

TAGNAMES(1)

User Contributed Perl Documentation

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NAME

Image::ExifTool::TagNames - ExifTool tag name documentation

DESCRIPTION

This document contains a complete list of ExifTool tag names, organized into tables based on information type. Tag names are used to reference specific meta information extracted from or written to a file.

TAG TABLES

The tables listed below give the names of all tags recognized by ExifTool. They contain a total of 27895 tags, with 17462 unique tag names.

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!)

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
-----	-----	-----
'APP0'	JFIF	JFIF
	JFXX	JFIF Extension
	CIFF	CanonRaw
	AVI1	JPEG AVI1
	Ocad	JPEG Ocad
'APP1'	EXIF	EXIF
	ExtendedXMP	XMP
	XMP	XMP
	QVCI	Casio QVCI
	FLIR	FLIR FFF
	RawThermalImage	no
'APP2'	ICC_Profile	ICC_Profile
	FPXR	FlashPix
	MPF	MPF
	InfiRayVersion	InfiRay Version
	PreviewImage	no
'APP3'	Meta	Kodak Meta
	Stim	Stim
	JPS	JPEG JPS
	ThermalData	no
	ImagingData	no
	PreviewImage	no
'APP4'	Scalado	Scalado
	FPXR	FlashPix
	InfiRayFactory	InfiRay Factory
	ThermalParams	DJI ThermalParams
	ThermalParams2	DJI ThermalParams2
	ThermalParams3	DJI ThermalParams3
'APP5'	PreviewImage	no
	RMETA	Ricoh RMETA
	SamsungUniqueID	Samsung APP5
	InfiRayPicture	InfiRay Picture
	ThermalCalibration	no
	PreviewImage	no

'APP6'	EPPIM	JPEG EPPIM
	NITF	JPEG NITF
	HP_TDHD	HP TDHD
	GoPro	GoPro GPMF
	InfiRayMixMode	InfiRay MixMode
	DJI_DTAT	no
'APP7'	Pentax	Pentax
	Huawei	Unknown
	Qualcomm	Qualcomm
	InfiRayOpMode	InfiRay OpMode
	DJI-DBG	DJI Info
'APP8'	SPIFF	JPEG SPIFF
	InfiRayIsothermal	InfiRay Isothermal
'APP9'	MediaJukebox	JPEG MediaJukebox
	InfiRaySensor	InfiRay Sensor
'APP10'	Comment	no
'APP11'	JPEG-HDR	JPEG HDR
	JUMBF	Jpeg2000
'APP12'	PictureInfo	APP12 PictureInfo
	Ducky	APP12 Ducky
'APP13'	Photoshop	Photoshop
	Adobe_CM	JPEG AdobeCM
'APP14'	Adobe	JPEG Adobe
'APP15'	GraphicConverter	JPEG GraphConv
'COM'	Comment	yes
'DQT'	DefineQuantizationTable	no
'SOF'	StartOfFrame	JPEG SOF
'Trailer'	AFCP	AFCP
	CanonVRD	CanonVRD
	FotoStation	FotoStation
	PhotoMechanic	PhotoMechanic
	MIE	MIE
	Samsung	Samsung Trailer
	EmbeddedVideo	no
	Insta360	no
	NikonApp	no
	SonyHiddenData	no
	PreviewImage	yes

JPEG AVI1 Tags

This information may be found in APP0 of JPEG image data from AVI videos.

Index1	Tag Name	Writable
-----	-----	-----
0	InterleavedField	no

JPEG Ocad Tags

Tags extracted from the JPEG APP0 "Ocad" segment (found in Photobucket images).

Tag ID	Tag Name	Writable
-----	-----	-----
'Rev'	OcadRevision	no

JPEG JPS Tags

Tags found in JPEG Stereo (JPS) images.

Index1	Tag Name	Writable
-----	-----	-----
10	JPSSeparation	no
11	JPSFlags	no
12	JPSLayout	no
13	JPSType	no
16	JPSComment	no

JPEG EPPIM Tags

APP6 is used in by the Toshiba PDR-M700 to store a TIFF structure containing PrintIM information.

Tag ID	Tag Name	Writable
-----	-----	-----
0xc4a5	PrintIM	PrintIM

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
-----	-----	-----
0	NITFVersion	no
2	ImageFormat	no
3	BlocksPerRow	no
5	BlocksPerColumn	no
7	ImageColor	no
8	BitDepth	no
9	ImageClass	no
10	JPEGProcess	no
11	Quality	no
12	StreamColor	no
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
-----	-----	-----
0	SPIFFVersion	no
2	ProfileID	no
3	ColorComponents	no
6	ImageHeight	no
10	ImageWidth	no
14	ColorSpace	no
15	BitsPerSample	no
16	Compression	no
17	ResolutionUnit	no
18	YResolution	no
22	XResolution	no

JPEG MediaJukebox Tags

Tags found in the XML metadata of the APP9 "Media Jukebox" segment.

Tag Name	Writable
-----	-----
Album	no
Caption	no
Date	no
Keywords	no
Name	no
People	no
Places	no
Tool_Name	no
Tool_Version	no

JPEG HDR Tags

Information extracted from APP11 of a JPEG-HDR image.

Tag ID	Tag Name	Writable
-----	-----	-----
'RatioImage'	RatioImage	no
'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
-----	-----	-----
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
-----	-----	-----
0	DCTEncodeVersion	no
1	APP14Flags0	no
2	APP14Flags1	no
3	ColorTransform	no

JPEG GraphConv Tags

APP15 is used by GraphicConverter to store JPEG quality.

Tag ID	Tag Name	Writable
-----	-----	-----
'Q'	Quality	no

JPEG SOF Tags

This information is extracted from the JPEG Start Of Frame segment.

Tag Name	Writable
-----	-----
BitsPerSample	no
ColorComponents	no
EncodingProcess	no
ImageHeight	no
ImageWidth	no
YCbCrSubSampling	no

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 2.32 specification have an underlined Tag Name in the HTML version of this documentation. See

<https://web.archive.org/web/20190624045241if_/http://www.cipa.jp:80/std/documents/e/DC-008-Translation-2019-E.pdf>

for the official EXIF 2.32 specification.

Tag ID	Tag Name	Group	Writable
-----	-----	-----	-----
0x0001	InteropIndex	InteropIFD	string!
0x0002	InteropVersion	InteropIFD	undef!:
0x000b	ProcessingSoftware	IFD0	string
0x00fe	SubfileType	IFD0	int32u!
0x00ff	OldSubfileType	IFD0	int16u!
0x0100	ImageWidth	IFD0	int32u!
0x0101	ImageHeight	IFD0	int32u!
0x0102	BitsPerSample	IFD0	int16u[n]!
0x0103	Compression	IFD0	int16u!:
0x0106	PhotometricInterpretation	IFD0	int16u!
0x0107	Thresholding	IFD0	int16u!
0x0108	CellWidth	IFD0	int16u!
0x0109	CellLength	IFD0	int16u!
0x010a	FillOrder	IFD0	int16u!
0x010d	DocumentName	IFD0	string
0x010e	ImageDescription	IFD0	string
0x010f	Make	IFD0	string
0x0110	Model	IFD0	string
0x0111	StripOffsets	-	no
	OtherImageStart	-	no
	PreviewJXLStart	-	no
	StripOffsets	-	no
	PreviewImageStart	IFD0	int32u*
	PreviewImageStart	All	int32u*
	JpgFromRawStart	SubIFD2	int32u*
0x0112	Orientation	IFD0	int16u
0x0115	SamplesPerPixel	IFD0	int16u!
0x0116	RowsPerStrip	IFD0	int32u!
0x0117	StripByteCounts	-	no
	OtherImageLength	-	no
	PreviewJXLLength	-	no
	StripByteCounts	-	no
	PreviewImageLength	IFD0	int32u*
	PreviewImageLength	All	int32u*
	JpgFromRawLength	SubIFD2	int32u*
0x0118	MinSampleValue	IFD0	int16u
0x0119	MaxSampleValue	IFD0	int16u
0x011a	XResolution	IFD0	rational64u:
0x011b	YResolution	IFD0	rational64u:
0x011c	PlanarConfiguration	IFD0	int16u!
0x011d	PageName	IFD0	string
0x011e	XPosition	IFD0	rational64u
0x011f	YPosition	IFD0	rational64u
0x0120	FreeOffsets	-	no
0x0121	FreeByteCounts	-	no
0x0122	GrayResponseUnit	IFD0	int16u
0x0123	GrayResponseCurve	-	no
0x0124	T4Options	-	no
0x0125	T6Options	-	no
0x0128	ResolutionUnit	IFD0	int16u:
0x0129	PageNumber	IFD0	int16u[2]
0x012c	ColorResponseUnit	-	no
0x012d	TransferFunction	IFD0	int16u[768]!
0x0131	Software	IFD0	string

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0x0132	ModifyDate	IFD0	string
0x013b	Artist	IFD0	string
0x013c	HostComputer	IFD0	string
0x013d	Predictor	IFD0	int16u!
0x013e	WhitePoint	IFD0	rational64u[2]
0x013f	PrimaryChromaticities	IFD0	rational64u[6]
0x0140	ColorMap	-	no
0x0141	HalftoneHints	IFD0	int16u[2]
0x0142	TileWidth	IFD0	int32u!
0x0143	TileLength	IFD0	int32u!
0x0144	TileOffsets	-	no
0x0145	TileByteCounts	-	no
0x0146	BadFaxLines	-	no
0x0147	CleanFaxData	-	no
0x0148	ConsecutiveBadFaxLines	-	no
0x014a	SubIFD	-	EXIF
	A100DataOffset	IFD0	no
0x014c	InkSet	IFD0	int16u
0x014d	InkNames	-	no
0x014e	NumberOfInks	-	no
0x0150	DotRange	-	no
0x0151	TargetPrinter	IFD0	string
0x0152	ExtraSamples	-	no
0x0153	SampleFormat	SubIFD	no
0x0154	SMinSampleValue	-	no
0x0155	SMaxSampleValue	-	no
0x0156	TransferRange	-	no
0x0157	ClipPath	-	no
0x0158	XClipPathUnits	-	no
0x0159	YClipPathUnits	-	no
0x015a	Indexed	-	no
0x015b	JPEGTables	-	no
0x015f	OPIProxy	-	no
0x0190	GlobalParametersIFD	-	EXIF
0x0191	ProfileType	-	no
0x0192	FaxProfile	-	no
0x0193	CodingMethods	-	no
0x0194	VersionYear	-	no
0x0195	ModeNumber	-	no
0x01b1	Decode	-	no
0x01b2	DefaultImageColor	-	no
0x01b3	T82Options	-	no
0x01b5	JPEGTables	-	no
0x0200	JPEGProc	-	no
0x0201	ThumbnailOffset	IFD1	int32u*
	ThumbnailOffset	IFD0	int32u*
	ThumbnailOffset	SubIFD	int32u*
	PreviewImageStart	MakerNotes	int32u*
	PreviewImageStart	IFD0	int32u*
	JpgFromRawStart	SubIFD	int32u*
	JpgFromRawStart	IFD2	int32u*
	OtherImageStart	SubIFD1	int32u*
	OtherImageStart	SubIFD2	int32u*
	OtherImageStart	-	no
0x0202	ThumbnailLength	IFD1	int32u*
	ThumbnailLength	IFD0	int32u*
	ThumbnailLength	SubIFD	int32u*
	PreviewImageLength	MakerNotes	int32u*
	PreviewImageLength	IFD0	int32u*
	JpgFromRawLength	SubIFD	int32u*
	JpgFromRawLength	IFD2	int32u*
	OtherImageLength	SubIFD1	int32u*
	OtherImageLength	SubIFD2	int32u*
	OtherImageLength	-	no
0x0203	JPEGRestartInterval	-	no
0x0205	JPEGLosslessPredictors	-	no
0x0206	JPEGPointTransforms	-	no
0x0207	JPEGQTables	-	no
0x0208	JPEGDCTables	-	no
0x0209	JPEGACTables	-	no

-- ExifTool 12.92 Tag Names --

0x0211	YCbCrCoefficients	IFD0	rational64u[3]!
0x0212	YCbCrSubSampling	IFD0	int16u[2]!
0x0213	YCbCrPositioning	IFD0	int16u!:
0x0214	ReferenceBlackWhite	IFD0	rational64u[6]
0x022f	StripRowCounts	-	no
0x02bc	ApplicationNotes	IFD0	XMP
0x0303	RenderingIntent	-	no
0x03e7	USPTOMiscellaneous	-	no
0x1000	RelatedImageFileFormat	InteropIFD	string!
0x1001	RelatedImageWidth	InteropIFD	int16u!
0x1002	RelatedImageHeight	InteropIFD	int16u!
0x4746	Rating	IFD0	int16u/
0x4747	XP_DIP_XML	-	no
0x4748	StitchInfo	-	Microsoft Stitch
0x4749	RatingPercent	IFD0	int16u/
0x5001	ResolutionXUnit	-	no
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

-- ExifTool 12.92 Tag Names --

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
0x7010	SonyToneCurve	-	no
0x7031	VignettingCorrection	SubIFD	int16s!
0x7032	VignettingCorrParams	SubIFD	int16s[17]!
0x7034	ChromaticAberrationCorrection	SubIFD	int16s!
0x7035	ChromaticAberrationCorrParams	SubIFD	int16s[33]!
0x7036	DistortionCorrection	SubIFD	int16s!
0x7037	DistortionCorrParams	SubIFD	int16s[17]!
0x7038	SonyRawImageSize	SubIFD	int32u[2]!
0x7310	BlackLevel	SubIFD	int16u[4]!
0x7313	WB_RGGBLevels	SubIFD	int16s[4]!
0x74c7	SonyCropTopLeft	SubIFD	int32u[2]!
0x74c8	SonyCropSize	SubIFD	int32u[2]!
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	CFARepetPatternDim	SubIFD	int16u[2]!
0x828e	CFAPattern2	SubIFD	int8u[n]!
0x828f	BatteryLevel	-	no
0x8290	KodakIFD	-	Kodak IFD
0x8298	Copyright	IFD0	string
0x829a	ExposureTime	ExifIFD	rational64u
0x829d	FNumber	ExifIFD	rational64u
0x82a5	MDFileTag	-	no
0x82a6	MDScalePixel	-	no
0x82a7	MDColorTable	-	no
0x82a8	MDLabName	-	no
0x82a9	MDSampleInfo	-	no
0x82aa	MDPrepDate	-	no
0x82ab	MDPrepTime	-	no
0x82ac	MDFileUnits	-	no
0x830e	PixelScale	IFD0	double[3]
0x8335	AdventScale	-	no
0x8336	AdventRevision	-	no
0x835c	UIC1Tag	-	no
0x835d	UIC2Tag	-	no
0x835e	UIC3Tag	-	no
0x835f	UIC4Tag	-	no
0x83bb	IPTC-NAA	IFD0	IPTC
0x847e	IntergraphPacketData	-	no
0x847f	IntergraphFlagRegisters	-	no

-- ExifTool 12.92 Tag Names --

0x8480	IntergraphMatrix	IFD0	double[n]
0x8481	INGRReserved	-	no
0x8482	ModelTiePoint	IFD0	double[n]
0x84e0	Site	-	no
0x84e1	ColorSequence	-	no
0x84e2	IT8Header	-	no
0x84e3	RasterPadding	-	no
0x84e4	BitsPerRunLength	-	no
0x84e5	BitsPerExtendedRunLength	-	no
0x84e6	ColorTable	-	no
0x84e7	ImageColorIndicator	-	no
0x84e8	BackgroundColorIndicator	-	no
0x84e9	ImageColorValue	-	no
0x84ea	BackgroundColorValue	-	no
0x84eb	PixelIntensityRange	-	no
0x84ec	TransparencyIndicator	-	no
0x84ed	ColorCharacterization	-	no
0x84ee	HCUsage	-	no
0x84ef	TrapIndicator	-	no
0x84f0	CMYKEquivalent	-	no
0x8546	SEMInfo	IFD0	string
0x8568	AFCP_IPTC	-	IPTC
0x85b8	PixelMagicJBIGOptions	-	no
0x85d7	JPLCartoIFD	-	no
0x85d8	ModelTransform	IFD0	double[16]
0x8602	WB_GRGBLevels	-	no
0x8606	LeafData	-	Leaf
0x8649	PhotoshopSettings	IFD0	Photoshop
0x8769	ExifOffset	IFD0	EXIF
0x8773	ICC_Profile	IFD0	ICC_Profile
0x877f	TIFF_FXExtensions	-	no
0x8780	MultiProfiles	-	no
0x8781	SharedData	-	no
0x8782	T88Options	-	no
0x87ac	ImageLayer	-	no
0x87af	GeoTiffDirectory	IFD0	int16u[0.5]
0x87b0	GeoTiffDoubleParams	IFD0	double[0.125]
0x87b1	GeoTiffAsciiParams	IFD0	string
0x87be	JBIGOptions	-	no
0x8822	ExposureProgram	ExifIFD	int16u
0x8824	SpectralSensitivity	ExifIFD	string
0x8825	GPSInfo	IFD0	GPS
0x8827	ISO	ExifIFD	int16u[n]
0x8828	Opto-ElectricConvFactor	-	no
0x8829	Interlace	-	no
0x882a	TimeZoneOffset	ExifIFD	int16s[n]
0x882b	SelfTimerMode	ExifIFD	int16u
0x8830	SensitivityType	ExifIFD	int16u
0x8831	StandardOutputSensitivity	ExifIFD	int32u
0x8832	RecommendedExposureIndex	ExifIFD	int32u
0x8833	ISOSpeed	ExifIFD	int32u
0x8834	ISOSpeedLatitudeyyy	ExifIFD	int32u
0x8835	ISOSpeedLatitudezzz	ExifIFD	int32u
0x885c	FaxRecvParams	-	no
0x885d	FaxSubAddress	-	no
0x885e	FaxRecvTime	-	no
0x8871	FedexEDR	-	no
0x888a	LeafSubIFD	-	Leaf SubIFD
0x9000	ExifVersion	ExifIFD	undef:
0x9003	DateTimeOriginal	ExifIFD	string
0x9004	CreateDate	ExifIFD	string
0x9009	GooglePlusUploadCode	ExifIFD	undef[n]
0x9010	OffsetTime	ExifIFD	string
0x9011	OffsetTimeOriginal	ExifIFD	string
0x9012	OffsetTimeDigitized	ExifIFD	string
0x9101	ComponentsConfiguration	ExifIFD	undef[4]!:
0x9102	CompressedBitsPerPixel	ExifIFD	rational64u!
0x9201	ShutterSpeedValue	ExifIFD	rational64s
0x9202	ApertureValue	ExifIFD	rational64u
0x9203	BrightnessValue	ExifIFD	rational64s

0x9204	ExposureCompensation	ExifIFD	rational64s
0x9205	MaxApertureValue	ExifIFD	rational64u
0x9206	SubjectDistance	ExifIFD	rational64u
0x9207	MeteringMode	ExifIFD	int16u
0x9208	LightSource	ExifIFD	int16u
0x9209	Flash	ExifIFD	int16u
0x920a	FocalLength	ExifIFD	rational64u
0x920b	FlashEnergy	-	no
0x920c	SpatialFrequencyResponse	-	no
0x920d	Noise	-	no
0x920e	FocalPlaneXResolution	-	no
0x920f	FocalPlaneYResolution	-	no
0x9210	FocalPlaneResolutionUnit	-	no
0x9211	ImageNumber	ExifIFD	int32u
0x9212	SecurityClassification	ExifIFD	string
0x9213	ImageHistory	ExifIFD	string
0x9214	SubjectArea	ExifIFD	int16u[n]
0x9215	ExposureIndex	-	no
0x9216	TIFF-EPStandardID	-	no
0x9217	SensingMethod	-	no
0x923a	CIP3DataFile	-	no
0x923b	CIP3Sheet	-	no
0x923c	CIP3Side	-	no
0x923f	StoNits	-	no
0x927c	MakerNoteApple	ExifIFD	Apple
	MakerNoteNikon	ExifIFD	Nikon
	MakerNoteCanon	ExifIFD	Canon
	MakerNoteCasio	ExifIFD	Casio
	MakerNoteCasio2	ExifIFD	Casio Type2
	MakerNoteDJIInfo	ExifIFD	DJI Info
	MakerNoteDJI	ExifIFD	DJI
	MakerNoteFLIR	ExifIFD	FLIR
	MakerNoteFujiFilm	ExifIFD	FujiFilm
	MakerNoteGE	ExifIFD	GE
	MakerNoteGE2	ExifIFD	FujiFilm
	MakerNoteHasselblad	ExifIFD	Unknown
	MakerNoteHP	ExifIFD	HP
	MakerNoteHP2	ExifIFD	HP Type2
	MakerNoteHP4	ExifIFD	HP Type4
	MakerNoteHP6	ExifIFD	HP Type6
	MakerNoteISL	ExifIFD	Unknown
	MakerNoteJVC	ExifIFD	JVC
	MakerNoteJVCText	ExifIFD	JVC Text
	MakerNoteKodak1a	ExifIFD	Kodak
	MakerNoteKodak1b	ExifIFD	Kodak
	MakerNoteKodak2	ExifIFD	Kodak Type2
	MakerNoteKodak3	ExifIFD	Kodak Type3
	MakerNoteKodak4	ExifIFD	Kodak Type4
	MakerNoteKodak5	ExifIFD	Kodak Type5
	MakerNoteKodak6a	ExifIFD	Kodak Type6
	MakerNoteKodak6b	ExifIFD	Kodak Type6
	MakerNoteKodak7	ExifIFD	Kodak Type7
	MakerNoteKodak8a	ExifIFD	Kodak Type8
	MakerNoteKodak8b	ExifIFD	Kodak Type8
	MakerNoteKodak8c	ExifIFD	Kodak Type8
	MakerNoteKodak9	ExifIFD	Kodak Type9
	MakerNoteKodak10	ExifIFD	Kodak Type10
	MakerNoteKodak11	ExifIFD	Kodak Type11
	MakerNoteKodak12	ExifIFD	Kodak Type11
	MakerNoteKodakUnknown	ExifIFD	Kodak Unknown
	MakerNoteKyocera	ExifIFD	Unknown
	MakerNoteMinolta	ExifIFD	Minolta
	MakerNoteMinolta2	ExifIFD	Olympus
	MakerNoteMinolta3	ExifIFD	undef
	MakerNoteMotorola	ExifIFD	Motorola
	MakerNoteNikon2	ExifIFD	Nikon Type2
	MakerNoteNikon3	ExifIFD	Nikon
	MakerNoteNintendo	ExifIFD	Nintendo
	MakerNoteOlympus	ExifIFD	Olympus
	MakerNoteOlympus2	ExifIFD	Olympus

	MakerNoteOlympus3	ExifIFD	Olympus
	MakerNoteLeica	ExifIFD	Panasonic
	MakerNoteLeica2	ExifIFD	Panasonic Leica2
	MakerNoteLeica3	ExifIFD	Panasonic Leica3
	MakerNoteLeica4	ExifIFD	Panasonic Leica4
	MakerNoteLeica5	ExifIFD	Panasonic Leica5
	MakerNoteLeica6	ExifIFD	Panasonic Leica6
	MakerNoteLeica7	ExifIFD	Panasonic Leica6
	MakerNoteLeica8	ExifIFD	Panasonic Leica5
	MakerNoteLeica9	ExifIFD	Panasonic Leica9
	MakerNoteLeica10	ExifIFD	Panasonic
	MakerNotePanasonic	ExifIFD	Panasonic
	MakerNotePanasonic2	ExifIFD	Panasonic Type2
	MakerNotePanasonic3	ExifIFD	Panasonic
	MakerNotePentax	ExifIFD	Pentax
	MakerNotePentax2	ExifIFD	Pentax Type2
	MakerNotePentax3	ExifIFD	Casio Type2
	MakerNotePentax4	ExifIFD	Pentax Type4
	MakerNotePentax5	ExifIFD	Pentax
	MakerNotePentax6	ExifIFD	Pentax S1
	MakerNotePhaseOne	ExifIFD	PhaseOne
	MakerNoteReconyx	ExifIFD	Reconyx
	MakerNoteReconyx2	ExifIFD	Reconyx Type2
	MakerNoteReconyx3	ExifIFD	Reconyx Type3
	MakerNoteRicohPentax	ExifIFD	Pentax
	MakerNoteRicoh	ExifIFD	Ricoh
	MakerNoteRicoh2	ExifIFD	Ricoh Type2
	MakerNoteRicohText	ExifIFD	Ricoh Text
	MakerNoteSamsung1a	ExifIFD	undef
	MakerNoteSamsung1b	ExifIFD	Samsung
	MakerNoteSamsung2	ExifIFD	Samsung Type2
	MakerNoteSanyo	ExifIFD	Sanyo
	MakerNoteSanyoC4	ExifIFD	Sanyo
	MakerNoteSanyoPatch	ExifIFD	Sanyo
	MakerNoteSigma	ExifIFD	Sigma
	MakerNoteSony	ExifIFD	Sony
	MakerNoteSony2	ExifIFD	Olympus
	MakerNoteSony3	ExifIFD	Olympus
	MakerNoteSony4	ExifIFD	Sony PIC
	MakerNoteSony5	ExifIFD	Sony
	MakerNoteSonyEricsson	ExifIFD	Sony Ericsson
	MakerNoteSonySRF	ExifIFD	Sony SRF
	MakerNoteUnknownText	ExifIFD	undef
	MakerNoteUnknownBinary	ExifIFD	undef
	MakerNoteUnknown	ExifIFD	Unknown
0x9286	UserComment	ExifIFD	undef
0x9290	SubSecTime	ExifIFD	string
0x9291	SubSecTimeOriginal	ExifIFD	string
0x9292	SubSecTimeDigitized	ExifIFD	string
0x932f	MSDocumentText	-	no
0x9330	MSPropertySetStorage	-	no
0x9331	MSDocumentTextPosition	-	no
0x935c	ImageSourceData	IFD0	Photoshop DocumentData
0x9400	AmbientTemperature	ExifIFD	rational64s
0x9401	Humidity	ExifIFD	rational64u
0x9402	Pressure	ExifIFD	rational64u
0x9403	WaterDepth	ExifIFD	rational64s
0x9404	Acceleration	ExifIFD	rational64u
0x9405	CameraElevationAngle	ExifIFD	rational64s
0x9999	XiaomiSettings	ExifIFD	JSON
0x9a00	XiaomiModel	ExifIFD	string!
0x9c9b	XPTitle	IFD0	int8u
0x9c9c	XPComment	IFD0	int8u
0x9c9d	XPAuthor	IFD0	int8u
0x9c9e	XPKeywords	IFD0	int8u
0x9c9f	XPSubject	IFD0	int8u
0xa000	FlashpixVersion	ExifIFD	undef:
0xa001	ColorSpace	ExifIFD	int16u:
0xa002	ExifImageWidth	ExifIFD	int16u:
0xa003	ExifImageHeight	ExifIFD	int16u:

0xa004	RelatedSoundFile	ExifIFD	string
0xa005	InteropOffset	-	EXIF
0xa010	SamsungRawPointersOffset	-	no
0xa011	SamsungRawPointersLength	-	no
0xa101	SamsungRawByteOrder	-	no
0xa102	SamsungRawUnknown?	-	no
0xa20b	FlashEnergy	ExifIFD	rational64u
0xa20c	SpatialFrequencyResponse	-	no
0xa20d	Noise	-	no
0xa20e	FocalPlaneXResolution	ExifIFD	rational64u
0xa20f	FocalPlaneYResolution	ExifIFD	rational64u
0xa210	FocalPlaneResolutionUnit	ExifIFD	int16u
0xa211	ImageNumber	-	no
0xa212	SecurityClassification	-	no
0xa213	ImageHistory	-	no
0xa214	SubjectLocation	ExifIFD	int16u[2]
0xa215	ExposureIndex	ExifIFD	rational64u
0xa216	TIFF-EPStandardID	-	no
0xa217	SensingMethod	ExifIFD	int16u
0xa300	FileSource	ExifIFD	undef
0xa301	SceneType	ExifIFD	undef
0xa302	CFAPattern	ExifIFD	undef
0xa401	CustomRendered	ExifIFD	int16u
0xa402	ExposureMode	ExifIFD	int16u
0xa403	WhiteBalance	ExifIFD	int16u
0xa404	DigitalZoomRatio	ExifIFD	rational64u
0xa405	FocalLengthIn35mmFormat	ExifIFD	int16u
0xa406	SceneCaptureType	ExifIFD	int16u
0xa407	GainControl	ExifIFD	int16u
0xa408	Contrast	ExifIFD	int16u
0xa409	Saturation	ExifIFD	int16u
0xa40a	Sharpness	ExifIFD	int16u
0xa40b	DeviceSettingDescription	-	no
0xa40c	SubjectDistanceRange	ExifIFD	int16u
0xa420	ImageUniqueID	ExifIFD	string
0xa430	OwnerName	ExifIFD	string
0xa431	SerialNumber	ExifIFD	string
0xa432	LensInfo	ExifIFD	rational64u[4]
0xa433	LensMake	ExifIFD	string
0xa434	LensModel	ExifIFD	string
0xa435	LensSerialNumber	ExifIFD	string
0xa436	Title	ExifIFD	string/
0xa437	Photographer	ExifIFD	string
0xa438	ImageEditor	ExifIFD	string
0xa439	CameraFirmware	ExifIFD	string
0xa43a	RAWDevelopingSoftware	ExifIFD	string
0xa43b	ImageEditingSoftware	ExifIFD	string
0xa43c	MetadataEditingSoftware	ExifIFD	string
0xa460	CompositeImage	ExifIFD	int16u
0xa461	CompositeImageCount	ExifIFD	int16u[2]
0xa462	CompositeImageExposureTimes	ExifIFD	undef
0xa480	GDALMetadata	IFD0	string
0xa481	GDALNoData	IFD0	string
0xa500	Gamma	ExifIFD	rational64u
0xafc0	ExpandSoftware	-	no
0xafc1	ExpandLens	-	no
0xafc2	ExpandFilm	-	no
0xafc3	ExpandFilterLens	-	no
0xafc4	ExpandScanner	-	no
0xafc5	ExpandFlashLamp	-	no
0xb4c3	HasselbladRawImage	-	no
0xbc01	PixelFormat	-	no
0xbc02	Transformation	-	no
0xbc03	Uncompressed	-	no
0xbc04	ImageType	-	no
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
0xbcc5	AlphaDataDiscard	-	no
0xc427	OceScanjobDesc	-	no
0xc428	OceApplicationSelector	-	no
0xc429	OceIDNumber	-	no
0xc42a	OceImageLogic	-	no
0xc44f	Annotations	-	no
0xc4a5	PrintIM	IFD0	PrintIM
0xc519	HasselbladXML	-	PLIST
0xc51b	HasselbladExif	-	EXIF
0xc573	OriginalFileName	-	no
0xc580	USPTOOriginalContentType	-	no
0xc5e0	CR2CFAPattern	-	no
0xc612	DNGVersion	IFD0	int8u[4]!
0xc613	DNGBackwardVersion	IFD0	int8u[4]!
0xc614	UniqueCameraModel	IFD0	string
0xc615	LocalizedCameraModel	IFD0	string
0xc616	CFAPlaneColor	SubIFD	no
0xc617	CFALayout	SubIFD	no
0xc618	LinearizationTable	SubIFD	int16u[n]!
0xc619	BlackLevelRepeatDim	SubIFD	int16u[2]!
0xc61a	BlackLevel	SubIFD	rational64u[n]!
0xc61b	BlackLevelDeltaH	SubIFD	rational64s[n]!
0xc61c	BlackLevelDeltaV	SubIFD	rational64s[n]!
0xc61d	WhiteLevel	SubIFD	int32u[n]!
0xc61e	DefaultScale	SubIFD	rational64u[2]!
0xc61f	DefaultCropOrigin	SubIFD	int32u[2]!
0xc620	DefaultCropSize	SubIFD	int32u[2]!
0xc621	ColorMatrix1	IFD0	rational64s[n]!
0xc622	ColorMatrix2	IFD0	rational64s[n]!
0xc623	CameraCalibration1	IFD0	rational64s[n]!
0xc624	CameraCalibration2	IFD0	rational64s[n]!
0xc625	ReductionMatrix1	IFD0	rational64s[n]!
0xc626	ReductionMatrix2	IFD0	rational64s[n]!
0xc627	AnalogBalance	IFD0	rational64u[n]!
0xc628	AsShotNeutral	IFD0	rational64u[n]!
0xc629	AsShotWhiteXY	IFD0	rational64u[2]!
0xc62a	BaselineExposure	IFD0	rational64s!
0xc62b	BaselineNoise	IFD0	rational64u!
0xc62c	BaselineSharpness	IFD0	rational64u!
0xc62d	BayerGreenSplit	SubIFD	int32u!
0xc62e	LinearResponseLimit	IFD0	rational64u!
0xc62f	CameraSerialNumber	IFD0	string
0xc630	DNGLensInfo	IFD0	rational64u[4]
0xc631	ChromaBlurRadius	SubIFD	rational64u!
0xc632	AntiAliasStrength	SubIFD	rational64u!
0xc633	ShadowScale	IFD0	rational64u!
0xc634	SR2Private	IFD0	Sony SR2Private
	DNGAdobeData	IFD0	DNG AdobeData
	MakerNotePentax	IFD0	Pentax
	MakerNotePentax5	IFD0	Pentax
	MakerNoteRicohPentax	IFD0	Pentax
	MakerNoteDJIInfo	IFD0	DJI Info
	DNGPrivateData	IFD0	int8u!
0xc635	MakerNoteSafety	IFD0	int16u
0xc640	RawImageSegmentation	-	no
0xc65a	CalibrationIlluminant1	IFD0	int16u!
0xc65b	CalibrationIlluminant2	IFD0	int16u!
0xc65c	BestQualityScale	SubIFD	rational64u!
0xc65d	RawDataUniqueID	IFD0	int8u[16]!
0xc660	AliasLayerMetadata	-	no
0xc68b	OriginalRawFileName	IFD0	string!
0xc68c	OriginalRawFileData	IFD0	DNG OriginalRaw
0xc68d	ActiveArea	SubIFD	int32u[4]!
0xc68e	MaskedAreas	SubIFD	int32u[n]!
0xc68f	AsShotICCProfile	IFD0	ICC_Profile
0xc690	AsShotPreProfileMatrix	IFD0	rational64s[n]!

