable	Values / Notes
11	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
13	IntelligentAuto	int8u	0 = Off 1 = On

## Sony Tag9405a Tags

Valid for SLT, NEX, ILCE-3000/3500 and several DSC models.

Index1	Tag Name	Writable	Values / Notes
1536	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
1537	DistortionCorrection	int8u	0 = None 1 = Applied
1539	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
1540	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
1541	LensType2	int16u	--> <a href="#">Sony LensType2 Values</a> (E-mount lenses)
1544	LensType	int16u	--> <a href="#">Sony LensType Values</a> (A-mount lenses on SLT and NEX)
1610	VignettingCorrParams	int16s[16]	
1642	ChromaticAberrationCorrParams	int16s[32]	
1738	DistortionCorrParams	int16s[16]	

## Sony Tag9405b Tags

Valid for DSC-HX60V/HX80/HX90V/HX99/HX350/HX400V/QX30/RX0/RX10/RX10M2/RX10M3/RX10M4/RX100M3/RX100M4/RX100M5/RX100M5A/RX100M6/RX100M7/WX220/WX350, ILCE-7/7M2/7M3/7R/7RM2/7RM3/7RM4/7S/7SM2/9/9M2/5000/5100/6000/6100/6300/ 6400/6500/6600/QX1, ILCA-68/77M2/99M2.

Index1	Tag Name	Writable	Values / Notes
4	SonyISO	int16u	
6	BaseISO	int16u	
10	StopsAboveBaseISO	int16u	
14	SonyExposureTime2	int16u	
16	ExposureTime	rational32u	
20	SonyFNumber	int16u	
22	SonyMaxApertureValue	int16u	
36	SequenceImageNumber	int32u	(number of images captured in burst sequence)
52	ReleaseMode2	int8u	--> <a href="#">Sony ReleaseMode2 Values</a>
62	SonyImageWidthMax	int16u	
64	SonyImageHeightMax	int16u	
66	HighISONoiseReduction	int8u	0 = Off 1 = Low 2 = Normal 3 = High
68	LongExposureNoiseReduction	int8u	0 = Off 1 = On
70	PictureEffect2	int8u	--> <a href="#">Sony PictureEffect2 Values</a>
72	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
74	CreativeStyle	int8u	0 = Standard 1 = Vivid 2 = Neutral 3 = Portrait 4 = Landscape 5 = B&W 6 = Clear

7 = Deep  
 8 = Light  
 9 = Sunset  
 10 = Night View/Portrait  
 11 = Autumn Leaves  
 13 = Sepia  
 15 = FL  
 16 = VV2  
 17 = IN  
 18 = SH  
 255 = Off

	82 Sharpness	int8s	
90	DistortionCorrParamsPresent	int8u	0 = No 1 = Yes
91	DistortionCorrection	int8u	0 = None 1 = Applied
93	LensFormat	int8u	0 = Unknown 1 = APS-C 2 = Full-frame
94	LensMount	int8u	0 = Unknown 1 = A-mount 2 = E-mount
96	LensType2	int16u	--> <a href="#">Sony LensType2 Values</a> (E-mount lenses)
98	LensType	int16u	--> <a href="#">Sony LensType Values</a> (A-mount lenses on SLT and NEX)
100	DistortionCorrParams	int16s[16]	
834	LensZoomPosition	int16u	
842	VignettingCorrParams	int16s[16]	
846	LensZoomPosition	int16u	
848	VignettingCorrParams	int16s[16]	
858	LensZoomPosition	int16u	
860	VignettingCorrParams	int16s[16]	
872	VignettingCorrParams	int16s[16]	
892	ChromaticAberrationCorrParams	int16s[32]	
900	ChromaticAberrationCorrParams	int16s[32]	
924	ChromaticAberrationCorrParams	int16s[32]	
944	ChromaticAberrationCorrParams	int16s[32]	
952	ChromaticAberrationCorrParams	int16s[32]	

## Sony Tag9406 Tags

Index1	Tag Name	Writable	Values / Notes
5	BatteryTemperature	int8u	
6	BatteryLevelGrip1	int8u	
7	BatteryLevel	int8u	
8	BatteryLevelGrip2	int8u	

## Sony Tag9406b Tags

Index1	Tag Name	Writable	Values / Notes
5	BatteryLevel	int8u	
7	BatteryLevel2	int8u	

## Sony Tag940a Tags

These tags are currently extracted for SLT models only.

Index1	Tag Name	Writable	Values / Notes
4	AFPointsSelected	int32u	0x0 = (none) 0x7801 = Center Zone

0x1821c = Right Zone	Bit 8 = Upper-left
0x3fff = (all LA-EA4)	Bit 9 = Far Right
0x605c0 = Left Zone	Bit 10 = Far Left
0x7fffffff = (all)	Bit 11 = Upper-middle
0xffffffff = n/a	Bit 12 = Near Right
Bit 0 = Center	Bit 13 = Lower-middle
Bit 1 = Top	Bit 14 = Near Left
Bit 2 = Upper-right	Bit 15 = Upper Far Right
Bit 3 = Right	Bit 16 = Lower Far Right
Bit 4 = Lower-right	Bit 17 = Lower Far Left
Bit 5 = Bottom	Bit 18 = Upper Far Left

## Sony Tag940c Tags

E-mount cameras only.

Index1	Tag Name	Writable	Values / Notes
8	LensMount2	int8u	0 = Unknown 1 = A-mount (1) 4 = E-mount 5 = A-mount (5)
9	LensType3	int16u	--> <a href="#">Sony LensType2 Values</a>
11	CameraE-mountVersion	int16u	
13	LensE-mountVersion	int16u	
20	LensFirmwareVersion	int16u~	

## Sony AFInfo Tags

These tags are currently extracted for SLT models only.

Index1	Tag Name	Writable	Values / Notes
2	AFType	int8u	1 = 15-point 2 = 19-point 3 = 79-point
4	AFStatusActiveSensor	int16s	-32768 = Out of Focus 0 = In Focus
5	FocusMode	int8u	(ILCA models only) 0 = Manual 2 = AF-S 3 = AF-C 4 = AF-A 6 = DMF
7	AFPoint	int8u	(models with 15-point AF) 0 = Upper-left 9 = Top (vertical) 1 = Left 10 = Center (vertical) 2 = Lower-left 11 = Bottom (vertical) 3 = Far Left 12 = Far Right 4 = Top (horizontal) 13 = Upper-right 5 = Near Right 14 = Right 6 = Center (horizontal) 15 = Lower-right 7 = Near Left 16 = Upper-middle 8 = Bottom (horizontal) 17 = Lower-middle  (models with 19-point AF) 0 = Upper Far Left 15 = Top (vertical) 1 = Upper-left (horizontal) 16 = Upper-middle 2 = Far Left (horizontal) 17 = Center (vertical) 3 = Left (horizontal) 18 = Lower-middle 4 = Lower Far Left 19 = Bottom (vertical) 5 = Lower-left (horizontal) 20 = Upper Far Right 6 = Upper-left (vertical) 21 = Upper-right (horizontal) 7 = Left (vertical) 22 = Far Right (horizontal) 8 = Lower-left (vertical) 23 = Right (horizontal) 9 = Far Left (vertical) 24 = Lower Far Right 10 = Top (horizontal) 25 = Lower-right (horizontal) 11 = Near Right 26 = Far Right (vertical) 12 = Center (horizontal) 27 = Upper-right (vertical) 13 = Near Left 28 = Right (vertical) 14 = Bottom (horizontal) 29 = Lower-right (vertical)
8	AFPointInFocus	int8u	(models with 15-point AF) 0 = Upper-left 10 = Center (vertical) 1 = Left 11 = Bottom (vertical) 2 = Lower-left 12 = Far Right

3 = Far Left	13 = Upper-right
4 = Top (horizontal)	14 = Right
5 = Near Right	15 = Lower-right
6 = Center (horizontal)	16 = Upper-middle
7 = Near Left	17 = Lower-middle
8 = Bottom (horizontal)	255 = (none)
9 = Top (vertical)	
(models with 19-point AF)	
0 = Upper Far Left	16 = Upper-middle
1 = Upper-left (horizontal)	17 = Center (vertical)
2 = Far Left (horizontal)	18 = Lower-middle
3 = Left (horizontal)	19 = Bottom (vertical)
4 = Lower Far Left	20 = Upper Far Right
5 = Lower-left (horizontal)	21 = Upper-right (horizontal)
6 = Upper-left (vertical)	22 = Far Right (horizontal)
7 = Left (vertical)	23 = Right (horizontal)
8 = Lower-left (vertical)	24 = Lower Far Right
9 = Far Left (vertical)	25 = Lower-right (horizontal)
10 = Top (horizontal)	26 = Far Right (vertical)
11 = Near Right	27 = Upper-right (vertical)
12 = Center (horizontal)	28 = Right (vertical)
13 = Near Left	29 = Lower-right (vertical)
14 = Bottom (horizontal)	255 = (none)
15 = Top (vertical)	

9	AFPointAtShutterRelease	int8u	(models with 15-point AF) 0 = Upper-left                    10 = Center (vertical) 1 = Left                         11 = Bottom (vertical) 2 = Lower-left                  12 = Far Right 3 = Far Left                    13 = Upper-right 4 = Top (horizontal)            14 = Right 5 = Near Right                15 = Lower-right 6 = Center (horizontal)      16 = Upper-middle 7 = Near Left                17 = Lower-middle 8 = Bottom (horizontal)     30 = (out of focus) 9 = Top (vertical) (models with 19-point AF) 0 = Upper Far Left            16 = Upper-middle 1 = Upper-left (horizontal) 17 = Center (vertical) 2 = Far Left (horizontal) 18 = Lower-middle 3 = Left (horizontal)        19 = Bottom (vertical) 4 = Lower Far Left           20 = Upper Far Right 5 = Lower-left (horizontal) 21 = Upper-right (horizontal) 6 = Upper-left (vertical)    22 = Far Right (horizontal) 7 = Left (vertical)           23 = Right (horizontal) 8 = Lower-left (vertical)    24 = Lower Far Right 9 = Far Left (vertical)     25 = Lower-right (horizontal) 10 = Top (horizontal)        26 = Far Right (vertical) 11 = Near Right              27 = Upper-right (vertical) 12 = Center (horizontal)    28 = Right (vertical) 13 = Near Left               29 = Lower-right (vertical) 14 = Bottom (horizontal)    30 = (out of focus) 15 = Top (vertical)
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10	AFAreaMode	int8u	0 = Wide 1 = Spot 2 = Local 3 = Zone
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11	FocusMode	int8u	0 = Manual    4 = AF-A 2 = AF-S        6 = DMF 3 = AF-C        7 = AF-D
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16	AFPointsUsed	int8u[10]	0x0 = (none)      Bit 26 = D4      Bit 53 = F9 Bit 0 = A5           Bit 27 = D5      Bit 54 = F10 Bit 1 = A6           Bit 28 = D6      Bit 55 = F11 Bit 2 = A7           Bit 29 = D7      Bit 56 = G1 Bit 3 = B2           Bit 30 = D8      Bit 57 = G2 Bit 4 = B3           Bit 31 = D9      Bit 58 = G3 Bit 5 = B4           Bit 32 = D10     Bit 59 = G4 Bit 6 = B5           Bit 33 = D11     Bit 60 = G5 Bit 7 = B6           Bit 34 = E1      Bit 61 = G6 Bit 8 = B7           Bit 35 = E2      Bit 62 = G7 Bit 9 = B8           Bit 36 = E3      Bit 63 = G8 Bit 10 = B9          Bit 37 = E4      Bit 64 = G9 Bit 11 = B10        Bit 38 = E5      Bit 65 = G10 Bit 12 = C1          Bit 39 = E6      Bit 66 = G11 Bit 13 = C2          Bit 40 = E7      Bit 67 = H2 Bit 14 = C3          Bit 41 = E8      Bit 68 = H3 Bit 15 = C4          Bit 42 = E9      Bit 69 = H4 Bit 16 = C5          Bit 43 = E10     Bit 70 = H5
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Bit 17 = C6	Bit 44 = E11	Bit 71 = H6
Bit 18 = C7	Bit 45 = F1	Bit 72 = H7
Bit 19 = C8	Bit 46 = F2	Bit 73 = H8
Bit 20 = C9	Bit 47 = F3	Bit 74 = H9
Bit 21 = C10	Bit 48 = F4	Bit 75 = H10
Bit 22 = C11	Bit 49 = F5	Bit 76 = I5
Bit 23 = D1	Bit 50 = F6	Bit 77 = I6
Bit 24 = D2	Bit 51 = F7	Bit 78 = I7
Bit 25 = D3	Bit 52 = F8	

17 AFStatus15	-	--> <a href="#">Sony AFStatus15 Tags</a>
AFStatus19	-	--> <a href="#">Sony AFStatus19 Tags</a>

55 AFPoint	int8u	0 = B4	48 = H7
		1 = C4	49 = I7
		2 = D4	50 = A6
		3 = E4	51 = B6
		4 = F4	52 = C6
		5 = G4	53 = D6
		6 = H4	54 = E6 Center
		7 = B3	55 = F6
		8 = C3	56 = G6
		9 = D3	57 = H6
		10 = E3	58 = I6
		11 = F3	59 = A5
		12 = G3	60 = B5
		13 = H3	61 = C5
		14 = B2	62 = D5
		15 = C2	63 = E5
		16 = D2	64 = F5
		17 = E2	65 = G5
		18 = F2	66 = H5
		19 = G2	67 = I5
		20 = H2	68 = C11
		21 = C1	69 = D11
		22 = D1	70 = E11
		23 = E1	71 = F11
		24 = F1	72 = G11
		25 = G1	73 = B10
		26 = A7 Vertical	74 = C10
		27 = A6 Vertical	75 = D10
		28 = A5 Vertical	76 = E10
		29 = C7 Vertical	77 = F10
		30 = C6 Vertical	78 = G10
		31 = C5 Vertical	79 = H10
		32 = E7 Vertical	80 = B9
		33 = E6 Center Vertical	81 = C9
		34 = E5 Vertical	82 = D9
		35 = G7 Vertical	83 = E9
		36 = G6 Vertical	84 = F9
		37 = G5 Vertical	85 = G9
		38 = I7 Vertical	86 = H9
		39 = I6 Vertical	87 = B8
		40 = I5 Vertical	88 = C8
		41 = A7	89 = D8
		42 = B7	90 = E8
		43 = C7	91 = F8
		44 = D7	92 = G8
		45 = E7	93 = H8
		46 = F7	94 = E6 Center F2.8
		47 = G7	255 = (none)

56 AFPointInFocus	int8u	0 = B4	48 = H7
		1 = C4	49 = I7
		2 = D4	50 = A6
		3 = E4	51 = B6
		4 = F4	52 = C6
		5 = G4	53 = D6
		6 = H4	54 = E6 Center
		7 = B3	55 = F6
		8 = C3	56 = G6
		9 = D3	57 = H6
		10 = E3	58 = I6
		11 = F3	59 = A5
		12 = G3	60 = B5
		13 = H3	61 = C5
		14 = B2	62 = D5
		15 = C2	63 = E5
		16 = D2	64 = F5
		17 = E2	65 = G5
		18 = F2	66 = H5

			19 = G2 20 = H2 21 = C1 22 = D1 23 = E1 24 = F1 25 = G1 26 = A7 Vertical 27 = A6 Vertical 28 = A5 Vertical 29 = C7 Vertical 30 = C6 Vertical 31 = C5 Vertical 32 = E7 Vertical 33 = E6 Center Vertical 34 = E5 Vertical 35 = G7 Vertical 36 = G6 Vertical 37 = G5 Vertical 38 = I7 Vertical 39 = I6 Vertical 40 = I5 Vertical 41 = A7 42 = B7 43 = C7 44 = D7 45 = E7 46 = F7 47 = G7	67 = I5 68 = C11 69 = D11 70 = E11 71 = F11 72 = G11 73 = B10 74 = C10 75 = D10 76 = E10 77 = F10 78 = G10 79 = H10 80 = B9 81 = C9 82 = D9 83 = E9 84 = F9 85 = G9 86 = H9 87 = B8 88 = C8 89 = D8 90 = E8 91 = F8 92 = G8 93 = H8 94 = E6 Center F2.8 255 = (none)
57	AFPointAtShutterRelease	int8u	0 = B4 1 = C4 2 = D4 3 = E4 4 = F4 5 = G4 6 = H4 7 = B3 8 = C3 9 = D3 10 = E3 11 = F3 12 = G3 13 = H3 14 = B2 15 = C2 16 = D2 17 = E2 18 = F2 19 = G2 20 = H2 21 = C1 22 = D1 23 = E1 24 = F1 25 = G1 26 = A7 Vertical 27 = A6 Vertical 28 = A5 Vertical 29 = C7 Vertical 30 = C6 Vertical 31 = C5 Vertical 32 = E7 Vertical 33 = E6 Center Vertical 34 = E5 Vertical 35 = G7 Vertical 36 = G6 Vertical 37 = G5 Vertical 38 = I7 Vertical 39 = I6 Vertical 40 = I5 Vertical 41 = A7 42 = B7 43 = C7 44 = D7 45 = E7 46 = F7 47 = G7	48 = H7 49 = I7 50 = A6 51 = B6 52 = C6 53 = D6 54 = E6 Center 55 = F6 56 = G6 57 = H6 58 = I6 59 = A5 60 = B5 61 = C5 62 = D5 63 = E5 64 = F5 65 = G5 66 = H5 67 = I5 68 = C11 69 = D11 70 = E11 71 = F11 72 = G11 73 = B10 74 = C10 75 = D10 76 = E10 77 = F10 78 = G10 79 = H10 80 = B9 81 = C9 82 = D9 83 = E9 84 = F9 85 = G9 86 = H9 87 = B8 88 = C8 89 = D8 90 = E8 91 = F8 92 = G8 93 = H8 94 = E6 Center F2.8 95 = (none)
58	AFAreaMode	int8u	0 = Wide 1 = Center	

			2 = Flexible Spot 3 = Zone 4 = Expanded Flexible Spot
59	AFStatusActiveSensor	int16s	-32768 = Out of Focus 0 = In Focus
67	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>
80	AFMicroAdj	int8s	
125	AFStatus79	-	--> <a href="#">Sony AFStatus79 Tags</a>
366	AFPointsUsed	int32u	(SLT models only) 0x0 = (none) Bit 0 = Center Bit 1 = Top Bit 2 = Upper-right Bit 3 = Right Bit 4 = Lower-right Bit 5 = Bottom Bit 6 = Lower-left Bit 7 = Left Bit 8 = Upper-left Bit 9 = Far Right Bit 10 = Far Left Bit 11 = Upper-middle Bit 12 = Near Right Bit 13 = Lower-middle Bit 14 = Near Left Bit 15 = Upper Far Right Bit 16 = Lower Far Right Bit 17 = Lower Far Left Bit 18 = Upper Far Left
381	AFMicroAdj	int8s	
382	ExposureProgram	int8u	--> <a href="#">Sony ExposureProgram3 Values</a>

## Sony AFStatus19 Tags

AF Status information for models with 19-point AF.

Index1	Tag Name	Writable	Values / Notes
0	AFStatusUpperFarLeft	int16s	-32768 = Out of Focus 0 = In Focus
2	AFStatusUpper-leftHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
4	AFStatusFarLeftHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
6	AFStatusLeftHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
8	AFStatusLowerFarLeft	int16s	-32768 = Out of Focus 0 = In Focus
10	AFStatusLower-leftHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
12	AFStatusUpper-leftVertical	int16s	-32768 = Out of Focus 0 = In Focus
14	AFStatusLeftVertical	int16s	-32768 = Out of Focus 0 = In Focus
16	AFStatusLower-leftVertical	int16s	-32768 = Out of Focus 0 = In Focus
18	AFStatusFarLeftVertical	int16s	-32768 = Out of Focus 0 = In Focus
20	AFStatusTopHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
22	AFStatusNearRight	int16s	-32768 = Out of Focus 0 = In Focus
24	AFStatusCenterHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
26	AFStatusNearLeft	int16s	-32768 = Out of Focus 0 = In Focus
28	AFStatusBottomHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
30	AFStatusTopVertical	int16s	-32768 = Out of Focus 0 = In Focus
32	AFStatusUpper-middle	int16s	-32768 = Out of Focus 0 = In Focus
34	AFStatusCenterVertical	int16s	-32768 = Out of Focus 0 = In Focus
36	AFStatusLower-middle	int16s	-32768 = Out of Focus 0 = In Focus
38	AFStatusBottomVertical	int16s	-32768 = Out of Focus 0 = In Focus
40	AFStatusUpperFarRight	int16s	-32768 = Out of Focus 0 = In Focus
42	AFStatusUpper-rightHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
44	AFStatusFarRightHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
46	AFStatusRightHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
48	AFStatusLowerFarRight	int16s	-32768 = Out of Focus 0 = In Focus
50	AFStatusLower-rightHorizontal	int16s	-32768 = Out of Focus 0 = In Focus
52	AFStatusFarRightVertical	int16s	-32768 = Out of Focus 0 = In Focus
54	AFStatusUpper-rightVertical	int16s	-32768 = Out of Focus 0 = In Focus
56	AFStatusRightVertical	int16s	-32768 = Out of Focus 0 = In Focus

58 AFStatusLower-rightVertical int16s -32768 = Out of Focus 0 = In Focus

# Sony AFStatus79 Tags

AF Status information for models with 79-point AF.

Index1	Tag Name	Writable	Values / Notes	
0	AFStatus_00_B4	int16s	-32768 = Out of Focus	0 = In Focus
2	AFStatus_01_C4	int16s	-32768 = Out of Focus	0 = In Focus
4	AFStatus_02_D4	int16s	-32768 = Out of Focus	0 = In Focus
6	AFStatus_03_E4	int16s	-32768 = Out of Focus	0 = In Focus
8	AFStatus_04_F4	int16s	-32768 = Out of Focus	0 = In Focus
10	AFStatus_05_G4	int16s	-32768 = Out of Focus	0 = In Focus
12	AFStatus_06_H4	int16s	-32768 = Out of Focus	0 = In Focus
14	AFStatus_07_B3	int16s	-32768 = Out of Focus	0 = In Focus
16	AFStatus_08_C3	int16s	-32768 = Out of Focus	0 = In Focus
18	AFStatus_09_D3	int16s	-32768 = Out of Focus	0 = In Focus
20	AFStatus_10_E3	int16s	-32768 = Out of Focus	0 = In Focus
22	AFStatus_11_F3	int16s	-32768 = Out of Focus	0 = In Focus
24	AFStatus_12_G3	int16s	-32768 = Out of Focus	0 = In Focus
26	AFStatus_13_H3	int16s	-32768 = Out of Focus	0 = In Focus
28	AFStatus_14_B2	int16s	-32768 = Out of Focus	0 = In Focus
30	AFStatus_15_C2	int16s	-32768 = Out of Focus	0 = In Focus
32	AFStatus_16_D2	int16s	-32768 = Out of Focus	0 = In Focus
34	AFStatus_17_E2	int16s	-32768 = Out of Focus	0 = In Focus
36	AFStatus_18_F2	int16s	-32768 = Out of Focus	0 = In Focus
38	AFStatus_19_G2	int16s	-32768 = Out of Focus	0 = In Focus
40	AFStatus_20_H2	int16s	-32768 = Out of Focus	0 = In Focus
42	AFStatus_21_C1	int16s	-32768 = Out of Focus	0 = In Focus
44	AFStatus_22_D1	int16s	-32768 = Out of Focus	0 = In Focus
46	AFStatus_23_E1	int16s	-32768 = Out of Focus	0 = In Focus
48	AFStatus_24_F1	int16s	-32768 = Out of Focus	0 = In Focus
50	AFStatus_25_G1	int16s	-32768 = Out of Focus	0 = In Focus
52	AFStatus_26_A7_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
54	AFStatus_27_A6_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
56	AFStatus_28_A5_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
58	AFStatus_29_C7_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
60	AFStatus_30_C6_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
62	AFStatus_31_C5_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
64	AFStatus_32_E7_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
66	AFStatus_33_E6_Center_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
68	AFStatus_34_E5_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
70	AFStatus_35_G7_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
72	AFStatus_36_G6_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
74	AFStatus_37_G5_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
76	AFStatus_38_I7_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
78	AFStatus_39_I6_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
80	AFStatus_40_I5_Vertical	int16s	-32768 = Out of Focus	0 = In Focus
82	AFStatus_41_A7	int16s	-32768 = Out of Focus	0 = In Focus
84	AFStatus_42_B7	int16s	-32768 = Out of Focus	0 = In Focus

86	AFStatus_43_C7	int16s	-32768 = Out of Focus	0 = In Focus
88	AFStatus_44_D7	int16s	-32768 = Out of Focus	0 = In Focus
90	AFStatus_45_E7	int16s	-32768 = Out of Focus	0 = In Focus
92	AFStatus_46_F7	int16s	-32768 = Out of Focus	0 = In Focus
94	AFStatus_47_G7	int16s	-32768 = Out of Focus	0 = In Focus
96	AFStatus_48_H7	int16s	-32768 = Out of Focus	0 = In Focus
98	AFStatus_49_I7	int16s	-32768 = Out of Focus	0 = In Focus
100	AFStatus_50_A6	int16s	-32768 = Out of Focus	0 = In Focus
102	AFStatus_51_B6	int16s	-32768 = Out of Focus	0 = In Focus
104	AFStatus_52_C6	int16s	-32768 = Out of Focus	0 = In Focus
106	AFStatus_53_D6	int16s	-32768 = Out of Focus	0 = In Focus
108	AFStatus_54_E6_Center	int16s	-32768 = Out of Focus	0 = In Focus
110	AFStatus_55_F6	int16s	-32768 = Out of Focus	0 = In Focus
112	AFStatus_56_G6	int16s	-32768 = Out of Focus	0 = In Focus
114	AFStatus_57_H6	int16s	-32768 = Out of Focus	0 = In Focus
116	AFStatus_58_I6	int16s	-32768 = Out of Focus	0 = In Focus
118	AFStatus_59_A5	int16s	-32768 = Out of Focus	0 = In Focus
120	AFStatus_60_B5	int16s	-32768 = Out of Focus	0 = In Focus
122	AFStatus_61_C5	int16s	-32768 = Out of Focus	0 = In Focus
124	AFStatus_62_D5	int16s	-32768 = Out of Focus	0 = In Focus
126	AFStatus_63_E5	int16s	-32768 = Out of Focus	0 = In Focus
128	AFStatus_64_F5	int16s	-32768 = Out of Focus	0 = In Focus
130	AFStatus_65_G5	int16s	-32768 = Out of Focus	0 = In Focus
132	AFStatus_66_H5	int16s	-32768 = Out of Focus	0 = In Focus
134	AFStatus_67_I5	int16s	-32768 = Out of Focus	0 = In Focus
136	AFStatus_68_C11	int16s	-32768 = Out of Focus	0 = In Focus
138	AFStatus_69_D11	int16s	-32768 = Out of Focus	0 = In Focus
140	AFStatus_70_E11	int16s	-32768 = Out of Focus	0 = In Focus
142	AFStatus_71_F11	int16s	-32768 = Out of Focus	0 = In Focus
144	AFStatus_72_G11	int16s	-32768 = Out of Focus	0 = In Focus
146	AFStatus_73_B10	int16s	-32768 = Out of Focus	0 = In Focus
148	AFStatus_74_C10	int16s	-32768 = Out of Focus	0 = In Focus
150	AFStatus_75_D10	int16s	-32768 = Out of Focus	0 = In Focus
152	AFStatus_76_E10	int16s	-32768 = Out of Focus	0 = In Focus
154	AFStatus_77_F10	int16s	-32768 = Out of Focus	0 = In Focus
156	AFStatus_78_G10	int16s	-32768 = Out of Focus	0 = In Focus
158	AFStatus_79_H10	int16s	-32768 = Out of Focus	0 = In Focus
160	AFStatus_80_B9	int16s	-32768 = Out of Focus	0 = In Focus
162	AFStatus_81_C9	int16s	-32768 = Out of Focus	0 = In Focus
164	AFStatus_82_D9	int16s	-32768 = Out of Focus	0 = In Focus
166	AFStatus_83_E9	int16s	-32768 = Out of Focus	0 = In Focus
168	AFStatus_84_F9	int16s	-32768 = Out of Focus	0 = In Focus
170	AFStatus_85_G9	int16s	-32768 = Out of Focus	0 = In Focus
172	AFStatus_86_H9	int16s	-32768 = Out of Focus	0 = In Focus
174	AFStatus_87_B8	int16s	-32768 = Out of Focus	0 = In Focus
176	AFStatus_88_C8	int16s	-32768 = Out of Focus	0 = In Focus
178	AFStatus_89_D8	int16s	-32768 = Out of Focus	0 = In Focus
180	AFStatus_90_E8	int16s	-32768 = Out of Focus	0 = In Focus

182	AFStatus_91_F8	int16s	-32768 = Out of Focus	0 = In Focus
184	AFStatus_92_G8	int16s	-32768 = Out of Focus	0 = In Focus
186	AFStatus_93_H8	int16s	-32768 = Out of Focus	0 = In Focus
188	AFStatus_94_E6_Center_F2-8	int16s	-32768 = Out of Focus	0 = In Focus

## Sony Tag940e Tags

E-mount models.

Index1	Tag Name	Writable	Values / Notes	
6662	TiffMeteringImageWidth	no		
6663	TiffMeteringImageHeight	no		
6664	TiffMeteringImage	no	(13(?)-bit intensity data from 1320 (1200) metering segments, extracted as a 16-bit TIFF image)	

## Sony Tag9416 Tags

Valid for the ILCE-1/6700/7CM2/7CR/7M4/7RM5/7SM3/9M3, ILME-FX2/FX3/FX30, ZV-E1/E10M2.

Index1	Tag Name	Writable	Values / Notes
4	SonyISO	no	
6	StopsAboveBaseISO	no	
10	SonyExposureTime2	no	
12	ExposureTime	no	
16	SonyFNumber2	no	
18	SonyMaxApertureValue	no	
29	SequenceImageNumber	no	(number of images captured in burst sequence)
43	ReleaseMode2	no	--> <a href="#">Sony ReleaseMode2 Values</a>
53	ExposureProgram	no	--> <a href="#">Sony ExposureProgram3 Values</a>
55	CreativeStyle	no	(offsets after this are shifted by 1 for the ILME-FX2) 0 = Standard 1 = Vivid 2 = Neutral 3 = Portrait 4 = Landscape 5 = B&W 6 = Clear 7 = Deep 8 = Light 9 = Sunset 10 = Night View/Portrait 11 = Autumn Leaves 13 = Sepia 15 = FL 16 = VV2 17 = IN 18 = SH 19 = FL2 20 = FL3 255 = Off
72	LensMount	no	0 = Unknown 1 = A-mount 2 = E-mount 3 = A-mount (3)
73	LensFormat	no	0 = Unknown 1 = APS-C 2 = Full-frame
74	LensMount	no	0 = Unknown 1 = A-mount 2 = E-mount
75	LensType2	no	--> <a href="#">Sony LensType2 Values</a>
77	LensType	no	--> <a href="#">Sony LensType Values</a>
79	DistortionCorrParams	no	

112 PictureProfile

	no	0 = Gamma Still - Standard/Neutral (PP2) 1 = Gamma Still - Portrait 3 = Gamma Still - Night View/Portrait 4 = Gamma Still - B&W/Sepia 5 = Gamma Still - Clear 6 = Gamma Still - Deep 7 = Gamma Still - Light 8 = Gamma Still - Vivid 9 = Gamma Still - Real 10 = Gamma Movie (PP1) 22 = Gamma ITU709 (PP3 or PP4) 24 = Gamma Cine1 (PP5) 25 = Gamma Cine2 (PP6) 26 = Gamma Cine3 27 = Gamma Cine4 28 = Gamma S-Log2 (PP7) 29 = Gamma ITU709 (800%) 31 = Gamma S-Log3 (PP8 or PP9) 33 = Gamma HLG2 (PP10) 34 = Gamma HLG3 36 = Off 37 = FL 38 = VV2 39 = IN 40 = SH 48 = FL2 49 = FL3
--	----	--

113	FocalLength	no	
115	MinFocalLength	no	
117	MaxFocalLength	no	
2191	VignettingCorrParams	no	
2193	VignettingCorrParams	no	
2205	VignettingCorrParams	no	
2229	APS-CSizeCapture	no	0 = Off 1 = On
2231	APS-CSizeCapture	no	0 = Off 1 = On
2277	APS-CSizeCapture	no	0 = Off 1 = On
2324	ChromaticAberrationCorrParams	no	
2326	ChromaticAberrationCorrParams	no	
2373	ChromaticAberrationCorrParams	no	

## Sony PIC Tags

The TextInfo data is extracted as a block to preserve the formatting, and some of the more interesting information is extracted as separate tags.

Tag ID	Tag Name	Writable	Values / Notes
'BC:'	Barcode	no	
'BarCode:'	Barcode	no	
'Capt:'	SensorTemperature	no	
'FWVer:'	FirmwareVersion	no	
'IFD'	PIC_IFD	-	--> <a href="#">Sony Tags</a>
'Temp:'	CameraTemperature	no	
'Temp:Clbt:'	BoardTemperature	no	
'TextInfo1'	TextInfo1	no	
'TextInfo2'	TextInfo2	no	
'VR Enable C:'	VibrationReduction	no	0 = Off 1 = On
'barcode:'	Barcode	no	

## Sony Ericsson Tags

Marker notes found in images from some Sony Ericsson phones.

Tag ID	Tag Name	Writable	Values / Notes
0x0201	PreviewImageStart	int32u*	(a small 320x200 preview image)
0x0202	PreviewImageLength	int32u*	
0x2000	MarkerNoteVersion	undef[4]	

## Sony SRF Tags

The maker notes in SRF (Sony Raw Format) images contain 7 IFD's with family 1 group names SRF0 through SRF6. SRF0 and SRF1 use the tags in this table, while SRF2 through SRF5 use the tags in the next table, and SRF6 uses standard EXIF tags. All information other than SRF0 is encrypted, but thanks to Dave Coffin the decryption algorithm is known. SRF images are written by the Sony DSC-F828 and DSC-V3.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	SRF2Key	no	(key to decrypt maker notes from the start of SRF2)
0x0001	DataKey	no	(key to decrypt the rest of the file from the end of the maker notes)

## Sony SR2Private Tags

The SR2 format uses the DNGPrivateData tag to reference a private IFD containing these tags. SR2 images are written by the Sony DSC-R1, but this information is also written to ARW images by other models.

Tag ID	Tag Name	Writable	Values / Notes
0x7200	SR2SubIFDOffset	no	
0x7201	SR2SubIFDLength	no	
0x7221	SR2SubIFDKey	no	(key to decrypt SR2SubIFD)
0x7240	IDC_IFD	-	--> <a href="#">SonyIDC Tags</a>
0x7241	IDC2_IFD	-	--> <a href="#">SonyIDC Tags</a>
0x7250	MRWInfo	-	--> <a href="#">MinoltaRaw Tags</a>

## Sony SRF2 Tags

These tags are found in the SRF2 through SRF5 IFD's.

Tag ID	Tag Name	Writable	Values / Notes
0x0002	SRF6Offset	no	
0x0003	SRFDataOffset?	no	
0x0004	RawDataOffset	no	
0x0005	RawDataLength	no	
0x0043	MaxApertureAtMaxFocal	no	
0x0044	MaxApertureAtMinFocal	no	
0x0045	MinFocalLength	no	
0x0046	MaxFocalLength	no	
0x00c0	WBRedDaylight	no	
0x00c1	WBGreenDaylight	no	
0x00c2	WBBlueDaylight	no	
0x00c3	WBRedCloudy	no	
0x00c4	WBGreenCloudy	no	
0x00c5	WBBlueCloudy	no	
0x00c6	WBRedFluorescent	no	
0x00c7	WBGreenFluorescent	no	
0x00c8	WBBlueFluorescent	no	
0x00c9	WBRedTungsten	no	
0x00ca	WBGreenTungsten	no	
0x00cb	WBBlueTungsten	no	
0x00cc	WBRedFlash	no	
0x00cd	WBGreenFlash	no	

0x00ce	WBBlueFlash	no
0x00d0	WBRedAsShot	no
0x00d1	WBGreenAsShot	no
0x00d2	WBBlueAsShot	no

## Sony SR2SubIFD Tags

Tags in the encrypted SR2SubIFD

Tag ID	Tag Name	Writable	Values / Notes
0x7300	BlackLevel	int16u[4]!	
0x7302	WB_GRBGLevelsAuto	int16s[4]!	
0x7303	WB_GRBGLevels	int16s[4]!	
0x7310	BlackLevel	int16u[4]!	
0x7312	WB_RGGBLevelsAuto	int16s[4]!	
0x7313	WB_RGGBLevels	int16s[4]!	
0x7480	WB_RGBLevelsDaylight	int16s[4]!	
0x7481	WB_RGBLevelsCloudy	int16s[4]!	
0x7482	WB_RGBLevelsTungsten	int16s[4]!	
0x7483	WB_RGBLevelsFlash	int16s[4]!	
0x7484	WB_RGBLevels4500K	int16s[4]!	
0x7486	WB_RGBLevelsFluorescent	int16s[4]!	
0x74a0	MaxApertureAtMaxFocal	no	
0x74a1	MaxApertureAtMinFocal	no	
0x74a2	MaxFocalLength	no	
0x74a3	MinFocalLength	no	
0x74c0	SR2DataIFD	-	--> <a href="#">Sony SR2DataIFD Tags</a>
0x7800	ColorMatrix	no	
0x7820	WB_RGBLevelsDaylight	int16s[3]!	
0x7821	WB_RGBLevelsCloudy	int16s[3]!	
0x7822	WB_RGBLevelsTungsten	int16s[3]!	
0x7823	WB_RGBLevelsFlash	int16s[3]!	
0x7824	WB_RGBLevels4500K	int16s[3]!	
0x7825	WB_RGBLevelsShade	int16s[3]!	
0x7826	WB_RGBLevelsFluorescent	int16s[3]!	
0x7827	WB_RGBLevelsFluorescentP1	int16s[3]!	
0x7828	WB_RGBLevelsFluorescentP2	int16s[3]!	
0x7829	WB_RGBLevelsFluorescentM1	int16s[3]!	
0x782a	WB_RGBLevels8500K	int16s[3]!	
0x782b	WB_RGBLevels6000K	int16s[3]!	
0x782c	WB_RGBLevels3200K	int16s[3]!	
0x782d	WB_RGBLevels2500K	int16s[3]!	
0x787f	WhiteLevel	int16u[3]!	
0x797d	VignettingCorrParams	no	
0x7980	ChromaticAberrationCorrParams	no	
0x7982	DistortionCorrParams	no	

## Sony SR2DataIFD Tags

Tag ID	Tag Name	Writable	Values / Notes
0x7770	ColorMode	no	

## Sony PMP Tags

These tags are written in the proprietary-format header of PMP images from the DSC-F1.

Index1	Tag Name	Writable	Values / Notes
8	JpgFromRawStart	no	(OK, not really a RAW file, but this mechanism is used to allow extraction of the JPEG image from a PMP file)
12	JpgFromRawLength	no	
22	SonyImageWidth	no	
24	SonyImageHeight	no	
27	Orientation	no	0 = Horizontal (normal) 1 = Rotate 270 CW 2 = Rotate 180 3 = Rotate 90 CW
29	ImageQuality	no	8 = Snap Shot 23 = Standard 51 = Fine
52	Comment	no	
76	DateTimeOriginal	no	
84	ModifyDate	no	
102	ExposureTime	no	
106	FNumber	no	
108	ExposureCompensation	no	
112	FocalLength	no	
118	Flash	no	0 = No Flash 1 = Fired

## Sony rtmpd Tags

These tags are extracted from the 'rtmpd' timed metadata of MP4 videos from some models when the [ExtractEmbedded](#) option is used.

Tag ID	Tag Name	Writable	Values / Notes
0x8000	FNumber	no	
0x8109	ExposureTime	no	
0x810a	MasterGainAdjustment	no	
0x810b	ISO	no	
0x810c	ElectricalExtenderMagnification	no	
0x8500	GPSVersionID	no	
0x8501	GPSLatitudeRef	no	'N' = North 'S' = South
0x8502	GPSLatitude	no	
0x8503	GPSLongitudeRef	no	'E' = East 'W' = West
0x8504	GPSLongitude	no	
0x8507	GPSTimeStamp	no	
0x8509	GPSStatus	no	'A' = Measurement Active 'V' = Measurement Void
0x850a	GPSMeasureMode	no	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
0x8512	GPSMapDatum	no	
0x851d	GPSDateStamp	no	
0xe303	WhiteBalance	no	1 = Incandescent 2 = Fluorescent 4 = Daylight 5 = Cloudy 6 = Custom 255 = Preset
0xe304	DateTime	no	
0xe43b	PitchRollYaw	no	
0xe44b	Accelerometer	no	

[<-- ExifTool Tag Names](#)

# SonyIDC Tags

Tags written by the Sony Image Data Converter utility in ARW images.

Tag ID	Tag Name	Writable	Values / Notes
0x0201	IDCPreviewStart	int32u*	
0x0202	IDCPreviewLength	int32u*	
0x8000	IDCCreativeStyle	int32u	1 = Camera Setting 2 = Standard 3 = Real 4 = Vivid 5 = Adobe RGB 6 = A100 Standard 7 = Neutral 8 = Portrait 9 = Landscape 10 = Clear 11 = Deep 12 = Light 13 = Sunset 14 = Night View 15 = Autumn Leaves 16 = B&W 17 = Sepia
0x8001	CreativeStyleWasChanged	int32u	(set if the creative style was ever changed) 0 = No 1 = Yes
0x8002	PresetWhiteBalance	int32u	1 = Camera Setting 2 = Color Temperature 3 = Specify Gray Point 4 = Daylight 5 = Cloudy 6 = Shade 7 = Cool White Fluorescent 8 = Day Light Fluorescent 9 = Day White Fluorescent 10 = Warm White Fluorescent 11 = Tungsten 12 = Flash 13 = Auto
0x8013	ColorTemperatureAdj	int16u	
0x8014	PresetWhiteBalanceAdj	int32s	
0x8015	ColorCorrection	int32s	
0x8016	SaturationAdj	int32s	
0x8017	ContrastAdj	int32s	
0x8018	BrightnessAdj	int32s	
0x8019	HueAdj	int32s	
0x801a	SharpnessAdj	int32s	
0x801b	SharpnessOvershoot	int32s	
0x801c	SharpnessUndershoot	int32s	
0x801d	SharpnessThreshold	int32s	
0x801e	NoiseReductionMode	int16u	0 = Off 1 = On
0x8021	GrayPoint	int16u[4]	
0x8022	D-RangeOptimizerMode	int16u	0 = Off 1 = Auto 2 = Manual
0x8023	D-RangeOptimizerValue	int32s	
0x8024	D-RangeOptimizerHighlight	int32s	
0x8026	HighlightColorDistortReduct	int16u	0 = Standard 1 = Advanced
0x8027	NoiseReductionValue	int32s	
0x8028	EdgeNoiseReduction	int32s	
0x8029	ColorNoiseReduction	int32s	
0x802d	D-RangeOptimizerShadow	int32s	
0x8030	PeripherallIllumCentralRadius	int32s	
0x8031	PeripherallIllumCentralValue	int32s	
0x8032	PeripherallIllumPeriphValue	int32s	
0x8040	DistortionCompensation	int32s	-1 = n/a 1 = On 2 = Off

0x9000	ToneCurveBrightnessX	int16u[n]	
0x9001	ToneCurveRedX	int16u[n]	
0x9002	ToneCurveGreenX	int16u[n]	
0x9003	ToneCurveBlueX	int16u[n]	
0x9004	ToneCurveBrightnessY	int16u[n]	
0x9005	ToneCurveRedY	int16u[n]	
0x9006	ToneCurveGreenY	int16u[n]	
0x9007	ToneCurveBlueY	int16u[n]	
0x900d	ChromaticAberrationCorrection	int32s	1 = On 2 = Off
0x900e	InclinationCorrection	int32u	0 = Off 1 = On
0x900f	InclinationAngle	int32s	
0x9010	Cropping	int32u	0 = Off 1 = On
0x9011	CropArea	int32u[4]	
0x9012	PreviewImageSize	int32u[2]	
0x9013	PxShiftPeriphEdgeNR	int32s	0 = Off 1 = On
0x9014	PxShiftPeriphEdgeNRValue	int32s	
0x9017	WhitesAdj	int32s	
0x9018	BlacksAdj	int32s	
0x9019	HighlightsAdj	int32s	
0x901a	ShadowsAdj	int32s	
0xd000	CurrentVersion	int32u	
0xd001	VersionIFD	-	--> <a href="#">SonyIDC Tags</a> (there is one VersionIFD for each entry in the "Version Stack")
0xd100	VersionCreateDate	string	(date/time when this entry was created in the "Version Stack")
0xd101	VersionModifyDate	string	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Aug 21, 2018*

[-- ExifTool Tag Names](#)

# Stim Tags

These tags are part of the CIPA Stereo Still Image specification, and are found in the APP3 "Stim" segment of JPEG images. See [https://web.archive.org/web/20190718152459/http://www.cipa.jp/std/documents/e/DC-006\\_E.pdf](https://web.archive.org/web/20190718152459/http://www.cipa.jp/std/documents/e/DC-006_E.pdf) for the official specification.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	StimVersion	no	
0x0001	ApplicationData	no	
0x0002	ImageArrangement	no	0 = Parallel View Alignment 1 = Cross View Alignment
0x0003	ImageRotation	no	1 = None
0x0004	ScalingFactor	no	
0x0005	CropXSize	no	
0x0006	CropYSize	no	
0x0007	CropX	-	--> <a href="#">Stim CropX Tags</a>
0x0008	CropY	-	--> <a href="#">Stim CropY Tags</a>
0x0009	ViewType	no	0 = No Pop-up Effect 1 = Pop-up Effect
0x000a	RepresentativeImage	no	0 = Left Viewpoint 1 = Right Viewpoint
0x000b	ConvergenceBaselineImage	no	0 = Left Viewpoint 1 = Right Viewpoint 255 = Equivalent for Both Viewpoints
0x000c	AssumedDisplaySize	no	
0x000d	AssumedDistanceView	no	
0x000e	RepresentativeDisparityNear	no	
0x000f	RepresentativeDisparityFar	no	
0x0010	InitialDisplayEffect	no	0 = Off 1 = On
0x0011	ConvergenceDistance	no	
0x0012	CameraArrangementInterval	no	
0x0013	ShootingCount	no	

## Stim CropX Tags

Index1	Tag Name	Writable	Values / Notes
0	CropXCommonOffset	no	0 = Common Offset Setting 1 = Individual Offset Setting
2	CropXViewpointNumber	no	
3	CropXOffset	no	
7	CropXViewpointNumber2	no	
8	CropXOffset2	no	

## Stim CropY Tags

Index1	Tag Name	Writable	Values / Notes
0	CropYCommonOffset	no	0 = Common Offset Setting 1 = Individual Offset Setting
2	CropYViewpointNumber	no	
3	CropYOffset	no	
7	CropYViewpointNumber2	no	
8	CropYOffset2	no	

# TNEF Tags

Information extracted from Transport Neutral Encapsulation Format (TNEF) files (eg. winmail.dat). But note that the exiftool application doesn't process files with a .DAT extension by default when a directory name is given, so in this case either specify the .DAT file(s) by name or add `-ext+ dat` to the command.