0xc691	CurrentICCProfile	IFD0	ICC_Profile
0xc692	CurrentPreProfileMatrix	IFD0	rational64s[n]!
0xc6bf	ColorimetricReference	IFD0	int16u!
0xc6c5	SRawType	IFD0	no
0xc6d2	PanasonicTitle	IFD0	undef
0xc6d3	PanasonicTitle2	IFD0	undef
0xc6f3	CameraCalibrationSig	IFD0	string!
0xc6f4	ProfileCalibrationSig	IFD0	string!
0xc6f5	ProfileIFD	IFD0	EXIF
0xc6f6	AsShotProfileName	IFD0	string!
0xc6f7	NoiseReductionApplied	SubIFD	rational64u!
0xc6f8	ProfileName	IFD0	string!
0xc6f9	ProfileHueSatMapDims	IFD0	int32u[3]!
0xc6fa	ProfileHueSatMapData1	IFD0	float[n]!
0xc6fb	ProfileHueSatMapData2	IFD0	float[n]!
0xc6fc	ProfileToneCurve	IFD0	float[n]!
0xc6fd	ProfileEmbedPolicy	IFD0	int32u!
0xc6fe	ProfileCopyright	IFD0	string!
0xc714	ForwardMatrix1	IFD0	rational64s[n]!
0xc715	ForwardMatrix2	IFD0	rational64s[n]!
0xc716	PreviewApplicationName	IFD0	string!
0xc717	PreviewApplicationVersion	IFD0	string!
0xc718	PreviewSettingsName	IFD0	string!
0xc719	PreviewSettingsDigest	IFD0	int8u!
0xc71a	PreviewColorSpace	IFD0	int32u!
0xc71b	PreviewDateTime	IFD0	string!
0xc71c	RawImageDigest	IFD0	int8u[16]!
0xc71d	OriginalRawFileDigest	IFD0	int8u[16]!
0xc71e	SubTileBlockSize	-	no
0xc71f	RowInterleaveFactor	-	no
0xc725	ProfileLookTableDims	IFD0	int32u[3]!
0xc726	ProfileLookTableData	IFD0	float[n]!
0xc740	OpcodeList1	SubIFD	undef%
0xc741	OpcodeList2	SubIFD	undef%
0xc74e	OpcodeList3	SubIFD	undef%
0xc761	NoiseProfile	SubIFD	double[n]!
0xc763	TimeCodes	IFD0	int8u[n]
0xc764	FrameRate	IFD0	rational64s
0xc772	TStop	IFD0	rational64u[n]
0xc789	ReelName	IFD0	string
0xc791	OriginalDefaultFinalSize	IFD0	int32u[2]!
0xc792	OriginalBestQualitySize	IFD0	int32u[2]!
0xc793	OriginalDefaultCropSize	IFD0	rational64u[2]!
0xc7a1	CameraLabel	IFD0	string
0xc7a3	ProfileHueSatMapEncoding	IFD0	int32u!
0xc7a4	ProfileLookTableEncoding	IFD0	int32u!
0xc7a5	BaselineExposureOffset	IFD0	rational64s!
0xc7a6	DefaultBlackRender	IFD0	int32u!
0xc7a7	NewRawImageDigest	IFD0	int8u[16]!
0xc7a8	RawToPreviewGain	IFD0	double!
0xc7aa	CacheVersion	SubIFD2	int32u!
0xc7b5	DefaultUserCrop	SubIFD	rational64u[4]!
0xc7d5	NikonNEFInfo	-	Nikon NEFInfo
0xc7e9	DepthFormat	IFD0	int16u!
0xc7ea	DepthNear	IFD0	rational64u!
0xc7eb	DepthFar	IFD0	rational64u!
0xc7ec	DepthUnits	IFD0	int16u!
0xc7ed	DepthMeasureType	IFD0	int16u!
0xc7ee	EnhanceParams	IFD0	string!
0xcd2d	ProfileGainTableMap	SubIFD	undef!
0xcd2e	SemanticName	SubIFD	no
0xcd30	SemanticInstanceID	SubIFD	no
0xcd31	CalibrationIlluminant3	IFD0	int16u!
0xcd32	CameraCalibration3	IFD0	rational64s[n]!
0xcd33	ColorMatrix3	IFD0	rational64s[n]!
0xcd34	ForwardMatrix3	IFD0	rational64s[n]!
0xcd35	IlluminantData1	IFD0	undef!
0xcd36	IlluminantData2	IFD0	undef!
0xcd37	IlluminantData3	IFD0	undef!
0xcd38	MaskSubArea	SubIFD	no

-- ExifTool 12.92 Tag Names --

0xcd39	ProfileHueSatMapData3	IFD0	float[n]!
0xcd3a	ReductionMatrix3	IFD0	rational64s[n]!
0xcd3f	RGBTables	IFD0	undef!
0xcd40	ProfileGainTableMap2	IFD0	undef!
0xcd41	JUMBF	-	Jpeg2000
0xcd43	ColumnInterleaveFactor	SubIFD	int32u!
0xcd44	ImageSequenceInfo	IFD0	DNG ImageSeq
0xcd46	ImageStats	IFD0	undef!
0xcd47	ProfileDynamicRange	IFD0	DNG ProfileDynamicRange
0xcd48	ProfileGroupName	IFD0	string!
0xcd49	JXLDistance	IFD0	float
0xcd4a	JXLEffort	IFD0	int32u
0xcd4b	JXLDecodeSpeed	IFD0	int32u
0xealc	Padding	ExifIFD	undef!
0xeald	OffsetSchema	ExifIFD	int32s!
0xfde8	OwnerName	ExifIFD	string/
0xfde9	SerialNumber	ExifIFD	string/
0xfdea	Lens	ExifIFD	string/
0xfe00	KDC_IFD	-	Kodak KDC_IFD
0xfe4c	RawFile	ExifIFD	string/
0xfe4d	Converter	ExifIFD	string/
0xfe4e	WhiteBalance	ExifIFD	string/
0xfe51	Exposure	ExifIFD	string/
0xfe52	Shadows	ExifIFD	string/
0xfe53	Brightness	ExifIFD	string/
0xfe54	Contrast	ExifIFD	string/
0xfe55	Saturation	ExifIFD	string/
0xfe56	Sharpness	ExifIFD	string/
0xfe57	Smoothness	ExifIFD	string/
0xfe58	MoireFilter	ExifIFD	string/

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 IPTC Core 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.iptc.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 automatically 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
-----	-----	-----
1	IPTCEnvelope	IPTC EnvelopeRecord
2	IPTCApplication	IPTC ApplicationRecord
3	IPTCNewsPhoto	IPTC NewsPhoto
7	IPTCPreObjectData	IPTC PreObjectData
8	IPTCObjectData	IPTC ObjectData
9	IPTCPostObjectData	IPTC PostObjectData
240	IPTCFotoStation	IPTC FotoStation

IPTC EnvelopeRecord Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0	EnvelopeRecordVersion	int16u:
5	Destination	string[0,1024]+
20	FileFormat	int16u
22	FileVersion	int16u
30	ServiceIdentifier	string[0,10]
40	EnvelopeNumber	digits[8]
50	ProductID	string[0,32]+
60	EnvelopePriority	digits[1]
70	DateSent	digits[8]
80	TimeSent	string[11]
90	CodedCharacterSet	string[0,32]!
100	UniqueObjectName	string[14,80]
120	ARMIdentifier	int16u
122	ARMVersion	int16u

IPTC ApplicationRecord Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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]
10	Urgency	digits[1]
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]
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]
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]
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]
122	Writer-Editor	string[0,32]+
125	RasterizedCaption	undef[7360]
130	ImageType	string[2]
131	ImageOrientation	string[1]
135	LanguageIdentifier	string[2,3]
150	AudioType	string[2]
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
201	ObjectPreviewFileVersion	int16u
202	ObjectPreviewData	undef[0,256000]
221	Prefs	string[0,64]
225	ClassifyState	string[0,64]
228	SimilarityIndex	string[0,32]
230	DocumentNotes	string[0,1024]
231	DocumentHistory	string[0,256]
232	ExifCameraInfo	string[0,4096]
255	CatalogSets	string[0,256]+

IPTC NewsPhoto Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0	NewsPhotoVersion	int16u:
10	IPTCPictureNumber	string[16]
20	IPTCImageWidth	int16u
30	IPTCImageHeight	int16u
40	IPTCPixelWidth	int16u
50	IPTCPixelHeight	int16u
55	SupplementalType	int8u
60	ColorRepresentation	int16u
64	InterchangeColorSpace	int8u
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
100	ScanningDirection	int8u
102	IPTCImageRotation	int8u
110	DataCompressionMethod	int32u
120	QuantizationMethod	int8u
125	EndPoints	no
130	ExcursionTolerance	int8u
135	BitsPerComponent	int8u
140	MaximumDensityRange	int16u
145	GammaCompensatedValue	int16u

IPTC PreObjectData Tags

Tag ID	Tag Name	Writable
-----	-----	-----
10	SizeMode	no
20	MaxSubfileSize	no
90	ObjectSizeAnnounced	no
95	MaximumObjectSize	no

IPTC ObjectData Tags

Tag ID	Tag Name	Writable
-----	-----	-----
10	SubFile	no+

IPTC PostObjectData Tags

Tag ID	Tag Name	Writable
-----	-----	-----
10	ConfirmedObjectSize	no

IPTC FotoStation Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

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 <<https://exiftool.org/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 <<https://exiftool.org/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 pre-defined 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 <<https://exiftool.org/struct.html#Fields>> 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
-----	-----
aas	XMP aas
acdsee	XMP acdsee
acdsee-rs	XMP ACDSeeRegions
album	XMP Album
apple-fi	XMP apple-fi
ast	Nikon ast
aux	XMP aux
cc	XMP cc
cell	XMP cell
crd	XMP crd
creatorAtom	XMP creatorAtom
crs	XMP crs
dc	XMP dc
Device	XMP Device
dex	XMP dex
DICOM	XMP DICOM
digiKam	XMP digiKam
drone-dji	DJI XMP
dwc	DarwinCore
et	XMP ExifTool
exif	XMP exif
exifEX	XMP exifEX
expressionmedia	XMP ExpressionMedia
extensis	XMP extensis
fpv	XMP fpv
GAudio	XMP GAudio

GCamera	XMP GCamera
GContainer	XMP GContainer
GCreations	XMP GCreations
GDepth	XMP GDepth
getty	XMP GettyImages
GFocus	XMP GFocus
GImage	XMP GImage
GPano	XMP GPano
GSpherical	XMP GSpherical
hdr	XMP hdr
hdrgm	XMP hdrgm
ics	XMP ics
iptcCore	XMP iptcCore
iptcExt	XMP iptcExt
LImage	XMP LImage
lr	XMP Lightroom
mediapro	XMP MediaPro
microsoft	Microsoft XMP
MP	Microsoft MP
MP1	Microsoft MP1
mwg-coll	MWG Collections
mwg-kw	MWG Keywords
mwg-rs	MWG Regions
nine	Nikon nine
panorama	XMP panorama
pdf	XMP pdf
pdfx	XMP pdfx
photomech	PhotoMechanic XMP
photoshop	XMP photoshop
PixelLive	XMP PixelLive
plus	PLUS XMP
pmi	XMP pmi
prism	XMP prism
prl	XMP prl
prm	XMP prm
pur	XMP pur
rdf	XMP rdf
sdv	Nikon sdc
swf	XMP swf
tiff	XMP tiff
x	XMP x
xmp	XMP xmp
xmpBJ	XMP xmpBJ
xmpDM	XMP xmpDM
xmpDSA	Panasonic DSA
xmpMM	XMP xmpMM
xmpNote	XMP xmpNote
xmpPLUS	XMP xmpPLUS
xmpRights	XMP xmpRights
xmpTPg	XMP xmpTPg

XMP aas Tags

Apple Adjustment Settings used by iPhone/iPad.

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

Tag Name	Writable
-----	-----
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 ACDSave 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
-----	-----
Author	string/
Caption	string/
Categories	string/
Collections	string/
DateTime	date/
DPP	lang-alt/
EditStatus	string/
FixtureIdentifier	string/
Keywords	string/+
Notes	string/
ObjectCycle	string/
OriginatingProgram	string/
Rating	real/
Rawrppused	boolean/
ReleaseDate	string/
ReleaseTime	string/
RPP	lang-alt/
Snapshots	string/+
Tagged	boolean/

XMP ACDSaveRegions Tags

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

Tag Name	Writable
-----	-----
RegionInfoACDSave	ACDSaveRegionInfo Struct
ACDSaveRegionAppliedToDimensions	ACDSaveDimensions Struct_
ACDSaveRegionAppliedToDimensionsH	real/_
ACDSaveRegionAppliedToDimensionsUnit	string/_
ACDSaveRegionAppliedToDimensionsW	real/_
ACDSaveRegion	ACDSaveRegion Struct_+
ACDSaveRegionALGArea	ACDSaveArea Struct_+
ACDSaveRegionALGAreaH	real/_+
ACDSaveRegionALGAreaW	real/_+
ACDSaveRegionALGAreaX	real/_+
ACDSaveRegionALGAreaY	real/_+
ACDSaveRegionDLYArea	ACDSaveArea Struct_+
ACDSaveRegionDLYAreaH	real/_+

ACDSeeRegionDLYAreaW	real/_+
ACDSeeRegionDLYAreaX	real/_+
ACDSeeRegionDLYAreaY	real/_+
ACDSeeRegionName	string/_+
ACDSeeRegionNameAssignType	string/_+
ACDSeeRegionType	string/_+

XMP ACDSeeRegionInfo Struct

Field Name	Writable
-----	-----
AppliedToDimensions	ACDSeeDimensions Struct
RegionList	ACDSeeRegion Struct+

XMP ACDSeeDimensions Struct

Field Name	Writable
-----	-----
H	real
Unit	string
W	real

XMP ACDSeeRegion Struct

Field Name	Writable
-----	-----
ALGArea	ACDSeeArea Struct
DLYArea	ACDSeeArea Struct
Name	string
NameAssignType	string
Type	string

XMP ACDSeeArea Struct

Field Name	Writable
-----	-----
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
-----	-----
Notes	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
-----	-----
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
-----	-----
ApproximateFocusDistance	rational
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/
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
-----	-----
AttributionName	string
AttributionURL	string
DeprecatedOn	date
Jurisdiction	string
LegalCode	string
License	string
MorePermissions	string
Permits	string+
Prohibits	string+
Requires	string+
UseGuidelines	string

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
-----	-----
CellTowerID	string
CellGlobalID	string
LocationAreaCode	string
MobileCountryCode	string
MobileNetworkCode	string

CellR string

XMP crd Tags

Adobe Camera Raw Defaults tags.

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

Tag Name	Writable
-----	-----
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	Correction Struct+
CircGradBasedCorrActive	boolean/_
CircGradBasedCorrAmount	real/_
CircGradBasedCorrMasks	CorrectionMask Struct_+
CircGradBasedCorrMaskAlpha	real/_
CircGradBasedCorrMaskAngle	real/_
CircGradBasedCorrMaskBottom	real/_
CircGradBasedCorrMaskCenterValue	real/_
CircGradBasedCorrMaskCenterWeight	real/_
CircGradBasedCorrMaskRange	CorrRangeMask Struct_+
CircGradBasedCorrMaskRangeAreaModels	AreaModels Struct_+
CircGradBasedCorrMaskRangeAreaModelsComponents	string/_+
CircGradBasedCorrMaskRangeAreaModelsColorSampleInfo	string/_+
CircGradBasedCorrMaskRangeColorAmount	real/_+
CircGradBasedCorrMaskRangeDepthFeather	real/_+
CircGradBasedCorrMaskRangeDepthMax	real/_+
CircGradBasedCorrMaskRangeDepthMin	real/_+
CircGradBasedCorrMaskRangeInvert	boolean/_+
CircGradBasedCorrMaskRangeLumFeather	real/_+
CircGradBasedCorrMaskRangeLuminanceDepthSampleInfo	string/_+
CircGradBasedCorrMaskRangeLumMax	real/_+
CircGradBasedCorrMaskRangeLumMin	real/_+
CircGradBasedCorrMaskRangeLumRange	string/_+
CircGradBasedCorrMaskRangeSampleType	integer/_+
CircGradBasedCorrMaskRangeType	string/_+
CircGradBasedCorrMaskRangeVersion	string/_+
CircGradBasedCorrMaskDabs	string/_
CircGradBasedCorrMaskFeather	real/_
CircGradBasedCorrMaskFlipped	boolean/_
CircGradBasedCorrMaskFlow	real/_
CircGradBasedCorrMaskFullX	real/_
CircGradBasedCorrMaskFullyY	real/_
CircGradBasedCorrMaskInputDigest	string/_
CircGradBasedCorrMaskLeft	real/_
CircGradBasedCorrMaskMaskActive	boolean/_
CircGradBasedCorrMaskMaskBlendMode	integer/_
CircGradBasedCorrMaskMaskDigest	string/_
CircGradBasedCorrMaskMaskInverted	boolean/_
CircGradBasedCorrMaskMaskName	string/_
CircGradBasedCorrMaskMasks	CorrectionMask Struct_+
CircGradBasedCorrMaskMasksAlpha	real/_

CircGradBasedCorrMaskMasksAngle	real/_
CircGradBasedCorrMaskMasksBottom	real/_
CircGradBasedCorrMaskMasksCenterValue	real/_
CircGradBasedCorrMaskMasksCenterWeight	real/_
CircGradBasedCorrMaskMasksDabs	string/_+
CircGradBasedCorrMaskMasksFeather	real/_
CircGradBasedCorrMaskMasksFlipped	boolean/_
CircGradBasedCorrMaskMasksFlow	real/_
CircGradBasedCorrMaskMasksFullX	real/_
CircGradBasedCorrMaskMasksFullyY	real/_
CircGradBasedCorrMaskMasksInputDigest	string/_
CircGradBasedCorrMaskMasksLeft	real/_
CircGradBasedCorrMaskMasksMaskActive	boolean/_
CircGradBasedCorrMaskMasksMaskBlendMode	integer/_
CircGradBasedCorrMaskMasksMaskDigest	string/_
CircGradBasedCorrMaskMasksMaskInverted	boolean/_
CircGradBasedCorrMaskMasksMaskName	string/_
CircGradBasedCorrMaskMasksMaskSubType	string/_
CircGradBasedCorrMaskMasksMaskSyncID	string/_
CircGradBasedCorrMaskMasksValue	real/_
CircGradBasedCorrMaskMasksMaskVersion	string/_
CircGradBasedCorrMaskMasksMidpoint	real/_
CircGradBasedCorrMaskMasksOrigin	string/_
CircGradBasedCorrMaskMasksPerimeterValue	real/_
CircGradBasedCorrMaskMasksRadius	real/_
CircGradBasedCorrMaskMasksReferencePoint	string/_
CircGradBasedCorrMaskMasksRight	real/_
CircGradBasedCorrMaskMasksRoundness	real/_
CircGradBasedCorrMaskMasksSizeX	real/_
CircGradBasedCorrMaskMasksSizeY	real/_
CircGradBasedCorrMaskMasksTop	real/_
CircGradBasedCorrMaskMaskSubType	string/_
CircGradBasedCorrMaskMasksVersion	integer/_
CircGradBasedCorrMaskMasksWhat	string/_
CircGradBasedCorrMaskMasksWholeImageArea	string/_
CircGradBasedCorrMaskMasksX	real/_
CircGradBasedCorrMaskMasksY	real/_
CircGradBasedCorrMaskMaskSyncID	string/_
CircGradBasedCorrMaskMasksZeroX	real/_
CircGradBasedCorrMaskMasksZeroY	real/_
CircGradBasedCorrMaskValue	real/_
CircGradBasedCorrMaskMaskVersion	string/_
CircGradBasedCorrMaskMidpoint	real/_
CircGradBasedCorrMaskOrigin	string/_
CircGradBasedCorrMaskPerimeterValue	real/_
CircGradBasedCorrMaskRadius	real/_
CircGradBasedCorrMaskReferencePoint	string/_
CircGradBasedCorrMaskRight	real/_
CircGradBasedCorrMaskRoundness	real/_
CircGradBasedCorrMaskSizeX	real/_
CircGradBasedCorrMaskSizeY	real/_
CircGradBasedCorrMaskTop	real/_
CircGradBasedCorrMaskVersion	integer/_
CircGradBasedCorrMaskWhat	string/_
CircGradBasedCorrMaskWholeImageArea	string/_
CircGradBasedCorrMaskX	real/_
CircGradBasedCorrMaskY	real/_
CircGradBasedCorrMaskZeroX	real/_
CircGradBasedCorrMaskZeroY	real/_
CircGradBasedCorrCorrectionName	string/_+
CircGradBasedCorrRangeMask	CorrRangeMask Struct_+
CircGradBasedCorrRangeMaskAreaModels	AreaModels Struct_+
CircGradBasedCorrRangeMaskAreaModelsComponents	string/_+
CircGradBasedCorrRangeMaskAreaModelsColorSampleInfo	string/_+
CircGradBasedCorrRangeMaskColorAmount	real/_+
CircGradBasedCorrRangeMaskDepthFeather	real/_+
CircGradBasedCorrRangeMaskDepthMax	real/_+
CircGradBasedCorrRangeMaskDepthMin	real/_+
CircGradBasedCorrRangeMaskInvert	boolean/_+
CircGradBasedCorrRangeMaskLumFeather	real/_+

CircGradBasedCorrRangeMaskLuminanceDepthSampleInfo	string/_+
CircGradBasedCorrRangeMaskLumMax	real/_+
CircGradBasedCorrRangeMaskLumMin	real/_+
CircGradBasedCorrRangeMaskLumRange	string/_+
CircGradBasedCorrRangeMaskSampleType	integer/_+
CircGradBasedCorrRangeMaskType	string/_+
CircGradBasedCorrRangeMaskVersion	string/_+
CircGradBasedCorrCorrectionSyncID	string/_+
CircGradBasedCorrBlacks2012	real/_
CircGradBasedCorrBrightness	real/_
CircGradBasedCorrClarity	real/_
CircGradBasedCorrClarity2012	real/_
CircGradBasedCorrContrast	real/_
CircGradBasedCorrContrast2012	real/_
CircGradBasedCorrDefringe	real/_
CircGradBasedCorrDehaze	real/_
CircGradBasedCorrExposure	real/_
CircGradBasedCorrExposure2012	real/_
CircGradBasedCorrHighlights2012	real/_
CircGradBasedCorrHue	real/_
CircGradBasedCorrLuminanceNoise	real/_
CircGradBasedCorrMoire	real/_
CircGradBasedCorrSaturation	real/_
CircGradBasedCorrShadows2012	real/_
CircGradBasedCorrSharpness	real/_
CircGradBasedCorrTemperature	real/_
CircGradBasedCorrTexture	real/_
CircGradBasedCorrTint	real/_
CircGradBasedCorrToningHue	real/_
CircGradBasedCorrToningSaturation	real/_
CircGradBasedCorrWhites2012	real/_
CircGradBasedCorrWhat	string/_
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/
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CropBottom	real/
CropConstrainToWarp	integer/
CropHeight	real/
CropLeft	real/
CropRight	real/
CropTop	real/
CropUnit	integer/
CropUnits	integer/
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/
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DepthBasedCorrMaskAngle	real/_
DepthBasedCorrMaskBottom	real/_
DepthBasedCorrMaskCenterValue	real/_
DepthBasedCorrMaskCenterWeight	real/_
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DepthBasedCorrMaskMasksMaskVersion	string/_

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DepthBasedCorrMaskMasksOrigin	string/_
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DepthMapInfoBaseHighlightGuideInputDigest	string/_
DepthMapInfoBaseHighlightGuideTable	string/_
DepthMapInfoBaseHighlightGuideVersion	string/_
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Description	lang-alt/
DNGIgnoreSidecars	boolean/
Exposure	real/
Exposure2012	real/
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GradientBasedCorrExposure	real/_
GradientBasedCorrExposure2012	real/_
GradientBasedCorrHighlights2012	real/_
GradientBasedCorrHue	real/_
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GradientBasedCorrMoire	real/_
GradientBasedCorrSaturation	real/_
GradientBasedCorrShadows2012	real/_
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GradientBasedCorrToningSaturation	real/_
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GrainFrequency	integer/
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GrayMixerRed	integer/
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Highlights2012	integer/
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HueAdjustmentBlue	integer/
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HueAdjustmentPurple	integer/
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JPEGHandling	string/
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LensBlurBokehShapeDetail	real/_
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LensBlurFocalRangeSource	real/_
LensBlurHighlightsBoost	real/_
LensBlurHighlightsThreshold	real/_
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LensBlurSampledRange	string/_
LensBlurSphericalAberration	real/_
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LensProfileMatchKeyCameraModelName	string/
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LensProfileMatchKeyExifModel	string/
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LensProfileMatchKeyLensInfo	string/
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LensProfileMatchKeySensorFormatFactor	real/
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LookCluster	string/_
LookCopyright	string/_
LookGroup	lang-alt/_
LookName	string/
LookParameters	LookParms Struct_
LookParametersCameraProfile	string/_
LookParametersClarity2012	string/_
LookParametersConvertToGrayscale	string/_
LookParametersHighlights2012	string/_

LookParametersLookTable	string/_
LookParametersProcessVersion	string/_
LookParametersShadows2012	string/_
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LookParametersToneCurvePV2012Blue	string/_+
LookParametersToneCurvePV2012Green	string/_+
LookParametersToneCurvePV2012Red	string/_+
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LuminanceAdjustmentBlue	integer/_
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LuminanceAdjustmentOrange	integer/_
LuminanceAdjustmentPurple	integer/_
LuminanceAdjustmentRed	integer/_
LuminanceAdjustmentYellow	integer/_
LuminanceNoiseReductionContrast	integer/_
LuminanceNoiseReductionDetail	integer/_
LuminanceSmoothing	integer/_
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MaskGroupBasedCorrHighlights2012	real/_
MaskGroupBasedCorrHue	real/_
MaskGroupBasedCorrLuminanceNoise	real/_
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OverrideLookVignette	boolean/
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PaintCorrectionMaskRight	real/_
PaintCorrectionMaskRoundness	real/_
PaintCorrectionMaskSizeX	real/_
PaintCorrectionMaskSizeY	real/_
PaintCorrectionMaskTop	real/_
PaintCorrectionMaskVersion	integer/_
PaintCorrectionMaskWhat	string/_
PaintCorrectionMaskWholeImageArea	string/_
PaintCorrectionMaskX	real/_
PaintCorrectionMaskY	real/_
PaintCorrectionMaskZeroX	real/_
PaintCorrectionMaskZeroY	real/_
PaintCorrectionCorrectionName	string/_+
PaintCorrectionRangeMask	CorrRangeMask Struct_+
PaintCorrectionRangeMaskAreaModels	AreaModels Struct_+
PaintCorrectionRangeMaskAreaModelsComponents	string/_+
PaintCorrectionRangeMaskAreaModelsColorSampleInfo	string/_+
PaintCorrectionRangeMaskColorAmount	real/_+
PaintCorrectionRangeMaskDepthFeather	real/_+
PaintCorrectionRangeMaskDepthMax	real/_+

PaintCorrectionRangeMaskDepthMin	real/_+
PaintCorrectionRangeMaskInvert	boolean/_+
PaintCorrectionRangeMaskLumFeather	real/_+
PaintCorrectionRangeMaskLuminanceDepthSampleInfo	string/_+
PaintCorrectionRangeMaskLumMax	real/_+
PaintCorrectionRangeMaskLumMin	real/_+
PaintCorrectionRangeMaskLumRange	string/_+
PaintCorrectionRangeMaskSampleType	integer/_+
PaintCorrectionRangeMaskType	string/_+
PaintCorrectionRangeMaskVersion	string/_+
PaintCorrectionCorrectionSyncID	string/_+
PaintCorrectionBlacks2012	real/_
PaintCorrectionBrightness	real/_
PaintCorrectionClarity	real/_
PaintCorrectionClarity2012	real/_
PaintCorrectionContrast	real/_
PaintCorrectionContrast2012	real/_
PaintCorrectionDefringe	real/_
PaintCorrectionDehaze	real/_
PaintCorrectionExposure	real/_
PaintCorrectionExposure2012	real/_
PaintCorrectionHighlights2012	real/_
PaintCorrectionHue	real/_
PaintCorrectionLuminanceNoise	real/_
PaintCorrectionMoire	real/_
PaintCorrectionSaturation	real/_
PaintCorrectionShadows2012	real/_
PaintCorrectionSharpness	real/_
PaintCorrectionTemperature	real/_
PaintCorrectionTexture	real/_
PaintCorrectionTint	real/_
PaintCorrectionToningHue	real/_
PaintCorrectionToningSaturation	real/_
PaintCorrectionWhites2012	real/_
PaintCorrectionWhat	string/_
ParametricDarks	integer/
ParametricHighlights	integer/
ParametricHighlightSplit	integer/
ParametricLights	integer/
ParametricMidtoneSplit	integer/
ParametricShadows	integer/
ParametricShadowSplit	integer/
PerspectiveAspect	integer/
PerspectiveHorizontal	integer/
PerspectiveRotate	real/
PerspectiveScale	integer/
PerspectiveUpright	integer/
PerspectiveVertical	integer/
PerspectiveX	real/
PerspectiveY	real/
PostCropVignetteAmount	integer/
PostCropVignetteFeather	integer/
PostCropVignetteHighlightContrast	integer/
PostCropVignetteMidpoint	integer/
PostCropVignetteRoundness	integer/
PostCropVignetteStyle	integer/
PresetType	string/
ProcessVersion	string/
RangeMask	RangeMask Struct
RangeMaskMapInfo	MapInfo Struct_
RangeMaskMapInfoLabMax	string/_
RangeMaskMapInfoLabMin	string/_
RangeMaskMapInfoLumEq	string/_+
RangeMaskMapInfoRGBMax	string/_
RangeMaskMapInfoRGBMin	string/_
RawFileName	string/
RedEyeInfo	string/+
RedHue	integer/
RedSaturation	integer/
RetouchAreas	RetouchArea Struct+

RetouchAreaFeather	real/_
RetouchAreaMasks	CorrectionMask Struct_+
RetouchAreaMaskAlpha	real/_
RetouchAreaMaskAngle	real/_
RetouchAreaMaskBottom	real/_
RetouchAreaMaskCenterValue	real/_
RetouchAreaMaskCenterWeight	real/_
RetouchAreaMaskRange	CorrRangeMask Struct_+
RetouchAreaMaskRangeAreaModels	AreaModels Struct_+
RetouchAreaMaskRangeAreaModelsComponents	string/_+
RetouchAreaMaskRangeAreaModelsColorSampleInfo	string/_+
RetouchAreaMaskRangeColorAmount	real/_+
RetouchAreaMaskRangeDepthFeather	real/_+
RetouchAreaMaskRangeDepthMax	real/_+
RetouchAreaMaskRangeDepthMin	real/_+
RetouchAreaMaskRangeInvert	boolean/_+
RetouchAreaMaskRangeLumFeather	real/_+
RetouchAreaMaskRangeLuminanceDepthSampleInfo	string/_+
RetouchAreaMaskRangeLumMax	real/_+
RetouchAreaMaskRangeLumMin	real/_+
RetouchAreaMaskRangeLumRange	string/_+
RetouchAreaMaskRangeSampleType	integer/_+
RetouchAreaMaskRangeType	string/_+
RetouchAreaMaskRangeVersion	string/_+
RetouchAreaMaskDabs	string/_
RetouchAreaMaskFeather	real/_
RetouchAreaMaskFlipped	boolean/_
RetouchAreaMaskFlow	real/_
RetouchAreaMaskFullX	real/_
RetouchAreaMaskFullyY	real/_
RetouchAreaMaskInputDigest	string/_
RetouchAreaMaskLeft	real/_
RetouchAreaMaskMaskActive	boolean/_
RetouchAreaMaskMaskBlendMode	integer/_
RetouchAreaMaskMaskDigest	string/_
RetouchAreaMaskMaskInverted	boolean/_
RetouchAreaMaskMaskName	string/_
RetouchAreaMaskMasks	CorrectionMask Struct_+
RetouchAreaMaskMasksAlpha	real/_
RetouchAreaMaskMasksAngle	real/_
RetouchAreaMaskMasksBottom	real/_
RetouchAreaMaskMasksCenterValue	real/_
RetouchAreaMaskMasksCenterWeight	real/_
RetouchAreaMaskMasksDabs	string/_+
RetouchAreaMaskMasksFeather	real/_
RetouchAreaMaskMasksFlipped	boolean/_
RetouchAreaMaskMasksFlow	real/_
RetouchAreaMaskMasksFullX	real/_
RetouchAreaMaskMasksFullyY	real/_
RetouchAreaMaskMasksInputDigest	string/_
RetouchAreaMaskMasksLeft	real/_
RetouchAreaMaskMasksMaskActive	boolean/_
RetouchAreaMaskMasksMaskBlendMode	integer/_
RetouchAreaMaskMasksMaskDigest	string/_
RetouchAreaMaskMasksMaskInverted	boolean/_
RetouchAreaMaskMasksMaskName	string/_
RetouchAreaMaskMasksMaskSubType	string/_
RetouchAreaMaskMasksMaskSyncID	string/_
RetouchAreaMaskMasksValue	real/_
RetouchAreaMaskMasksMaskVersion	string/_
RetouchAreaMaskMasksMidpoint	real/_
RetouchAreaMaskMasksOrigin	string/_
RetouchAreaMaskMasksPerimeterValue	real/_
RetouchAreaMaskMasksRadius	real/_
RetouchAreaMaskMasksReferencePoint	string/_
RetouchAreaMaskMasksRight	real/_
RetouchAreaMaskMasksRoundness	real/_
RetouchAreaMaskMasksSizeX	real/_
RetouchAreaMaskMasksSizeY	real/_
RetouchAreaMaskMasksTop	real/_

RetouchAreaMaskMaskSubType	string/_
RetouchAreaMaskMasksVersion	integer/_
RetouchAreaMaskMasksWhat	string/_
RetouchAreaMaskMasksWholeImageArea	string/_
RetouchAreaMaskMasksX	real/_
RetouchAreaMaskMasksY	real/_
RetouchAreaMaskMaskSyncID	string/_
RetouchAreaMaskMasksZeroX	real/_
RetouchAreaMaskMasksZeroY	real/_
RetouchAreaMaskValue	real/_
RetouchAreaMaskMaskVersion	string/_
RetouchAreaMaskMidpoint	real/_
RetouchAreaMaskOrigin	string/_
RetouchAreaMaskPerimeterValue	real/_
RetouchAreaMaskRadius	real/_
RetouchAreaMaskReferencePoint	string/_
RetouchAreaMaskRight	real/_
RetouchAreaMaskRoundness	real/_
RetouchAreaMaskSizeX	real/_
RetouchAreaMaskSizeY	real/_
RetouchAreaMaskTop	real/_
RetouchAreaMaskVersion	integer/_
RetouchAreaMaskWhat	string/_
RetouchAreaMaskWholeImageArea	string/_
RetouchAreaMaskX	real/_
RetouchAreaMaskY	real/_
RetouchAreaMaskZeroX	real/_
RetouchAreaMaskZeroY	real/_
RetouchAreaMethod	string/_
RetouchAreaOffsetY	real/_
RetouchAreaOpacity	real/_
RetouchAreaSeed	integer/_
RetouchAreaSourceState	string/_
RetouchAreaSourceX	real/_
RetouchAreaSpotType	string/_
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/
SplitToningHighlightHue	integer/
SplitToningHighlightSaturation	integer/
SplitToningShadowHue	integer/
SplitToningShadowSaturation	integer/
SupportsAmount	boolean/
SupportsColor	boolean/
SupportsHighDynamicRange	boolean/
SupportsMonochrome	boolean/

SupportsNormalDynamicRange	boolean/
SupportsOutputReferred	boolean/
SupportsSceneReferred	boolean/
ColorTemperature	integer/
Texture	integer/
TIFFHandling	string/
Tint	integer/
ToggleStyleAmount	integer/
ToggleStyleDigest	string/
ToneCurve	string/+
ToneCurveBlue	string/+
ToneCurveGreen	string/+
ToneCurveName	string/
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/
Whites2012	integer/

XMP Correction Struct

Field Name	Writable
-----	-----
CorrectionActive	boolean
CorrectionAmount	real
CorrectionMasks	CorrectionMask Struct+
CorrectionName	string
CorrRangeMask	CorrRangeMask Struct
	-
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
-----	-----
Alpha	real
Angle	real
Bottom	real
CenterValue	real
CenterWeight	real
CorrRangeMask	CorrRangeMask Struct
Dabs	string+
Feather	real
Flipped	boolean
Flow	real
FullX	real
FullyY	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 Struct
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
-----	-----
AreaModels	AreaModels Struct+

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
-----	-----
AreaComponents	string+
ColorRangeMaskAreaSampleInfo	string

XMP DepthBasedCorr Struct

Field Name	Writable
-----	-----
CorrectionActive	boolean
CorrectionAmount	real
CorrectionMasks	CorrectionMask Struct+
CorrectionSyncID	string
LocalCorrectedDepth	real
LocalCurveRefineSaturation	real
What	string

XMP DepthMapInfo Struct

Field Name	Writable
-----	-----
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
-----	-----
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
-----	-----
Amount	string
Cluster	string
Copyright	string
Group	lang-alt
Name	string
Parameters	LookParms Struct
SupportsAmount	string
SupportsMonochrome	string
SupportsOutputReferred	string
UUID	string

XMP LookParms Struct

Field Name	Writable
-----	-----
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
-----	-----
RangeMaskMapInfo	MapInfo Struct

XMP MapInfo Struct

Called RangeMaskMapInfo by the specification, the same as the containing structure.

Field Name	Writable
-----	-----
LabMax	string
LabMin	string
LumEq	string+
RGBMax	string
RGBMin	string

XMP RetouchArea Struct

Field Name	Writable
-----	-----
Feather	real
Masks	CorrectionMask Struct+
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
-----	-----
AeProjectLink	AEProjectLink Struct
AeProjectLinkCompositionID	string_
AeProjectLinkFullPath	string_
AeProjectLinkRenderOutputModuleIndex	string_
AeProjectLinkRenderQueueItemID	string_
AeProjectLinkRenderTimeStamp	integer_
MacAtom	MacAtom Struct
MacAtomApplicationCode	string_
MacAtomInvocationAppleEvent	string_
MacAtomPosixProjectPath	string_
WindowsAtom	WindowsAtom Struct
WindowsAtomExtension	string_
WindowsAtomInvocationFlags	string_
WindowsAtomUncProjectPath	string_

XMP AEProjectLink Struct

Field Name	Writable
-----	-----
CompositionID	string
FullPath	string
RenderOutputModuleIndex	string
RenderQueueItemID	string
RenderTimeStamp	integer

XMP MacAtom Struct

Field Name	Writable
-----	-----
ApplicationCode	string
InvocationAppleEvent	string
PosixProjectPath	string

XMP WindowsAtom Struct

Field Name	Writable
-----	-----
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
-----	-----
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	Correction Struct_+
CircGradBasedCorrActive	boolean_
CircGradBasedCorrAmount	real_
CircGradBasedCorrMasks	CorrectionMask Struct_+
CircGradBasedCorrMaskAlpha	real_
CircGradBasedCorrMaskAngle	real_
CircGradBasedCorrMaskBottom	real_
CircGradBasedCorrMaskCenterValue	real_
CircGradBasedCorrMaskCenterWeight	real_
CircGradBasedCorrMaskRange	CorrRangeMask Struct_+
CircGradBasedCorrMaskRangeAreaModels	AreaModels Struct_+
CircGradBasedCorrMaskRangeAreaModelsComponents	string_+
CircGradBasedCorrMaskRangeAreaModelsColorSampleInfo	string_+
CircGradBasedCorrMaskRangeColorAmount	real_+
CircGradBasedCorrMaskRangeDepthFeather	real_+
CircGradBasedCorrMaskRangeDepthMax	real_+
CircGradBasedCorrMaskRangeDepthMin	real_+
CircGradBasedCorrMaskRangeInvert	boolean_+
CircGradBasedCorrMaskRangeLumFeather	real_+
CircGradBasedCorrMaskRangeLuminanceDepthSampleInfo	string_+
CircGradBasedCorrMaskRangeLumMax	real_+
CircGradBasedCorrMaskRangeLumMin	real_+
CircGradBasedCorrMaskRangeLumRange	string_+
CircGradBasedCorrMaskRangeSampleType	integer_+
CircGradBasedCorrMaskRangeType	string_+
CircGradBasedCorrMaskRangeVersion	string_+
CircGradBasedCorrMaskDabs	string_
CircGradBasedCorrMaskFeather	real_
CircGradBasedCorrMaskFlipped	boolean_
CircGradBasedCorrMaskFlow	real_
CircGradBasedCorrMaskFullX	real_
CircGradBasedCorrMaskFullyY	real_
CircGradBasedCorrMaskInputDigest	string_
CircGradBasedCorrMaskLeft	real_
CircGradBasedCorrMaskMaskActive	boolean_
CircGradBasedCorrMaskMaskBlendMode	integer_
CircGradBasedCorrMaskMaskDigest	string_
CircGradBasedCorrMaskMaskInverted	boolean_
CircGradBasedCorrMaskMaskName	string_
CircGradBasedCorrMaskMasks	CorrectionMask Struct_+
CircGradBasedCorrMaskMasksAlpha	real_
CircGradBasedCorrMaskMasksAngle	real_
CircGradBasedCorrMaskMasksBottom	real_
CircGradBasedCorrMaskMasksCenterValue	real_
CircGradBasedCorrMaskMasksCenterWeight	real_
CircGradBasedCorrMaskMasksDabs	string_+
CircGradBasedCorrMaskMasksFeather	real_
CircGradBasedCorrMaskMasksFlipped	boolean_
CircGradBasedCorrMaskMasksFlow	real_
CircGradBasedCorrMaskMasksFullX	real_
CircGradBasedCorrMaskMasksFullyY	real_
CircGradBasedCorrMaskMasksInputDigest	string_
CircGradBasedCorrMaskMasksLeft	real_
CircGradBasedCorrMaskMasksMaskActive	boolean_
CircGradBasedCorrMaskMasksMaskBlendMode	integer_
CircGradBasedCorrMaskMasksMaskDigest	string_
CircGradBasedCorrMaskMasksMaskInverted	boolean_
CircGradBasedCorrMaskMasksMaskName	string_
CircGradBasedCorrMaskMasksMaskSubType	string_
CircGradBasedCorrMaskMasksMaskSyncID	string_
CircGradBasedCorrMaskMasksValue	real_
CircGradBasedCorrMaskMasksMaskVersion	string_

CircGradBasedCorrMaskMasksMidpoint	real_
CircGradBasedCorrMaskMasksOrigin	string_
CircGradBasedCorrMaskMasksPerimeterValue	real_
CircGradBasedCorrMaskMasksRadius	real_
CircGradBasedCorrMaskMasksReferencePoint	string_
CircGradBasedCorrMaskMasksRight	real_
CircGradBasedCorrMaskMasksRoundness	real_
CircGradBasedCorrMaskMasksSizeX	real_
CircGradBasedCorrMaskMasksSizeY	real_
CircGradBasedCorrMaskMasksTop	real_
CircGradBasedCorrMaskMaskSubType	string_
CircGradBasedCorrMaskMasksVersion	integer_
CircGradBasedCorrMaskMasksWhat	string_
CircGradBasedCorrMaskMasksWholeImageArea	string_
CircGradBasedCorrMaskMasksX	real_
CircGradBasedCorrMaskMasksY	real_
CircGradBasedCorrMaskMaskSyncID	string_
CircGradBasedCorrMaskMasksZeroX	real_
CircGradBasedCorrMaskMasksZeroY	real_
CircGradBasedCorrMaskValue	real_
CircGradBasedCorrMaskMaskVersion	string_
CircGradBasedCorrMaskMidpoint	real_
CircGradBasedCorrMaskOrigin	string_
CircGradBasedCorrMaskPerimeterValue	real_
CircGradBasedCorrMaskRadius	real_
CircGradBasedCorrMaskReferencePoint	string_
CircGradBasedCorrMaskRight	real_
CircGradBasedCorrMaskRoundness	real_
CircGradBasedCorrMaskSizeX	real_
CircGradBasedCorrMaskSizeY	real_
CircGradBasedCorrMaskTop	real_
CircGradBasedCorrMaskVersion	integer_
CircGradBasedCorrMaskWhat	string_
CircGradBasedCorrMaskWholeImageArea	string_
CircGradBasedCorrMaskX	real_
CircGradBasedCorrMaskY	real_
CircGradBasedCorrMaskZeroX	real_
CircGradBasedCorrMaskZeroY	real_
CircGradBasedCorrCorrectionName	string_+
CircGradBasedCorrRangeMask	CorrRangeMask Struct_+
CircGradBasedCorrRangeMaskAreaModels	AreaModels Struct_+
CircGradBasedCorrRangeMaskAreaModelsComponents	string_+
CircGradBasedCorrRangeMaskAreaModelsColorSampleInfo	string_+
CircGradBasedCorrRangeMaskColorAmount	real_+
CircGradBasedCorrRangeMaskDepthFeather	real_+
CircGradBasedCorrRangeMaskDepthMax	real_+
CircGradBasedCorrRangeMaskDepthMin	real_+
CircGradBasedCorrRangeMaskInvert	boolean_+
CircGradBasedCorrRangeMaskLumFeather	real_+
CircGradBasedCorrRangeMaskLuminanceDepthSampleInfo	string_+
CircGradBasedCorrRangeMaskLumMax	real_+
CircGradBasedCorrRangeMaskLumMin	real_+
CircGradBasedCorrRangeMaskLumRange	string_+
CircGradBasedCorrRangeMaskSampleType	integer_+
CircGradBasedCorrRangeMaskType	string_+
CircGradBasedCorrRangeMaskVersion	string_+
CircGradBasedCorrCorrectionSyncID	string_+
CircGradBasedCorrBlacks2012	real_
CircGradBasedCorrBrightness	real_
CircGradBasedCorrClarity	real_
CircGradBasedCorrClarity2012	real_
CircGradBasedCorrContrast	real_
CircGradBasedCorrContrast2012	real_
CircGradBasedCorrDefringe	real_
CircGradBasedCorrDehaze	real_
CircGradBasedCorrExposure	real_
CircGradBasedCorrExposure2012	real_
CircGradBasedCorrHighlights2012	real_
CircGradBasedCorrHue	real_
CircGradBasedCorrLuminanceNoise	real_

CircGradBasedCorrMoire	real_
CircGradBasedCorrSaturation	real_
CircGradBasedCorrShadows2012	real_
CircGradBasedCorrSharpness	real_
CircGradBasedCorrTemperature	real_
CircGradBasedCorrTexture	real_
CircGradBasedCorrTint	real_
CircGradBasedCorrToningHue	real_
CircGradBasedCorrToningSaturation	real_
CircGradBasedCorrWhites2012	real_
CircGradBasedCorrWhat	string_
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
CropUnits	integer
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	DepthBasedCorr Struct+
DepthBasedCorrCorrectionActive	boolean_+
DepthBasedCorrCorrectionAmount	real_+
DepthBasedCorrMask	CorrectionMask Struct_+
DepthBasedCorrMaskAlpha	real_
DepthBasedCorrMaskAngle	real_
DepthBasedCorrMaskBottom	real_
DepthBasedCorrMaskCenterValue	real_
DepthBasedCorrMaskCenterWeight	real_
DepthBasedCorrMaskRange	CorrRangeMask Struct_+
DepthBasedCorrMaskRangeAreaModels	AreaModels Struct_+
DepthBasedCorrMaskRangeAreaModelsComponents	string_+
DepthBasedCorrMaskRangeAreaModelsColorSampleInfo	string_+

DepthBasedCorrMaskRangeColorAmount	real_+
DepthBasedCorrMaskRangeDepthFeather	real_+
DepthBasedCorrMaskRangeDepthMax	real_+
DepthBasedCorrMaskRangeDepthMin	real_+
DepthBasedCorrMaskRangeInvert	boolean_+
DepthBasedCorrMaskRangeLumFeather	real_+
DepthBasedCorrMaskRangeLuminanceDepthSampleInfo	string_+
DepthBasedCorrMaskRangeLumMax	real_+
DepthBasedCorrMaskRangeLumMin	real_+
DepthBasedCorrMaskRangeLumRange	string_+
DepthBasedCorrMaskRangeSampleType	integer_+
DepthBasedCorrMaskRangeType	string_+
DepthBasedCorrMaskRangeVersion	string_+
DepthBasedCorrMaskDabs	string_+
DepthBasedCorrMaskFeather	real_
DepthBasedCorrMaskFlipped	boolean_
DepthBasedCorrMaskFlow	real_
DepthBasedCorrMaskFullX	real_
DepthBasedCorrMaskFullyY	real_
DepthBasedCorrMaskInputDigest	string_
DepthBasedCorrMaskLeft	real_
DepthBasedCorrMaskMaskActive	boolean_
DepthBasedCorrMaskMaskBlendMode	integer_
DepthBasedCorrMaskMaskDigest	string_
DepthBasedCorrMaskMaskInverted	boolean_
DepthBasedCorrMaskMaskName	string_
DepthBasedCorrMaskMasks	CorrectionMask Struct_+
DepthBasedCorrMaskMasksAlpha	real_
DepthBasedCorrMaskMasksAngle	real_
DepthBasedCorrMaskMasksBottom	real_
DepthBasedCorrMaskMasksCenterValue	real_
DepthBasedCorrMaskMasksCenterWeight	real_
DepthBasedCorrMaskMasksDabs	string_+
DepthBasedCorrMaskMasksFeather	real_
DepthBasedCorrMaskMasksFlipped	boolean_
DepthBasedCorrMaskMasksFlow	real_
DepthBasedCorrMaskMasksFullX	real_
DepthBasedCorrMaskMasksFullyY	real_
DepthBasedCorrMaskMasksInputDigest	string_
DepthBasedCorrMaskMasksLeft	real_
DepthBasedCorrMaskMasksMaskActive	boolean_
DepthBasedCorrMaskMasksMaskBlendMode	integer_
DepthBasedCorrMaskMasksMaskDigest	string_
DepthBasedCorrMaskMasksMaskInverted	boolean_
DepthBasedCorrMaskMasksMaskName	string_
DepthBasedCorrMaskMasksMaskSubType	string_
DepthBasedCorrMaskMasksMaskSyncID	string_
DepthBasedCorrMaskMasksValue	real_
DepthBasedCorrMaskMasksMaskVersion	string_
DepthBasedCorrMaskMasksMidpoint	real_
DepthBasedCorrMaskMasksOrigin	string_
DepthBasedCorrMaskMasksPerimeterValue	real_
DepthBasedCorrMaskMasksRadius	real_
DepthBasedCorrMaskMasksReferencePoint	string_
DepthBasedCorrMaskMasksRight	real_
DepthBasedCorrMaskMasksRoundness	real_
DepthBasedCorrMaskMasksSizeX	real_
DepthBasedCorrMaskMasksSizeY	real_
DepthBasedCorrMaskMasksTop	real_
DepthBasedCorrMaskMaskSubType	string_
DepthBasedCorrMaskMasksVersion	integer_
DepthBasedCorrMaskMasksWhat	string_
DepthBasedCorrMaskMasksWholeImageArea	string_
DepthBasedCorrMaskMasksX	real_
DepthBasedCorrMaskMasksY	real_
DepthBasedCorrMaskMaskSyncID	string_
DepthBasedCorrMaskMasksZeroX	real_
DepthBasedCorrMaskMasksZeroY	real_
DepthBasedCorrMaskValue	real_
DepthBasedCorrMaskMaskVersion	string_

DepthBasedCorrMaskMidpoint	real_
DepthBasedCorrMaskOrigin	string_
DepthBasedCorrMaskPerimeterValue	real_
DepthBasedCorrMaskRadius	real_
DepthBasedCorrMaskReferencePoint	string_
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DepthBasedCorrMaskRoundness	real_
DepthBasedCorrMaskSizeX	real_
DepthBasedCorrMaskSizeY	real_
DepthBasedCorrMaskTop	real_
DepthBasedCorrMaskVersion	integer_
DepthBasedCorrMaskWhat	string_
DepthBasedCorrMaskWholeImageArea	string_
DepthBasedCorrMaskX	real_
DepthBasedCorrMaskY	real_
DepthBasedCorrMaskZeroX	real_
DepthBasedCorrMaskZeroY	real_
DepthBasedCorrCorrectionSyncID	string_+
DepthBasedCorrLocalCorrectedDepth	real_+
DepthBasedCorrLocalCurveRefineSaturation	real_+
DepthBasedCorrWhat	string_+
DepthMapInfo	DepthMapInfo Struct
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	Correction Struct+
GradientBasedCorrActive	boolean_
GradientBasedCorrAmount	real_
GradientBasedCorrMasks	CorrectionMask Struct_+
GradientBasedCorrMaskAlpha	real_
GradientBasedCorrMaskAngle	real_
GradientBasedCorrMaskBottom	real_
GradientBasedCorrMaskCenterValue	real_
GradientBasedCorrMaskCenterWeight	real_
GradientBasedCorrMaskRange	CorrRangeMask Struct_+
GradientBasedCorrMaskRangeAreaModels	AreaModels Struct_+
GradientBasedCorrMaskRangeAreaModelsComponents	string_+
GradientBasedCorrMaskRangeAreaModelsColorSampleInfo	string_+
GradientBasedCorrMaskRangeColorAmount	real_+
GradientBasedCorrMaskRangeDepthFeather	real_+
GradientBasedCorrMaskRangeDepthMax	real_+
GradientBasedCorrMaskRangeDepthMin	real_+
GradientBasedCorrMaskRangeInvert	boolean_+
GradientBasedCorrMaskRangeLumFeather	real_+
GradientBasedCorrMaskRangeLuminanceDepthSampleInfo	string_+
GradientBasedCorrMaskRangeLumMax	real_+
GradientBasedCorrMaskRangeLumMin	real_+
GradientBasedCorrMaskRangeLumRange	string_+
GradientBasedCorrMaskRangeSampleType	integer_+
GradientBasedCorrMaskRangeType	string_+
GradientBasedCorrMaskRangeVersion	string_+
GradientBasedCorrMaskDabs	string_
GradientBasedCorrMaskFeather	real_
GradientBasedCorrMaskFlipped	boolean_
GradientBasedCorrMaskFlow	real_
GradientBasedCorrMaskFullX	real_
GradientBasedCorrMaskFullY	real_
GradientBasedCorrMaskInputDigest	string_

GradientBasedCorrMaskLeft	real_
GradientBasedCorrMaskMaskActive	boolean_
GradientBasedCorrMaskMaskBlendMode	integer_
GradientBasedCorrMaskMaskDigest	string_
GradientBasedCorrMaskMaskInverted	boolean_
GradientBasedCorrMaskMaskName	string_
GradientBasedCorrMaskMasks	CorrectionMask Struct_+
GradientBasedCorrMaskMasksAlpha	real_
GradientBasedCorrMaskMasksAngle	real_
GradientBasedCorrMaskMasksBottom	real_
GradientBasedCorrMaskMasksCenterValue	real_
GradientBasedCorrMaskMasksCenterWeight	real_
GradientBasedCorrMaskMasksDabs	string_+
GradientBasedCorrMaskMasksFeather	real_
GradientBasedCorrMaskMasksFlipped	boolean_
GradientBasedCorrMaskMasksFlow	real_
GradientBasedCorrMaskMasksFullX	real_
GradientBasedCorrMaskMasksFullyY	real_
GradientBasedCorrMaskMasksInputDigest	string_
GradientBasedCorrMaskMasksLeft	real_
GradientBasedCorrMaskMasksMaskActive	boolean_
GradientBasedCorrMaskMasksMaskBlendMode	integer_
GradientBasedCorrMaskMasksMaskDigest	string_
GradientBasedCorrMaskMasksMaskInverted	boolean_
GradientBasedCorrMaskMasksMaskName	string_
GradientBasedCorrMaskMasksMaskSubType	string_
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GradientBasedCorrMaskMasksValue	real_
GradientBasedCorrMaskMasksMaskVersion	string_
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GradientBasedCorrMaskMasksOrigin	string_
GradientBasedCorrMaskMasksPerimeterValue	real_
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GradientBasedCorrMaskMasksRoundness	real_
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GradientBasedCorrMaskMasksWholeImageArea	string_
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GradientBasedCorrMaskMasksY	real_
GradientBasedCorrMaskMaskSyncID	string_
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GradientBasedCorrMaskMasksZeroY	real_
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GradientBasedCorrMaskOrigin	string_
GradientBasedCorrMaskPerimeterValue	real_
GradientBasedCorrMaskRadius	real_
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GradientBasedCorrMaskRight	real_
GradientBasedCorrMaskRoundness	real_
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GradientBasedCorrMaskSizeY	real_
GradientBasedCorrMaskTop	real_
GradientBasedCorrMaskVersion	integer_
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GradientBasedCorrMaskWholeImageArea	string_
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GradientBasedCorrMaskY	real_
GradientBasedCorrMaskZeroX	real_
GradientBasedCorrMaskZeroY	real_
GradientBasedCorrCorrectionName	string_+
GradientBasedCorrRangeMask	CorrRangeMask Struct_+
GradientBasedCorrRangeMaskAreaModels	AreaModels Struct_+

GradientBasedCorrRangeMaskAreaModelsComponents	string_+
GradientBasedCorrRangeMaskAreaModelsColorSampleInfo	string_+
GradientBasedCorrRangeMaskColorAmount	real_+
GradientBasedCorrRangeMaskDepthFeather	real_+
GradientBasedCorrRangeMaskDepthMax	real_+
GradientBasedCorrRangeMaskDepthMin	real_+
GradientBasedCorrRangeMaskInvert	boolean_+
GradientBasedCorrRangeMaskLumFeather	real_+
GradientBasedCorrRangeMaskLuminanceDepthSampleInfo	string_+
GradientBasedCorrRangeMaskLumMax	real_+
GradientBasedCorrRangeMaskLumMin	real_+
GradientBasedCorrRangeMaskLumRange	string_+
GradientBasedCorrRangeMaskSampleType	integer_+
GradientBasedCorrRangeMaskType	string_+
GradientBasedCorrRangeMaskVersion	string_+
GradientBasedCorrCorrectionSyncID	string_+
GradientBasedCorrBlacks2012	real_
GradientBasedCorrBrightness	real_
GradientBasedCorrClarity	real_
GradientBasedCorrClarity2012	real_
GradientBasedCorrContrast	real_
GradientBasedCorrContrast2012	real_
GradientBasedCorrDefringe	real_
GradientBasedCorrDehaze	real_
GradientBasedCorrExposure	real_
GradientBasedCorrExposure2012	real_
GradientBasedCorrHighlights2012	real_
GradientBasedCorrHue	real_
GradientBasedCorrLuminanceNoise	real_
GradientBasedCorrMoire	real_
GradientBasedCorrSaturation	real_
GradientBasedCorrShadows2012	real_
GradientBasedCorrSharpness	real_
GradientBasedCorrTemperature	real_
GradientBasedCorrTexture	real_
GradientBasedCorrTint	real_
GradientBasedCorrToningHue	real_
GradientBasedCorrToningSaturation	real_
GradientBasedCorrWhites2012	real_
GradientBasedCorrWhat	string_
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	LensBlur Struct
LensBlurActive	boolean_
LensBlurAmount	real_
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	Look Struct
LookAmount	string_
LookCluster	string_
LookCopyright	string_
LookGroup	lang-alt_
LookName	string
LookParameters	LookParms Struct_
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	Correction Struct+
MaskGroupBasedCorrActive	boolean_
MaskGroupBasedCorrAmount	real_
MaskGroupBasedCorrMask	CorrectionMask Struct_+
MaskGroupBasedCorrMaskAlpha	real_
MaskGroupBasedCorrMaskAngle	real_
MaskGroupBasedCorrMaskBottom	real_
MaskGroupBasedCorrMaskCenterValue	real_
MaskGroupBasedCorrMaskCenterWeight	real_
MaskGroupBasedCorrMaskRange	CorrRangeMask Struct_+
MaskGroupBasedCorrMaskRangeAreaModels	AreaModels Struct_+
MaskGroupBasedCorrMaskRangeAreaModelsComponents	string_+
MaskGroupBasedCorrMaskRangeAreaModelsColorSampleInfo	string_+
MaskGroupBasedCorrMaskRangeColorAmount	real_+
MaskGroupBasedCorrMaskRangeDepthFeather	real_+
MaskGroupBasedCorrMaskRangeDepthMax	real_+
MaskGroupBasedCorrMaskRangeDepthMin	real_+
MaskGroupBasedCorrMaskRangeInvert	boolean_+
MaskGroupBasedCorrMaskRangeLumFeather	real_+
MaskGroupBasedCorrMaskRangeLuminanceDepthSampleInfo	string_+
MaskGroupBasedCorrMaskRangeLumMax	real_+
MaskGroupBasedCorrMaskRangeLumMin	real_+
MaskGroupBasedCorrMaskRangeLumRange	string_+
MaskGroupBasedCorrMaskRangeSampleType	integer_+
MaskGroupBasedCorrMaskRangeType	string_+
MaskGroupBasedCorrMaskRangeVersion	string_+
MaskGroupBasedCorrMaskDabs	string_+
MaskGroupBasedCorrMaskFeather	real_
MaskGroupBasedCorrMaskFlipped	boolean_
MaskGroupBasedCorrMaskFlow	real_
MaskGroupBasedCorrMaskFullX	real_
MaskGroupBasedCorrMaskFullyY	real_
MaskGroupBasedCorrMaskInputDigest	string_
MaskGroupBasedCorrMaskLeft	real_
MaskGroupBasedCorrMaskMaskActive	boolean_
MaskGroupBasedCorrMaskMaskBlendMode	integer_
MaskGroupBasedCorrMaskMaskDigest	string_
MaskGroupBasedCorrMaskMaskInverted	boolean_
MaskGroupBasedCorrMaskMaskName	string_
MaskGroupBasedCorrMaskMasks	CorrectionMask Struct_+
MaskGroupBasedCorrMaskMasksAlpha	real_
MaskGroupBasedCorrMaskMasksAngle	real_
MaskGroupBasedCorrMaskMasksBottom	real_
MaskGroupBasedCorrMaskMasksCenterValue	real_
MaskGroupBasedCorrMaskMasksCenterWeight	real_
MaskGroupBasedCorrMaskMasksDabs	string_+
MaskGroupBasedCorrMaskMasksFeather	real_
MaskGroupBasedCorrMaskMasksFlipped	boolean_
MaskGroupBasedCorrMaskMasksFlow	real_
MaskGroupBasedCorrMaskMasksFullX	real_
MaskGroupBasedCorrMaskMasksFullyY	real_
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MaskGroupBasedCorrMaskMasksMaskInverted	boolean_
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MaskGroupBasedCorrMaskMasksMidpoint	real_
MaskGroupBasedCorrMaskMasksOrigin	string_
MaskGroupBasedCorrMaskMasksPerimeterValue	real_
MaskGroupBasedCorrMaskMasksRadius	real_
MaskGroupBasedCorrMaskMasksReferencePoint	string_
MaskGroupBasedCorrMaskMasksRight	real_

MaskGroupBasedCorrMaskMasksRoundness	real_
MaskGroupBasedCorrMaskMasksSizeX	real_
MaskGroupBasedCorrMaskMasksSizeY	real_
MaskGroupBasedCorrMaskMasksTop	real_
MaskGroupBasedCorrMaskMaskSubType	string_
MaskGroupBasedCorrMaskMasksVersion	integer_
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MaskGroupBasedCorrMaskMasksWholeImageArea	string_
MaskGroupBasedCorrMaskMasksX	real_
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MaskGroupBasedCorrMaskMasksZeroY	real_
MaskGroupBasedCorrMaskValue	real_
MaskGroupBasedCorrMaskMaskVersion	string_
MaskGroupBasedCorrMaskMidpoint	real_
MaskGroupBasedCorrMaskOrigin	string_
MaskGroupBasedCorrMaskPerimeterValue	real_
MaskGroupBasedCorrMaskRadius	real_
MaskGroupBasedCorrMaskReferencePoint	string_
MaskGroupBasedCorrMaskRight	real_
MaskGroupBasedCorrMaskRoundness	real_
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MaskGroupBasedCorrMaskY	real_
MaskGroupBasedCorrMaskZeroX	real_
MaskGroupBasedCorrMaskZeroY	real_
MaskGroupBasedCorrCorrectionName	string_+
MaskGroupBasedCorrRangeMask	CorrRangeMask Struct_+
MaskGroupBasedCorrRangeMaskAreaModels	AreaModels Struct_+
MaskGroupBasedCorrRangeMaskAreaModelsComponents	string_+
MaskGroupBasedCorrRangeMaskAreaModelsColorSampleInfo	string_+
MaskGroupBasedCorrRangeMaskColorAmount	real_+
MaskGroupBasedCorrRangeMaskDepthFeather	real_+
MaskGroupBasedCorrRangeMaskDepthMax	real_+
MaskGroupBasedCorrRangeMaskDepthMin	real_+
MaskGroupBasedCorrRangeMaskInvert	boolean_+
MaskGroupBasedCorrRangeMaskLumFeather	real_+
MaskGroupBasedCorrRangeMaskLuminanceDepthSampleInfo	string_+
MaskGroupBasedCorrRangeMaskLumMax	real_+
MaskGroupBasedCorrRangeMaskLumMin	real_+
MaskGroupBasedCorrRangeMaskLumRange	string_+
MaskGroupBasedCorrRangeMaskSampleType	integer_+
MaskGroupBasedCorrRangeMaskType	string_+
MaskGroupBasedCorrRangeMaskVersion	string_+
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MaskGroupBasedCorrClarity	real_
MaskGroupBasedCorrClarity2012	real_
MaskGroupBasedCorrContrast	real_
MaskGroupBasedCorrContrast2012	real_
MaskGroupBasedCorrDefringe	real_
MaskGroupBasedCorrDehaze	real_
MaskGroupBasedCorrExposure	real_
MaskGroupBasedCorrExposure2012	real_
MaskGroupBasedCorrHighlights2012	real_
MaskGroupBasedCorrHue	real_
MaskGroupBasedCorrLuminanceNoise	real_
MaskGroupBasedCorrMoire	real_
MaskGroupBasedCorrSaturation	real_
MaskGroupBasedCorrShadows2012	real_
MaskGroupBasedCorrSharpness	real_
MaskGroupBasedCorrTemperature	real_
MaskGroupBasedCorrTexture	real_

MaskGroupBasedCorrTint	real_
MaskGroupBasedCorrToningHue	real_
MaskGroupBasedCorrToningSaturation	real_
MaskGroupBasedCorrWhites2012	real_
MaskGroupBasedCorrWhat	string_
MoireFilter	string
Name	lang-alt/
NegativeCacheLargePreviewSize	integer
NegativeCacheMaximumSize	real
NegativeCachePath	string
OverrideLookVignette	boolean
PaintBasedCorrections	Correction Struct_+
PaintCorrectionActive	boolean_
PaintCorrectionAmount	real_
PaintBasedCorrectionMasks	CorrectionMask Struct_+
PaintCorrectionMaskAlpha	real_
PaintCorrectionMaskAngle	real_
PaintCorrectionMaskBottom	real_
PaintCorrectionMaskCenterValue	real_
PaintCorrectionMaskCenterWeight	real_
PaintCorrectionMaskRange	CorrRangeMask Struct_+
PaintCorrectionMaskRangeAreaModels	AreaModels Struct_+
PaintCorrectionMaskRangeAreaModelsComponents	string_+
PaintCorrectionMaskRangeAreaModelsColorSampleInfo	string_+
PaintCorrectionMaskRangeColorAmount	real_+
PaintCorrectionMaskRangeDepthFeather	real_+
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PaintCorrectionMaskRangeDepthMin	real_+
PaintCorrectionMaskRangeInvert	boolean_+
PaintCorrectionMaskRangeLumFeather	real_+
PaintCorrectionMaskRangeLuminanceDepthSampleInfo	string_+
PaintCorrectionMaskRangeLumMax	real_+
PaintCorrectionMaskRangeLumMin	real_+
PaintCorrectionMaskRangeLumRange	string_+
PaintCorrectionMaskRangeSampleType	integer_+
PaintCorrectionMaskRangeType	string_+
PaintCorrectionMaskRangeVersion	string_+
PaintCorrectionMaskDabs	string_
PaintCorrectionMaskFeather	real_
PaintCorrectionMaskFlipped	boolean_
PaintCorrectionMaskFlow	real_
PaintCorrectionMaskFullX	real_
PaintCorrectionMaskFullyY	real_
PaintCorrectionMaskInputDigest	string_
PaintCorrectionMaskLeft	real_
PaintCorrectionMaskMaskActive	boolean_
PaintCorrectionMaskMaskBlendMode	integer_
PaintCorrectionMaskMaskDigest	string_
PaintCorrectionMaskMaskInverted	boolean_
PaintCorrectionMaskMaskName	string_
PaintCorrectionMaskMasks	CorrectionMask Struct_+
PaintCorrectionMaskMasksAlpha	real_
PaintCorrectionMaskMasksAngle	real_
PaintCorrectionMaskMasksBottom	real_
PaintCorrectionMaskMasksCenterValue	real_
PaintCorrectionMaskMasksCenterWeight	real_
PaintCorrectionMaskMasksDabs	string_+
PaintCorrectionMaskMasksFeather	real_
PaintCorrectionMaskMasksFlipped	boolean_
PaintCorrectionMaskMasksFlow	real_
PaintCorrectionMaskMasksFullX	real_
PaintCorrectionMaskMasksFullyY	real_
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PaintCorrectionMaskMasksMaskBlendMode	integer_
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PaintCorrectionMaskMasksMaskSubType	string_

PaintCorrectionMaskMasksMaskSyncID	string_
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PaintCorrectionMaskMasksMaskVersion	string_
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PaintCorrectionMaskMasksReferencePoint	string_
PaintCorrectionMaskMasksRight	real_
PaintCorrectionMaskMasksRoundness	real_
PaintCorrectionMaskMasksSizeX	real_
PaintCorrectionMaskMasksSizeY	real_
PaintCorrectionMaskMasksTop	real_
PaintCorrectionMaskMaskSubType	string_
PaintCorrectionMaskMasksVersion	integer_
PaintCorrectionMaskMasksWhat	string_
PaintCorrectionMaskMasksWholeImageArea	string_
PaintCorrectionMaskMasksX	real_
PaintCorrectionMaskMasksY	real_
PaintCorrectionMaskMaskSyncID	string_
PaintCorrectionMaskMasksZeroX	real_
PaintCorrectionMaskMasksZeroY	real_
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PaintCorrectionMaskSizeY	real_
PaintCorrectionMaskTop	real_
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PaintCorrectionMaskWhat	string_
PaintCorrectionMaskWholeImageArea	string_
PaintCorrectionMaskX	real_
PaintCorrectionMaskY	real_
PaintCorrectionMaskZeroX	real_
PaintCorrectionMaskZeroY	real_
PaintCorrectionCorrectionName	string_+
PaintCorrectionRangeMask	CorrRangeMask Struct_+
PaintCorrectionRangeMaskAreaModels	AreaModels Struct_+
PaintCorrectionRangeMaskAreaModelsComponents	string_+
PaintCorrectionRangeMaskAreaModelsColorSampleInfo	string_+
PaintCorrectionRangeMaskColorAmount	real_+
PaintCorrectionRangeMaskDepthFeather	real_+
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PaintCorrectionRangeMaskDepthMin	real_+
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PaintCorrectionRangeMaskLuminanceDepthSampleInfo	string_+
PaintCorrectionRangeMaskLumMax	real_+
PaintCorrectionRangeMaskLumMin	real_+
PaintCorrectionRangeMaskLumRange	string_+
PaintCorrectionRangeMaskSampleType	integer_+
PaintCorrectionRangeMaskType	string_+
PaintCorrectionRangeMaskVersion	string_+
PaintCorrectionCorrectionSyncID	string_+
PaintCorrectionBlacks2012	real_
PaintCorrectionBrightness	real_
PaintCorrectionClarity	real_
PaintCorrectionClarity2012	real_
PaintCorrectionContrast	real_
PaintCorrectionContrast2012	real_
PaintCorrectionDefringe	real_
PaintCorrectionDehaze	real_
PaintCorrectionExposure	real_
PaintCorrectionExposure2012	real_

PaintCorrectionHighlights2012	real_
PaintCorrectionHue	real_
PaintCorrectionLuminanceNoise	real_
PaintCorrectionMoire	real_
PaintCorrectionSaturation	real_
PaintCorrectionShadows2012	real_
PaintCorrectionSharpness	real_
PaintCorrectionTemperature	real_
PaintCorrectionTexture	real_
PaintCorrectionTint	real_
PaintCorrectionToningHue	real_
PaintCorrectionToningSaturation	real_
PaintCorrectionWhites2012	real_
PaintCorrectionWhat	string_
ParametricDarks	integer
ParametricHighlights	integer
ParametricHighlightSplit	integer
ParametricLights	integer
ParametricMidtoneSplit	integer
ParametricShadows	integer
ParametricShadowSplit	integer
PerspectiveAspect	integer
PerspectiveHorizontal	integer
PerspectiveRotate	real
PerspectiveScale	integer
PerspectiveUpright	integer
PerspectiveVertical	integer
PerspectiveX	real
PerspectiveY	real
PostCropVignetteAmount	integer
PostCropVignetteFeather	integer
PostCropVignetteHighlightContrast	integer
PostCropVignetteMidpoint	integer
PostCropVignetteRoundness	integer
PostCropVignetteStyle	integer
PresetType	string
ProcessVersion	string
RangeMask	RangeMask Struct
RangeMaskMapInfo	MapInfo Struct_
RangeMaskMapInfoLabMax	string_
RangeMaskMapInfoLabMin	string_
RangeMaskMapInfoLumEq	string_+
RangeMaskMapInfoRGBMax	string_
RangeMaskMapInfoRGBMin	string_
RawFileName	string
RedEyeInfo	string+
RedHue	integer
RedSaturation	integer
RetouchAreas	RetouchArea Struct+
RetouchAreaFeather	real_
RetouchAreaMasks	CorrectionMask Struct_+
RetouchAreaMaskAlpha	real_
RetouchAreaMaskAngle	real_
RetouchAreaMaskBottom	real_
RetouchAreaMaskCenterValue	real_
RetouchAreaMaskCenterWeight	real_
RetouchAreaMaskRange	CorrRangeMask Struct_+
RetouchAreaMaskRangeAreaModels	AreaModels Struct_+
RetouchAreaMaskRangeAreaModelsComponents	string_+
RetouchAreaMaskRangeAreaModelsColorSampleInfo	string_+
RetouchAreaMaskRangeColorAmount	real_+
RetouchAreaMaskRangeDepthFeather	real_+
RetouchAreaMaskRangeDepthMax	real_+
RetouchAreaMaskRangeDepthMin	real_+
RetouchAreaMaskRangeInvert	boolean_+
RetouchAreaMaskRangeLumFeather	real_+
RetouchAreaMaskRangeLuminanceDepthSampleInfo	string_+
RetouchAreaMaskRangeLumMax	real_+
RetouchAreaMaskRangeLumMin	real_+
RetouchAreaMaskRangeLumRange	string_+

RetouchAreaMaskRangeSampleType	integer_+
RetouchAreaMaskRangeType	string_+
RetouchAreaMaskRangeVersion	string_+
RetouchAreaMaskDabs	string_
RetouchAreaMaskFeather	real_
RetouchAreaMaskFlipped	boolean_
RetouchAreaMaskFlow	real_
RetouchAreaMaskFullX	real_
RetouchAreaMaskFullyY	real_
RetouchAreaMaskInputDigest	string_
RetouchAreaMaskLeft	real_
RetouchAreaMaskMaskActive	boolean_
RetouchAreaMaskMaskBlendMode	integer_
RetouchAreaMaskMaskDigest	string_
RetouchAreaMaskMaskInverted	boolean_
RetouchAreaMaskMaskName	string_
RetouchAreaMaskMasks	CorrectionMask Struct_+
RetouchAreaMaskMasksAlpha	real_
RetouchAreaMaskMasksAngle	real_
RetouchAreaMaskMasksBottom	real_
RetouchAreaMaskMasksCenterValue	real_
RetouchAreaMaskMasksCenterWeight	real_
RetouchAreaMaskMasksDabs	string_+
RetouchAreaMaskMasksFeather	real_
RetouchAreaMaskMasksFlipped	boolean_
RetouchAreaMaskMasksFlow	real_
RetouchAreaMaskMasksFullX	real_
RetouchAreaMaskMasksFullyY	real_
RetouchAreaMaskMasksInputDigest	string_
RetouchAreaMaskMasksLeft	real_
RetouchAreaMaskMasksMaskActive	boolean_
RetouchAreaMaskMasksMaskBlendMode	integer_
RetouchAreaMaskMasksMaskDigest	string_
RetouchAreaMaskMasksMaskInverted	boolean_
RetouchAreaMaskMasksMaskName	string_
RetouchAreaMaskMasksMaskSubType	string_
RetouchAreaMaskMasksMaskSyncID	string_
RetouchAreaMaskMasksValue	real_
RetouchAreaMaskMasksMaskVersion	string_
RetouchAreaMaskMasksMidpoint	real_
RetouchAreaMaskMasksOrigin	string_
RetouchAreaMaskMasksPerimeterValue	real_
RetouchAreaMaskMasksRadius	real_
RetouchAreaMaskMasksReferencePoint	string_
RetouchAreaMaskMasksRight	real_
RetouchAreaMaskMasksRoundness	real_
RetouchAreaMaskMasksSizeX	real_
RetouchAreaMaskMasksSizeY	real_
RetouchAreaMaskMasksTop	real_
RetouchAreaMaskMasksSubType	string_
RetouchAreaMaskMasksVersion	integer_
RetouchAreaMaskMasksWhat	string_
RetouchAreaMaskMasksWholeImageArea	string_
RetouchAreaMaskMasksX	real_
RetouchAreaMaskMasksY	real_
RetouchAreaMaskMaskSyncID	string_
RetouchAreaMaskMasksZeroX	real_
RetouchAreaMaskMasksZeroY	real_
RetouchAreaMaskValue	real_
RetouchAreaMaskMaskVersion	string_
RetouchAreaMaskMidpoint	real_
RetouchAreaMaskOrigin	string_
RetouchAreaMaskPerimeterValue	real_
RetouchAreaMaskRadius	real_
RetouchAreaMaskReferencePoint	string_
RetouchAreaMaskRight	real_
RetouchAreaMaskRoundness	real_
RetouchAreaMaskSizeX	real_
RetouchAreaMaskSizeY	real_
RetouchAreaMaskTop	real_

RetouchAreaMaskVersion	integer_
RetouchAreaMaskWhat	string_
RetouchAreaMaskWholeImageArea	string_
RetouchAreaMaskX	real_
RetouchAreaMaskY	real_
RetouchAreaMaskZeroX	real_
RetouchAreaMaskZeroY	real_
RetouchAreaMethod	string_
RetouchAreaOffsetY	real_
RetouchAreaOpacity	real_
RetouchAreaSeed	integer_
RetouchAreaSourceState	string_
RetouchAreaSourceX	real_
RetouchAreaSpotType	string_
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
SplitToningHighlightHue	integer
SplitToningHighlightSaturation	integer
SplitToningShadowHue	integer
SplitToningShadowSaturation	integer
SupportsAmount	boolean
SupportsColor	boolean
SupportsHighDynamicRange	boolean
SupportsMonochrome	boolean
SupportsNormalDynamicRange	boolean
SupportsOutputReferred	boolean
SupportsSceneReferred	boolean
ColorTemperature	integer
Texture	integer
TIFFHandling	string
Tint	integer
ToggleStyleAmount	integer
ToggleStyleDigest	string
ToneCurve	string+
ToneCurveBlue	string+
ToneCurveGreen	string+
ToneCurveName	string
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/
Whites2012	integer

XMP dc Tags

Dublin Core namespace tags.