Tag ID	Tag Name	Writable	Values / Notes
0x8000	From	no	
0x18004	Subject	no	
0x18009	MessageID	no	
0x18010	AttachTitle	no	
0x2800c	MessageBody	no	
0x30006	StartDate	no	
0x30007	EndDate	no	
0x38005	SentDate	no	
0x38006	ReceivedDate	no	
0x38012	AttachCreateDate	no	
0x38013	AttachModifyDate	no	
0x38020	MessageModifyDate	no	
0x40009	ResponseRequested	no	
0x4800d	Priority	no	0 = Low 1 = Normal 2 = High
0x50008	OwnerAppointmentID	no	
0x60000	Owner	no	
0x60001	SentFor	no	
0x60002	Delegate	no	
0x68007	MessageStatus	no	
0x6800f	AttachData	no	
0x68011	AttachMetaFile	no	
0x69001	AttachTransportFilename	no	
0x69002	AttachRenderingData	no	
0x69003	MessageProps	-	--> <a href="#">TNEF MsgProps Tags</a>
0x69004	RecipientTable	no	
0x69005	AttachInfo	-	--> <a href="#">TNEF AttachInfo Tags</a>
0x69007	CodePage	no	--> <a href="#">Microsoft CodePage Values</a>
0x70600	OriginalMessageClass	no	
0x78008	MessageClass	no	
0x89006	TNEFVersion	no	

## TNEF MsgProps Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0002	AlternateRecipientAllowed	no	
0x0039	ClientSubmitTime	no	
0x0040	ReceivedByName	no	
0x0044	ReceivedRepresentingName	no	
0x004d	OriginalAuthorName	no	
0x0055	OriginalDeliveryTime	no	
0x0070	Subject	no	
0x0075	ReceivedByAddressType	no	
0x0076	ReceivedByEmailAddress	no	
0x0077	ReceivedRepresentingAddressType	no	
0x0078	ReceivedRepresentingEmailAddress	no	
0x007f	CorrelationKey	no	

0x0c1a	SenderName	no	
0x0c1d	SenderSearchKey	no	
0x0e06	MessageDeliveryTime	no	
0x0e1d	NormalizedSubject	no	
0x0e28	PrimarySendAccount	no	
0x0e29	NextSendAccount	no	
0x0f02	DeliveryOrRenewTime	no	
0x1000	MessageBodyText	no	
0x1007	SyncBodyCount	no	
0x1008	SyncBodyData	no	
0x1009	MessageBodyRTF	no	(RTF message body, decompressed if necessary)
0x1013	MessageBodyHTML	no	
0x1035	InternetMessageID	no	
0x10f4	Hidden	no	
0x10f6	ReadOnly	no	
0x3007	CreateDate	no	
0x3008	ModifyDate	no	
0x3fde	InternetCodePage	no	
0x3ff1	LocalUserID	no	
0x3ff8	CreatorName	no	
0x3ffa	LastModifierName	no	
0x3ffd	MessageCodePage	no	
0x4076	SpamConfidenceLevel	no	
'00020329_Author'	Author	no	(tag ID's for named properties are constructed from the property namespace GUID with the ending "-0000-0000-C000-00000000046" removed, followed by the string or numerical ID in hex, separated by an underscore)
'00020329_LastAuthor'	LastAuthor	no	
'00062004_0000801A'	HomeAddress	no	
'00062004_000080DA'	HomeAddressCountryCode	no	
'00062008_00008554'	AppVersion	no	

## TNEF AttachInfo Tags

Tag ID	Tag Name	Writable	Values / Notes
0x0e20	AttachSize	no	
0x0e21	AttachNum	no	
0x0ff8	MappingSignature?	no	
0x3001	AttachFileName	no	
0x3701	AttachBinary	no	
0x3703	AttachFileExtension	no	
0x3705	AttachMethod	no	0 = Attachment Created 1 = AttachData 2 = AttachLongPathName (recipients with access) 4 = AttachLongPathName 5 = Embedded Message 6 = AttachBinary (object) 7 = AttachLongPathName (using AttachmentProviderType)
0x3707	AttachLongFileName	no	
0x3708	AttachPathName	no	
0x370d	AttachLongPathName	no	
0x370e	AttachMIMEType	no	
0x7ffb	ExceptionStartTime?	no	
0x7ffc	ExceptionEndTime?	no	

[<-- ExifTool Tag Names](#)

# Text Tags

Although basic text files contain no metadata, the following tags are determined from a simple analysis of the data in TXT and CSV files. Statistics are generated only for 8-bit encodings, but the [FastScan](#) (-fast) option may be used to limit processing to the first 64 KiB in which case some tags are not produced. To avoid long processing delays, ExifTool will issue a minor warning and process only the first 64 KiB of any file larger than 20 MiB unless the [IgnoreMinorErrors](#) (-m) option is used.

Tag Name	Writable	Values / Notes
ByteOrderMark	no	0 = No 1 = Yes
ColumnCount	no	
Delimiter	no	" = (none) \x09 = Tab , = Comma ; = Semicolon
LineCount	no	
MIMEEncoding	no	
Newlines	no	" = (none) \x0a = Unix LF \x0d = Macintosh CR \x0d\x0a = Windows CRLF
Quoting	no	" = (none) "" = Double quotes '' = Single quotes
RowCount	no	
WordCount	no	

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Nov 19, 2023

[<- ExifTool Tag Names](#)

# Theora Tags

Information extracted from Ogg Theora video files. See <http://www.theora.org/doc/Theora.pdf> for the Theora specification.

Tag ID	Tag Name	Writable	Values / Notes
0x0080	Identification	-	--> <a href="#">Theora Identification Tags</a>
0x0081	Comments	-	--> <a href="#">Vorbis Comments Tags</a>

## Theora Identification Tags

Tags extracted from the Theora identification header.

Index1	Tag Name	Writable	Values / Notes
0	TheoraVersion	no	
7	ImageWidth	no	
10	ImageHeight	no	
13	XOffset	no	
14	YOffset	no	
15	FrameRate	no	
23	PixelAspectRatio	no	
29	ColorSpace	no	0 = Undefined 1 = Rec. 470M 2 = Rec. 470BG
30	NominalVideoBitrate	no	0 = Unspecified
33	Quality	no	
34	PixelFormat	no	0 = 4:2:0 2 = 4:2:2 3 = 4:4:4

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Jul 16, 2011

[<- ExifTool Tag Names](#)

# Torrent Tags

Below are tags commonly found in BitTorrent files. As well as these tags, any other existing tags will be extracted. For convenience, list items are expanded into individual tags with an index in the tag name, but only the tags with index "1" are listed in the tables below. See <https://wiki.theory.org/BitTorrentSpecification> for the BitTorrent specification.

Tag ID	Tag Name	Writable	Values / Notes
'announce'	Announce	no	
'announce-list'	AnnounceList1	no	
'comment'	Comment	no	
'created by'	Creator	no	
'creation date'	CreateDate	no	
'encoding'	Encoding	no	
'info'	Info	-	--> <a href="#">Torrent Info Tags</a> (extracted as a structure with the Struct option)
'url-list'	URLList1	no	

## Torrent Info Tags

Tag ID	Tag Name	Writable	Values / Notes
'file-duration'	File1Duration	no	
'file-media'	File1Media	no	
'files'	Files	-	--> <a href="#">Torrent Files Tags</a>
'length'	Length	no	
'md5sum'	MD5Sum	no	
'name'	Name	no	
'name.utf-8'	NameUTF-8	no	
'piece length'	PieceLength	no	
'pieces'	Pieces	no	(concatenation of 20-byte SHA-1 digests for each piece)
'private'	Private	no	
'profiles'	Profiles	-	--> <a href="#">Torrent Profiles Tags</a>

## Torrent Files Tags

Tag ID	Tag Name	Writable	Values / Notes
'length'	File1Length	no	
'md5sum'	File1MD5Sum	no	
'path'	File1Path	no	
'path.utf-8'	File1PathUTF-8	no	

## Torrent Profiles Tags

Tag ID	Tag Name	Writable	Values / Notes
'acodec'	Profile1AudioCodec	no	
'height'	Profile1Height	no	
'vcodec'	Profile1VideoCodec	no	
'width'	Profile1Width	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Jun 24, 2019

[--> ExifTool Tag Names](#)

# Trailer Vivo Tags

Information written in JPEG trailer by some Vivo phones.

Tag Name	Writable	Values / Notes
HDRImage	no	(highlights of HDR image)
HiddenData	no	(hidden in EXIF, not in trailer. This data is lost if the file is edited)
JSONInfo	no	

# Trailer OnePlus Tags

Information written in JPEG trailer by some OnePlus phones.

Tag ID	Tag Name	Writable	Values / Notes
'JSONInfo'	JSONInfo	no	
'private.emptyspace'	OnePlusTrailerLen?	no	
'watermark.device'	Device	no	

# Trailer Google Tags

Google-defined information written in the trailer of JPEG images by some phones. This information is referenced by DirectoryItem entries in the XMP. Note that some of this information may also be referenced from other metadata formats, and hence may be extracted twice. For example, MotionPhotoVideo may also exist within a Samsung trailer as EmbbededVideoFile, or GainMapImage may also exist in an MPF trailer as MPImage2.

Tag ID	Tag Name	Writable	Values / Notes
'Confidence'	ConfidenceMapImage	no	
'Depth'	DepthMapImage	no	
'GainMap'	GainMapImage	no	
'MotionPhoto'	MotionPhotoVideo	no	
'android/confidencemap'	ConfidenceMapImage	no	
'android/depthmap'	DepthMapImage	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Jan 28, 2025

[<-- ExifTool Tag Names](#)

# Unknown Tags

The following tags are decoded in unsupported maker notes. Use the [Unknown](#) (-u) option to display other unknown tags.

Tag ID	Tag Name	Writable	Values / Notes
0x0e00	PrintIM	-	--> <a href="#">PrintIM Tags</a>

---

(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Apr 11, 2006*

[-- ExifTool Tag Names](#)

## VCard Tags

This table lists common vCard tags, but ExifTool will also extract any other vCard tags found. Tag names may have "Pref" added to indicate the preferred instance of a vCard property, and other "TYPE" parameters may also be added to the tag name. VCF files may contain multiple vCard entries which are distinguished by the ExifTool family 3 group name (document number). See <http://tools.ietf.org/html/rfc6350> for the vCard 4.0 specification.

Tag ID	Tag Name	Writable	Values / Notes
'Adr'	Address	no	
'Anniversary'	Anniversary	no	
'Bday'	Birthday	no	
'Email'	Email	no	
'Fn'	FormattedName	no	
'Gender'	Gender	no	
'Geo'	Geolocation	no	
'Impp'	IMPP	no	
'Lang'	Language	no	
'Logo'	Logo	no	
'N'	Name	no	
'Nickname'	Nickname	no	
'Note'	Note	no	
'Org'	Organization	no	
'Photo'	Photo	no	
'Prodid'	Software	no	
'Rev'	Revision	no	
'Sound'	Sound	no	
'Tel'	Telephone	no	
'Title'	JobTitle	no	
'Tz'	TimeZone	no	
'Uid'	UID	no	
'Url'	URL	no	
'Version'	VCardVersion	no	
'X-abdate'	ABDate	no	
'X-ablabel'	ABLLabel	no	
'X-abrelatednames'	ABRelatedNames	no	
'X-abuid'	AB_UID	no	
'X-aim'	AIM	no	
'X-icq'	ICQ	no	
'X-socialprofile'	SocialProfile	no	

## VCard VCalendar Tags

The VCard module is also used to process iCalendar ICS files since they use a format similar to vCard. The following table lists standard iCalendar tags, but any existing tags will be extracted. Top-level iCalendar components (eg. Event, Todo, Timezone, etc.) are used for the family 1 group names, and embedded components (eg. Alarm) are added as a prefix to the tag name. See <http://tools.ietf.org/html/rfc5545> for the official iCalendar 2.0 specification.

Tag ID	Tag Name	Writable	Values / Notes
'Acknowledged'	Acknowledged	no	
'Action'	Action	no	
'Attach'	Attachment	no	
'Attendee'	Attendee	no	
'Calscale'	CalendarScale	no	
'Categories'	Categories	no	
'Class'	Classification	no	

'Comment'	Comment	no	
'Completed'	DateTimeCompleted	no	
'Contact'	Contact	no	
'Created'	DateCreated	no	
'Description'	Description	no	
'Dtend'	DateTimeEnd	no	
'Dtstamp'	DateTimeStamp	no	
'Dtstart'	DateTimeStart	no	
'Due'	DateTimeDue	no	
'Duration'	Duration	no	
'Exdate'	ExceptionDateTimes	no	
'Freebusy'	FreeBusyTime	no	
'Geo'	Geolocation	no	
'Last-modified'	ModifyDate	no	
'Location'	Location	no	
'Method'	Method	no	
'Organizer'	Organizer	no	
'Percent-complete'	PercentComplete	no	
'Priority'	Priority	no	
'Prodid'	Software	no	
'Rdate'	RecurrenceDateTimes	no	
'Recurrence-id'	RecurrenceID	no	
'Related-to'	RelatedTo	no	
'Repeat'	Repeat	no	
'Request-status'	RequestStatus	no	
'Resources'	Resources	no	
'Rrule'	RecurrenceRule	no	
'Sequence'	SequenceNumber	no	
'Status'	Status	no	
'Summary'	Summary	no	
'Transp'	TimeTransparency	no	
'Trigger'	Trigger	no	
'Tzid'	TimezoneID	no	
'Tzname'	TimezoneName	no	
'Tzoffsetfrom'	TimezoneOffsetFrom	no	
'Tzoffsetto'	TimezoneOffsetTo	no	
'Tzurl'	TimeZoneURL	no	
'Uid'	UID	no	
'Url'	URL	no	
'Version'	VCalendarVersion	no	
'X-apple-calendar-color'	CalendarColor	no	
'X-apple-default-alarm'	DefaultAlarm	no	
'X-apple-local-default-alarm'	LocalDefaultAlarm	no	
'X-microsoft-cdo-alldayevent'	AllDayEvent	no	
'X-microsoft-cdo-appt-sequence'	AppointmentSequence	no	
'X-microsoft-cdo-busystatus'	BusyStatus	no	
'X-microsoft-cdo-importance'	Importance	no	0 = Low 1 = Normal 2 = High
'X-microsoft-cdo-insttype'	InstanceType	no	0 = Non-recurring Appointment 1 = Recurring Appointment 2 = Single Instance of Recurring Appointment 3 = Exception to Recurring Appointment
'X-microsoft-cdo-intendedstatus'	IntendedBusyStatus	no	

'X-microsoft-cdo-ownerapptid'	OwnerAppointmentID	no
'X-microsoft-disallow-counter'	DisallowCounterProposal	no
'X-microsoft-donotforwardmeeting'	DoNotForwardMeeting	no
'X-microsoft-locations'	MeetingLocations	no
'X-wr-alarmuid'	AlarmUID	no
'X-wr-caldesc'	CalendarDescription	no
'X-wr-calname'	CalendarName	no
'X-wr-relcalid'	CalendarID	no
'X-wr-timezone'	TimeZone2	no

## VCard VNote Tags

Tags extracted from V-Note VNT files.

Tag ID	Tag Name	Writable	Values / Notes
'Body'	Body	no	
'Dcreated'	CreateDate	no	
'Last-modified'	ModifyDate	no	
'Version'	Version	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Feb 9, 2023

[--> ExifTool Tag Names](#)

# Vorbis Tags

Information extracted from Ogg Vorbis files. See <http://www.xiph.org/vorbis/doc/> for the Vorbis specification.

Tag ID	Tag Name	Writable	Values / Notes
0x0001	Identification	-	--> <a href="#">Vorbis Identification Tags</a>
0x0003	Comments	-	--> <a href="#">Vorbis Comments Tags</a>

## Vorbis Comments Tags

The tags below are only some common tags found in the Vorbis comments of Ogg Vorbis and Ogg FLAC audio files, however ExifTool will extract values from any tag found, even if not listed here.

Tag ID	Tag Name	Writable	Values / Notes
'ACTOR'	Actor	no	
'ALBUM'	Album	no	
'ARTIST'	Artist	no+	
'COMMENT'	Comment	no	
'COMPOSER'	Composer	no	
'CONTACT'	Contact	no+	
'COPYRIGHT'	Copyright	no	
'COVERART'	CoverArt	no	(base64-encoded image)
'COVERARTMIME'	CoverArtMIMEType	no	
'DATE'	Date	no	
'DESCRIPTION'	Description	no	
'DIRECTOR'	Director	no	
'ENCODED_BY'	EncodedBy	no	
'ENCODED_USING'	EncodedUsing	no	
'ENCODER'	Encoder	no	
'ENCODER_OPTIONS'	EncoderOptions	no	
'GENRE'	Genre	no	
'ISRC'	ISRCNumber	no	
'LICENSE'	License	no	
'LOCATION'	Location	no	
'METADATA_BLOCK_PICTURE'	Picture	-	--> <a href="#">FLAC Picture Tags</a>
'ORGANIZATION'	Organization	no	
'PERFORMER'	Performer	no+	
'PRODUCER'	Producer	no	
'REPLAYGAIN_ALBUM_GAIN'	ReplayGainAlbumGain	no	
'REPLAYGAIN_ALBUM_PEAK'	ReplayGainAlbumPeak	no	
'REPLAYGAIN_TRACK_GAIN'	ReplayGainTrackGain	no	
'REPLAYGAIN_TRACK_PEAK'	ReplayGainTrackPeak	no	
'TITLE'	Title	no	
'TRACKNUMBER'	TrackNumber	no	
'VERSION'	Version	no	
'vendor'	Vendor	no	(from comment header)

## Vorbis Identification Tags

Index1	Tag Name	Writable	Values / Notes
0	VorbisVersion	no	
4	AudioChannels	no	
5	SampleRate	no	
9	MaximumBitrate	no	

13 NominalBitrate no

17 MinimumBitrate no

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(This document generated automatically by Image::ExifTool::BuildTagLookup)

*Last revised Jul 14, 2016*

[<-- ExifTool Tag Names](#)

# WPG Tags

Tags extracted from WordPerfect Graphics (WPG) images.

Tag Name	Writable	Values / Notes
ImageHeightInches	no	
ImageWidthInches	no	
Records	no+	(records for version 1.0 files) 0x01 = Fill Attributes 0x02 = Line Attributes 0x03 = Marker Attributes 0x04 = Polymarker 0x05 = Line 0x06 = Polyline 0x07 = Rectangle 0x08 = Polygon 0x09 = Ellipse 0x0a = Reserved 0x0b = Bitmap (Type 1) 0x0c = Graphics Text (Type 1) 0x0d = Graphics Text Attributes 0x0e = Color Map 0x0f = Start WPG (Type 1) 0x10 = End WPG 0x11 = PostScript Data (Type 1) 0x12 = Output Attributes 0x13 = Curved Polyline 0x14 = Bitmap (Type 2) 0x15 = Start Figure 0x16 = Start Chart 0x17 = PlanPerfect Data 0x18 = Graphics Text (Type 2) 0x19 = Start WPG (Type 2) 0x1a = Graphics Text (Type 3) 0x1b = PostScript Data (Type 2)
RecordsV2	no+	(records for version 2.0 files) 0x00 = End Marker 0x01 = Start WPG 0x02 = End WPG 0x03 = Form Settings 0x04 = Ruler Settings 0x05 = Grid Settings 0x06 = Layer 0x08 = Pen Style Definition 0x09 = Pattern Definition 0x0a = Comment 0x0b = Color Transfer 0x0c = Color Palette 0x0d = DP Color Palette 0x0e = Bitmap Data 0x0f = Text Data 0x10 = Chart Style 0x11 = Chart Data 0x12 = Object Image 0x15 = Polyline 0x16 = Polyspline 0x17 = Polycurve 0x18 = Rectangle 0x19 = Arc 0x1a = Compound Polygon 0x1b = Bitmap 0x1c = Text Line 0x1d = Text Block 0x1e = Text Path 0x1f = Chart 0x20 = Group 0x21 = Object Capsule 0x22 = Font Settings 0x25 = Pen Fore Color 0x26 = DP Pen Fore Color 0x27 = Pen Back Color 0x28 = DP Pen Back Color 0x29 = Pen Style 0x2a = Pen Pattern 0x2b = Pen Size 0x2c = DP Pen Size 0x2d = Line Cap 0x2e = Line Join 0x2f = Brush Gradient 0x30 = DP Brush Gradient 0x31 = Brush Fore Color 0x32 = DP Brush Fore Color 0x33 = Brush Back Color 0x34 = DP Brush Back Color 0x35 = Brush Pattern 0x36 = Horizontal Line 0x37 = Vertical Line 0x38 = Poster Settings 0x39 = Image State 0x3a = Envelope Definition 0x3b = Envelope 0x3c = Texture Definition 0x3d = Brush Texture 0x3e = Texture Alignment 0x3f = Pen Texture
WPGVersion	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised May 3, 2023

[-- ExifTool Tag Names](#)

# WTV Tags

Tags found in Windows recorded TV (WTV) videos.

Tag ID	Tag Name	Writable	Values / Notes
'table.0.entries.legacy_attrib'	Metdata	-	--> <a href="#">WTV Metadata Tags</a>

## WTV Metadata Tags

ExifTool will extract any tag found, even if not in this table.

Tag Name	Writable	Values / Notes
ATSCContent	no	0 = No 1 = Yes
ActualSoftPostPadding	no	
ActualSoftPrePadding	no	
Bitrate?	no	(unknown units)
BrandingImageID	no	
BrandingName	no	
ContentProtected	no	0 = No 1 = Yes
ContentProtectedPercent	no	
DTVContent	no	0 = No 1 = Yes
Duration	no	
EncodeTime	no	
EndTime	no	
ExpirationDate?	no	
ExpirationSpan?	no	(unknown units)
Genre	no	
HDContent	no	0 = No 1 = Yes
HardPostPadding	no	
HardPrePadding	no	
InBandRatingAttributes	no	
InBandRatingLevel	no	
InBandRatingSystem	no	
KeepUntil	no	
Language	no	
MediaClassPrimaryID	no	
MediaClassSecondaryID	no	
MediaCredits	no	
MedialsDelay	no	0 = No 1 = Yes
MedialsFinale	no	0 = No 1 = Yes
MedialsLive	no	0 = No 1 = Yes
MedialsMovie	no	0 = No 1 = Yes
MedialsPremiere	no	0 = No 1 = Yes
MedialsRepeat	no	0 = No 1 = Yes
MedialsSAP	no	0 = No 1 = Yes
MedialsSport	no	0 = No 1 = Yes
MedialsStereo	no	0 = No 1 = Yes
MedialsSubtitled	no	0 = No 1 = Yes
MedialsTape	no	0 = No 1 = Yes
MediaNetworkAffiliation	no	
MediaOriginalBroadcastDateTime	no	
MediaOriginalChannel	no	
MediaOriginalChannelSubNumber	no	

MediaOriginalRunTime	no	
MediaStationCallSign	no	
MediaStationName	no	
MediaThumbAspectRatioX	no	
MediaThumbAspectRatioY	no	
MediaThumbHeight	no	
MediaThumbRatingAttributes	no	
MediaThumbRatingLevel	no	
MediaThumbRatingSystem	no	
MediaThumbRet	no	
MediaThumbStride	no	
MediaThumbTimeStamp?	no	(unknown units)
MediaThumbWidth	no	
OriginalReleaseTime	no	
OriginalSoftPostPadding	no	
OriginalSoftPrePadding	no	
ParentalRating	no	
ParentalRatingReason	no	
ProgramID	no	
Provider	no	
ProviderCopyright	no	
ProviderRating	no	
Quality	no	
RequestID	no	
ScheduleItemID	no	
SeriesUID	no	
ServiceID	no	
Subtitle	no	
SubtitleDescription	no	
Title	no	
VideoClosedCaptioning	no	0 = No 1 = Yes
Watched	no	0 = No 1 = Yes

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Jun 5, 2018*

[-- ExifTool Tag Names](#)

# WavPack Tags

Tags extracted from the header of WavPack (WV and WVP) audio files. These files may also contain RIFF, ID3 and/or APE metadata which is also extracted by ExifTool. See <https://www.wavpack.com/WavPack5FileFormat.pdf> for the WavPack specification.

Index	Tag Name	Writable	Values / Notes
6.1	BytesPerSample	no	[val & 0x3]
6.2	AudioType	no	[val >> 2 & 0x1] 0 = Stereo 1 = Mono
6.3	Compression	no	[val >> 3 & 0x1] 0 = Lossless 1 = Hybrid
6.4	DataFormat	no	[val >> 7 & 0x1] 0 = Integer 1 = Floating Point
6.5	SampleRate	no	[val >> 23 & 0xf] 0 = 6000    6 = 22050    12 = 88200 1 = 8000    7 = 24000    13 = 96000 2 = 9600    8 = 32000    14 = 192000 3 = 11025    9 = 44100    15 = Custom 4 = 12000    10 = 48000 5 = 16000    11 = 64000

(This document generated automatically by Image::ExifTool::BuildTagLookup)

Last revised Sep 25, 2025

[--> ExifTool Tag Names](#)

# XISF Tags

This table lists some standard Extensible Image Serialization Format (XISF) tags, but ExifTool will extract any other tags found. See <https://pixinsight.com/xisf/> for the specification.

Tag ID	Tag Name	Writable	Values / Notes
'Abstract'	Abstract	no	
'AccessRights'	AccessRights	no	
'Authors'	Authors	no	
'BibliographicReferences'	BibliographicReferences	no	
'BriefDescription'	BriefDescription	no	
'CompressionCodecs'	CompressionCodecs	no	
'CompressionLevel'	CompressionLevel	no	
'Contributors'	Contributors	no	
'Copyright'	Copyright	no	
'CreationTime'	CreateDate	no	
'CreatorApplication'	CreatorApplication	no	
'CreatorModule'	CreatorModule	no	
'CreatorOS'	CreatorOS	no	
'Description'	Description	no	
'ImageBounds'	ImageBounds	no	
'ImageColorSpace'	ColorSpace	no	
'ImageData'	ImageData	no	
'ImageGeometry'	ImageGeometry	no	
'ImageICCProfile'	ICC_Profile	no	
'ImageICCProfileLocation'	ICCProfileLocation	no	
'ImageId'	ImageID	no	
'ImageImageType'	ImageType	no	
'ImageLocation'	ImageLocation	no	
'ImageOffset'	ImagePixelOffset	no	
'ImageOrientation'	Orientation	no	
'ImagePixelStorage'	ImagePixelStorage	no	
'ImageResolutionHorizontal'	XResolution	no	
'ImageResolutionUnit'	ResolutionUnit	no	
'ImageResolutionVertical'	YResolution	no	
'ImageSampleFormat'	ImageSampleFormat	no	
'ImageUuid'	UUID	no	
'Keywords'	Keywords	no	
'Languages'	Languages	no	
'License'	License	no	
'OriginalCreationTime'	DateTimeOriginal	no	
'RelatedResources'	RelatedResources	no	
'Title'	Title	no	

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
Last revised Oct 16, 2023

[--> ExifTool Tag Names](#)

# XMP Tags

XMP stands for "Extensible Metadata Platform", an XML/RDF-based metadata format which is being pushed by Adobe. Information in this format can be embedded in many different image file types including JPG, JP2, TIFF, GIF, EPS, PDF, PSD, IND, INX, PNG, DJVU, SVG, PGF, MIFF, XCF, CRW, DNG and a variety of proprietary TIFF-based RAW images, as well as MOV, AVI, ASF, WMV, FLV, SWF and MP4 videos, and WMA and audio formats supporting ID3v2 information.

The XMP Tag ID's aren't listed because in most cases they are identical to the **Tag Name** (aside from differences in case). Tags with different ID's are mentioned in the **Notes** column of the HTML version of this document.

All XMP information is stored as character strings. The **Writable** column specifies the information format: **string** is an unformatted string, **integer** is a string of digits (possibly beginning with a '+' or '-'), **real** is a floating point number, **rational** is entered as a floating point number but stored as two **integer** strings separated by a '/' character, **date** is a date/time string entered in the format "YYYY:mm:dd HH:MM:SS[.ss][+/-HH:MM]" but some partial date/time formats are also accepted (see [faq.html#Q5](#)), **boolean** is either "True" or "False" (but "true" and "false" may be written as a ValueConv value for compatibility with non-conforming applications), **struct** indicates a structured tag, and **lang-alt** is a tag that supports alternate languages.

When reading, **struct** tags are extracted only if the **Struct** (-struct) option is used. Otherwise the corresponding **Flattened** tags, indicated by an underline (\_) after the **Writable** type, are extracted. When copying, by default both structured and flattened tags are available, but the flattened tags are considered "unsafe" so they aren't copied unless specified explicitly. The **Struct** option may be disabled by setting Struct to 0 via the API or with --struct on the command line to copy only flattened tags, or enabled by setting Struct to 1 via the API or with -struct on the command line to copy only as structures. When writing, the **Struct** option has no effect, and both structured and flattened tags may be written. See [struct.html](#) for more details.

Individual languages for **lang-alt** tags are accessed by suffixing the tag name with a '-', followed by an RFC 3066 language code (eg. "XMP:Title-fr", or "Rights-en-US"). (See <http://www.ietf.org/rfc/rfc3066.txt> for the RFC 3066 specification.) A **lang-alt** tag with no language code accesses the "x-default" language, but causes other languages for this tag to be deleted when writing. The "x-default" language code may be specified when writing to preserve other existing languages (eg. "XMP dc:Description-x-default"). When reading, "x-default" is not specified.

The XMP tags are organized according to schema **Namespace** in the following tables. The ExifTool family 1 group names are derived from the namespace prefixes by adding a leading "XMP-" (eg. "XMP-dc"). A few of the longer prefixes have been shortened (as mentioned in the documentation below) to avoid excessively long ExifTool group names. The tags of any namespace may be deleted as a group by specifying the family 1 group name (eg. "-XMP-dc:all=" on the command line). This includes namespaces which are not predefined by ExifTool.

In cases where a tag name exists in more than one namespace, less common namespaces are avoided when writing. However, a specific namespace may be written by providing a family 1 group name for the tag (eg. XMP-crs:Contrast or XMP-exif:Contrast). When deciding on which tags to add to an image, using standard schemas such as **dc**, **xmp**, **iptcCore** and **iptcExt** is recommended if possible.

For structures, the heading of the first column is **Field Name**. Field names are very similar to tag names, except they are used to identify fields inside structures instead of stand-alone tags. See [the Field Name section of the Structured Information documentation](#) for more details.

ExifTool will extract XMP information even if it is not listed in these tables, but other tags are not writable unless added as user-defined tags in the [ExifTool config file](#). For example, the **pdfx** namespace doesn't have a predefined set of tag names because it is used to store application-defined PDF information, so although this information will be extracted, it is only writable if the corresponding user-defined tags have been created.

The tables below list tags from the official XMP specification (with an underlined **Namespace** in the HTML version of this documentation), as well as extensions from various other sources. See <http://www.adobe.com/devnet/xmp/> for the official XMP specification.

Namespace	Writable	Values / Notes
aas	-	--> <a href="#">XMP aas Tags</a>
acdsee	-	--> <a href="#">XMP acdsee Tags</a>
acdsee-rs	-	--> <a href="#">XMP ACDSeeRegions Tags</a>
album	-	--> <a href="#">XMP Album Tags</a>
apdi	-	--> <a href="#">XMP apdi Tags</a>
apple-fi	-	--> <a href="#">XMP apple_fi Tags</a>
ast	-	--> <a href="#">Nikon ast Tags</a>
<u>aux</u>	-	--> <a href="#">XMP aux Tags</a>
cc	-	--> <a href="#">XMP cc Tags</a>
cell	-	--> <a href="#">XMP cell Tags</a>
crd	-	--> <a href="#">XMP crd Tags</a>
creatorAtom	-	--> <a href="#">XMP creatorAtom Tags</a>
crs	-	--> <a href="#">XMP crs Tags</a>
<u>dc</u>	-	--> <a href="#">XMP dc Tags</a>
Device	-	--> <a href="#">Google Device Tags</a>
dex	-	--> <a href="#">XMP dex Tags</a>
DICOM	-	--> <a href="#">XMP DICOM Tags</a>
digiKam	-	--> <a href="#">XMP digiKam Tags</a>
drone-dji	-	--> <a href="#">DJI XMP Tags</a>
dwc	-	--> <a href="#">DarwinCore Tags</a>
et	-	--> <a href="#">XMP ExifTool Tags</a>
<u>exif</u>	-	--> <a href="#">XMP exif Tags</a>
exifEX	-	--> <a href="#">XMP exifEX Tags</a>
expressionmedia	-	--> <a href="#">XMP ExpressionMedia Tags</a>
extensis	-	--> <a href="#">XMP extensis Tags</a>
fpv	-	--> <a href="#">XMP fpv Tags</a>
GAudio	-	--> <a href="#">Google GAudio Tags</a>
GCamera	-	--> <a href="#">Google GCamera Tags</a>
GContainer	-	--> <a href="#">Google GContainer Tags</a>
GC Creations	-	--> <a href="#">Google GC Creations Tags</a>
GDepth	-	--> <a href="#">Google GDepth Tags</a>
getty	-	--> <a href="#">XMP GettyImages Tags</a>
GFocus	-	--> <a href="#">Google GFocus Tags</a>
GlImage	-	--> <a href="#">Google GlImage Tags</a>
GPano	-	--> <a href="#">Google GPano Tags</a>
GSpherical	-	--> <a href="#">Google GSpherical Tags</a>
hdr	-	--> <a href="#">XMP hdr Tags</a>
HDRGainMap	-	--> <a href="#">XMP HDRGainMap Tags</a>
hdrgm	-	--> <a href="#">XMP hdrgm Tags</a>
ics	-	--> <a href="#">XMP ics Tags</a>
iptcCore	-	--> <a href="#">XMP iptcCore Tags</a>
iptcExt	-	--> <a href="#">XMP iptcExt Tags</a>
LImage	-	--> <a href="#">XMP LImage Tags</a>
lr	-	--> <a href="#">XMP Lightroom Tags</a>

mediapro	-	--> XMP MediaPro Tags
microsoft	-	--> Microsoft XMP Tags
MP	-	--> Microsoft MP Tags
MP1	-	--> Microsoft MP1 Tags
mwg-coll	-	--> MWG Collections Tags
mwg-kw	-	--> MWG Keywords Tags
mwg-rs	-	--> MWG Regions Tags
nine	-	--> Nikon nine Tags
panorama	-	--> XMP panorama Tags
pdf	-	--> XMP pdf Tags
pdfx	-	--> XMP pdfx Tags
photomech	-	--> PhotoMechanic XMP Tags
photoshop	-	--> XMP photoshop Tags
PixelLive	-	--> XMP PixelLive Tags
plus	-	--> PLUS XMP Tags
pmi	-	--> XMP pmi Tags
prism	-	--> XMP prism Tags
prl	-	--> XMP prl Tags
prm	-	--> XMP prm Tags
pur	-	--> XMP pur Tags
rdf	-	--> XMP rdf Tags
sdc	-	--> Nikon sdc Tags
seal	-	--> XMP seal Tags
swf	-	--> XMP swf Tags
tiff	-	--> XMP tiff Tags
x	-	--> XMP x Tags
xmp	-	--> XMP xmp Tags
xmpBJ	-	--> XMP xmpBJ Tags
xmpDM	-	--> XMP xmpDM Tags
xmpDSA	-	--> Panasonic DSA Tags
xmpMM	-	--> XMP xmpMM Tags
xmpNote	-	--> XMP xmpNote Tags
xmpPLUS	-	--> XMP xmpPLUS Tags
xmpRights	-	--> XMP xmpRights Tags
xmpTPg	-	--> XMP xmpTPg Tags

## XMP aas Tags

Apple Adjustment Settings used by iPhone/iPad.

These tags belong to the ExifTool XMP-aas family 1 group.

Tag Name	Writable	Values / Notes
AffineA	real	
AffineB	real	
AffineC	real	
AffineD	real	
AffineX	real	
AffineY	real	
CropH	integer/	
CropW	integer/	
CropX	integer/	
CropY	integer/	
Curve0x	real	
Curve0y	real	
Curve1x	real	
Curve1y	real	
Curve2x	real	
Curve2y	real	
Curve3x	real	
Curve3y	real	
Curve4x	real	
Curve4y	real	
FaceBalanceOrigI	real	
FaceBalanceOrigQ	real	
FaceBalanceStrength	real	
FaceBalanceWarmth	real	
Highlights	real/	
Shadows	real/	
Vibrance	real/	

## XMP acdsee Tags

ACD Systems ACDSee namespace tags.

(A note to software developers: Re-inventing your own private tags instead of using the equivalent tags in standard XMP namespaces defeats one of the most valuable features of metadata: interoperability. Your applications mumble to themselves instead of speaking out for the rest of the world to hear.)

These tags belong to the ExifTool XMP-acdsee family 1 group.

Tag Name	Writable	Values / Notes
Author	string/	
Caption	string/	

Categories	string/
Collections	string/
DateTime	date/
DPP	lang-alt/ (newer version of XML raw processing settings)
EditStatus	string/
FixtureIdentifier	string/
Keywords	string/+
Notes	string/
ObjectCycle	string/
OriginatingProgram	string/
Rating	real/
Rawrppused	boolean/
ReleaseDate	string/
ReleaseTime	string/
RPP	lang-alt/ (raw processing settings in XML format)
Snapshots	string/+
Tagged	boolean/

## XMP ACDSeeRegions Tags

These tags belong to the ExifTool XMP-acdsee-rs family 1 group.

Tag Name	Writable	Values / Notes
RegionInfoACDSee	struct	--> <a href="#">ACDSeeRegionInfo Struct</a> (tag ID is 'Regions')
ACDSeeRegionAppliedToDimensions	struct_	--> <a href="#">ACDSeeDimensions Struct</a> (RegionsAppliedToDimensions)
ACDSeeRegionAppliedToDimensionsH	real/_	(RegionsAppliedToDimensionsH)
ACDSeeRegionAppliedToDimensionsUnit	string/_	(RegionsAppliedToDimensionsUnit)
ACDSeeRegionAppliedToDimensionsW	real/_	(RegionsAppliedToDimensionsW)
ACDSeeRegion	struct_ +	--> <a href="#">ACDSeeRegion Struct</a> (RegionsRegionList)
ACDSeeRegionALGArea	struct_ +	--> <a href="#">ACDSeeArea Struct</a> (RegionsRegionListALGArea)
ACDSeeRegionALGAreaH	real/_ +	(RegionsRegionListALGAreaH)
ACDSeeRegionALGAreaW	real/_ +	(RegionsRegionListALGAreaW)
ACDSeeRegionALGAreaX	real/_ +	(RegionsRegionListALGAreaX)
ACDSeeRegionALGAreaY	real/_ +	(RegionsRegionListALGAreaY)
ACDSeeRegionDLYArea	struct_ +	--> <a href="#">ACDSeeArea Struct</a> (RegionsRegionListDLYArea)
ACDSeeRegionDLYAreaH	real/_ +	(RegionsRegionListDLYAreaH)
ACDSeeRegionDLYAreaW	real/_ +	(RegionsRegionListDLYAreaW)
ACDSeeRegionDLYAreaX	real/_ +	(RegionsRegionListDLYAreaX)
ACDSeeRegionDLYAreaY	real/_ +	(RegionsRegionListDLYAreaY)
ACDSeeRegionName	string/_ +	(RegionsRegionListName)
ACDSeeRegionNameAssignType	string/_ +	(RegionsRegionListNameAssignType)
ACDSeeRegionType	string/_ +	(RegionsRegionListType)

## XMP ACDSeeRegionInfo Struct

Field Name	Writable	Values / Notes
AppliedToDimensions	ACDSeeDimensions	--> <a href="#">ACDSeeDimensions Struct</a>
RegionList	ACDSeeRegion+	--> <a href="#">ACDSeeRegion Struct</a>

## XMP ACDSeeDimensions Struct

Field Name	Writable	Values / Notes
H	real	
Unit	string	
W	real	

## XMP ACDSeeRegion Struct

Field Name	Writable	Values / Notes
ALGArea	ACDSeeArea	--> <a href="#">ACDSeeArea Struct</a>
DLYArea	ACDSeeArea	--> <a href="#">ACDSeeArea Struct</a>
Name	string	
NameAssignType	string	
Type	string	

## XMP ACDSeeArea Struct

Field Name	Writable	Values / Notes
H	real	
W	real	
X	real	
Y	real	

## XMP Album Tags

Adobe Album namespace tags.

These tags belong to the ExifTool XMP-album family 1 group.

Tag Name	Writable	Values / Notes
Notes	string	

## XMP apdi Tags

Used in Apple HDR GainMap images.

These tags belong to the ExifTool XMP-apdi family 1 group.

Tag Name	Writable	Values / Notes
AuxiliaryImageType	string	
NativeFormat	string	
StoredFormat	string	

## XMP apple\_fi Tags

Face information tags written by the Apple iPhone 5 inside the mwg-rs RegionExtensions.

These tags belong to the ExifTool XMP-apple-fi family 1 group.

Tag Name	Writable	Values / Notes
AngleInfoRoll	integer	
AngleInfoYaw	integer	
ConfidenceLevel	integer	
FaceID	integer	
TimeStamp	integer	

## XMP aux Tags

Adobe-defined auxiliary EXIF tags. This namespace existed in the XMP specification until it was dropped in 2012, presumably due to the introduction of the EXIF 2.3 for XMP specification and the exifEX namespace at this time. For this reason, tags below with equivalents in the [exifEX namespace](#) are avoided when writing.

These tags belong to the ExifTool XMP-aux family 1 group.

Tag Name	Writable	Values / Notes
ApproximateFocusDistance	rational	4294967295 = infinity
DistortionCorrectionAlreadyApplied	boolean	
EnhanceDenoiseAlreadyApplied	boolean	
EnhanceDenoiseLumaAmount	string	
EnhanceDenoiseVersion	string	
EnhanceDetailsAlreadyApplied	boolean	
EnhanceDetailsVersion	string	
EnhanceSuperResolutionAlreadyApplied	boolean	
EnhanceSuperResolutionScale	rational	
EnhanceSuperResolutionVersion	string	
Firmware	string	
FlashCompensation	rational	
ImageNumber	string	
IsMergedHDR	boolean	
IsMergedPanorama	boolean	
LateralChromaticAberrationCorrectionAlreadyApplied	boolean	
Lens	string	
LensDistortInfo	string	
LensID	string	
LensInfo	string/	(4 rational values giving focal and aperture ranges)
LensSerialNumber	string/	
NeutralDensityFactor	string	
OwnerName	string/	
SerialNumber	string/	
VignetteCorrectionAlreadyApplied	boolean	

## XMP cc Tags

Creative Commons namespace tags. Note that the CC specification for XMP is non-existent, so ExifTool must make some assumptions about the format of the specific properties in XMP (see <http://creativecommons.org/ns>).

These tags belong to the ExifTool XMP-cc family 1 group.

Tag Name	Writable	Values / Notes
AttributionName	string	
AttributionURL	string	
DeprecatedOn	date	
Jurisdiction	string	
LegalCode	string	
License	string	
MorePermissions	string	
Permits	string+	'cc:DerivativeWorks' = Derivative Works 'cc:Distribution' = Distribution 'cc:Reproduction' = Reproduction 'cc:Sharing' = Sharing
Prohibits	string+	'cc:CommercialUse' = Commercial Use 'cc:HighIncomeNationUse' = High Income Nation Use
Requires	string+	'cc:Attribution' = Attribution 'cc:Copyleft' = Copyleft 'cc:LesserCopyleft' = Lesser Copyleft 'cc:Notice' = Notice 'cc:ShareAlike' = Share Alike 'cc:SourceCode' = Source Code

## XMP cell Tags

Location tags written by some Sony Ericsson phones.

These tags belong to the ExifTool XMP-cell family 1 group.

Tag Name	Writable	Values / Notes
CellTowerID	string	(tag ID is 'cellid')
CellGlobalID	string	(tag ID is 'cgi')
LocationAreaCode	string	(tag ID is 'lac')
MobileCountryCode	string	(tag ID is 'mcc')
MobileNetworkCode	string	(tag ID is 'mnc')
CellR	string	(tag ID is 'r')

## XMP crd Tags

Adobe Camera Raw Defaults tags.

These tags belong to the ExifTool XMP-crd family 1 group.