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

Tag Name	Writable
-----	-----
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 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
-----	-----
AppInfo	AppInfo Struct
AppInfoApplication	string_
AppInfoItemURI	string_
AppInfoVersion	string_
Cameras	DeviceCameras Struct+
Camera	DeviceCamera Struct_+
CameraAppInfo	AppInfo Struct_+

CameraAppInfoApplication	string_+
CameraAppInfoItemURI	string_+
CameraAppInfoVersion	string_+
CameraDepthMap	DeviceDepthMap Struct_+
CameraDepthMapConfidenceURI	string_+
CameraDepthMapDepthURI	string_+
CameraDepthMapFar	real_+
CameraDepthMapFocalTable	string_+
CameraDepthMapFocalTableEntryCount	integer_+
CameraDepthMapFormat	string_+
CameraDepthMapItemSemantic	string_+
CameraDepthMapMeasureType	string_+
CameraDepthMapNear	real_+
CameraDepthMapSoftware	string_+
CameraDepthMapUnits	string_+
CameraImage	DeviceImage Struct_+
CameraImageItemSemantic	string_+
CameraImageItemURI	string_+
CameraImagingModel	DeviceImagingModel Struct_+
CameraImagingModelDistortion	string_+
CameraImagingModelDistortionCount	integer_+
CameraImagingModelFocalLengthX	real_+
CameraImagingModelFocalLengthY	real_+
CameraImagingModelImageHeight	integer_+
CameraImagingModelImageWidth	integer_+
CameraImagingModelPixelAspectRatio	real_+
CameraImagingModelPrincipalPointX	real_+
CameraImagingModelPrincipalPointY	real_+
CameraImagingModelSkew	real_+
CameraLightEstimate	DeviceLightEstimate Struct_+
CameraLightEstimateColorCorrectionB	real_+
CameraLightEstimateColorCorrectionG	real_+
CameraLightEstimateColorCorrectionR	real_+
CameraLightEstimatePixelIntensity	real_+
CameraPointCloud	DevicePointCloud Struct_+
CameraPointCloudMetric	boolean_+
CameraPointCloudPointCloud	integer_+
CameraPointCloudPoints	string_+
CameraPose	Pose Struct_+
CameraPosePositionX	real_+
CameraPosePositionY	real_+
CameraPosePositionZ	real_+
CameraPoseRotationW	real_+
CameraPoseRotationX	real_+
CameraPoseRotationY	real_+
CameraPoseRotationZ	real_+
CameraPoseTimestamp	integer_+
CameraTrait	string_+
CameraVendorInfo	VendorInfo Struct_+
CameraVendorInfoManufacturer	string_+
CameraVendorInfoModel	string_+
CameraVendorInfoNotes	string_+
Container	DeviceContainer Struct
ContainerDirectory	DeviceDirectory Struct_+
ContainerDirectoryItem	DeviceItem Struct_+
ContainerDirectoryItemDataURI	string_+
ContainerDirectoryItemLength	integer_+
ContainerDirectoryItemMimeType	string_+
ContainerDirectoryItemPadding	integer_+
EarthPos	EarthPose Struct
EarthPosAltitude	real_
EarthPosLatitude	real_
EarthPosLongitude	real_
EarthPosRotationW	real_
EarthPosRotationX	real_
EarthPosRotationY	real_
EarthPosRotationZ	real_
EarthPosTimestamp	integer_
Planes	DevicePlanes Struct_+
Plane	DevicePlane Struct_+

PlaneBoundary	string_+
PlaneBoundaryVertexCount	integer_+
PlaneExtentX	real_+
PlaneExtentZ	real_+
PlanePose	Pose Struct_+
PlanePosePositionX	real_+
PlanePosePositionY	real_+
PlanePosePositionZ	real_+
PlanePoseRotationW	real_+
PlanePoseRotationX	real_+
PlanePoseRotationY	real_+
PlanePoseRotationZ	real_+
PlanePoseTimestamp	integer_+
Pose	Pose Struct
PosePositionX	real_
PosePositionY	real_
PosePositionZ	real_
PoseRotationW	real_
PoseRotationX	real_
PoseRotationY	real_
PoseRotationZ	real_
PoseTimestamp	integer_
Profiles	DeviceProfiles Struct+
Profile	DeviceProfile Struct_+
ProfileCameraIndices	integer_+
ProfileType	string_+
VendorInfo	VendorInfo Struct
VendorInfoManufacturer	string_
VendorInfoModel	string_
VendorInfoNotes	string_

XMP AppInfo Struct

Field Name	Writable
-----	-----
Application	string
ItemURI	string
Version	string

XMP DeviceCameras Struct

Field Name	Writable
-----	-----
Camera	DeviceCamera Struct

XMP DeviceCamera Struct

Field Name	Writable
-----	-----
AppInfo	AppInfo Struct
DepthMap	DeviceDepthMap Struct
Image	DeviceImage Struct
ImagingModel	DeviceImagingModel Struct
LightEstimate	DeviceLightEstimate Struct
PointCloud	DevicePointCloud Struct
Pose	Pose Struct
Trait	string
VendorInfo	VendorInfo Struct

XMP DeviceDepthMap Struct

Field Name	Writable
-----	-----
ConfidenceURI	string
DepthURI	string
Far	real
FocalTable	string
FocalTableEntryCount	integer
Format	string
ItemSemantic	string

MeasureType	string
Near	real
Software	string
Units	string

XMP DeviceImage Struct

Field Name	Writable
-----	-----
ItemSemantic	string
ItemURI	string

XMP DeviceImagingModel Struct

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

XMP DeviceLightEstimate Struct

Field Name	Writable
-----	-----
ColorCorrectionB	real
ColorCorrectionG	real
ColorCorrectionR	real
PixelIntensity	real

XMP DevicePointCloud Struct

Field Name	Writable
-----	-----
Metric	boolean
PointCloud	integer
Points	string

XMP Pose Struct

Field Name	Writable
-----	-----
PositionX	real
PositionY	real
PositionZ	real
RotationW	real
RotationX	real
RotationY	real
RotationZ	real
Timestamp	integer

XMP VendorInfo Struct

Field Name	Writable
-----	-----
Manufacturer	string
Model	string
Notes	string

XMP DeviceContainer Struct

Field Name	Writable
-----	-----
Directory	DeviceDirectory Struct+

XMP DeviceDirectory Struct

Field Name	Writable
-----	-----
Item	DeviceItem Struct

XMP DeviceItem Struct

Field Name	Writable
-----	-----
DataURI	string
Length	integer
Mime	string
Padding	integer

XMP EarthPose Struct

Field Name	Writable
-----	-----
Altitude	real
Latitude	real
Longitude	real
RotationW	real
RotationX	real
RotationY	real
RotationZ	real
Timestamp	integer

XMP DevicePlanes Struct

Field Name	Writable
-----	-----
Plane	DevicePlane Struct

XMP DevicePlane Struct

Field Name	Writable
-----	-----
Boundary	string
BoundaryVertexCount	integer
ExtentX	real
ExtentZ	real
Pose	Pose Struct

XMP DeviceProfiles Struct

Field Name	Writable
-----	-----
Profile	DeviceProfile Struct

XMP DeviceProfile Struct

Field Name	Writable
-----	-----
CameraIndices	integer+
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
-----	-----
CRC32	integer

FFID	string
LicenseType	string
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
-----	-----
EquipmentInstitution	string
EquipmentManufacturer	string
PatientBirthDate	date
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
-----	-----
CaptionsAuthorNames	lang-alt
CaptionsDateTimeStamps	lang-alt
ColorLabel	string
ImageHistory	string/
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
-----	-----
OriginalImageHash	string
OriginalImageHashType	string
OriginalImageMD5	string

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>
for the specification.

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

Tag Name	Writable
-----	-----
ApertureValue	rational
BrightnessValue	rational
CFAPattern	CFAPattern Struct
CFAPatternColumns	integer_
CFAPatternRows	integer_
CFAPatternValues	integer_+
ColorSpace	integer
ComponentsConfiguration	integer+
CompressedBitsPerPixel	rational
Contrast	integer
CustomRendered	integer
DateTimeDigitized	date
DateTimeOriginal	date
DeviceSettingDescription	DeviceSettings Struct
DeviceSettingDescriptionColumns	integer_
DeviceSettingDescriptionRows	integer_
DeviceSettingDescriptionSettings	string_+
DigitalZoomRatio	rational
ExifVersion	string
ExposureCompensation	rational
ExposureIndex	rational
ExposureMode	integer
ExposureProgram	integer
ExposureTime	rational
FileSource	integer
Flash	Flash Struct
FlashEnergy	rational
FlashFired	boolean_
FlashFunction	boolean_
FlashMode	integer_
FlashpixVersion	string
FlashRedEyeMode	boolean_
FlashReturn	integer_
FNumber	rational
FocalLength	rational
FocalLengthIn35mmFormat	integer
FocalPlaneResolutionUnit	integer
FocalPlaneXResolution	rational
FocalPlaneYResolution	rational
GainControl	integer
GPSAltitude	rational
GPSAltitudeRef	integer
GPSAreaInformation	string
GPSTDestBearing	rational
GPSTDestBearingRef	string
GPSTDestDistance	rational
GPSTDestDistanceRef	string
GPSTDestLatitude	string
GPSTDestLongitude	string
GPSTDifferential	integer
GPSTDOP	rational
GPSTHorizontalPositioningError	rational
GPSTImgDirection	rational
GPSTImgDirectionRef	string
GPSTLatitude	string
GPSTLongitude	string
GPSTMapDatum	string
GPSTMeasureMode	integer
GPSTProcessingMethod	string
GPSTSatellites	string
GPSTSpeed	rational
GPSTSpeedRef	string
GPSTStatus	string
GPSTDateTime	date
GPSTTrack	rational
GPSTTrackRef	string
GPSTVersionID	string
ImageUniqueID	string

ISO	integer+
LightSource	string
MakerNote	string
MaxApertureValue	rational
MeteringMode	integer
NativeDigest	string
Opto-ElectricConvFactor	OECF Struct
OEFCColumns	integer_
OECFNames	string_+
OECFRows	integer_
OECFValues	rational_+
ExifImageWidth	integer
ExifImageHeight	integer
RelatedSoundFile	string
Saturation	integer
SceneCaptureType	integer
SceneType	integer
SensingMethod	integer
Sharpness	integer
ShutterSpeedValue	rational
SpatialFrequencyResponse	OECF Struct
SpatialFrequencyResponseColumns	integer_
SpatialFrequencyResponseNames	string_+
SpatialFrequencyResponseRows	integer_
SpatialFrequencyResponseValues	rational_+
SpectralSensitivity	string
SubjectArea	integer+
SubjectDistance	rational
SubjectDistanceRange	integer
SubjectLocation	integer+
UserComment	lang-alt
WhiteBalance	integer

XMP CFAPattern Struct

Field Name	Writable
-----	-----
Columns	integer
Rows	integer
Values	integer+

XMP DeviceSettings Struct

Field Name	Writable
-----	-----
Columns	integer
Rows	integer
Settings	string+

XMP Flash Struct

Field Name	Writable
-----	-----
Fired	boolean
Function	boolean
Mode	integer
RedEyeMode	boolean
Return	integer

XMP OECF Struct

Field Name	Writable
-----	-----
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).

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

Tag Name	Writable
-----	-----
Acceleration	rational
SerialNumber	string
CameraElevationAngle	rational
OwnerName	string
CompositeImage	integer
CompositeImageCount	integer+
CompositeImageExposureTimes	CompImageExp Struct
CompImageMaxExposureAll	rational_
CompImageMaxExposureUsed	rational_
CompImageMinExposureAll	rational_
CompImageMinExposureUsed	rational_
CompImageImagesPerSequence	integer_
CompImageNumSequences	integer_
CompImageSumExposureAll	rational_
CompImageSumExposureUsed	rational_
CompImageTotalExposurePeriod	rational_
CompImageValues	rational_+
Gamma	rational
Humidity	rational
InteropIndex	string
ISOSpeed	integer
ISOSpeedLatitudeyyy	integer
ISOSpeedLatitudezzz	integer
LensMake	string
LensModel	string
LensSerialNumber	string
LensInfo	rational+
PhotographicSensitivity	integer
Pressure	rational
RecommendedExposureIndex	integer
SensitivityType	integer
StandardOutputSensitivity	integer
AmbientTemperature	rational
WaterDepth	rational

XMP CompImageExp Struct

Field Name	Writable
-----	-----
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
-----	-----
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
-----	-----
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.fastpicturereviewer.com/help/#rtfcomments>>).

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

Tag Name	Writable
-----	-----
RichTextComment	string

XMP GAudio Tags

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

Tag Name	Writable
-----	-----
AudioData	string
AudioMimeType	string

XMP GCamera Tags

Camera information found in Google panorama images.

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

Tag Name	Writable
-----	-----
BurstID	string
BurstPrimary	string
DisableAutoCreation	string+
DisableSuggestedAction	string+
HDRPMakerNote	string
HdrPlusMakernote	string
MicroVideo	integer
MicroVideoOffset	integer
MicroVideoPresentationTimestampUs	integer
MicroVideoVersion	integer
MotionPhoto	integer
MotionPhotoPresentationTimestampUs	integer
MotionPhotoVersion	integer
PortraitNote	string
PortraitRequest	string
PortraitVersion	string
ShotLogData	string
SpecialTypeID	string+

XMP 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
-----	-----
ContainerDirectory	Directory Struct+
DirectoryItem	Item Struct_+
DirectoryItemLabel	string_+
DirectoryItemLength	integer_+
DirectoryItemMime	string_+
DirectoryItemPadding	integer_+
DirectoryItemSemantic	string_+
DirectoryItemURI	string_+

XMP Directory Struct

Field Name	Writable
-----	-----
Item	Item Struct

XMP Item Struct

Field Name	Writable
-----	-----
Label	string
Length	integer
Mime	string
Padding	integer
Semantic	string
URI	string

XMP GCreations Tags

Google creations tags.

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

Tag Name	Writable
-----	-----
CameraBurstID	string
Type	string/

XMP GDepth Tags

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

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

Tag Name	Writable
-----	-----
Confidence	string/
ConfidenceMime	string/
DepthImage	string/
Far	real/
Format	string/
ImageHeight	real/
ImageWidth	real/
Manufacturer	string/
MeasureType	string/
Mime	string/
Model	string/
Near	real/
Software	string/
Units	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
-----	-----
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 GFocus Tags

Focus information found in Google depthmap images.

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

Tag Name	Writable
-----	-----
BlurAtInfinity	real
FocalDistance	real
FocalPointX	real
FocalPointY	real

XMP GImage Tags

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

Tag Name	Writable
-----	-----
ImageData	string
ImageMimeType	string

XMP 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
-----	-----
CaptureSoftware	string
CroppedAreaImageHeightPixels	real
CroppedAreaImageWidthPixels	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

XMP 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
-----	-----
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/

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
-----	-----
CCVAvgLuminanceNits	real
CCVMaxLuminanceNits	real
CCVMinLuminanceNits	real
CCVPrimariesXY	string
CCVWhiteXY	string
SceneReferred	boolean

XMP hdrgm Tags

Tags used in Adobe gain map images.

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

Tag Name	Writable
-----	-----
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
-----	-----
AppVersion	string/
ImageRef	string
SubVersions	SubVersion Struct+
SubVersionFileName	string_+
SubVersionReference	string_+
TagStructure	TagStructure Struct+
LabelName1	string_+
ParentReference1	string_+
Reference1	string_+
SubLabels1	TagStructure Struct_+
LabelName2	string_+
ParentReference2	string_+
Reference2	string_+
SubLabels2	TagStructure Struct_+
LabelName3	string_+
ParentReference3	string_+
Reference3	string_+
SubLabels3	TagStructure Struct_+
LabelName4	string_+
ParentReference4	string_+
Reference4	string_+
SubLabels4	TagStructure Struct_+
LabelName5	string_+
ParentReference5	string_+
Reference5	string_+
SubLabels5	TagStructure Struct_+
LabelName6	string_+
ParentReference6	string_+
Reference6	string_+
TimeStamp	date/

XMP SubVersion Struct

Field Name	Writable
-----	-----
FileName	string
VersRef	string

XMP TagStructure Struct

Field Name	Writable
-----	-----
LabelName	string
ParentReference	string
Reference	string
SubLabels	TagStructure Struct+

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.iptc.org/IPTC4XMP/>>)

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

Tag Name	Writable
-----	-----
AltTextAccessibility	lang-alt
CountryCode	string
CreatorContactInfo	ContactInfo Struct
CreatorCity	string_
CreatorCountry	string_
CreatorAddress	string_
CreatorPostalCode	string_
CreatorRegion	string_
CreatorWorkEmail	string_
CreatorWorkTelephone	string_
CreatorWorkURL	string_
ExtDescrAccessibility	lang-alt
IntellectualGenre	string
Location	string
Scene	string+
SubjectCode	string+

XMP ContactInfo Struct

Field Name	Writable
-----	-----
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. The actual namespace prefix is "Iptc4xmpExt", but ExifTool shortens this for the family 1 group name. (See <<http://www.iptc.org/standards/photo-metadata/iptc-standard/>> and <<https://iptc.org/standards/video-metadata-hub/>>.)

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

Tag Name	Writable
-----	-----
AboutCvTerm	CVTermDetails Struct+
AboutCvTermCvId	string_+
AboutCvTermId	string_+
AboutCvTermName	lang-alt_+
AboutCvTermRefinedAbout	string_+
AdditionalModelInformation	string
ArtworkOrObject	ArtworkOrObjectDetails Struct+
ArtworkCircaDateCreated	string!_+
ArtworkContentDescription	lang-alt_+
ArtworkContributionDescription	lang-alt_+
ArtworkCopyrightNotice	string_+
ArtworkCreator	string_+
ArtworkCreatorID	string_+
ArtworkCopyrightOwnerID	string_+
ArtworkCopyrightOwnerName	string_+
ArtworkLicensorID	string_+
ArtworkLicensorName	string_+
ArtworkDateCreated	date_+
ArtworkPhysicalDescription	lang-alt_+

ArtworkSource	string_+
ArtworkSourceInventoryNo	string_+
ArtworkSourceInvURL	string_+
ArtworkStylePeriod	string_+
ArtworkTitle	lang-alt_+
AudioBitrate	integer
AudioBitrateMode	string
AudioBitsPerSample	integer
AudioChannelCount	integer
CircaDateCreated	string
ContainerFormat	Entity Struct
ContainerFormatIdentifier	string_+
ContainerFormatName	lang-alt_+
Contributor	EntityWithRole Struct+
ContributorIdentifier	string_+
ContributorName	lang-alt_+
ContributorRole	string_+
CopyrightYear	integer
Creator	EntityWithRole Struct+
CreatorIdentifier	string_+
CreatorName	lang-alt_+
CreatorRole	string_+
ControlledVocabularyTerm	string+
DataOnScreen	TextRegion Struct+
DataOnScreenRegion	Area Struct_+
DataOnScreenRegionD	real_+
DataOnScreenRegionH	real_+
DataOnScreenRegionText	string_+
DataOnScreenRegionUnit	string_+
DataOnScreenRegionW	real_+
DataOnScreenRegionX	real_+
DataOnScreenRegionY	real_+
DigitalImageGUID	string
DigitalSourceFileType	string
DigitalSourceType	string
Dopesheet	lang-alt
DopesheetLink	QualifiedLink Struct+
DopesheetLinkLink	string_+
DopesheetLinkLinkQualifier	string_+
EmbdEncRightsExpr	EEREDetails Struct+
EmbeddedEncodedRightsExpr	string_+
EmbeddedEncodedRightsExprType	string_+
EmbeddedEncodedRightsExprLangID	string_+
Episode	EpisodeOrSeason Struct
EpisodeIdentifier	string_
EpisodeName	string_
EpisodeNumber	string_
Event	lang-alt
ShownEvent	Entity Struct+
ShownEventIdentifier	string_+
ShownEventName	lang-alt_+
EventID	string+
ExternalMetadataLink	string+
FeedIdentifier	string
Genre	CVTermDetails Struct+
GenreCvId	string_+
GenreCvTermId	string_+
GenreCvTermName	lang-alt_+
GenreCvTermRefinedAbout	string_+
Headline	lang-alt/
ImageRegion	ImageRegion Struct+
ImageRegionName	lang-alt_+
ImageRegionCtype	Entity Struct_+
ImageRegionCtypeIdentifier	string_+
ImageRegionCtypeName	lang-alt_+
ImageRegionBoundary	RegionBoundary Struct_+
ImageRegionBoundaryH	real_+
ImageRegionBoundaryRx	real_+
ImageRegionBoundaryShape	string_+
ImageRegionBoundaryUnit	string_+

ImageRegionBoundaryVertices	BoundaryPoint Struct_+
ImageRegionBoundaryVerticesX	real_+
ImageRegionBoundaryVerticesY	real_+
ImageRegionBoundaryW	real_+
ImageRegionBoundaryX	real_+
ImageRegionBoundaryY	real_+
ImageRegionID	string_+
ImageRegionRole	Entity Struct_+
ImageRegionRoleIdentifier	string_+
ImageRegionRoleName	lang-alt_+
IPTCLastEdited	date
LinkedEncRightsExpr	LEREDetails Struct+
LinkedEncodedRightsExpr	string_+
LinkedEncodedRightsExprType	string_+
LinkedEncodedRightsExprLangID	string_+
LocationCreated	LocationDetails Struct+
LocationCreatedCity	string_+
LocationCreatedCountryCode	string_+
LocationCreatedCountryName	string_+
LocationCreatedGPSAltitude	rational_+
LocationCreatedGPSAltitudeRef	integer_+
LocationCreatedGPSLatitude	string_+
LocationCreatedGPSLongitude	string_+
LocationCreatedIdentifier	string_+
LocationCreatedLocationId	string_+
LocationCreatedLocationName	lang-alt_+
LocationCreatedProvinceState	string_+
LocationCreatedSublocation	string_+
LocationCreatedWorldRegion	string_+
LocationShown	LocationDetails Struct+
LocationShownCity	string_+
LocationShownCountryCode	string_+
LocationShownCountryName	string_+
LocationShownGPSAltitude	rational_+
LocationShownGPSAltitudeRef	integer_+
LocationShownGPSLatitude	string_+
LocationShownGPSLongitude	string_+
LocationShownIdentifier	string_+
LocationShownLocationId	string_+
LocationShownLocationName	lang-alt_+
LocationShownProvinceState	string_+
LocationShownSublocation	string_+
LocationShownWorldRegion	string_+
MaxAvailHeight	integer
MaxAvailWidth	integer
MetadataAuthority	Entity Struct
MetadataAuthorityIdentifier	string_+
MetadataAuthorityName	lang-alt_
MetadataLastEdited	date
MetadataLastEditor	Entity Struct
MetadataLastEditorIdentifier	string_+
MetadataLastEditorName	lang-alt_
ModelAge	integer+
OrganisationInImageCode	string+
OrganisationInImageName	string+
ParentID	string
PersonHeard	Entity Struct+
PersonHeardIdentifier	string_+
PersonHeardName	lang-alt_+
PersonInImage	string+
PersonInImageWDetails	PersonDetails Struct+
PersonInImageCharacteristic	CVTermDetails Struct_+
PersonInImageCvTermCvId	string_+
PersonInImageCvTermId	string_+
PersonInImageCvTermName	lang-alt_+
PersonInImageCvTermRefinedAbout	string_+
PersonInImageDescription	lang-alt_+
PersonInImageId	string_+
PersonInImageName	lang-alt_+
PlanningRef	EntityWithRole Struct+

PlanningRefIdentifier	string_+
PlanningRefName	lang-alt_+
PlanningRefRole	string_+
ProductInImage	ProductDetails Struct+
ProductInImageDescription	lang-alt_+
ProductInImageGTIN	string_+
ProductInImageProductId	string_+
ProductInImageName	lang-alt_+
PublicationEvent	PublicationEvent Struct+
PublicationEventDate	date_+
PublicationEventIdentifier	string_+
PublicationEventName	string_+
Rating	Rating Struct+
RatingRegion	LocationDetails Struct_+
RatingRegionCity	string_+
RatingRegionCountryCode	string_+
RatingRegionCountryName	string_+
RatingRegionGPSAltitude	rational_+
RatingRegionGPSAltitudeRef	integer_+
RatingRegionGPSLatitude	string_+
RatingRegionGPSLongitude	string_+
RatingRegionIdentifier	string_+
RatingRegionLocationId	string_+
RatingRegionLocationName	lang-alt_+
RatingRegionProvinceState	string_+
RatingRegionSublocation	string_+
RatingRegionWorldRegion	string_+
RatingScaleMaxValue	string_+
RatingScaleMinValue	string_+
RatingSourceLink	string_+
RatingValue	string_+
RatingValueLogoLink	string_+
RecDevice	Device Struct
RecDeviceAttLensDescription	string_
RecDeviceManufacturer	string_
RecDeviceModelName	string_
RecDeviceOwnersDeviceId	string_
RecDeviceSerialNumber	string_
RegistryID	RegistryEntryDetails Struct+
RegistryEntryRole	string_+
RegistryItemID	string_+
RegistryOrganisationID	string_+
ReleaseReady	boolean
Season	EpisodeOrSeason Struct
SeasonIdentifier	string_
SeasonName	string_
SeasonNumber	string_
Series	Series Struct
SeriesIdentifier	string_
SeriesName	string_
Snapshot	LinkedImage Struct+
SnapshotFormat	string_+
SnapshotHeightPixels	integer_+
SnapshotImageRole	string_+
SnapshotLink	string_+
SnapshotLinkQualifier	string_+
SnapshotUsedVideoFrame	Timecode Struct_+
SnapshotUsedVideoFrameTimeFormat	string_+
SnapshotUsedVideoFrameTimeValue	string_+
SnapshotUsedVideoFrameValue	integer_+
SnapshotWidthPixels	integer_+
StorylineIdentifier	string_+
StreamReady	string
StylePeriod	string
SupplyChainSource	Entity Struct+
SupplyChainSourceIdentifier	string_+
SupplyChainSourceName	lang-alt_+
TemporalCoverage	TemporalCoverage Struct
TemporalCoverageFrom	date_
TemporalCoverageTo	date_

Transcript	lang-alt
TranscriptLink	QualifiedLink Struct+
TranscriptLinkLink	string_+
TranscriptLinkLinkQualifier	string_+
VideoBitrate	integer
VideoBitrateMode	string
VideoDisplayAspectRatio	rational
VideoEncodingProfile	string
VideoShotType	Entity Struct+
VideoShotTypeIdentifier	string_+
VideoShotTypeName	lang-alt_+
VideoStreamsCount	integer
VisualColor	string
WorkflowTag	CVTermDetails Struct
WorkflowTagCvId	string_
WorkflowTagCvTermId	string_
WorkflowTagCvTermName	lang-alt_
WorkflowTagCvTermRefinedAbout	string_

XMP CVTermDetails Struct

Field Name	Writable
-----	-----
CvId	string
CvTermId	string
CvTermName	lang-alt
CvTermRefinedAbout	string

XMP ArtworkOrObjectDetails Struct

Field Name	Writable
-----	-----
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
-----	-----
Identifier	string+
Name	lang-alt

XMP EntityWithRole Struct

Field Name	Writable
-----	-----
Identifier	string+
Name	lang-alt
Role	string+

XMP TextRegion Struct

Field Name	Writable
-----	-----
Region	Area Struct

RegionText	string
------------	--------

XMP Area Struct

Field Name	Writable
-----	-----
D	real
H	real
Unit	string
W	real
X	real
Y	real

XMP QualifiedLink Struct

Field Name	Writable
-----	-----
Link	string
LinkQualifier	string

XMP EEREDetails Struct

Field Name	Writable
-----	-----
EncRightsExpr	string
RightsExprEncType	string
RightsExprLangId	string

XMP EpisodeOrSeason Struct

Field Name	Writable
-----	-----
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
-----	-----
Name	lang-alt
RegionBoundary	RegionBoundary Struct
RCTYPE	Entity Struct+
RId	string
RRole	Entity Struct+

XMP RegionBoundary Struct

Field Name	Writable
-----	-----
RbH	real
RbRx	real
RbShape	string
RbUnit	string
RbVertices	BoundaryPoint Struct+
RbW	real
RbX	real
RbY	real

XMP BoundaryPoint Struct

Field Name	Writable
-----	-----
RbX	real

RbY	real
-----	------

XMP LEREDetails Struct

Field Name	Writable
-----	-----
LinkedRightsExpr	string
RightsExprEncType	string
RightsExprLangId	string

XMP LocationDetails Struct

Field Name	Writable
-----	-----
City	string
CountryCode	string
CountryName	string
GPSAltitude	rational
GPSAltitudeRef	integer
GPSLatitude	string
GPSLongitude	string
Identifier	string+
LocationId	string+
LocationName	lang-alt
ProvinceState	string
Sublocation	string
WorldRegion	string

XMP PersonDetails Struct

Field Name	Writable
-----	-----
PersonCharacteristic	CVTermDetails Struct+
PersonDescription	lang-alt
PersonId	string+
PersonName	lang-alt

XMP ProductDetails Struct

Field Name	Writable
-----	-----
ProductDescription	lang-alt
ProductGTIN	string
ProductId	string
ProductName	lang-alt

XMP PublicationEvent Struct

Field Name	Writable
-----	-----
Date	date
Identifier	string
Name	string

XMP Rating Struct

Field Name	Writable
-----	-----
RatingRegion	LocationDetails Struct+
RatingScaleMaxValue	string
RatingScaleMinValue	string
RatingSourceLink	string
RatingValue	string
RatingValueLogoLink	string

XMP Device Struct

Field Name	Writable
-----	-----
AttLensDescription	string

Manufacturer	string
ModelName	string
OwnersDeviceId	string
SerialNumber	string

XMP RegistryEntryDetails Struct

Field Name	Writable
-----	-----
RegEntryRole	string
RegItemId	string
RegOrgId	string

XMP Series Struct

Field Name	Writable
-----	-----
Identifier	string
Name	string

XMP LinkedImage Struct

Field Name	Writable
-----	-----
HeightPixels	integer
ImageRole	string
Link	string
LinkQualifier	string+
UsedVideoFrame	Timecode Struct
WidthPixels	integer
Format	string

XMP Timecode Struct

Field Name	Writable
-----	-----
TimeFormat	string
TimeValue	string
Value	integer

XMP TemporalCoverage Struct

Field Name	Writable
-----	-----
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
-----	-----
MajorVersion	string
MinorVersion	string
RightAlbedo	string

XMP Lightroom Tags

Adobe Lightroom "lr" namespace tags.

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

Tag Name	Writable
-----	-----
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
-----	-----
CatalogSets	string+
Event	string/
Location	string/
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
-----	-----
Transformation	string
VirtualFocalLength	real
VirtualImageXCenter	real
VirtualImageYCenter	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
-----	-----
Author	string
Copyright	string/
CreationDate	date
Creator	string/
Keywords	string
Marked	boolean/
ModDate	date
PDFVersion	string
Producer	string
Subject	string/
Title	string/
Trapped	string

XMP pdfx Tags

PDF extension tags. This namespace is used to store application-defined PDF information, so there are no pre-defined tags. User-defined tags must be created to enable writing of XMP-pdfx information.

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

Tag Name	Writable
-----	-----
[no tags known]	

XMP photoshop Tags

Adobe Photoshop namespace tags.

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

Tag Name	Writable
-----	-----
AuthorsPosition	string
CameraProfiles	Camera Struct+
CameraProfilesApertureValue	real_+
CameraProfilesAuthor	string_+
CameraProfilesAutoScale	boolean_+
CameraProfilesCameraPrettyName	string_+
CameraProfilesCameraRawProfile	boolean_+
CameraProfilesFocalLength	real_+
CameraProfilesFocusDistance	real_+
CameraProfilesLens	string_+
CameraProfilesLensPrettyName	string_+
CameraProfilesMake	string_+
CameraProfilesModel	string_+
CameraProfilesPerspectiveModel	PerspectiveModel Struct_+
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
Country	string
Credit	string
DateCreated	date
DocumentAncestors	string+
EmbeddedXMPDigest	string
Headline	string
History	string
ICCPProfileName	string
Instructions	string
LegacyIPTCDigest	string
SidecarForExtension	string
Source	string
State	string
SupplementalCategories	string+
TextLayers	Layer Struct+
TextLayerName	string_+
TextLayerText	string_+
TransmissionReference	string
Urgency	integer

XMP Camera Struct

Field Name	Writable
-----	-----
ApertureValue	real
Author	string
AutoScale	boolean
CameraPrettyName	string
CameraRawProfile	boolean
FocalLength	real
FocusDistance	real
Lens	string
LensPrettyName	string
Make	string
Model	string
PerspectiveModel	PerspectiveModel Struct
ProfileName	string
SensorFormatFactor	real
UniqueCameraModel	string

XMP PerspectiveModel Struct

Field Name	Writable
-----	-----
ImageXCenter	real
ImageYCenter	real
RadialDistortParam1	real
RadialDistortParam2	real
RadialDistortParam3	real
ScaleFactor	real
Version	string

XMP Layer Struct

Field Name	Writable
-----	-----
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
-----	-----
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
-----	-----
Color	string/
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/
PositionDescriptor	string/
ProductID	string/
ProductIDType	string/
Season	string/

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
-----	-----
AcademicField	string/
AggregateIssueNumber	integer/
AggregationType	string/+
AlternateTitle	prismAlternateTitle Struct+
AlternateTitleA-lang	string/_+
AlternateTitleA-platform	string/_+
AlternateTitleText	string/_+
BlogTitle	string/
BlogURL	string/
BookEdition	string/
ByteCount	integer/
Channel	prismChannel Struct+
ChannelA-lang	string/_+
ChannelChannel	string/_+
ChannelSubchannel1	string/_+
ChannelSubchannel2	string/_+
ChannelSubchannel3	string/_+
ChannelSubchannel4	string/_+
ComplianceProfile	string/
ContentType	string/
CopyrightYear	string/
CorporateEntity	string/+
CoverDate	date/
CoverDisplayDate	string/
CreationDate	date/
DateRecieved	date/
Device	string/
Distributor	string/
DOI	string/
Edition	string/
EIssn	string/
EndingPage	string/
Event	string/+
Genre	string/+
HasAlternative	string/+
HasCorrection	prismHasCorrection Struct
HasCorrectionA-lang	string/_
HasCorrectionA-platform	string/_
HasCorrectionText	string/_
HasTranslation	string/+
Industry	string/+
IsAlternativeOf	string/+
ISBN	string/+
IsCorrectionOf	string/+
ISSN	string/
IssueIdentifier	string/
IssueName	string/
IssueTeaser	string/
IssueType	string/

IsTranslationOf	string/
Keyword	string/+
KillDate	prismKillDate Struct
KillDateA-platform	string/_
KillDateDate	date/_
Link	string/+
Location	string/+
ModificationDate	date/
NationalCatalogNumber	string/
Number	string/
Object	string/+
OffSaleDate	prismOffSaleDate Struct+
OffSaleDateA-platform	string/_+
OffSaleDateDate	date/_+
OnSaleDate	prismOnSaleDate Struct+
OnSaleDateA-platform	string/_+
OnSaleDateDate	date/_+
OnSaleDay	prismOnSaleDay Struct+
OnSaleDayA-platform	string/_+
OnSaleDayDay	string/_+
Organization	string/+
OriginPlatform	string/+
PageCount	integer/
PageProgressionDirection	string/
PageRange	string/+
Person	string/
Platform	string/
ProductCode	string/
Profession	string/
PublicationDate	prismPublicationDate Struct+
PublicationDateA-platform	string/_+
PublicationDateDate	date/_+
PublicationDisplayDate	prismPublicationDate Struct+
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	prismUrl Struct+
URLA-platform	string/_+
URLUrl	string/_+
UspsNumber	string/
VersionIdentifier	string/
Volume	string/
WordCount	integer/

XMP prismAlternateTitle Struct

Field Name	Writable
-----	-----
A-lang	string
A-platform	string

Text	string
------	--------

XMP prismChannel Struct

Field Name	Writable
-----	-----
A-lang	string
Channel	string
Subchannel1	string
Subchannel2	string
Subchannel3	string
Subchannel4	string

XMP prismHasCorrection Struct

Field Name	Writable
-----	-----
A-lang	string
A-platform	string
Text	string

XMP prismKillDate Struct

Field Name	Writable
-----	-----
A-platform	string
Date	date

XMP prismOffSaleDate Struct

Field Name	Writable
-----	-----
A-platform	string
Date	date

XMP prismOnSaleDate Struct

Field Name	Writable
-----	-----
A-platform	string
Date	date

XMP prismOnSaleDay Struct

Field Name	Writable
-----	-----
A-platform	string
Day	string

XMP prismPublicationDate Struct

Field Name	Writable
-----	-----
A-platform	string
Date	date

XMP prismUrl Struct

Field Name	Writable
-----	-----
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
-----	-----
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
-----	-----
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
-----	-----
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
-----	-----

About string!