Tag Name	Writable	Values / Notes
AlreadyApplied	boolean/	
AutoBrightness	boolean/	
AutoContrast	boolean/	
AutoExposure	boolean/	
AutoLateralCA	integer/	
AutoShadows	boolean/	
AutoTone	boolean/	
AutoToneDigest	string/	
AutoToneDigestNoSat	string/	
AutoWhiteVersion	integer/	
Blacks2012	integer/	
BlueHue	integer/	
BlueSaturation	integer/	
Brightness	integer/	
CameraModelRestriction	string/	
CameraProfile	string/	
CameraProfileDigest	string/	
ChromaticAberrationB	integer/	
ChromaticAberrationR	integer/	
CircularGradientBasedCorrections	struct+ --> <a href="#">Correction Struct</a>	
CircGradBasedCorrActive	boolean/_	(CircularGradientBasedCorrectionsCorrectionActive)
CircGradBasedCorrAmount	real/_	(CircularGradientBasedCorrectionsCorrectionAmount)
CircGradBasedCorrMasks	struct_+ --> <a href="#">CorrectionMask Struct</a>	(CircularGradientBasedCorrectionsCorrectionMasks)
CircGradBasedCorrMaskAlpha	real/_	(CircularGradientBasedCorrectionsCorrectionMasksAlpha)
CircGradBasedCorrMaskAngle	real/_	(CircularGradientBasedCorrectionsCorrectionMasksAngle)
CircGradBasedCorrMaskBottom	real/_	(CircularGradientBasedCorrectionsCorrectionMasksBottom)
CircGradBasedCorrMaskCenterValue	real/_	(CircularGradientBasedCorrectionsCorrectionMasksCenterValue)
CircGradBasedCorrMaskCenterWeight	real/_	(CircularGradientBasedCorrectionsCorrectionMasksCenterWeight)
CircGradBasedCorrMaskRange	struct_+ --> <a href="#">CorrRangeMask Struct</a>	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
CircGradBasedCorrMaskRangeAreaModels	struct_+ --> <a href="#">AreaModels Struct</a>	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
CircGradBasedCorrMaskRangeAreaModelsComponents	string/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsComponents)
CircGradBasedCorrMaskRangeAreaModelsColorSampleInfo	string/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
CircGradBasedCorrMaskRangeColorAmount	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
CircGradBasedCorrMaskRangeDepthFeather	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
CircGradBasedCorrMaskRangeDepthMax	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
CircGradBasedCorrMaskRangeDepthMin	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
CircGradBasedCorrMaskRangeInvert	boolean/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
CircGradBasedCorrMaskRangeLumFeather	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
CircGradBasedCorrMaskRangeLuminanceDepthSampleInfo	string/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
CircGradBasedCorrMaskRangeLumMax	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
CircGradBasedCorrMaskRangeLumMin	real/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
CircGradBasedCorrMaskRangeLumRange	string/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
CircGradBasedCorrMaskRangeSampleType	integer/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
CircGradBasedCorrMaskRangeType	string/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
CircGradBasedCorrMaskRangeVersion	string/_+	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
CircGradBasedCorrMaskDabs	string/_	(CircularGradientBasedCorrectionsCorrectionMasksDabs)
CircGradBasedCorrMaskFeather	real/_	(CircularGradientBasedCorrectionsCorrectionMasksFeather)
CircGradBasedCorrMaskFlipped	boolean/_	(CircularGradientBasedCorrectionsCorrectionMasksFlipped)
CircGradBasedCorrMaskFlow	real/_	(CircularGradientBasedCorrectionsCorrectionMasksFlow)
CircGradBasedCorrMaskFullX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksFullX)
CircGradBasedCorrMaskFullY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksFullY)
CircGradBasedCorrMaskInputDigest	string/_	(CircularGradientBasedCorrectionsCorrectionMasksInputDigest)
CircGradBasedCorrMaskLeft	real/_	(CircularGradientBasedCorrectionsCorrectionMasksLeft)
CircGradBasedCorrMaskMaskActive	boolean/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskActive)
CircGradBasedCorrMaskMaskBlendMode	integer/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskBlendMode)
CircGradBasedCorrMaskMaskDigest	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskDigest)
CircGradBasedCorrMaskMaskInverted	boolean/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskInverted)

CircGradBasedCorrMaskMaskName	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskName)
CircGradBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (CircularGradientBasedCorrectionsCorrectionMasksMasks)
CircGradBasedCorrMaskMasksAlpha	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksAlpha)
CircGradBasedCorrMaskMasksAngle	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksAngle)
CircGradBasedCorrMaskMasksBottom	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksBottom)
CircGradBasedCorrMaskMasksCenterValue	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksCenterValue)
CircGradBasedCorrMaskMasksCenterWeight	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksCenterWeight)
CircGradBasedCorrMaskMasksDabs	string/_ +	(CircularGradientBasedCorrectionsCorrectionMasksMasksDabs)
CircGradBasedCorrMaskMasksFeather	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFeather)
CircGradBasedCorrMaskMasksFlipped	boolean/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFlipped)
CircGradBasedCorrMaskMasksFlow	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFlow)
CircGradBasedCorrMaskMasksFullX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFullX)
CircGradBasedCorrMaskMasksFullY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFullY)
CircGradBasedCorrMaskMasksInputDigest	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksInputDigest)
CircGradBasedCorrMaskMasksLeft	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksLeft)
CircGradBasedCorrMaskMasksMaskActive	boolean/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskActive)
CircGradBasedCorrMaskMasksMaskBlendMode	integer/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
CircGradBasedCorrMaskMasksMaskDigest	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskDigest)
CircGradBasedCorrMaskMasksMaskInverted	boolean/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskInverted)
CircGradBasedCorrMaskMasksMaskName	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskName)
CircGradBasedCorrMaskMasksMaskSubType	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskSubType)
CircGradBasedCorrMaskMasksMaskSyncID	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskSyncID)
CircGradBasedCorrMaskMasksValue	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskValue)
CircGradBasedCorrMaskMasksMaskVersion	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskVersion)
CircGradBasedCorrMaskMasksMidpoint	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMidpoint)
CircGradBasedCorrMaskMasksOrigin	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksOrigin)
CircGradBasedCorrMaskMasksPerimeterValue	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksPerimeterValue)
CircGradBasedCorrMaskMasksRadius	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksRadius)
CircGradBasedCorrMaskMasksReferencePoint	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksReferencePoint)
CircGradBasedCorrMaskMasksRight	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksRight)
CircGradBasedCorrMaskMasksRoundness	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksRoundness)
CircGradBasedCorrMaskMasksSizeX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksSizeX)
CircGradBasedCorrMaskMasksSizeY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksSizeY)
CircGradBasedCorrMaskMasksTop	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksTop)
CircGradBasedCorrMaskMaskSubType	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskSubType)
CircGradBasedCorrMaskMasksVersion	integer/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksVersion)
CircGradBasedCorrMaskMasksWhat	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksWhat)
CircGradBasedCorrMaskMasksWholeImageArea	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksWholeImageArea)
CircGradBasedCorrMaskMasksX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksX)
CircGradBasedCorrMaskMasksY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksY)
CircGradBasedCorrMaskMaskSyncID	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskSyncID)
CircGradBasedCorrMaskMasksZeroX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksZeroX)
CircGradBasedCorrMaskMasksZeroY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMasksZeroY)
CircGradBasedCorrMaskValue	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskValue)
CircGradBasedCorrMaskMaskVersion	string/_	(CircularGradientBasedCorrectionsCorrectionMasksMaskVersion)
CircGradBasedCorrMaskMidpoint	real/_	(CircularGradientBasedCorrectionsCorrectionMasksMidpoint)
CircGradBasedCorrMaskOrigin	string/_	(CircularGradientBasedCorrectionsCorrectionMasksOrigin)
CircGradBasedCorrMaskPerimeterValue	real/_	(CircularGradientBasedCorrectionsCorrectionMasksPerimeterValue)
CircGradBasedCorrMaskRadius	real/_	(CircularGradientBasedCorrectionsCorrectionMasksRadius)
CircGradBasedCorrMaskReferencePoint	string/_	(CircularGradientBasedCorrectionsCorrectionMasksReferencePoint)
CircGradBasedCorrMaskRight	real/_	(CircularGradientBasedCorrectionsCorrectionMasksRight)
CircGradBasedCorrMaskRoundness	real/_	(CircularGradientBasedCorrectionsCorrectionMasksRoundness)
CircGradBasedCorrMaskSizeX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksSizeX)
CircGradBasedCorrMaskSizeY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksSizeY)
CircGradBasedCorrMaskTop	real/_	(CircularGradientBasedCorrectionsCorrectionMasksTop)
CircGradBasedCorrMaskVersion	integer/_	(CircularGradientBasedCorrectionsCorrectionMasksVersion)
CircGradBasedCorrMaskWhat	string/_	(CircularGradientBasedCorrectionsCorrectionMasksWhat)
CircGradBasedCorrMaskWholeImageArea	string/_	(CircularGradientBasedCorrectionsCorrectionMasksWholeImageArea)
CircGradBasedCorrMaskX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksX)
CircGradBasedCorrMaskY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksY)
CircGradBasedCorrMaskZeroX	real/_	(CircularGradientBasedCorrectionsCorrectionMasksZeroX)
CircGradBasedCorrMaskZeroY	real/_	(CircularGradientBasedCorrectionsCorrectionMasksZeroY)
CircGradBasedCorrCorrectionName	string/_ +	(CircularGradientBasedCorrectionsCorrectionName)
CircGradBasedCorrRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (CircularGradientBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
CircGradBasedCorrRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (CircularGradientBasedCorrectionsCorrectionRangeMaskAreaModels)
CircGradBasedCorrRangeMaskAreaModelsComponents	string/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
CircGradBasedCorrRangeMaskAreaModelsColorSampleInfo	string/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
CircGradBasedCorrRangeMaskColorAmount	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskColorAmount)
CircGradBasedCorrRangeMaskDepthFeather	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskDepthFeather)
CircGradBasedCorrRangeMaskDepthMax	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskDepthMax)
CircGradBasedCorrRangeMaskDepthMin	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskDepthMin)
CircGradBasedCorrRangeMaskInvert	boolean/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskInvert)
CircGradBasedCorrRangeMaskLumFeather	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumFeather)
CircGradBasedCorrRangeMaskLuminanceDepthSampleInfo	string/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
CircGradBasedCorrRangeMaskLumMax	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumMax)
CircGradBasedCorrRangeMaskLumMin	real/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumMin)
CircGradBasedCorrRangeMaskLumRange	string/_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumRange)

CircGradBasedCorrRangeMaskSampleType	integer/_+ (CircularGradientBasedCorrectionsCorrectionRangeMaskSampleType)
CircGradBasedCorrRangeMaskType	string/_+ (CircularGradientBasedCorrectionsCorrectionRangeMaskType)
CircGradBasedCorrRangeMaskVersion	string/_+ (CircularGradientBasedCorrectionsCorrectionRangeMaskVersion)
CircGradBasedCorrCorrectionSyncID	string/_+ (CircularGradientBasedCorrectionsCorrectionSyncID)
CircGradBasedCorrBlacks2012	real/_ (CircularGradientBasedCorrectionsLocalBlacks2012)
CircGradBasedCorrBrightness	real/_ (CircularGradientBasedCorrectionsLocalBrightness)
CircGradBasedCorrClarity	real/_ (CircularGradientBasedCorrectionsLocalClarity)
CircGradBasedCorrClarity2012	real/_ (CircularGradientBasedCorrectionsLocalClarity2012)
CircGradBasedCorrContrast	real/_ (CircularGradientBasedCorrectionsLocalContrast)
CircGradBasedCorrContrast2012	real/_ (CircularGradientBasedCorrectionsLocalContrast2012)
CircGradBasedCorrDefringe	real/_ (CircularGradientBasedCorrectionsLocalDefringe)
CircGradBasedCorrDehaze	real/_ (CircularGradientBasedCorrectionsLocalDehaze)
CircGradBasedCorrExposure	real/_ (CircularGradientBasedCorrectionsLocalExposure)
CircGradBasedCorrExposure2012	real/_ (CircularGradientBasedCorrectionsLocalExposure2012)
CircGradBasedCorrHighlights2012	real/_ (CircularGradientBasedCorrectionsLocalHighlights2012)
CircGradBasedCorrHue	real/_ (CircularGradientBasedCorrectionsLocalHue)
CircGradBasedCorrLuminanceNoise	real/_ (CircularGradientBasedCorrectionsLocalLuminanceNoise)
CircGradBasedCorrMoire	real/_ (CircularGradientBasedCorrectionsLocalMoire)
CircGradBasedCorrSaturation	real/_ (CircularGradientBasedCorrectionsLocalSaturation)
CircGradBasedCorrShadows2012	real/_ (CircularGradientBasedCorrectionsLocalShadows2012)
CircGradBasedCorrSharpness	real/_ (CircularGradientBasedCorrectionsLocalSharpness)
CircGradBasedCorrTemperature	real/_ (CircularGradientBasedCorrectionsLocalTemperature)
CircGradBasedCorrTexture	real/_ (CircularGradientBasedCorrectionsLocalTexture)
CircGradBasedCorrTint	real/_ (CircularGradientBasedCorrectionsLocalTint)
CircGradBasedCorrToningHue	real/_ (CircularGradientBasedCorrectionsLocalToningHue)
CircGradBasedCorrToningSaturation	real/_ (CircularGradientBasedCorrectionsLocalToningSaturation)
CircGradBasedCorrWhites2012	real/_ (CircularGradientBasedCorrectionsLocalWhites2012)
CircGradBasedCorrWhat	string/_ (CircularGradientBasedCorrectionsWhat)
Clarity	integer/
Clarity2012	integer/
ClipboardAspectRatio	integer/
ClipboardOrientation	integer/
Cluster	string/
ColorGradeBlending	integer/
ColorGradeGlobalHue	integer/
ColorGradeGlobalLum	integer/
ColorGradeGlobalSat	integer/
ColorGradeHighlightLum	integer/
ColorGradeMidtoneHue	integer/
ColorGradeMidtoneLum	integer/
ColorGradeMidtoneSat	integer/
ColorGradeShadowLum	integer/
ColorNoiseReduction	integer/
ColorNoiseReductionDetail	integer/
ColorNoiseReductionSmoothness	integer/
CompatibleVersion	string/
ContactInfo	string/
Contrast	integer/
Contrast2012	integer/
Converter	string/
ConvertToGrayscale	boolean/
Copyright	string/
CropAngle	real/
CropBottom	real/
CropConstrainToWarp	integer/
CropHeight	real/
CropLeft	real/
CropRight	real/
CropTop	real/
CropUnit	integer/ 0 = pixels 1 = inches 2 = cm
CropUnits	integer/ 0 = pixels 1 = inches 2 = cm
CropWidth	real/
DefaultAutoGray	boolean/
DefaultAutoTone	boolean/
DefaultsSpecificToISO	boolean/
DefaultsSpecificToSerial	boolean/
Defringe	integer/
DefringeGreenAmount	integer/
DefringeGreenHueHi	integer/
DefringeGreenHueLo	integer/
DefringePurpleAmount	integer/
DefringePurpleHueHi	integer/
DefringePurpleHueLo	integer/
Dehaze	real/
DepthBasedCorrections	struct+ --> <a href="#">DepthBasedCorr Struct</a>
DepthBasedCorrCorrectionActive	boolean/_+ (DepthBasedCorrectionsCorrectionActive)
DepthBasedCorrCorrectionAmount	real/_+ (DepthBasedCorrectionsCorrectionAmount)

DepthBasedCorrMask	struct_+ --> <a href="#">CorrectionMask Struct</a> (DepthBasedCorrectionsCorrectionMasks)
DepthBasedCorrMaskAlpha	real/_ (DepthBasedCorrectionsCorrectionMasksAlpha)
DepthBasedCorrMaskAngle	real/_ (DepthBasedCorrectionsCorrectionMasksAngle)
DepthBasedCorrMaskBottom	real/_ (DepthBasedCorrectionsCorrectionMasksBottom)
DepthBasedCorrMaskCenterValue	real/_ (DepthBasedCorrectionsCorrectionMasksCenterValue)
DepthBasedCorrMaskCenterWeight	real/_ (DepthBasedCorrectionsCorrectionMasksCenterWeight)
DepthBasedCorrMaskRange	struct_+ --> <a href="#">CorrRangeMask Struct</a> (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
DepthBasedCorrMaskRangeAreaModels	struct_+ --> <a href="#">AreaModels Struct</a> (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
DepthBasedCorrMaskRangeAreaModelsComponents	string/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsAreaComponents)
DepthBasedCorrMaskRangeAreaModelsColorSampleInfo	string/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
DepthBasedCorrMaskRangeColorAmount	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
DepthBasedCorrMaskRangeDepthFeather	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
DepthBasedCorrMaskRangeDepthMax	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
DepthBasedCorrMaskRangeDepthMin	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
DepthBasedCorrMaskRangeInvert	boolean/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
DepthBasedCorrMaskRangeLumFeather	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
DepthBasedCorrMaskRangeLuminanceDepthSampleInfo	string/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
DepthBasedCorrMaskRangeLumMax	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
DepthBasedCorrMaskRangeLumMin	real/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
DepthBasedCorrMaskRangeLumRange	string/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
DepthBasedCorrMaskRangeSampleType	integer/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
DepthBasedCorrMaskRangeType	string/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
DepthBasedCorrMaskRangeVersion	string/_+ (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
DepthBasedCorrMaskDabs	string/_+ (DepthBasedCorrectionsCorrectionMasksDabs)
DepthBasedCorrMaskFeather	real/_ (DepthBasedCorrectionsCorrectionMasksFeather)
DepthBasedCorrMaskFlipped	boolean/_ (DepthBasedCorrectionsCorrectionMasksFlipped)
DepthBasedCorrMaskFlow	real/_ (DepthBasedCorrectionsCorrectionMasksFlow)
DepthBasedCorrMaskFullX	real/_ (DepthBasedCorrectionsCorrectionMasksFullX)
DepthBasedCorrMaskFullY	real/_ (DepthBasedCorrectionsCorrectionMasksFullY)
DepthBasedCorrMaskInputDigest	string/_ (DepthBasedCorrectionsCorrectionMasksInputDigest)
DepthBasedCorrMaskLeft	real/_ (DepthBasedCorrectionsCorrectionMasksLeft)
DepthBasedCorrMaskMaskActive	boolean/_ (DepthBasedCorrectionsCorrectionMasksMaskActive)
DepthBasedCorrMaskMaskBlendMode	integer/_ (DepthBasedCorrectionsCorrectionMasksMaskBlendMode)
DepthBasedCorrMaskMaskDigest	string/_ (DepthBasedCorrectionsCorrectionMasksMaskDigest)
DepthBasedCorrMaskMaskInverted	boolean/_ (DepthBasedCorrectionsCorrectionMasksMaskInverted)
DepthBasedCorrMaskMaskName	string/_ (DepthBasedCorrectionsCorrectionMasksMaskName)
DepthBasedCorrMaskMasks	struct_+ --> <a href="#">CorrectionMask Struct</a> (DepthBasedCorrectionsCorrectionMasksMasks)
DepthBasedCorrMaskMasksAlpha	real/_ (DepthBasedCorrectionsCorrectionMasksMasksAlpha)
DepthBasedCorrMaskMasksAngle	real/_ (DepthBasedCorrectionsCorrectionMasksMasksAngle)
DepthBasedCorrMaskMasksBottom	real/_ (DepthBasedCorrectionsCorrectionMasksMasksBottom)
DepthBasedCorrMaskMasksCenterValue	real/_ (DepthBasedCorrectionsCorrectionMasksMasksCenterValue)
DepthBasedCorrMaskMasksCenterWeight	real/_ (DepthBasedCorrectionsCorrectionMasksMasksCenterWeight)
DepthBasedCorrMaskMasksDabs	string/_+ (DepthBasedCorrectionsCorrectionMasksMasksDabs)
DepthBasedCorrMaskMasksFeather	real/_ (DepthBasedCorrectionsCorrectionMasksMasksFeather)
DepthBasedCorrMaskMasksFlipped	boolean/_ (DepthBasedCorrectionsCorrectionMasksMasksFlipped)
DepthBasedCorrMaskMasksFlow	real/_ (DepthBasedCorrectionsCorrectionMasksMasksFlow)
DepthBasedCorrMaskMasksFullX	real/_ (DepthBasedCorrectionsCorrectionMasksMasksFullX)
DepthBasedCorrMaskMasksFullY	real/_ (DepthBasedCorrectionsCorrectionMasksMasksFullY)
DepthBasedCorrMaskMasksInputDigest	string/_ (DepthBasedCorrectionsCorrectionMasksMasksInputDigest)
DepthBasedCorrMaskMasksLeft	real/_ (DepthBasedCorrectionsCorrectionMasksMasksLeft)
DepthBasedCorrMaskMasksMaskActive	boolean/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskActive)
DepthBasedCorrMaskMasksMaskBlendMode	integer/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
DepthBasedCorrMaskMasksMaskDigest	string/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskDigest)
DepthBasedCorrMaskMasksMaskInverted	boolean/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskInverted)
DepthBasedCorrMaskMasksMaskName	string/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskName)
DepthBasedCorrMaskMasksMaskSubType	string/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskSubType)
DepthBasedCorrMaskMasksMaskSyncID	string/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskSyncID)
DepthBasedCorrMaskMasksValue	real/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskValue)
DepthBasedCorrMaskMasksMaskVersion	string/_ (DepthBasedCorrectionsCorrectionMasksMasksMaskVersion)
DepthBasedCorrMaskMasksMidpoint	real/_ (DepthBasedCorrectionsCorrectionMasksMasksMidpoint)
DepthBasedCorrMaskMasksOrigin	string/_ (DepthBasedCorrectionsCorrectionMasksMasksOrigin)
DepthBasedCorrMaskMasksPerimeterValue	real/_ (DepthBasedCorrectionsCorrectionMasksMasksPerimeterValue)
DepthBasedCorrMaskMasksRadius	real/_ (DepthBasedCorrectionsCorrectionMasksMasksRadius)
DepthBasedCorrMaskMasksReferencePoint	string/_ (DepthBasedCorrectionsCorrectionMasksMasksReferencePoint)
DepthBasedCorrMaskMasksRight	real/_ (DepthBasedCorrectionsCorrectionMasksMasksRight)
DepthBasedCorrMaskMasksRoundness	real/_ (DepthBasedCorrectionsCorrectionMasksMasksRoundness)
DepthBasedCorrMaskMasksSizeX	real/_ (DepthBasedCorrectionsCorrectionMasksMasksSizeX)
DepthBasedCorrMaskMasksSizeY	real/_ (DepthBasedCorrectionsCorrectionMasksMasksSizeY)
DepthBasedCorrMaskMasksTop	real/_ (DepthBasedCorrectionsCorrectionMasksMasksTop)
DepthBasedCorrMaskMaskSubType	string/_ (DepthBasedCorrectionsCorrectionMasksMaskSubType)
DepthBasedCorrMaskMasksVersion	integer/_ (DepthBasedCorrectionsCorrectionMasksMasksVersion)
DepthBasedCorrMaskMasksWhat	string/_ (DepthBasedCorrectionsCorrectionMasksMasksWhat)
DepthBasedCorrMaskMasksWholeImageArea	string/_ (DepthBasedCorrectionsCorrectionMasksMasksWholeImageArea)
DepthBasedCorrMaskMasksX	real/_ (DepthBasedCorrectionsCorrectionMasksMasksX)
DepthBasedCorrMaskMasksY	real/_ (DepthBasedCorrectionsCorrectionMasksMasksY)
DepthBasedCorrMaskMaskSyncID	string/_ (DepthBasedCorrectionsCorrectionMasksMaskSyncID)
DepthBasedCorrMaskMasksZeroX	real/_ (DepthBasedCorrectionsCorrectionMasksMasksZeroX)

DepthBasedCorrMaskMasksZeroY	real/_	(DepthBasedCorrectionsCorrectionMasksMasksZeroY)
DepthBasedCorrMaskValue	real/_	(DepthBasedCorrectionsCorrectionMasksMaskValue)
DepthBasedCorrMaskMaskVersion	string/_	(DepthBasedCorrectionsCorrectionMasksMaskVersion)
DepthBasedCorrMaskMidpoint	real/_	(DepthBasedCorrectionsCorrectionMasksMidpoint)
DepthBasedCorrMaskOrigin	string/_	(DepthBasedCorrectionsCorrectionMasksOrigin)
DepthBasedCorrMaskPerimeterValue	real/_	(DepthBasedCorrectionsCorrectionMasksPerimeterValue)
DepthBasedCorrMaskRadius	real/_	(DepthBasedCorrectionsCorrectionMasksRadius)
DepthBasedCorrMaskReferencePoint	string/_	(DepthBasedCorrectionsCorrectionMasksReferencePoint)
DepthBasedCorrMaskRight	real/_	(DepthBasedCorrectionsCorrectionMasksRight)
DepthBasedCorrMaskRoundness	real/_	(DepthBasedCorrectionsCorrectionMasksRoundness)
DepthBasedCorrMaskSizeX	real/_	(DepthBasedCorrectionsCorrectionMasksSizeX)
DepthBasedCorrMaskSizeY	real/_	(DepthBasedCorrectionsCorrectionMasksSizeY)
DepthBasedCorrMaskTop	real/_	(DepthBasedCorrectionsCorrectionMasksTop)
DepthBasedCorrMaskVersion	integer/_	(DepthBasedCorrectionsCorrectionMasksVersion)
DepthBasedCorrMaskWhat	string/_	(DepthBasedCorrectionsCorrectionMasksWhat)
DepthBasedCorrMaskWholeImageArea	string/_	(DepthBasedCorrectionsCorrectionMasksWholeImageArea)
DepthBasedCorrMaskX	real/_	(DepthBasedCorrectionsCorrectionMasksX)
DepthBasedCorrMaskY	real/_	(DepthBasedCorrectionsCorrectionMasksY)
DepthBasedCorrMaskZeroX	real/_	(DepthBasedCorrectionsCorrectionMasksZeroX)
DepthBasedCorrMaskZeroY	real/_	(DepthBasedCorrectionsCorrectionMasksZeroY)
DepthBasedCorrCorrectionSyncID	string/_+	(DepthBasedCorrectionsCorrectionSyncID)
DepthBasedCorrLocalCorrectedDepth	real/_+	(DepthBasedCorrectionsLocalCorrectedDepth)
DepthBasedCorrLocalCurveRefineSaturation	real/_+	(DepthBasedCorrectionsLocalCurveRefineSaturation)
DepthBasedCorrWhat	string/_+	(DepthBasedCorrectionsWhat)
DepthMapInfo	struct	--> <a href="#">DepthMapInfo Struct</a>
DepthMapInfoBaseHighlightGuideInputDigest	string/_	
DepthMapInfoBaseHighlightGuideTable	string/_	
DepthMapInfoBaseHighlightGuideVersion	string/_	
DepthMapInfoBaseLayeredDepthInputDigest	string/_	
DepthMapInfoBaseLayeredDepthTable	string/_	
DepthMapInfoBaseLayeredDepthVersion	string/_	
DepthMapInfoBaseRawDepthInputDigest	string/_	
DepthMapInfoBaseRawDepthTable	string/_	
DepthMapInfoBaseRawDepthVersion	string/_	
DepthMapInfoDepthSource	string/_	
Description	lang-alt/	
DNGIgnoreSidecars	boolean/	
Exposure	real/	
Exposure2012	real/	
FillLight	integer/	
GradientBasedCorrections	struct+	--> <a href="#">Correction Struct</a>
GradientBasedCorrActive	boolean/_	(GradientBasedCorrectionsCorrectionActive)
GradientBasedCorrAmount	real/_	(GradientBasedCorrectionsCorrectionAmount)
GradientBasedCorrMasks	struct_+	--> <a href="#">CorrectionMask Struct</a> (GradientBasedCorrectionsCorrectionMasks)
GradientBasedCorrMaskAlpha	real/_	(GradientBasedCorrectionsCorrectionMasksAlpha)
GradientBasedCorrMaskAngle	real/_	(GradientBasedCorrectionsCorrectionMasksAngle)
GradientBasedCorrMaskBottom	real/_	(GradientBasedCorrectionsCorrectionMasksBottom)
GradientBasedCorrMaskCenterValue	real/_	(GradientBasedCorrectionsCorrectionMasksCenterValue)
GradientBasedCorrMaskCenterWeight	real/_	(GradientBasedCorrectionsCorrectionMasksCenterWeight)
GradientBasedCorrMaskRange	struct_+	--> <a href="#">CorrRangeMask Struct</a> (GradientBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
GradientBasedCorrMaskRangeAreaModels	struct_+	--> <a href="#">AreaModels Struct</a> (GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
GradientBasedCorrMaskRangeAreaModelsComponents	string/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsComponents)
GradientBasedCorrMaskRangeAreaModelsColorSampleInfo	string/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
GradientBasedCorrMaskRangeColorAmount	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
GradientBasedCorrMaskRangeDepthFeather	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
GradientBasedCorrMaskRangeDepthMax	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
GradientBasedCorrMaskRangeDepthMin	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
GradientBasedCorrMaskRangeInvert	boolean/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
GradientBasedCorrMaskRangeLumFeather	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
GradientBasedCorrMaskRangeLuminanceDepthSampleInfo	string/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
GradientBasedCorrMaskRangeLumMax	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
GradientBasedCorrMaskRangeLumMin	real/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
GradientBasedCorrMaskRangeLumRange	string/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
GradientBasedCorrMaskRangeSampleType	integer/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
GradientBasedCorrMaskRangeType	string/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
GradientBasedCorrMaskRangeVersion	string/_+	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
GradientBasedCorrMaskDabs	string/_	(GradientBasedCorrectionsCorrectionMasksDabs)
GradientBasedCorrMaskFeather	real/_	(GradientBasedCorrectionsCorrectionMasksFeather)
GradientBasedCorrMaskFlipped	boolean/_	(GradientBasedCorrectionsCorrectionMasksFlipped)
GradientBasedCorrMaskFlow	real/_	(GradientBasedCorrectionsCorrectionMasksFlow)
GradientBasedCorrMaskFullX	real/_	(GradientBasedCorrectionsCorrectionMasksFullX)
GradientBasedCorrMaskFullY	real/_	(GradientBasedCorrectionsCorrectionMasksFullY)
GradientBasedCorrMaskInputDigest	string/_	(GradientBasedCorrectionsCorrectionMasksInputDigest)
GradientBasedCorrMaskLeft	real/_	(GradientBasedCorrectionsCorrectionMasksLeft)
GradientBasedCorrMaskMaskActive	boolean/_	(GradientBasedCorrectionsCorrectionMasksMaskActive)
GradientBasedCorrMaskMaskBlendMode	integer/_	(GradientBasedCorrectionsCorrectionMasksMaskBlendMode)
GradientBasedCorrMaskMaskDigest	string/_	(GradientBasedCorrectionsCorrectionMasksMaskDigest)

GradientBasedCorrMaskMaskInverted	boolean/_	(GradientBasedCorrectionsCorrectionMasksMaskInverted)
GradientBasedCorrMaskMaskName	string/_	(GradientBasedCorrectionsCorrectionMasksMaskName)
GradientBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (GradientBasedCorrectionsCorrectionMasksMasks)
GradientBasedCorrMaskMasksAlpha	real/_	(GradientBasedCorrectionsCorrectionMasksMasksAlpha)
GradientBasedCorrMaskMasksAngle	real/_	(GradientBasedCorrectionsCorrectionMasksMasksAngle)
GradientBasedCorrMaskMasksBottom	real/_	(GradientBasedCorrectionsCorrectionMasksMasksBottom)
GradientBasedCorrMaskMasksCenterValue	real/_	(GradientBasedCorrectionsCorrectionMasksMasksCenterValue)
GradientBasedCorrMaskMasksCenterWeight	real/_	(GradientBasedCorrectionsCorrectionMasksMasksCenterWeight)
GradientBasedCorrMaskMasksDabs	string/_ +	(GradientBasedCorrectionsCorrectionMasksMasksDabs)
GradientBasedCorrMaskMasksFeather	real/_	(GradientBasedCorrectionsCorrectionMasksMasksFeather)
GradientBasedCorrMaskMasksFlipped	boolean/_	(GradientBasedCorrectionsCorrectionMasksMasksFlipped)
GradientBasedCorrMaskMasksFlow	real/_	(GradientBasedCorrectionsCorrectionMasksMasksFlow)
GradientBasedCorrMaskMasksFullX	real/_	(GradientBasedCorrectionsCorrectionMasksMasksFullX)
GradientBasedCorrMaskMasksFullY	real/_	(GradientBasedCorrectionsCorrectionMasksMasksFullY)
GradientBasedCorrMaskMasksInputDigest	string/_	(GradientBasedCorrectionsCorrectionMasksMasksInputDigest)
GradientBasedCorrMaskMasksLeft	real/_	(GradientBasedCorrectionsCorrectionMasksMasksLeft)
GradientBasedCorrMaskMasksMaskActive	boolean/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskActive)
GradientBasedCorrMaskMasksMaskBlendMode	integer/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
GradientBasedCorrMaskMasksMaskDigest	string/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskDigest)
GradientBasedCorrMaskMasksMaskInverted	boolean/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskInverted)
GradientBasedCorrMaskMasksMaskName	string/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskName)
GradientBasedCorrMaskMasksMaskSubType	string/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskSubType)
GradientBasedCorrMaskMasksMaskSyncID	string/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskSyncID)
GradientBasedCorrMaskMasksValue	real/_	(GradientBasedCorrectionsCorrectionMasksMasksValue)
GradientBasedCorrMaskMasksMaskVersion	string/_	(GradientBasedCorrectionsCorrectionMasksMasksMaskVersion)
GradientBasedCorrMaskMasksMidpoint	real/_	(GradientBasedCorrectionsCorrectionMasksMasksMidpoint)
GradientBasedCorrMaskMasksOrigin	string/_	(GradientBasedCorrectionsCorrectionMasksMasksOrigin)
GradientBasedCorrMaskMasksPerimeterValue	real/_	(GradientBasedCorrectionsCorrectionMasksMasksPerimeterValue)
GradientBasedCorrMaskMasksRadius	real/_	(GradientBasedCorrectionsCorrectionMasksMasksRadius)
GradientBasedCorrMaskMasksReferencePoint	string/_	(GradientBasedCorrectionsCorrectionMasksMasksReferencePoint)
GradientBasedCorrMaskMasksRight	real/_	(GradientBasedCorrectionsCorrectionMasksMasksRight)
GradientBasedCorrMaskMasksRoundness	real/_	(GradientBasedCorrectionsCorrectionMasksMasksRoundness)
GradientBasedCorrMaskMasksSizeX	real/_	(GradientBasedCorrectionsCorrectionMasksMasksSizeX)
GradientBasedCorrMaskMasksSizeY	real/_	(GradientBasedCorrectionsCorrectionMasksMasksSizeY)
GradientBasedCorrMaskMasksTop	real/_	(GradientBasedCorrectionsCorrectionMasksMasksTop)
GradientBasedCorrMaskMaskSubType	string/_	(GradientBasedCorrectionsCorrectionMasksMaskSubType)
GradientBasedCorrMaskMasksVersion	integer/_	(GradientBasedCorrectionsCorrectionMasksMasksVersion)
GradientBasedCorrMaskMasksWhat	string/_	(GradientBasedCorrectionsCorrectionMasksMasksWhat)
GradientBasedCorrMaskMasksWholeImageArea	string/_	(GradientBasedCorrectionsCorrectionMasksMasksWholeImageArea)
GradientBasedCorrMaskMasksX	real/_	(GradientBasedCorrectionsCorrectionMasksMasksX)
GradientBasedCorrMaskMasksY	real/_	(GradientBasedCorrectionsCorrectionMasksMasksY)
GradientBasedCorrMaskMaskSyncID	string/_	(GradientBasedCorrectionsCorrectionMasksMaskSyncID)
GradientBasedCorrMaskMasksZeroX	real/_	(GradientBasedCorrectionsCorrectionMasksMasksZeroX)
GradientBasedCorrMaskMasksZeroY	real/_	(GradientBasedCorrectionsCorrectionMasksMasksZeroY)
GradientBasedCorrMaskValue	real/_	(GradientBasedCorrectionsCorrectionMasksMaskValue)
GradientBasedCorrMaskMaskVersion	string/_	(GradientBasedCorrectionsCorrectionMasksMaskVersion)
GradientBasedCorrMaskMidpoint	real/_	(GradientBasedCorrectionsCorrectionMasksMidpoint)
GradientBasedCorrMaskOrigin	string/_	(GradientBasedCorrectionsCorrectionMasksOrigin)
GradientBasedCorrMaskPerimeterValue	real/_	(GradientBasedCorrectionsCorrectionMasksPerimeterValue)
GradientBasedCorrMaskRadius	real/_	(GradientBasedCorrectionsCorrectionMasksRadius)
GradientBasedCorrMaskReferencePoint	string/_	(GradientBasedCorrectionsCorrectionMasksReferencePoint)
GradientBasedCorrMaskRight	real/_	(GradientBasedCorrectionsCorrectionMasksRight)
GradientBasedCorrMaskRoundness	real/_	(GradientBasedCorrectionsCorrectionMasksRoundness)
GradientBasedCorrMaskSizeX	real/_	(GradientBasedCorrectionsCorrectionMasksSizeX)
GradientBasedCorrMaskSizeY	real/_	(GradientBasedCorrectionsCorrectionMasksSizeY)
GradientBasedCorrMaskTop	real/_	(GradientBasedCorrectionsCorrectionMasksTop)
GradientBasedCorrMaskVersion	integer/_	(GradientBasedCorrectionsCorrectionMasksVersion)
GradientBasedCorrMaskWhat	string/_	(GradientBasedCorrectionsCorrectionMasksWhat)
GradientBasedCorrMaskWholeImageArea	string/_	(GradientBasedCorrectionsCorrectionMasksWholeImageArea)
GradientBasedCorrMaskX	real/_	(GradientBasedCorrectionsCorrectionMasksX)
GradientBasedCorrMaskY	real/_	(GradientBasedCorrectionsCorrectionMasksY)
GradientBasedCorrMaskZeroX	real/_	(GradientBasedCorrectionsCorrectionMasksZeroX)
GradientBasedCorrMaskZeroY	real/_	(GradientBasedCorrectionsCorrectionMasksZeroY)
GradientBasedCorrCorrectionName	string/_ +	(GradientBasedCorrectionsCorrectionName)
GradientBasedCorrRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (GradientBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
GradientBasedCorrRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (GradientBasedCorrectionsCorrectionRangeMaskAreaModels)
GradientBasedCorrRangeMaskAreaModelsComponents	string/_ +	(GradientBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
GradientBasedCorrRangeMaskAreaModelsColorSampleInfo	string/_ +	(GradientBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
GradientBasedCorrRangeMaskColorAmount	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskColorAmount)
GradientBasedCorrRangeMaskDepthFeather	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskDepthFeather)
GradientBasedCorrRangeMaskDepthMax	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskDepthMax)
GradientBasedCorrRangeMaskDepthMin	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskDepthMin)
GradientBasedCorrRangeMaskInvert	boolean/_ +	(GradientBasedCorrectionsCorrectionRangeMaskInvert)
GradientBasedCorrRangeMaskLumFeather	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumFeather)
GradientBasedCorrRangeMaskLuminanceDepthSampleInfo	string/_ +	(GradientBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
GradientBasedCorrRangeMaskLumMax	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumMax)
GradientBasedCorrRangeMaskLumMin	real/_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumMin)

GradientBasedCorrRangeMaskLumRange	string/_+ (GradientBasedCorrectionsCorrectionRangeMaskLumRange)
GradientBasedCorrRangeMaskSampleType	integer/_+ (GradientBasedCorrectionsCorrectionRangeMaskSampleType)
GradientBasedCorrRangeMaskType	string/_+ (GradientBasedCorrectionsCorrectionRangeMaskType)
GradientBasedCorrRangeMaskVersion	string/_+ (GradientBasedCorrectionsCorrectionRangeMaskVersion)
GradientBasedCorrCorrectionSyncID	string/_+ (GradientBasedCorrectionsCorrectionSyncID)
GradientBasedCorrBlacks2012	real/_ (GradientBasedCorrectionsLocalBlacks2012)
GradientBasedCorrBrightness	real/_ (GradientBasedCorrectionsLocalBrightness)
GradientBasedCorrClarity	real/_ (GradientBasedCorrectionsLocalClarity)
GradientBasedCorrClarity2012	real/_ (GradientBasedCorrectionsLocalClarity2012)
GradientBasedCorrContrast	real/_ (GradientBasedCorrectionsLocalContrast)
GradientBasedCorrContrast2012	real/_ (GradientBasedCorrectionsLocalContrast2012)
GradientBasedCorrDefringe	real/_ (GradientBasedCorrectionsLocalDefringe)
GradientBasedCorrDehaze	real/_ (GradientBasedCorrectionsLocalDehaze)
GradientBasedCorrExposure	real/_ (GradientBasedCorrectionsLocalExposure)
GradientBasedCorrExposure2012	real/_ (GradientBasedCorrectionsLocalExposure2012)
GradientBasedCorrHighlights2012	real/_ (GradientBasedCorrectionsLocalHighlights2012)
GradientBasedCorrHue	real/_ (GradientBasedCorrectionsLocalHue)
GradientBasedCorrLuminanceNoise	real/_ (GradientBasedCorrectionsLocalLuminanceNoise)
GradientBasedCorrMoire	real/_ (GradientBasedCorrectionsLocalMoire)
GradientBasedCorrSaturation	real/_ (GradientBasedCorrectionsLocalSaturation)
GradientBasedCorrShadows2012	real/_ (GradientBasedCorrectionsLocalShadows2012)
GradientBasedCorrSharpness	real/_ (GradientBasedCorrectionsLocalSharpness)
GradientBasedCorrTemperature	real/_ (GradientBasedCorrectionsLocalTemperature)
GradientBasedCorrTexture	real/_ (GradientBasedCorrectionsLocalTexture)
GradientBasedCorrTint	real/_ (GradientBasedCorrectionsLocalTint)
GradientBasedCorrToningHue	real/_ (GradientBasedCorrectionsLocalToningHue)
GradientBasedCorrToningSaturation	real/_ (GradientBasedCorrectionsLocalToningSaturation)
GradientBasedCorrWhites2012	real/_ (GradientBasedCorrectionsLocalWhites2012)
GradientBasedCorrWhat	string/_ (GradientBasedCorrectionsWhat)
GrainAmount	integer/
GrainFrequency	integer/
GrainSeed	integer/
GrainSize	integer/
GrayMixerAqua	integer/
GrayMixerBlue	integer/
GrayMixerGreen	integer/
GrayMixerMagenta	integer/
GrayMixerOrange	integer/
GrayMixerPurple	integer/
GrayMixerRed	integer/
GrayMixerYellow	integer/
GreenHue	integer/
GreenSaturation	integer/
Group	lang-alt/
HasCrop	boolean/
HasSettings	boolean/
HDREditMode	integer/
Highlight2012	integer/
HighlightRecovery	integer/
Highlights2012	integer/
HueAdjustmentAqua	integer/
HueAdjustmentBlue	integer/
HueAdjustmentGreen	integer/
HueAdjustmentMagenta	integer/
HueAdjustmentOrange	integer/
HueAdjustmentPurple	integer/
HueAdjustmentRed	integer/
HueAdjustmentYellow	integer/
IncrementalTemperature	integer/
IncrementalTint	integer/
JPEGHandling	string/
LensBlur	struct --> <a href="#">LensBlur Struct</a>
LensBlurActive	boolean/_
LensBlurAmount	real/_ (LensBlurBlurAmount)
LensBlurBokehAspect	real/_
LensBlurBokehRotation	real/_
LensBlurBokehShape	real/_
LensBlurBokehShapeDetail	real/_
LensBlurCatEyeAmount	real/_
LensBlurCatEyeScale	real/_
LensBlurFocalRange	string/_
LensBlurFocalRangeSource	real/_
LensBlurHighlightsBoost	real/_
LensBlurHighlightsThreshold	real/_
LensBlurSampledArea	string/_
LensBlurSampledRange	string/_
LensBlurSphericalAberration	real/_
LensBlurSubjectRange	string/_
LensBlurVersion	string/_

LensManualDistortionAmount	integer/
LensProfileChromaticAberrationScale	integer/
LensProfileDigest	string/
LensProfileDistortionScale	integer/
LensProfileEnable	integer/
LensProfileFilename	string/
LensProfileIsEmbedded	boolean/
LensProfileMatchKeyCameraModelName	string/
LensProfileMatchKeyExifMake	string/
LensProfileMatchKeyExifModel	string/
LensProfileMatchKeyIsRaw	boolean/
LensProfileMatchKeyLensID	string/
LensProfileMatchKeyLensInfo	string/
LensProfileMatchKeyLensName	string/
LensProfileMatchKeySensorFormatFactor	real/
LensProfileName	string/
LensProfileSetup	string/
LensProfileVignettingScale	integer/
Look	struct --> <a href="#">Look Struct</a>
LookAmount	string/_
LookCluster	string/_
LookCopyright	string/_
LookGroup	lang-alt/_
LookName	string/ (NOT a flattened tag!)
LookParameters	struct_ --> <a href="#">LookParms Struct</a>
LookParametersCameraProfile	string/_
LookParametersClarity2012	string/_
LookParametersConvertToGrayscale	string/_
LookParametersHighlights2012	string/_
LookParametersLookTable	string/_
LookParametersProcessVersion	string/_
LookParametersShadows2012	string/_
LookParametersToneCurvePV2012	string/_+
LookParametersToneCurvePV2012Blue	string/_+
LookParametersToneCurvePV2012Green	string/_+
LookParametersToneCurvePV2012Red	string/_+
LookParametersVersion	string/_
LookSupportsAmount	string/_
LookSupportsMonochrome	string/_
LookSupportsOutputReferred	string/_
LookUUID	string/_
LuminanceAdjustmentAqua	integer/
LuminanceAdjustmentBlue	integer/
LuminanceAdjustmentGreen	integer/
LuminanceAdjustmentMagenta	integer/
LuminanceAdjustmentOrange	integer/
LuminanceAdjustmentPurple	integer/
LuminanceAdjustmentRed	integer/
LuminanceAdjustmentYellow	integer/
LuminanceNoiseReductionContrast	integer/
LuminanceNoiseReductionDetail	integer/
LuminanceSmoothing	integer/
MaskGroupBasedCorrections	struct+ --> <a href="#">Correction Struct</a>
MaskGroupBasedCorrActive	boolean/_ (MaskGroupBasedCorrectionsCorrectionActive)
MaskGroupBasedCorrAmount	real/_ (MaskGroupBasedCorrectionsCorrectionAmount)
MaskGroupBasedCorrMask	struct_+ --> <a href="#">CorrectionMask Struct</a> (MaskGroupBasedCorrectionsCorrectionMasks)
MaskGroupBasedCorrMaskAlpha	real/_ (MaskGroupBasedCorrectionsCorrectionMasksAlpha)
MaskGroupBasedCorrMaskAngle	real/_ (MaskGroupBasedCorrectionsCorrectionMasksAngle)
MaskGroupBasedCorrMaskBottom	real/_ (MaskGroupBasedCorrectionsCorrectionMasksBottom)
MaskGroupBasedCorrMaskCenterValue	real/_ (MaskGroupBasedCorrectionsCorrectionMasksCenterValue)
MaskGroupBasedCorrMaskCenterWeight	real/_ (MaskGroupBasedCorrectionsCorrectionMasksCenterWeight)
MaskGroupBasedCorrMaskRange	struct_+ --> <a href="#">CorrRangeMask Struct</a> (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
MaskGroupBasedCorrMaskRangeAreaModels	struct_+ --> <a href="#">AreaModels Struct</a> (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
MaskGroupBasedCorrMaskRangeAreaModelsComponents	string/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsAreaComponents)
MaskGroupBasedCorrMaskRangeAreaModelsColorSampleInfo	string/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
MaskGroupBasedCorrMaskRangeColorAmount	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
MaskGroupBasedCorrMaskRangeDepthFeather	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
MaskGroupBasedCorrMaskRangeDepthMax	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
MaskGroupBasedCorrMaskRangeDepthMin	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
MaskGroupBasedCorrMaskRangeInvert	boolean/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
MaskGroupBasedCorrMaskRangeLumFeather	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
MaskGroupBasedCorrMaskRangeLuminanceDepthSampleInfo	string/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
MaskGroupBasedCorrMaskRangeLumMax	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
MaskGroupBasedCorrMaskRangeLumMin	real/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
MaskGroupBasedCorrMaskRangeLumRange	string/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
MaskGroupBasedCorrMaskRangeSampleType	integer/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
MaskGroupBasedCorrMaskRangeType	string/_+ (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)

MaskGroupBasedCorrMaskRangeVersion	string/_+	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
MaskGroupBasedCorrMaskDabs	string/_+	(MaskGroupBasedCorrectionsCorrectionMasksDabs)
MaskGroupBasedCorrMaskFeather	real/_	(MaskGroupBasedCorrectionsCorrectionMasksFeather)
MaskGroupBasedCorrMaskFlipped	boolean/_	(MaskGroupBasedCorrectionsCorrectionMasksFlipped)
MaskGroupBasedCorrMaskFlow	real/_	(MaskGroupBasedCorrectionsCorrectionMasksFlow)
MaskGroupBasedCorrMaskFullX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksFullX)
MaskGroupBasedCorrMaskFullY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksFullY)
MaskGroupBasedCorrMaskInputDigest	string/_	(MaskGroupBasedCorrectionsCorrectionMasksInputDigest)
MaskGroupBasedCorrMaskLeft	real/_	(MaskGroupBasedCorrectionsCorrectionMasksLeft)
MaskGroupBasedCorrMaskMaskActive	boolean/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskActive)
MaskGroupBasedCorrMaskMaskBlendMode	integer/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskBlendMode)
MaskGroupBasedCorrMaskMaskDigest	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskDigest)
MaskGroupBasedCorrMaskMaskInverted	boolean/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskInverted)
MaskGroupBasedCorrMaskMaskName	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskName)
MaskGroupBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (MaskGroupBasedCorrectionsCorrectionMasksMasks)
MaskGroupBasedCorrMaskMasksAlpha	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksAlpha)
MaskGroupBasedCorrMaskMasksAngle	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksAngle)
MaskGroupBasedCorrMaskMasksBottom	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksBottom)
MaskGroupBasedCorrMaskMasksCenterValue	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksCenterValue)
MaskGroupBasedCorrMaskMasksCenterWeight	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksCenterWeight)
MaskGroupBasedCorrMaskMasksDabs	string/_ +	(MaskGroupBasedCorrectionsCorrectionMasksMasksDabs)
MaskGroupBasedCorrMaskMasksFeather	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFeather)
MaskGroupBasedCorrMaskMasksFlipped	boolean/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFlipped)
MaskGroupBasedCorrMaskMasksFlow	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFlow)
MaskGroupBasedCorrMaskMasksFullX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFullX)
MaskGroupBasedCorrMaskMasksFullY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFullY)
MaskGroupBasedCorrMaskMasksInputDigest	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksInputDigest)
MaskGroupBasedCorrMaskMasksLeft	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksLeft)
MaskGroupBasedCorrMaskMasksMaskActive	boolean/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskActive)
MaskGroupBasedCorrMaskMasksMaskBlendMode	integer/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
MaskGroupBasedCorrMaskMasksMaskDigest	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskDigest)
MaskGroupBasedCorrMaskMasksMaskInverted	boolean/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskInverted)
MaskGroupBasedCorrMaskMasksMaskName	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskName)
MaskGroupBasedCorrMaskMasksMaskSubType	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskSubType)
MaskGroupBasedCorrMaskMasksMaskSyncID	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskSyncID)
MaskGroupBasedCorrMaskMasksValue	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksJsonValue)
MaskGroupBasedCorrMaskMasksMaskVersion	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskVersion)
MaskGroupBasedCorrMaskMasksMidpoint	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMidpoint)
MaskGroupBasedCorrMaskMasksOrigin	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksOrigin)
MaskGroupBasedCorrMaskMasksPerimeterValue	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksPerimeterValue)
MaskGroupBasedCorrMaskMasksRadius	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksRadius)
MaskGroupBasedCorrMaskMasksReferencePoint	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksReferencePoint)
MaskGroupBasedCorrMaskMasksRight	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksRight)
MaskGroupBasedCorrMaskMasksRoundness	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksRoundness)
MaskGroupBasedCorrMaskMasksSizeX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksSizeX)
MaskGroupBasedCorrMaskMasksSizeY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksSizeY)
MaskGroupBasedCorrMaskMasksTop	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksTop)
MaskGroupBasedCorrMaskMaskSubType	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskSubType)
MaskGroupBasedCorrMaskMasksVersion	integer/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksVersion)
MaskGroupBasedCorrMaskMasksWhat	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksWhat)
MaskGroupBasedCorrMaskMasksWholeImageArea	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksWholeImageArea)
MaskGroupBasedCorrMaskMasksX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksX)
MaskGroupBasedCorrMaskMasksY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksY)
MaskGroupBasedCorrMaskMaskSyncID	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskSyncID)
MaskGroupBasedCorrMaskMasksZeroX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksZeroX)
MaskGroupBasedCorrMaskMasksZeroY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMasksZeroY)
MaskGroupBasedCorrMaskValue	real/_	(MaskGroupBasedCorrectionsCorrectionMasksJsonValue)
MaskGroupBasedCorrMaskMaskVersion	string/_	(MaskGroupBasedCorrectionsCorrectionMasksMaskVersion)
MaskGroupBasedCorrMaskMidpoint	real/_	(MaskGroupBasedCorrectionsCorrectionMasksMidpoint)
MaskGroupBasedCorrMaskOrigin	string/_	(MaskGroupBasedCorrectionsCorrectionMasksOrigin)
MaskGroupBasedCorrMaskPerimeterValue	real/_	(MaskGroupBasedCorrectionsCorrectionMasksPerimeterValue)
MaskGroupBasedCorrMaskRadius	real/_	(MaskGroupBasedCorrectionsCorrectionMasksRadius)
MaskGroupBasedCorrMaskReferencePoint	string/_	(MaskGroupBasedCorrectionsCorrectionMasksReferencePoint)
MaskGroupBasedCorrMaskRight	real/_	(MaskGroupBasedCorrectionsCorrectionMasksRight)
MaskGroupBasedCorrMaskRoundness	real/_	(MaskGroupBasedCorrectionsCorrectionMasksRoundness)
MaskGroupBasedCorrMaskSizeX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksSizeX)
MaskGroupBasedCorrMaskSizeY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksSizeY)
MaskGroupBasedCorrMaskTop	real/_	(MaskGroupBasedCorrectionsCorrectionMasksTop)
MaskGroupBasedCorrMaskVersion	integer/_	(MaskGroupBasedCorrectionsCorrectionMasksVersion)
MaskGroupBasedCorrMaskWhat	string/_	(MaskGroupBasedCorrectionsCorrectionMasksWhat)
MaskGroupBasedCorrMaskWholeImageArea	string/_	(MaskGroupBasedCorrectionsCorrectionMasksWholeImageArea)
MaskGroupBasedCorrMaskX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksX)
MaskGroupBasedCorrMaskY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksY)
MaskGroupBasedCorrMaskZeroX	real/_	(MaskGroupBasedCorrectionsCorrectionMasksZeroX)
MaskGroupBasedCorrMaskZeroY	real/_	(MaskGroupBasedCorrectionsCorrectionMasksZeroY)
MaskGroupBasedCorrCorrectionName	string/_ +	(MaskGroupBasedCorrectionsCorrectionName)
MaskGroupBasedCorrRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (MaskGroupBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)

MaskGroupBasedCorrRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (MaskGroupBasedCorrectionsCorrectionRangeMaskAreaModels)
MaskGroupBasedCorrRangeMaskAreaModelsComponents	string/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
MaskGroupBasedCorrRangeMaskAreaModelsColorSampleInfo	string/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
MaskGroupBasedCorrRangeMaskColorAmount	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskColorAmount)
MaskGroupBasedCorrRangeMaskDepthFeather	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskDepthFeather)
MaskGroupBasedCorrRangeMaskDepthMax	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskDepthMax)
MaskGroupBasedCorrRangeMaskDepthMin	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskDepthMin)
MaskGroupBasedCorrRangeMaskInvert	boolean/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskInvert)
MaskGroupBasedCorrRangeMaskLumFeather	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumFeather)
MaskGroupBasedCorrRangeMaskLuminanceDepthSampleInfo	string/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
MaskGroupBasedCorrRangeMaskLumMax	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumMax)
MaskGroupBasedCorrRangeMaskLumMin	real/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumMin)
MaskGroupBasedCorrRangeMaskLumRange	string/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumRange)
MaskGroupBasedCorrRangeMaskSampleType	integer/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskSampleType)
MaskGroupBasedCorrRangeMaskType	string/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskType)
MaskGroupBasedCorrRangeMaskVersion	string/_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskVersion)
MaskGroupBasedCorrCorrectionSyncID	string/_ +	(MaskGroupBasedCorrectionsCorrectionSyncID)
MaskGroupBasedCorrBlacks2012	real/_	(MaskGroupBasedCorrectionsLocalBlacks2012)
MaskGroupBasedCorrBrightness	real/_	(MaskGroupBasedCorrectionsLocalBrightness)
MaskGroupBasedCorrClarity	real/_	(MaskGroupBasedCorrectionsLocalClarity)
MaskGroupBasedCorrClarity2012	real/_	(MaskGroupBasedCorrectionsLocalClarity2012)
MaskGroupBasedCorrContrast	real/_	(MaskGroupBasedCorrectionsLocalContrast)
MaskGroupBasedCorrContrast2012	real/_	(MaskGroupBasedCorrectionsLocalContrast2012)
MaskGroupBasedCorrDefringe	real/_	(MaskGroupBasedCorrectionsLocalDefringe)
MaskGroupBasedCorrDehaze	real/_	(MaskGroupBasedCorrectionsLocalDehaze)
MaskGroupBasedCorrExposure	real/_	(MaskGroupBasedCorrectionsLocalExposure)
MaskGroupBasedCorrExposure2012	real/_	(MaskGroupBasedCorrectionsLocalExposure2012)
MaskGroupBasedCorrHighlights2012	real/_	(MaskGroupBasedCorrectionsLocalHighlights2012)
MaskGroupBasedCorrHue	real/_	(MaskGroupBasedCorrectionsLocalHue)
MaskGroupBasedCorrLuminanceNoise	real/_	(MaskGroupBasedCorrectionsLocalLuminanceNoise)
MaskGroupBasedCorrMoire	real/_	(MaskGroupBasedCorrectionsLocalMoire)
MaskGroupBasedCorrSaturation	real/_	(MaskGroupBasedCorrectionsLocalSaturation)
MaskGroupBasedCorrShadows2012	real/_	(MaskGroupBasedCorrectionsLocalShadows2012)
MaskGroupBasedCorrSharpness	real/_	(MaskGroupBasedCorrectionsLocalSharpness)
MaskGroupBasedCorrTemperature	real/_	(MaskGroupBasedCorrectionsLocalTemperature)
MaskGroupBasedCorrTexture	real/_	(MaskGroupBasedCorrectionsLocalTexture)
MaskGroupBasedCorrTint	real/_	(MaskGroupBasedCorrectionsLocalTint)
MaskGroupBasedCorrToningHue	real/_	(MaskGroupBasedCorrectionsLocalToningHue)
MaskGroupBasedCorrToningSaturation	real/_	(MaskGroupBasedCorrectionsLocalToningSaturation)
MaskGroupBasedCorrWhites2012	real/_	(MaskGroupBasedCorrectionsLocalWhites2012)
MaskGroupBasedCorrWhat	string/_	(MaskGroupBasedCorrectionsWhat)
MoireFilter	string/_	'Off' = Off 'On' = On
Name	lang-alt/	
NegativeCacheLargePreviewSize	integer/_	
NegativeCacheMaximumSize	real/_	
NegativeCachePath	string/_	
OverrideLookVignette	boolean/_	
PaintBasedCorrections	struct+ --> <a href="#">Correction Struct</a>	
PaintCorrectionActive	boolean/_	(PaintBasedCorrectionsCorrectionActive)
PaintCorrectionAmount	real/_	(PaintBasedCorrectionsCorrectionAmount)
PaintBasedCorrectionMasks	struct_ + --> <a href="#">CorrectionMask Struct</a> (PaintBasedCorrectionsCorrectionMasks)	
PaintCorrectionMaskAlpha	real/_	(PaintBasedCorrectionsCorrectionMasksAlpha)
PaintCorrectionMaskAngle	real/_	(PaintBasedCorrectionsCorrectionMasksAngle)
PaintCorrectionMaskBottom	real/_	(PaintBasedCorrectionsCorrectionMasksBottom)
PaintCorrectionMaskCenterValue	real/_	(PaintBasedCorrectionsCorrectionMasksCenterValue)
PaintCorrectionMaskCenterWeight	real/_	(PaintBasedCorrectionsCorrectionMasksCenterWeight)
PaintCorrectionMaskRange	struct_ + --> <a href="#">CorrRangeMask Struct</a> (PaintBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)	
PaintCorrectionMaskRangeAreaModels	struct_ + --> <a href="#">AreaModels Struct</a> (PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)	
PaintCorrectionMaskRangeAreaModelsComponents	string/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsAreaComponents)
PaintCorrectionMaskRangeAreaModelsColorSampleInfo	string/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
PaintCorrectionMaskRangeColorAmount	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
PaintCorrectionMaskRangeDepthFeather	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
PaintCorrectionMaskRangeDepthMax	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
PaintCorrectionMaskRangeDepthMin	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
PaintCorrectionMaskRangeInvert	boolean/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
PaintCorrectionMaskRangeLumFeather	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
PaintCorrectionMaskRangeLuminanceDepthSampleInfo	string/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
PaintCorrectionMaskRangeLumMax	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
PaintCorrectionMaskRangeLumMin	real/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
PaintCorrectionMaskRangeLumRange	string/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
PaintCorrectionMaskRangeSampleType	integer/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
PaintCorrectionMaskRangeType	string/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
PaintCorrectionMaskRangeVersion	string/_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
PaintCorrectionMaskDabs	string/_	(PaintBasedCorrectionsCorrectionMasksDabs)
PaintCorrectionMaskFeather	real/_	(PaintBasedCorrectionsCorrectionMasksFeather)
PaintCorrectionMaskFlipped	boolean/_	(PaintBasedCorrectionsCorrectionMasksFlipped)

PaintCorrectionMaskFlow	real/_	(PaintBasedCorrectionsCorrectionMasksFlow)
PaintCorrectionMaskFullX	real/_	(PaintBasedCorrectionsCorrectionMasksFullX)
PaintCorrectionMaskFullY	real/_	(PaintBasedCorrectionsCorrectionMasksFullY)
PaintCorrectionMaskInputDigest	string/_	(PaintBasedCorrectionsCorrectionMasksInputDigest)
PaintCorrectionMaskLeft	real/_	(PaintBasedCorrectionsCorrectionMasksLeft)
PaintCorrectionMaskMaskActive	boolean/_	(PaintBasedCorrectionsCorrectionMasksMaskActive)
PaintCorrectionMaskMaskBlendMode	integer/_	(PaintBasedCorrectionsCorrectionMasksMaskBlendMode)
PaintCorrectionMaskMaskDigest	string/_	(PaintBasedCorrectionsCorrectionMasksMaskDigest)
PaintCorrectionMaskMaskInverted	boolean/_	(PaintBasedCorrectionsCorrectionMasksMaskInverted)
PaintCorrectionMaskMaskName	string/_	(PaintBasedCorrectionsCorrectionMasksMaskName)
PaintCorrectionMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (PaintBasedCorrectionsCorrectionMasksMasks)
PaintCorrectionMaskMasksAlpha	real/_	(PaintBasedCorrectionsCorrectionMasksMasksAlpha)
PaintCorrectionMaskMasksAngle	real/_	(PaintBasedCorrectionsCorrectionMasksMasksAngle)
PaintCorrectionMaskMasksBottom	real/_	(PaintBasedCorrectionsCorrectionMasksMasksBottom)
PaintCorrectionMaskMasksCenterValue	real/_	(PaintBasedCorrectionsCorrectionMasksMasksCenterValue)
PaintCorrectionMaskMasksCenterWeight	real/_	(PaintBasedCorrectionsCorrectionMasksMasksCenterWeight)
PaintCorrectionMaskMasksDabs	string/_ +	(PaintBasedCorrectionsCorrectionMasksMasksDabs)
PaintCorrectionMaskMasksFeather	real/_	(PaintBasedCorrectionsCorrectionMasksMasksFeather)
PaintCorrectionMaskMasksFlipped	boolean/_	(PaintBasedCorrectionsCorrectionMasksMasksFlipped)
PaintCorrectionMaskMasksFlow	real/_	(PaintBasedCorrectionsCorrectionMasksMasksFlow)
PaintCorrectionMaskMasksFullX	real/_	(PaintBasedCorrectionsCorrectionMasksMasksFullX)
PaintCorrectionMaskMasksFullY	real/_	(PaintBasedCorrectionsCorrectionMasksMasksFullY)
PaintCorrectionMaskMasksInputDigest	string/_	(PaintBasedCorrectionsCorrectionMasksMasksInputDigest)
PaintCorrectionMaskMasksLeft	real/_	(PaintBasedCorrectionsCorrectionMasksMasksLeft)
PaintCorrectionMaskMasksMaskActive	boolean/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskActive)
PaintCorrectionMaskMasksMaskBlendMode	integer/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
PaintCorrectionMaskMasksMaskDigest	string/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskDigest)
PaintCorrectionMaskMasksMaskInverted	boolean/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskInverted)
PaintCorrectionMaskMasksMaskName	string/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskName)
PaintCorrectionMaskMasksMaskSubType	string/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskSubType)
PaintCorrectionMaskMasksMaskSyncID	string/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskSyncID)
PaintCorrectionMaskMasksValue	real/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskValue)
PaintCorrectionMaskMasksMaskVersion	string/_	(PaintBasedCorrectionsCorrectionMasksMasksMaskVersion)
PaintCorrectionMaskMasksMidpoint	real/_	(PaintBasedCorrectionsCorrectionMasksMasksMidpoint)
PaintCorrectionMaskMasksOrigin	string/_	(PaintBasedCorrectionsCorrectionMasksMasksOrigin)
PaintCorrectionMaskMasksPerimeterValue	real/_	(PaintBasedCorrectionsCorrectionMasksMasksPerimeterValue)
PaintCorrectionMaskMasksRadius	real/_	(PaintBasedCorrectionsCorrectionMasksMasksRadius)
PaintCorrectionMaskMasksReferencePoint	string/_	(PaintBasedCorrectionsCorrectionMasksMasksReferencePoint)
PaintCorrectionMaskMasksRight	real/_	(PaintBasedCorrectionsCorrectionMasksMasksRight)
PaintCorrectionMaskMasksRoundness	real/_	(PaintBasedCorrectionsCorrectionMasksMasksRoundness)
PaintCorrectionMaskMasksSizeX	real/_	(PaintBasedCorrectionsCorrectionMasksMasksSizeX)
PaintCorrectionMaskMasksSizeY	real/_	(PaintBasedCorrectionsCorrectionMasksMasksSizeY)
PaintCorrectionMaskMasksTop	real/_	(PaintBasedCorrectionsCorrectionMasksMasksTop)
PaintCorrectionMaskMaskSubType	string/_	(PaintBasedCorrectionsCorrectionMasksMaskSubType)
PaintCorrectionMaskMasksVersion	integer/_	(PaintBasedCorrectionsCorrectionMasksMasksVersion)
PaintCorrectionMaskMasksWhat	string/_	(PaintBasedCorrectionsCorrectionMasksMasksWhat)
PaintCorrectionMaskMasksWholeImageArea	string/_	(PaintBasedCorrectionsCorrectionMasksMasksWholeImageArea)
PaintCorrectionMaskMasksX	real/_	(PaintBasedCorrectionsCorrectionMasksMasksX)
PaintCorrectionMaskMasksY	real/_	(PaintBasedCorrectionsCorrectionMasksMasksY)
PaintCorrectionMaskMaskSyncID	string/_	(PaintBasedCorrectionsCorrectionMasksMaskSyncID)
PaintCorrectionMaskMasksZeroX	real/_	(PaintBasedCorrectionsCorrectionMasksMasksZeroX)
PaintCorrectionMaskMasksZeroY	real/_	(PaintBasedCorrectionsCorrectionMasksMasksZeroY)
PaintCorrectionMaskValue	real/_	(PaintBasedCorrectionsCorrectionMasksMaskValue)
PaintCorrectionMaskMaskVersion	string/_	(PaintBasedCorrectionsCorrectionMasksMaskVersion)
PaintCorrectionMaskMidpoint	real/_	(PaintBasedCorrectionsCorrectionMasksMidpoint)
PaintCorrectionMaskOrigin	string/_	(PaintBasedCorrectionsCorrectionMasksOrigin)
PaintCorrectionMaskPerimeterValue	real/_	(PaintBasedCorrectionsCorrectionMasksPerimeterValue)
PaintCorrectionMaskRadius	real/_	(PaintBasedCorrectionsCorrectionMasksRadius)
PaintCorrectionMaskReferencePoint	string/_	(PaintBasedCorrectionsCorrectionMasksReferencePoint)
PaintCorrectionMaskRight	real/_	(PaintBasedCorrectionsCorrectionMasksRight)
PaintCorrectionMaskRoundness	real/_	(PaintBasedCorrectionsCorrectionMasksRoundness)
PaintCorrectionMaskSizeX	real/_	(PaintBasedCorrectionsCorrectionMasksSizeX)
PaintCorrectionMaskSizeY	real/_	(PaintBasedCorrectionsCorrectionMasksSizeY)
PaintCorrectionMaskTop	real/_	(PaintBasedCorrectionsCorrectionMasksTop)
PaintCorrectionMaskVersion	integer/_	(PaintBasedCorrectionsCorrectionMasksVersion)
PaintCorrectionMaskWhat	string/_	(PaintBasedCorrectionsCorrectionMasksWhat)
PaintCorrectionMaskWholeImageArea	string/_	(PaintBasedCorrectionsCorrectionMasksWholeImageArea)
PaintCorrectionMaskX	real/_	(PaintBasedCorrectionsCorrectionMasksX)
PaintCorrectionMaskY	real/_	(PaintBasedCorrectionsCorrectionMasksY)
PaintCorrectionMaskZeroX	real/_	(PaintBasedCorrectionsCorrectionMasksZeroX)
PaintCorrectionMaskZeroY	real/_	(PaintBasedCorrectionsCorrectionMasksZeroY)
PaintCorrectionCorrectionName	string/_ +	(PaintBasedCorrectionsCorrectionName)
PaintCorrectionRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (PaintBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
PaintCorrectionRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (PaintBasedCorrectionsCorrectionRangeMaskAreaModels)
PaintCorrectionRangeMaskAreaModelsComponents	string/_ +	(PaintBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
PaintCorrectionRangeMaskAreaModelsColorSampleInfo	string/_ +	(PaintBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
PaintCorrectionRangeMaskColorAmount	real/_ +	(PaintBasedCorrectionsCorrectionRangeMaskColorAmount)

PaintCorrectionRangeMaskDepthFeather	real/_+	(PaintBasedCorrectionsCorrectionRangeMaskDepthFeather)
PaintCorrectionRangeMaskDepthMax	real/_+	(PaintBasedCorrectionsCorrectionRangeMaskDepthMax)
PaintCorrectionRangeMaskDepthMin	real/_+	(PaintBasedCorrectionsCorrectionRangeMaskDepthMin)
PaintCorrectionRangeMaskInvert	boolean/_+	(PaintBasedCorrectionsCorrectionRangeMaskInvert)
PaintCorrectionRangeMaskLumFeather	real/_+	(PaintBasedCorrectionsCorrectionRangeMaskLumFeather)
PaintCorrectionRangeMaskLuminanceDepthSampleInfo	string/_+	(PaintBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
PaintCorrectionRangeMaskLumMax	real/_+	(PaintBasedCorrectionsCorrectionRangeMaskLumMax)
PaintCorrectionRangeMaskLumMin	real/_+	(PaintBasedCorrectionsCorrectionRangeMaskLumMin)
PaintCorrectionRangeMaskLumRange	string/_+	(PaintBasedCorrectionsCorrectionRangeMaskLumRange)
PaintCorrectionRangeMaskSampleType	integer/_+	(PaintBasedCorrectionsCorrectionRangeMaskSampleType)
PaintCorrectionRangeMaskType	string/_+	(PaintBasedCorrectionsCorrectionRangeMaskType)
PaintCorrectionRangeMaskVersion	string/_+	(PaintBasedCorrectionsCorrectionRangeMaskVersion)
PaintCorrectionCorrectionSyncID	string/_+	(PaintBasedCorrectionsCorrectionSyncID)
PaintCorrectionBlacks2012	real/_	(PaintBasedCorrectionsLocalBlacks2012)
PaintCorrectionBrightness	real/_	(PaintBasedCorrectionsLocalBrightness)
PaintCorrectionClarity	real/_	(PaintBasedCorrectionsLocalClarity)
PaintCorrectionClarity2012	real/_	(PaintBasedCorrectionsLocalClarity2012)
PaintCorrectionContrast	real/_	(PaintBasedCorrectionsLocalContrast)
PaintCorrectionContrast2012	real/_	(PaintBasedCorrectionsLocalContrast2012)
PaintCorrectionDefringe	real/_	(PaintBasedCorrectionsLocalDefringe)
PaintCorrectionDehaze	real/_	(PaintBasedCorrectionsLocalDehaze)
PaintCorrectionExposure	real/_	(PaintBasedCorrectionsLocalExposure)
PaintCorrectionExposure2012	real/_	(PaintBasedCorrectionsLocalExposure2012)
PaintCorrectionHighlights2012	real/_	(PaintBasedCorrectionsLocalHighlights2012)
PaintCorrectionHue	real/_	(PaintBasedCorrectionsLocalHue)
PaintCorrectionLuminanceNoise	real/_	(PaintBasedCorrectionsLocalLuminanceNoise)
PaintCorrectionMoire	real/_	(PaintBasedCorrectionsLocalMoire)
PaintCorrectionSaturation	real/_	(PaintBasedCorrectionsLocalSaturation)
PaintCorrectionShadows2012	real/_	(PaintBasedCorrectionsLocalShadows2012)
PaintCorrectionSharpness	real/_	(PaintBasedCorrectionsLocalSharpness)
PaintCorrectionTemperature	real/_	(PaintBasedCorrectionsLocalTemperature)
PaintCorrectionTexture	real/_	(PaintBasedCorrectionsLocalTexture)
PaintCorrectionTint	real/_	(PaintBasedCorrectionsLocalTint)
PaintCorrectionToningHue	real/_	(PaintBasedCorrectionsLocalToningHue)
PaintCorrectionToningSaturation	real/_	(PaintBasedCorrectionsLocalToningSaturation)
PaintCorrectionWhites2012	real/_	(PaintBasedCorrectionsLocalWhites2012)
PaintCorrectionWhat	string/_	(PaintBasedCorrectionsWhat)
ParametricDarks	integer/	
ParametricHighlights	integer/	
ParametricHighlightSplit	integer/	
ParametricLights	integer/	
ParametricMidtoneSplit	integer/	
ParametricShadows	integer/	
ParametricShadowSplit	integer/	
PerspectiveAspect	integer/	
PerspectiveHorizontal	integer/	
PerspectiveRotate	real/	
PerspectiveScale	integer/	
PerspectiveUpright	integer/	0 = Off    3 = Level 1 = Auto    4 = Vertical 2 = Full    5 = Guided
PerspectiveVertical	integer/	
PerspectiveX	real/	
PerspectiveY	real/	
PostCropVignetteAmount	integer/	
PostCropVignetteFeather	integer/	
PostCropVignetteHighlightContrast	integer/	
PostCropVignetteMidpoint	integer/	
PostCropVignetteRoundness	integer/	
PostCropVignetteStyle	integer/	1 = Highlight Priority 2 = Color Priority 3 = Paint Overlay
PresetType	string/	
ProcessVersion	string/	
RangeMask	struct	--> <a href="#">RangeMask Struct</a> (tag ID is 'RangeMaskMapInfo')
RangeMaskMapInfo	struct_	--> <a href="#">MapInfo Struct</a> (RangeMaskMapInfoRangeMaskMapInfo)
RangeMaskMapInfoLabMax	string/_	(RangeMaskMapInfoRangeMaskMapInfoLabMax)
RangeMaskMapInfoLabMin	string/_	(RangeMaskMapInfoRangeMaskMapInfoLabMin)
RangeMaskMapInfoLumEq	string/_+	(RangeMaskMapInfoRangeMaskMapInfoLumEq)
RangeMaskMapInfoRGBMax	string/_	(RangeMaskMapInfoRangeMaskMapInfoRGBMax)
RangeMaskMapInfoRGBMin	string/_	(RangeMaskMapInfoRangeMaskMapInfoRGBMin)
RawFileName	string/	
RedEyeInfo	string/+	
RedHue	integer/	
RedSaturation	integer/	
RetouchAreas	struct+	--> <a href="#">RetouchArea Struct</a>
RetouchAreaFeather	real/_	(RetouchAreasFeather)
RetouchAreaMasks	struct_+	--> <a href="#">CorrectionMask Struct</a> (RetouchAreasMasks)
RetouchAreaMaskAlpha	real/_	(RetouchAreasMasksAlpha)

RetouchAreaMaskAngle	real/_	(RetouchAreasMasksAngle)
RetouchAreaMaskBottom	real/_	(RetouchAreasMasksBottom)
RetouchAreaMaskCenterValue	real/_	(RetouchAreasMasksCenterValue)
RetouchAreaMaskCenterWeight	real/_	(RetouchAreasMasksCenterWeight)
RetouchAreaMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (RetouchAreasMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
RetouchAreaMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (RetouchAreasMasksCorrectionRangeMaskAreaModels)
RetouchAreaMaskRangeAreaModelsComponents	string/_ +	(RetouchAreasMasksCorrectionRangeMaskAreaModelsAreaComponents)
RetouchAreaMaskRangeAreaModelsColorSampleInfo	string/_ +	(RetouchAreasMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
RetouchAreaMaskRangeColorAmount	real/_ +	(RetouchAreasMasksCorrectionRangeMaskColorAmount)
RetouchAreaMaskRangeDepthFeather	real/_ +	(RetouchAreasMasksCorrectionRangeMaskDepthFeather)
RetouchAreaMaskRangeDepthMax	real/_ +	(RetouchAreasMasksCorrectionRangeMaskDepthMax)
RetouchAreaMaskRangeDepthMin	real/_ +	(RetouchAreasMasksCorrectionRangeMaskDepthMin)
RetouchAreaMaskRangeInvert	boolean/_ +	(RetouchAreasMasksCorrectionRangeMaskInvert)
RetouchAreaMaskRangeLumFeather	real/_ +	(RetouchAreasMasksCorrectionRangeMaskLumFeather)
RetouchAreaMaskRangeLuminanceDepthSampleInfo	string/_ +	(RetouchAreasMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
RetouchAreaMaskRangeLumMax	real/_ +	(RetouchAreasMasksCorrectionRangeMaskLumMax)
RetouchAreaMaskRangeLumMin	real/_ +	(RetouchAreasMasksCorrectionRangeMaskLumMin)
RetouchAreaMaskRangeLumRange	string/_ +	(RetouchAreasMasksCorrectionRangeMaskLumRange)
RetouchAreaMaskRangeSampleType	integer/_ +	(RetouchAreasMasksCorrectionRangeMaskSampleType)
RetouchAreaMaskRangeType	string/_ +	(RetouchAreasMasksCorrectionRangeMaskType)
RetouchAreaMaskRangeVersion	string/_ +	(RetouchAreasMasksCorrectionRangeMaskVersion)
RetouchAreaMaskDabs	string/_	(RetouchAreasMasksDabs)
RetouchAreaMaskFeather	real/_	(RetouchAreasMasksFeather)
RetouchAreaMaskFlipped	boolean/_	(RetouchAreasMasksFlipped)
RetouchAreaMaskFlow	real/_	(RetouchAreasMasksFlow)
RetouchAreaMaskFullX	real/_	(RetouchAreasMasksFullX)
RetouchAreaMaskFullY	real/_	(RetouchAreasMasksFullY)
RetouchAreaMaskInputDigest	string/_	(RetouchAreasMasksInputDigest)
RetouchAreaMaskLeft	real/_	(RetouchAreasMasksLeft)
RetouchAreaMaskMaskActive	boolean/_	(RetouchAreasMasksMaskActive)
RetouchAreaMaskMaskBlendMode	integer/_	(RetouchAreasMasksMaskBlendMode)
RetouchAreaMaskMaskDigest	string/_	(RetouchAreasMasksMaskDigest)
RetouchAreaMaskMaskInverted	boolean/_	(RetouchAreasMasksMaskInverted)
RetouchAreaMaskMaskName	string/_	(RetouchAreasMasksMaskName)
RetouchAreaMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (RetouchAreasMasksMasks)
RetouchAreaMaskMasksAlpha	real/_	(RetouchAreasMasksMasksAlpha)
RetouchAreaMaskMasksAngle	real/_	(RetouchAreasMasksMasksAngle)
RetouchAreaMaskMasksBottom	real/_	(RetouchAreasMasksMasksBottom)
RetouchAreaMaskMasksCenterValue	real/_	(RetouchAreasMasksMasksCenterValue)
RetouchAreaMaskMasksCenterWeight	real/_	(RetouchAreasMasksMasksCenterWeight)
RetouchAreaMaskMasksDabs	string/_ +	(RetouchAreasMasksMasksDabs)
RetouchAreaMaskMasksFeather	real/_	(RetouchAreasMasksMasksFeather)
RetouchAreaMaskMasksFlipped	boolean/_	(RetouchAreasMasksMasksFlipped)
RetouchAreaMaskMasksFlow	real/_	(RetouchAreasMasksMasksFlow)
RetouchAreaMaskMasksFullX	real/_	(RetouchAreasMasksMasksFullX)
RetouchAreaMaskMasksFullY	real/_	(RetouchAreasMasksMasksFullY)
RetouchAreaMaskMasksInputDigest	string/_	(RetouchAreasMasksMasksInputDigest)
RetouchAreaMaskMasksLeft	real/_	(RetouchAreasMasksMasksLeft)
RetouchAreaMaskMasksMaskActive	boolean/_	(RetouchAreasMasksMasksMaskActive)
RetouchAreaMaskMasksMaskBlendMode	integer/_	(RetouchAreasMasksMasksMaskBlendMode)
RetouchAreaMaskMasksMaskDigest	string/_	(RetouchAreasMasksMasksMaskDigest)
RetouchAreaMaskMasksMaskInverted	boolean/_	(RetouchAreasMasksMasksMaskInverted)
RetouchAreaMaskMasksMaskName	string/_	(RetouchAreasMasksMasksMaskName)
RetouchAreaMaskMasksMaskSubType	string/_	(RetouchAreasMasksMasksMaskSubType)
RetouchAreaMaskMasksMaskSyncID	string/_	(RetouchAreasMasksMasksMaskSyncID)
RetouchAreaMaskMasksValue	real/_	(RetouchAreasMasksMasksMaskValue)
RetouchAreaMaskMasksMaskVersion	string/_	(RetouchAreasMasksMasksMaskVersion)
RetouchAreaMaskMasksMidpoint	real/_	(RetouchAreasMasksMasksMidpoint)
RetouchAreaMaskMasksOrigin	string/_	(RetouchAreasMasksMasksOrigin)
RetouchAreaMaskMasksPerimeterValue	real/_	(RetouchAreasMasksMasksPerimeterValue)
RetouchAreaMaskMasksRadius	real/_	(RetouchAreasMasksMasksRadius)
RetouchAreaMaskMasksReferencePoint	string/_	(RetouchAreasMasksMasksReferencePoint)
RetouchAreaMaskMasksRight	real/_	(RetouchAreasMasksMasksRight)
RetouchAreaMaskMasksRoundness	real/_	(RetouchAreasMasksMasksRoundness)
RetouchAreaMaskMasksSizeX	real/_	(RetouchAreasMasksMasksSizeX)
RetouchAreaMaskMasksSizeY	real/_	(RetouchAreasMasksMasksSizeY)
RetouchAreaMaskMasksTop	real/_	(RetouchAreasMasksMasksTop)
RetouchAreaMaskMaskSubType	string/_	(RetouchAreasMasksMaskSubType)
RetouchAreaMaskMasksVersion	integer/_	(RetouchAreasMasksMasksVersion)
RetouchAreaMaskMasksWhat	string/_	(RetouchAreasMasksMasksWhat)
RetouchAreaMaskMasksWholeImageArea	string/_	(RetouchAreasMasksMasksWholeImageArea)
RetouchAreaMaskMasksX	real/_	(RetouchAreasMasksMasksX)
RetouchAreaMaskMasksY	real/_	(RetouchAreasMasksMasksY)
RetouchAreaMaskMaskSyncID	string/_	(RetouchAreasMasksMaskSyncID)
RetouchAreaMaskMasksZeroX	real/_	(RetouchAreasMasksMasksZeroX)
RetouchAreaMaskMasksZeroY	real/_	(RetouchAreasMasksMasksZeroY)
RetouchAreaMaskValue	real/_	(RetouchAreasMasksMaskValue)

RetouchAreaMaskMaskVersion	string/_	(RetouchAreasMasksMaskVersion)
RetouchAreaMaskMidpoint	real/_	(RetouchAreasMasksMidpoint)
RetouchAreaMaskOrigin	string/_	(RetouchAreasMasksOrigin)
RetouchAreaMaskPerimeterValue	real/_	(RetouchAreasMasksPerimeterValue)
RetouchAreaMaskRadius	real/_	(RetouchAreasMasksRadius)
RetouchAreaMaskReferencePoint	string/_	(RetouchAreasMasksReferencePoint)
RetouchAreaMaskRight	real/_	(RetouchAreasMasksRight)
RetouchAreaMaskRoundness	real/_	(RetouchAreasMasksRoundness)
RetouchAreaMaskSizeX	real/_	(RetouchAreasMasksSizeX)
RetouchAreaMaskSizeY	real/_	(RetouchAreasMasksSizeY)
RetouchAreaMaskTop	real/_	(RetouchAreasMasksTop)
RetouchAreaMaskVersion	integer/_	(RetouchAreasMasksVersion)
RetouchAreaMaskWhat	string/_	(RetouchAreasMasksWhat)
RetouchAreaMaskWholeImageArea	string/_	(RetouchAreasMasksWholeImageArea)
RetouchAreaMaskX	real/_	(RetouchAreasMasksX)
RetouchAreaMaskY	real/_	(RetouchAreasMasksY)
RetouchAreaMaskZeroX	real/_	(RetouchAreasMasksZeroX)
RetouchAreaMaskZeroY	real/_	(RetouchAreasMasksZeroY)
RetouchAreaMethod	string/_	(RetouchAreasMethod)
RetouchAreaOffsetY	real/_	(RetouchAreasOffsetY)
RetouchAreaOpacity	real/_	(RetouchAreasOpacity)
RetouchAreaSeed	integer/_	(RetouchAreasSeed)
RetouchAreaSourceState	string/_	(RetouchAreasSourceState)
RetouchAreaSourceX	real/_	(RetouchAreasSourceX)
RetouchAreaSpotType	string/_	(RetouchAreasSpotType)
RetouchInfo	string/+	
Saturation	integer/	
SaturationAdjustmentAqua	integer/	
SaturationAdjustmentBlue	integer/	
SaturationAdjustmentGreen	integer/	
SaturationAdjustmentMagenta	integer/	
SaturationAdjustmentOrange	integer/	
SaturationAdjustmentPurple	integer/	
SaturationAdjustmentRed	integer/	
SaturationAdjustmentYellow	integer/	
SDRBlend	real/	
SDRBrightness	real/	
SDRContrast	real/	
SDRHighlights	real/	
SDRShadows	real/	
SDRWhites	real/	
Shadows	integer/	
Shadows2012	integer/	
ShadowTint	integer/	
SharpenDetail	integer/	
SharpenEdgeMasking	integer/	
SharpenRadius	real/	
Sharpness	integer/	
ShortName	lang-alt/	
Smoothness	integer/	
SortName	lang-alt/	
SplitToningBalance	integer/	(also used for newer ColorGrade settings)
SplitToningHighlightHue	integer/	(also used for newer ColorGrade settings)
SplitToningHighlightSaturation	integer/	(also used for newer ColorGrade settings)
SplitToningShadowHue	integer/	(also used for newer ColorGrade settings)
SplitToningShadowSaturation	integer/	(also used for newer ColorGrade settings)
SupportsAmount	boolean/	
SupportsColor	boolean/	
SupportsHighDynamicRange	boolean/	
SupportsMonochrome	boolean/	
SupportsNormalDynamicRange	boolean/	
SupportsOutputReferred	boolean/	
SupportsSceneReferred	boolean/	
ColorTemperature	integer/	(tag ID is 'Temperature')
Texture	integer/	
TIFFHandling	string/	
Tint	integer/	
ToggleStyleAmount	integer/	
ToggleStyleDigest	string/	
ToneCurve	string/+	
ToneCurveBlue	string/+	
ToneCurveGreen	string/+	
ToneCurveName	string/	'Custom' = Custom 'Linear' = Linear 'Medium Contrast' = Medium Contrast 'Strong Contrast' = Strong Contrast
ToneCurveName2012	string/	
ToneCurvePV2012	string/+	
ToneCurvePV2012Blue	string/+	
ToneCurvePV2012Green	string/+	
ToneCurvePV2012Red	string/+	

ToneCurveRed	string/+
ToneMapStrength	real/
UprightCenterMode	integer/
UprightCenterNormX	real/
UprightCenterNormY	real/
UprightDependentDigest	string/
UprightFocalLength35mm	real/
UprightFocalMode	integer/
UprightFourSegments_0	string/
UprightFourSegments_1	string/
UprightFourSegments_2	string/
UprightFourSegments_3	string/
UprightFourSegmentsCount	integer/
UprightGuidedDependentDigest	string/
UprightPreview	boolean/
UprightTransform_0	string/
UprightTransform_1	string/
UprightTransform_2	string/
UprightTransform_3	string/
UprightTransform_4	string/
UprightTransform_5	string/
UprightTransformCount	integer/
UprightVersion	integer/
UUID	string/
Version	string/
Vibrance	integer/
VignetteAmount	integer/
VignetteMidpoint	integer/
What	string/
WhiteBalance	string/ 'As Shot' = As Shot 'Auto' = Auto 'Cloudy' = Cloudy 'Custom' = Custom 'Daylight' = Daylight 'Flash' = Flash 'Fluorescent' = Fluorescent 'Shade' = Shade 'Tungsten' = Tungsten
Whites2012	integer/

## XMP Correction Struct

Field Name	Writable	Values / Notes
CorrectionActive	boolean	
CorrectionAmount	real	
CorrectionMasks	CorrectionMask+ --> <a href="#">CorrectionMask Struct</a>	
CorrectionName	string	
CorrRangeMask	CorrRangeMask	(called CorrectionRangeMask by the spec) --> <a href="#">CorrRangeMask Struct</a>
CorrectionSyncID	string	
LocalBlacks2012	real	
LocalBrightness	real	
LocalClarity	real	
LocalClarity2012	real	
LocalContrast	real	
LocalContrast2012	real	
LocalDefringe	real	
LocalDehaze	real	
LocalExposure	real	
LocalExposure2012	real	
LocalHighlights2012	real	
LocalHue	real	
LocalLuminanceNoise	real	
LocalMoire	real	
LocalSaturation	real	
LocalShadows2012	real	
LocalSharpness	real	
LocalTemperature	real	
LocalTexture	real	
LocalTint	real	
LocalToningHue	real	
LocalToningSaturation	real	
LocalWhites2012	real	
What	string	

## XMP CorrectionMask Struct

Field Name	Writable	Values / Notes
Alpha	real	
Angle	real	
Bottom	real	
CenterValue	real	
CenterWeight	real	

CorrRangeMask	CorrRangeMask	(called CorrectionRangeMask by the spec) --> <a href="#">CorrRangeMask Struct</a>
Dabs	string+	
Feather	real	
Flipped	boolean	
Flow	real	
FullX	real	
FullY	real	
InputDigest	string	
Left	real	
MaskActive	boolean	
MaskBlendMode	integer	
MaskDigest	string	
MaskInverted	boolean	
MaskName	string	
MaskSubType	string	
MaskSyncID	string	
MaskValue	real	
MaskVersion	string	
Masks	CorrectionMask	--> <a href="#">CorrectionMask Struct</a>
Midpoint	real	
Origin	string	
PerimeterValue	real	
Radius	real	
ReferencePoint	string	
Right	real	
Roundness	real	
SizeX	real	
SizeY	real	
Top	real	
Version	integer	
What	string	
WholeImageArea	string	
X	real	
Y	real	
ZeroX	real	
ZeroY	real	

## XMP CorrRangeMask Struct

Called CorrectionRangeMask by the spec.

Field Name	Writable	Values / Notes
AreaModels	AreaModels+	--> <a href="#">AreaModels Struct</a>
ColorAmount	real	
DepthFeather	real	
DepthMax	real	
DepthMin	real	
Invert	boolean	
LumFeather	real	
LumMax	real	
LumMin	real	
LumRange	string	
LuminanceDepthSampleInfo	string	
SampleType	integer	
Type	string	
Version	string	

## XMP AreaModels Struct

Field Name	Writable	Values / Notes
AreaComponents	string+	
ColorRangeMaskAreaSampleInfo	string	

## XMP DepthBasedCorr Struct

Field Name	Writable	Values / Notes
CorrectionActive	boolean	
CorrectionAmount	real	
CorrectionMasks	CorrectionMask+	--> <a href="#">CorrectionMask Struct</a>
CorrectionSyncID	string	
LocalCorrectedDepth	real	
LocalCurveRefineSaturation	real	
What	string	

## XMP DepthMapInfo Struct

Field Name	Writable	Values / Notes
BaseHighlightGuideInputDigest	string	
BaseHighlightGuideTable	string	
BaseHighlightGuideVersion	string	

BaseLayeredDepthInputDigest	string
BaseLayeredDepthTable	string
BaseLayeredDepthVersion	string
BaseRawDepthInputDigest	string
BaseRawDepthTable	string
BaseRawDepthVersion	string
DepthSource	string

## XMP LensBlur Struct

Field Name	Writable	Values / Notes
Active	boolean	
BlurAmount	real	
BokehAspect	real	
BokehRotation	real	
BokehShape	real	
BokehShapeDetail	real	
CatEyeAmount	real	
CatEyeScale	real	
FocalRange	string	
FocalRangeSource	real	
HighlightsBoost	real	
HighlightsThreshold	real	
SampledArea	string	
SampledRange	string	
SphericalAberration	real	
SubjectRange	string	
Version	string	

## XMP Look Struct

Field Name	Writable	Values / Notes
Amount	string	
Cluster	string	
Copyright	string	
Group	lang-alt	
Name	string	
Parameters	LookParms	--> <a href="#">LookParms Struct</a>
SupportsAmount	string	
SupportsMonochrome	string	
SupportsOutputReferred	string	
UUID	string	

## XMP LookParms Struct

Field Name	Writable	Values / Notes
CameraProfile	string	
Clarity2012	string	
ConvertToGrayscale	string	
Highlights2012	string	
LookTable	string	
ProcessVersion	string	
Shadows2012	string	
ToneCurvePV2012	string+	
ToneCurvePV2012Blue	string+	
ToneCurvePV2012Green	string+	
ToneCurvePV2012Red	string+	
Version	string	

## XMP RangeMask Struct

This structure is actually called RangeMaskMapInfo, but it only contains one element which is a RangeMaskMapInfo structure (Yes, really!). So these are renamed to RangeMask and MapInfo respectively to avoid confusion and redundancy in the tag names.

Field Name	Writable	Values / Notes
RangeMaskMapInfo	MapInfo	--> <a href="#">MapInfo Struct</a>

## XMP MapInfo Struct

Called RangeMaskMapInfo by the specification, the same as the containing structure.

Field Name	Writable	Values / Notes
LabMax	string	
LabMin	string	
LumEq	string+	
RGBMax	string	
RGBMin	string	

## XMP RetouchArea Struct

Field Name	Writable	Values / Notes
Feather	real	

Masks	CorrectionMask+ --> <a href="#">CorrectionMask Struct</a>
Method	string
OffsetY	real
Opacity	real
Seed	integer
SourceState	string
SourceX	real
SpotType	string

## XMP creatorAtom Tags

Adobe creatorAtom tags, written by After Effects.

These tags belong to the ExifTool XMP-creatorAtom family 1 group.

Tag Name	Writable	Values / Notes
AeProjectLink	struct	--> <a href="#">AEProjectLink Struct</a>
AeProjectLinkCompositionID	string_	
AeProjectLinkFullPath	string_	
AeProjectLinkRenderOutputModuleIndex	string_	
AeProjectLinkRenderQueueItemID	string_	
AeProjectLinkRenderTimeStamp	integer_	
MacAtom	struct	--> <a href="#">MacAtom Struct</a>
MacAtomApplicationCode	string_	
MacAtomInvocationAppleEvent	string_	
MacAtomPosixProjectPath	string_	
WindowsAtom	struct	--> <a href="#">WindowsAtom Struct</a>
WindowsAtomExtension	string_	
WindowsAtomInvocationFlags	string_	
WindowsAtomUncProjectPath	string_	

## XMP AEProjectLink Struct

Field Name	Writable	Values / Notes
CompositionID	string	
FullPath	string	
RenderOutputModuleIndex	string	
RenderQueueItemID	string	
RenderTimeStamp	integer	

## XMP MacAtom Struct

Field Name	Writable	Values / Notes
ApplicationCode	string	
InvocationAppleEvent	string	
PosixProjectPath	string	

## XMP WindowsAtom Struct

Field Name	Writable	Values / Notes
Extension	string	
InvocationFlags	string	
UncProjectPath	string	

## XMP crs Tags

Photoshop Camera Raw namespace tags. It is a shame that Adobe pollutes the metadata space with these incredibly bulky image editing parameters.

These tags belong to the ExifTool XMP-crs family 1 group.

Tag Name	Writable	Values / Notes
AlreadyApplied	boolean	
AutoBrightness	boolean	
AutoContrast	boolean	
AutoExposure	boolean	
AutoLateralCA	integer	
AutoShadows	boolean	
AutoTone	boolean	
AutoToneDigest	string	
AutoToneDigestNoSat	string	
AutoWhiteVersion	integer	
Blacks2012	integer	
BlueHue	integer	
BlueSaturation	integer	
Brightness	integer	
CameraModelRestriction	string	
CameraProfile	string	
CameraProfileDigest	string	
ChromaticAberrationB	integer	
ChromaticAberrationR	integer	
CircularGradientBasedCorrections	struct+	--> <a href="#">Correction Struct</a>
CircGradBasedCorrActive	boolean_	(CircularGradientBasedCorrectionsCorrectionActive)

CircGradBasedCorrAmount	real_	(CircularGradientBasedCorrectionsCorrectionAmount)
CircGradBasedCorrMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (CircularGradientBasedCorrectionsCorrectionMasks)
CircGradBasedCorrMaskAlpha	real_	(CircularGradientBasedCorrectionsCorrectionMasksAlpha)
CircGradBasedCorrMaskAngle	real_	(CircularGradientBasedCorrectionsCorrectionMasksAngle)
CircGradBasedCorrMaskBottom	real_	(CircularGradientBasedCorrectionsCorrectionMasksBottom)
CircGradBasedCorrMaskCenterValue	real_	(CircularGradientBasedCorrectionsCorrectionMasksCenterValue)
CircGradBasedCorrMaskCenterWeight	real_	(CircularGradientBasedCorrectionsCorrectionMasksCenterWeight)
CircGradBasedCorrMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
CircGradBasedCorrMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
CircGradBasedCorrMaskRangeAreaModelsComponents	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsAreaComponents)
CircGradBasedCorrMaskRangeAreaModelsColorSampleInfo	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
CircGradBasedCorrMaskRangeColorAmount	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
CircGradBasedCorrMaskRangeDepthFeather	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
CircGradBasedCorrMaskRangeDepthMax	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
CircGradBasedCorrMaskRangeDepthMin	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
CircGradBasedCorrMaskRangeInvert	boolean_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
CircGradBasedCorrMaskRangeLumFeather	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
CircGradBasedCorrMaskRangeLuminanceDepthSampleInfo	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
CircGradBasedCorrMaskRangeLumMax	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
CircGradBasedCorrMaskRangeLumMin	real_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
CircGradBasedCorrMaskRangeLumRange	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
CircGradBasedCorrMaskRangeSampleType	integer_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
CircGradBasedCorrMaskRangeType	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
CircGradBasedCorrMaskRangeVersion	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
CircGradBasedCorrMaskDabs	string_	(CircularGradientBasedCorrectionsCorrectionMasksDabs)
CircGradBasedCorrMaskFeather	real_	(CircularGradientBasedCorrectionsCorrectionMasksFeather)
CircGradBasedCorrMaskFlipped	boolean_	(CircularGradientBasedCorrectionsCorrectionMasksFlipped)
CircGradBasedCorrMaskFlow	real_	(CircularGradientBasedCorrectionsCorrectionMasksFlow)
CircGradBasedCorrMaskFullX	real_	(CircularGradientBasedCorrectionsCorrectionMasksFullX)
CircGradBasedCorrMaskFullyY	real_	(CircularGradientBasedCorrectionsCorrectionMasksFullyY)
CircGradBasedCorrMaskInputDigest	string_	(CircularGradientBasedCorrectionsCorrectionMasksInputDigest)
CircGradBasedCorrMaskLeft	real_	(CircularGradientBasedCorrectionsCorrectionMasksLeft)
CircGradBasedCorrMaskMaskActive	boolean_	(CircularGradientBasedCorrectionsCorrectionMasksMaskActive)
CircGradBasedCorrMaskMaskBlendMode	integer_	(CircularGradientBasedCorrectionsCorrectionMasksMaskBlendMode)
CircGradBasedCorrMaskMaskDigest	string_	(CircularGradientBasedCorrectionsCorrectionMasksMaskDigest)
CircGradBasedCorrMaskMaskInverted	boolean_	(CircularGradientBasedCorrectionsCorrectionMasksMaskInverted)
CircGradBasedCorrMaskMaskName	string_	(CircularGradientBasedCorrectionsCorrectionMasksMaskName)
CircGradBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (CircularGradientBasedCorrectionsCorrectionMasksMasks)
CircGradBasedCorrMaskMasksAlpha	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksAlpha)
CircGradBasedCorrMaskMasksAngle	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksAngle)
CircGradBasedCorrMaskMasksBottom	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksBottom)
CircGradBasedCorrMaskMasksCenterValue	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksCenterValue)
CircGradBasedCorrMaskMasksCenterWeight	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksCenterWeight)
CircGradBasedCorrMaskMasksDabs	string_ +	(CircularGradientBasedCorrectionsCorrectionMasksMasksDabs)
CircGradBasedCorrMaskMasksFeather	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFeather)
CircGradBasedCorrMaskMasksFlipped	boolean_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFlipped)
CircGradBasedCorrMaskMasksFlow	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFlow)
CircGradBasedCorrMaskMasksFullX	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFullX)
CircGradBasedCorrMaskMasksFullyY	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksFullyY)
CircGradBasedCorrMaskMasksInputDigest	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksInputDigest)
CircGradBasedCorrMaskMasksLeft	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksLeft)
CircGradBasedCorrMaskMasksMaskActive	boolean_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskActive)
CircGradBasedCorrMaskMasksMaskBlendMode	integer_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
CircGradBasedCorrMaskMasksMaskDigest	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskDigest)
CircGradBasedCorrMaskMasksMaskInverted	boolean_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskInverted)
CircGradBasedCorrMaskMasksMaskName	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskName)
CircGradBasedCorrMaskMasksMaskSubType	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskSubType)
CircGradBasedCorrMaskMasksMaskSyncID	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskSyncID)
CircGradBasedCorrMaskMasksValue	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskValue)
CircGradBasedCorrMaskMasksMaskVersion	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMaskVersion)
CircGradBasedCorrMaskMasksMidpoint	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksMidpoint)
CircGradBasedCorrMaskMasksOrigin	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksOrigin)
CircGradBasedCorrMaskMasksPerimeterValue	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksPerimeterValue)
CircGradBasedCorrMaskMasksRadius	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksRadius)
CircGradBasedCorrMaskMasksReferencePoint	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksReferencePoint)
CircGradBasedCorrMaskMasksRight	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksRight)
CircGradBasedCorrMaskMasksRoundness	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksRoundness)
CircGradBasedCorrMaskMasksSizeX	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksSizeX)
CircGradBasedCorrMaskMasksSizeY	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksSizeY)
CircGradBasedCorrMaskMasksTop	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksTop)
CircGradBasedCorrMaskMaskSubType	string_	(CircularGradientBasedCorrectionsCorrectionMasksMaskSubType)
CircGradBasedCorrMaskMasksVersion	integer_	(CircularGradientBasedCorrectionsCorrectionMasksMasksVersion)
CircGradBasedCorrMaskMasksWhat	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksWhat)
CircGradBasedCorrMaskMasksWholeImageArea	string_	(CircularGradientBasedCorrectionsCorrectionMasksMasksWholeImageArea)
CircGradBasedCorrMaskMasksX	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksX)
CircGradBasedCorrMaskMasksY	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksY)
CircGradBasedCorrMaskMaskSyncID	string_	(CircularGradientBasedCorrectionsCorrectionMasksMaskSyncID)

CircGradBasedCorrMaskMasksZeroX	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksZeroX)
CircGradBasedCorrMaskMasksZeroY	real_	(CircularGradientBasedCorrectionsCorrectionMasksMasksZeroY)
CircGradBasedCorrMaskValue	real_	(CircularGradientBasedCorrectionsCorrectionMasksMaskValue)
CircGradBasedCorrMaskMaskVersion	string_	(CircularGradientBasedCorrectionsCorrectionMasksMaskVersion)
CircGradBasedCorrMaskMidpoint	real_	(CircularGradientBasedCorrectionsCorrectionMasksMidpoint)
CircGradBasedCorrMaskOrigin	string_	(CircularGradientBasedCorrectionsCorrectionMasksOrigin)
CircGradBasedCorrMaskPerimeterValue	real_	(CircularGradientBasedCorrectionsCorrectionMasksPerimeterValue)
CircGradBasedCorrMaskRadius	real_	(CircularGradientBasedCorrectionsCorrectionMasksRadius)
CircGradBasedCorrMaskReferencePoint	string_	(CircularGradientBasedCorrectionsCorrectionMasksReferencePoint)
CircGradBasedCorrMaskRight	real_	(CircularGradientBasedCorrectionsCorrectionMasksRight)
CircGradBasedCorrMaskRoundness	real_	(CircularGradientBasedCorrectionsCorrectionMasksRoundness)
CircGradBasedCorrMaskSizeX	real_	(CircularGradientBasedCorrectionsCorrectionMasksSizeX)
CircGradBasedCorrMaskSizeY	real_	(CircularGradientBasedCorrectionsCorrectionMasksSizeY)
CircGradBasedCorrMaskTop	real_	(CircularGradientBasedCorrectionsCorrectionMasksTop)
CircGradBasedCorrMaskVersion	integer_	(CircularGradientBasedCorrectionsCorrectionMasksVersion)
CircGradBasedCorrMaskWhat	string_	(CircularGradientBasedCorrectionsCorrectionMasksWhat)
CircGradBasedCorrMaskWholeImageArea	string_	(CircularGradientBasedCorrectionsCorrectionMasksWholeImageArea)
CircGradBasedCorrMaskX	real_	(CircularGradientBasedCorrectionsCorrectionMasksX)
CircGradBasedCorrMaskY	real_	(CircularGradientBasedCorrectionsCorrectionMasksY)
CircGradBasedCorrMaskZeroX	real_	(CircularGradientBasedCorrectionsCorrectionMasksZeroX)
CircGradBasedCorrMaskZeroY	real_	(CircularGradientBasedCorrectionsCorrectionMasksZeroY)
CircGradBasedCorrCorrectionName	string_ +	(CircularGradientBasedCorrectionsCorrectionName)
CircGradBasedCorrRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (CircularGradientBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
CircGradBasedCorrRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (CircularGradientBasedCorrectionsCorrectionRangeMaskAreaModels)
CircGradBasedCorrRangeMaskAreaModelsComponents	string_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
CircGradBasedCorrRangeMaskAreaModelsColorSampleInfo	string_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
CircGradBasedCorrRangeMaskColorAmount	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskColorAmount)
CircGradBasedCorrRangeMaskDepthFeather	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskDepthFeather)
CircGradBasedCorrRangeMaskDepthMax	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskDepthMax)
CircGradBasedCorrRangeMaskDepthMin	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskDepthMin)
CircGradBasedCorrRangeMaskInvert	boolean_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskInvert)
CircGradBasedCorrRangeMaskLumFeather	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumFeather)
CircGradBasedCorrRangeMaskLuminanceDepthSampleInfo	string_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
CircGradBasedCorrRangeMaskLumMax	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumMax)
CircGradBasedCorrRangeMaskLumMin	real_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumMin)
CircGradBasedCorrRangeMaskLumRange	string_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskLumRange)
CircGradBasedCorrRangeMaskSampleType	integer_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskSampleType)
CircGradBasedCorrRangeMaskType	string_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskType)
CircGradBasedCorrRangeMaskVersion	string_ +	(CircularGradientBasedCorrectionsCorrectionRangeMaskVersion)
CircGradBasedCorrCorrectionSyncID	string_ +	(CircularGradientBasedCorrectionsCorrectionSyncID)
CircGradBasedCorrBlacks2012	real_	(CircularGradientBasedCorrectionsLocalBlacks2012)
CircGradBasedCorrBrightness	real_	(CircularGradientBasedCorrectionsLocalBrightness)
CircGradBasedCorrClarity	real_	(CircularGradientBasedCorrectionsLocalClarity)
CircGradBasedCorrClarity2012	real_	(CircularGradientBasedCorrectionsLocalClarity2012)
CircGradBasedCorrContrast	real_	(CircularGradientBasedCorrectionsLocalContrast)
CircGradBasedCorrContrast2012	real_	(CircularGradientBasedCorrectionsLocalContrast2012)
CircGradBasedCorrDefringe	real_	(CircularGradientBasedCorrectionsLocalDefringe)
CircGradBasedCorrDehaze	real_	(CircularGradientBasedCorrectionsLocalDehaze)
CircGradBasedCorrExposure	real_	(CircularGradientBasedCorrectionsLocalExposure)
CircGradBasedCorrExposure2012	real_	(CircularGradientBasedCorrectionsLocalExposure2012)
CircGradBasedCorrHighlights2012	real_	(CircularGradientBasedCorrectionsLocalHighlights2012)
CircGradBasedCorrHue	real_	(CircularGradientBasedCorrectionsLocalHue)
CircGradBasedCorrLuminanceNoise	real_	(CircularGradientBasedCorrectionsLocalLuminanceNoise)
CircGradBasedCorrMoire	real_	(CircularGradientBasedCorrectionsLocalMoire)
CircGradBasedCorrSaturation	real_	(CircularGradientBasedCorrectionsLocalSaturation)
CircGradBasedCorrShadows2012	real_	(CircularGradientBasedCorrectionsLocalShadows2012)
CircGradBasedCorrSharpness	real_	(CircularGradientBasedCorrectionsLocalSharpness)
CircGradBasedCorrTemperature	real_	(CircularGradientBasedCorrectionsLocalTemperature)
CircGradBasedCorrTexture	real_	(CircularGradientBasedCorrectionsLocalTexture)
CircGradBasedCorrTint	real_	(CircularGradientBasedCorrectionsLocalTint)
CircGradBasedCorrToningHue	real_	(CircularGradientBasedCorrectionsLocalToningHue)
CircGradBasedCorrToningSaturation	real_	(CircularGradientBasedCorrectionsLocalToningSaturation)
CircGradBasedCorrWhites2012	real_	(CircularGradientBasedCorrectionsLocalWhites2012)
CircGradBasedCorrWhat	string_	(CircularGradientBasedCorrectionsWhat)
Clarity	integer	
Clarity2012	integer	
ClipboardAspectRatio	integer	
ClipboardOrientation	integer	
Cluster	string	
ColorGradeBlending	integer	
ColorGradeGlobalHue	integer	
ColorGradeGlobalLum	integer	
ColorGradeGlobalSat	integer	
ColorGradeHighlightLum	integer	
ColorGradeMidtoneHue	integer	
ColorGradeMidtoneLum	integer	
ColorGradeMidtoneSat	integer	
ColorGradeShadowLum	integer	

ColorNoiseReduction	integer	
ColorNoiseReductionDetail	integer	
ColorNoiseReductionSmoothness	integer	
CompatibleVersion	string	
ContactInfo	string	
Contrast	integer/	
Contrast2012	integer	
Converter	string	
ConvertToGrayscale	boolean	
Copyright	string/	
CropAngle	real	
CropBottom	real	
CropConstrainToWarp	integer	
CropHeight	real	
CropLeft	real	
CropRight	real	
CropTop	real	
CropUnit	integer	0 = pixels 1 = inches 2 = cm
CropUnits	integer	0 = pixels 1 = inches 2 = cm
CropWidth	real	
DefaultAutoGray	boolean	
DefaultAutoTone	boolean	
DefaultsSpecificToISO	boolean	
DefaultsSpecificToSerial	boolean	
Defringe	integer	
DefringeGreenAmount	integer	
DefringeGreenHueHi	integer	
DefringeGreenHueLo	integer	
DefringePurpleAmount	integer	
DefringePurpleHueHi	integer	
DefringePurpleHueLo	integer	
Dehaze	real	
DepthBasedCorrections	struct+	--> <a href="#">DepthBasedCorr Struct</a>
DepthBasedCorrCorrectionActive	boolean_ +	(DepthBasedCorrectionsCorrectionActive)
DepthBasedCorrCorrectionAmount	real_ +	(DepthBasedCorrectionsCorrectionAmount)
DepthBasedCorrMask	struct_ +	--> <a href="#">CorrectionMask Struct</a> (DepthBasedCorrectionsCorrectionMasks)
DepthBasedCorrMaskAlpha	real_	(DepthBasedCorrectionsCorrectionMasksAlpha)
DepthBasedCorrMaskAngle	real_	(DepthBasedCorrectionsCorrectionMasksAngle)
DepthBasedCorrMaskBottom	real_	(DepthBasedCorrectionsCorrectionMasksBottom)
DepthBasedCorrMaskCenterValue	real_	(DepthBasedCorrectionsCorrectionMasksCenterValue)
DepthBasedCorrMaskCenterWeight	real_	(DepthBasedCorrectionsCorrectionMasksCenterWeight)
DepthBasedCorrMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
DepthBasedCorrMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
DepthBasedCorrMaskRangeAreaModelsComponents	string_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaComponents)
DepthBasedCorrMaskRangeAreaModelsColorSampleInfo	string_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaSampleInfo)
DepthBasedCorrMaskRangeColorAmount	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
DepthBasedCorrMaskRangeDepthFeather	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
DepthBasedCorrMaskRangeDepthMax	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
DepthBasedCorrMaskRangeDepthMin	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
DepthBasedCorrMaskRangeInvert	boolean_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
DepthBasedCorrMaskRangeLumFeather	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
DepthBasedCorrMaskRangeLuminanceDepthSampleInfo	string_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
DepthBasedCorrMaskRangeLumMax	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
DepthBasedCorrMaskRangeLumMin	real_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
DepthBasedCorrMaskRangeLumRange	string_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
DepthBasedCorrMaskRangeSampleType	integer_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
DepthBasedCorrMaskRangeType	string_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
DepthBasedCorrMaskRangeVersion	string_ +	(DepthBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
DepthBasedCorrMaskDabs	string_ +	(DepthBasedCorrectionsCorrectionMasksDabs)
DepthBasedCorrMaskFeather	real_	(DepthBasedCorrectionsCorrectionMasksFeather)
DepthBasedCorrMaskFlipped	boolean_	(DepthBasedCorrectionsCorrectionMasksFlipped)
DepthBasedCorrMaskFlow	real_	(DepthBasedCorrectionsCorrectionMasksFlow)
DepthBasedCorrMaskFullX	real_	(DepthBasedCorrectionsCorrectionMasksFullX)
DepthBasedCorrMaskFullY	real_	(DepthBasedCorrectionsCorrectionMasksFullY)
DepthBasedCorrMaskInputDigest	string_	(DepthBasedCorrectionsCorrectionMasksInputDigest)
DepthBasedCorrMaskLeft	real_	(DepthBasedCorrectionsCorrectionMasksLeft)
DepthBasedCorrMaskMaskActive	boolean_	(DepthBasedCorrectionsCorrectionMasksMaskActive)
DepthBasedCorrMaskMaskBlendMode	integer_	(DepthBasedCorrectionsCorrectionMasksMaskBlendMode)
DepthBasedCorrMaskMaskDigest	string_	(DepthBasedCorrectionsCorrectionMasksMaskDigest)
DepthBasedCorrMaskMaskInverted	boolean_	(DepthBasedCorrectionsCorrectionMasksMaskInverted)
DepthBasedCorrMaskMaskName	string_	(DepthBasedCorrectionsCorrectionMasksMaskName)
DepthBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (DepthBasedCorrectionsCorrectionMasksMasks)
DepthBasedCorrMaskMasksAlpha	real_	(DepthBasedCorrectionsCorrectionMasksMasksAlpha)
DepthBasedCorrMaskMasksAngle	real_	(DepthBasedCorrectionsCorrectionMasksMasksAngle)

DepthBasedCorrMaskMasksBottom	real_	(DepthBasedCorrectionsCorrectionMasksMasksBottom)
DepthBasedCorrMaskMasksCenterValue	real_	(DepthBasedCorrectionsCorrectionMasksMasksCenterValue)
DepthBasedCorrMaskMasksCenterWeight	real_	(DepthBasedCorrectionsCorrectionMasksMasksCenterWeight)
DepthBasedCorrMaskMasksDabs	string_ +	(DepthBasedCorrectionsCorrectionMasksMasksDabs)
DepthBasedCorrMaskMasksFeather	real_	(DepthBasedCorrectionsCorrectionMasksMasksFeather)
DepthBasedCorrMaskMasksFlipped	boolean_	(DepthBasedCorrectionsCorrectionMasksMasksFlipped)
DepthBasedCorrMaskMasksFlow	real_	(DepthBasedCorrectionsCorrectionMasksMasksFlow)
DepthBasedCorrMaskMasksFullX	real_	(DepthBasedCorrectionsCorrectionMasksMasksFullX)
DepthBasedCorrMaskMasksFullY	real_	(DepthBasedCorrectionsCorrectionMasksMasksFullY)
DepthBasedCorrMaskMasksInputDigest	string_	(DepthBasedCorrectionsCorrectionMasksMasksInputDigest)
DepthBasedCorrMaskMasksLeft	real_	(DepthBasedCorrectionsCorrectionMasksMasksLeft)
DepthBasedCorrMaskMasksMaskActive	boolean_	(DepthBasedCorrectionsCorrectionMasksMasksMaskActive)
DepthBasedCorrMaskMasksMaskBlendMode	integer_	(DepthBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
DepthBasedCorrMaskMasksMaskDigest	string_	(DepthBasedCorrectionsCorrectionMasksMasksMaskDigest)
DepthBasedCorrMaskMasksMaskInverted	boolean_	(DepthBasedCorrectionsCorrectionMasksMasksMaskInverted)
DepthBasedCorrMaskMasksMaskName	string_	(DepthBasedCorrectionsCorrectionMasksMasksMaskName)
DepthBasedCorrMaskMasksMaskSubType	string_	(DepthBasedCorrectionsCorrectionMasksMasksMaskSubType)
DepthBasedCorrMaskMasksMaskSyncID	string_	(DepthBasedCorrectionsCorrectionMasksMasksMaskSyncID)
DepthBasedCorrMaskMasksValue	real_	(DepthBasedCorrectionsCorrectionMasksMasksMaskValue)
DepthBasedCorrMaskMasksMaskVersion	string_	(DepthBasedCorrectionsCorrectionMasksMasksMaskVersion)
DepthBasedCorrMaskMasksMidpoint	real_	(DepthBasedCorrectionsCorrectionMasksMasksMidpoint)
DepthBasedCorrMaskMasksOrigin	string_	(DepthBasedCorrectionsCorrectionMasksMasksOrigin)
DepthBasedCorrMaskMasksPerimeterValue	real_	(DepthBasedCorrectionsCorrectionMasksMasksPerimeterValue)
DepthBasedCorrMaskMasksRadius	real_	(DepthBasedCorrectionsCorrectionMasksMasksRadius)
DepthBasedCorrMaskMasksReferencePoint	string_	(DepthBasedCorrectionsCorrectionMasksMasksReferencePoint)
DepthBasedCorrMaskMasksRight	real_	(DepthBasedCorrectionsCorrectionMasksMasksRight)
DepthBasedCorrMaskMasksRoundness	real_	(DepthBasedCorrectionsCorrectionMasksMasksRoundness)
DepthBasedCorrMaskMasksSizeX	real_	(DepthBasedCorrectionsCorrectionMasksMasksSizeX)
DepthBasedCorrMaskMasksSizeY	real_	(DepthBasedCorrectionsCorrectionMasksMasksSizeY)
DepthBasedCorrMaskMasksTop	real_	(DepthBasedCorrectionsCorrectionMasksMasksTop)
DepthBasedCorrMaskMaskSubType	string_	(DepthBasedCorrectionsCorrectionMasksMaskSubType)
DepthBasedCorrMaskMasksVersion	integer_	(DepthBasedCorrectionsCorrectionMasksMasksVersion)
DepthBasedCorrMaskMasksWhat	string_	(DepthBasedCorrectionsCorrectionMasksMasksWhat)
DepthBasedCorrMaskMasksWholeImageArea	string_	(DepthBasedCorrectionsCorrectionMasksMasksWholeImageArea)
DepthBasedCorrMaskMasksX	real_	(DepthBasedCorrectionsCorrectionMasksMasksX)
DepthBasedCorrMaskMasksY	real_	(DepthBasedCorrectionsCorrectionMasksMasksY)
DepthBasedCorrMaskMaskSyncID	string_	(DepthBasedCorrectionsCorrectionMasksMaskSyncID)
DepthBasedCorrMaskMasksZeroX	real_	(DepthBasedCorrectionsCorrectionMasksMasksZeroX)
DepthBasedCorrMaskMasksZeroY	real_	(DepthBasedCorrectionsCorrectionMasksMasksZeroY)
DepthBasedCorrMaskValue	real_	(DepthBasedCorrectionsCorrectionMasksMaskValue)
DepthBasedCorrMaskMaskVersion	string_	(DepthBasedCorrectionsCorrectionMasksMaskVersion)
DepthBasedCorrMaskMidpoint	real_	(DepthBasedCorrectionsCorrectionMasksMidpoint)
DepthBasedCorrMaskOrigin	string_	(DepthBasedCorrectionsCorrectionMasksOrigin)
DepthBasedCorrMaskPerimeterValue	real_	(DepthBasedCorrectionsCorrectionMasksPerimeterValue)
DepthBasedCorrMaskRadius	real_	(DepthBasedCorrectionsCorrectionMasksRadius)
DepthBasedCorrMaskReferencePoint	string_	(DepthBasedCorrectionsCorrectionMasksReferencePoint)
DepthBasedCorrMaskRight	real_	(DepthBasedCorrectionsCorrectionMasksRight)
DepthBasedCorrMaskRoundness	real_	(DepthBasedCorrectionsCorrectionMasksRoundness)
DepthBasedCorrMaskSizeX	real_	(DepthBasedCorrectionsCorrectionMasksSizeX)
DepthBasedCorrMaskSizeY	real_	(DepthBasedCorrectionsCorrectionMasksSizeY)
DepthBasedCorrMaskTop	real_	(DepthBasedCorrectionsCorrectionMasksTop)
DepthBasedCorrMaskVersion	integer_	(DepthBasedCorrectionsCorrectionMasksVersion)
DepthBasedCorrMaskWhat	string_	(DepthBasedCorrectionsCorrectionMasksWhat)
DepthBasedCorrMaskWholeImageArea	string_	(DepthBasedCorrectionsCorrectionMasksWholeImageArea)
DepthBasedCorrMaskX	real_	(DepthBasedCorrectionsCorrectionMasksX)
DepthBasedCorrMaskY	real_	(DepthBasedCorrectionsCorrectionMasksY)
DepthBasedCorrMaskZeroX	real_	(DepthBasedCorrectionsCorrectionMasksZeroX)
DepthBasedCorrMaskZeroY	real_	(DepthBasedCorrectionsCorrectionMasksZeroY)
DepthBasedCorrCorrectionSyncID	string_ +	(DepthBasedCorrectionsCorrectionSyncID)
DepthBasedCorrLocalCorrectedDepth	real_ +	(DepthBasedCorrectionsLocalCorrectedDepth)
DepthBasedCorrLocalCurveRefineSaturation	real_ +	(DepthBasedCorrectionsLocalCurveRefineSaturation)
DepthBasedCorrWhat	string_ +	(DepthBasedCorrectionsWhat)
DepthMapInfo	struct	--> <a href="#">DepthMapInfo Struct</a>
DepthMapInfoBaseHighlightGuideInputDigest	string_	
DepthMapInfoBaseHighlightGuideTable	string_	
DepthMapInfoBaseHighlightGuideVersion	string_	
DepthMapInfoBaseLayeredDepthInputDigest	string_	
DepthMapInfoBaseLayeredDepthTable	string_	
DepthMapInfoBaseLayeredDepthVersion	string_	
DepthMapInfoBaseRawDepthInputDigest	string_	
DepthMapInfoBaseRawDepthTable	string_	
DepthMapInfoBaseRawDepthVersion	string_	
DepthMapInfoDepthSource	string_	
Description	lang-alt/	
DNGIgnoreSidecars	boolean	
Exposure	real	
Exposure2012	real	
FillLight	integer	
GradientBasedCorrections	struct+	--> <a href="#">Correction Struct</a>

GradientBasedCorrActive	boolean_	(GradientBasedCorrectionsCorrectionActive)
GradientBasedCorrAmount	real_	(GradientBasedCorrectionsCorrectionAmount)
GradientBasedCorrMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (GradientBasedCorrectionsCorrectionMasks)
GradientBasedCorrMaskAlpha	real_	(GradientBasedCorrectionsCorrectionMasksAlpha)
GradientBasedCorrMaskAngle	real_	(GradientBasedCorrectionsCorrectionMasksAngle)
GradientBasedCorrMaskBottom	real_	(GradientBasedCorrectionsCorrectionMasksBottom)
GradientBasedCorrMaskCenterValue	real_	(GradientBasedCorrectionsCorrectionMasksCenterValue)
GradientBasedCorrMaskCenterWeight	real_	(GradientBasedCorrectionsCorrectionMasksCenterWeight)
GradientBasedCorrMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (GradientBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
GradientBasedCorrMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
GradientBasedCorrMaskRangeAreaModelsComponents	string_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsComponents)
GradientBasedCorrMaskRangeAreaModelsColorSampleInfo	string_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
GradientBasedCorrMaskRangeColorAmount	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
GradientBasedCorrMaskRangeDepthFeather	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
GradientBasedCorrMaskRangeDepthMax	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
GradientBasedCorrMaskRangeDepthMin	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
GradientBasedCorrMaskRangeInvert	boolean_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
GradientBasedCorrMaskRangeLumFeather	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
GradientBasedCorrMaskRangeLuminanceDepthSampleInfo	string_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
GradientBasedCorrMaskRangeLumMax	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
GradientBasedCorrMaskRangeLumMin	real_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
GradientBasedCorrMaskRangeLumRange	string_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
GradientBasedCorrMaskRangeSampleType	integer_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
GradientBasedCorrMaskRangeType	string_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
GradientBasedCorrMaskRangeVersion	string_ +	(GradientBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
GradientBasedCorrMaskDabs	string_	(GradientBasedCorrectionsCorrectionMasksDabs)
GradientBasedCorrMaskFeather	real_	(GradientBasedCorrectionsCorrectionMasksFeather)
GradientBasedCorrMaskFlipped	boolean_	(GradientBasedCorrectionsCorrectionMasksFlipped)
GradientBasedCorrMaskFlow	real_	(GradientBasedCorrectionsCorrectionMasksFlow)
GradientBasedCorrMaskFullX	real_	(GradientBasedCorrectionsCorrectionMasksFullX)
GradientBasedCorrMaskFullY	real_	(GradientBasedCorrectionsCorrectionMasksFullY)
GradientBasedCorrMaskInputDigest	string_	(GradientBasedCorrectionsCorrectionMasksInputDigest)
GradientBasedCorrMaskLeft	real_	(GradientBasedCorrectionsCorrectionMasksLeft)
GradientBasedCorrMaskMaskActive	boolean_	(GradientBasedCorrectionsCorrectionMasksMaskActive)
GradientBasedCorrMaskMaskBlendMode	integer_	(GradientBasedCorrectionsCorrectionMasksMaskBlendMode)
GradientBasedCorrMaskMaskDigest	string_	(GradientBasedCorrectionsCorrectionMasksMaskDigest)
GradientBasedCorrMaskMaskInverted	boolean_	(GradientBasedCorrectionsCorrectionMasksMaskInverted)
GradientBasedCorrMaskMaskName	string_	(GradientBasedCorrectionsCorrectionMasksMaskName)
GradientBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (GradientBasedCorrectionsCorrectionMasksMasks)
GradientBasedCorrMaskMasksAlpha	real_	(GradientBasedCorrectionsCorrectionMasksMasksAlpha)
GradientBasedCorrMaskMasksAngle	real_	(GradientBasedCorrectionsCorrectionMasksMasksAngle)
GradientBasedCorrMaskMasksBottom	real_	(GradientBasedCorrectionsCorrectionMasksMasksBottom)
GradientBasedCorrMaskMasksCenterValue	real_	(GradientBasedCorrectionsCorrectionMasksMasksCenterValue)
GradientBasedCorrMaskMasksCenterWeight	real_	(GradientBasedCorrectionsCorrectionMasksMasksCenterWeight)
GradientBasedCorrMaskMasksDabs	string_ +	(GradientBasedCorrectionsCorrectionMasksMasksDabs)
GradientBasedCorrMaskMasksFeather	real_	(GradientBasedCorrectionsCorrectionMasksMasksFeather)
GradientBasedCorrMaskMasksFlipped	boolean_	(GradientBasedCorrectionsCorrectionMasksMasksFlipped)
GradientBasedCorrMaskMasksFlow	real_	(GradientBasedCorrectionsCorrectionMasksMasksFlow)
GradientBasedCorrMaskMasksFullX	real_	(GradientBasedCorrectionsCorrectionMasksMasksFullX)
GradientBasedCorrMaskMasksFullY	real_	(GradientBasedCorrectionsCorrectionMasksMasksFullY)
GradientBasedCorrMaskMasksInputDigest	string_	(GradientBasedCorrectionsCorrectionMasksMasksInputDigest)
GradientBasedCorrMaskMasksLeft	real_	(GradientBasedCorrectionsCorrectionMasksMasksLeft)
GradientBasedCorrMaskMasksMaskActive	boolean_	(GradientBasedCorrectionsCorrectionMasksMasksMaskActive)
GradientBasedCorrMaskMasksMaskBlendMode	integer_	(GradientBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
GradientBasedCorrMaskMasksMaskDigest	string_	(GradientBasedCorrectionsCorrectionMasksMasksMaskDigest)
GradientBasedCorrMaskMasksMaskInverted	boolean_	(GradientBasedCorrectionsCorrectionMasksMasksMaskInverted)
GradientBasedCorrMaskMasksMaskName	string_	(GradientBasedCorrectionsCorrectionMasksMasksMaskName)
GradientBasedCorrMaskMasksMaskSubType	string_	(GradientBasedCorrectionsCorrectionMasksMasksMaskSubType)
GradientBasedCorrMaskMasksMaskSyncID	string_	(GradientBasedCorrectionsCorrectionMasksMasksMaskSyncID)
GradientBasedCorrMaskMasksValue	real_	(GradientBasedCorrectionsCorrectionMasksMasksMaskValue)
GradientBasedCorrMaskMasksMaskVersion	string_	(GradientBasedCorrectionsCorrectionMasksMasksMaskVersion)
GradientBasedCorrMaskMasksMidpoint	real_	(GradientBasedCorrectionsCorrectionMasksMasksMidpoint)
GradientBasedCorrMaskMasksOrigin	string_	(GradientBasedCorrectionsCorrectionMasksMasksOrigin)
GradientBasedCorrMaskMasksPerimeterValue	real_	(GradientBasedCorrectionsCorrectionMasksMasksPerimeterValue)
GradientBasedCorrMaskMasksRadius	real_	(GradientBasedCorrectionsCorrectionMasksMasksRadius)
GradientBasedCorrMaskMasksReferencePoint	string_	(GradientBasedCorrectionsCorrectionMasksMasksReferencePoint)
GradientBasedCorrMaskMasksRight	real_	(GradientBasedCorrectionsCorrectionMasksMasksRight)
GradientBasedCorrMaskMasksRoundness	real_	(GradientBasedCorrectionsCorrectionMasksMasksRoundness)
GradientBasedCorrMaskMasksSizeX	real_	(GradientBasedCorrectionsCorrectionMasksMasksSizeX)
GradientBasedCorrMaskMasksSizeY	real_	(GradientBasedCorrectionsCorrectionMasksMasksSizeY)
GradientBasedCorrMaskMasksTop	real_	(GradientBasedCorrectionsCorrectionMasksMasksTop)
GradientBasedCorrMaskMaskSubType	string_	(GradientBasedCorrectionsCorrectionMasksMaskSubType)
GradientBasedCorrMaskMasksVersion	integer_	(GradientBasedCorrectionsCorrectionMasksMasksVersion)
GradientBasedCorrMaskMasksWhat	string_	(GradientBasedCorrectionsCorrectionMasksMasksWhat)
GradientBasedCorrMaskMasksWholeImageArea	string_	(GradientBasedCorrectionsCorrectionMasksMasksWholeImageArea)
GradientBasedCorrMaskMasksX	real_	(GradientBasedCorrectionsCorrectionMasksMasksX)
GradientBasedCorrMaskMasksY	real_	(GradientBasedCorrectionsCorrectionMasksMasksY)

GradientBasedCorrMaskSyncID	string_	(GradientBasedCorrectionsCorrectionMasksMaskSyncID)
GradientBasedCorrMaskMasksZeroX	real_	(GradientBasedCorrectionsCorrectionMasksMasksZeroX)
GradientBasedCorrMaskMasksZeroY	real_	(GradientBasedCorrectionsCorrectionMasksMasksZeroY)
GradientBasedCorrMaskValue	real_	(GradientBasedCorrectionsCorrectionMasksMaskValue)
GradientBasedCorrMaskMaskVersion	string_	(GradientBasedCorrectionsCorrectionMasksMaskVersion)
GradientBasedCorrMaskMidpoint	real_	(GradientBasedCorrectionsCorrectionMasksMidpoint)
GradientBasedCorrMaskOrigin	string_	(GradientBasedCorrectionsCorrectionMasksOrigin)
GradientBasedCorrMaskPerimeterValue	real_	(GradientBasedCorrectionsCorrectionMasksPerimeterValue)
GradientBasedCorrMaskRadius	real_	(GradientBasedCorrectionsCorrectionMasksRadius)
GradientBasedCorrMaskReferencePoint	string_	(GradientBasedCorrectionsCorrectionMasksReferencePoint)
GradientBasedCorrMaskRight	real_	(GradientBasedCorrectionsCorrectionMasksRight)
GradientBasedCorrMaskRoundness	real_	(GradientBasedCorrectionsCorrectionMasksRoundness)
GradientBasedCorrMaskSizeX	real_	(GradientBasedCorrectionsCorrectionMasksSizeX)
GradientBasedCorrMaskSizeY	real_	(GradientBasedCorrectionsCorrectionMasksSizeY)
GradientBasedCorrMaskTop	real_	(GradientBasedCorrectionsCorrectionMasksTop)
GradientBasedCorrMaskVersion	integer_	(GradientBasedCorrectionsCorrectionMasksVersion)
GradientBasedCorrMaskWhat	string_	(GradientBasedCorrectionsCorrectionMasksWhat)
GradientBasedCorrMaskWholeImageArea	string_	(GradientBasedCorrectionsCorrectionMasksWholeImageArea)
GradientBasedCorrMaskX	real_	(GradientBasedCorrectionsCorrectionMasksX)
GradientBasedCorrMaskY	real_	(GradientBasedCorrectionsCorrectionMasksY)
GradientBasedCorrMaskZeroX	real_	(GradientBasedCorrectionsCorrectionMasksZeroX)
GradientBasedCorrMaskZeroY	real_	(GradientBasedCorrectionsCorrectionMasksZeroY)
GradientBasedCorrCorrectionName	string_ +	(GradientBasedCorrectionsCorrectionName)
GradientBasedCorrRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (GradientBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
GradientBasedCorrRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (GradientBasedCorrectionsCorrectionRangeMaskAreaModels)
GradientBasedCorrRangeMaskAreaModelsComponents	string_ +	(GradientBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
GradientBasedCorrRangeMaskAreaModelsColorSampleInfo	string_ +	(GradientBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
GradientBasedCorrRangeMaskColorAmount	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskColorAmount)
GradientBasedCorrRangeMaskDepthFeather	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskDepthFeather)
GradientBasedCorrRangeMaskDepthMax	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskDepthMax)
GradientBasedCorrRangeMaskDepthMin	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskDepthMin)
GradientBasedCorrRangeMaskInvert	boolean_ +	(GradientBasedCorrectionsCorrectionRangeMaskInvert)
GradientBasedCorrRangeMaskLumFeather	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumFeather)
GradientBasedCorrRangeMaskLuminanceDepthSampleInfo	string_ +	(GradientBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
GradientBasedCorrRangeMaskLumMax	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumMax)
GradientBasedCorrRangeMaskLumMin	real_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumMin)
GradientBasedCorrRangeMaskLumRange	string_ +	(GradientBasedCorrectionsCorrectionRangeMaskLumRange)
GradientBasedCorrRangeMaskSampleType	integer_ +	(GradientBasedCorrectionsCorrectionRangeMaskSampleType)
GradientBasedCorrRangeMaskType	string_ +	(GradientBasedCorrectionsCorrectionRangeMaskType)
GradientBasedCorrRangeMaskVersion	string_ +	(GradientBasedCorrectionsCorrectionRangeMaskVersion)
GradientBasedCorrCorrectionSyncID	string_ +	(GradientBasedCorrectionsCorrectionSyncID)
GradientBasedCorrBlacks2012	real_	(GradientBasedCorrectionsLocalBlacks2012)
GradientBasedCorrBrightness	real_	(GradientBasedCorrectionsLocalBrightness)
GradientBasedCorrClarity	real_	(GradientBasedCorrectionsLocalClarity)
GradientBasedCorrClarity2012	real_	(GradientBasedCorrectionsLocalClarity2012)
GradientBasedCorrContrast	real_	(GradientBasedCorrectionsLocalContrast)
GradientBasedCorrContrast2012	real_	(GradientBasedCorrectionsLocalContrast2012)
GradientBasedCorrDefringe	real_	(GradientBasedCorrectionsLocalDefringe)
GradientBasedCorrDehaze	real_	(GradientBasedCorrectionsLocalDehaze)
GradientBasedCorrExposure	real_	(GradientBasedCorrectionsLocalExposure)
GradientBasedCorrExposure2012	real_	(GradientBasedCorrectionsLocalExposure2012)
GradientBasedCorrHighlights2012	real_	(GradientBasedCorrectionsLocalHighlights2012)
GradientBasedCorrHue	real_	(GradientBasedCorrectionsLocalHue)
GradientBasedCorrLuminanceNoise	real_	(GradientBasedCorrectionsLocalLuminanceNoise)
GradientBasedCorrMoire	real_	(GradientBasedCorrectionsLocalMoire)
GradientBasedCorrSaturation	real_	(GradientBasedCorrectionsLocalSaturation)
GradientBasedCorrShadows2012	real_	(GradientBasedCorrectionsLocalShadows2012)
GradientBasedCorrSharpness	real_	(GradientBasedCorrectionsLocalSharpness)
GradientBasedCorrTemperature	real_	(GradientBasedCorrectionsLocalTemperature)
GradientBasedCorrTexture	real_	(GradientBasedCorrectionsLocalTexture)
GradientBasedCorrTint	real_	(GradientBasedCorrectionsLocalTint)
GradientBasedCorrToningHue	real_	(GradientBasedCorrectionsLocalToningHue)
GradientBasedCorrToningSaturation	real_	(GradientBasedCorrectionsLocalToningSaturation)
GradientBasedCorrWhites2012	real_	(GradientBasedCorrectionsLocalWhites2012)
GradientBasedCorrWhat	string_	(GradientBasedCorrectionsWhat)
GrainAmount	integer	
GrainFrequency	integer	
GrainSeed	integer	
GrainSize	integer	
GrayMixerAqua	integer	
GrayMixerBlue	integer	
GrayMixerGreen	integer	
GrayMixerMagenta	integer	
GrayMixerOrange	integer	
GrayMixerPurple	integer	
GrayMixerRed	integer	
GrayMixerYellow	integer	
GreenHue	integer	

GreenSaturation	integer	
Group	lang-alt/	
HasCrop	boolean	
HasSettings	boolean	
HDREditMode	integer	
Highlight2012	integer	
HighlightRecovery	integer	
Highlights2012	integer	
HueAdjustmentAqua	integer	
HueAdjustmentBlue	integer	
HueAdjustmentGreen	integer	
HueAdjustmentMagenta	integer	
HueAdjustmentOrange	integer	
HueAdjustmentPurple	integer	
HueAdjustmentRed	integer	
HueAdjustmentYellow	integer	
IncrementalTemperature	integer	
IncrementalTint	integer	
JPEGHandling	string	
LensBlur	struct	--> <a href="#">LensBlur Struct</a>
LensBlurActive	boolean_	
LensBlurAmount	real_	(LensBlurBlurAmount)
LensBlurBokehAspect	real_	
LensBlurBokehRotation	real_	
LensBlurBokehShape	real_	
LensBlurBokehShapeDetail	real_	
LensBlurCatEyeAmount	real_	
LensBlurCatEyeScale	real_	
LensBlurFocalRange	string_	
LensBlurFocalRangeSource	real_	
LensBlurHighlightsBoost	real_	
LensBlurHighlightsThreshold	real_	
LensBlurSampledArea	string_	
LensBlurSampledRange	string_	
LensBlurSphericalAberration	real_	
LensBlurSubjectRange	string_	
LensBlurVersion	string_	
LensManualDistortionAmount	integer	
LensProfileChromaticAberrationScale	integer	
LensProfileDigest	string	
LensProfileDistortionScale	integer	
LensProfileEnable	integer	
LensProfileFilename	string	
LensProfileIsEmbedded	boolean	
LensProfileMatchKeyCameraModelName	string	
LensProfileMatchKeyExifMake	string	
LensProfileMatchKeyExifModel	string	
LensProfileMatchKeyIsRaw	boolean	
LensProfileMatchKeyLensID	string	
LensProfileMatchKeyLensInfo	string	
LensProfileMatchKeyLensName	string	
LensProfileMatchKeySensorFormatFactor	real	
LensProfileName	string	
LensProfileSetup	string	
LensProfileVignettingScale	integer	
Look	struct	--> <a href="#">Look Struct</a>
LookAmount	string_	
LookCluster	string_	
LookCopyright	string_	
LookGroup	lang-alt_	
LookName	string	(NOT a flattened tag!)
LookParameters	struct_	--> <a href="#">LookParms Struct</a>
LookParametersCameraProfile	string_	
LookParametersClarity2012	string_	
LookParametersConvertToGrayscale	string_	
LookParametersHighlights2012	string_	
LookParametersLookTable	string_	
LookParametersProcessVersion	string_	
LookParametersShadows2012	string_	
LookParametersToneCurvePV2012	string_ +	
LookParametersToneCurvePV2012Blue	string_ +	
LookParametersToneCurvePV2012Green	string_ +	
LookParametersToneCurvePV2012Red	string_ +	
LookParametersVersion	string_	
LookSupportsAmount	string_	
LookSupportsMonochrome	string_	
LookSupportsOutputReferred	string_	
LookUUID	string_	
LuminanceAdjustmentAqua	integer	

LuminanceAdjustmentBlue	integer	
LuminanceAdjustmentGreen	integer	
LuminanceAdjustmentMagenta	integer	
LuminanceAdjustmentOrange	integer	
LuminanceAdjustmentPurple	integer	
LuminanceAdjustmentRed	integer	
LuminanceAdjustmentYellow	integer	
LuminanceNoiseReductionContrast	integer	
LuminanceNoiseReductionDetail	integer	
LuminanceSmoothing	integer	
MaskGroupBasedCorrections	struct+	--> <a href="#">Correction Struct</a>
MaskGroupBasedCorrActive	boolean_	(MaskGroupBasedCorrectionsCorrectionActive)
MaskGroupBasedCorrAmount	real_	(MaskGroupBasedCorrectionsCorrectionAmount)
MaskGroupBasedCorrMask	struct_ +	--> <a href="#">CorrectionMask Struct</a> (MaskGroupBasedCorrectionsCorrectionMasks)
MaskGroupBasedCorrMaskAlpha	real_	(MaskGroupBasedCorrectionsCorrectionMasksAlpha)
MaskGroupBasedCorrMaskAngle	real_	(MaskGroupBasedCorrectionsCorrectionMasksAngle)
MaskGroupBasedCorrMaskBottom	real_	(MaskGroupBasedCorrectionsCorrectionMasksBottom)
MaskGroupBasedCorrMaskCenterValue	real_	(MaskGroupBasedCorrectionsCorrectionMasksCenterValue)
MaskGroupBasedCorrMaskCenterWeight	real_	(MaskGroupBasedCorrectionsCorrectionMasksCenterWeight)
MaskGroupBasedCorrMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
MaskGroupBasedCorrMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
MaskGroupBasedCorrMaskRangeAreaModelsComponents	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsAreaComponents)
MaskGroupBasedCorrMaskRangeAreaModelsColorSampleInfo	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
MaskGroupBasedCorrMaskRangeColorAmount	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
MaskGroupBasedCorrMaskRangeDepthFeather	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
MaskGroupBasedCorrMaskRangeDepthMax	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
MaskGroupBasedCorrMaskRangeDepthMin	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
MaskGroupBasedCorrMaskRangeInvert	boolean_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
MaskGroupBasedCorrMaskRangeLumFeather	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
MaskGroupBasedCorrMaskRangeLuminanceDepthSampleInfo	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
MaskGroupBasedCorrMaskRangeLumMax	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
MaskGroupBasedCorrMaskRangeLumMin	real_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
MaskGroupBasedCorrMaskRangeLumRange	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
MaskGroupBasedCorrMaskRangeSampleType	integer_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
MaskGroupBasedCorrMaskRangeType	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
MaskGroupBasedCorrMaskRangeVersion	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
MaskGroupBasedCorrMaskDabs	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksDabs)
MaskGroupBasedCorrMaskFeather	real_	(MaskGroupBasedCorrectionsCorrectionMasksFeather)
MaskGroupBasedCorrMaskFlipped	boolean_	(MaskGroupBasedCorrectionsCorrectionMasksFlipped)
MaskGroupBasedCorrMaskFlow	real_	(MaskGroupBasedCorrectionsCorrectionMasksFlow)
MaskGroupBasedCorrMaskFullX	real_	(MaskGroupBasedCorrectionsCorrectionMasksFullX)
MaskGroupBasedCorrMaskFullY	real_	(MaskGroupBasedCorrectionsCorrectionMasksFullY)
MaskGroupBasedCorrMaskInputDigest	string_	(MaskGroupBasedCorrectionsCorrectionMasksInputDigest)
MaskGroupBasedCorrMaskLeft	real_	(MaskGroupBasedCorrectionsCorrectionMasksLeft)
MaskGroupBasedCorrMaskMaskActive	boolean_	(MaskGroupBasedCorrectionsCorrectionMasksMaskActive)
MaskGroupBasedCorrMaskMaskBlendMode	integer_	(MaskGroupBasedCorrectionsCorrectionMasksMaskBlendMode)
MaskGroupBasedCorrMaskMaskDigest	string_	(MaskGroupBasedCorrectionsCorrectionMasksMaskDigest)
MaskGroupBasedCorrMaskMaskInverted	boolean_	(MaskGroupBasedCorrectionsCorrectionMasksMaskInverted)
MaskGroupBasedCorrMaskMaskName	string_	(MaskGroupBasedCorrectionsCorrectionMasksMaskName)
MaskGroupBasedCorrMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (MaskGroupBasedCorrectionsCorrectionMasksMasks)
MaskGroupBasedCorrMaskMasksAlpha	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksAlpha)
MaskGroupBasedCorrMaskMasksAngle	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksAngle)
MaskGroupBasedCorrMaskMasksBottom	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksBottom)
MaskGroupBasedCorrMaskMasksCenterValue	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksCenterValue)
MaskGroupBasedCorrMaskMasksCenterWeight	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksCenterWeight)
MaskGroupBasedCorrMaskMasksDabs	string_ +	(MaskGroupBasedCorrectionsCorrectionMasksMasksDabs)
MaskGroupBasedCorrMaskMasksFeather	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFeather)
MaskGroupBasedCorrMaskMasksFlipped	boolean_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFlipped)
MaskGroupBasedCorrMaskMasksFlow	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFlow)
MaskGroupBasedCorrMaskMasksFullX	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFullX)
MaskGroupBasedCorrMaskMasksFullY	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksFullY)
MaskGroupBasedCorrMaskMasksInputDigest	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksInputDigest)
MaskGroupBasedCorrMaskMasksLeft	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksLeft)
MaskGroupBasedCorrMaskMasksMaskActive	boolean_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskActive)
MaskGroupBasedCorrMaskMasksMaskBlendMode	integer_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
MaskGroupBasedCorrMaskMasksMaskDigest	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskDigest)
MaskGroupBasedCorrMaskMasksMaskInverted	boolean_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskInverted)
MaskGroupBasedCorrMaskMasksMaskName	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskName)
MaskGroupBasedCorrMaskMasksMaskSubType	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskSubType)
MaskGroupBasedCorrMaskMasksMaskSyncID	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskSyncID)
MaskGroupBasedCorrMaskMasksValue	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskValue)
MaskGroupBasedCorrMaskMasksMaskVersion	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMaskVersion)
MaskGroupBasedCorrMaskMasksMidpoint	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksMidpoint)
MaskGroupBasedCorrMaskMasksOrigin	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksOrigin)
MaskGroupBasedCorrMaskMasksPerimeterValue	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksPerimeterValue)
MaskGroupBasedCorrMaskMasksRadius	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksRadius)
MaskGroupBasedCorrMaskMasksReferencePoint	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksReferencePoint)