XMP swf Tags

Adobe SWF namespace tags.

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

Tag Name	Writable
-----	-----
BackgroundAlpha	integer
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>
for the specification.

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

Tag Name	Writable
-----	-----
Artist	string
BitsPerSample	integer+
Compression	integer
Copyright	lang-alt
DateTime	date
ImageDescription	lang-alt
ImageHeight	integer
ImageWidth	integer
Make	string
Model	string
NativeDigest	string/
Orientation	integer
PhotometricInterpretation	integer
PlanarConfiguration	integer
PrimaryChromaticities	rational+
ReferenceBlackWhite	rational+
ResolutionUnit	integer
SamplesPerPixel	integer
Software	string
TransferFunction	integer+
WhitePoint	rational+
XResolution	rational
YCbCrCoefficients	rational+
YCbCrPositioning	integer
YCbCrSubSampling	integer+
YResolution	rational

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
-----	-----
XMPToolkit	string!

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
-----	-----
Advisory	string+
Author	string/
BaseURL	string
CreateDate	date
CreatorTool	string
Description	lang-alt/
Format	string/
Identifier	string/+
Keywords	string/
Label	string
MetadataDate	date
ModifyDate	date
Nickname	string
PageInfo	PageInfo Struct+
PageImageFormat	string_+
PageImageHeight	integer_+
PageImage	string_+
PageImagePageNumber	integer_+
PageImageWidth	integer_+
Rating	real
RatingPercent	real/
Thumbnails	Thumbnail Struct+
ThumbnailFormat	string_+
ThumbnailHeight	integer_+
ThumbnailImage	string/_+
ThumbnailWidth	integer_+
Title	lang-alt/

XMP PageInfo Struct

Field Name	Writable
-----	-----
PageNumber	integer
Format	string
Height	integer
Image	string
Width	integer

XMP Thumbnail Struct

Field Name	Writable
-----	-----
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
-----	-----
JobRef	JobRef Struct+
JobRefId	string_+
JobRefName	string_+
JobRefUrl	string_+

XMP JobRef Struct

Field Name	Writable
------------	----------

-----	-----
Id	string
Name	string
Url	string

XMP xmpDM Tags

XMP Dynamic Media namespace tags.

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

Tag Name	Writable
-----	-----
AbsPeakAudioFilePath	string
Album	string
AltTapeName	string
AltTimecode	Timecode Struct
AltTimecodeTimeFormat	string_
AltTimecodeTimeValue	string_
AltTimecodeValue	integer_
Artist	string/
AudioChannelType	string
AudioCompressor	string
AudioModDate	date
AudioSampleRate	integer
AudioSampleType	string
BeatSpliceParams	BeatSpliceStretch Struct
BeatSpliceParamsRiseInDecibel	real_
BeatSpliceParamsRiseInTimeDuration	Time Struct_
BeatSpliceParamsRiseInTimeDurationScale	rational_
BeatSpliceParamsRiseInTimeDurationValue	integer_
BeatSpliceParamsUseFileBeatsMarker	boolean_
CameraAngle	string
CameraLabel	string
CameraModel	string
CameraMove	string
Client	string
DMComment	string
Composer	string
ContributedMedia	Media Struct+
ContributedMediaDuration	Time Struct_+
ContributedMediaDurationScale	rational_+
ContributedMediaDurationValue	integer_+
ContributedMediaManaged	boolean_+
ContributedMediaPath	string_+
ContributedMediaStartTime	Time Struct_+
ContributedMediaStartTimeScale	rational_+
ContributedMediaStartTimeValue	integer_+
ContributedMediaTrack	string_+
ContributedMediaWebStatement	string_+
Copyright	string/
Director	string
DirectorPhotography	string
DiscNumber	string
Duration	Time Struct
DurationScale	rational_
DurationValue	integer_
Engineer	string
FileDataRate	rational
Genre	string
Good	boolean
Instrument	string
IntroTime	Time Struct
IntroTimeScale	rational_
IntroTimeValue	integer_
Key	string
LogComment	string
Loop	boolean
Lyrics	string
Markers	Marker Struct+

MarkersComment	string_+
MarkersCuePointParams	CuePointParam Struct_+
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	Time Struct
OutCueScale	rational_
OutCueValue	integer_
PartOfCompilation	boolean
Pick	integer
ProjectName	string
ProjectRef	ProjectLink Struct
ProjectRefPath	string_
ProjectRefType	string_
PullDown	string
RelativePeakAudioFilePath	string
RelativeTimestamp	Time Struct
RelativeTimestampScale	rational_
RelativeTimestampValue	integer_
ReleaseDate	date
ResampleParams	ResampleStretch Struct
ResampleParamsQuality	string_
ScaleType	string
Scene	string/
ShotDate	date
ShotDay	string
ShotLocation	string
ShotName	string
ShotNumber	string
ShotSize	string
SpeakerPlacement	string
StartTimecode	Timecode Struct
StartTimecodeTimeFormat	string_
StartTimecodeTimeValue	string_
StartTimecodeValue	integer_
StartTimeSampleSize	integer
StartTimeScale	string
StretchMode	string
TakeNumber	integer
TapeName	string
Tempo	real
TimeScaleParams	TimeScaleStretch Struct
TimeScaleParamsFrameOverlappingPercentage	real_
TimeScaleParamsFrameSize	real_
TimeScaleParamsQuality	string_
TimeSignature	string
TrackNumber	integer
Tracks	Track Struct+
TracksFrameRate	string_+
TracksMarkers	Marker Struct_+
TracksMarkersComment	string_+
TracksMarkersCuePointParams	CuePointParam Struct_+
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
VideoAlphaPremultipleColor	Colorant Struct
VideoAlphaPremultipleColorA	integer_
VideoAlphaPremultipleColorB	integer_
VideoAlphaPremultipleColorBlack	real_
VideoAlphaPremultipleColorBlue	integer_
VideoAlphaPremultipleColorCyan	real_
VideoAlphaPremultipleColorGray	integer_
VideoAlphaPremultipleColorGreen	integer_
VideoAlphaPremultipleColorL	real_
VideoAlphaPremultipleColorMagenta	real_
VideoAlphaPremultipleColorMode	string_
VideoAlphaPremultipleColorRed	integer_
VideoAlphaPremultipleColorSwatchName	string_
VideoAlphaPremultipleColorTint	integer_
VideoAlphaPremultipleColorType	string_
VideoAlphaPremultipleColorYellow	real_
VideoAlphaUnityIsTransparent	boolean
VideoColorSpace	string
VideoCompressor	string
VideoFieldOrder	string
VideoFrameRate	real
VideoFrameSize	Dimensions Struct
VideoFrameSizeH	real_
VideoFrameSizeUnit	string_
VideoFrameSizeW	real_
VideoModDate	date
VideoPixelAspectRatio	rational
VideoPixelDepth	string

XMP BeatSpliceStretch Struct

Field Name	Writable
-----	-----
RiseInDecibel	real
RiseInTimeDuration	Time Struct
UseFileBeatsMarker	boolean

XMP Time Struct

Field Name	Writable
-----	-----
Scale	rational
Value	integer

XMP Media Struct

Field Name	Writable
-----	-----
Duration	Time Struct
Managed	boolean
Path	string
StartTime	Time Struct
Track	string
WebStatement	string

XMP Marker Struct

Field Name	Writable
-----	-----
Comment	string
CuePointParams	CuePointParam Struct+
CuePointType	string
Duration	string
Location	string

Name	string
Probability	real
Speaker	string
StartTime	string
Target	string
Type	string

XMP CuePointParam Struct

Field Name	Writable
-----	-----
Key	string
Value	string

XMP ProjectLink Struct

Field Name	Writable
-----	-----
Path	string
Type	string

XMP ResampleStretch Struct

Field Name	Writable
-----	-----
Quality	string

XMP TimeScaleStretch Struct

Field Name	Writable
-----	-----
FrameOverlappingPercentage	real
FrameSize	real
Quality	string

XMP Track Struct

Field Name	Writable
-----	-----
FrameRate	string
Markers	Marker Struct+
TrackName	string
TrackType	string

XMP Colorant Struct

Field Name	Writable
-----	-----
A	integer
B	integer
L	real
Black	real
Blue	integer
Cyan	real
Gray	integer
Green	integer
Magenta	real
Mode	string
Red	integer
SwatchName	string
Tint	integer
Type	string
Yellow	real

XMP Dimensions Struct

Field Name	Writable
-----	-----
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
-----	-----
DerivedFrom	ResourceRef Struct
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_
DerivedFromOriginalDocumentID	string_
DerivedFromPartMapping	string_
DerivedFromPlacedResolutionUnit	string_
DerivedFromPlacedXResolution	string_
DerivedFromPlacedYResolution	string_
DerivedFromRenditionClass	string_
DerivedFromRenditionParams	string_
DerivedFromToPart	string_
DerivedFromVersionID	string_
DocumentID	string
History	ResourceEvent Struct+
HistoryAction	string_+
HistoryChanged	string_+
HistoryInstanceID	string_+
HistoryParameters	string_+
HistorySoftwareAgent	string_+
HistoryWhen	date_+
Ingredients	ResourceRef Struct+
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_+
IngredientsOriginalDocumentID	string_+
IngredientsPartMapping	string_+
IngredientsPlacedResolutionUnit	string_+
IngredientsPlacedXResolution	string_+
IngredientsPlacedYResolution	string_+
IngredientsRenditionClass	string_+
IngredientsRenditionParams	string_+
IngredientsToPart	string_+
IngredientsVersionID	string_+
InstanceID	string
LastURL	string
ManagedFrom	ResourceRef Struct
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_
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	ManifestItem Struct+
ManifestLinkForm	string_+
ManifestPlacedResolutionUnit	string_+
ManifestPlacedXResolution	real_+
ManifestPlacedYResolution	real_+
ManifestReference	ResourceRef Struct_+
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_+
ManifestReferenceOriginalDocumentID	string_+
ManifestReferencePartMapping	string_+
ManifestReferencePlacedResolutionUnit	string_+
ManifestReferencePlacedXResolution	string_+
ManifestReferencePlacedYResolution	string_+
ManifestReferenceRenditionClass	string_+
ManifestReferenceRenditionParams	string_+
ManifestReferenceToPart	string_+
ManifestReferenceVersionID	string_+
OriginalDocumentID	string
Pantry	PantryItem Struct+
PantryInstanceID	string_
PreservedFileName	string
RenditionClass	string
RenditionOf	ResourceRef Struct
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_
RenditionOfOriginalDocumentID	string_
RenditionOfPartMapping	string_
RenditionOfPlacedResolutionUnit	string_
RenditionOfPlacedXResolution	string_
RenditionOfPlacedYResolution	string_
RenditionOfRenditionClass	string_
RenditionOfRenditionParams	string_
RenditionOfToPart	string_
RenditionOfVersionID	string_
RenditionParams	string
SaveID	integer
Subject	string/+
VersionID	string
Versions	Version Struct+
VersionsComments	string_+
VersionsEvent	ResourceEvent Struct_+
VersionsEventAction	string_+
VersionsEventChanged	string_+
VersionsEventInstanceID	string_+
VersionsEventParameters	string_+
VersionsEventSoftwareAgent	string_+
VersionsEventWhen	date_+
VersionsModifier	string_+
VersionsModifyDate	date_+
VersionsVersion	string_+

XMP ResourceRef Struct

Field Name	Writable
-----	-----
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
OriginalDocumentID	string
PartMapping	string
PlacedResolutionUnit	string
PlacedXResolution	string
PlacedYResolution	string
RenditionClass	string
RenditionParams	string
ToPart	string
VersionID	string

XMP ResourceEvent Struct

Field Name	Writable
-----	-----
Action	string
Changed	string
InstanceID	string
Parameters	string
SoftwareAgent	string
When	date

XMP ManifestItem Struct

Field Name	Writable
-----	-----
LinkForm	string
PlacedResolutionUnit	string
PlacedXResolution	real
PlacedYResolution	real
Reference	ResourceRef Struct

XMP PantryItem Struct

This structure must have an InstanceID field, but may also contain any other XMP properties.

Field Name	Writable
-----	-----
InstanceID	string

XMP Version Struct

Field Name	Writable
-----	-----
Comments	string
Event	ResourceEvent Struct
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
-----	-----
HasExtendedXMP	string*

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
-----	-----
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
-----	-----
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
-----	-----
Colorants	Colorant Struct+
ColorantA	integer_+
ColorantB	integer_+
ColorantBlack	real_+
ColorantBlue	integer_+
ColorantCyan	real_+
ColorantGray	integer_+
ColorantGreen	integer_+
ColorantL	real_+
ColorantMagenta	real_+
ColorantMode	string_+
ColorantRed	integer_+
ColorantSwatchName	string_+
ColorantTint	integer_+
ColorantType	string_+
ColorantYellow	real_+
Fonts	Font Struct+
ChildFontFiles	string_+
FontComposite	boolean_+
FontFace	string_+
FontFamily	string_+
FontFileName	string_+
FontName	string_+
FontType	string_+
FontVersion	string_+
HasVisibleOverprint	boolean
HasVisibleTransparency	boolean
MaxPageSize	Dimensions Struct
MaxPageSizeH	real_
MaxPageSizeUnit	string_
MaxPageSizeW	real_
NPages	integer
PlateNames	string+
SwatchGroups	SwatchGroup Struct+
SwatchGroupsColorants	Colorant Struct_+
SwatchColorantA	integer_+
SwatchColorantB	integer_+
SwatchColorantBlack	real_+
SwatchColorantBlue	integer_+
SwatchColorantCyan	real_+
SwatchColorantGray	integer_+
SwatchColorantGreen	integer_+
SwatchColorantL	real_+
SwatchColorantMagenta	real_+
SwatchColorantMode	string_+
SwatchColorantRed	integer_+
SwatchColorantSwatchName	string_+
SwatchColorantTint	integer_+
SwatchColorantType	string_+
SwatchColorantYellow	real_+
SwatchGroupName	string_+
SwatchGroupType	integer_+

XMP Font Struct

Field Name	Writable
-----	-----
ChildFontFiles	string+
Composite	boolean
FontFace	string
FontFamily	string
FontFileName	string
FontName	string
FontType	string
VersionString	string

XMP SwatchGroup Struct

Field Name	Writable
-----	-----
Colorants	Colorant Struct+
GroupName	string
GroupType	integer

XMP XML Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'dc'	dc	XMP dc
'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
-----	-----	-----
'height'	ImageHeight	no
'id'	ID	no
'metadataId'	MetadataID	no
'version'	SVGVersion	no
'width'	ImageWidth	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, GPSTimeStamp, GPSTimeStampRef, and GPSTimeStampRef 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
-----	-----	-----
0x0000	GPSVersionID	int8u[4]:
0x0001	GPSLatitudeRef	string[2]
0x0002	GPSLatitude	rational64u[3]
0x0003	GPSTimeStampRef	string[2]
0x0004	GPSTimeStamp	rational64u[3]
0x0005	GPSTimeStampRef	int8u
0x0006	GPSTimeStamp	rational64u
0x0007	GPSTimeStamp	rational64u[3]
0x0008	GPSSatellites	string
0x0009	GPSStatus	string[2]
0x000a	GPSMeasureMode	string[2]
0x000b	GPSDOP	rational64u

0x000c	GPSSpeedRef	string[2]
0x000d	GPSSpeed	rational64u
0x000e	GPSTrackRef	string[2]
0x000f	GPSTrack	rational64u
0x0010	GPSImgDirectionRef	string[2]
0x0011	GPSImgDirection	rational64u
0x0012	GPSMapDatum	string
0x0013	GPSDestLatitudeRef	string[2]
0x0014	GPSDestLatitude	rational64u[3]
0x0015	GPSDestLongitudeRef	string[2]
0x0016	GPSDestLongitude	rational64u[3]
0x0017	GPSDestBearingRef	string[2]
0x0018	GPSDestBearing	rational64u
0x0019	GPSDestDistanceRef	string[2]
0x001a	GPSDestDistance	rational64u
0x001b	GPSProcessingMethod	undef
0x001c	GPSAreaInformation	undef
0x001d	GPSDateStamp	string[11]
0x001e	GPSDifferential	int16u
0x001f	GPSHPositioningError	rational64u

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 mass via the block tags GeoTiffDirectory, GeoTiffDoubleParams and GeoTiffAsciiParams.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	GeoTiffVersion	no
0x0400	GTModelType	no
0x0401	GTRasterType	no
0x0402	GTCitation	no
0x0800	GeographicType	no
0x0801	GeogCitation	no
0x0802	GeogGeodeticDatum	no
0x0803	GeogPrimeMeridian	no
0x0804	GeogLinearUnits	no
0x0805	GeogLinearUnitSize	no
0x0806	GeogAngularUnits	no
0x0807	GeogAngularUnitSize	no
0x0808	GeogEllipsoid	no
0x0809	GeogSemiMajorAxis	no
0x080a	GeogSemiMinorAxis	no
0x080b	GeogInvFlattening	no
0x080c	GeogAzimuthUnits	no
0x080d	GeogPrimeMeridianLong	no
0x080e	GeogToWGS84	no
0x0c00	ProjectedCSType	no
0x0c01	PCSCitation	no
0x0c02	Projection	no
0x0c03	ProjCoordTrans	no
0x0c04	ProjLinearUnits	no
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
0x1001	VerticalCitation	no
0x1002	VerticalDatum	no
0x1003	VerticalUnits	no
0xb799	ChartFormat	no
0xb79a	ChartSource	no
0xb79b	ChartSourceEdition	no
0xb79c	ChartSourceDate	no
0xb79d	ChartCorrDate	no
0xb79e	ChartCountryOrigin	no
0xb79f	ChartRasterEdition	no
0xb7a0	ChartSoundingDatum	no
0xb7a1	ChartDepthUnits	no
0xb7a2	ChartMagVar	no
0xb7a3	ChartMagVarYear	no
0xb7a4	ChartMagVarAnnChange	no
0xb7a5	ChartWGSNSShift	no
0xb7a7	InsetNWPixelX	no
0xb7a8	InsetNWPixelY	no
0xb7a9	ChartContourInterval	no

PLUS Tags

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
-----	-----
AdultContentWarning	string
CopyrightOwner	CopyrightOwner Struct+
CopyrightOwnerID	string_+
CopyrightOwnerName	string_+
CopyrightOwnerImageID	string
CopyrightRegistrationNumber	string
CopyrightStatus	string
CreditLineRequired	string
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
EndUser	EndUser Struct+
EndUserID	string_+
EndUserName	string_+
FileNameAsDelivered	string
FirstPublicationDate	date
ImageAlterationConstraints	string+

ImageCreator	ImageCreator Struct+
ImageCreatorID	string_+
ImageCreatorName	string_+
ImageCreatorImageID	string
ImageDuplicationConstraints	string
ImageFileConstraints	string+
ImageFileFormatAsDelivered	string
ImageFileSizeAsDelivered	string
ImageSupplier	ImageSupplier Struct+
ImageSupplierImageID	string
ImageSupplierID	string_+
ImageSupplierName	string_+
ImageType	string
Licensee	Licensee Struct+
LicenseeImageID	string
LicenseeImageNotes	lang-alt
LicenseeID	string_+
LicenseeName	string_+
LicenseEndDate	date
LicenseeProjectReference	string+
LicenseeTransactionID	string+
LicenseID	string
LicenseStartDate	date
LicenseTransactionDate	date
Licensor	Licensor Struct+
LicensorImageID	string
LicensorCity	string_+
LicensorCountry	string_+
LicensorEmail	string_+
LicensorExtendedAddress	string_+
LicensorID	string_+
LicensorName	string_+
LicensorPostalCode	string_+
LicensorRegion	string_+
LicensorStreetAddress	string_+
LicensorTelephone1	string_+
LicensorTelephone2	string_+
LicensorTelephoneType1	string_+
LicensorTelephoneType2	string_+
LicensorURL	string_+
LicensorNotes	lang-alt
LicensorTransactionID	string+
MediaConstraints	lang-alt
MediaSummaryCode	string
MinorModelAgeDisclosure	string
ModelReleaseID	string+
ModelReleaseStatus	string
OtherConditions	lang-alt
OtherConstraints	lang-alt
OtherImageInfo	lang-alt
OtherLicenseDocuments	string+
OtherLicenseInfo	lang-alt
OtherLicenseRequirements	lang-alt
ProductOrServiceConstraints	lang-alt
PropertyReleaseID	string+
PropertyReleaseStatus	string
RegionConstraints	lang-alt
Reuse	string
TermsAndConditionsText	lang-alt
TermsAndConditionsURL	string
PLUSVersion	string

XMP CopyrightOwner Struct

Field Name	Writable
-----	-----
CopyrightOwnerID	string
CopyrightOwnerName	string

XMP EndUser Struct

Field Name	Writable
-----	-----
EndUserID	string
EndUserName	string

XMP ImageCreator Struct

Field Name	Writable
-----	-----
ImageCreatorID	string
ImageCreatorName	string

XMP ImageSupplier Struct

Field Name	Writable
-----	-----
ImageSupplierID	string
ImageSupplierName	string

XMP Licensee Struct

Field Name	Writable
-----	-----
LicenseeID	string
LicenseeName	string

XMP Licensor Struct

Field Name	Writable
-----	-----
LicensorCity	string
LicensorCountry	string
LicensorEmail	string
LicensorExtendedAddress	string
LicensorID	string
LicensorName	string
LicensorPostalCode	string
LicensorRegion	string
LicensorStreetAddress	string
LicensorTelephone1	string
LicensorTelephone2	string
LicensorTelephoneType1	string
LicensorTelephoneType2	string
LicensorURL	string

Panasonic Tags

These tags are used in Panasonic/Leica cameras.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	ImageQuality	int16u
0x0002	FirmwareVersion	undef
0x0003	WhiteBalance	int16u
0x0007	FocusMode	int16u
0x000f	AFAreaMode	int8u[2]
0x001a	ImageStabilization	int16u
0x001c	MacroMode	int16u
0x001f	ShootingMode	int16u
0x0020	Audio	int16u
0x0021	DataDump	no
0x0023	WhiteBalanceBias	int16s
0x0024	FlashBias	int16s
0x0025	InternalSerialNumber	undef[16]
0x0026	PanasonicExifVersion	undef
0x0027	VideoFrameRate	int16u
0x0028	ColorEffect	int16u
0x0029	TimeSincePowerOn	int32u
0x002a	BurstMode	int16u
0x002b	SequenceNumber	int32u

0x002c	ContrastMode	int16u
0x002d	NoiseReduction	int16u
0x002e	SelfTimer	int16u
0x0030	Rotation	int16u
0x0031	AFAssistLamp	int16u
0x0032	ColorMode	int16u
0x0033	BabyAge	string
0x0034	OpticalZoomMode	int16u
0x0035	ConversionLens	int16u
0x0036	TravelDay	int16u
0x0038	BatteryLevel	int16u
0x0039	Contrast	int16u
0x003a	WorldTimeLocation	int16u
0x003b	TextStamp	int16u
0x003c	ProgramISO	int16u
0x003d	AdvancedSceneType	int16u
0x003e	TextStamp	int16u
0x003f	FacesDetected	int16u
0x0040	Saturation	int16u
0x0041	Sharpness	int16u
0x0042	FilmMode	int16u
0x0043	JPEGQuality	int16u
0x0044	ColorTempKelvin	int16u
0x0045	BracketSettings	int16u
0x0046	WBShiftAB	int16u
0x0047	WBShiftGM	int16u
0x0048	FlashCurtain	int16u
0x0049	LongExposureNoiseReduction	int16u
0x004b	PanasonicImageWidth	int32u
0x004c	PanasonicImageHeight	int32u
0x004d	AFPointPosition	rational64u[2]
0x004e	FaceDetInfo	Panasonic FaceDetInfo
0x0051	LensType	string
0x0052	LensSerialNumber	string
0x0053	AccessoryType	string
0x0054	AccessorySerialNumber	string
0x0059	Transform	undef[4]
0x005d	IntelligentExposure	int16u
0x0060	LensFirmwareVersion	undef[4]
0x0061	FaceRecInfo	Panasonic FaceRecInfo
0x0062	FlashWarning	int16u
0x0063	RecognizedFaceFlags?	undef[4]
0x0065	Title	undef
0x0066	BabyName	undef
0x0067	Location	undef
0x0069	Country	undef
0x006b	State	undef
0x006d	City	undef
0x006f	Landmark	undef
0x0070	IntelligentResolution	int8u
0x0076	MergedImages	int16u
0x0077	BurstSpeed	int16u
0x0079	IntelligentD-Range	int16u
0x007c	ClearRetouch	int16u
0x0080	City2	undef
0x0086	ManometerPressure	int16u
0x0089	PhotoStyle	int16u
0x008a	ShadingCompensation	int16u
0x008b	WBShiftIntelligentAuto	int16u
0x008c	AccelerometerZ	int16u
0x008d	AccelerometerX	int16u
0x008e	AccelerometerY	int16u
0x008f	CameraOrientation	int8u
0x0090	RollAngle	int16u
0x0091	PitchAngle	int16u
0x0092	WBShiftCreativeControl	int8u
0x0093	SweepPanoramaDirection	int8u
0x0094	SweepPanoramaFieldOfView	int16u
0x0096	TimerRecording	int8u
0x009d	InternalNDFilter	rational64u

0x009e	HDR	int16u
0x009f	ShutterType	int16u
0x00a1	FilterEffect	rational64u[0.5]
0x00a3	ClearRetouchValue	rational64u
0x00a7	OutputLUT	yes
0x00ab	TouchAE	int16u
0x00ac	MonochromeFilterEffect	int16u
0x00ad	HighlightShadow	int16u[2]
0x00af	TimeStamp	string
0x00b3	VideoBurstResolution	int16u
0x00b4	MultiExposure	int16u
0x00b9	RedEyeRemoval	int16u
0x00bb	VideoBurstMode	int32u
0x00bc	DiffractionCorrection	int16u
0x00bd	FocusBracket	int16u
0x00be	LongExposureNRUsed	int16u
0x00bf	PostFocusMerging	int32u[2]
0x00c1	VideoPreburst	int16u
0x00c4	LensTypeMake	int16u
0x00c5	LensTypeModel	int16u
0x00ca	SensorType	int16u
0x00d1	ISO	int32u
0x00d2	MonochromeGrainEffect	int16u
0x00d6	NoiseReductionStrength	rational64s
0x00e4	LensTypeModel	int16u
0x00e8	MinimumISO	int32u
0x00ee	DynamicRangeBoost	int16u
0x0e00	PrintIM	PrintIM
0x2003	TimeInfo	Panasonic TimeInfo
0x8000	MakerNoteVersion	undef
0x8001	SceneMode	int16u
0x8002	HighlightWarning	int16u
0x8003	DarkFocusEnvironment	int16u
0x8004	WBRedLevel	int16u
0x8005	WBGreenLevel	int16u
0x8006	WBBlueLevel	int16u
0x8008	TextStamp	int16u
0x8009	TextStamp	int16u
0x8010	BabyAge	string
0x8012	Transform	undef[4]

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
-----	-----
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
-----	-----	-----
0	NumFacePositions	int16u
1	Face1Position	int16u[4]
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
-----	-----	-----
0	FacesRecognized	int16u
4	RecognizedFace1Name	string[20]
24	RecognizedFace1Position	int16u[4]
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
-----	-----	-----
0	PanasonicDateTime	undef[8]
16	TimeLapseShotNumber	int32u

Panasonic Leica2 Tags

These tags are used by the Leica M8.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0300	Quality	int16u
0x0302	UserProfile	int32u
0x0303	SerialNumber	int32u
0x0304	WhiteBalance	int16u
0x0310	LensType	int32u
0x0311	ExternalSensorBrightnessValue	rational64s
0x0312	MeasuredLV	rational64s
0x0313	ApproximateFNumber	rational64u
0x0320	CameraTemperature	int32s
0x0321	ColorTemperature	int32u
0x0322	WBRedLevel	rational64u
0x0323	WBGreenLevel	rational64u
0x0324	WBBlueLevel	rational64u
0x0325	UV-IRFilterCorrection	int32u
0x0330	CCDVersion	int32u
0x0331	CCDBoardVersion	int32u
0x0332	ControllerBoardVersion	int32u
0x0333	M16CVersion	int32u
0x0340	ImageIDNumber	int32u

Panasonic Leica3 Tags

These tags are used by the Leica R8 and R9 digital backs.

Tag ID	Tag Name	Writable
-----	-----	-----
0x000b	SerialInfo	Panasonic SerialInfo
0x000d	WB_RGBLevels	int16u[3]

Panasonic SerialInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
4	SerialNumber	no

Panasonic Leica4 Tags

This information is written by the M9.

Tag ID	Tag Name	Writable
-----	-----	-----
0x3000	Subdir3000	Panasonic Subdir
0x3100	Subdir3100	Panasonic Subdir
0x3400	Subdir3400	Panasonic Subdir
0x3900	Subdir3900	Panasonic Subdir

Panasonic Subdir Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x300a	Contrast	int32u
0x300b	Sharpening	int32u
0x300d	Saturation	int32u
0x3033	WhiteBalance	int32u
0x3034	JPEGQuality	int32u
0x3036	WB_RGBLevels	rational64u[3]
0x3038	UserProfile	string
0x303a	JPEGSize	int32u
0x3103	SerialNumber	string
0x3109	FirmwareVersion	string
0x312a	BaseISO	int32u
0x312b	SensorWidth	int32u
0x312c	SensorHeight	int32u
0x312d	SensorBitDepth	int32u
0x3402	CameraTemperature	int32s
0x3405	LensType	int32u
0x3406	ApproximateFNumber	rational64u
0x3407	MeasuredLV	int32s
0x3408	ExternalSensorBrightnessValue	int32s
0x3901	Data1	Panasonic Data1
0x3902	Data2	Panasonic Data2

Panasonic Data1 Tags

Index1	Tag Name	Writable
-----	-----	-----
22	LensType	int32u

Panasonic Data2 Tags

Index1	Tag Name	Writable
-----	-----	-----
[no tags known]		

Panasonic Leica5 Tags

This information is written by the X1, X2, X VARIO and T.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0303	LensType	string
0x0305	SerialNumber	int32u
0x0407	OriginalFileName	string
0x0408	OriginalDirectory	string
0x040a	FocusInfo	Panasonic FocusInfo
0x040d	ExposureMode	int8u[4]
0x0410	ShotInfo	Panasonic ShotInfo
0x0412	FilmMode	string
0x0413	WB_RGBLevels	rational64u[3]
0x0500	InternalSerialNumber	undef
0x05ff	CameraIFD	PanasonicRaw CameraIFD

Panasonic FocusInfo Tags

Index2	Tag Name	Writable
--------	----------	----------

-----	-----	-----
0	FocusDistance	int16u
1	FocalLength	int16u

Panasonic ShotInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0x0300	PreviewImage	undef
0x0301	UnknownBlock?	no
0x0303	LensType	string
0x0304	FocusDistance	int32u
0x0311	ExternalSensorBrightnessValue	rational64s
0x0312	MeasuredLV	rational64s
0x0320	FirmwareVersion	int8u[4]
0x0321	LensSerialNumber	int32u

Panasonic Leica9 Tags

This information is written by the Leica S (Typ 007) and M10 models.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0304	FocusDistance	int32u
0x0311	ExternalSensorBrightnessValue	rational64s
0x0312	MeasuredLV	rational64s
0x034c	UserProfile	string
0x0359	ISOSelected	int32s
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
-----	-----	-----
0	MakerNoteType	no
3	Gain	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
-----	-----	-----
0	Make	no
4	Model	no
12	Model	no
16	JPEG-likeData	EXIF
22	Model	no
52	Version1	no
62	Version2	no
80	MakerNoteLeica5	Panasonic Leica5
88	ThumbnailWidth	no

90	ThumbnailHeight	no
92	ThumbnailImage	no
1334	ThumbnailWidth	no
1338	ThumbnailHeight	no
1342	ThumbnailLength	no
1350	ThumbnailImage	no
1358	ThumbnailWidth	no
1362	ThumbnailHeight	no
1366	ThumbnailLength	no
1374	ThumbnailImage	no
16488	ExifData	EXIF
16512	ExifData	EXIF
0x00200080	ExifData	EXIF

Pentax Tags

These tags are used in Pentax/Asahi cameras.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	PentaxVersion	int8u[4]
0x0001	PentaxModelType	int16u
0x0002	PreviewImageSize	int16u[2]
0x0003	PreviewImageLength	int32u*
0x0004	PreviewImageStart	int32u*
0x0005	PentaxModelID	int32u
0x0006	Date	undef[4]
0x0007	Time	undef[3]
0x0008	Quality	int16u
0x0009	PentaxImageSize	int16u
0x000b	PictureMode	int16u[n]
0x000c	FlashMode	int16u[n]
0x000d	FocusMode	int16u
0x000e	AFPointSelected	int16u
0x000f	AFPointsInFocus	int32u
	AFPointsInFocus	int16u
0x0010	FocusPosition	int16u
0x0012	ExposureTime	int32u
0x0013	FNumber	int16u
0x0014	ISO	int16u
0x0015	LightReading	int16u
0x0016	ExposureCompensation	int16u
	ExposureCompensation	int16u[2]
0x0017	MeteringMode	int16u
0x0018	AutoBracketing	int16u[n]
0x0019	WhiteBalance	int16u
0x001a	WhiteBalanceMode	int16u
0x001b	BlueBalance	int16u
0x001c	RedBalance	int16u
0x001d	FocalLength	int32u
0x001e	DigitalZoom	int16u
0x001f	Saturation	int16u[n]
0x0020	Contrast	int16u[n]
0x0021	Sharpness	int16u[n]
0x0022	WorldTimeLocation	int16u
0x0023	HometownCity	int16u
0x0024	DestinationCity	int16u
0x0025	HometownDST	int16u
0x0026	DestinationDST	int16u
0x0027	DSPFirmwareVersion	undef
0x0028	CPUFirmwareVersion	undef
0x0029	FrameNumber	int32u
0x002d	EffectiveLV	int16u
	EffectiveLV	int32u
0x0032	ImageEditing	undef[4]
0x0033	PictureMode	int8u[3]
0x0034	DriveMode	int8u[4]
0x0035	SensorSize	int16u[2]
0x0037	ColorSpace	int16u
0x0038	ImageAreaOffset	int16u[2]
0x0039	RawImageSize	int16u[2]½

0x003c	AFPointsInFocus	no
0x003d	DataScaling	int16u
0x003e	PreviewImageBorders	int8u[4]
0x003f	LensRec	Pentax LensRec
0x0040	SensitivityAdjust	int16u
0x0041	ImageEditCount	int16u
0x0047	CameraTemperature	int8s
0x0048	AELock	int16u
0x0049	NoiseReduction	int16u
0x004d	FlashExposureComp	int32s
	FlashExposureComp	int8s[2]
0x004f	ImageTone	int16u
0x0050	ColorTemperature	int16u
0x0053	ColorTempDaylight	undef[4]
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	Pentax SRInfo
		Pentax SRInfo2
0x005d	ShutterCount	undef[4]
0x0060	FaceInfo	Pentax FaceInfo
0x0062	RawDevelopmentProcess	int16u
0x0067	Hue	int16u
0x0068	AWBInfo	Pentax AWBInfo
0x0069	DynamicRangeExpansion	undef[4]
0x006b	TimeInfo	Pentax TimeInfo
0x006c	HighLowKeyAdj	int16s[2]
0x006d	ContrastHighlight	int16s[2]
0x006e	ContrastShadow	int16s[2]
0x006f	ContrastHighlightShadowAdj	int8u
0x0070	FineSharpness	int8u[n]
0x0071	HighISONoiseReduction	int8u
0x0072	AFAdjustment	int16s
0x0073	MonochromeFilterEffect	int16u
0x0074	MonochromeToning	int16u
0x0076	FaceDetect	int8u[2]
0x0077	FaceDetectFrameSize	int16u[2]
0x0079	ShadowCorrection	int8u[n]
0x007a	ISOAutoMinSpeed	int8u[2]
0x007b	CrossProcess	int8u
0x007d	LensCorr	Pentax LensCorr
0x007e	WhiteLevel	int32u
0x007f	BleachBypassToning	int16u
0x0080	AspectRatio	yes
0x0082	BlurControl	int8u[4]
0x0085	HDR	int8u[4]
0x0087	ShutterType	int8u
0x0088	NeutralDensityFilter	int8u[n]
0x008b	ISO	int32u
0x0092	IntervalShooting	int16u[2]
0x0095	SkinToneCorrection	int8s[2]
	SkinToneCorrection	int8s[3]
0x0096	ClarityControl	int8s[2]
0x0200	BlackPoint	int16u[4]
0x0201	WhitePoint	int16u[4]
0x0203	ColorMatrixA	int16s[9]
0x0204	ColorMatrixB	int16s[9]
0x0205	CameraSettings	Pentax CameraSettings
	CameraSettingsUnknown	Pentax CameraSettingsUnknown
0x0206	AEInfo	Pentax AEInfo
	AEInfo2	Pentax AEInfo2
	AEInfo3	Pentax AEInfo3
	AEInfoUnknown	Pentax AEInfoUnknown
0x0207	LensInfo	Pentax LensInfo
		Pentax LensInfo2
		Pentax LensInfo3

		Pentax LensInfo4
		Pentax LensInfo5
0x0208	FlashInfo	Pentax FlashInfo
	FlashInfoUnknown	Pentax FlashInfoUnknown
0x0209	AEMeteringSegments	int8u[n]
0x020a	FlashMeteringSegments	int8u[n]
0x020b	SlaveFlashMeteringSegments	int8u[n]
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	CameraInfo	Pentax CameraInfo
0x0216	BatteryInfo	Pentax BatteryInfo
0x021b	SaturationInfo?	no
0x021c	ColorMatrixA2	undef[18]
0x021d	ColorMatrixB2	undef[18]
0x021f	AFInfo	Pentax AFInfo
0x0220	HuffmanTable?	no
0x0221	KelvinWB	Pentax KelvinWB
0x0222	ColorInfo	Pentax ColorInfo
0x0224	EVStepInfo	Pentax EVStepInfo
0x0226	ShotInfo	Pentax ShotInfo
0x0227	FacePos	Pentax FacePos
0x0228	FaceSize	Pentax FaceSize
0x0229	SerialNumber	string
0x022a	FilterInfo	Pentax FilterInfo
		Pentax FilterInfo
0x022b	LevelInfoK3III	Pentax LevelInfoK3III
	LevelInfo	Pentax LevelInfo
0x022d	WBLevels	Pentax WBLevels
0x022e	Artist	string
0x022f	Copyright	string
0x0230	FirmwareVersion	string
0x0231	ContrastDetectAFArea	int16u[4]
0x0235	CrossProcessParams	undef[10]
0x0239	LensInfoQ	Pentax LensInfoQ
0x023f	Model	string
0x0243	PixelShiftInfo	Pentax PixelShiftInfo
0x0245	AFPointInfo	Pentax AFPointInfo
0x03fe	DataDump	no
0x03ff	TempInfo	Pentax TempInfo
	UnknownInfo	Pentax UnknownInfo
0x0402	ToneCurve	yes ² / ₂
0x0403	ToneCurves	yes ² / ₂
0x0405	UnknownBlock?	undef
0x0e00	PrintIM	PrintIM

Pentax LensRec Tags

This record stores the LensType, plus one or two unknown bytes for some models.