MaskGroupBasedCorrMaskMasksRight	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksRight)
MaskGroupBasedCorrMaskMasksRoundness	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksRoundness)
MaskGroupBasedCorrMaskMasksSizeX	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksSizeX)
MaskGroupBasedCorrMaskMasksSizeY	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksSizeY)
MaskGroupBasedCorrMaskMasksTop	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksTop)
MaskGroupBasedCorrMaskMaskSubType	string_	(MaskGroupBasedCorrectionsCorrectionMasksMaskSubType)
MaskGroupBasedCorrMaskMasksVersion	integer_	(MaskGroupBasedCorrectionsCorrectionMasksMasksVersion)
MaskGroupBasedCorrMaskMasksWhat	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksWhat)
MaskGroupBasedCorrMaskMasksWholeImageArea	string_	(MaskGroupBasedCorrectionsCorrectionMasksMasksWholeImageArea)
MaskGroupBasedCorrMaskMasksX	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksX)
MaskGroupBasedCorrMaskMasksY	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksY)
MaskGroupBasedCorrMaskMaskSyncID	string_	(MaskGroupBasedCorrectionsCorrectionMasksMaskSyncID)
MaskGroupBasedCorrMaskMasksZeroX	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksZeroX)
MaskGroupBasedCorrMaskMasksZeroY	real_	(MaskGroupBasedCorrectionsCorrectionMasksMasksZeroY)
MaskGroupBasedCorrMaskValue	real_	(MaskGroupBasedCorrectionsCorrectionMasksMaskValue)
MaskGroupBasedCorrMaskMaskVersion	string_	(MaskGroupBasedCorrectionsCorrectionMasksMaskVersion)
MaskGroupBasedCorrMaskMidpoint	real_	(MaskGroupBasedCorrectionsCorrectionMasksMidpoint)
MaskGroupBasedCorrMaskOrigin	string_	(MaskGroupBasedCorrectionsCorrectionMasksOrigin)
MaskGroupBasedCorrMaskPerimeterValue	real_	(MaskGroupBasedCorrectionsCorrectionMasksPerimeterValue)
MaskGroupBasedCorrMaskRadius	real_	(MaskGroupBasedCorrectionsCorrectionMasksRadius)
MaskGroupBasedCorrMaskReferencePoint	string_	(MaskGroupBasedCorrectionsCorrectionMasksReferencePoint)
MaskGroupBasedCorrMaskRight	real_	(MaskGroupBasedCorrectionsCorrectionMasksRight)
MaskGroupBasedCorrMaskRoundness	real_	(MaskGroupBasedCorrectionsCorrectionMasksRoundness)
MaskGroupBasedCorrMaskSizeX	real_	(MaskGroupBasedCorrectionsCorrectionMasksSizeX)
MaskGroupBasedCorrMaskSizeY	real_	(MaskGroupBasedCorrectionsCorrectionMasksSizeY)
MaskGroupBasedCorrMaskTop	real_	(MaskGroupBasedCorrectionsCorrectionMasksTop)
MaskGroupBasedCorrMaskVersion	integer_	(MaskGroupBasedCorrectionsCorrectionMasksVersion)
MaskGroupBasedCorrMaskWhat	string_	(MaskGroupBasedCorrectionsCorrectionMasksWhat)
MaskGroupBasedCorrMaskWholeImageArea	string_	(MaskGroupBasedCorrectionsCorrectionMasksWholeImageArea)
MaskGroupBasedCorrMaskX	real_	(MaskGroupBasedCorrectionsCorrectionMasksX)
MaskGroupBasedCorrMaskY	real_	(MaskGroupBasedCorrectionsCorrectionMasksY)
MaskGroupBasedCorrMaskZeroX	real_	(MaskGroupBasedCorrectionsCorrectionMasksZeroX)
MaskGroupBasedCorrMaskZeroY	real_	(MaskGroupBasedCorrectionsCorrectionMasksZeroY)
MaskGroupBasedCorrCorrectionName	string_ +	(MaskGroupBasedCorrectionsCorrectionName)
MaskGroupBasedCorrRangeMask	struct_ +	--> <b>CorrRangeMask Struct</b> (MaskGroupBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
MaskGroupBasedCorrRangeMaskAreaModels	struct_ +	--> <b>AreaModels Struct</b> (MaskGroupBasedCorrectionsCorrectionRangeMaskAreaModels)
MaskGroupBasedCorrRangeMaskAreaModelsComponents	string_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
MaskGroupBasedCorrRangeMaskAreaModelsColorSampleInfo	string_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
MaskGroupBasedCorrRangeMaskColorAmount	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskColorAmount)
MaskGroupBasedCorrRangeMaskDepthFeather	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskDepthFeather)
MaskGroupBasedCorrRangeMaskDepthMax	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskDepthMax)
MaskGroupBasedCorrRangeMaskDepthMin	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskDepthMin)
MaskGroupBasedCorrRangeMaskInvert	boolean_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskInvert)
MaskGroupBasedCorrRangeMaskLumFeather	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumFeather)
MaskGroupBasedCorrRangeMaskLuminanceDepthSampleInfo	string_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
MaskGroupBasedCorrRangeMaskLumMax	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumMax)
MaskGroupBasedCorrRangeMaskLumMin	real_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumMin)
MaskGroupBasedCorrRangeMaskLumRange	string_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskLumRange)
MaskGroupBasedCorrRangeMaskSampleType	integer_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskSampleType)
MaskGroupBasedCorrRangeMaskType	string_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskType)
MaskGroupBasedCorrRangeMaskVersion	string_ +	(MaskGroupBasedCorrectionsCorrectionRangeMaskVersion)
MaskGroupBasedCorrCorrectionSyncID	string_ +	(MaskGroupBasedCorrectionsCorrectionSyncID)
MaskGroupBasedCorrBlacks2012	real_	(MaskGroupBasedCorrectionsLocalBlacks2012)
MaskGroupBasedCorrBrightness	real_	(MaskGroupBasedCorrectionsLocalBrightness)
MaskGroupBasedCorrClarity	real_	(MaskGroupBasedCorrectionsLocalClarity)
MaskGroupBasedCorrClarity2012	real_	(MaskGroupBasedCorrectionsLocalClarity2012)
MaskGroupBasedCorrContrast	real_	(MaskGroupBasedCorrectionsLocalContrast)
MaskGroupBasedCorrContrast2012	real_	(MaskGroupBasedCorrectionsLocalContrast2012)
MaskGroupBasedCorrDefringe	real_	(MaskGroupBasedCorrectionsLocalDefringe)
MaskGroupBasedCorrDehaze	real_	(MaskGroupBasedCorrectionsLocalDehaze)
MaskGroupBasedCorrExposure	real_	(MaskGroupBasedCorrectionsLocalExposure)
MaskGroupBasedCorrExposure2012	real_	(MaskGroupBasedCorrectionsLocalExposure2012)
MaskGroupBasedCorrHighlights2012	real_	(MaskGroupBasedCorrectionsLocalHighlights2012)
MaskGroupBasedCorrHue	real_	(MaskGroupBasedCorrectionsLocalHue)
MaskGroupBasedCorrLuminanceNoise	real_	(MaskGroupBasedCorrectionsLocalLuminanceNoise)
MaskGroupBasedCorrMoire	real_	(MaskGroupBasedCorrectionsLocalMoire)
MaskGroupBasedCorrSaturation	real_	(MaskGroupBasedCorrectionsLocalSaturation)
MaskGroupBasedCorrShadows2012	real_	(MaskGroupBasedCorrectionsLocalShadows2012)
MaskGroupBasedCorrSharpness	real_	(MaskGroupBasedCorrectionsLocalSharpness)
MaskGroupBasedCorrTemperature	real_	(MaskGroupBasedCorrectionsLocalTemperature)
MaskGroupBasedCorrTexture	real_	(MaskGroupBasedCorrectionsLocalTexture)
MaskGroupBasedCorrTint	real_	(MaskGroupBasedCorrectionsLocalTint)
MaskGroupBasedCorrToningHue	real_	(MaskGroupBasedCorrectionsLocalToningHue)
MaskGroupBasedCorrToningSaturation	real_	(MaskGroupBasedCorrectionsLocalToningSaturation)
MaskGroupBasedCorrWhites2012	real_	(MaskGroupBasedCorrectionsLocalWhites2012)
MaskGroupBasedCorrWhat	string_	(MaskGroupBasedCorrectionsWhat)
MoireFilter	string	'Off' = Off 'On' = On
Name	lang-alt/	

NegativeCacheLargePreviewSize	integer	
NegativeCacheMaximumSize	real	
NegativeCachePath	string	
OverrideLookVignette	boolean	
PaintBasedCorrections	struct+	--> <a href="#">Correction Struct</a>
PaintCorrectionActive	boolean_	(PaintBasedCorrectionsCorrectionActive)
PaintCorrectionAmount	real_	(PaintBasedCorrectionsCorrectionAmount)
PaintBasedCorrectionMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (PaintBasedCorrectionsCorrectionMasks)
PaintCorrectionMaskAlpha	real_	(PaintBasedCorrectionsCorrectionMasksAlpha)
PaintCorrectionMaskAngle	real_	(PaintBasedCorrectionsCorrectionMasksAngle)
PaintCorrectionMaskBottom	real_	(PaintBasedCorrectionsCorrectionMasksBottom)
PaintCorrectionMaskCenterValue	real_	(PaintBasedCorrectionsCorrectionMasksCenterValue)
PaintCorrectionMaskCenterWeight	real_	(PaintBasedCorrectionsCorrectionMasksCenterWeight)
PaintCorrectionMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (PaintBasedCorrectionsCorrectionMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
PaintCorrectionMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModels)
PaintCorrectionMaskRangeAreaModelsComponents	string_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsComponents)
PaintCorrectionMaskRangeAreaModelsColorSampleInfo	string_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
PaintCorrectionMaskRangeColorAmount	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskColorAmount)
PaintCorrectionMaskRangeDepthFeather	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthFeather)
PaintCorrectionMaskRangeDepthMax	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMax)
PaintCorrectionMaskRangeDepthMin	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskDepthMin)
PaintCorrectionMaskRangeInvert	boolean_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskInvert)
PaintCorrectionMaskRangeLumFeather	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumFeather)
PaintCorrectionMaskRangeLuminanceDepthSampleInfo	string_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
PaintCorrectionMaskRangeLumMax	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMax)
PaintCorrectionMaskRangeLumMin	real_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumMin)
PaintCorrectionMaskRangeLumRange	string_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskLumRange)
PaintCorrectionMaskRangeSampleType	integer_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskSampleType)
PaintCorrectionMaskRangeType	string_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskType)
PaintCorrectionMaskRangeVersion	string_ +	(PaintBasedCorrectionsCorrectionMasksCorrectionRangeMaskVersion)
PaintCorrectionMaskDabs	string_	(PaintBasedCorrectionsCorrectionMasksDabs)
PaintCorrectionMaskFeather	real_	(PaintBasedCorrectionsCorrectionMasksFeather)
PaintCorrectionMaskFlipped	boolean_	(PaintBasedCorrectionsCorrectionMasksFlipped)
PaintCorrectionMaskFlow	real_	(PaintBasedCorrectionsCorrectionMasksFlow)
PaintCorrectionMaskFullX	real_	(PaintBasedCorrectionsCorrectionMasksFullX)
PaintCorrectionMaskFullY	real_	(PaintBasedCorrectionsCorrectionMasksFullY)
PaintCorrectionMaskInputDigest	string_	(PaintBasedCorrectionsCorrectionMasksInputDigest)
PaintCorrectionMaskLeft	real_	(PaintBasedCorrectionsCorrectionMasksLeft)
PaintCorrectionMaskMaskActive	boolean_	(PaintBasedCorrectionsCorrectionMasksMaskActive)
PaintCorrectionMaskMaskBlendMode	integer_	(PaintBasedCorrectionsCorrectionMasksMaskBlendMode)
PaintCorrectionMaskMaskDigest	string_	(PaintBasedCorrectionsCorrectionMasksMaskDigest)
PaintCorrectionMaskMaskInverted	boolean_	(PaintBasedCorrectionsCorrectionMasksMaskInverted)
PaintCorrectionMaskMaskName	string_	(PaintBasedCorrectionsCorrectionMasksMaskName)
PaintCorrectionMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (PaintBasedCorrectionsCorrectionMasksMasks)
PaintCorrectionMaskMasksAlpha	real_	(PaintBasedCorrectionsCorrectionMasksMasksAlpha)
PaintCorrectionMaskMasksAngle	real_	(PaintBasedCorrectionsCorrectionMasksMasksAngle)
PaintCorrectionMaskMasksBottom	real_	(PaintBasedCorrectionsCorrectionMasksMasksBottom)
PaintCorrectionMaskMasksCenterValue	real_	(PaintBasedCorrectionsCorrectionMasksMasksCenterValue)
PaintCorrectionMaskMasksCenterWeight	real_	(PaintBasedCorrectionsCorrectionMasksMasksCenterWeight)
PaintCorrectionMaskMasksDabs	string_ +	(PaintBasedCorrectionsCorrectionMasksMasksDabs)
PaintCorrectionMaskMasksFeather	real_	(PaintBasedCorrectionsCorrectionMasksMasksFeather)
PaintCorrectionMaskMasksFlipped	boolean_	(PaintBasedCorrectionsCorrectionMasksMasksFlipped)
PaintCorrectionMaskMasksFlow	real_	(PaintBasedCorrectionsCorrectionMasksMasksFlow)
PaintCorrectionMaskMasksFullX	real_	(PaintBasedCorrectionsCorrectionMasksMasksFullX)
PaintCorrectionMaskMasksFullY	real_	(PaintBasedCorrectionsCorrectionMasksMasksFullY)
PaintCorrectionMaskMasksInputDigest	string_	(PaintBasedCorrectionsCorrectionMasksMasksInputDigest)
PaintCorrectionMaskMasksLeft	real_	(PaintBasedCorrectionsCorrectionMasksMasksLeft)
PaintCorrectionMaskMasksMaskActive	boolean_	(PaintBasedCorrectionsCorrectionMasksMasksMaskActive)
PaintCorrectionMaskMasksMaskBlendMode	integer_	(PaintBasedCorrectionsCorrectionMasksMasksMaskBlendMode)
PaintCorrectionMaskMasksMaskDigest	string_	(PaintBasedCorrectionsCorrectionMasksMasksMaskDigest)
PaintCorrectionMaskMasksMaskInverted	boolean_	(PaintBasedCorrectionsCorrectionMasksMasksMaskInverted)
PaintCorrectionMaskMasksMaskName	string_	(PaintBasedCorrectionsCorrectionMasksMasksMaskName)
PaintCorrectionMaskMasksMaskSubType	string_	(PaintBasedCorrectionsCorrectionMasksMasksMaskSubType)
PaintCorrectionMaskMasksMaskSyncID	string_	(PaintBasedCorrectionsCorrectionMasksMasksMaskSyncID)
PaintCorrectionMaskMasksValue	real_	(PaintBasedCorrectionsCorrectionMasksMasksMaskValue)
PaintCorrectionMaskMasksMaskVersion	string_	(PaintBasedCorrectionsCorrectionMasksMasksMaskVersion)
PaintCorrectionMaskMasksMidpoint	real_	(PaintBasedCorrectionsCorrectionMasksMasksMidpoint)
PaintCorrectionMaskMasksOrigin	string_	(PaintBasedCorrectionsCorrectionMasksMasksOrigin)
PaintCorrectionMaskMasksPerimeterValue	real_	(PaintBasedCorrectionsCorrectionMasksMasksPerimeterValue)
PaintCorrectionMaskMasksRadius	real_	(PaintBasedCorrectionsCorrectionMasksMasksRadius)
PaintCorrectionMaskMasksReferencePoint	string_	(PaintBasedCorrectionsCorrectionMasksMasksReferencePoint)
PaintCorrectionMaskMasksRight	real_	(PaintBasedCorrectionsCorrectionMasksMasksRight)
PaintCorrectionMaskMasksRoundness	real_	(PaintBasedCorrectionsCorrectionMasksMasksRoundness)
PaintCorrectionMaskMasksSizeX	real_	(PaintBasedCorrectionsCorrectionMasksMasksSizeX)
PaintCorrectionMaskMasksSizeY	real_	(PaintBasedCorrectionsCorrectionMasksMasksSizeY)
PaintCorrectionMaskMasksTop	real_	(PaintBasedCorrectionsCorrectionMasksMasksTop)
PaintCorrectionMaskMaskSubType	string_	(PaintBasedCorrectionsCorrectionMasksMaskSubType)

PaintCorrectionMaskMasksVersion	integer_	(PaintBasedCorrectionsCorrectionMasksMasksVersion)
PaintCorrectionMaskMasksWhat	string_	(PaintBasedCorrectionsCorrectionMasksMasksWhat)
PaintCorrectionMaskMasksWholeImageArea	string_	(PaintBasedCorrectionsCorrectionMasksMasksWholeImageArea)
PaintCorrectionMaskMasksX	real_	(PaintBasedCorrectionsCorrectionMasksMasksX)
PaintCorrectionMaskMasksY	real_	(PaintBasedCorrectionsCorrectionMasksMasksY)
PaintCorrectionMaskMaskSyncID	string_	(PaintBasedCorrectionsCorrectionMasksMaskSyncID)
PaintCorrectionMaskMasksZeroX	real_	(PaintBasedCorrectionsCorrectionMasksMasksZeroX)
PaintCorrectionMaskMasksZeroY	real_	(PaintBasedCorrectionsCorrectionMasksMasksZeroY)
PaintCorrectionMaskValue	real_	(PaintBasedCorrectionsCorrectionMasksMaskValue)
PaintCorrectionMaskMaskVersion	string_	(PaintBasedCorrectionsCorrectionMasksMaskVersion)
PaintCorrectionMaskMidpoint	real_	(PaintBasedCorrectionsCorrectionMasksMidpoint)
PaintCorrectionMaskOrigin	string_	(PaintBasedCorrectionsCorrectionMasksOrigin)
PaintCorrectionMaskPerimeterValue	real_	(PaintBasedCorrectionsCorrectionMasksPerimeterValue)
PaintCorrectionMaskRadius	real_	(PaintBasedCorrectionsCorrectionMasksRadius)
PaintCorrectionMaskReferencePoint	string_	(PaintBasedCorrectionsCorrectionMasksReferencePoint)
PaintCorrectionMaskRight	real_	(PaintBasedCorrectionsCorrectionMasksRight)
PaintCorrectionMaskRoundness	real_	(PaintBasedCorrectionsCorrectionMasksRoundness)
PaintCorrectionMaskSizeX	real_	(PaintBasedCorrectionsCorrectionMasksSizeX)
PaintCorrectionMaskSizeY	real_	(PaintBasedCorrectionsCorrectionMasksSizeY)
PaintCorrectionMaskTop	real_	(PaintBasedCorrectionsCorrectionMasksTop)
PaintCorrectionMaskVersion	integer_	(PaintBasedCorrectionsCorrectionMasksVersion)
PaintCorrectionMaskWhat	string_	(PaintBasedCorrectionsCorrectionMasksWhat)
PaintCorrectionMaskWholeImageArea	string_	(PaintBasedCorrectionsCorrectionMasksWholeImageArea)
PaintCorrectionMaskX	real_	(PaintBasedCorrectionsCorrectionMasksX)
PaintCorrectionMaskY	real_	(PaintBasedCorrectionsCorrectionMasksY)
PaintCorrectionMaskZeroX	real_	(PaintBasedCorrectionsCorrectionMasksZeroX)
PaintCorrectionMaskZeroY	real_	(PaintBasedCorrectionsCorrectionMasksZeroY)
PaintCorrectionCorrectionName	string_ +	(PaintBasedCorrectionsCorrectionName)
PaintCorrectionRangeMask	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (PaintBasedCorrectionsCorrectionRangeMask; called CorrectionRangeMask by the spec)
PaintCorrectionRangeMaskAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (PaintBasedCorrectionsCorrectionRangeMaskAreaModels)
PaintCorrectionRangeMaskAreaModelsComponents	string_ +	(PaintBasedCorrectionsCorrectionRangeMaskAreaModelsAreaComponents)
PaintCorrectionRangeMaskAreaModelsColorSampleInfo	string_ +	(PaintBasedCorrectionsCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
PaintCorrectionRangeMaskColorAmount	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskColorAmount)
PaintCorrectionRangeMaskDepthFeather	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskDepthFeather)
PaintCorrectionRangeMaskDepthMax	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskDepthMax)
PaintCorrectionRangeMaskDepthMin	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskDepthMin)
PaintCorrectionRangeMaskInvert	boolean_ +	(PaintBasedCorrectionsCorrectionRangeMaskInvert)
PaintCorrectionRangeMaskLumFeather	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskLumFeather)
PaintCorrectionRangeMaskLuminanceDepthSampleInfo	string_ +	(PaintBasedCorrectionsCorrectionRangeMaskLuminanceDepthSampleInfo)
PaintCorrectionRangeMaskLumMax	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskLumMax)
PaintCorrectionRangeMaskLumMin	real_ +	(PaintBasedCorrectionsCorrectionRangeMaskLumMin)
PaintCorrectionRangeMaskLumRange	string_ +	(PaintBasedCorrectionsCorrectionRangeMaskLumRange)
PaintCorrectionRangeMaskSampleType	integer_ +	(PaintBasedCorrectionsCorrectionRangeMaskSampleType)
PaintCorrectionRangeMaskType	string_ +	(PaintBasedCorrectionsCorrectionRangeMaskType)
PaintCorrectionRangeMaskVersion	string_ +	(PaintBasedCorrectionsCorrectionRangeMaskVersion)
PaintCorrectionCorrectionSyncID	string_ +	(PaintBasedCorrectionsCorrectionSyncID)
PaintCorrectionBlacks2012	real_	(PaintBasedCorrectionsLocalBlacks2012)
PaintCorrectionBrightness	real_	(PaintBasedCorrectionsLocalBrightness)
PaintCorrectionClarity	real_	(PaintBasedCorrectionsLocalClarity)
PaintCorrectionClarity2012	real_	(PaintBasedCorrectionsLocalClarity2012)
PaintCorrectionContrast	real_	(PaintBasedCorrectionsLocalContrast)
PaintCorrectionContrast2012	real_	(PaintBasedCorrectionsLocalContrast2012)
PaintCorrectionDefringe	real_	(PaintBasedCorrectionsLocalDefringe)
PaintCorrectionDehaze	real_	(PaintBasedCorrectionsLocalDehaze)
PaintCorrectionExposure	real_	(PaintBasedCorrectionsLocalExposure)
PaintCorrectionExposure2012	real_	(PaintBasedCorrectionsLocalExposure2012)
PaintCorrectionHighlights2012	real_	(PaintBasedCorrectionsLocalHighlights2012)
PaintCorrectionHue	real_	(PaintBasedCorrectionsLocalHue)
PaintCorrectionLuminanceNoise	real_	(PaintBasedCorrectionsLocalLuminanceNoise)
PaintCorrectionMoire	real_	(PaintBasedCorrectionsLocalMoire)
PaintCorrectionSaturation	real_	(PaintBasedCorrectionsLocalSaturation)
PaintCorrectionShadows2012	real_	(PaintBasedCorrectionsLocalShadows2012)
PaintCorrectionSharpness	real_	(PaintBasedCorrectionsLocalSharpness)
PaintCorrectionTemperature	real_	(PaintBasedCorrectionsLocalTemperature)
PaintCorrectionTexture	real_	(PaintBasedCorrectionsLocalTexture)
PaintCorrectionTint	real_	(PaintBasedCorrectionsLocalTint)
PaintCorrectionToningHue	real_	(PaintBasedCorrectionsLocalToningHue)
PaintCorrectionToningSaturation	real_	(PaintBasedCorrectionsLocalToningSaturation)
PaintCorrectionWhites2012	real_	(PaintBasedCorrectionsLocalWhites2012)
PaintCorrectionWhat	string_	(PaintBasedCorrectionsWhat)
ParametricDarks	integer	
ParametricHighlights	integer	
ParametricHighlightSplit	integer	
ParametricLights	integer	
ParametricMidtoneSplit	integer	
ParametricShadows	integer	
ParametricShadowSplit	integer	
PerspectiveAspect	integer	

PerspectiveHorizontal	integer	
PerspectiveRotate	real	
PerspectiveScale	integer	
PerspectiveUpright	integer	0 = Off    3 = Level 1 = Auto    4 = Vertical 2 = Full    5 = Guided
PerspectiveVertical	integer	
PerspectiveX	real	
PerspectiveY	real	
PostCropVignetteAmount	integer	
PostCropVignetteFeather	integer	
PostCropVignetteHighlightContrast	integer	
PostCropVignetteMidpoint	integer	
PostCropVignetteRoundness	integer	
PostCropVignetteStyle	integer	1 = Highlight Priority 2 = Color Priority 3 = Paint Overlay
PresetType	string	
ProcessVersion	string	
RangeMask	struct	--> <a href="#">RangeMask Struct</a> (tag ID is 'RangeMaskMapInfo')
RangeMaskMapInfo	struct_	--> <a href="#">MapInfo Struct</a> (RangeMaskMapInfoRangeMaskMapInfo) (RangeMaskMapInfoRangeMaskMapInfoLabMax)
RangeMaskMapInfoLabMax	string_	(RangeMaskMapInfoRangeMaskMapInfoLabMax)
RangeMaskMapInfoLabMin	string_	(RangeMaskMapInfoRangeMaskMapInfoLabMin)
RangeMaskMapInfoLumEq	string_ +	(RangeMaskMapInfoRangeMaskMapInfoLumEq)
RangeMaskMapInfoRGBMax	string_	(RangeMaskMapInfoRangeMaskMapInfoRGBMax)
RangeMaskMapInfoRGBMin	string_	(RangeMaskMapInfoRangeMaskMapInfoRGBMin)
RawFileName	string	
RedEyeInfo	string+	
RedHue	integer	
RedSaturation	integer	
RetouchAreas	struct+ _	--> <a href="#">RetouchArea Struct</a>
RetouchAreaFeather	real_	(RetouchAreasFeather)
RetouchAreaMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (RetouchAreasMasks)
RetouchAreaMaskAlpha	real_	(RetouchAreasMasksAlpha)
RetouchAreaMaskAngle	real_	(RetouchAreasMasksAngle)
RetouchAreaMaskBottom	real_	(RetouchAreasMasksBottom)
RetouchAreaMaskCenterValue	real_	(RetouchAreasMasksCenterValue)
RetouchAreaMaskCenterWeight	real_	(RetouchAreasMasksCenterWeight)
RetouchAreaMaskRange	struct_ +	--> <a href="#">CorrRangeMask Struct</a> (RetouchAreasMasksCorrectionRangeMask; called CorrectionRangeMask by the spec)
RetouchAreaMaskRangeAreaModels	struct_ +	--> <a href="#">AreaModels Struct</a> (RetouchAreasMasksCorrectionRangeMaskAreaModels)
RetouchAreaMaskRangeAreaModelsComponents	string_ +	(RetouchAreasMasksCorrectionRangeMaskAreaModelsAreaComponents)
RetouchAreaMaskRangeAreaModelsColorSampleInfo	string_ +	(RetouchAreasMasksCorrectionRangeMaskAreaModelsColorRangeMaskAreaSampleInfo)
RetouchAreaMaskRangeColorAmount	real_ +	(RetouchAreasMasksCorrectionRangeMaskColorAmount)
RetouchAreaMaskRangeDepthFeather	real_ +	(RetouchAreasMasksCorrectionRangeMaskDepthFeather)
RetouchAreaMaskRangeDepthMax	real_ +	(RetouchAreasMasksCorrectionRangeMaskDepthMax)
RetouchAreaMaskRangeDepthMin	real_ +	(RetouchAreasMasksCorrectionRangeMaskDepthMin)
RetouchAreaMaskRangeInvert	boolean_ +	(RetouchAreasMasksCorrectionRangeMaskInvert)
RetouchAreaMaskRangeLumFeather	real_ +	(RetouchAreasMasksCorrectionRangeMaskLumFeather)
RetouchAreaMaskRangeLuminanceDepthSampleInfo	string_ +	(RetouchAreasMasksCorrectionRangeMaskLuminanceDepthSampleInfo)
RetouchAreaMaskRangeLumMax	real_ +	(RetouchAreasMasksCorrectionRangeMaskLumMax)
RetouchAreaMaskRangeLumMin	real_ +	(RetouchAreasMasksCorrectionRangeMaskLumMin)
RetouchAreaMaskRangeLumRange	string_ +	(RetouchAreasMasksCorrectionRangeMaskLumRange)
RetouchAreaMaskRangeSampleType	integer_ +	(RetouchAreasMasksCorrectionRangeMaskSampleType)
RetouchAreaMaskRangeType	string_ +	(RetouchAreasMasksCorrectionRangeMaskType)
RetouchAreaMaskRangeVersion	string_ +	(RetouchAreasMasksCorrectionRangeMaskVersion)
RetouchAreaMaskDabs	string_	(RetouchAreasMasksDabs)
RetouchAreaMaskFeather	real_	(RetouchAreasMasksFeather)
RetouchAreaMaskFlipped	boolean_	(RetouchAreasMasksFlipped)
RetouchAreaMaskFlow	real_	(RetouchAreasMasksFlow)
RetouchAreaMaskFullX	real_	(RetouchAreasMasksFullX)
RetouchAreaMaskFullY	real_	(RetouchAreasMasksFullY)
RetouchAreaMaskInputDigest	string_	(RetouchAreasMasksInputDigest)
RetouchAreaMaskLeft	real_	(RetouchAreasMasksLeft)
RetouchAreaMaskMaskActive	boolean_	(RetouchAreasMasksMaskActive)
RetouchAreaMaskMaskBlendMode	integer_	(RetouchAreasMasksMaskBlendMode)
RetouchAreaMaskMaskDigest	string_	(RetouchAreasMasksMaskDigest)
RetouchAreaMaskMaskInverted	boolean_	(RetouchAreasMasksMaskInverted)
RetouchAreaMaskMaskName	string_	(RetouchAreasMasksMaskName)
RetouchAreaMaskMasks	struct_ +	--> <a href="#">CorrectionMask Struct</a> (RetouchAreasMasksMasks)
RetouchAreaMaskMasksAlpha	real_	(RetouchAreasMasksMasksAlpha)
RetouchAreaMaskMasksAngle	real_	(RetouchAreasMasksMasksAngle)
RetouchAreaMaskMasksBottom	real_	(RetouchAreasMasksMasksBottom)
RetouchAreaMaskMasksCenterValue	real_	(RetouchAreasMasksMasksCenterValue)
RetouchAreaMaskMasksCenterWeight	real_	(RetouchAreasMasksMasksCenterWeight)
RetouchAreaMaskMasksDabs	string_ +	(RetouchAreasMasksMasksDabs)
RetouchAreaMaskMasksFeather	real_	(RetouchAreasMasksMasksFeather)
RetouchAreaMaskMasksFlipped	boolean_	(RetouchAreasMasksMasksFlipped)

RetouchAreaMaskMasksFlow	real_	(RetouchAreasMasksMasksFlow)
RetouchAreaMaskMasksFullX	real_	(RetouchAreasMasksMasksFullX)
RetouchAreaMaskMasksFullY	real_	(RetouchAreasMasksMasksFullY)
RetouchAreaMaskMasksInputDigest	string_	(RetouchAreasMasksMasksInputDigest)
RetouchAreaMaskMasksLeft	real_	(RetouchAreasMasksMasksLeft)
RetouchAreaMaskMasksMaskActive	boolean_	(RetouchAreasMasksMasksMaskActive)
RetouchAreaMaskMasksMaskBlendMode	integer_	(RetouchAreasMasksMasksMaskBlendMode)
RetouchAreaMaskMasksMaskDigest	string_	(RetouchAreasMasksMasksMaskDigest)
RetouchAreaMaskMasksMaskInverted	boolean_	(RetouchAreasMasksMasksMaskInverted)
RetouchAreaMaskMasksMaskName	string_	(RetouchAreasMasksMasksMaskName)
RetouchAreaMaskMasksMaskSubType	string_	(RetouchAreasMasksMasksMaskSubType)
RetouchAreaMaskMasksMaskSyncID	string_	(RetouchAreasMasksMasksMaskSyncID)
RetouchAreaMaskMasksValue	real_	(RetouchAreasMasksMasksMaskValue)
RetouchAreaMaskMasksMaskVersion	string_	(RetouchAreasMasksMasksMaskVersion)
RetouchAreaMaskMasksMidpoint	real_	(RetouchAreasMasksMasksMidpoint)
RetouchAreaMaskMasksOrigin	string_	(RetouchAreasMasksMasksOrigin)
RetouchAreaMaskMasksPerimeterValue	real_	(RetouchAreasMasksMasksPerimeterValue)
RetouchAreaMaskMasksRadius	real_	(RetouchAreasMasksMasksRadius)
RetouchAreaMaskMasksReferencePoint	string_	(RetouchAreasMasksMasksReferencePoint)
RetouchAreaMaskMasksRight	real_	(RetouchAreasMasksMasksRight)
RetouchAreaMaskMasksRoundness	real_	(RetouchAreasMasksMasksRoundness)
RetouchAreaMaskMasksSizeX	real_	(RetouchAreasMasksMasksSizeX)
RetouchAreaMaskMasksSizeY	real_	(RetouchAreasMasksMasksSizeY)
RetouchAreaMaskMasksTop	real_	(RetouchAreasMasksMasksTop)
RetouchAreaMaskMaskSubType	string_	(RetouchAreasMasksMaskSubType)
RetouchAreaMaskMasksVersion	integer_	(RetouchAreasMasksMasksVersion)
RetouchAreaMaskMasksWhat	string_	(RetouchAreasMasksMasksWhat)
RetouchAreaMaskMasksWholeImageArea	string_	(RetouchAreasMasksMasksWholeImageArea)
RetouchAreaMaskMasksX	real_	(RetouchAreasMasksMasksX)
RetouchAreaMaskMasksY	real_	(RetouchAreasMasksMasksY)
RetouchAreaMaskMaskSyncID	string_	(RetouchAreasMasksMaskSyncID)
RetouchAreaMaskMasksZeroX	real_	(RetouchAreasMasksMasksZeroX)
RetouchAreaMaskMasksZeroY	real_	(RetouchAreasMasksMasksZeroY)
RetouchAreaMaskValue	real_	(RetouchAreasMasksMaskValue)
RetouchAreaMaskMaskVersion	string_	(RetouchAreasMasksMaskVersion)
RetouchAreaMaskMidpoint	real_	(RetouchAreasMasksMidpoint)
RetouchAreaMaskOrigin	string_	(RetouchAreasMasksOrigin)
RetouchAreaMaskPerimeterValue	real_	(RetouchAreasMasksPerimeterValue)
RetouchAreaMaskRadius	real_	(RetouchAreasMasksRadius)
RetouchAreaMaskReferencePoint	string_	(RetouchAreasMasksReferencePoint)
RetouchAreaMaskRight	real_	(RetouchAreasMasksRight)
RetouchAreaMaskRoundness	real_	(RetouchAreasMasksRoundness)
RetouchAreaMaskSizeX	real_	(RetouchAreasMasksSizeX)
RetouchAreaMaskSizeY	real_	(RetouchAreasMasksSizeY)
RetouchAreaMaskTop	real_	(RetouchAreasMasksTop)
RetouchAreaMaskVersion	integer_	(RetouchAreasMasksVersion)
RetouchAreaMaskWhat	string_	(RetouchAreasMasksWhat)
RetouchAreaMaskWholeImageArea	string_	(RetouchAreasMasksWholeImageArea)
RetouchAreaMaskX	real_	(RetouchAreasMasksX)
RetouchAreaMaskY	real_	(RetouchAreasMasksY)
RetouchAreaMaskZeroX	real_	(RetouchAreasMasksZeroX)
RetouchAreaMaskZeroY	real_	(RetouchAreasMasksZeroY)
RetouchAreaMethod	string_	(RetouchAreasMethod)
RetouchAreaOffsetY	real_	(RetouchAreasOffsetY)
RetouchAreaOpacity	real_	(RetouchAreasOpacity)
RetouchAreaSeed	integer_	(RetouchAreasSeed)
RetouchAreaSourceState	string_	(RetouchAreasSourceState)
RetouchAreaSourceX	real_	(RetouchAreasSourceX)
RetouchAreaSpotType	string_	(RetouchAreasSpotType)
RetouchInfo	string+	
Saturation	integer/	
SaturationAdjustmentAqua	integer	
SaturationAdjustmentBlue	integer	
SaturationAdjustmentGreen	integer	
SaturationAdjustmentMagenta	integer	
SaturationAdjustmentOrange	integer	
SaturationAdjustmentPurple	integer	
SaturationAdjustmentRed	integer	
SaturationAdjustmentYellow	integer	
SDRBlend	real	
SDRBrightness	real	
SDRContrast	real	
SDRHighlights	real	
SDRShadows	real	
SDRWhites	real	
Shadows	integer	
Shadows2012	integer	
ShadowTint	integer	
SharpenDetail	integer	

SharpenEdgeMasking	integer	
SharpenRadius	real	
Sharpness	integer/	
ShortName	lang-alt	
Smoothness	integer	
SortName	lang-alt	
SplitToningBalance	integer	(also used for newer ColorGrade settings)
SplitToningHighlightHue	integer	(also used for newer ColorGrade settings)
SplitToningHighlightSaturation	integer	(also used for newer ColorGrade settings)
SplitToningShadowHue	integer	(also used for newer ColorGrade settings)
SplitToningShadowSaturation	integer	(also used for newer ColorGrade settings)
SupportsAmount	boolean	
SupportsColor	boolean	
SupportsHighDynamicRange	boolean	
SupportsMonochrome	boolean	
SupportsNormalDynamicRange	boolean	
SupportsOutputReferred	boolean	
SupportsSceneReferred	boolean	
ColorTemperature	integer	(tag ID is 'Temperature')
Texture	integer	
TIFFHandling	string	
Tint	integer	
ToggleStyleAmount	integer	
ToggleStyleDigest	string	
ToneCurve	string+	
ToneCurveBlue	string+	
ToneCurveGreen	string+	
ToneCurveName	string	'Custom' = Custom 'Linear' = Linear 'Medium Contrast' = Medium Contrast 'Strong Contrast' = Strong Contrast
ToneCurveName2012	string	
ToneCurvePV2012	string+	
ToneCurvePV2012Blue	string+	
ToneCurvePV2012Green	string+	
ToneCurvePV2012Red	string+	
ToneCurveRed	string+	
ToneMapStrength	real	
UprightCenterMode	integer	
UprightCenterNormX	real	
UprightCenterNormY	real	
UprightDependentDigest	string	
UprightFocalLength35mm	real	
UprightFocalMode	integer	
UprightFourSegments_0	string	
UprightFourSegments_1	string	
UprightFourSegments_2	string	
UprightFourSegments_3	string	
UprightFourSegmentsCount	integer	
UprightGuidedDependentDigest	string	
UprightPreview	boolean	
UprightTransform_0	string	
UprightTransform_1	string	
UprightTransform_2	string	
UprightTransform_3	string	
UprightTransform_4	string	
UprightTransform_5	string	
UprightTransformCount	integer	
UprightVersion	integer	
UUID	string/	
Version	string	
Vibrance	integer	
VignetteAmount	integer	
VignetteMidpoint	integer	
What	string	
WhiteBalance	string/	'As Shot' = As Shot 'Auto' = Auto 'Cloudy' = Cloudy 'Custom' = Custom 'Daylight' = Daylight 'Flash' = Flash 'Fluorescent' = Fluorescent 'Shade' = Shade 'Tungsten' = Tungsten
Whites2012	integer	

## XMP dc Tags

Dublin Core namespace tags.

These tags belong to the ExifTool XMP-dc family 1 group.

Tag Name	Writable	Values / Notes
Contributor	string+	

Coverage	string
Creator	string+
Date	date+
Description	lang-alt
Format	string
Identifier	string
Language	string+
Publisher	string+
Relation	string+
Rights	lang-alt
Source	string/
Subject	string+
Title	lang-alt
Type	string+

## XMP dex Tags

Description Explorer namespace tags. These tags are not very common. The Source and Rating tags are avoided when writing due to name conflicts with other XMP tags. (see <http://www.optimasc.com/products/fileid/>)

These tags belong to the ExifTool XMP-dex family 1 group.

Tag Name	Writable	Values / Notes
CRC32	integer	
FFID	string	
LicenseType	string	'adware' = Adware 'commercial' = Commercial 'demo' = Demo 'freeware' = Freeware 'open source' = Open Source 'public domain' = Public Domain 'shareware' = Shareware 'unknown' = Unknown
OS	integer	
Rating	string/	
Revision	string	
ShortDescription	lang-alt	
Source	string/	

## XMP DICOM Tags

DICOM namespace tags. These XMP tags allow some DICOM information to be stored in files of other than DICOM format. See the [DICOM Tags documentation](#) for a list of tags available in DICOM-format files.

These tags belong to the ExifTool XMP-DICOM family 1 group.

Tag Name	Writable	Values / Notes
EquipmentInstitution	string	
EquipmentManufacturer	string	
PatientBirthDate	date	(tag ID is 'PatientDOB')
PatientID	string	
PatientName	string	
PatientSex	string	
SeriesDateTime	date	
SeriesDescription	string	
SeriesModality	string	
SeriesNumber	string	
StudyDateTime	date	
StudyDescription	string	
StudyID	string	
StudyPhysician	string	

## XMP digiKam Tags

DigiKam namespace tags.

These tags belong to the ExifTool XMP-digiKam family 1 group.

Tag Name	Writable	Values / Notes
CaptionsAuthorNames	lang-alt	
CaptionsDateTimeStamps	lang-alt	
ColorLabel	string	
ImageHistory	string/	(different format from EXIF:ImageHistory)
ImageUniqueId	string/	
LensCorrectionSettings	string	
PicasawebGPhotoid	string	
PickLabel	string	
TagsList	string+	

## XMP ExifTool Tags

These tags belong to the ExifTool XMP-et family 1 group.

Tag Name	Writable	Values / Notes
OriginalImageHash	string	(used to store ExifTool ImageDataHash digest)
OriginalImageHashType	string	(ImageHashType API setting, default 'MD5')
OriginalImageMD5	string	(deprecated)

# XMP exif Tags

EXIF namespace for EXIF tags. See [https://web.archive.org/web/20180921145139if\\_/http://www.cipa.jp:80/std/documents/e/DC-010-2017\\_E.pdf](https://web.archive.org/web/20180921145139if_/http://www.cipa.jp:80/std/documents/e/DC-010-2017_E.pdf) for the specification.

These tags belong to the ExifTool XMP-exif family 1 group.

Tag Name	Writable	Values / Notes
ApertureValue	rational	
BrightnessValue	rational	
CFAPattern	struct	--> <a href="#">CFAPattern Struct</a>
CFAPatternColumns	integer_	
CFAPatternRows	integer_	
CFAPatternValues	integer_+	
ColorSpace	integer	1 = sRGB 2 = Adobe RGB 65535 = Uncalibrated
ComponentsConfiguration	integer+	0 = -    4 = R 1 = Y    5 = G 2 = Cb  6 = B 3 = Cr
CompressedBitsPerPixel	rational	
Contrast	integer	0 = Normal 1 = Low 2 = High
CustomRendered	integer	0 = Normal 1 = Custom
DateTimeDigitized	date	
DateTimeOriginal	date	
DeviceSettingDescription	struct	--> <a href="#">DeviceSettings Struct</a>
DeviceSettingDescriptionColumns	integer_	
DeviceSettingDescriptionRows	integer_	
DeviceSettingDescriptionSettings	string_+	
DigitalZoomRatio	rational	
ExifVersion	string	
ExposureCompensation	rational	(tag ID is 'ExposureBiasValue')
ExposureIndex	rational	
ExposureMode	integer	0 = Auto 1 = Manual 2 = Auto bracket
ExposureProgram	integer	0 = Not Defined 1 = Manual 2 = Program AE 3 = Aperture-priority AE 4 = Shutter speed priority AE 5 = Creative (Slow speed) 6 = Action (High speed) 7 = Portrait 8 = Landscape
ExposureTime	rational	
FileSource	integer	1 = Film Scanner 2 = Reflection Print Scanner 3 = Digital Camera
Flash	struct	--> <a href="#">Flash Struct</a>
FlashEnergy	rational	
FlashFired	boolean_	'False' = False 'True' = True
FlashFunction	boolean_	'False' = False 'True' = True
FlashMode	integer_	0 = Unknown 1 = On 2 = Off 3 = Auto
FlashpixVersion	string	
FlashRedEyeMode	boolean_	'False' = False 'True' = True
FlashReturn	integer_	0 = No return detection 2 = Return not detected 3 = Return detected
FNumber	rational	
FocalLength	rational	
FocalLengthIn35mmFormat	integer	(tag ID is 'FocalLengthIn35mmFilm')
FocalPlaneResolutionUnit	integer	(values 1, 4 and 5 are not standard EXIF) 1 = None 2 = inches 3 = cm 4 = mm 5 = um
FocalPlaneXResolution	rational	
FocalPlaneYResolution	rational	
GainControl	integer	0 = None 1 = Low gain up 2 = High gain up 3 = Low gain down 4 = High gain down
GPSAltitude	rational	
GPSAltitudeRef	integer	0 = Above Sea Level 1 = Below Sea Level
GPSAreaInformation	string	
GPSDestBearing	rational	
GPSDestBearingRef	string	'M' = Magnetic North 'T' = True North
GPSDestDistance	rational	
GPSDestDistanceRef	string	'K' = Kilometers 'M' = Miles 'N' = Nautical Miles

GPSDestLatitude	string	
GPSDestLongitude	string	
GPSDifferential	integer	0 = No Correction 1 = Differential Corrected
GPSDOP	rational	
GPSHPositioningError	rational	
GPSImgDirection	rational	
GPSImgDirectionRef	string	'M' = Magnetic North 'T' = True North
GPSLatitude	string	
GPSLongitude	string	
GPSMapDatum	string	
GPSMeasureMode	integer	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
GPSProcessingMethod	string	
GPSSatellites	string	
GPSSpeed	rational	
GPSSpeedRef	string	'K' = km/h 'M' = mph 'N' = knots
GPSStatus	string	'A' = Measurement Active 'V' = Measurement Void
GPSDateTime	date	(tag ID is 'GPSTimeStamp'; a date/time tag called GPSTimeStamp by the XMP specification. This tag is renamed here to prevent direct copy from EXIF:GPSTimeStamp which is a time-only tag. Instead, the value of this tag should be taken from Composite:GPSDateTime when copying from EXIF)
GPSTrack	rational	
GPSTrackRef	string	'M' = Magnetic North 'T' = True North
GPSVersionID	string	
ImageUniqueId	string_	(moved to exifEX namespace in 2024 spec)
ISO	integer_+	(tag ID is 'ISOSpeedRatings'; deprecated)
LightSource	string	--> <a href="#">EXIF LightSource Values</a>
MarkerNote	string	
MaxApertureValue	rational	
MeteringMode	integer	1 = Average 2 = Center-weighted average 3 = Spot 4 = Multi-spot 5 = Multi-segment 6 = Partial 255 = Other
NativeDigest	string	
Opto-ElectricConvFactor	struct	--> <a href="#">OECF Struct</a> (tag ID is 'OECF')
OECFColumns	integer_	
OECFNames	string_+	
OECFRows	integer_	
OECFValues	rational_+	
ExifImageWidth	integer	(tag ID is 'PixelXDimension')
ExifImageHeight	integer	(tag ID is 'PixelYDimension')
RelatedSoundFile	string	
Saturation	integer	0 = Normal 1 = Low 2 = High
SceneCaptureType	integer	0 = Standard 1 = Landscape 2 = Portrait 3 = Night
SceneType	integer	1 = Directly photographed
SensingMethod	integer	(values 1 and 6 are not standard EXIF) 1 = Monochrome area 2 = One-chip color area 3 = Two-chip color area 4 = Three-chip color area 5 = Color sequential area 6 = Monochrome linear 7 = Trilinear 8 = Color sequential linear
Sharpness	integer	0 = Normal 1 = Soft 2 = Hard
ShutterSpeedValue	rational	
SpatialFrequencyResponse	struct	--> <a href="#">OECF Struct</a>
SpatialFrequencyResponseColumns	integer_	
SpatialFrequencyResponseNames	string_+	
SpatialFrequencyResponseRows	integer_	
SpatialFrequencyResponseValues	rational_+	
SpectralSensitivity	string	
SubjectArea	integer_+	
SubjectDistance	rational	
SubjectDistanceRange	integer	0 = Unknown 1 = Macro 2 = Close 3 = Distant
SubjectLocation	integer_+	
UserComment	lang-alt	
WhiteBalance	integer	0 = Auto 1 = Manual

## XMP CFAPattern Struct

Field Name	Writable	Values / Notes
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Columns	integer
Rows	integer
Values	integer+

## XMP DeviceSettings Struct

Field Name	Writable	Values / Notes
Columns	integer	
Rows	integer	
Settings	string+	

## XMP Flash Struct

Field Name	Writable	Values / Notes
Fired	boolean	False = False True = True
Function	boolean	False = False True = True
Mode	integer	0 = Unknown 1 = On 2 = Off 3 = Auto
RedEyeMode	boolean	False = False True = True
Return	integer	0 = No return detection 2 = Return not detected 3 = Return detected

## XMP OECF Struct

Field Name	Writable	Values / Notes
Columns	integer	
Names	string+	
Rows	integer	
Values	rational+	

## XMP exifEX Tags

EXIF tags added by the EXIF 2.32 for XMP specification (see [https://cipa.jp/std/documents/download\\_e.html?DC-010-2020\\_E](https://cipa.jp/std/documents/download_e.html?DC-010-2020_E)).

These tags belong to the ExifTool XMP-exifEX family 1 group.

Tag Name	Writable	Values / Notes
Acceleration	rational	
SerialNumber	string	(tag ID is 'BodySerialNumber')
CameraElevationAngle	rational	
CameraFirmware	string	
OwnerName	string	(tag ID is 'CameraOwnerName')
CompositeImage	integer	0 = Unknown 1 = Not a Composite Image 2 = General Composite Image 3 = Composite Image Captured While Shooting
CompositeImageCount	integer+	
CompositeImageExposureTimes	struct	--> <a href="#">ComplImageExp Struct</a>
ComplImageMaxExposureAll	rational_	(CompositeImageExposureTimesMaxExposureTimesOfAll)
ComplImageMaxExposureUsed	rational_	(CompositeImageExposureTimesMaxExposureTimesOfUsed)
ComplImageMinExposureAll	rational_	(CompositeImageExposureTimesMinExposureTimesOfAll)
ComplImageMinExposureUsed	rational_	(CompositeImageExposureTimesMinExposureTimesOfUsed)
ComplImageImagesPerSequence	integer_	(CompositeImageExposureTimesNumberOfImagesInSequences)
ComplImageNumSequences	integer_	(CompositeImageExposureTimesNumberOfSequences)
ComplImageSumExposureAll	rational_	(CompositeImageExposureTimesSumOfExposureTimesOfAll)
ComplImageSumExposureUsed	rational_	(CompositeImageExposureTimesSumOfExposureTimesOfUsed)
ComplImageTotalExposurePeriod	rational_	(CompositeImageExposureTimesTotalExposurePeriod)
ComplImageValues	rational_+	(CompositeImageExposureTimesValues)
Gamma	rational	
Humidity	rational	
ImageEditingSoftware	string	
ImageEditor	string	
ImageTitle	string	
ImageUniqueId	string	
InteropIndex	string	(tag ID is 'InteroperabilityIndex') 'R03' = R03 - DCF option file (Adobe RGB) 'R98' = R98 - DCF basic file (sRGB) 'THM' = THM - DCF thumbnail file
ISOSpeed	integer	
ISOSpeedLatitudeyyy	integer	
ISOSpeedLatitudezzz	integer	
LensMake	string	
LensModel	string	
LensSerialNumber	string	
LensInfo	rational+	(tag ID is 'LensSpecification'; unfortunately the EXIF 2.3 for XMP specification defined this new tag instead of using the existing XMP-aux:LensInfo)
MetadataEditingSoftware	string	
Photographer	string	
PhotographicSensitivity	integer	
Pressure	rational	
RAWDevelopingSoftware	string	
RecommendedExposureIndex	integer	

SensitivityType	integer	0 = Unknown 1 = Standard Output Sensitivity 2 = Recommended Exposure Index 3 = ISO Speed 4 = Standard Output Sensitivity and Recommended Exposure Index 5 = Standard Output Sensitivity and ISO Speed 6 = Recommended Exposure Index and ISO Speed 7 = Standard Output Sensitivity, Recommended Exposure Index and ISO Speed
StandardOutputSensitivity	integer	
AmbientTemperature	rational	(tag ID is 'Temperature')
WaterDepth	rational	

## XMP ComplImageExp Struct

Field Name	Writable	Values / Notes
MaxExposureTimesOfAll	rational	
MaxExposureTimesOfUsed	rational	
MinExposureTimesOfAll	rational	
MinExposureTimesOfUsed	rational	
NumberofImagesInSequences	integer	
NumberOfSequences	integer	
SumOfExposureTimesOfAll	rational	
SumOfExposureTimesOfUsed	rational	
TotalExposurePeriod	rational	
Values	rational+	

## XMP ExpressionMedia Tags

Microsoft Expression Media namespace tags. These tags are avoided when writing due to name conflicts with tags in other schemas.

These tags belong to the ExifTool XMP-expressionmedia family 1 group.

Tag Name	Writable	Values / Notes
CatalogSets	string/+	
Event	string/	
People	string/+	
Status	string/	

## XMP extensis Tags

Tags used by Extensis Portfolio.

These tags belong to the ExifTool XMP-extensis family 1 group.

Tag Name	Writable	Values / Notes
Approved	boolean	
ApprovedBy	string	
ClientName	string	
JobName	string	
JobStatus	string	
RoutedTo	string	
RoutingNotes	string	
WorkToDo	string	

## XMP fpv Tags

Fast Picture Viewer tags (see <http://www.fastpictureviewer.com/help/#rtfcomments>).

These tags belong to the ExifTool XMP-fpv family 1 group.

Tag Name	Writable	Values / Notes
RichTextComment	string	

## XMP GettyImages Tags

The actual Getty Images namespace prefix is "GettyImagesGIFT", which is the prefix recorded in the file, but ExifTool shortens this for the family 1 group name.

These tags belong to the ExifTool XMP-getty family 1 group.

Tag Name	Writable	Values / Notes
AssetID	string	
CallForImage	string	
CameraFilename	string	
CameraMakeModel	string/	
CameraSerialNumber	string/	
Composition	string	
ExclusiveCoverage	string	
GIFTFtpPriority	string	
ImageRank	string	
MediaEventIdDate	string	
OriginalCreateDateTime	date/	
OriginalFileName	string	
ParentMediaEventID	string	
ParentMEID	string	
Personality	string+	
PrimaryFTP	string+	
RoutingDestinations	string+	

RoutingExclusions	string+
SecondaryFTP	string+
TimeShot	string

## XMP hdr Tags

HDR metadata namespace tags written by ACR 15.1. The actual namespace prefix is "hdr\_metadata", which is the prefix recorded in the file, but ExifTool shortens this for the family 1 group name.

These tags belong to the ExifTool XMP-hdr family 1 group.

Tag Name	Writable	Values / Notes
CCAvgLuminanceNits	real	(tag ID is 'ccv_avg_luminance_nits')
CCVMaxLuminanceNits	real	(tag ID is 'ccv_max_luminance_nits')
CCVMinLuminanceNits	real	(tag ID is 'ccv_min_luminance_nits')
CCVPrimariesXY	string	(tag ID is 'ccv_primaries_xy')
CCVWhiteXY	string	(tag ID is 'ccv_white_xy')
SceneReferred	boolean	(tag ID is 'scene_referred')

## XMP HDRGainMap Tags

Used in Apple HDR GainMap images.

These tags belong to the ExifTool XMP-HDRGainMap family 1 group.

Tag Name	Writable	Values / Notes
HDRGainMapView	string	

## XMP hdrgm Tags

Tags used in Adobe gain map images.

These tags belong to the ExifTool XMP-hdrgm family 1 group.

Tag Name	Writable	Values / Notes
BaseRenditionIsHDR	boolean	
GainMapMax	real+	
GainMapMin	real+	
Gamma	real/+	
HDRCapacityMax	real	
HDRCapacityMin	real	
OffsetHDR	real+	
OffsetSDR	real+	
Version	string/	

## XMP ics Tags

Tags used by IDimager. Nested TagStructure structures are unrolled to an arbitrary depth of 6 to avoid infinite recursion.

These tags belong to the ExifTool XMP-ics family 1 group.

Tag Name	Writable	Values / Notes
AppVersion	string/	
ImageRef	string	
SubVersions	struct+ --> <a href="#">SubVersion Struct</a>	
SubVersionFileName	string_+ (SubVersionsFileName)	
SubVersionReference	string_+ (SubVersionsVersRef)	
TagStructure	struct+ --> <a href="#">TagStructure Struct</a>	
LabelName1	string_+ (TagStructureLabelName)	
ParentReference1	string_+ (TagStructureParentReference)	
Reference1	string_+ (TagStructureReference)	
SubLabels1	struct_+ --> <a href="#">TagStructure Struct</a> (TagStructureSubLabels)	
LabelName2	string_+ (TagStructureSubLabelsLabelName)	
ParentReference2	string_+ (TagStructureSubLabelsParentReference)	
Reference2	string_+ (TagStructureSubLabelsReference)	
SubLabels2	struct_+ --> <a href="#">TagStructure Struct</a> (TagStructureSubLabelsSubLabels)	
LabelName3	string_+ (TagStructureSubLabelsSubLabelsLabelName)	
ParentReference3	string_+ (TagStructureSubLabelsSubLabelsParentReference)	
Reference3	string_+ (TagStructureSubLabelsSubLabelsReference)	
SubLabels3	struct_+ --> <a href="#">TagStructure Struct</a> (TagStructureSubLabelsSubLabelsSubLabels)	
LabelName4	string_+ (TagStructureSubLabelsSubLabelsSubLabelsLabelName)	
ParentReference4	string_+ (TagStructureSubLabelsSubLabelsSubLabelsParentReference)	
Reference4	string_+ (TagStructureSubLabelsSubLabelsSubLabelsReference)	
SubLabels4	struct_+ --> <a href="#">TagStructure Struct</a> (TagStructureSubLabelsSubLabelsSubLabelsSubLabels)	
LabelName5	string_+ (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsLabelName)	
ParentReference5	string_+ (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsParentReference)	
Reference5	string_+ (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsReference)	
SubLabels5	struct_+ --> <a href="#">TagStructure Struct</a> (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsSubLabels)	
LabelName6	string_+ (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsSubLabelsLabelName)	
ParentReference6	string_+ (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsSubLabelsParentReference)	
Reference6	string_+ (TagStructureSubLabelsSubLabelsSubLabelsSubLabelsReference)	

## XMP SubVersion Struct

Field Name	Writable	Values / Notes
FileName	string	
VersRef	string	

## XMP TagStructure Struct

Field Name	Writable	Values / Notes
LabelName	string	
ParentReference	string	
Reference	string	
SubLabels	TagStructure+ --> <a href="#">TagStructure Struct</a>	

## XMP iptcCore Tags

IPTC Core namespace tags. The actual IPTC Core namespace prefix is "Iptc4xmpCore", which is the prefix recorded in the file, but ExifTool shortens this for the family 1 group name. (see <http://www.ipctc.org/IPTC4XMP/>)

These tags belong to the ExifTool XMP-iptcCore family 1 group.

Tag Name	Writable	Values / Notes
AltTextAccessibility	lang-alt	
CountryCode	string	
CreatorContactInfo	struct	--> <a href="#">ContactInfo Struct</a>
CreatorCity	string_	(CreatorContactInfoCiAdrCity)
CreatorCountry	string_	(CreatorContactInfoCiAdrCtry)
CreatorAddress	string_	(CreatorContactInfoCiAdrExtadr)
CreatorPostalCode	string_	(CreatorContactInfoCiAdrPcode)
CreatorRegion	string_	(CreatorContactInfoCiAdrRegion)
CreatorWorkEmail	string_	(CreatorContactInfoCiEmailWork)
CreatorWorkTelephone	string_	(CreatorContactInfoCiTelWork)
CreatorWorkURL	string_	(CreatorContactInfoCiUrlWork)
ExtDescrAccessibility	lang-alt	
IntellectualGenre	string	
Location	string	
Scene	string+	
SubjectCode	string+	

## XMP ContactInfo Struct

Field Name	Writable	Values / Notes
CiAdrCity	string	
CiAdrCtry	string	
CiAdrExtadr	string	
CiAdrPcode	string	
CiAdrRegion	string	
CiEmailWork	string	
CiTelWork	string	
CiUrlWork	string	

## XMP iptcExt Tags

This table contains tags defined by the IPTC Extension schema version 1.7 and IPTC Video Metadata version 1.3, plus the AI additions. The actual namespace prefix is "Iptc4xmpExt", but ExifTool shortens this for the family 1 group name. (See <http://www.ipctc.org/standards/photo-metadata/iptc-standard/> and <https://ipctc.org/standards/video-metadata-hub/>.)

These tags belong to the ExifTool XMP-iptcExt family 1 group.

Tag Name	Writable	Values / Notes
AboutCvTerm	struct+	--> <a href="#">CVTermDetails Struct</a>
AboutCvTermCvId	string_+	
AboutCvTermId	string_+	(AboutCvTermCvTermId)
AboutCvTermName	lang-alt_+	(AboutCvTermCvTermName)
AboutCvTermRefinedAbout	string_+	(AboutCvTermCvTermRefinedAbout)
AdditionalModellnformation	string	(tag ID is 'AddlModellnfo')
AIPromptInformation	string	
AIPromptWriterName	string	
AISystemUsed	string	
AISystemVersionUsed	string	
ArtworkOrObject	struct+	--> <a href="#">ArtworkOrObjectDetails Struct</a>
ArtworkCircaDateCreated	string!_+	(ArtworkOrObjectAOCircaDateCreated)
ArtworkContentDescription	lang-alt_+	(ArtworkOrObjectAOContentDescription)
ArtworkContributionDescription	lang-alt_+	(ArtworkOrObjectAOContributionDescription)
ArtworkCopyrightNotice	string_+	(ArtworkOrObjectAOCopyrightNotice)
ArtworkCreator	string_+	(ArtworkOrObjectAOCreator)
ArtworkCreatorID	string_+	(ArtworkOrObjectAOCreatorId)
ArtworkCopyrightOwnerId	string_+	(ArtworkOrObjectAOCurrentCopyrightOwnerId)
ArtworkCopyrightOwnerName	string_+	(ArtworkOrObjectAOCurrentCopyrightOwnerName)
ArtworkLicensorID	string_+	(ArtworkOrObjectAOCurrentLicensorId)
ArtworkLicensorName	string_+	(ArtworkOrObjectAOCurrentLicensorName)

ArtworkDateCreated	date_+	(ArtworkOrObjectAODateCreated)
ArtworkPhysicalDescription	lang-alt_+	(ArtworkOrObjectAOPhysicalDescription)
ArtworkSource	string_+	(ArtworkOrObjectAOSSource)
ArtworkSourceInventoryNo	string_+	(ArtworkOrObjectAOSSourceInvNo)
ArtworkSourceInvURL	string_+	(ArtworkOrObjectAOSSourceInvURL)
ArtworkStylePeriod	string_+	(ArtworkOrObjectAOStylePeriod)
ArtworkTitle	lang-alt_+	(ArtworkOrObjectAOTitle)
AudioBitrate	integer	
AudioBitrateMode	string	'fixed' = Fixed 'variable' = Variable
AudioBitsPerSample	integer	
AudioChannelCount	integer	
CircaDateCreated	string	
ContainerFormat	struct	--> <a href="#">Entity Struct</a>
ContainerFormatIdentifier	string_+	
ContainerFormatName	lang-alt_	
Contributor	struct+	--> <a href="#">EntityWithRole Struct</a>
ContributorIdentifier	string_+	
ContributorName	lang-alt_+	
ContributorRole	string_+	
CopyrightYear	integer	
Creator	struct+	--> <a href="#">EntityWithRole Struct</a>
CreatorIdentifier	string_+	
CreatorName	lang-alt_+	
CreatorRole	string_+	
ControlledVocabularyTerm	string+	(tag ID is 'CVterm'; deprecated by version 1.2)
DataOnScreen	struct+	--> <a href="#">TextRegion Struct</a>
DataOnScreenRegion	struct_+	--> <a href="#">Area Struct</a>
DataOnScreenRegionD	real_+	
DataOnScreenRegionH	real_+	
DataOnScreenRegionText	string_+	
DataOnScreenRegionUnit	string_+	
DataOnScreenRegionW	real_+	
DataOnScreenRegionX	real_+	
DataOnScreenRegionY	real_+	
DigitalImageGUID	string	(tag ID is 'DigImageGUID')
DigitalSourceFileType	string	(now deprecated -- replaced by DigitalSourceType)
DigitalSourceType	string	
Dopesheet	lang-alt	
DopesheetLink	struct+	--> <a href="#">QualifiedLink Struct</a>
DopesheetLinkLink	string_+	
DopesheetLinkLinkQualifier	string_+	
EmbdEncRightsExpr	struct+	--> <a href="#">EREReDetails Struct</a>
EmbeddedEncodedRightsExpr	string_+	(EmbdEncRightsExprEncRightsExpr)
EmbeddedEncodedRightsExprType	string_+	(EmbdEncRightsExprRightsExprEncType)
EmbeddedEncodedRightsExprLangID	string_+	(EmbdEncRightsExprRightsExprLangId)
Episode	struct	--> <a href="#">EpisodeOrSeason Struct</a>
Episodentifier	string_	
EpisodeName	string_	
EpisodeNumber	string_	
Event	lang-alt	
ShownEvent	struct+	--> <a href="#">Entity Struct</a> (tag ID is 'EventExt')
ShownEventIdentifier	string_+	(EventExtIdentifier)
ShownEventName	lang-alt_+	(EventExtName)
EventID	string+	
ExternalMetadataLink	string+	
FeedIdentifier	string	
Genre	struct+	--> <a href="#">CVTermDetails Struct</a>
GenreCvId	string_+	
GenreCvTermId	string_+	
GenreCvTermName	lang-alt_+	
GenreCvTermRefinedAbout	string_+	
Headline	lang-alt/	
ImageRegion	struct+	--> <a href="#">ImageRegion Struct</a>
ImageRegionName	lang-alt_+	
ImageRegionCtype	struct_+	--> <a href="#">Entity Struct</a> (ImageRegionRCtype)
ImageRegionCtypeIdentifier	string_+	(ImageRegionRCtypeIdentifier)
ImageRegionCtypeName	lang-alt_+	(ImageRegionRCtypeName)
ImageRegionBoundary	struct_+	--> <a href="#">RegionBoundary Struct</a> (ImageRegionRegionBoundary)
ImageRegionBoundaryH	real_+	(ImageRegionRegionBoundaryRbH)
ImageRegionBoundaryRx	real_+	(ImageRegionRegionBoundaryRbRx)
ImageRegionBoundaryShape	string_+	(ImageRegionRegionBoundaryRbShape) 'circle' = Circle 'polygon' = Polygon 'rectangle' = Rectangle
ImageRegionBoundaryUnit	string_+	(ImageRegionRegionBoundaryRbUnit) 'pixel' = Pixel 'relative' = Relative
ImageRegionBoundaryVertices	struct_+	--> <a href="#">BoundaryPoint Struct</a> (ImageRegionRegionBoundaryRbVertices)

ImageRegionBoundaryVerticesX	real_+	(ImageRegionRegionBoundaryRbVerticesRbX)
ImageRegionBoundaryVerticesY	real_+	(ImageRegionRegionBoundaryRbVerticesRbY)
ImageRegionBoundaryW	real_+	(ImageRegionRegionBoundaryRbW)
ImageRegionBoundaryX	real_+	(ImageRegionRegionBoundaryRbX)
ImageRegionBoundaryY	real_+	(ImageRegionRegionBoundaryRbY)
ImageRegionID	string_+	(ImageRegionRId)
ImageRegionRole	struct_+	--> <a href="#">Entity Struct</a> (ImageRegionRRole)
ImageRegionRoleIdentifier	string_+	(ImageRegionRRoleIdentifier)
ImageRegionRoleName	lang-alt_+	(ImageRegionRRoleName)
IPTCLastEdited	date	
LinkedEncRightsExpr	struct+	--> <a href="#">LEREDEDetails Struct</a>
LinkedEncodedRightsExpr	string_+	(LinkedEncRightsExprLinkedRightsExpr)
LinkedEncodedRightsExprType	string_+	(LinkedEncRightsExprRightsExprEncType)
LinkedEncodedRightsExprLangID	string_+	(LinkedEncRightsExprRightsExprLangId)
LocationCreated	struct+	--> <a href="#">LocationDetails Struct</a>
LocationCreatedCity	string_+	
LocationCreatedCountryCode	string_+	
LocationCreatedCountryName	string_+	
LocationCreatedGPSAltitude	rational_+	
LocationCreatedGPSAltitudeRef	integer_+	0 = Above Sea Level 1 = Below Sea Level
LocationCreatedGPSLatitude	string_+	
LocationCreatedGPSLongitude	string_+	
LocationCreatedIdentifier	string_+	
LocationCreatedLocationId	string_+	
LocationCreatedLocationName	lang-alt_+	
LocationCreatedProvinceState	string_+	
LocationCreatedSublocation	string_+	
LocationCreatedWorldRegion	string_+	
LocationShown	struct+	--> <a href="#">LocationDetails Struct</a>
LocationShownCity	string_+	
LocationShownCountryCode	string_+	
LocationShownCountryName	string_+	
LocationShownGPSAltitude	rational_+	
LocationShownGPSAltitudeRef	integer_+	0 = Above Sea Level 1 = Below Sea Level
LocationShownGPSLatitude	string_+	
LocationShownGPSLongitude	string_+	
LocationShownIdentifier	string_+	
LocationShownLocationId	string_+	
LocationShownLocationName	lang-alt_+	
LocationShownProvinceState	string_+	
LocationShownSublocation	string_+	
LocationShownWorldRegion	string_+	
MaxAvailHeight	integer	
MaxAvailWidth	integer	
MetadataAuthority	struct	--> <a href="#">Entity Struct</a>
MetadataAuthorityIdentifier	string_+	
MetadataAuthorityName	lang-alt_	
MetadataLastEdited	date	
MetadataLastEditor	struct	--> <a href="#">Entity Struct</a>
MetadataLastEditorIdentifier	string_+	
MetadataLastEditorName	lang-alt_	
ModelAge	integer+	
OrganisationInImageCode	string+	
OrganisationInImageName	string+	
ParentID	string	
PersonHeard	struct+	--> <a href="#">Entity Struct</a>
PersonHeardIdentifier	string_+	
PersonHeardName	lang-alt_+	
PersonInImage	string+	
PersonInImageWDetails	struct+	--> <a href="#">PersonDetails Struct</a>
PersonInImageCharacteristic	struct_+	--> <a href="#">CVTermDetails Struct</a> (PersonInImageWDetailsPersonCharacteristic)
PersonInImageCvTermCvId	string_+	(PersonInImageWDetailsPersonCharacteristicCvId)
PersonInImageCvTermId	string_+	(PersonInImageWDetailsPersonCharacteristicCvTermId)
PersonInImageCvTermName	lang-alt_+	(PersonInImageWDetailsPersonCharacteristicCvTermName)
PersonInImageCvTermRefinedAbout	string_+	(PersonInImageWDetailsPersonCharacteristicCvTermRefinedAbout)
PersonInImageDescription	lang-alt_+	(PersonInImageWDetailsPersonDescription)
PersonInImageId	string_+	(PersonInImageWDetailsPersonId)
PersonInImageName	lang-alt_+	(PersonInImageWDetailsPersonName)
PlanningRef	struct+	--> <a href="#">EntityWithRole Struct</a>
PlanningRefIdentifier	string_+	
PlanningRefName	lang-alt_+	
PlanningRefRole	string_+	
ProductInImage	struct+	--> <a href="#">ProductDetails Struct</a>
ProductInImageDescription	lang-alt_+	(ProductInImageProductDescription)
ProductInImageGTIN	string_+	(ProductInImageProductGTIN)
ProductInImageProductId	string_+	
ProductInImageName	lang-alt_+	(ProductInImageProductName)

PublicationEvent	struct+	--> <a href="#">PublicationEvent Struct</a>
PublicationEventDate	date_+	
PublicationEventIdentifier	string_+	
PublicationEventName	string_+	
Rating	struct+	--> <a href="#">Rating Struct</a>
RatingRegion	struct_+	--> <a href="#">LocationDetails Struct</a> (RatingRatingRegion)
RatingRegionCity	string_+	(RatingRatingRegionCity)
RatingRegionCountryCode	string_+	(RatingRatingRegionCountryCode)
RatingRegionCountryName	string_+	(RatingRatingRegionCountryName)
RatingRegionGPSAltitude	rational_+	(RatingRatingRegionGPSAltitude)
RatingRegionGPSAltitudeRef	integer_+	(RatingRatingRegionGPSAltitudeRef) 0 = Above Sea Level 1 = Below Sea Level
RatingRegionGPSLatitude	string_+	(RatingRatingRegionGPSLatitude)
RatingRegionGPSLongitude	string_+	(RatingRatingRegionGPSLongitude)
RatingRegionIdentifier	string_+	(RatingRatingRegionIdentifier)
RatingRegionLocationId	string_+	(RatingRatingRegionLocationId)
RatingRegionLocationName	lang-alt_+	(RatingRatingRegionLocationName)
RatingRegionProvinceState	string_+	(RatingRatingRegionProvinceState)
RatingRegionSublocation	string_+	(RatingRatingRegionSublocation)
RatingRegionWorldRegion	string_+	(RatingRatingRegionWorldRegion)
RatingScaleMaxValue	string_+	(RatingRatingScaleMaxValue)
RatingScaleMinValue	string_+	(RatingRatingScaleMinValue)
RatingSourceLink	string_+	(RatingRatingSourceLink)
RatingValue	string_+	(RatingRatingValue)
RatingValueLogoLink	string_+	(RatingRatingValueLogoLink)
RecDevice	struct	--> <a href="#">Device Struct</a>
RecDeviceAttLensDescription	string_	
RecDeviceManufacturer	string_	
RecDeviceModelName	string_	
RecDeviceOwnersDeviceId	string_	
RecDeviceSerialNumber	string_	
RegistryID	struct+	--> <a href="#">RegistryEntryDetails Struct</a>
RegistryEntryRole	string_+	(RegistryIdRegEntryRole)
RegistryItemID	string_+	(RegistryIdRegItemId)
RegistryOrganisationID	string_+	(RegistryIdRegOrgId)
ReleaseReady	boolean	
Season	struct	--> <a href="#">EpisodeOrSeason Struct</a>
SeasonIdentifier	string_	
SeasonName	string_	
SeasonNumber	string_	
Series	struct	--> <a href="#">Series Struct</a>
SeriesIdentifier	string_	
SeriesName	string_	
Snapshot	struct+	--> <a href="#">LinkedImage Struct</a> (tag ID is 'SnapshotLink')
SnapshotFormat	string_+	(SnapshotLinkFormat)
SnapshotHeightPixels	integer_+	(SnapshotLinkHeightPixels)
SnapshotImageRole	string_+	(SnapshotLinkImageRole)
SnapshotLink	string_+	(SnapshotLinkLink)
SnapshotLinkQualifier	string_+	(SnapshotLinkLinkQualifier)
SnapshotUsedVideoFrame	struct_+	--> <a href="#">Timecode Struct</a> (SnapshotLinkUsedVideoFrame)
SnapshotUsedVideoFrameTimeFormat	string_+	(SnapshotLinkUsedVideoFrameTimeFormat) '23976Timecode' = 23.976 fps '24Timecode' = 24 fps '25Timecode' = 25 fps '2997DropTimecode' = 29.97 fps (drop) '2997NonDropTimecode' = 29.97 fps (non-drop) '30Timecode' = 30 fps '50Timecode' = 50 fps '5994DropTimecode' = 59.94 fps (drop) '5994NonDropTimecode' = 59.94 fps (non-drop) '60Timecode' = 60 fps
SnapshotUsedVideoFrameTimeValue	string_+	(SnapshotLinkUsedVideoFrameTimeValue)
SnapshotUsedVideoFrameValue	integer_+	(SnapshotLinkUsedVideoFrameValue; only in XMP 2008 spec; an error?)
SnapshotWidthPixels	integer_+	(SnapshotLinkWidthPixels)
StorylineIdentifier	string+	
StreamReady	string	'false' = False 'true' = True 'unknown' = Unknown
StylePeriod	string	
SupplyChainSource	struct+	--> <a href="#">Entity Struct</a>
SupplyChainSourceIdentifier	string_+	
SupplyChainSourceName	lang-alt_+	
TemporalCoverage	struct	--> <a href="#">TemporalCoverage Struct</a>
TemporalCoverageFrom	date_	(TemporalCoverageTempCoverageFrom)
TemporalCoverageTo	date_	(TemporalCoverageTempCoverageTo)
Transcript	lang-alt	
TranscriptLink	struct+	--> <a href="#">QualifiedLink Struct</a>
TranscriptLinkLink	string_+	
TranscriptLinkLinkQualifier	string_+	
VideoBitrate	integer	
VideoBitrateMode	string	'fixed' = Fixed 'variable' = Variable

VideoDisplayAspectRatio	rational	
VideoEncodingProfile	string	
VideoShotType	struct+	--> <a href="#">Entity Struct</a>
VideoShotTypeIdentifier	string_+	
VideoShotTypeName	lang-alt_+	
VideoStreamsCount	integer	
VisualColor	string	(tag ID is 'VisualColour') 'bw-monochrome' = Monochrome 'colour' = Color
WorkflowTag	struct	--> <a href="#">CVTermDetails Struct</a>
WorkflowTagCvId	string_	
WorkflowTagCvTermId	string_	
WorkflowTagCvTermName	lang-alt_	
WorkflowTagCvTermRefinedAbout	string_	

## XMP CVTermDetails Struct

Field Name	Writable	Values / Notes
CvId	string	
CvTermld	string	
CvTermName	lang-alt	
CvTermRefinedAbout	string	

## XMP ArtworkOrObjectDetails Struct

Field Name	Writable	Values / Notes
AOCircaDateCreated	string	
AOContentDescription	lang-alt	
AOContributionDescription	lang-alt	
AOCopyrightNotice	string	
AOCreator	string+	
AOCreatorId	string+	
AOCurrentCopyrightOwnerId	string	
AOCurrentCopyrightOwnerName	string	
AOCurrentLicensorId	string	
AOCurrentLicensorName	string	
AODateCreated	date	
AOPhysicalDescription	lang-alt	
AOSource	string	
AOSourceInvNo	string	
AOSourceInvURL	string	
AOSTylePeriod	string+	
AOTitle	lang-alt	

## XMP Entity Struct

Field Name	Writable	Values / Notes
Identifier	string+	
Name	lang-alt	

## XMP EntityWithRole Struct

Field Name	Writable	Values / Notes
Identifier	string+	
Name	lang-alt	
Role	string+	

## XMP TextRegion Struct

Field Name	Writable	Values / Notes
Region	Area	--> <a href="#">Area Struct</a>
RegionText	string	

## XMP Area Struct

Field Name	Writable	Values / Notes
D	real	
H	real	
Unit	string	
W	real	
X	real	
Y	real	

## XMP QualifiedLink Struct

Field Name	Writable	Values / Notes
Link	string	
LinkQualifier	string	

## XMP EEREDetails Struct

Field Name	Writable	Values / Notes
EncRightsExpr	string	
RightsExprEncType	string	
RightsExprLangId	string	

## XMP EpisodeOrSeason Struct

Field Name	Writable	Values / Notes
Identifier	string	
Name	string	
Number	string	

## XMP ImageRegion Struct

This structure is new in the IPTC Extension version 1.5 specification. As well as the fields defined below, this structure may contain any top-level XMP tags, but since they aren't pre-defined the only way to add these tags is to write ImageRegion as a structure with these tags as new fields.

Field Name	Writable	Values / Notes
Name	lang-alt	
RegionBoundary	RegionBoundary	--> <a href="#">RegionBoundary Struct</a>
RCtype	Entity+	--> <a href="#">Entity Struct</a>
RId	string	
RRole	Entity+	--> <a href="#">Entity Struct</a>

## XMP RegionBoundary Struct

Field Name	Writable	Values / Notes
RbH	real	
RbRx	real	
RbShape	string	circle = Circle polygon = Polygon rectangle = Rectangle
RbUnit	string	pixel = Pixel relative = Relative
RbVertices	BoundaryPoint+	--> <a href="#">BoundaryPoint Struct</a>
RbW	real	
RbX	real	
RbY	real	

## XMP BoundaryPoint Struct

Field Name	Writable	Values / Notes
RbX	real	
RbY	real	

## XMP LEREDetails Struct

Field Name	Writable	Values / Notes
LinkedRightsExpr	string	
RightsExprEncType	string	
RightsExprLangId	string	

## XMP LocationDetails Struct

Note that the GPS elements of this structure are in the "exif" namespace.

Field Name	Writable	Values / Notes
City	string	
CountryCode	string	
CountryName	string	
GPSAltitude	rational	
GPSAltitudeRef	integer	0 = Above Sea Level 1 = Below Sea Level
GPSLatitude	string	
GPSLongitude	string	
Identifier	string+	
LocationId	string+	
LocationName	lang-alt	
ProvinceState	string	
Sublocation	string	
WorldRegion	string	

## XMP PersonDetails Struct

Field Name	Writable	Values / Notes
PersonCharacteristic	CVTermDetails+	--> <a href="#">CVTermDetails Struct</a>
PersonDescription	lang-alt	
PersonId	string+	
PersonName	lang-alt	

## XMP ProductDetails Struct

Field Name	Writable	Values / Notes

ProductDescription	lang-alt
ProductGTIN	string
ProductId	string
ProductName	lang-alt

## XMP PublicationEvent Struct

Field Name	Writable	Values / Notes
Date	date	
Identifier	string	
Name	string	

## XMP Rating Struct

Field Name	Writable	Values / Notes
RatingRegion	LocationDetails+ --> <a href="#">LocationDetails Struct</a>	
RatingScaleMaxValue	string	
RatingScaleMinValue	string	
RatingSourceLink	string	
RatingValue	string	
RatingValueLogoLink	string	

## XMP Device Struct

Field Name	Writable	Values / Notes
AttLensDescription	string	
Manufacturer	string	
ModelName	string	
OwnersDeviceId	string	
SerialNumber	string	

## XMP RegistryEntryDetails Struct

Field Name	Writable	Values / Notes
RegEntryRole	string	
RegItemId	string	
RegOrgId	string	

## XMP Series Struct

Field Name	Writable	Values / Notes
Identifier	string	
Name	string	

## XMP LinkedImage Struct

Field Name	Writable	Values / Notes
HeightPixels	integer	
ImageRole	string	
Link	string	
LinkQualifier	string+	
UsedVideoFrame	Timecode --> <a href="#">Timecode Struct</a>	
WidthPixels	integer	
Format	string	

## XMP Timecode Struct

Field Name	Writable	Values / Notes
TimeFormat	string	23976Timecode = 23.976 fps 24Timecode = 24 fps 25Timecode = 25 fps 2997DropTimecode = 29.97 fps (drop) 2997NonDropTimecode = 29.97 fps (non-drop) 30Timecode = 30 fps 50Timecode = 50 fps 5994DropTimecode = 59.94 fps (drop) 5994NonDropTimecode = 59.94 fps (non-drop) 60Timecode = 60 fps
TimeValue	string	
Value	integer	(only in XMP 2008 spec; an error?)

## XMP TemporalCoverage Struct

Field Name	Writable	Values / Notes
TempCoverageFrom	date	
TempCoverageTo	date	

## XMP LImage Tags

Tags written by RED smartphones.

These tags belong to the ExifTool XMP-LImage family 1 group.

Tag Name	Writable	Values / Notes
MajorVersion	string	

MinorVersion	string
RightAlbedo	string (Right stereoscopic image)

## XMP Lightroom Tags

Adobe Lightroom "lr" namespace tags.

These tags belong to the ExifTool XMP-lr family 1 group.

Tag Name	Writable	Values / Notes
HierarchicalSubject	string+	
PrivateRTKInfo	string	
WeightedFlatSubject	string+	

## XMP MediaPro Tags

iView MediaPro namespace tags.

These tags belong to the ExifTool XMP-mediapro family 1 group.

Tag Name	Writable	Values / Notes
CatalogSets	string+	
Event	string/	(avoided due to conflict with XMP-iptcExt:Event)
Location	string/	(avoided due to conflict with XMP-iptcCore:Location)
People	string+	
Status	string	
UserFields	string+	

## XMP panorama Tags

Adobe Photoshop Panorama-profile tags.

These tags belong to the ExifTool XMP-panorama family 1 group.

Tag Name	Writable	Values / Notes
Transformation	string	
VirtualFocalLength	real	
VirtuallImageXCenter	real	
VirtuallImageYCenter	real	

## XMP pdf Tags

Adobe PDF namespace tags. The official XMP specification defines only Keywords, PDFVersion, Producer and Trapped. The other tags are included because they have been observed in PDF files, but some are avoided when writing due to name conflicts with other XMP namespaces.

These tags belong to the ExifTool XMP-pdf family 1 group.

Tag Name	Writable	Values / Notes
Author	string	
Copyright	string/	
CreationDate	date	
Creator	string/	
Keywords	string	
Marked	boolean/	
ModDate	date	
PDFVersion	string	
Producer	string	
Subject	string/	
Title	string/	
Trapped	string	'False' = False 'True' = True 'Unknown' = Unknown

## XMP pdfx Tags

PDF extension tags. This namespace is used to store application-defined PDF information, so there are few pre-defined tags. User-defined tags must be created to enable writing of other XMP-pd氟x information.

These tags belong to the ExifTool XMP-pd氟x family 1 group.

Tag Name	Writable	Values / Notes
SourceModified	string	

## XMP photoshop Tags

Adobe Photoshop namespace tags.

These tags belong to the ExifTool XMP-photoshop family 1 group.

Tag Name	Writable	Values / Notes
AuthorsPosition	string	
CameraProfiles	struct+	--> <a href="#">Camera Struct</a>
CameraProfilesApertureValue	real_+	
CameraProfilesAuthor	string_+	
CameraProfilesAutoScale	boolean_+	
CameraProfilesCameraPrettyName	string_+	
CameraProfilesCameraRawProfile	boolean_+	
CameraProfilesFocalLength	real_+	

CameraProfilesFocusDistance	real_+	
CameraProfilesLens	string_+	
CameraProfilesLensPrettyName	string_+	
CameraProfilesMake	string_+	
CameraProfilesModel	string_+	
CameraProfilesPerspectiveModel	struct_+ --> <a href="#">PerspectiveModel Struct</a>	
CameraProfilesPerspectiveModelImageXCenter	real_+	
CameraProfilesPerspectiveModelImageYCenter	real_+	
CameraProfilesPerspectiveModelRadialDistortParam1	real_+	
CameraProfilesPerspectiveModelRadialDistortParam2	real_+	
CameraProfilesPerspectiveModelRadialDistortParam3	real_+	
CameraProfilesPerspectiveModelScaleFactor	real_+	
CameraProfilesPerspectiveModelVersion	string_+	
CameraProfilesProfileName	string_+	
CameraProfilesSensorFormatFactor	real_+	
CameraProfilesUniqueCameraModel	string_+	
CaptionWriter	string	
Category	string	
City	string	
ColorMode	integer	0 = Bitmap 1 = Grayscale 2 = Indexed 3 = RGB      4 = CMYK 7 = Multichannel 8 = Duotone 9 = Lab
Country	string	
Credit	string	
DateCreated	date	
DocumentAncestors	string+	
EmbeddedXMPDigest	string	
Headline	string	
History	string	
ICCPProfileName	string	(tag ID is 'ICCProfile')
Instructions	string	
LegacyIPTCDigest	string	
SidecarForExtension	string	
Source	string	
State	string	
SupplementalCategories	string+	
TextLayers	struct+ --> <a href="#">Layer Struct</a>	
TextLayerName	string_+ (TextLayersLayerName)	
TextLayerText	string_+ (TextLayersLayerText)	
TransmissionReference	string	(Now used as a job identifier)
Urgency	integer	(should be in the range 1-8 to conform with the XMP spec) 0 = 0 (reserved) 1 = 1 (most urgent) 2 = 2 3 = 3 4 = 4 5 = 5 (normal urgency) 6 = 6 7 = 7 8 = 8 (least urgent) 9 = 9 (user-defined priority)

## XMP Camera Struct

Field Name	Writable	Values / Notes
ApertureValue	real	
Author	string	
AutoScale	boolean	
CameraPrettyName	string	
CameraRawProfile	boolean	
FocalLength	real	
FocusDistance	real	
Lens	string	
LensPrettyName	string	
Make	string	
Model	string	
PerspectiveModel	PerspectiveModel	--> <a href="#">PerspectiveModel Struct</a>
ProfileName	string	
SensorFormatFactor	real	
UniqueCameraModel	string	

## XMP PerspectiveModel Struct

Field Name	Writable	Values / Notes
ImageXCenter	real	
ImageYCenter	real	
RadialDistortParam1	real	
RadialDistortParam2	real	
RadialDistortParam3	real	
ScaleFactor	real	
Version	string	

## XMP Layer Struct

Field Name	Writable	Values / Notes
LayerName	string	
LayerText	string	

## XMP PixelLive Tags

PixelLive namespace tags. These tags are not writable because they are very uncommon and I haven't been able to locate a reference which gives the namespace URI.

These tags belong to the ExifTool XMP-PixelLive family 1 group.

Tag Name	Writable	Values / Notes
Author	no	
Comments	no	
Copyright	no	
Date	no	
Genre	no	
Title	no	

## XMP pmi Tags

PRISM Metadata for Images 3.0 namespace tags. (see <http://www.prismstandard.org/>)

These tags belong to the ExifTool XMP-pmi family 1 group.

Tag Name	Writable	Values / Notes
Color	string/	'bw' = BW 'color' = Color 'duotone' = Duotone 'quadtone' = Quadtone 'sepia' = Sepia 'tritone' = Tritone
ContactInfo	string/	
DisplayName	string/	
DistributorProductID	string/	
EventAlias	string/	
EventEnd	string/	
EventStart	string/	
EventSubtype	string/	
EventType	string/	
Field	string/	
Framing	string/	
Location	string/	
Make	string/	
Manufacturer	string/	
Model	string/	
ModelYear	string/	
ObjectDescription	string/	
ObjectSubtype	string/	
ObjectType	string/	
Orientation	string/	'horizontal' = Horizontal 'vertical' = Vertical
PositionDescriptor	string/	
ProductID	string/	
ProductIDType	string/	
Season	string/	'fall' = Fall 'spring' = Spring 'summer' = Summer 'winter' = Winter
SequenceName	string/	
SequenceNumber	string/	
SequenceTotalNumber	string/	
Setting	string/	
ShootID	string/	
SlideshowName	string/	
SlideshowNumber	integer/	
SlideshowTotalNumber	integer/	
Viewpoint	string/	
VisualTechnique	string/	

## XMP prism Tags

Publishing Requirements for Industry Standard Metadata 3.0 namespace tags. (see <https://www.w3.org/Submission/2020/SUBM-prism-20200910/prism-basic.html>)

These tags belong to the ExifTool XMP-prism family 1 group.

Tag Name	Writable	Values / Notes
AcademicField	string/	
AggregateIssueNumber	integer/	
AggregationType	string/+	
AlternateTitle	struct+ --> <a href="#">prismAlternateTitle Struct</a>	
AlternateTitleA-lang	string/_+	
AlternateTitleA-platform	string/_+	
AlternateTitleText	string/_+	
BlogTitle	string/	
BlogURL	string/	
BookEdition	string/	
ByteCount	integer/	
Channel	struct+ --> <a href="#">prismChannel Struct</a>	

ChannelA-lang	string/_+
ChannelChannel	string/_+
ChannelSubchannel1	string/_+
ChannelSubchannel2	string/_+
ChannelSubchannel3	string/_+
ChannelSubchannel4	string/_+
ComplianceProfile	string/ 'three' = Three
ContentType	string/
CopyrightYear	string/
CorporateEntity	string/+
CoverDate	date/
CoverDisplayDate	string/
CreationDate	date/
DateReceived	date/
Device	string/
Distributor	string/
DOI	string/
Edition	string/
Elssn	string/
EndingPage	string/
Event	string/+
Genre	string/+
HasAlternative	string/+
HasCorrection	struct --> <a href="#">prismHasCorrection Struct</a>
HasCorrectionA-lang	string/_
HasCorrectionA-platform	string/_
HasCorrectionText	string/_
HasTranslation	string/+
Industry	string/+
IsAlternativeOf	string/+
ISBN	string/+
IsCorrectionOf	string/+
ISSN	string/
IssuelIdentifier	string/
IssueName	string/
IssueTeaser	string/
IssueType	string/
IsTranslationOf	string/
Keyword	string/+
KillDate	struct --> <a href="#">prismKillDate Struct</a>
KillDateA-platform	string/_
KillDateDate	date/_
Link	string/+
Location	string/+
ModificationDate	date/
NationalCatalogNumber	string/
Number	string/
Object	string/+
OffSaleDate	struct+ --> <a href="#">prismOffSaleDate Struct</a>
OffSaleDateA-platform	string/_+
OffSaleDateDate	date/_+
OnSaleDate	struct+ --> <a href="#">prismOnSaleDate Struct</a>
OnSaleDateA-platform	string/_+
OnSaleDateDate	date/_+
OnSaleDay	struct+ --> <a href="#">prismOnSaleDay Struct</a>
OnSaleDayA-platform	string/_+
OnSaleDayDay	string/_+
Organization	string/+
OriginPlatform	string/+ 'broadcast' = Broadcast 'email' = E-Mail 'mobile' = Mobile 'other' = Other 'print' = Print 'recordableMedia' = Recordable Media 'web' = Web
PageCount	integer/
PageProgressionDirection	string/ 'LTR' = Left to Right 'RTL' = Right to Left
PageRange	string/+
Person	string/
Platform	string/
ProductCode	string/
Profession	string/
PublicationDate	struct+ --> <a href="#">prismPublicationDate Struct</a>
PublicationDateA-platform	string/_+
PublicationDateDate	date/_+
PublicationDisplayDate	struct+ --> <a href="#">prismPublicationDate Struct</a>
PublicationDisplayDateA-platform	string/_+
PublicationDisplayDateDate	date/_+
PublicationName	string/
PublishingFrequency	string/
Rating	string/

SamplePageRange	string/
Section	string/
SellingAgency	string/
SeriesNumber	integer/
SeriesTitle	string/
Sport	string/
StartingPage	string/
Subsection1	string/
Subsection2	string/
Subsection3	string/
Subsection4	string/
Subtitle	string/
SupplementDisplayID	string/
SupplementStartingPage	string/
SupplementTitle	string/
Teaser	string/+
Ticker	string/+
TimePeriod	string/
URL	struct+ --> <a href="#">prismUrl Struct</a>
URLA-platform	string/_+
URLUrl	string/_+
UspsNumber	string/
VersionIdentifier	string/
Volume	string/
WordCount	integer/

## XMP prismAlternateTitle Struct

Field Name	Writable	Values / Notes
A-lang	string	
A-platform	string	
Text	string	

## XMP prismChannel Struct

Field Name	Writable	Values / Notes
A-lang	string	
Channel	string	
Subchannel1	string	
Subchannel2	string	
Subchannel3	string	
Subchannel4	string	

## XMP prismHasCorrection Struct

Field Name	Writable	Values / Notes
A-lang	string	
A-platform	string	
Text	string	

## XMP prismKillDate Struct

Field Name	Writable	Values / Notes
A-platform	string	
Date	date	

## XMP prismOffSaleDate Struct

Field Name	Writable	Values / Notes
A-platform	string	
Date	date	

## XMP prismOnSaleDate Struct

Field Name	Writable	Values / Notes
A-platform	string	
Date	date	

## XMP prismOnSaleDay Struct

Field Name	Writable	Values / Notes
A-platform	string	
Day	string	

## XMP prismPublicationDate Struct

Field Name	Writable	Values / Notes
A-platform	string	
Date	date	

## XMP prismUrl Struct

Field Name	Writable	Values / Notes
A-platform	string	
Url	string	

## XMP prl Tags

PRISM Rights Language 2.1 namespace tags. These tags have been deprecated since the release of the PRISM Usage Rights 3.0. (see <https://www.w3.org/submissions/2020/SUBM-prism-20200910/prism-image.html>)

These tags belong to the ExifTool XMP-prl family 1 group.

Tag Name	Writable	Values / Notes
Geography	string/+	
Industry	string/+	
Usage	string/+	

## XMP prm Tags

PRISM Recipe Metadata 3.0 namespace tags. (see <http://www.prismstandard.org/>)

These tags belong to the ExifTool XMP-prm family 1 group.