Index1	Tag Name	Writable
-----	-----	-----
0	LensType	int8u[2]
3	ExtenderStatus	int8u

Pentax SRInfo Tags

Shake reduction information.

Index1	Tag Name	Writable
-----	-----	-----
0	SRResult	int8u
1	ShakeReduction	int8u
2	SRHalfPressTime	int8u

3	SRFocalLength	int8u
---	---------------	-------

Pentax SRInfo2 Tags

Shake reduction information for the K-3.

Index1	Tag Name	Writable
-----	-----	-----
0	SRResult?	int8u
1	ShakeReduction	int8u

Pentax FaceInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FacesDetected	int8u
2	FacePosition	int8u[2]

Pentax AWBInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	WhiteBalanceAutoAdjustment	int8u
1	TungstenAWB	int8u

Pentax TimeInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0.1	WorldTimeLocation	int8u & 0x01
0.2	HometownDST	int8u & 0x02
0.3	DestinationDST	int8u & 0x04
2	HometownCity	int8u
3	DestinationCity	int8u

Pentax LensCorr Tags

Index1	Tag Name	Writable
-----	-----	-----
0	DistortionCorrection	int8u
1	ChromaticAberrationCorrection	int8u
2	PeripheralIlluminationCorr	int8u
3	DiffractionCorrection	int8u

Pentax CameraSettings Tags

Camera settings information written by Pentax DSLR cameras.

Index1	Tag Name	Writable
-----	-----	-----
0	PictureMode2	int8u
1.1	ProgramLine	int8u & 0x03
1.2	EVSteps	int8u & 0x20
1.3	E-DialInProgram	int8u & 0x40
1.4	ApertureRingUse	int8u & 0x80
2	FlashOptions	int8u & 0xf0
2.1	MeteringMode2	int8u & 0x0f
3	AFPointMode	int8u & 0xf0
3.1	FocusMode2	int8u & 0x0f
4	AFPointSelected2	int16u
6	ISOFloor	int8u
7	DriveMode2	int8u
8	ExposureBracketStepSize	int8u
9	BracketShotNumber	int8u
10	WhiteBalanceSet	int8u & 0xf0
10.1	MultipleExposureSet	int8u & 0x0f
13	RawAndJpgRecording	int8u
14.1	JpgRecordedPixels	int8u & 0x03
14.2	LinkAETToAFPoint	int8u & 0x01
14.3	SensitivitySteps	int8u & 0x02

14.4	ISOAuto	int8u & 0x04
16	FlashOptions2	int8u & 0xf0
16.1	MeteringMode3	int8u & 0x0f
17.1	SRActive	int8u & 0x80
17.2	Rotation	int8u & 0x60
17.3	ISOSetting	int8u & 0x04
17.4	SensitivitySteps	int8u & 0x02
18	TvExposureTimeSetting	int8u
19	AvApertureSetting	int8u
20	SvISOSetting	int8u
21	BaseExposureCompensation	int8u

Pentax CameraSettingsUnknown Tags

This information has not yet been decoded for models such as the K-01.

Index1	Tag Name	Writable
-----	-----	-----
	[no tags known]	

Pentax AEInfo Tags

Auto-exposure information for most Pentax models.

Index1	Tag Name	Writable
-----	-----	-----
0	AEEExposureTime	int8u
1	AEAperature	int8u
2	AE_ISO	int8u
3	AEXv	int8u
4	AEBXv	int8s
5	AEMinExposureTime	int8u
6	AEProgramMode	int8u
7	AEFlags	no
8	AEAperatureSteps	int8u
9	AEMaxAperture	int8u
10	AEMaxAperture2	int8u
11	AEMinAperture	int8u
12	AEMeteringMode	int8u
13	AEWhiteBalance	int8u & 0xf0
13.1	AEMeteringMode2	int8u & 0x0f
14	FlashExposureCompSet	int8s
21	LevelIndicator	int8u

Pentax AEInfo2 Tags

Auto-exposure information for the K-01.

Index1	Tag Name	Writable
-----	-----	-----
2	AEEExposureTime	int8u
3	AEAperature	int8u
4	AE_ISO	int8u
5	AEXv	int8u
6	AEBXv	int8s
8	AEEError	int8s
11	AEAperatureSteps	int8u
15	SceneMode	int8u
16	AEMaxAperture	int8u
17	AEMaxAperture2	int8u
18	AEMinAperture	int8u
19	AEMinExposureTime	int8u

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
-----	-----	-----

16	AEExposureTime	int8u
17	AEAperture	int8u
18	AE_ISO	int8u
28	AEMaxAperture	int8u
29	AEMaxAperture2	int8u
30	AEMinAperture	int8u
31	AEMinExposureTime	int8u

Pentax AEInfoUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
	[no tags known]	

Pentax LensInfo Tags

Pentax lens information structure for models such as the *istD.

Index1	Tag Name	Writable
-----	-----	-----
0	LensType	int8u[2]
3	LensData	Pentax LensData

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
-----	-----	-----
0.1	AutoAperture	int8u & 0x01
0.2	MinAperture	int8u & 0x06
0.3	LensFStops	int8u & 0x70
1	LensKind?	int8u
2	LC1?	int8u
3	MinFocusDistance	int8u & 0xf8
3.1	FocusRangeIndex	int8u & 0x07
4	LC3?	int8u
5	LC4?	int8u
6	LC5?	int8u
7	LC6?	int8u
8	LC7?	int8u
9	LensFocalLength	int8u
	LC8?	int8u
10	NominalMaxAperture	int8u & 0xf0
10.1	NominalMinAperture	int8u & 0x0f
11	LC10?	int8u
12	LC11?	int8u
13	LC12?	int8u
14.1	MaxAperture	int8u & 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
-----	-----	-----
0	LensType	int8u[4]
4	LensData	Pentax LensData

Pentax LensInfo3 Tags

Pentax lens information structure for 645D.

Index1	Tag Name	Writable
-----	-----	-----
1	LensType	int8u[4]
13	LensData	Pentax LensData

Pentax LensInfo4 Tags

Pentax lens information structure for models such as the K-5 and K-r.

Index1	Tag Name	Writable
-----	-----	-----
1	LensType	int8u[4]
12	LensData	Pentax LensData

Pentax LensInfo5 Tags

Pentax lens information structure for the K-01 and newer models.

Index1	Tag Name	Writable
-----	-----	-----
1	LensType	int8u[5]
15	LensData	Pentax LensData

Pentax FlashInfo Tags

Flash information tags for the K10D, K20D and K200D.

Index1	Tag Name	Writable
-----	-----	-----
0	FlashStatus	int8u
1	InternalFlashMode	int8u
2	ExternalFlashMode	int8u
3	InternalFlashStrength	int8u
4	TTL_DA_AUp	int8u
5	TTL_DA_ADown	int8u
6	TTL_DA_BUp	int8u
7	TTL_DA_BDown	int8u
24.1	ExternalFlashGuideNumber	int8u & 0x1f
25	ExternalFlashExposureComp	int8u
26	ExternalFlashBounce	int8u

Pentax FlashInfoUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
[no tags known]		

Pentax CameraInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	PentaxModelID	int32u
1	ManufactureDate	int32u
2	ProductionCode	int32u[2]
4	InternalSerialNumber	int32u

Pentax BatteryInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0.1	PowerSource	int8u & 0x0f
0.2	PowerAvailable	int8u & 0xf0
1.1	BodyBatteryState	int8u & 0xf0
1.2	GripBatteryState	int8u & 0x0f
2	BodyBatteryADNoLoad	int8u
	BodyBatteryVoltage1	int16u
	BodyBatteryState	int8u
3	BodyBatteryADLoad	int8u
	BodyBatteryPercent	int8u
4	GripBatteryADNoLoad	int8u
	BodyBatteryVoltage2	int16u
	BodyBatteryVoltage	int32u
5	GripBatteryADLoad	int8u
6	BodyBatteryVoltage3	int16u

8	BodyBatteryVoltage4	int16u
16	GripBatteryState	int8u
17	GripBatteryPercent	int8u
18	GripBatteryVoltage	int32u

Pentax AFInfo Tags

Index1	Tag Name	Writable
0	AFPointsUnknown1?	int16u
2	AFPointsUnknown2?	int16u
4	AFPredictor	int16s
6	AFDefocus	int8u
7	AFIntegrationTime	int8u
11	AFPointsInFocus	int8u
506	LiveView	int8u
509	AFHold	int8u

Pentax KelvinWB Tags

White balance Blue/Red gains as a function of color temperature.

Index2	Tag Name	Writable
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
16	WBShiftAB	int8s
17	WBShiftGM	int8s

Pentax EVStepInfo Tags

Index1	Tag Name	Writable
0	EVSteps	int8u
1	SensitivitySteps	int8u
3	LiveView	int8u

Pentax ShotInfo Tags

Index1	Tag Name	Writable
1	CameraOrientation	int8u

Pentax FacePos Tags

Index2	Tag Name	Writable
0	Face1Position	int16u[2]
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
-----	-----	-----
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
-----	-----	-----
0	SourceDirectoryIndex	int16u
2	SourceFileIndex	int16u
5	DigitalFilter01	undef[17]
22	DigitalFilter02	undef[17]
39	DigitalFilter03	undef[17]
56	DigitalFilter04	undef[17]
73	DigitalFilter05	undef[17]
90	DigitalFilter06	undef[17]
107	DigitalFilter07	undef[17]
124	DigitalFilter08	undef[17]
141	DigitalFilter09	undef[17]
158	DigitalFilter10	undef[17]
175	DigitalFilter11	undef[17]
192	DigitalFilter12	undef[17]
209	DigitalFilter13	undef[17]
226	DigitalFilter14	undef[17]
243	DigitalFilter15	undef[17]
260	DigitalFilter16	undef[17]
277	DigitalFilter17	undef[17]
294	DigitalFilter18	undef[17]
311	DigitalFilter19	undef[17]
328	DigitalFilter20	undef[17]

Pentax LevelInfoK3III Tags

Tags decoded from the electronic level information for the K-3 III.

Index1	Tag Name	Writable
-----	-----	-----
1	CameraOrientation	int8s
3	RollAngle	int16s
5	PitchAngle	int16s

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
-----	-----	-----
0	LevelOrientation	int8s & 0x0f
0.1	CompositionAdjust	int8s & 0xf0
1	RollAngle	int8s
2	PitchAngle	int8s
5	CompositionAdjustX	int8s
6	CompositionAdjustY	int8s
7	CompositionAdjustRotation	int8s

Pentax WBLevels Tags

Index1	Tag Name	Writable
-----	-----	-----
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 LensInfoQ Tags

More lens information stored by the Pentax Q.

Index1	Tag Name	Writable
-----	-----	-----
12	LensModel	string[30]
42	LensInfo	string[20]

Pentax PixelShiftInfo Tags

Pixel shift information stored by the K-3 II.

Index1	Tag Name	Writable
-----	-----	-----
0	PixelShiftResolution	int8u

Pentax AFPointInfo Tags

AF point information written by the K-1.

Index1	Tag Name	Writable
-----	-----	-----
2	NumAFPoints	int16u
4	AFPointsInFocus	int8u[9] ^{3/4}
4.1	AFPointsSelected	int8u[9] ^{3/4}
4.2	AFPointsSpecial	int8u[9] ^{3/4}

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
-----	-----	-----
12	SensorTemperature	int16s
14	SensorTemperature2	int16s
20	CameraTemperature4	int16s
22	CameraTemperature5	int16s

Pentax UnknownInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
[no tags known]		

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
-----	-----	-----
0x0001	RecordingMode	int16u
0x0002	Quality	int16u
0x0003	FocusMode	int16u
0x0004	FlashMode	int16u
0x0007	WhiteBalance	int16u
0x000a	DigitalZoom	int32u
0x000b	Sharpness	int16u
0x000c	Contrast	int16u
0x000d	Saturation	int16u
0x0014	ISO	int16u
0x0017	ColorFilter	int16u
0x0e00	PrintIM	PrintIM
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
-----	-----	-----
'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
-----	-----	-----
0x0000	MakerNoteVersion	no

Pentax Junk Tags

Tags found in the JUNK chunk of AVI videos from the RS1000.

Index1	Tag Name	Writable
-----	-----	-----
12	Model	no

Pentax Junk2 Tags

This information is found in AVI videos from the Optio RZ18.

Index1	Tag Name	Writable
-----	-----	-----
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

Pentax AVI Tags

Pentax-specific RIFF tags found in AVI videos.

Tag ID	Tag Name	Writable
-----	-----	-----
'hymn'	MakerNotes	Pentax
'mknt'	MakerNotes	Pentax

Pentax PENT Tags

Tags found in the PENT atom of MOV videos from the Optio WG-2 GPS.

Index1	Tag Name	Writable
-----	-----	-----
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
209	GPSLatitude	no
233	GPSLongitudeRef	no

235	GPSLongitude	no
259	GPSAltitudeRef	no
260	GPSAltitude	no
284	GPSTimeStamp	no
308	GPSSatellites	no
311	GPSStatus	no
313	GPSMeasureMode	no
315	GPSMapDatum	no
322	GPSDateStamp	no
371	AudioCodecID	no
2003	PreviewImage	no

Pentax PXTH Tags

Tags found in the PXTH atom of MOV videos from the K-01.

Index1	Tag Name	Writable
-----	-----	-----
0	PreviewImageLength	no
4	PreviewImage	no

Pentax MOV Tags

This information is found in MOV videos from cameras such as the Optio WP.

Index1	Tag Name	Writable
-----	-----	-----
0	Make	no
38	ExposureTime	no
42	FNumber	no
50	ExposureCompensation	no
68	WhiteBalance	no
72	FocalLength	no
175	ISO	no

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> for the official ICC specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'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	ICC_Profile Header
'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'	WCSPfiles	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
'chrn'	Chromaticity	ICC_Profile Chromaticity
'ciis'	ColorimetricIntentImageState	no
'clio'	ColorantInfoOut	no
'cloo'	ColorantOrderOut	no
'clot'	ColorantTableOut	no
'clro'	ColorantOrder	no
'clrt'	ColorantTable	ICC_Profile ColorantTable
'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
'dBD0'	DirectionalBToD0	no
'dBD1'	DirectionalBToD1	no
'dBD2'	DirectionalBToD2	no
'dBD3'	DirectionalBToD3	no
'dDB0'	DirectionalDToB0	no
'dDB1'	DirectionalDToB1	no

'dDB2'	DirectionalDToB2	no
'dDB3'	DirectionalDToB3	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
'kTRC'	GrayTRC	no
'lumi'	Luminance	no
'mcta'	MultiplexTypeArray	no
'mdv'	MultiplexDefaultValues	no
'meas'	Measurement	ICC_Profile Measurement
'meta'	Metadata	ICC_Profile Metadata
'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
'rig2'	SaturationRenderingIntentGamut	no
'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
'vcgt'	VideoCardGamma	no
'view'	ViewingConditions	ICC_Profile ViewingConditions
'vued'	ViewingCondDesc	no
'wtpt'	MediaWhitePoint	no

ICC Profile Header Tags

Index1	Tag Name	Writable
-----	-----	-----
4	ProfileCMType	no
8	ProfileVersion	no

12	ProfileClass	no
16	ColorSpaceData	no
20	ProfileConnectionSpace	no
24	ProfileDateTime	no
36	ProfileFileSignature	no
40	PrimaryPlatform	no
44	CMMFlags	no
48	DeviceManufacturer	no
52	DeviceModel	no
56	DeviceAttributes	no
64	RenderingIntent	no
68	ConnectionSpaceIlluminant	no
80	ProfileCreator	no
84	ProfileID	no

ICC Profile Chromaticity Tags

Index1	Tag Name	Writable
-----	-----	-----
8	ChromaticityChannels	no
10	ChromaticityColorant	no
12	ChromaticityChannel1	no
20	ChromaticityChannel2	no
28	ChromaticityChannel3	no
36	ChromaticityChannel4	no

ICC Profile ColorantTable Tags

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
8	MeasurementObserver	no
12	MeasurementBacking	no
24	MeasurementGeometry	no
28	MeasurementFlare	no
32	MeasurementIlluminant	no

ICC Profile Metadata Tags

Only these few tags have been pre-defined, but ExifTool will extract any Metadata tags that exist.

Tag Name	Writable
-----	-----
CreatorApp	no
ManufacturerName	no
MediaColor	no
MediaWeight	no

ICC Profile ViewingConditions Tags

Index1	Tag Name	Writable
-----	-----	-----
8	ViewingCondIlluminant	no
20	ViewingCondSurround	no
32	ViewingCondIlluminantType	no

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
-----	-----	-----
'PrintIMVersion'	PrintIMVersion	no

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
-----	-----	-----
0x03e8	Photoshop2Info?	no
0x03e9	MacintoshPrintInfo?	no
0x03ea	XMLData?	no
0x03eb	Photoshop2ColorTable?	no
0x03ed	ResolutionInfo	Photoshop Resolution
0x03ee	AlphaChannelsNames	no
0x03ef	DisplayInfo?	no
0x03f0	PStringCaption?	no
0x03f1	BorderInformation?	no
0x03f2	BackgroundColor?	no
0x03f3	PrintFlags?	no
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	IPTC
0x0405	RawImageMode?	no
0x0406	JPEG_Quality	Photoshop JPEG_Quality
0x0408	GridGuidesInfo?	no
0x0409	PhotoshopBGRThumbnail	undef!
0x040a	CopyrightFlag	int8u
0x040b	URL	string
0x040c	PhotoshopThumbnail	undef!
0x040d	GlobalAngle	int32u
0x040e	ColorSamplersResource?	no
0x040f	ICC_Profile	ICC_Profile
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	Photoshop SliceInfo
0x041b	WorkflowURL	no
0x041c	JumpToXPEP?	no
0x041d	AlphaIdentifiers?	no
0x041e	URL_List	no+
0x0421	VersionInfo	Photoshop VersionInfo
0x0422	EXIFInfo	EXIF
0x0423	ExifInfo2?	no
0x0424	XMP	XMP
0x0425	IPTCDigest	string!
0x0426	PrintScaleInfo	Photoshop PrintScaleInfo
0x0428	PixelInfo	Photoshop PixelInfo
0x0429	LayerComps?	no
0x042a	AlternateDuotoneColors?	no
0x042b	AlternateSpotColors?	no
0x042d	LayerSelectionIDs?	no
0x042e	HDR ToningInfo?	no
0x042f	PrintInfo?	no
0x0430	LayerGroupsEnabledID?	no
0x0431	ColorSamplersResource2?	no
0x0432	MeasurementScale?	no
0x0433	TimelineInfo?	no
0x0434	SheetDisclosure?	no
0x0435	DisplayInfo?	no
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
0x2710	PrintFlagsInfo?	no

Photoshop Resolution Tags

Index2	Tag Name	Writable
-----	-----	-----
0	XResolution	int32u
2	DisplayedUnitsX	int16u
4	YResolution	int32u
6	DisplayedUnitsY	int16u

Photoshop JPEG Quality Tags

Index2	Tag Name	Writable
-----	-----	-----
0	PhotoshopQuality	int16s
1	PhotoshopFormat	no
2	ProgressiveScans	no

Photoshop SliceInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
20	SlicesGroupName	no
24	NumSlices	no

Photoshop VersionInfo Tags

Index1	Tag Name	Writable
--------	----------	----------

-----	-----	-----
4	HasRealMergedData	no
5	WriterName	no
9	ReaderName	no

Photoshop PrintScaleInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PrintStyle	no
2	PrintPosition	no
10	PrintScale	no

Photoshop PixelInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
4	PixelAspectRatio	no

Photoshop DocumentData Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Layr'	Layers	Photoshop Layers
'Lr16'	Layers	Photoshop Layers

Photoshop Layers Tags

Tags extracted from Photoshop layer information.

Tag ID	Tag Name	Writable
-----	-----	-----
'_xbnd'	LayerBlendModes	no+
'_xcnt'	LayerCount	no
'_xnam'	LayerNames	no+
'_xopc'	LayerOpacities	no+
'_xrct'	LayerRectangles	no+
'_xvis'	LayerVisible	no+
'lclr'	LayerColors	no+
'lsct'	LayerSections	no+
'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
-----	-----	-----
6	NumChannels	no
7	ImageHeight	no
9	ImageWidth	no
11	BitDepth	no
12	ColorMode	no

Photoshop ImageData Tags

Index1	Tag Name	Writable
-----	-----	-----
0	Compression	no

Apple Tags

Tags extracted from the maker notes of iPhone images.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	MakerNoteVersion	int32s
0x0002	AEMatrix?	no
0x0003	RunTime	Apple RunTime

0x0004	AESTable	int32s
0x0005	AETarget	int32s
0x0006	AEAverage	int32s
0x0007	AFStable	int32s
0x0008	AccelerationVector	rational64s[3]
0x000a	HDRImageType	int32s
0x000b	BurstUUID	string
0x000c	FocusDistanceRange	rational64s[2]
0x000f	OISMode	int32s
0x0011	ContentIdentifier	string
0x0014	ImageCaptureType	int32s
0x0015	ImageUniqueID	string
0x0017	LivePhotoVideoIndex	yes
0x0019	ImageProcessingFlags?	int32s
0x001a	QualityHint?	string
0x001d	LuminanceNoiseAmplitude	rational64s
0x001f	PhotosAppFeatureFlags	int32s
0x0020	ImageCaptureRequestID?	string
0x0021	HDRHeadroom	rational64s
0x0023	AFPerformance	int32s[2]
0x0025	SceneFlags?	int32s
0x0026	SignalToNoiseRatioType?	int32s
0x0027	SignalToNoiseRatio	rational64s
0x002b	PhotoIdentifier	string
0x002d	ColorTemperature	int32s
0x002e	CameraType	int32s
0x002f	FocusPosition	int32s
0x0030	HDRGain	rational64s
0x0038	AFMeasuredDepth	int32s
0x003d	AFConfidence	int32s
0x003e	ColorCorrectionMatrix?	no
0x003f	GreenGhostMitigationStatus?	int32s
0x0040	SemanticStyle	no
0x0041	SemanticStyleRenderingVer	no
0x0042	SemanticStylePreset	no
0x004e	Apple_0x004e?	no
0x004f	Apple_0x004f?	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
-----	-----	-----
'epoch'	RunTimeEpoch	no
'flags'	RunTimeFlags	no
'timescale'	RunTimeScale	no
'value'	RunTimeValue	no

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
-----	-----	-----
0x0001	ISOAutoHiLimit	no
0x0002	ISOAutoFlashLimit	no
0x0003	ISOAutoShutterTime	no
0x000b	FlickerReductionShooting	no
0x000c	FlickerReductionIndicator	no
0x000d	MovieISOAutoHiLimit	no
0x000e	MovieISOAutoControlManualMode	no
0x000f	MovieWhiteBalanceSameAsPhoto	no
0x001d	AF-CPrioritySel	no
0x001e	AF-SPrioritySel	no
0x0020	AFPointSel	no
0x0022	AFActivation	no
0x0023	FocusPointWrap	no

0x0025	ManualFocusPointIllumination	no
0x0026	AF-AssistIlluminator	no
0x0027	ManualFocusRingInAFMode	no
0x0029	ISOStepSize	no
0x002a	ExposureControlStepSize	no
0x002b	EasyExposureCompensation	no
0x002c	MatrixMetering	no
0x002d	CenterWeightedAreaSize	no
0x002f	FineTuneOptMatrixMetering	no
0x0030	FineTuneOptCenterWeighted	no
0x0031	FineTuneOptSpotMetering	no
0x0032	FineTuneOptHighlightWeighted	no
0x0033	ShutterReleaseButtonAE-L	no
0x0034	StandbyMonitorOffTime	no
0x0035	SelfTimerTime	no
0x0036	SelfTimerShotCount	no
0x0037	SelfTimerShotInterval	no
0x0038	PlaybackMonitorOffTime	no
0x0039	MenuMonitorOffTime	no
0x003a	ShootingInfoMonitorOffTime	no
0x003b	ImageReviewMonitorOffTime	no
0x003c	LiveViewMonitorOffTime	no
0x003e	CLModeShootingSpeed	no
0x003f	MaxContinuousRelease	no
0x0040	ExposureDelayMode	no
0x0041	ElectronicFront-CurtainShutter	no
0x0042	FileNumberSequence	no
0x0043	FramingGridDisplay	no
0x0045	LCDIllumination	no
0x0046	OpticalVR	no
0x0047	FlashSyncSpeed	no
0x0048	FlashShutterSpeed	no
0x0049	FlashExposureCompArea	no
0x004a	AutoFlashISO Sensitivity	no
0x0051	AssignBktButton	no
0x0052	AssignMovieRecordButton	no
0x0053	MultiSelectorShootMode	no
0x0054	MultiSelectorPlaybackMode	no
0x0056	MultiSelectorLiveView	no
0x0058	CmdDialsReverseRotExposureComp?	no
0x0059	CmdDialsChangeMainSubExposure?	no
0x005a	CmdDialsChangeMainSub	no
0x005b	CmdDialsMenuAndPlayback	no
0x005c	SubDialFrameAdvance	no
0x005d	ReleaseButtonToUseDial	no
0x005e	ReverseIndicators	no
0x0062	MovieShutterButton	no
0x0063	Language	no
0x006c	ShootingInfoDisplay	no
0x0074	FlickAdvanceDirection	no
0x0075	HDMIOutputResolution	no
0x0077	HDMIOutputRange	no
0x0080	RemoteFuncButton	no
0x008b	CmdDialsReverseRotation	no
0x008d	FocusPeakingHighlightColor	no
0x008e	ContinuousModeDisplay	no
0x008f	ShutterSpeedLock	no
0x0090	ApertureLock	no
0x0091	MovieHighlightDisplayThreshold	no
0x0092	HDMIExternalRecorder	no
0x0093	BlockShotAFResponse	no
0x0094	SubjectMotion	no
0x0095	Three-DTrackingFaceDetection	no
0x0097	StoreByOrientation	no
0x0099	DynamicAreaAFAssist	no
0x009a	ExposureCompStepSize	no
0x009b	SyncReleaseMode	no
0x009c	ModelingFlash	no
0x009d	AutoBracketModeM	no
0x009e	PreviewButton	no

0x00a0	Func1Button	no
0x00a2	Func2Button	no
0x00a3	AF-OnButton	no
0x00a4	SubSelector	no
0x00a5	SubSelectorCenter	no
0x00a7	LensFunc1Button	no
0x00a8	CmdDialsApertureSetting	no
0x00a9	MultiSelector	no
0x00aa	LiveViewButtonOptions	no
0x00ab	LightSwitch	no
0x00b1	MoviePreviewButton	no
	MovieFunc1Button	no
0x00b3	MovieFunc1Button	no
	MovieFunc2Button	no
0x00b5	MovieFunc2Button	no
0x00b6	AssignMovieSubselector	no
0x00b8	LimitAFAreaModeSelD9?	no
0x00b9	LimitAFAreaModeSelD25?	no
0x00bc	LimitAFAreaModeSel3D?	no
0x00bd	LimitAFAreaModeSelGroup?	no
0x00be	LimitAFAreaModeSelAuto?	no
0x00c1	LimitSelectableImageArea5To4?	no
0x00c2	LimitSelectableImageArea1To1?	no
0x00d4	PhotoShootingMenuBank	no
0x00d5	CustomSettingsBank	no
0x00d6	LimitAF-AreaModeSelPinpoint?	no
0x00d7	LimitAF-AreaModeSelDynamic?	no
0x00d8	LimitAF-AreaModeSelWideAF_S?	no
0x00d9	LimitAF-AreaModeSelWideAF_L?	no
0x00da	LowLightAF	no
0x00db	LimitSelectableImageAreaDX?	no
0x00dc	LimitSelectableImageArea5To4?	no
0x00dd	LimitSelectableImageArea1To1?	no
0x00de	LimitSelectableImageArea16To9?	no
0x00df	ApplySettingsToLiveView	no
0x00e0	FocusPeakingLevel	no
0x00ea	LensControlRing	no
0x00ed	MovieMultiSelector	no
0x00ee	MovieAFSpeed	no
0x00ef	MovieAFSpeedApply	no
0x00f0	MovieAFTrackingSensitivity	no
0x00f1	MovieHighlightDisplayPattern	no
0x00f2	SubDialFrameAdvanceRating5?	no
0x00f3	SubDialFrameAdvanceRating4?	no
0x00f4	SubDialFrameAdvanceRating3?	no
0x00f5	SubDialFrameAdvanceRating2?	no
0x00f6	SubDialFrameAdvanceRating1?	no
0x00f7	SubDialFrameAdvanceRating0?	no
0x00f9	MovieAF-OnButton	no
0x00fb	SecondarySlotFunction	no
0x00fc	SilentPhotography	no
0x00fd	ExtendedShutterSpeeds	no
0x0102	HDMIBitDepth	no
0x0103	HDMIOutputHDR	no
0x0104	HDMIViewAssist	no
0x0109	BracketSet	no
0x010a	BracketProgram	no
0x010b	BracketIncrement	no
0x010c	BracketIncrement	no
0x010e	MonitorBrightness	no
0x0116	GroupAreaC1	no
0x0117	AutoAreaAFStartingPoint	no
0x0118	FocusPointPersistence	no
0x0119	LimitAFAreaModeSelD49?	no
0x011a	LimitAFAreaModeSelD105?	no
0x011b	LimitAFAreaModeSelGroupC1?	no
0x011c	LimitAFAreaModeSelGroupC2?	no
0x011d	AutoFocusModeRestrictions	no
0x011e	FocusPointBrightness	no
0x011f	CHModeShootingSpeed	no

0x0120	CLModeShootingSpeed	no
0x0121	QuietShutterShootingSpeed	no
0x0122	LimitReleaseModeSelCL?	no
0x0123	LimitReleaseModeSelCH?	no
0x0124	LimitReleaseModeSelQ?	no
0x0125	LimitReleaseModeSelTimer?	no
0x0126	LimitReleaseModeSelMirror-Up?	no
0x0127	LimitSelectableImageArea16To9?	no
0x0128	RearControPanelDisplay	no
0x0129	FlashBurstPriority	no
0x012a	RecallShootFuncExposureMode	no
0x012b	RecallShootFuncShutterSpeed	no
0x012c	RecallShootFuncAperture	no
0x012d	RecallShootFuncExposureComp	no
0x012e	RecallShootFuncISO	no
0x012f	RecallShootFuncMeteringMode	no
0x0130	RecallShootFuncWhiteBalance	no
0x0131	RecallShootFuncAFAreaMode	no
0x0132	RecallShootFuncFocusTracking	no
0x0133	RecallShootFuncAF-On	no
0x0134	VerticalFuncButton	no
0x0135	Func3Button	no
0x0136	VerticalAF-OnButton	no
0x0137	VerticalMultiSelector	no
0x0138	MeteringButton	no
0x0139	PlaybackFlickUp	no
0x013a	PlaybackFlickUpRating	no
0x013b	PlaybackFlickDown	no
0x013c	PlaybackFlickDownRating	no
0x013d	MovieFunc3Button	no
0x0150	ShutterType	no
0x0151	LensFunc2Button	no
0x0158	USBPowerDelivery	no
0x0159	EnergySavingMode	no
0x015c	BracketingBurstOptions	no
0x015e	PrimarySlot	no
0x015f	ReverseFocusRing	no
0x0160	VerticalFuncButton	no
0x0161	VerticalAFOnButton	no
0x0162	VerticalMultiSelector	no
0x0164	VerticalMovieFuncButton	no
0x0165	VerticalMovieAFOnButton	no
0x0169	LimitAF-AreaModeSelAutoPeople?	no
0x016a	LimitAF-AreaModeSelAutoAnimals?	no
0x016b	LimitAF-AreaModeSelWideLPeople?	no
0x016c	LimitAF-AreaModeSelWideLAnimals?	no
0x016d	SaveFocus	no
0x016e	AFAreaMode	no
0x016f	MovieAFAreaMode	no
0x0170	PreferSubSelectorCenter	no
0x0171	KeepExposureWithTeleconverter	no
0x0174	FocusPointSelectionSpeed	no

Canon Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	CanonCameraSettings	Canon CameraSettings
0x0002	CanonFocalLength	Canon FocalLength
0x0003	CanonFlashInfo?	no
0x0004	CanonShotInfo	Canon ShotInfo
0x0005	CanonPanorama	Canon Panorama
0x0006	CanonImageType	string
0x0007	CanonFirmwareVersion	string
0x0008	FileNumber	int32u
0x0009	OwnerName	string
0x000a	UnknownD30	Canon UnknownD30
0x000c	SerialNumber	int32u
0x000d	CanonCameraInfoID	Canon CameraInfoID
	CanonCameraInfoIDmkII	Canon CameraInfoIDmkII
	CanonCameraInfoIDmkIIN	Canon CameraInfoIDmkIIN

	CanonCameraInfo1DmkIII	Canon CameraInfo1DmkIII
	CanonCameraInfo1DmkIV	Canon CameraInfo1DmkIV
	CanonCameraInfo1DX	Canon CameraInfo1DX
	CanonCameraInfo5D	Canon CameraInfo5D
	CanonCameraInfo5DmkII	Canon CameraInfo5DmkII
	CanonCameraInfo5DmkIII	Canon CameraInfo5DmkIII
	CanonCameraInfo6D	Canon CameraInfo6D
	CanonCameraInfo7D	Canon CameraInfo7D
	CanonCameraInfo40D	Canon CameraInfo40D
	CanonCameraInfo50D	Canon CameraInfo50D
	CanonCameraInfo60D	Canon CameraInfo60D
	CanonCameraInfo70D	Canon CameraInfo70D
	CanonCameraInfo80D	Canon CameraInfo80D
	CanonCameraInfo450D	Canon CameraInfo450D
	CanonCameraInfo500D	Canon CameraInfo500D
	CanonCameraInfo550D	Canon CameraInfo550D
	CanonCameraInfo600D	Canon CameraInfo600D
	CanonCameraInfo650D	Canon CameraInfo650D
	CanonCameraInfo700D	Canon CameraInfo650D
	CanonCameraInfo750D	Canon CameraInfo750D
	CanonCameraInfo760D	Canon CameraInfo750D
	CanonCameraInfo1000D	Canon CameraInfo1000D
	CanonCameraInfo1100D	Canon CameraInfo600D
	CanonCameraInfo1200D	Canon CameraInfo60D
	CanonCameraInfoR6	Canon CameraInfoR6
	CanonCameraInfoG5XII	Canon CameraInfoG5XII
	CanonCameraInfoPowerShot	Canon CameraInfoPowerShot
	CanonCameraInfoPowerShot2	Canon CameraInfoPowerShot2
	CanonCameraInfoUnknown32	Canon CameraInfoUnknown32
	CanonCameraInfoUnknown16	Canon CameraInfoUnknown16
	CanonCameraInfoUnknown	Canon CameraInfoUnknown
0x000e	CanonFileLength	int32u
0x000f	CustomFunctions1D	CanonCustom Functions1D
	CustomFunctions5D	CanonCustom Functions5D
	CustomFunctions10D	CanonCustom Functions10D
	CustomFunctions20D	CanonCustom Functions20D
	CustomFunctions30D	CanonCustom Functions30D
	CustomFunctions350D	CanonCustom Functions350D
	CustomFunctions400D	CanonCustom Functions400D
	CustomFunctionsD30	CanonCustom FunctionsD30
	CustomFunctionsD60	CanonCustom FunctionsD30
	CustomFunctionsUnknown	CanonCustom FuncsUnknown
0x0010	CanonModelID	int32u
0x0011	MovieInfo	Canon MovieInfo
0x0012	CanonAFInfo	Canon AFInfo
0x0013	ThumbnailImageValidArea	int16u[4]
0x0015	SerialNumberFormat	int32u
0x001a	SuperMacro	int16u
0x001c	DateStampMode	int16u
0x001d	MyColors	Canon MyColors
0x001e	FirmwareRevision	int32u
0x0023	Categories	int32u[2]
0x0024	FaceDetect1	Canon FaceDetect1
0x0025	FaceDetect2	Canon FaceDetect2
0x0026	CanonAFInfo2	Canon AFInfo2
0x0027	ContrastInfo	Canon ContrastInfo
0x0028	ImageUniqueID	int8u
0x0029	WBInfo	Canon WBInfo
0x002f	FaceDetect3	Canon FaceDetect3
0x0035	TimeInfo	Canon TimeInfo
0x0038	BatteryType	undef
0x003c	AFInfo3	Canon AFInfo2
0x0081	RawDataOffset	no
0x0082	RawDataLength	no
0x0083	OriginalDecisionDataOffset	int32u*
0x0090	CustomFunctions1D	CanonCustom Functions1D
0x0091	PersonalFunctions	CanonCustom PersonalFuncs
0x0092	PersonalFunctionValues	CanonCustom PersonalFuncValues
0x0093	CanonFileInfo	Canon FileInfo
0x0094	AFPointsInFocus1D	no