Tag Name	Writable	Values / Notes
CookingEquipment	string/	
CookingMethod	string/	
Course	string/	
Cuisine	string/	
DietaryNeeds	string/	
DishType	string/	
Duration	string/	
IngredientExclusion	string/	
MainIngredient	string/	
Meal	string/	
RecipeEndingPage	string/	
RecipePageRange	string/	
RecipeSource	string/	
RecipeStartingPage	string/	
RecipeTitle	string/	
ServingSize	string/	
SkillLevel	string/	
SpecialOccasion	string/	
Yield	string/	

## XMP pur Tags

PRISM Usage Rights 3.0 namespace tags. (see <http://www.prismstandard.org/>)

These tags belong to the ExifTool XMP-pur family 1 group.

Tag Name	Writable	Values / Notes
AdultContentWarning	string/+	
Agreement	string/+	
Copyright	lang-alt/	
CreditLine	string/+	
EmbargoDate	date/+	
ExclusivityEndDate	date/+	
ExpirationDate	date/+	
ImageSizeRestriction	string/	
OptionEndDate	date/+	
Permissions	string/+	
Restrictions	string/+	
ReuseProhibited	boolean/	
RightsAgent	string/	
RightsOwner	string/	

## XMP rdf Tags

Most RDF attributes are handled internally, but the "about" attribute is treated specially to allow it to be set to a specific value if required.

These tags belong to the ExifTool XMP-rdf family 1 group.

Tag Name	Writable	Values / Notes
About	string!	

## XMP seal Tags

SEAL embedded in XMP.

These tags belong to the ExifTool XMP-seal family 1 group.

Tag Name	Writable	Values / Notes
Seal	-	--> <a href="#">XMP SEAL Tags</a>

## XMP SEAL Tags

These tags are used in SEAL (Secure Evidence Attribution Label) content authentication, which is actually XML format, not XMP. ExifTool has read/delete support for SEAL information in JPG, TIFF, XMP, PNG, WEBP, HEIC, PPM, MOV and MP4 files, and read-only support in PDF, MKV and WAV. Use `-seal:all=` on the command line to delete SEAL

Tag ID	Tag Name	Writable	Values / Notes
'b'	ByteRange	no	
'copyright'	Copyright	no	
'd'	Domain	no	
'da'	DigestAlgorithm	no	
'id'	Identifier	no	
'info'	SEALComment	no	
'ka'	KeyAlgorithm	no	
'kv'	KeyVersion	no	
's'	Signature	no	
'seal'	SEALVersion	no	
'sf'	SignatureFormat	no	
'sl'	SignatureLength	no	
'uid'	UniquelIdentifier	no	

## XMP swf Tags

Adobe SWF namespace tags.

These tags belong to the ExifTool XMP-swf family 1 group.

Tag Name	Writable	Values / Notes
BackgroundAlpha	integer	(tag ID is 'bgalpha')
ForwardLock	boolean	
MaxStorage	integer	
Type	string/	

## XMP tiff Tags

EXIF namespace for TIFF tags. See [https://web.archive.org/web/20180921145139if\\_/http://www.cipa.jp:80/std/documents/e/DC-010-2017\\_E.pdf](https://web.archive.org/web/20180921145139if_/http://www.cipa.jp:80/std/documents/e/DC-010-2017_E.pdf) for the specification.

These tags belong to the ExifTool XMP-tiff family 1 group.

Tag Name	Writable	Values / Notes
Artist	string	
BitsPerSample	integer+	
Compression	integer	--> <a href="#">EXIF Compression Values</a>
Copyright	lang-alt	
DateTime	date	
ImageDescription	lang-alt	
ImageHeight	integer	(tag ID is 'ImageLength')
ImageWidth	integer	
Make	string	
Model	string	
NativeDigest	string/	
Orientation	integer	1 = Horizontal (normal) 2 = Mirror horizontal 3 = Rotate 180 4 = Mirror vertical 5 = Mirror horizontal and rotate 270 CW 6 = Rotate 90 CW 7 = Mirror horizontal and rotate 90 CW 8 = Rotate 270 CW
PhotometricInterpretation	integer	0 = WhitespaceZero 1 = BlackIsZero 2 = RGB 3 = RGB Palette 4 = Transparency Mask 5 = CMYK 6 = YCbCr 8 = CIELab 9 = ICCLab 10 = ITULab 32803 = Color Filter Array 32844 = Pixar LogL 32845 = Pixar LogLuv 32892 = Sequential Color Filter 34892 = Linear Raw 51177 = Depth Map 52527 = Semantic Mask
PlanarConfiguration	integer	1 = Chunky 2 = Planar
PrimaryChromaticities	rational+	
ReferenceBlackWhite	rational+	
ResolutionUnit	integer	(the value 1 is not standard EXIF) 1 = None 2 = inches 3 = cm
SamplesPerPixel	integer	
Software	string	
TransferFunction	integer+	
WhitePoint	rational+	
XResolution	rational	
YCbcCrCoefficients	rational+	
YCbcCrPositioning	integer	1 = Centered 2 = Co-sited
YCbcCrSubSampling	integer+	(while technically this is a list-type tag, for compatibility with its EXIF counterpart it is written and read as a simple string) '1 1' = YCbCr4:4:4 (1 1) '1 2' = YCbCr4:4:0 (1 2) '1 4' = YCbCr4:4:1 (1 4) '2 1' = YCbCr4:2:2 (2 1) '2 2' = YCbCr4:2:0 (2 2)

## XMP x Tags

The "x" namespace is used for the "xmpmeta" wrapper, and may contain an "xmptk" attribute that is extracted as the XMPToolkit tag. When writing, the XMPToolkit tag is generated automatically by ExifTool unless specifically set to another value.

These tags belong to the ExifTool XMP-x family 1 group.

Tag Name	Writable	Values / Notes
XMPToolkit	string!	(tag ID is 'xmptk')

## XMP xmp Tags

XMP namespace tags. If the older "xap", "xapBJ", "xapMM" or "xapRights" namespace prefixes are found, they are translated to the newer "xmp", "xmpBJ", "xmpMM" and "xmpRights" prefixes for use in family 1 group names.

These tags belong to the ExifTool XMP-xmp family 1 group.

Tag Name	Writable	Values / Notes
Advisory	string+	(deprecated)
Author	string/	(non-standard)
BaseUrl	string	
CreateDate	date	
CreatorTool	string	
Description	lang-alt/	(non-standard)
Format	string/	(non-standard)
Identifier	string/+	
Keywords	string/	(non-standard)
Label	string	
MetadataDate	date	
ModifyDate	date	
Nickname	string	
PageInfo	struct+	--> <a href="#">PageInfo Struct</a>
PageImageFormat	string_+	(PageImageFormat)
PageImageHeight	integer_+	(PageImageHeight)
PageImage	string_+	(PageImage)
PageImagePageNumber	integer_+	(PageImagePageNumber)
PageImageWidth	integer_+	(PageImageWidth)
Rating	real	(a value from 0 to 5, or -1 for "rejected")
RatingPercent	real/	(non-standard)
Thumbnails	struct+	--> <a href="#">Thumbnail Struct</a>
ThumbnailFormat	string_+	(ThumbnailsFormat)
ThumbnailHeight	integer_+	(ThumbnailsHeight)
ThumbnailImage	string/_+	(ThumbnailImage)
ThumbnailWidth	integer_+	(ThumbnailsWidth)
Title	lang-alt/	(non-standard)

## XMP PageInfo Struct

Field Name	Writable	Values / Notes
PageNumber	integer	
Format	string	
Height	integer	
Image	string	
Width	integer	

## XMP Thumbnail Struct

Field Name	Writable	Values / Notes
Format	string	
Height	integer	
Image	string	
Width	integer	

## XMP xmpBJ Tags

XMP Basic Job Ticket namespace tags.

These tags belong to the ExifTool XMP-xmpBJ family 1 group.

Tag Name	Writable	Values / Notes
JobRef	struct+	--> <a href="#">JobRef Struct</a>
JobRefId	string_+	
JobRefName	string_+	
JobRefUrl	string_+	

## XMP JobRef Struct

Field Name	Writable	Values / Notes
Id	string	
Name	string	

## XMP xmpDM Tags

XMP Dynamic Media namespace tags. See <https://developer.adobe.com/xmp/docs/XMPNamespaces/xmpDM/> for the specification.

These tags belong to the ExifTool XMP-xmpDM family 1 group.

Tag Name	Writable	Values / Notes
AbsPeakAudioFilePath	string	
Album	string	
AltTapeName	string	
AltTimecode	struct	--> <a href="#">Timecode Struct</a>
AltTimecodeTimeFormat	string_	'23976Timecode' = 23.976 fps '24Timecode' = 24 fps '25Timecode' = 25 fps '2997DropTimecode' = 29.97 fps (drop) '2997NonDropTimecode' = 29.97 fps (non-drop) '30Timecode' = 30 fps '50Timecode' = 50 fps '5994DropTimecode' = 59.94 fps (drop) '5994NonDropTimecode' = 59.94 fps (non-drop) '60Timecode' = 60 fps
AltTimecodeTimeValue	string_	
AltTimecodeValue	integer_	(only in XMP 2008 spec; an error?)
Artist	string/	
AudioChannelType	string	5.1 = 5.1 7.1 = 7.1 '16 Channel' = 16 Channel 'Mono' = Mono 'Other' = Other 'Stereo' = Stereo
AudioCompressor	string	
AudioModDate	date	
AudioSampleRate	integer	
AudioSampleType	string	'16Int' = 16-bit integer '24Int' = 24-bit integer '32Float' = 32-bit float '32Int' = 32-bit integer '8Int' = 8-bit integer 'Compressed' = Compressed 'Other' = Other 'Packed' = Packed
BeatSpliceParams	struct	--> <a href="#">BeatSpliceStretch Struct</a>
BeatSpliceParamsRiseInDecibel	real_	
BeatSpliceParamsRiseInTimeDuration	struct_	--> <a href="#">Time Struct</a>
BeatSpliceParamsRiseInTimeDurationScale	rational_	
BeatSpliceParamsRiseInTimeDurationValue	integer_	
BeatSpliceParamsUseFileBeatsMarker	boolean_	
CameraAngle	string	
CameraLabel	string	
CameraModel	string	
CameraMove	string	
Client	string	
DMComment	string	(tag ID is 'comment')
Composer	string	
ContributedMedia	struct+	--> <a href="#">Media Struct</a>
ContributedMediaDuration	struct_ +	--> <a href="#">Time Struct</a>
ContributedMediaDurationScale	rational_ +	
ContributedMediaDurationValue	integer_ +	
ContributedMediaManaged	boolean_ +	
ContributedMediaPath	string_ +	
ContributedMediaStartTime	struct_ +	--> <a href="#">Time Struct</a>
ContributedMediaStartTimeScale	rational_ +	
ContributedMediaStartTimeValue	integer_ +	
ContributedMediaTrack	string_ +	
ContributedMediaWebStatement	string_ +	
Copyright	string/	
Director	string	
DirectorPhotography	string	
DiscNumber	string	
Duration	struct	--> <a href="#">Time Struct</a>
DurationScale	rational_	
DurationValue	integer_	
Engineer	string	
FileDataRate	rational	
Genre	string	
Good	boolean	
Instrument	string	
IntroTime	struct	--> <a href="#">Time Struct</a>
IntroTimeScale	rational_	
IntroTimeValue	integer_	
Key	string	'A' = A    'C#' = C#    'F' = F 'A#' = A#    'D' = D    'F#' = F# 'B' = B    'D#' = D#    'G' = G 'C' = C    'E' = E    'G#' = G#
LogComment	string	
Loop	boolean	

Lyrics	string	
Markers	struct+	--> <a href="#">Marker Struct</a>
MarkersComment	string_+	
MarkersCuePointParams	struct_+	--> <a href="#">CuePointParam Struct</a>
MarkersCuePointParamsKey	string_+	
MarkersCuePointParamsValue	string_+	
MarkersCuePointType	string_+	
MarkersDuration	string_+	
MarkersLocation	string_+	
MarkersName	string_+	
MarkersProbability	real_+	
MarkersSpeaker	string_+	
MarkersStartTime	string_+	
MarkersTarget	string_+	
MarkersType	string_+	
MetadataModDate	date	
NumberOfBeats	real	
OutCue	struct	--> <a href="#">Time Struct</a>
OutCueScale	rational_	
OutCueValue	integer_	
PartOfCompilation	boolean	
Pick	integer	
ProjectName	string	
ProjectRef	struct	--> <a href="#">ProjectLink Struct</a>
ProjectRefPath	string_	
ProjectRefType	string_	'audio' = Audio 'custom' = Custom 'movie' = Movie 'still' = Still Image
PullDown	string	'SSWWWW' = SSWWW 'WWSSW' = WWSWW 'SWWWSS' = SWWWSS 'WWSSWW' = WWSWW 'SWWWWW' = SWWWWW 'WWWWSS' = WWWWS 'WSSWW' = WSSWW 'WWWWSW' = WWWWS 'WSWWWW' = WSWWW 'WWWWWS' = WWWWS
RelativePeakAudioFilePath	string	
RelativeTimestamp	struct	--> <a href="#">Time Struct</a>
RelativeTimestampScale	rational_	
RelativeTimestampValue	integer_	
ReleaseDate	date	
ResampleParams	struct	--> <a href="#">ResampleStretch Struct</a>
ResampleParamsQuality	string_	'High' = High 'Low' = Low 'Medium' = Medium
ScaleType	string	'Both' = Both 'Major' = Major 'Minor' = Minor 'Neither' = Neither
Scene	string/	
ShotDate	date	
ShotDay	string	
ShotLocation	string	
ShotName	string	
ShotNumber	string	
ShotSize	string	
SpeakerPlacement	string	
StartTimecode	struct	--> <a href="#">Timecode Struct</a>
StartTimecodeTimeFormat	string_	'23976Timecode' = 23.976 fps '24Timecode' = 24 fps '25Timecode' = 25 fps '2997DropTimecode' = 29.97 fps (drop) '2997NonDropTimecode' = 29.97 fps (non-drop) '30Timecode' = 30 fps '50Timecode' = 50 fps '5994DropTimecode' = 59.94 fps (drop) '5994NonDropTimecode' = 59.94 fps (non-drop) '60Timecode' = 60 fps
StartTimecodeTimeValue	string_	
StartTimecodeValue	integer_	(only in XMP 2008 spec; an error?)
StartTimeSampleSize	integer	
StartTimeScale	string	
StretchMode	string	'Beat Splice' = Beat Splice 'Fixed length' = Fixed length 'Hybrid' = Hybrid 'Resample' = Resample 'Time-Scale' = Time-Scale
TakeNumber	integer	
TapeName	string	
Tempo	real	
TimeScaleParams	struct	--> <a href="#">TimeScaleStretch Struct</a>
TimeScaleParamsFrameOverlappingPercentage	real_	
TimeScaleParamsFrameSize	real_	
TimeScaleParamsQuality	string_	'High' = High 'Low' = Low 'Medium' = Medium
TimeSignature	string	'12/8' = 12/8 '4/4' = 4/4 '7/4' = 7/4 '2/4' = 2/4 '5/4' = 5/4 '9/8' = 9/8 '3/4' = 3/4 '6/8' = 6/8 'other' = other
TrackNumber	integer	
Tracks	struct+	--> <a href="#">Track Struct</a>

TracksFrameRate	string_+	
TracksMarkers	struct_+	--> <a href="#">Marker Struct</a>
TracksMarkersComment	string_+	
TracksMarkersCuePointParams	struct_+	--> <a href="#">CuePointParam Struct</a>
TracksMarkersCuePointParamsKey	string_+	
TracksMarkersCuePointParamsValue	string_+	
TracksMarkersCuePointType	string_+	
TracksMarkersDuration	string_+	
TracksMarkersLocation	string_+	
TracksMarkersName	string_+	
TracksMarkersProbability	real_+	
TracksMarkersSpeaker	string_+	
TracksMarkersStartTime	string_+	
TracksMarkersTarget	string_+	
TracksMarkersType	string_+	
TracksTrackName	string_+	
TracksTrackType	string_+	
VideoAlphaMode	string	'none' = None 'pre-multiplied' = Pre-multiplied 'straight' = Straight
VideoAlphaPremultipleColor	struct	--> <a href="#">Colorant Struct</a>
VideoAlphaPremmultipleColorA	integer_	
VideoAlphaPremmultipleColorB	integer_	
VideoAlphaPremmultipleColorBlack	real_	
VideoAlphaPremmultipleColorBlue	integer_	
VideoAlphaPremmultipleColorCyan	real_	
VideoAlphaPremmultipleColorGray	integer_	
VideoAlphaPremmultipleColorGreen	integer_	
VideoAlphaPremmultipleColorL	real_	
VideoAlphaPremmultipleColorMagenta	real_	
VideoAlphaPremmultipleColorMode	string_	'CMYK' = CMYK 'LAB' = Lab 'RGB' = RGB
VideoAlphaPremmultipleColorRed	integer_	
VideoAlphaPremmultipleColorSwatchName	string_	
VideoAlphaPremmultipleColorTint	integer_	(not part of 2010 XMP specification)
VideoAlphaPremmultipleColorType	string_	
VideoAlphaPremmultipleColorYellow	real_	
VideoAlphaUnityIsTransparent	boolean	
VideoColorSpace	string	'CCIR-601' = CCIR-601 'CCIR-709' = CCIR-709 'sRGB' = sRGB
VideoCompressor	string	
VideoFieldOrder	string	'Lower' = Lower 'Progressive' = Progressive 'Upper' = Upper
VideoFrameRate	real	
VideoFrameSize	struct	--> <a href="#">Dimensions Struct</a>
VideoFrameSizeH	real_	
VideoFrameSizeUnit	string_	
VideoFrameSizeW	real_	
VideoModDate	date	
VideoPixelAspectRatio	rational	
VideoPixelDepth	string	'16Int' = 16-bit integer '24Int' = 24-bit integer '32Float' = 32-bit float '32Int' = 32-bit integer '8Int' = 8-bit integer 'Other' = Other

## XMP BeatSpliceStretch Struct

Field Name	Writable	Values / Notes
RiseInDecibel	real	
RiseInTimeDuration	Time	--> <a href="#">Time Struct</a>
UseFileBeatsMarker	boolean	

## XMP Time Struct

Field Name	Writable	Values / Notes
Scale	rational	
Value	integer	

## XMP Media Struct

Field Name	Writable	Values / Notes
Duration	Time	--> <a href="#">Time Struct</a>
Managed	boolean	
Path	string	
StartTime	Time	--> <a href="#">Time Struct</a>
Track	string	
WebStatement	string	

## XMP Marker Struct

Field Name	Writable	Values / Notes
Comment	string	
CuePointParams	CuePointParam+ --> <a href="#">CuePointParam Struct</a>	
CuePointType	string	
Duration	string	
Location	string	
Name	string	
Probability	real	
Speaker	string	
StartTime	string	
Target	string	
Type	string	

## XMP CuePointParam Struct

Field Name	Writable	Values / Notes
Key	string	
Value	string	

## XMP ProjectLink Struct

Field Name	Writable	Values / Notes
Path	string	
Type	string	audio = Audio custom = Custom movie = Movie still = Still Image

## XMP ResampleStretch Struct

Field Name	Writable	Values / Notes
Quality	string	High = High Low = Low Medium = Medium

## XMP TimeScaleStretch Struct

Field Name	Writable	Values / Notes
FrameOverlappingPercentage	real	
FrameSize	real	
Quality	string	High = High Low = Low Medium = Medium

## XMP Track Struct

Field Name	Writable	Values / Notes
FrameRate	string	
Markers	Marker+	--> <a href="#">Marker Struct</a>
TrackName	string	
TrackType	string	

## XMP Colorant Struct

Field Name	Writable	Values / Notes
A	integer	
B	integer	
L	real	
Black	real	
Blue	integer	
Cyan	real	
Gray	integer	
Green	integer	
Magenta	real	
Mode	string	CMYK = CMYK LAB = Lab RGB = RGB
Red	integer	
SwatchName	string	
Tint	integer	(not part of 2010 XMP specification)
Type	string	
Yellow	real	

## XMP Dimensions Struct

Field Name	Writable	Values / Notes
H	real	
Unit	string	
W	real	

## XMP xmpMM Tags

XMP Media Management namespace tags.

These tags belong to the ExifTool XMP-xmpMM family 1 group.

Tag Name	Writable	Values / Notes
DerivedFrom	struct	--> <a href="#">ResourceRef Struct</a>
DerivedFromAlternatePaths	string_+	
DerivedFromDocumentID	string_	
DerivedFromFilePath	string_	
DerivedFromFromPart	string_	
DerivedFromInstanceID	string_	
DerivedFromLastModifyDate	date_	
DerivedFromLastURL	string_	
DerivedFromLinkCategory	string_	
DerivedFromLinkForm	string_	
DerivedFromManager	string_	
DerivedFromManagerVariant	string_	
DerivedFromManageTo	string_	
DerivedFromManageUI	string_	
DerivedFromMaskMarkers	string_	'All' = All 'None' = None
DerivedFromOriginalDocumentID	string_	
DerivedFromPartMapping	string_	
DerivedFromPlacedResolutionUnit	string_	
DerivedFromPlacedXResolution	string_	
DerivedFromPlacedYResolution	string_	
DerivedFromRenditionClass	string_	
DerivedFromRenditionParams	string_	
DerivedFromToPart	string_	
DerivedFromVersionID	string_	
DocumentID	string	
History	struct+	--> <a href="#">ResourceEvent Struct</a>
HistoryAction	string_+	
HistoryChanged	string_+	
HistoryInstanceID	string_+	
HistoryParameters	string_+	
HistorySoftwareAgent	string_+	
HistoryWhen	date_+	
Ingredients	struct+	--> <a href="#">ResourceRef Struct</a>
IngredientsAlternatePaths	string_+	
IngredientsDocumentID	string_+	
IngredientsFilePath	string_+	
IngredientsFromPart	string_+	
IngredientsInstanceID	string_+	
IngredientsLastModifyDate	date_+	
IngredientsLastURL	string_+	
IngredientsLinkCategory	string_+	
IngredientsLinkForm	string_+	
IngredientsManager	string_+	
IngredientsManagerVariant	string_+	
IngredientsManageTo	string_+	
IngredientsManageUI	string_+	
IngredientsMaskMarkers	string_+	'All' = All 'None' = None
IngredientsOriginalDocumentID	string_+	
IngredientsPartMapping	string_+	
IngredientsPlacedResolutionUnit	string_+	
IngredientsPlacedXResolution	string_+	
IngredientsPlacedYResolution	string_+	
IngredientsRenditionClass	string_+	
IngredientsRenditionParams	string_+	
IngredientsToPart	string_+	
IngredientsVersionID	string_+	
InstanceID	string	
LastURL	string	
ManagedFrom	struct	--> <a href="#">ResourceRef Struct</a>
ManagedFromAlternatePaths	string_+	
ManagedFromDocumentID	string_	
ManagedFromFilePath	string_	
ManagedFromFromPart	string_	
ManagedFromInstanceID	string_	
ManagedFromLastModifyDate	date_	
ManagedFromLastURL	string_	
ManagedFromLinkCategory	string_	
ManagedFromLinkForm	string_	
ManagedFromManager	string_	
ManagedFromManagerVariant	string_	
ManagedFromManageTo	string_	
ManagedFromManageUI	string_	
ManagedFromMaskMarkers	string_	'All' = All 'None' = None
ManagedFromOriginalDocumentID	string_	
ManagedFromPartMapping	string_	
ManagedFromPlacedResolutionUnit	string_	
ManagedFromPlacedXResolution	string_	

ManagedFromPlacedYResolution	string_
ManagedFromRenditionClass	string_
ManagedFromRenditionParams	string_
ManagedFromToPart	string_
ManagedFromVersionID	string_
Manager	string
ManagerVariant	string
ManageTo	string
ManageUI	string
Manifest	struct+ --> <a href="#">ManifestItem Struct</a>
ManifestLinkForm	string_+
ManifestPlacedResolutionUnit	string_+
ManifestPlacedXResolution	real_+
ManifestPlacedYResolution	real_+
ManifestReference	struct_+ --> <a href="#">ResourceRef Struct</a>
ManifestReferenceAlternatePaths	string_+
ManifestReferenceDocumentID	string_+
ManifestReferenceFilePath	string_+
ManifestReferenceFromPart	string_+
ManifestReferenceInstanceID	string_+
ManifestReferenceLastModifyDate	date_+
ManifestReferenceLastURL	string_+
ManifestReferenceLinkCategory	string_+
ManifestReferenceLinkForm	string_+
ManifestReferenceManager	string_+
ManifestReferenceManagerVariant	string_+
ManifestReferenceManageTo	string_+
ManifestReferenceManageUI	string_+
ManifestReferenceMaskMarkers	string_+ 'All' = All 'None' = None
ManifestReferenceOriginalDocumentID	string_+
ManifestReferencePartMapping	string_+
ManifestReferencePlacedResolutionUnit	string_+
ManifestReferencePlacedXResolution	string_+
ManifestReferencePlacedYResolution	string_+
ManifestReferenceRenditionClass	string_+
ManifestReferenceRenditionParams	string_+
ManifestReferenceToPart	string_+
ManifestReferenceVersionID	string_+
OriginalDocumentID	string
Pantry	struct+ --> <a href="#">PantryItem Struct</a>
PantryInstanceID	string_
PreservedFileName	string
RenditionClass	string
RenditionOf	struct --> <a href="#">ResourceRef Struct</a>
RenditionOfAlternatePaths	string_+
RenditionOfDocumentID	string_
RenditionOfFilePath	string_
RenditionOfFromPart	string_
RenditionOfInstanceID	string_
RenditionOfLastModifyDate	date_
RenditionOfLastURL	string_
RenditionOfLinkCategory	string_
RenditionOfLinkForm	string_
RenditionOfManager	string_
RenditionOfManagerVariant	string_
RenditionOfManageTo	string_
RenditionOfManageUI	string_
RenditionOfMaskMarkers	string_+ 'All' = All 'None' = None
RenditionOfOriginalDocumentID	string_
RenditionOfPartMapping	string_
RenditionOfPlacedResolutionUnit	string_
RenditionOfPlacedXResolution	string_
RenditionOfPlacedYResolution	string_
RenditionOfRenditionClass	string_
RenditionOfRenditionParams	string_
RenditionOfToPart	string_
RenditionOfVersionID	string_
RenditionParams	string
SaveID	integer
Subject	string/+ (undocumented)
VersionID	string
Versions	struct+ --> <a href="#">Version Struct</a>
VersionsComments	string_+
VersionsEvent	struct_+ --> <a href="#">ResourceEvent Struct</a>
VersionsEventAction	string_+
VersionsEventChanged	string_+
VersionsEventInstanceID	string_+
VersionsEventParameters	string_+

VersionsEventSoftwareAgent	string_+
VersionsEventWhen	date_+
VersionsModifier	string_+
VersionsModifyDate	date_+
VersionsVersion	string_+

## XMP ResourceRef Struct

Field Name	Writable	Values / Notes
AlternatePaths	string+	
DocumentID	string	
FilePath	string	
FromPart	string	
InstanceID	string	
LastModifyDate	date	
LastURL	string	
LinkCategory	string	
LinkForm	string	
ManageTo	string	
ManageUI	string	
Manager	string	
ManagerVariant	string	
MaskMarkers	string	All = All None = None
OriginalDocumentID	string	
PartMapping	string	
PlacedResolutionUnit	string	
PlacedXResolution	string	
PlacedYResolution	string	
RenditionClass	string	
RenditionParams	string	
ToPart	string	
VersionID	string	

## XMP ResourceEvent Struct

Field Name	Writable	Values / Notes
Action	string	
Changed	string	
InstanceID	string	
Parameters	string	
SoftwareAgent	string	
When	date	

## XMP ManifestItem Struct

Field Name	Writable	Values / Notes
LinkForm	string	
PlacedResolutionUnit	string	
PlacedXResolution	real	
PlacedYResolution	real	
Reference	ResourceRef --> <a href="#">ResourceRef Struct</a>	

## XMP PantryItem Struct

This structure must have an InstanceID field, but may also contain any other XMP properties.

Field Name	Writable	Values / Notes
InstanceID	string	

## XMP Version Struct

Field Name	Writable	Values / Notes
Comments	string	
Event	ResourceEvent --> <a href="#">ResourceEvent Struct</a>	
Modifier	string	
ModifyDate	date	
Version	string	

## XMP xmpNote Tags

XMP Note namespace tags.

These tags belong to the ExifTool XMP-xmpNote family 1 group.

Tag Name	Writable	Values / Notes
HasExtendedXMP	string*	(this tag is protected so it is not writable directly. Instead, it is set automatically to the GUID of the extended XMP when writing extended XMP to a JPEG image)

## XMP xmpPLUS Tags

XMP Picture Licensing Universal System (PLUS) tags as written by some older Adobe applications. See [PLUS XMP Tags](#) for the current PLUS tags.

These tags belong to the ExifTool XMP-xmpPLUS family 1 group.

Tag Name	Writable	Values / Notes
CreditLineReq	boolean	
ReuseAllowed	boolean	

## XMP xmpRights Tags

XMP Rights Management namespace tags.

These tags belong to the ExifTool XMP-xmpRights family 1 group.

Tag Name	Writable	Values / Notes
Certificate	string	
Marked	boolean	
Owner	string+	
UsageTerms	lang-alt	
WebStatement	string	

## XMP xmpTPg Tags

XMP Paged-Text namespace tags.

These tags belong to the ExifTool XMP-xmpTPg family 1 group.

Tag Name	Writable	Values / Notes
Colorants	struct+	--> <a href="#">Colorant Struct</a>
ColorantA	integer_+	(ColorantsA)
ColorantB	integer_+	(ColorantsB)
ColorantBlack	real_+	(ColorantsBlack)
ColorantBlue	integer_+	(ColorantsBlue)
ColorantCyan	real_+	(ColorantsCyan)
ColorantGray	integer_+	(ColorantsGray)
ColorantGreen	integer_+	(ColorantsGreen)
ColorantL	real_+	(ColorantsL)
ColorantMagenta	real_+	(ColorantsMagenta)
ColorantMode	string_+	(ColorantsMode) 'CMYK' = CMYK 'LAB' = Lab 'RGB' = RGB
ColorantRed	integer_+	(ColorantsRed)
ColorantSwatchName	string_+	(ColorantsSwatchName)
ColorantTint	integer_+	(ColorantsTint; not part of 2010 XMP specification)
ColorantType	string_+	(ColorantsType)
ColorantYellow	real_+	(ColorantsYellow)
Fonts	struct+	--> <a href="#">Font Struct</a>
ChildFontFiles	string_+	(FontsChildFontFiles)
FontComposite	boolean_+	(FontsComposite)
FontFace	string_+	(FontsFontFace)
FontFamily	string_+	(FontsFontFamily)
FontFileName	string_+	(FontsFontFileName)
FontName	string_+	(FontsFontName)
FontType	string_+	(FontsFontType)
FontVersion	string_+	(FontsVersionString)
HasVisibleOverprint	boolean	
HasVisibleTransparency	boolean	
MaxPageSize	struct	--> <a href="#">Dimensions Struct</a>
MaxPageSizeH	real_	
MaxPageSizeUnit	string_	
MaxPageSizeW	real_	
NPages	integer	
PlateNames	string+	
SwatchGroups	struct+	--> <a href="#">SwatchGroup Struct</a>
SwatchGroupsColorants	struct_+	--> <a href="#">Colorant Struct</a>
SwatchColorantA	integer_+	(SwatchGroupsColorantsA)
SwatchColorantB	integer_+	(SwatchGroupsColorantsB)
SwatchColorantBlack	real_+	(SwatchGroupsColorantsBlack)
SwatchColorantBlue	integer_+	(SwatchGroupsColorantsBlue)
SwatchColorantCyan	real_+	(SwatchGroupsColorantsCyan)
SwatchColorantGray	integer_+	(SwatchGroupsColorantsGray)
SwatchColorantGreen	integer_+	(SwatchGroupsColorantsGreen)
SwatchColorantL	real_+	(SwatchGroupsColorantsL)
SwatchColorantMagenta	real_+	(SwatchGroupsColorantsMagenta)
SwatchColorantMode	string_+	(SwatchGroupsColorantsMode) 'CMYK' = CMYK 'LAB' = Lab 'RGB' = RGB
SwatchColorantRed	integer_+	(SwatchGroupsColorantsRed)
SwatchColorantSwatchName	string_+	(SwatchGroupsColorantsSwatchName)
SwatchColorantTint	integer_+	(SwatchGroupsColorantsTint; not part of 2010 XMP specification)
SwatchColorantType	string_+	(SwatchGroupsColorantsType)
SwatchColorantYellow	real_+	(SwatchGroupsColorantsYellow)
SwatchGroupName	string_+	(SwatchGroupsGroupName)
SwatchGroupType	integer_+	(SwatchGroupsGroupType)

## XMP Font Struct

Field Name	Writable	Values / Notes
ChildFontFiles	string+	
Composite	boolean	
FontFace	string	
FontFamily	string	
FontFileName	string	
FontName	string	
FontType	string	
VersionString	string	

## XMP SwatchGroup Struct

Field Name	Writable	Values / Notes
Colorants	Colorant+ --> <a href="#">Colorant Struct</a>	
GroupName	string	
GroupType	integer	

## XMP XML Tags

Tag ID	Tag Name	Writable	Values / Notes
'dc'	dc	-	--> <a href="#">XMP_dc Tags</a>
'lastUpdate'	LastUpdate	no	

## XMP SVG Tags

SVG (Scalable Vector Graphics) image tags. By default, only the top-level SVG and Metadata tags are extracted from these images, but all graphics tags may be extracted by setting the Unknown option to 2 (-U on the command line). The SVG tags are not part of XMP as such, but are included with the XMP module for convenience. (see <http://www.w3.org/TR/SVG11/>)

These tags belong to the ExifTool XMP-svg family 1 group.

Tag ID	Tag Name	Writable	Values / Notes
'height'	ImageHeight	no	
'id'	ID	no	
'metadataId'	MetadataID	no	
'version'	SVGVersion	no	
'width'	ImageWidth	no	

## XMP CopyrightOwner Struct

Field Name	Writable	Values / Notes
CopyrightOwnerId	string	
CopyrightOwnerName	string	

## XMP EndUser Struct

Field Name	Writable	Values / Notes
EndUserID	string	
EndUserName	string	

## XMP ImageCreator Struct

Field Name	Writable	Values / Notes
ImageCreatorID	string	
ImageCreatorName	string	

## XMP ImageSupplier Struct

Field Name	Writable	Values / Notes
ImageSupplierID	string	
ImageSupplierName	string	

## XMP Licensee Struct

Field Name	Writable	Values / Notes
LicenseeID	string	
LicenseeName	string	

## XMP Licensor Struct

Field Name	Writable	Values / Notes
LicensorCity	string	
LicensorCountry	string	
LicensorEmail	string	
LicensorExtendedAddress	string	
LicensorID	string	
LicensorName	string	
LicensorPostalCode	string	
LicensorRegion	string	
LicensorStreetAddress	string	
LicensorTelephone1	string	
LicensorTelephone2	string	

LicensorTelephoneType1	string	cell = Cell fax = FAX home = Home pager = Pager work = Work
LicensorTelephoneType2	string	cell = Cell fax = FAX home = Home pager = Pager work = Work
LicensorURL	string	

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*Last revised Oct 24, 2025*

[<-- ExifTool Tag Names](#)

# ZIP Tags

The following tags are extracted from ZIP archives. ExifTool also extracts additional meta information from compressed documents inside some ZIP-based files such Office Open XML (DOCX, PPTX and XLSX), Open Document (ODB, ODC, ODF, ODG, ODI, ODP, ODS and ODT), iWork (KEY, PAGES, NUMBERS), Capture One Enhanced Image Package (EIP), Adobe InDesign Markup Language (IDML), Electronic Publication (EPUB), and Sketch design files (SKETCH). The ExifTool family 3 groups may be used to organize ZIP tags by embedded document number (ie. the exiftool `-g3` option).

Index2	Tag Name	Writable	Values / Notes
2	ZipRequiredVersion	no	
3	ZipBitFlag	no	
4	ZipCompression	no	0 = None 1 = Shrunk 2 = Reduced with compression factor 1 3 = Reduced with compression factor 2 4 = Reduced with compression factor 3 5 = Reduced with compression factor 4 6 = Imploded 7 = Tokenized 8 = Deflated 9 = Enhanced Deflate using Deflate64(tm) 10 = Imploded (old IBM TERSE) 12 = BZIP2 14 = LZMA (EFS) 18 = IBM TERSE (new) 19 = IBM LZ77 z Architecture (PFS) 96 = JPEG recompressed 97 = WavPack compressed 98 = PPMd version I, Rev 1
5	ZipModifyDate	no	
7	ZipCRC	no	
9	ZipCompressedSize	no	
11	ZipUncompressedSize	no	
15	ZipFileName	no	
'_com'	ZipFileComment	no	

# ZIP GZIP Tags

These tags are extracted from GZIP (GNU ZIP) archives, but currently only for the first file in the archive.

Index1	Tag Name	Writable	Values / Notes
2	Compression	no	8 = Deflated
3	Flags	no	Bit 0 = Text Bit 1 = CRC16 Bit 2 = ExtraFields Bit 3 = FileName Bit 4 = Comment
4	ModifyDate	no	
8	ExtraFlags	no	0 = (none) 2 = Maximum Compression 4 = Fastest Algorithm
9	OperatingSystem	no	0 = FAT filesystem (MS-DOS, OS/2, NT/Win32) 1 = Amiga 2 = VMS (or OpenVMS) 3 = Unix 4 = VM/CMS 5 = Atari TOS 6 = HPFS filesystem (OS/2, NT) 7 = Macintosh 8 = Z-System 9 = CP/M 10 = TOPS-20 11 = NTFS filesystem (NT) 12 = QDOS 13 = Acorn RISCOS 255 = unknown

10	ArchivedFileName	no
11	Comment	no

## ZIP RAR Tags

These tags are extracted from RAR archive files.

Index1	Tag Name	Writable	Values / Notes	
0	CompressedSize	no		
4	UncompressedSize	no		
8	OperatingSystem	no	0 = MS-DOS 1 = OS/2 2 = Win32 3 = Unix	
13	ModifyDate	no		
18	PackingMethod	no	0x30 = Stored 0x31 = Fastest 0x32 = Fast	0x33 = Normal 0x34 = Good Compression 0x35 = Best Compression
25	ArchivedFileName	no		

## ZIP RAR5 Tags

These tags are extracted from RAR v5 and 7z archive files.

Tag Name	Writable	Values / Notes
ArchivedFileName	no	
CompressedSize	no	
FileVersion	no	
ModifyDate	no	
OperatingSystem	no	0 = Win32 1 = Unix
UncompressedSize	no	

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Last revised Jun 8, 2023

[--> ExifTool Tag Names](#)

# ZISRAW Tags

As well as the header information listed below, ExifTool also extracts the top-level XML-based metadata from Zeiss Integrated Software RAW (ZISRAW) CZI files.

Index1	Tag Name	Writable	Values / Notes
32	ZISRAWVersion	no	
48	PrimaryFileGUID	no	
64	FileGUID	no	

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Last revised Aug 10, 2020

[--> ExifTool Tag Names](#)

# iWork Tags

The Apple iWork '09 file format is a ZIP archive containing XML files similar to the Office Open XML (OOXML) format. Metadata tags in iWork files are extracted even if they don't appear below.

Tag Name	Writable	Values / Notes
Author	no	
Comment	no	
Copyright	no	
Keywords	no	
Projects	no+	
Title	no	

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*Last revised Nov 11, 2009*

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# ExifTool Tag Names

The tables listed below give the names of all tags recognized by ExifTool. They contain a total of 28853 tags, with 17925 unique tag names.

Tag Table Index

<a href="#">JPEG</a>	<a href="#">Minolta</a>	<a href="#">PanasonicRaw</a>	<a href="#">MNG</a>	<a href="#">Vorbis</a>	<a href="#">HTML</a>
<a href="#">EXIF</a>	<a href="#">Motorola</a>	<a href="#">SigmaRaw</a>	<a href="#">FLIF</a>	<a href="#">Opus</a>	<a href="#">Palm</a>
<a href="#">IPTC</a>	<a href="#">Nikon</a>	<a href="#">JFIF</a>	<a href="#">DjVu</a>	<a href="#">Theora</a>	<a href="#">Torrent</a>
<a href="#">XMP</a>	<a href="#">NikonCapture</a>	<a href="#">FlashPix</a>	<a href="#">DPX</a>	<a href="#">DSF</a>	<a href="#">EXE</a>
<a href="#">GPS</a>	<a href="#">NikonCustom</a>	<a href="#">MPF</a>	<a href="#">OpenEXR</a>	<a href="#">WavPack</a>	<a href="#">LNK</a>
<a href="#">GeoTiff</a>	<a href="#">NikonSettings</a>	<a href="#">InfiRay</a>	<a href="#">ZISRAW</a>	<a href="#">APE</a>	<a href="#">PCAP</a>
<a href="#">PLUS</a>	<a href="#">Nintendo</a>	<a href="#">Stim</a>	<a href="#">MRC</a>	<a href="#">Audible</a>	<a href="#">Font</a>
<a href="#">ICC_Profile</a>	<a href="#">Olympus</a>	<a href="#">Scalado</a>	<a href="#">LIF</a>	<a href="#">MPC</a>	<a href="#">VCard</a>
<a href="#">PrintIM</a>	<a href="#">Panasonic</a>	<a href="#">Qualcomm</a>	<a href="#">MIFF</a>	<a href="#">MPEG</a>	<a href="#">Text</a>
<a href="#">Photoshop</a>	<a href="#">Pentax</a>	<a href="#">Jpeg2000</a>	<a href="#">PCX</a>	<a href="#">M2TS</a>	<a href="#">RSRC</a>
<a href="#">Apple</a>	<a href="#">PhaseOne</a>	<a href="#">APP12</a>	<a href="#">PGF</a>	<a href="#">H264</a>	<a href="#">Rawzor</a>
<a href="#">Canon</a>	<a href="#">Reconyx</a>	<a href="#">AFCP</a>	<a href="#">PSP</a>	<a href="#">MISB</a>	<a href="#">ZIP</a>
<a href="#">CanonCustom</a>	<a href="#">Ricoh</a>	<a href="#">DarwinCore</a>	<a href="#">PhotoCD</a>	<a href="#">Matroska</a>	<a href="#">RTF</a>
<a href="#">CanonVRD</a>	<a href="#">Samsung</a>	<a href="#">FotoStation</a>	<a href="#">Radiance</a>	<a href="#">MOI</a>	<a href="#">OOXML</a>
<a href="#">Casio</a>	<a href="#">Sanyo</a>	<a href="#">PhotoMechanic</a>	<a href="#">PFM</a>	<a href="#">MXF</a>	<a href="#">iWork</a>
<a href="#">DJI</a>	<a href="#">Sigma</a>	<a href="#">Microsoft</a>	<a href="#">PDF</a>	<a href="#">DV</a>	<a href="#">ISO</a>
<a href="#">FLIR</a>	<a href="#">Sony</a>	<a href="#">GIMP</a>	<a href="#">PostScript</a>	<a href="#">Flash</a>	<a href="#">MacOS</a>
<a href="#">FujiFilm</a>	<a href="#">SonyIDC</a>	<a href="#">MIE</a>	<a href="#">ID3</a>	<a href="#">Real</a>	<a href="#">Extra</a>
<a href="#">GE</a>	<a href="#">Unknown</a>	<a href="#">Trailer</a>	<a href="#">ITC</a>	<a href="#">Red</a>	<a href="#">Composite</a>
<a href="#">Google</a>	<a href="#">DNG</a>	<a href="#">GIF</a>	<a href="#">QuickTime</a>	<a href="#">AIFF</a>	<a href="#">Shortcuts</a>
<a href="#">GoPro</a>	<a href="#">JSON</a>	<a href="#">BMP</a>	<a href="#">RIFF</a>	<a href="#">ASF</a>	<a href="#">MWG</a>
<a href="#">HP</a>	<a href="#">CBOR</a>	<a href="#">BPG</a>	<a href="#">FLAC</a>	<a href="#">TNEF</a>	
<a href="#">JVC</a>	<a href="#">PLIST</a>	<a href="#">WPG</a>	<a href="#">GM</a>	<a href="#">WTV</a>	
<a href="#">Kodak</a>	<a href="#">CanonRaw</a>	<a href="#">ICO</a>	<a href="#">Parrot</a>	<a href="#">DICOM</a>	
<a href="#">Leaf</a>	<a href="#">KyoceraRaw</a>	<a href="#">PICT</a>	<a href="#">AAC</a>	<a href="#">FITS</a>	
<a href="#">Lytro</a>	<a href="#">MinoltaRaw</a>	<a href="#">PNG</a>	<a href="#">Ogg</a>	<a href="#">XISF</a>	

**Tag ID, Index# or Sequence** is given in the first column of each table. A **Tag ID** is the computer-readable equivalent of a tag name, and is the identifier that is actually stored in the file. **Index#** refers to the offset of a value when found at a fixed position within a data block (# is the multiplier for calculating a byte offset: **1**, **2**, **4** or **8**). These offsets may have a decimal part which is used only to differentiate tags with values stored at the same position. (Note that writable tags within binary data blocks are not individually deletable, and the usual alternative is to set them to a value of zero.) **Sequence** gives the order of values for a serial data stream.

A **Tag Name** is the handle by which the information is accessed in ExifTool. In some instances, more than one name may correspond to a single tag ID. In these cases, the actual name used depends on the context in which the information is found. Valid characters in a tag name are A-Z, a-z, 0-9, hyphen (-) and underline (\_). Case is not significant. A question mark (?) after a tag name indicates that the information is either not understood, not verified, or not very useful -- these tags are not extracted by ExifTool unless the [Unknown](#) (-u) option is enabled. Be aware that some tag names are different than the descriptions printed out by default when extracting information with exiftool. To see the tag names instead of the descriptions, use `exiftool -s`.

The **Writable** column indicates whether the tag is writable by ExifTool. Anything but a **no** in this column means the tag is writable. A **yes** indicates writable information that is either unformatted or written using the existing format. Other expressions give details about the format of the stored value, and vary depending on the general type of information. The format name may be followed by a number in square brackets to indicate the number of values written, or the number of characters in a fixed-length string (including a null terminator which is added if required).

A plus sign (+) after an entry in the **Writable** column indicates a *List* tag which supports multiple values and allows individual values to be added and deleted. A slash (/) indicates a tag that ExifTool will *Avoid* when writing. These will be edited but not created if another same-named tag may be created instead. To create these tags, the group should be specified. A tilde (~) indicates a tag this is writable only when the print conversion is disabled (by setting [PrintConv](#) to 0, using the -n option, or suffixing the tag name with a # character). An exclamation point (!) indicates a tag that is considered *Unsafe* to write under normal circumstances. These tags are not written unless specified explicitly (ie. not when wildcards or "all" are used), and care should be taken when editing them manually since they may affect the way an image is rendered. An asterisk (\*) indicates a *Protected* tag which is not writable directly, but is written automatically by ExifTool (often when a corresponding [Composite](#) or [Extra](#) tag is written). A colon (:) indicates a *Mandatory* tag which may be added automatically when writing (use the API [NoMandatory](#) option to avoid creating mandatory EXIF tags). Normally MakerNotes tags may not be deleted individually, but a caret (^) indicates a *Deletable* MakerNotes tag.

The HTML version of these tables also lists possible **Values** for discrete-valued tags, as well as **Notes** for some tags. The **Values** are listed with the computer-readable values on the left of the equals sign (=), and the human-readable values on the right. The human-readable values are used by default when reading and writing, but the computer-readable values may be accessed by disabling the value conversion with the -n option on the command line, by setting the [PrintConv](#) option to 0 in the API, or on a per-tag basis by adding a hash (#) after the tag name.

**Note:** If you are familiar with common meta-information tag names, you may find that some ExifTool tag names are different than expected. The usual reason for this is to make the tag names more consistent across different types of meta information. To determine a tag name, either consult this documentation or run `exiftool -s` on a file containing the information in question.

*(This documentation is the result of decades of research, testing and reverse engineering, and is the most complete metadata tag list available anywhere on the internet. It is provided not only for ExifTool users, but more importantly as a public service to help augment the collective knowledge, and is often used as a primary source of information in the development of other metadata software. Please help keep this documentation as accurate and complete as possible, and feed any new discoveries back to ExifTool. A big thanks to everyone who has helped with this so far!)*

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