0x0095	LensModel	string
0x0096	SerialInfo	Canon SerialInfo
	InternalSerialNumber	string
0x0097	DustRemovalData	undef!
0x0098	CropInfo	Canon CropInfo
0x0099	CustomFunctions2	CanonCustom Functions2
0x009a	AspectInfo	Canon AspectInfo
0x00a0	ProcessingInfo	Canon Processing
0x00a1	ToneCurveTable	no
0x00a2	SharpnessTable	no
0x00a3	SharpnessFreqTable	no
0x00a4	WhiteBalanceTable	no
0x00a9	ColorBalance	Canon ColorBalance
0x00aa	MeasuredColor	Canon MeasuredColor
0x00ae	ColorTemperature	int16u
0x00b0	CanonFlags	Canon Flags
0x00b1	ModifiedInfo	Canon ModifiedInfo
0x00b2	ToneCurveMatching	no
0x00b3	WhiteBalanceMatching	no
0x00b4	ColorSpace	int16u
0x00b6	PreviewImageInfo	Canon PreviewImageInfo
0x00d0	VRDOffset	int32u*
0x00e0	SensorInfo	Canon SensorInfo
0x4001	ColorData1	Canon ColorData1
	ColorData2	Canon ColorData2
	ColorData3	Canon ColorData3
	ColorData4	Canon ColorData4
	ColorData5	Canon ColorData5
	ColorData6	Canon ColorData6
	ColorData7	Canon ColorData7
	ColorData8	Canon ColorData8
	ColorData9	Canon ColorData9
	ColorData10	Canon ColorData10
	ColorData11	Canon ColorData11
	ColorDataUnknown	Canon ColorDataUnknown
0x4002	CRWParam?	no
0x4003	ColorInfo	Canon ColorInfo
0x4005	Flavor?	no
0x4008	PictureStyleUserDef	[Values 0-2] Canon PictureStyle
0x4009	PictureStylePC	[Values 0-2] Canon PictureStyle
0x4010	CustomPictureStyleFileName	string
0x4013	AFMicroAdj	Canon AFMicroAdj
0x4015	VignettingCorr	Canon VignettingCorr
	VignettingCorrUnknown1	Canon VignettingCorrUnknown
	VignettingCorrUnknown2	Canon VignettingCorrUnknown
0x4016	VignettingCorr2	Canon VignettingCorr2
0x4018	LightingOpt	Canon LightingOpt
0x4019	LensInfo	Canon LensInfo
0x4020	AmbienceInfo	Canon Ambience
0x4021	MultiExp	Canon MultiExp
0x4024	FilterInfo	Canon FilterInfo
0x4025	HDRInfo	Canon HDRInfo
0x4026	LogInfo	Canon LogInfo
0x4028	AFConfig	Canon AFConfig
0x403f	RawBurstModeRoll	Canon RawBurstInfo
0x4059	LevelInfo	Canon LevelInfo

Canon CameraSettings Tags

Index2	Tag Name	Writable
-----	-----	-----
1	MacroMode	int16s
2	SelfTimer	int16s
3	Quality	int16s
4	CanonFlashMode	int16s
5	ContinuousDrive	int16s
7	FocusMode	int16s
9	RecordMode	int16s

10	CanonImageSize	int16s
11	EasyMode	int16s
12	DigitalZoom	int16s
13	Contrast	int16s
14	Saturation	int16s
15	Sharpness	int16s
16	CameraISO	int16s
17	MeteringMode	int16s
18	FocusRange	int16s
19	AFPoint	int16s
20	CanonExposureMode	int16s
22	LensType	int16u
23	MaxFocalLength	int16u
24	MinFocalLength	int16u
25	FocalUnits	int16s
26	MaxAperture	int16s
27	MinAperture	int16s
28	FlashActivity	int16s
29	FlashBits	int16s
32	FocusContinuous	int16s
33	AESetting	int16s
34	ImageStabilization	int16s
35	DisplayAperture	int16s
36	ZoomSourceWidth	int16s
37	ZoomTargetWidth	int16s
39	SpotMeteringMode	int16s
40	PhotoEffect	int16s
41	ManualFlashOutput	int16s
42	ColorTone	int16s
46	SRAWQuality	int16s
51	Clarity	int16s

Canon FocalLength Tags

Index2	Tag Name	Writable
-----	-----	-----
0	FocalType	int16u
1	FocalLength	int16u
2	FocalPlaneXSize	int16u
	FocalPlaneXUnknown?	int16u
3	FocalPlaneYSize	int16u
	FocalPlaneYUnknown?	int16u

Canon ShotInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
1	AutoISO	int16s
2	BaseISO	int16s
3	MeasuredEV	int16s
4	TargetAperture	int16s
5	TargetExposureTime	int16s
6	ExposureCompensation	int16s
7	WhiteBalance	int16s
8	SlowShutter	int16s
9	SequenceNumber	int16s
10	OpticalZoomCode	int16s
12	CameraTemperature	int16s
13	FlashGuideNumber	int16s
14	AFPointsInFocus	int16s
15	FlashExposureComp	int16s
16	AutoExposureBracketing	int16s
17	AEBracketValue	int16s
18	ControlMode	int16s
19	FocusDistanceUpper	int16u
20	FocusDistanceLower	int16u
21	FNumber	int16s
22	ExposureTime	int16s
23	MeasuredEV2	int16s
24	BulbDuration	int16s

26	CameraType	int16s
27	AutoRotate	int16s
28	NDFilter	int16s
29	SelfTimer2	int16s
33	FlashOutput	int16s

Canon Panorama Tags

Index2	Tag Name	Writable
-----	-----	-----
2	PanoramaFrameNumber	int16s
5	PanoramaDirection	int16s

Canon UnknownD30 Tags

Index2	Tag Name	Writable
-----	-----	-----
[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
-----	-----	-----
4	ExposureTime	int8u
10	FocalLength	int16u
13	LensType	int16uRev
14	MinFocalLength	int16u
16	MaxFocalLength	int16u
65	SharpnessFrequency	int8u
66	Sharpness	int8s
68	WhiteBalance	int8u
71	SharpnessFrequency	int8u
72	ColorTemperature	int16u
	Sharpness	int8s
74	WhiteBalance	int8u
75	PictureStyle	int8u
78	ColorTemperature	int16u
81	PictureStyle	int8u

Canon CameraInfo1DmkII Tags

CameraInfo tags for the 1DmkII and 1DSmkII.

Index1	Tag Name	Writable
-----	-----	-----
4	ExposureTime	int8u
9	FocalLength	int16uRev
12	LensType	int16uRev
17	MinFocalLength	int16uRev
19	MaxFocalLength	int16uRev
45	FocalType	int8u
54	WhiteBalance	int8u
55	ColorTemperature	int16uRev
57	CanonImageSize	int16u
102	JPEGQuality	int8u
108	PictureStyle	int8u
110	Saturation	int8s
111	ColorTone	int8s
114	Sharpness	int8s
115	Contrast	int8s
117	ISO	string[5]

Canon CameraInfo1DmkIIN Tags

CameraInfo tags for the 1DmkIIN.

Index1	Tag Name	Writable
-----	-----	-----
4	ExposureTime	int8u
9	FocalLength	int16uRev
12	LensType	int16uRev
17	MinFocalLength	int16uRev
19	MaxFocalLength	int16uRev
54	WhiteBalance	int8u
55	ColorTemperature	int16uRev
115	PictureStyle	int8u
116	Sharpness	int8s
117	Contrast	int8s
118	Saturation	int8s
119	ColorTone	int8s
121	ISO	string[5]

Canon CameraInfo1DmkIII Tags

CameraInfo tags for the 1DmkIII and 1DSmkIII.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
24	CameraTemperature	int8u
27	MacroMagnification	int8u
29	FocalLength	int16uRev
48	CameraOrientation	int8u
67	FocusDistanceUpper	int16uRev
69	FocusDistanceLower	int16uRev
94	WhiteBalance	int16u
98	ColorTemperature	int16u
134	PictureStyle	int8u
273	LensType	int16uRev
275	MinFocalLength	int16uRev
277	MaxFocalLength	int16uRev
310	FirmwareVersion	string[6]
370	FileIndex	int32u
374	ShutterCount	int32u
382	DirectoryIndex	int32u
682	PictureStyleInfo	Canon PSInfo
1114	TimeStamp1	int32u
1118	TimeStamp	int32u

Canon PSInfo Tags

Custom picture style information for various models.

Index1	Tag Name	Writable
-----	-----	-----
0	ContrastStandard	int32s
4	SharpnessStandard	int32s
8	SaturationStandard	int32s
12	ColorToneStandard	int32s
16	FilterEffectStandard?	int32s
20	ToningEffectStandard?	int32s
24	ContrastPortrait	int32s
28	SharpnessPortrait	int32s
32	SaturationPortrait	int32s
36	ColorTonePortrait	int32s
40	FilterEffectPortrait?	int32s
44	ToningEffectPortrait?	int32s
48	ContrastLandscape	int32s
52	SharpnessLandscape	int32s
56	SaturationLandscape	int32s
60	ColorToneLandscape	int32s
64	FilterEffectLandscape?	int32s

68	ToningEffectLandscape?	int32s
72	ContrastNeutral	int32s
76	SharpnessNeutral	int32s
80	SaturationNeutral	int32s
84	ColorToneNeutral	int32s
88	FilterEffectNeutral?	int32s
92	ToningEffectNeutral?	int32s
96	ContrastFaithful	int32s
100	SharpnessFaithful	int32s
104	SaturationFaithful	int32s
108	ColorToneFaithful	int32s
112	FilterEffectFaithful?	int32s
116	ToningEffectFaithful?	int32s
120	ContrastMonochrome	int32s
124	SharpnessMonochrome	int32s
128	SaturationMonochrome?	int32s
132	ColorToneMonochrome?	int32s
136	FilterEffectMonochrome	int32s
140	ToningEffectMonochrome	int32s
144	ContrastUserDef1	int32s
148	SharpnessUserDef1	int32s
152	SaturationUserDef1	int32s
156	ColorToneUserDef1	int32s
160	FilterEffectUserDef1	int32s
164	ToningEffectUserDef1	int32s
168	ContrastUserDef2	int32s
172	SharpnessUserDef2	int32s
176	SaturationUserDef2	int32s
180	ColorToneUserDef2	int32s
184	FilterEffectUserDef2	int32s
188	ToningEffectUserDef2	int32s
192	ContrastUserDef3	int32s
196	SharpnessUserDef3	int32s
200	SaturationUserDef3	int32s
204	ColorToneUserDef3	int32s
208	FilterEffectUserDef3	int32s
212	ToningEffectUserDef3	int32s
216	UserDef1PictureStyle	int16u
218	UserDef2PictureStyle	int16u
220	UserDef3PictureStyle	int16u

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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
8	MeasuredEV2	int8u
9	MeasuredEV3	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
53	CameraOrientation	int8u
84	FocusDistanceUpper	int16uRev
86	FocusDistanceLower	int16uRev
120	WhiteBalance	int16u
124	ColorTemperature	int16u
335	LensType	int16uRev
337	MinFocalLength	int16uRev
339	MaxFocalLength	int16uRev
493	FirmwareVersion	no
556	FileIndex	int32u
568	DirectoryIndex	int32u
872	PictureStyleInfo	Canon PSInfo

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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
125	CameraOrientation	int8u
140	FocusDistanceUpper	int16uRev
142	FocusDistanceLower	int16uRev
188	WhiteBalance	int16u
192	ColorTemperature	int16u
244	PictureStyle	int8u
423	LensType	int16uRev
425	MinFocalLength	int16uRev
427	MaxFocalLength	int16uRev
640	FirmwareVersion	no
720	FileIndex	int32u
732	DirectoryIndex	int32u
1012	PictureStyleInfo	Canon PSInfo2

Canon PSInfo2 Tags

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

Index1	Tag Name	Writable
-----	-----	-----
0	ContrastStandard	int32s
4	SharpnessStandard	int32s
8	SaturationStandard	int32s
12	ColorToneStandard	int32s
16	FilterEffectStandard?	int32s
20	ToningEffectStandard?	int32s
24	ContrastPortrait	int32s
28	SharpnessPortrait	int32s
32	SaturationPortrait	int32s
36	ColorTonePortrait	int32s
40	FilterEffectPortrait?	int32s
44	ToningEffectPortrait?	int32s
48	ContrastLandscape	int32s
52	SharpnessLandscape	int32s
56	SaturationLandscape	int32s
60	ColorToneLandscape	int32s
64	FilterEffectLandscape?	int32s
68	ToningEffectLandscape?	int32s
72	ContrastNeutral	int32s
76	SharpnessNeutral	int32s
80	SaturationNeutral	int32s
84	ColorToneNeutral	int32s
88	FilterEffectNeutral?	int32s
92	ToningEffectNeutral?	int32s
96	ContrastFaithful	int32s
100	SharpnessFaithful	int32s
104	SaturationFaithful	int32s
108	ColorToneFaithful	int32s
112	FilterEffectFaithful?	int32s
116	ToningEffectFaithful?	int32s
120	ContrastMonochrome	int32s
124	SharpnessMonochrome	int32s
128	SaturationMonochrome?	int32s
132	ColorToneMonochrome?	int32s
136	FilterEffectMonochrome	int32s
140	ToningEffectMonochrome	int32s
144	ContrastAuto	int32s

148	SharpnessAuto	int32s
152	SaturationAuto	int32s
156	ColorToneAuto	int32s
160	FilterEffectAuto	int32s
164	ToningEffectAuto	int32s
168	ContrastUserDef1	int32s
172	SharpnessUserDef1	int32s
176	SaturationUserDef1	int32s
180	ColorToneUserDef1	int32s
184	FilterEffectUserDef1	int32s
188	ToningEffectUserDef1	int32s
192	ContrastUserDef2	int32s
196	SharpnessUserDef2	int32s
200	SaturationUserDef2	int32s
204	ColorToneUserDef2	int32s
208	FilterEffectUserDef2	int32s
212	ToningEffectUserDef2	int32s
216	ContrastUserDef3	int32s
220	SharpnessUserDef3	int32s
224	SaturationUserDef3	int32s
228	ColorToneUserDef3	int32s
232	FilterEffectUserDef3	int32s
236	ToningEffectUserDef3	int32s
240	UserDef1PictureStyle	int16u
242	UserDef2PictureStyle	int16u
244	UserDef3PictureStyle	int16u

Canon CameraInfo5D Tags

CameraInfo tags for the EOS 5D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
12	LensType	int16uRev
23	CameraTemperature	int8u
27	MacroMagnification	int8s
39	CameraOrientation	int8s
40	FocalLength	int16uRev
56	AFPointsInFocus5D	int16uRev
84	WhiteBalance	int16u
88	ColorTemperature	int16u
108	PictureStyle	int8u
147	MinFocalLength	int16uRev
149	MaxFocalLength	int16uRev
151	LensType	int16uRev
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
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
265	ColorToneUserDef1	int8s
266	ColorToneUserDef2	int8s
267	ColorToneUserDef3	int8s
268	UserDef1PictureStyle	int16u
270	UserDef2PictureStyle	int16u
272	UserDef3PictureStyle	int16u
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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
27	MacroMagnification	int8u
30	FocalLength	int16uRev
49	CameraOrientation	int8u
80	FocusDistanceUpper	int16uRev
82	FocusDistanceLower	int16uRev
111	WhiteBalance	int16u
115	ColorTemperature	int16u
167	PictureStyle	int8u
189	HighISONoiseReduction	int8u
191	AutoLightingOptimizer	int8u
230	LensType	int16uRev
232	MinFocalLength	int16uRev
234	MaxFocalLength	int16uRev
382	FirmwareVersion	no
443	FileIndex	int32u
455	DirectoryIndex	int32u
759	PictureStyleInfo	Canon PSInfo

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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
125	CameraOrientation	int8u
140	FocusDistanceUpper	int16uRev
142	FocusDistanceLower	int16uRev

188	WhiteBalance	int16u
192	ColorTemperature	int16u
244	PictureStyle	int8u
339	LensType	int16uRev
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	Canon PSInfo2

Canon CameraInfo6D Tags

CameraInfo tags for the EOS 6D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
131	CameraOrientation	int8u
146	FocusDistanceUpper	int16uRev
148	FocusDistanceLower	int16uRev
194	WhiteBalance	int16u
198	ColorTemperature	int16u
250	PictureStyle	int8u
353	LensType	int16uRev
355	MinFocalLength	int16uRev
357	MaxFocalLength	int16uRev
598	FirmwareVersion	no
682	FileIndex	int32u
694	DirectoryIndex	int32u
966	PictureStyleInfo	Canon PSInfo2

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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
8	MeasuredEV2	int8u
9	MeasuredEV	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
53	CameraOrientation	int8u
84	FocusDistanceUpper	int16uRev
86	FocusDistanceLower	int16uRev
119	WhiteBalance	int16u
123	ColorTemperature	int16u
175	CameraPictureStyle	int8u
201	HighISONoiseReduction	int8u
274	LensType	int16uRev
276	MinFocalLength	int16uRev
278	MaxFocalLength	int16uRev
428	FirmwareVersion	no
491	FileIndex	int32u
503	DirectoryIndex	int32u
807	PictureStyleInfo	Canon PSInfo

Canon CameraInfo40D Tags

CameraInfo tags for the EOS 40D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
21	FlashMeteringMode	int8u
24	CameraTemperature	int8u
27	MacroMagnification	int8u
29	FocalLength	int16uRev
48	CameraOrientation	int8u
67	FocusDistanceUpper	int16uRev
69	FocusDistanceLower	int16uRev
111	WhiteBalance	int16u
115	ColorTemperature	int16u
214	LensType	int16uRev
216	MinFocalLength	int16uRev
218	MaxFocalLength	int16uRev
255	FirmwareVersion	string[6]
307	FileIndex	int32u
319	DirectoryIndex	int32u
603	PictureStyleInfo	Canon PSInfo
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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
49	CameraOrientation	int8u
80	FocusDistanceUpper	int16uRev
82	FocusDistanceLower	int16uRev
111	WhiteBalance	int16u
115	ColorTemperature	int16u
167	PictureStyle	int8u
189	HighISONoiseReduction	int8u
191	AutoLightingOptimizer	int8u
234	LensType	int16uRev
236	MinFocalLength	int16uRev
238	MaxFocalLength	int16uRev
350	FirmwareVersion	no
411	FileIndex	int32u
423	DirectoryIndex	int32u
727	PictureStyleInfo	Canon PSInfo

Canon CameraInfo60D Tags

CameraInfo tags for the EOS 60D and 1200D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
54	CameraOrientation	int8u
58	CameraOrientation	int8u

85	FocusDistanceUpper	int16uRev
87	FocusDistanceLower	int16uRev
125	ColorTemperature	int16u
232	LensType	int16uRev
234	MinFocalLength	int16uRev
236	MaxFocalLength	int16uRev
409	FirmwareVersion	no
473	FileIndex	int32u
485	DirectoryIndex	int32u
761	PictureStyleInfo	Canon PSInfo2
801	PictureStyleInfo	Canon PSInfo2

Canon CameraInfo70D Tags

CameraInfo tags for the EOS 70D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
132	CameraOrientation	int8u
147	FocusDistanceUpper	int16uRev
149	FocusDistanceLower	int16uRev
199	ColorTemperature	int16u
358	LensType	int16uRev
360	MinFocalLength	int16uRev
362	MaxFocalLength	int16uRev
606	FirmwareVersion	no
691	FileIndex	int32u
703	DirectoryIndex	int32u
975	PictureStyleInfo	Canon PSInfo2

Canon CameraInfo80D Tags

CameraInfo tags for the EOS 80D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
150	CameraOrientation	int8u
165	FocusDistanceUpper	int16uRev
167	FocusDistanceLower	int16uRev
314	ColorTemperature	int16u
393	LensType	int16uRev
395	MinFocalLength	int16uRev
397	MaxFocalLength	int16uRev
1114	FirmwareVersion	no
1198	FileIndex	int32u
1210	DirectoryIndex	int32u

Canon CameraInfo450D Tags

CameraInfo tags for the EOS 450D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
21	FlashMeteringMode	int8u
24	CameraTemperature	int8u
27	MacroMagnification	int8u
29	FocalLength	int16uRev

48	CameraOrientation	int8u
67	FocusDistanceUpper	int16uRev
69	FocusDistanceLower	int16uRev
111	WhiteBalance	int16u
115	ColorTemperature	int16u
222	LensType	int16uRev
263	FirmwareVersion	string[6]
271	OwnerName	string[32]
307	DirectoryIndex	int32u
319	FileIndex	int32u
611	PictureStyleInfo	Canon PSInfo
2355	LensModel	string[64]

Canon CameraInfo500D Tags

CameraInfo tags for the EOS 500D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
49	CameraOrientation	int8u
80	FocusDistanceUpper	int16uRev
82	FocusDistanceLower	int16uRev
115	WhiteBalance	int16u
119	ColorTemperature	int16u
171	PictureStyle	int8u
188	HighISONoiseReduction	int8u
190	AutoLightingOptimizer	int8u
246	LensType	int16uRev
248	MinFocalLength	int16uRev
250	MaxFocalLength	int16uRev
400	FirmwareVersion	no
467	FileIndex	int32u
479	DirectoryIndex	int32u
779	PictureStyleInfo	Canon PSInfo

Canon CameraInfo550D Tags

CameraInfo tags for the EOS 550D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
53	CameraOrientation	int8u
84	FocusDistanceUpper	int16uRev
86	FocusDistanceLower	int16uRev
120	WhiteBalance	int16u
124	ColorTemperature	int16u
176	PictureStyle	int8u
255	LensType	int16uRev
257	MinFocalLength	int16uRev
259	MaxFocalLength	int16uRev
420	FirmwareVersion	no
484	FileIndex	int32u
496	DirectoryIndex	int32u
796	PictureStyleInfo	Canon PSInfo

Canon CameraInfo600D Tags

CameraInfo tags for the EOS 600D and 1100D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
7	HighlightTonePriority	int8u
21	FlashMeteringMode	int8u
25	CameraTemperature	int8u
30	FocalLength	int16uRev
56	CameraOrientation	int8u
87	FocusDistanceUpper	int16uRev
89	FocusDistanceLower	int16uRev
123	WhiteBalance	int16u
127	ColorTemperature	int16u
179	PictureStyle	int8u
234	LensType	int16uRev
236	MinFocalLength	int16uRev
238	MaxFocalLength	int16uRev
411	FirmwareVersion	no
475	FileIndex	int32u
487	DirectoryIndex	int32u
763	PictureStyleInfo	Canon PSInfo2

Canon CameraInfo650D Tags

CameraInfo tags for the EOS 650D and 700D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
125	CameraOrientation	int8u
140	FocusDistanceUpper	int16uRev
142	FocusDistanceLower	int16uRev
188	WhiteBalance	int16u
192	ColorTemperature	int16u
244	PictureStyle	int8u
295	LensType	int16uRev
297	MinFocalLength	int16uRev
299	MaxFocalLength	int16uRev
539	FirmwareVersion	no
544	FirmwareVersion	no
624	FileIndex	int32u
628	FileIndex	int32u
636	DirectoryIndex	int32u
640	DirectoryIndex	int32u
912	PictureStyleInfo	Canon PSInfo2

Canon CameraInfo750D Tags

CameraInfo tags for the EOS 750D and 760D.

Index1	Tag Name	Writable
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
27	CameraTemperature	int8u
35	FocalLength	int16uRev
150	CameraOrientation	int8u
165	FocusDistanceUpper	int16uRev
167	FocusDistanceLower	int16uRev
305	WhiteBalance	int16u
309	ColorTemperature	int16u

361	PictureStyle	int8u
388	LensType	int16uRev
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
-----	-----	-----
3	FNumber	int8u
4	ExposureTime	int8u
6	ISO	int8u
21	FlashMeteringMode	int8u
24	CameraTemperature	int8u
27	MacroMagnification	int8u
29	FocalLength	int16uRev
48	CameraOrientation	int8u
67	FocusDistanceUpper	int16uRev
69	FocusDistanceLower	int16uRev
111	WhiteBalance	int16u
115	ColorTemperature	int16u
226	LensType	int16uRev
228	MinFocalLength	int16uRev
230	MaxFocalLength	int16uRev
267	FirmwareVersion	string[6]
311	DirectoryIndex	int32u
323	FileIndex	int32u
615	PictureStyleInfo	Canon PSInfo
2359	LensModel	string[64]

Canon CameraInfoR6 Tags

CameraInfo tags for the EOS R5 and R6.

Index1	Tag Name	Writable
-----	-----	-----
2801	ShutterCount	int32u

Canon CameraInfoG5XII Tags

CameraInfo tags for the PowerShot G5 X Mark II.

Index1	Tag Name	Writable
-----	-----	-----
659	ShutterCount	int32u
2709	ShutterCount	int32u
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
-----	-----	-----
0	ISO	int32s
5	FNumber	int32s
6	ExposureTime	int32s
23	Rotation	int32s
135	CameraTemperature	int32s
145	CameraTemperature	int32s

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
-----	-----	-----
1	ISO	int32s
6	FNumber	int32s
7	ExposureTime	int32s
24	Rotation	int32s
153	CameraTemperature	int32s
159	CameraTemperature	int32s
164	CameraTemperature	int32s
168	CameraTemperature	int32s
261	CameraTemperature	int32s

Canon CameraInfoUnknown32 Tags

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

Index4	Tag Name	Writable
-----	-----	-----
71	CameraTemperature	int32s
83	CameraTemperature	int32s
91	CameraTemperature	int32s
92	CameraTemperature	int32s
100	CameraTemperature	int32s
-3	CameraTemperature	int32s

Canon CameraInfoUnknown16 Tags

Index2	Tag Name	Writable
-----	-----	-----
[no tags known]		

Canon CameraInfoUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
363	LensSerialNumber	undef[5]
1473	FirmwareVersion	no

Canon MovieInfo Tags

Tags written by some Canon cameras when recording video.

Index2	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	NumAFPoints	no
1	ValidAFPoints	no
2	CanonImageWidth	no
3	CanonImageHeight	no
4	AFImageWidth	no
5	AFImageHeight	no
6	AFAreaWidth	no
7	AFAreaHeight	no
8	AFAreaXPositions	no
9	AFAreaYPositions	no
10	AFPointsInFocus	no
11	PrimaryAFPoint	no
	Canon_AFInfo_0x000b?	no
12	PrimaryAFPoint	no

Canon MyColors Tags

Index2	Tag Name	Writable
-----	-----	-----
2	MyColorMode	int16u

Canon FaceDetect1 Tags

Index2	Tag Name	Writable
-----	-----	-----
2	FacesDetected	int16u
3	FaceDetectFrameSize	int16u[2]
8	Face1Position	int16s[2]
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
-----	-----	-----
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
-----	-----	-----
0	AFInfoSize?	no
1	AFAreaMode	no
2	NumAFPoints	no
3	ValidAFPoints	no
4	CanonImageWidth	no
5	CanonImageHeight	no
6	AFImageWidth	no
7	AFImageHeight	no
8	AFAreaWidths	no
9	AFAreaHeights	no
10	AFAreaXPositions	no
11	AFAreaYPositions	no
12	AFPointsInFocus	no
13	AFPointsSelected	no
	Canon_AFInfo2_0x000d?	no

14	PrimaryAFPoint	no
----	----------------	----

Canon ContrastInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
4	IntelligentContrast	int16u

Canon WBInfo Tags

WB tags for the Canon G9.

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
3	FacesDetected	int16u

Canon TimeInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
1	TimeZone	int32s
2	TimeZoneCity	int32s
3	DaylightSavings	int32s

Canon FileInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
1	FileNumber	int32u
	ShutterCount	int32u
3	BracketMode	int16s
4	BracketValue	int16s
5	BracketShotNumber	int16s
6	RawJpgQuality	int16s
7	RawJpgSize	int16s
8	LongExposureNoiseReduction2	int16s
9	WBBracketMode	int16s
12	WBBracketValueAB	int16s
13	WBBracketValueGM	int16s
14	FilterEffect	int16s
15	ToningEffect	int16s
16	MacroMagnification	int16s
19	LiveViewShooting	int16s
20	FocusDistanceUpper	int16u
21	FocusDistanceLower	int16u
23	ShutterMode	int16s
25	FlashExposureLock	int16s
32	AntiFlicker	int16s
61	RFLensType	int16u

Canon SerialInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
9	InternalSerialNumber	string

Canon CropInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
0	CropLeftMargin	int16u
1	CropRightMargin	int16u
2	CropTopMargin	int16u
3	CropBottomMargin	int16u

Canon AspectInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	AspectRatio	int32u
1	CroppedImageWidth	int32u
2	CroppedImageHeight	int32u
3	CroppedImageLeft	int32u
4	CroppedImageTop	int32u

Canon Processing Tags

Index2	Tag Name	Writable
-----	-----	-----
1	ToneCurve	int16s
2	Sharpness	int16s
3	SharpnessFrequency	int16s
4	SensorRedLevel	int16s
5	SensorBlueLevel	int16s
6	WhiteBalanceRed	int16s
7	WhiteBalanceBlue	int16s
8	WhiteBalance	int16s
9	ColorTemperature	int16s
10	PictureStyle	int16s
11	DigitalGain	int16s
12	WBShiftAB	int16s
13	WBShiftGM	int16s
14	UnsharpMaskFineness	int16s
15	UnsharpMaskThreshold	int16s

Canon ColorBalance Tags

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

Index2	Tag Name	Writable
-----	-----	-----
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]
	BlackLevels	int16s[4]
33	WB_RGGBLevelsKelvin	int16s[4]
37	WB_RGGBBlackLevels	int16s[4]

Canon MeasuredColor Tags

Index2	Tag Name	Writable
-----	-----	-----
1	MeasuredRGGB	int16u[4]

Canon Flags Tags

Index2	Tag Name	Writable
-----	-----	-----
1	ModifiedParamFlag	int16s

Canon ModifiedInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
1	ModifiedToneCurve	int16s
2	ModifiedSharpness	int16s
3	ModifiedSharpnessFreq	int16s
4	ModifiedSensorRedLevel	int16s
5	ModifiedSensorBlueLevel	int16s
6	ModifiedWhiteBalanceRed	int16s
7	ModifiedWhiteBalanceBlue	int16s
8	ModifiedWhiteBalance	int16s
9	ModifiedColorTemp	int16s
10	ModifiedPictureStyle	int16s
11	ModifiedDigitalGain	int16s

Canon PreviewImageInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
1	PreviewQuality	int32u
2	PreviewImageLength	int32u*
3	PreviewImageWidth	int32u
4	PreviewImageHeight	int32u
5	PreviewImageStart	int32u*

Canon SensorInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
1	SensorWidth	no
2	SensorHeight	no
5	SensorLeftBorder	no
6	SensorTopBorder	no
7	SensorRightBorder	no
8	SensorBottomBorder	no
9	BlackMaskLeftBorder	no
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
-----	-----	-----
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?	Canon ColorCalib

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
-----	-----	-----
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
-----	-----	-----
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?	Canon ColorCalib
618	RawMeasuredRGGB	int32u[4]

Canon ColorData3 Tags

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

Index2	Tag Name	Writable
-----	-----	-----
0	ColorDataVersion	int16s
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?	Canon ColorCalib
196	PerChannelBlackLevel	int16u[4]
584	FlashOutput	int16s
585	FlashBatteryLevel	int16s
586	ColorTempFlashData	int16s
647	MeasuredRGGBData	int32u[4]

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
-----	-----	-----
0	ColorDataVersion	int16s
63	ColorCoefs	Canon ColorCoefs

168	ColorCalib?	Canon ColorCalib
231	AverageBlackLevel	int16u[4]
640	RawMeasuredRGGB	int32u[4]
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
-----	-----	-----
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
-----	-----	-----
0	ColorDataVersion	int16s
71	ColorCoefs	Canon ColorCoefs
	ColorCoefs2	Canon ColorCoefs2
186	ColorCalib2?	Canon ColorCalib2
255	ColorCalib2?	Canon ColorCalib2
264	PerChannelBlackLevel	int16s[4]
333	PerChannelBlackLevel	int16s[4]
662	SpecularWhiteLevel	int16u
1385	NormalWhiteLevel	int16u
1386	SpecularWhiteLevel	int16u

Canon ColorCoefs2 Tags

Index2	Tag Name	Writable
-----	-----	-----
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
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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
0	ColorDataVersion	int16s
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?	Canon ColorCalib
251	AverageBlackLevel	int16u[4]
404	RawMeasuredRGGB	int32u[4]
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
-----	-----	-----
0	ColorDataVersion	int16s
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?	Canon ColorCalib
276	AverageBlackLevel	int16u[4]
429	RawMeasuredRGGB	int32u[4]
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
-----	-----	-----
0	ColorDataVersion	int16s
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?	Canon ColorCalib
326	AverageBlackLevel	int16u[4]
556	PerChannelBlackLevel	int16u[4]
560	NormalWhiteLevel	int16u
561	SpecularWhiteLevel	int16u
562	LinearityUpperMargin	int16u
778	PerChannelBlackLevel	int16u[4]
782	NormalWhiteLevel	int16u
783	SpecularWhiteLevel	int16u
784	LinearityUpperMargin	int16u

Canon ColorData9 Tags

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

Index2	Tag Name	Writable
-----	-----	-----
0	ColorDataVersion	int16s
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?	Canon ColorCalib
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
-----	-----	-----
0	ColorDataVersion	int16s
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?	Canon ColorCalib
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
-----	-----	-----
0	ColorDataVersion	int16s
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
363	PerChannelBlackLevel	int16u[4]
640	NormalWhiteLevel	int16u
641	SpecularWhiteLevel	int16u
642	LinearityUpperMargin	int16u

Canon ColorDataUnknown Tags

Index2	Tag Name	Writable
-----	-----	-----
0	ColorDataVersion	no

Canon ColorInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
1	Saturation	int16s
2	ColorTone	int16s
3	ColorSpace	int16s

Canon AFMicroAdj Tags

Index4	Tag Name	Writable
-----	-----	-----
1	AFMicroAdjMode	int32s
2	AFMicroAdjValue	rational64s

Canon VignettingCorr Tags

This information is found in images from newer EOS models.

Index2	Tag Name	Writable
--------	----------	----------

-----	-----	-----
0	VignettingCorrVersion	no
2	PeripheralLighting	int16s
3	DistortionCorrection	int16s
4	ChromaticAberrationCorr	int16s
5	ChromaticAberrationCorr	int16s
6	PeripheralLightingValue	int16s
9	DistortionCorrectionValue	int16s
11	OriginalImageWidth	int16s
12	OriginalImageHeight	int16s

Canon VignettingCorrUnknown Tags

Vignetting correction from PowerShot models.

Index2	Tag Name	Writable
-----	-----	-----
0	VignettingCorrVersion	no

Canon VignettingCorr2 Tags

Index4	Tag Name	Writable
-----	-----	-----
5	PeripheralLightingSetting	int32s
6	ChromaticAberrationSetting	int32s
7	DistortionCorrectionSetting	int32s
9	DigitalLensOptimizerSetting	int32s

Canon LightingOpt Tags

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

Index4	Tag Name	Writable
-----	-----	-----
1	PeripheralIlluminationCorr	int32s
2	AutoLightingOptimizer	int32s
3	HighlightTonePriority	int32s
4	LongExposureNoiseReduction	int32s
5	HighISONoiseReduction	int32s
10	DigitalLensOptimizer	int32s
11	DualPixelRaw	int32s

Canon LensInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	LensSerialNumber	undef[5]

Canon Ambience Tags

Index4	Tag Name	Writable
-----	-----	-----
1	AmbienceSelection	int32s

Canon MultiExp Tags

Index4	Tag Name	Writable
-----	-----	-----
1	MultiExposure	int32s
2	MultiExposureControl	int32s
3	MultiExposureShots	int32s

Canon FilterInfo Tags

Information about creative filter settings.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0101	GrainyBWFilter	no
0x0201	SoftFocusFilter	no

0x0301	ToyCameraFilter	no
0x0401	MiniatureFilter	no
0x0402	MiniatureFilterOrientation	no
0x0403	MiniatureFilterPosition	no
0x0404	MiniatureFilterParameter	no
0x0501	FisheyeFilter	no
0x0601	PaintingFilter	no
0x0701	WatercolorFilter	no

Canon HDRInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
1	HDR	int32s
2	HDREffect	int32s

Canon LogInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
4	CompressionFormat	int32s
6	Sharpness	int32s
7	Saturation	int32s
8	ColorTone	int32s
9	ColorSpace2	int32s
10	ColorMatrix	int32s
11	CanonLogVersion	int32s

Canon AFConfig Tags

Index4	Tag Name	Writable
-----	-----	-----
1	AFConfigTool	int32s
2	AFTrackingSensitivity	int32s
3	AFAccelDecelTracking	int32s
4	AFPointSwitching	int32s
5	AI Servo First Image	int32s
6	AI Servo Second Image	int32s
7	USMLensElectronicMF	int32s
8	AF Assist Beam	int32s
9	OneShotAFRelease	int32s
10	AutoAFPointSelEOSiTRAF	int32s
11	LensDriveWhenAFImpossible	int32s
12	SelectAFAreaSelectionMode	int32s
13	AFAreaSelectionMethod	int32s
14	OrientationLinkedAF	int32s
15	ManualAFPointSelPattern	int32s
16	AFPointDisplayDuringFocus	int32s
17	VFDisplayIllumination	int32s
18	AFStatusViewfinder	int32s
19	InitialAFPointInServo	int32s
20	SubjectToDetect	int32s
24	EyeDetection	int32s

Canon RawBurstInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
1	RawBurstImageNum	int32u
2	RawBurstImageCount	int32u

Canon LevelInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
4	RollAngle	int32s
5	PitchAngle	int32s
7	FocalLength	int32s
8	MinFocalLength	int32s
9	MaxFocalLength	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
-----	-----	-----
0x0001	TimeStamp	no
0x0004	FocalInfo	Canon FocalInfo
0x0005	ExposureInfo	Canon ExposureInfo
0x0007	ExifInfo7	Canon ExifInfo
0x0008	ExifInfo8	Canon ExifInfo
0x0009	ExifInfo9	Canon ExifInfo

Canon FocalInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FocalLength	no

Canon ExposureInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FNumber	no
1	ExposureTime	no
2	ISO	no

Canon ExifInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x8769	ExifIFD	EXIF
0x927c	MakerNoteCanon	Canon

Canon CDI1 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'IAD1'	IAD1	Canon IAD1

Canon IAD1 Tags

Index2	Tag Name	Writable
-----	-----	-----
[no tags known]		

Canon CMP1 Tags

Index2	Tag Name	Writable
-----	-----	-----
8	ImageWidth	no
10	ImageHeight	no

Canon CNOP Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

Canon CNTH Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
'CNDA'	ThumbnailImage	undef

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
-----	-----	-----
'CCTP'	CanonCCTP	Canon CCTP
'CMT1'	IFD0	EXIF
'CMT2'	ExifIFD	EXIF
'CMT3'	MakerNoteCanon	Canon
'CMT4'	GPSInfo	GPS
'CNCV'	CompressorVersion	no
'CNOP'	CanonCNOP	Canon CNOP
'CNTH'	CanonCNTH	Canon CNTH
'THMB'	ThumbnailImage	no

Canon CCTP Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

Canon Skip Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
'CNDB'	Unknown_CNDB?	no

Canon uuid2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'CNOP'	CanonVRD	CanonVRD

CanonCustom Tags

CanonCustom Functions1D Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0	FocusingScreen	int8u
1	FinderDisplayDuringExposure	int8u
2	ShutterReleaseNoCFCard	int8u
3	ISOspeedExpansion	int8u
4	ShutterAELButton	int8u
5	ManualTv	int8u
6	ExposureLevelIncrements	int8u
7	USMLensElectronicMF	int8u
8	LCDPanels	int8u
9	AEBSequenceAutoCancel	int8u
10	AFPointIllumination	int8u
11	AFPointSelection	int8u
12	MirrorLockup	int8u
13	AFPointSpotMetering	int8u
14	FillFlashAutoReduction	int8u
15	ShutterCurtainSync	int8u
16	SafetyShiftInAvOrTv	int8u
17	AFPointActivationArea	int8u
18	SwitchToRegisteredAFPoint	int8u
19	LensAFStopButton	int8u
20	AI Servo Tracking Sensitivity	int8u
21	AI Servo Continuous Shooting	int8u

CanonCustom Functions5D Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0	FocusingScreen	int8u
1	SetFunctionWhenShooting	int8u
2	LongExposureNoiseReduction	int8u
3	FlashSyncSpeedAv	int8u
4	Shutter-AELock	int8u
5	AFAssistBeam	int8u
6	ExposureLevelIncrements	int8u
7	FlashFiring	int8u
8	ISOExpansion	int8u
9	AEBSequenceAutoCancel	int8u
10	SuperimposedDisplay	int8u
11	MenuButtonDisplayPosition	int8u
12	MirrorLockup	int8u
13	AFPointSelectionMethod	int8u
14	ETTLII	int8u
15	ShutterCurtainSync	int8u
16	SafetyShiftInAvOrTv	int8u
17	AFPointActivationArea	int8u
18	LCDDisplayReturnToShoot	int8u
19	LensAFStopButton	int8u
20	AddOriginalDecisionData	int8u

CanonCustom Functions10D Tags

Tag ID	Tag Name	Writable
-----	-----	-----
1	SetButtonWhenShooting	int8u
2	ShutterReleaseNoCFCard	int8u
3	FlashSyncSpeedAv	int8u
4	Shutter-AELock	int8u
5	AFAssist	int8u
6	ExposureLevelIncrements	int8u
7	AFPointRegistration	int8u
8	RawAndJpgRecording	int8u
9	AEBSequenceAutoCancel	int8u
10	SuperimposedDisplay	int8u
11	MenuButtonDisplayPosition	int8u
12	MirrorLockup	int8u
13	AssistButtonFunction	int8u
14	FillFlashAutoReduction	int8u
15	ShutterCurtainSync	int8u
16	SafetyShiftInAvOrTv	int8u
17	LensAFStopButton	int8u

CanonCustom Functions20D Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0	SetFunctionWhenShooting	int8u
1	LongExposureNoiseReduction	int8u
2	FlashSyncSpeedAv	int8u
3	Shutter-AELock	int8u
4	AFAssistBeam	int8u
5	ExposureLevelIncrements	int8u
6	FlashFiring	int8u
7	ISOExpansion	int8u
8	AEBSequenceAutoCancel	int8u
9	SuperimposedDisplay	int8u
10	MenuButtonDisplayPosition	int8u
11	MirrorLockup	int8u
12	AFPointSelectionMethod	int8u
13	ETTLII	int8u
14	ShutterCurtainSync	int8u
15	SafetyShiftInAvOrTv	int8u
16	LensAFStopButton	int8u
17	AddOriginalDecisionData	int8u

CanonCustom Functions30D Tags

Tag ID	Tag Name	Writable
-----	-----	-----
1	SetFunctionWhenShooting	int8u
2	LongExposureNoiseReduction	int8u
3	FlashSyncSpeedAv	int8u
4	Shutter-AELock	int8u
5	AFAssistBeam	int8u
6	ExposureLevelIncrements	int8u
7	FlashFiring	int8u
8	ISOExpansion	int8u
9	AEBSequenceAutoCancel	int8u
10	SuperimposedDisplay	int8u
11	MenuButtonDisplayPosition	int8u
12	MirrorLockup	int8u
13	AFPointSelectionMethod	int8u
14	ETTLII	int8u
15	ShutterCurtainSync	int8u
16	SafetyShiftInAvOrTv	int8u
17	MagnifiedView	int8u
18	LensAFStopButton	int8u
19	AddOriginalDecisionData	int8u

CanonCustom Functions350D Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0	SetButtonCrossKeysFunc	int8u
1	LongExposureNoiseReduction	int8u
2	FlashSyncSpeedAv	int8u
3	Shutter-AELock	int8u
4	AFAssistBeam	int8u
5	ExposureLevelIncrements	int8u
6	MirrorLockup	int8u
7	ETTLII	int8u
8	ShutterCurtainSync	int8u

CanonCustom Functions400D Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0	SetButtonCrossKeysFunc	int8u
1	LongExposureNoiseReduction	int8u
2	FlashSyncSpeedAv	int8u
3	Shutter-AELock	int8u
4	AFAssistBeam	int8u
5	ExposureLevelIncrements	int8u
6	MirrorLockup	int8u
7	ETTLII	int8u
8	ShutterCurtainSync	int8u
9	MagnifiedView	int8u
10	LCDDisplayAtPowerOn	int8u

CanonCustom FunctionsD30 Tags

Custom functions for the EOS D30 and D60.

Tag ID	Tag Name	Writable
-----	-----	-----
1	LongExposureNoiseReduction	int8u
2	Shutter-AELock	int8u
3	MirrorLockup	int8u
4	ExposureLevelIncrements	int8u
5	AFAssist	int8u
6	FlashSyncSpeedAv	int8u
7	AEBSequenceAutoCancel	int8u
8	ShutterCurtainSync	int8u
9	LensAFStopButton	int8u
10	FillFlashAutoReduction	int8u

11	MenuButtonReturn	int8u
12	SetButtonWhenShooting	int8u
13	SensorCleaning	int8u
14	SuperimposedDisplay	int8u
15	ShutterReleaseNoCFCard	int8u

CanonCustom FuncsUnknown Tags

Tag ID	Tag Name	Writable
-----	-----	-----
	[no tags known]	

CanonCustom PersonalFuncs Tags

Personal function settings for the EOS-1D.

Index2	Tag Name	Writable
-----	-----	-----
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	PF20LimitContinuousShots	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
-----	-----	-----
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	PF20MaxContinuousShots	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
-----	-----	-----
0x0101	ExposureLevelIncrements	int32s
0x0102	ISOSpeedIncrements	int32s
0x0103	ISOSpeedRange	int32s[3]
	ISOExpansion	int32s
0x0104	AEBAutoCancel	int32s
0x0105	AEBSequence	int32s
0x0106	AEBShotCount	int32s
	AEBShotCount	int32s[2]
0x0107	SpotMeterLinkToAFPoint	int32s
0x0108	SafetyShift	int32s
0x0109	UsableShootingModes	int32s
	UsableShootingModes	int32s[2]
0x010a	UsableMeteringModes	int32s
	UsableMeteringModes	int32s[2]
0x010b	ExposureModeInManual	int32s
0x010c	ShutterSpeedRange	int32s[3]
	ShutterSpeedRange	int32s[4]
0x010d	ApertureRange	int32s[3]
	ApertureRange	int32s[4]
0x010e	ApplyShootingMeteringMode	int32s[8]
0x010f	FlashSyncSpeedAv	int32s
0x0110	AEMicroadjustment	int32s[3]
0x0111	FEMicroadjustment	int32s[3]
0x0112	SameExposureForNewAperture	int32s
0x0113	ExposureCompAutoCancel	int32s
0x0114	AELockMeterModeAfterFocus	int32s
0x0201	LongExposureNoiseReduction	int32s
0x0202	HighISONoiseReduction	int32s
0x0203	HighlightTonePriority	int32s
0x0204	AutoLightingOptimizer	int32s
0x0304	ETTLII	int32s
0x0305	ShutterCurtainSync	int32s
0x0306	FlashFiring	int32s
0x0407	ViewInfoDuringExposure	int32s
0x0408	LCDIlluminationDuringBulb	int32s
0x0409	InfoButtonWhenShooting	int32s
0x040a	ViewfinderWarnings	int32s
0x040b	LVShootingAreaDisplay	int32s
0x040c	LVShootingAreaDisplay	int32s
0x0501	USMLensElectronicMF	int32s
0x0502	AI Servo Tracking Sensitivity	int32s
0x0503	AI Servo Image Priority	int32s
0x0504	AI Servo Tracking Method	int32s
0x0505	Lens Drive No AF	int32s
0x0506	Lens AF Stop Button	int32s
0x0507	AF Microadjustment	int32s[5]
0x0508	AF Point Area Expansion	int32s
0x0509	Selectable AF Point	int32s
0x050a	Switch To Registered AF Point	int32s

0x050b	AFPointAutoSelection	int32s
0x050c	AFPointDisplayDuringFocus	int32s
0x050d	AFPointBrightness	int32s
0x050e	AFAssistBeam	int32s
0x050f	AFPointSelectionMethod	int32s
0x0510	VFDisplayIllumination	int32s
	SuperimposedDisplay	int32s
0x0511	AFDuringLiveView	int32s
0x0512	SelectAFAreaSelectMode	int32s
0x0513	ManualAFPointSelectPattern	int32s
0x0514	DisplayAllAFPoints	int32s
0x0515	FocusDisplayAIServoAndMF	int32s
0x0516	OrientationLinkedAFPoint	int32s
0x0517	MultiControllerWhileMetering	int32s
0x0518	AccelerationTracking	int32s
0x0519	AIServoFirstImagePriority	int32s
0x051a	AIServoSecondImagePriority	int32s
0x051b	AFAreaSelectMethod	int32s
0x051c	AutoAFPointColorTracking	int32s
0x051d	VFDisplayIllumination	int32s
0x051e	InitialAFPointAIServoAF	int32s
0x060f	MirrorLockup	int32s
0x0610	ContinuousShootingSpeed	int32s[6]
	ContinuousShootingSpeed	int32s[5]
	ContinuousShootingSpeed	int32s[3]
0x0611	ContinuousShotLimit	int32s[2]
0x0612	RestrictDriveModes	int32s
	RestrictDriveModes	int32s[2]
0x0701	Shutter-AELock	int32s
	AFAndMeteringButtons	int32s
	ShutterButtonAFOnButton	int32s
0x0702	AFOnAELockButtonSwitch	int32s
0x0703	QuickControlDialInMeter	int32s
0x0704	SetButtonWhenShooting	int32s
0x0705	ManualTv	int32s
0x0706	DialDirectionTvAv	int32s
0x0707	AvSettingWithoutLens	int32s
0x0708	WBMediaImageSizeSetting	int32s
0x0709	LockMicrophoneButton	int32s
0x070a	ButtonFunctionControlOff	int32s
0x070b	AssignFuncButton	int32s
0x070c	CustomControls	int32s
0x070d	StartMovieShooting	int32s
0x070e	FlashButtonFunction	int32s
0x070f	MultiFunctionLock	int32s
0x0710	TrashButtonFunction	int32s
0x0711	ShutterReleaseWithoutLens	int32s
0x0712	ControlRingRotation	int32s
0x0713	FocusRingRotation	int32s
0x0714	RFLensMFFocusRingSensitivity	int32s
0x0715	CustomizedDials	int32s
0x080b	FocusingScreen	int32s
0x080c	TimerLength	int32s[3]
	TimerLength	int32s[4]
0x080d	ShortReleaseTimeLag	int32s
0x080e	AddAspectRatioInfo	int32s
0x080f	AddOriginalDecisionData	int32s
0x0810	LiveViewExposureSimulation	int32s
0x0811	LCDDisplayAtPowerOn	int32s
0x0812	MemoAudioQuality	int32s
0x0813	DefaultEraseOption	int32s
0x0814	RetractLensOnPowerOff	int32s
0x0815	AddIPTCInformation	int32s
0x0816	AudioCompression	int32s

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
-----	-----	-----
0xffff00f4	EditData	CanonVRD Edit
0xffff00f5	IHLData	CanonVRD IHL
0xffff00f6	XMP	XMP
0xffff00f7	Edit4Data	CanonVRD Edit4

CanonVRD Edit Tags

Canon VRD edit information.

Index	Tag Name	Writable
-----	-----	-----
0	VRD1	CanonVRD Ver1
1	VRDStampTool	CanonVRD StampTool
2	VRD2	CanonVRD Ver2

CanonVRD Ver1 Tags

Index1	Tag Name	Writable
-----	-----	-----
2	VRDVersion	no
6	WBAAdjRGGBLevels	int16u[4]
24	WhiteBalanceAdj	int16u
26	WBAAdjColorTemp	int16u
36	WBFineTuneActive	int16u
40	WBFineTuneSaturation	int16u
44	WBFineTuneTone	int16u
46	RawColorAdj	int16u
48	RawCustomSaturation	int32s
52	RawCustomTone	int32s
56	RawBrightnessAdj	int32s
60	ToneCurveProperty	int16u
122	DynamicRangeMin	int16u
124	DynamicRangeMax	int16u
272	ToneCurveActive	int16u
275	ToneCurveMode	int8u
276	BrightnessAdj	int8s
277	ContrastAdj	int8s
278	SaturationAdj	int16s
286	ColorToneAdj	int32s
294	LuminanceCurvePoints	int16u[21]
336	LuminanceCurveLimits	int16u[4]
345	ToneCurveInterpolation	int8u
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
582	CropLeft	int16u
584	CropTop	int16u
586	CropWidth	int16u
588	CropHeight	int16u
602	SharpnessAdj	int16u
608	CropAspectRatio	int16u
610	ConstrainedCropWidth	float
614	ConstrainedCropHeight	float
618	CheckMark	int16u
622	Rotation	int16u
624	WorkColorSpace	int16u

CanonVRD StampTool Tags

Index1	Tag Name	Writable
-----	-----	-----
0	StampToolCount	no

CanonVRD Ver2 Tags

Tags added in DPP version 2.0 and later.

Index2	Tag Name	Writable
-----	-----	-----
2	PictureStyle	int16s
3	IsCustomPictureStyle	int16s
13	StandardRawColorTone	int16s
14	StandardRawSaturation	int16s
15	StandardRawContrast	int16s
16	StandardRawLinear	int16s
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
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
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
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
53	FaithfulRawSharpness	int16s
54	FaithfulRawHighlightPoint	int16s
55	FaithfulRawShadowPoint	int16s
56	FaithfulOutputHighlightPoint	int16s
57	FaithfulOutputShadowPoint	int16s
58	MonochromeFilterEffect	int16s
59	MonochromeToningEffect	int16s
60	MonochromeContrast	int16s
61	MonochromeLinear	int16s
62	MonochromeSharpness	int16s
63	MonochromeRawHighlightPoint	int16s
64	MonochromeRawShadowPoint	int16s
65	MonochromeOutputHighlightPoint	int16s
66	MonochromeOutputShadowPoint	int16s
69	UnknownContrast?	int16s
70	UnknownLinear?	int16s
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
80	CustomSharpness	int16s
81	CustomRawHighlightPoint	int16s
82	CustomRawShadowPoint	int16s
83	CustomOutputHighlightPoint	int16s
84	CustomOutputShadowPoint	int16s
88	CustomPictureStyleData	no
94	ChrominanceNoiseReduction	int16s
95	LuminanceNoiseReduction	int16s
96	ChrominanceNR_TIFF_JPEG	int16s
98	ChromaticAberrationOn	int16s
99	DistortionCorrectionOn	int16s
100	PeripheralIlluminationOn	int16s
101	ColorBlur	int16s
102	ChromaticAberration	int16s
103	DistortionCorrection	int16s
104	PeripheralIllumination	int16s
105	AberrationCorrectionDistance	int16s
106	ChromaticAberrationRed	int16s
107	ChromaticAberrationBlue	int16s
109	LuminanceNR_TIFF_JPEG	int16s
110	AutoLightingOptimizerOn	int16s
111	AutoLightingOptimizer	int16s
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
144	UnsharpMask	int16s
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	NeutraUnsharpMaskStrength	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
215	CropCircleX	int16s
216	CropCircleY	int16s
217	CropCircleRadius	int16s
220	DLOOn	int16s
221	DLOSetting	int16s
222	DLOShootingDistance	int16s
223	DLODataLength	no
224	DLOInfo	CanonVRD DLOInfo
225	CameraRawColorTone	int16s
226	CameraRawSaturation	int16s
227	CameraRawContrast	int16s
228	CameraRawLinear	int16s
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
-----	-----	-----
4	DLOSettingApplied	int16s
5	DLOVersion	string[10]
10	DLOData	no

CanonVRD IHL Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	IHL_EXIF	EXIF
	IHL_EXIF?	no
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
-----	-----	-----
0	DR4	CanonVRD DR4

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
-----	-----	-----
'header'	DR4Header	CanonVRD DR4Header
0x10002	Rotation	yes
0x10003	AngleAdj	yes
0x10021	CustomPictureStyle	yes
0x10100	Rating	yes
0x10101	CheckMark	yes
0x10200	WorkColorSpace	yes
0x20001	RawBrightnessAdj	yes
0x20101	WhiteBalanceAdj	yes
0x20102	WBAdjColorTemp	yes

0x20105	WBAdjMagentaGreen	yes
0x20106	WBAdjBlueAmber	yes
0x20125	WBAdjRGGBLevels	yes
0x20200	GammaLinear	yes
0x20301	PictureStyle	yes
0x20303	ContrastAdj	yes
0x20304	ColorToneAdj	yes
0x20305	ColorSaturationAdj	yes
0x20306	MonochromeToningEffect	yes
0x20307	MonochromeFilterEffect	yes
0x20308	UnsharpMaskStrength	yes
0x20309	UnsharpMaskFineness	yes
0x2030a	UnsharpMaskThreshold	yes
0x2030b	ShadowAdj	yes
0x2030c	HighlightAdj	yes
0x20310	SharpnessAdj	yes
0x20310.0	SharpnessAdjOn	yes
0x20311	SharpnessStrength	yes
0x20400	ToneCurve	CanonVRD ToneCurve
0x20400.1	ToneCurveOriginal	yes
0x20410	ToneCurveBrightness	yes
0x20411	ToneCurveContrast	yes
0x20500	AutoLightingOptimizer	yes
0x20500.0	AutoLightingOptimizerOn	yes
0x20600	LuminanceNoiseReduction	yes
0x20601	ChrominanceNoiseReduction	yes
0x20670	ColorMoireReduction	yes
0x20670.0	ColorMoireReductionOn	yes
0x20701	ShootingDistance	yes
0x20702	PeripheralIllumination	yes
0x20702.0	PeripheralIlluminationOn	yes
0x20703	ChromaticAberration	yes
0x20703.0	ChromaticAberrationOn	yes
0x20704	ColorBlurOn	yes
0x20705	DistortionCorrection	yes
0x20705.0	DistortionCorrectionOn	yes
0x20706	DLOSetting	yes
0x20706.0	DLOOn	yes
0x20707	ChromaticAberrationRed	yes
0x20708	ChromaticAberrationBlue	yes
0x20709	DistortionEffect	yes
0x2070b	DiffractionCorrectionOn	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	GammaInfo	CanonVRD GammaInfo
0x20b10	DPRAWMicroadjustBackFront	yes
0x20b12	DPRAWMicroadjustStrength	yes
0x20b20	DPRAWBokehShift	yes
0x20b21	DPRAWBokehShiftArea	yes
0x20b30	DPRAWGhostingReductionArea	yes
0x30101	CropAspectRatio	yes
0x30102	CropAspectRatioCustom	yes
0xf0100	CropInfo	CanonVRD CropInfo
0xf0500	CustomPictureStyleData	yes
0xf0510	StampInfo	CanonVRD StampInfo
0xf0511	DustInfo	CanonVRD DustInfo
0xf0512	LensFocalLength	yes

CanonVRD DR4Header Tags

Index4	Tag Name	Writable
-----	-----	-----

3 DR4CameraModel int32u

CanonVRD ToneCurve Tags

Index4	Tag Name	Writable
-----	-----	-----
0	ToneCurveColorSpace	int32u
1	ToneCurveShape	int32u
3	ToneCurveInputRange	int32u[2]
5	ToneCurveOutputRange	int32u[2]
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
-----	-----	-----
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]

CanonVRD CropInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	CropActive	int32s
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
-----	-----	-----
2	StampToolCount	no

CanonVRD DustInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
2	DustDeleteApplied	no

Casio Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	RecordingMode	int16u
0x0002	Quality	int16u
0x0003	FocusMode	int16u
0x0004	FlashMode	int16u

0x0005	FlashIntensity	int16u
0x0006	ObjectDistance	int32u
0x0007	WhiteBalance	int16u
0x000a	DigitalZoom	int32u
0x000b	Sharpness	int16u
0x000c	Contrast	int16u
0x000d	Saturation	int16u
0x0014	ISO	int16u
0x0015	FirmwareDate	string[18]
0x0016	Enhancement	int16u
0x0017	ColorFilter	int16u
0x0018	AFPoint	int16u
0x0019	FlashIntensity	int16u
0x0e00	PrintIM	PrintIM

Casio Type2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0002	PreviewImageSize	int16u[2]
0x0003	PreviewImageLength	int32u*
0x0004	PreviewImageStart	int32u*
0x0008	QualityMode	int16u
0x0009	CasioImageSize	int16u
0x000d	FocusMode	int16u
0x0014	ISO	int16u
0x0019	WhiteBalance	int16u
0x001d	FocalLength	rational64u
0x001f	Saturation	int16u
0x0020	Contrast	int16u
0x0021	Sharpness	int16u
0x0e00	PrintIM	PrintIM
0x2000	PreviewImage	undef
0x2001	FirmwareDate	string[18]
0x2011	WhiteBalanceBias	int16u[2]
0x2012	WhiteBalance	int16u
0x2021	AFPointPosition	int16u[4] 2
0x2022	ObjectDistance	int32u
0x2034	FlashDistance	int16u
0x2076	SpecialEffectMode	int8u[3]
0x2089	FaceInfo1	Casio FaceInfo1
	FaceInfo2	Casio FaceInfo2
	FaceInfoUnknown?	yes
0x211c	FacesDetected	int8u
0x3000	RecordMode	int16u
0x3001	ReleaseMode	int16u
0x3002	Quality	int16u
0x3003	FocusMode	int16u
0x3006	HometownCity	string
0x3007	BestShotMode	int16u
0x3008	AutoISO	int16u
0x3009	AFMode	int16u
0x3011	Sharpness	undef[2]
0x3012	Contrast	undef[2]
0x3013	Saturation	undef[2]
0x3014	ISO	int16u
0x3015	ColorMode	int16u
0x3016	Enhancement	int16u
0x3017	ColorFilter	int16u
0x301b	ArtMode	int16u
0x301c	SequenceNumber	int16u
0x301d	BracketSequence	int16u[2]
0x3020	ImageStabilization	int16u
0x302a	LightingMode	int16u
0x302b	PortraitRefiner	int16u
0x3030	SpecialEffectLevel	int16u
0x3031	SpecialEffectSetting	int16u
0x3103	DriveMode	int16u
0x310b	ArtModeParameters	int8u[3]
0x4001	CaptureFrameRate	int16u[n]

0x4003 VideoQuality int16u

Casio FaceInfo1 Tags

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

Index1	Tag Name	Writable
-----	-----	-----
0	FacesDetected	int8u
1	FaceDetectFrameSize	int16u[2]
13	Face1Position	int16u[4]
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
-----	-----	-----
2	FacesDetected	int8u
4	FaceDetectFrameSize	int16u[2]
8	FaceOrientation	int8u
24	Face1Position	int16u[4]
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
-----	-----	-----
44	CasioQuality	no
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
-----	-----	-----
0	Software	no

DJI Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----

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
-----	-----
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
-----	-----	-----
'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
-----	-----	-----
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
-----	-----	-----
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.

Index1	Tag Name	Writable
-----	-----	-----
4	RelativeHumidity	no
6	ObjectDistance	no
8	Emissivity	no
10	ReflectedTemperature	no

FLIR Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	ImageTemperatureMax	rational64u
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
-----	-----	-----
'_header'	FFFHeader	FLIR Header
0x0001	RawData	FLIR RawData
0x0005	GainDeadData	FLIR GainDeadData
0x0006	CoarseData	FLIR CoarseData
0x000e	EmbeddedImage	FLIR EmbeddedImage
0x0020	CameraInfo	FLIR CameraInfo
0x0021	MeasurementInfo	FLIR MeasInfo
0x0022	PaletteInfo	FLIR PaletteInfo
0x0023	TextInfo	FLIR TextInfo
0x0024	EmbeddedAudioFile	no
0x0028	PaintData	FLIR PaintData
0x002a	PiP	FLIR PiP
0x002b	GPSInfo	FLIR GPSInfo
0x002c	MeterLink	FLIR MeterLink
0x002e	ParameterInfo	FLIR ParamInfo

FLIR Header Tags

Tags extracted from the FLIR FFF/AFF header.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
1	RawThermalImageWidth	no
2	RawThermalImageHeight	no
16	RawThermalImageType	no
16.1	RawThermalImage	no

FLIR GainDeadData Tags

Information found in FFF-format .GAN calibration image files.

Index2	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
1	CoarseMapImageWidth	no
2	CoarseMapImageHeight	no
16	CoarseMapImageType	no
16.1	CoarseMapImage	no

FLIR EmbeddedImage Tags

Index2	Tag Name	Writable
-----	-----	-----
1	EmbeddedImageWidth	no
2	EmbeddedImageHeight	no

16	EmbeddedImageType	no
16.1	EmbeddedImage	no

FLIR CameraInfo Tags

FLIR camera information. The Planck tags are variables used in the temperature calculation. See <https://exiftool.org/forum/index.php?topic=4898.msg23972#msg23972> for details.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----
Meas1Label	no
Meas1Params	no
Meas1Type	no

FLIR PaletteInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PaletteColors	no
6	AboveColor	no
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

FLIR TextInfo Tags

Tag Name	Writable
-----	-----
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
-----	-----	-----
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
-----	-----	-----
0	Real2IR	no
2	OffsetX	no
3	OffsetY	no
4	PiPX1	no
5	PiPX2	no
6	PiPY1	no
7	PiPY2	no

FLIR GPSInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	GPSValid	no
4	GPSVersionID	no
8	GPSLatitudeRef	no
10	GPSLongitudeRef	no
16	GPSLatitude	no
24	GPSLongitude	no
32	GPSAltitude	no
64	GPSDOP	no
68	GPSSpeedRef	no
70	GPSTrackRef	no
72	GPSTrackDirectionRef	no

76	GPSSpeed	no
80	GPSTrack	no
84	GPSTimeDirection	no
88	GPSTimeDatum	no

FLIR MeterLink Tags

Tags containing Meterlink humidity meter information.

Index1	Tag Name	Writable
-----	-----	-----
26	Reading1Units	no
28	Reading1Description	no
32	Reading1Device	no
96	Reading1Value	no
126	Reading2Units	no
128	Reading2Description	no
132	Reading2Device	no
196	Reading2Value	no
226	Reading3Units	no
228	Reading3Description	no
232	Reading3Device	no
296	Reading3Value	no
326	Reading4Units	no
328	Reading4Description	no
332	Reading4Device	no
396	Reading4Value	no

FLIR ParamInfo Tags

Tag Name	Writable
-----	-----
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
-----	-----	-----
'uuid'	FLIR_Parts	FLIR Parts
	FLIR_Serial	FLIR SerialNums
	FLIR_Params	FLIR Params
	FLIR_UnknownUUID	FLIR UnknownUUID
	FLIR_GPS	FLIR GPS_UUID
	FLIR_MoreInfo	FLIR MoreInfo
	SoftwareComponents?	no
	FLIR_Unknown?	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
-----	-----	-----
4	BAHPVer	no
	BALPVer	no
	Battery	no
	BAVPVer	no
	CamCore	no
	DetectorBoard	no
	Detector	no

-- ExifTool 12.92 Tag Names --

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
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
[no tags known]		

FLIR GPS UUID Tags

Tags extracted from the "uuid" box with ID
7f2e21008b464918afblde709a74f6f5 in FLIR MP4 videos.

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
5	LensModel	no
11	UnknownTemperature1?	no
15	UnknownTemperature2?	no

FLIR AFF Tags

Tags extracted from FLIR "AFF" SEQ images.

Tag ID	Tag Name	Writable
-----	-----	-----
'_header'	AFFHeader	FLIR Header
0x0001	AFF1	FLIR AFF1
0x0005	AFF5	FLIR AFF5

FLIR AFF1 Tags

Index2	Tag Name	Writable
-----	-----	-----
1	SensorWidth	no
2	SensorHeight	no

FLIR AFF5 Tags

Index2	Tag Name	Writable
-----	-----	-----
19	SensorWidth	no
20	SensorHeight	no

FLIR FPF Tags

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

Index1	Tag Name	Writable
-----	-----	-----
32	FPFVersion	no
36	ImageDataOffset	no
40	ImageType	no
42	ImagePixelFormat	no
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

FujiFilm Tags

Tag ID	Tag Name	Writable
-----	-----	-----

0x0000	Version	undef
0x0010	InternalSerialNumber	string
0x1000	Quality	string
0x1001	Sharpness	int16u
0x1002	WhiteBalance	int16u
0x1003	Saturation	int16u
0x1004	Contrast	int16u
0x1005	ColorTemperature	int16u
0x1006	Contrast	int16u
0x100a	WhiteBalanceFineTune	int32s[2]
0x100b	NoiseReduction	int16u
0x100e	NoiseReduction	int16u
0x100f	Clarity	int32s
0x1010	FujiFlashMode	int16u
0x1011	FlashExposureComp	rational64s
0x1020	Macro	int16u
0x1021	FocusMode	int16u
0x1022	AFMode	int16u
0x1023	FocusPixel	int16u[2]
0x102b	PrioritySettings	FujiFilm PrioritySettings
0x102d	FocusSettings	FujiFilm FocusSettings
0x102e	AFCSettings	FujiFilm AFCSettings
0x1030	SlowSync	int16u
0x1031	PictureMode	int16u
0x1032	ExposureCount	int16u
0x1033	EXRAuto	int16u
0x1034	EXRMode	int16u
0x1040	ShadowTone	int32s
0x1041	HighlightTone	int32s
0x1044	DigitalZoom	int32u
0x1045	LensModulationOptimizer	int32u
0x1047	GrainEffectRoughness	int32s
0x1048	ColorChromeEffect	int32s
0x1049	BWAdjustment	int8s
0x104b	BWMagentaGreen	int8s
0x104c	GrainEffectSize	int16u
0x104d	CropMode	int16u
0x104e	ColorChromeFXBlue	int32s
0x1050	ShutterType	int16u
0x1051	CropFlag	int8u
0x1052	CropTopLeft	int32u
0x1053	CropSize	int32u
0x1100	AutoBracketing	int16u
0x1101	SequenceNumber	int16u
0x1103	DriveSettings	FujiFilm DriveSettings
0x1105	PixelShiftShots	int16u
0x1106	PixelShiftOffset	rational64s[2]
0x1153	PanoramaAngle	int16u
0x1154	PanoramaDirection	int16u
0x1201	AdvancedFilter	int32u
0x1210	ColorMode	int16u
0x1300	BlurWarning	int16u
0x1301	FocusWarning	int16u
0x1302	ExposureWarning	int16u
0x1304	GEImageSize	string
0x1400	DynamicRange	int16u
0x1401	FilmMode	int16u
0x1402	DynamicRangeSetting	int16u
0x1403	DevelopmentDynamicRange	int16u
0x1404	MinFocalLength	rational64s
0x1405	MaxFocalLength	rational64s
0x1406	MaxApertureAtMinFocal	rational64s
0x1407	MaxApertureAtMaxFocal	rational64s
0x140b	AutoDynamicRange	int16u
0x1422	ImageStabilization	int16u[3]
0x1425	SceneRecognition	int16u
0x1431	Rating	int32u
0x1436	ImageGeneration	int16u
0x1438	ImageCount	int16u
0x1443	DRangePriority	int16u

0x1444	DRangePriorityAuto	int16u
0x1445	DRangePriorityFixed	int16u
0x1446	FlickerReduction	int32u
0x1447	FujiModel	string
0x1448	FujiModel2	string
0x144d	RollAngle	rational64s
0x3803	VideoRecordingMode	int32u
0x3804	PeripheralLighting	int16u
0x3806	VideoCompression	int16u
0x3820	FrameRate	int16u
0x3821	FrameWidth	int16u
0x3822	FrameHeight	int16u
0x3824	FullHDHighSpeedRec	int32u
0x4005	FaceElementSelected	int16u[4]
0x4100	FacesDetected	int16u
0x4103	FacePositions	int16u[n]
0x4200	NumFaceElements	int16u
0x4201	FaceElementTypes	int8u[n]
0x4203	FaceElementPositions	int16u[n]
0x4282	FaceRecInfo	FujiFilm FaceRecInfo
0x8000	FileSource	string
0x8002	OrderNumber	int32u
0x8003	FrameNumber	int16u
0xb211	Parallax	rational64s

FujiFilm PrioritySettings Tags

Index2	Tag Name	Writable
-----	-----	-----
0.1	AF-SPriority	int16u & 0x0f
0.2	AF-CPriority	int16u & 0xf0

FujiFilm FocusSettings Tags

Index4	Tag Name	Writable
-----	-----	-----
0.1	FocusMode2	int32u & 0x0f
0.2	PreAF	int32u & 0xf0
0.3	AFAreaMode	int32u & 0xf00
0.4	AFAreaPointSize	int32u & 0xf000
0.5	AFAreaZoneSize	int32u & 0xff0000

FujiFilm AFCSettings Tags

Index4	Tag Name	Writable
-----	-----	-----
0	AF-CSetting	int32u
0.1	AF-CTrackingSensitivity	int32u & 0x0f
0.2	AF-CSpeedTrackingSensitivity	int32u & 0xf0
0.3	AF-CZoneAreaSwitching	int32u & 0xf00

FujiFilm DriveSettings Tags

Index4	Tag Name	Writable
-----	-----	-----
0.1	DriveMode	int32u & 0xff
0.2	DriveSpeed	int32u & 0xff000000

FujiFilm FaceRecInfo Tags

Face recognition information.

Tag Name	Writable
-----	-----
FacelBirthday	no
FacelCategory	no
FacelName	no
Face2Birthday	no
Face2Category	no
Face2Name	no

Face3Birthday	no
Face3Category	no
Face3Name	no
Face4Birthday	no
Face4Category	no
Face4Name	no
Face5Birthday	no
Face5Category	no
Face5Name	no
Face6Birthday	no
Face6Category	no
Face6Name	no
Face7Birthday	no
Face7Category	no
Face7Name	no
Face8Birthday	no
Face8Category	no
Face8Name	no

FujiFilm RAFHeader Tags

Tags extracted from the header of RAF images.

Index1	Tag Name	Writable
-----	-----	-----
60	RAFVersion	no
108	RAFCompression	no

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
-----	-----	-----
0x0100	RawImageFullSize	no
0x0110	RawImageCropTopLeft	no
0x0111	RawImageCroppedSize	no
0x0115	RawImageAspectRatio	no
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	FujiFilm RAFData

FujiFilm RAFData Tags

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0xf000	FujiIFD	FujiFilm IFD
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".

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	RawImageNumber	no
0x0005	ExposureTime	no
0x0006	FNumber	no
0x0007	ISO	no

FujiFilm FFMV Tags

Information found in the FFMV atom of MOV videos.

Index1	Tag Name	Writable
-----	-----	-----
0	MovieStreamName	no

FujiFilm MOV Tags

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

Index1	Tag Name	Writable
-----	-----	-----
0	Make	no
24	Model	no
46	ExposureTime	no
50	FNumber	no
58	ExposureCompensation	no

GE Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0x0202	Macro	int16u
0x0207	GEModel	string
0x0300	GEMake	string

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
-----	-----	-----

HP Type2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Lens Shading'	LensShading	no
'PreviewImage'	PreviewImage	no
'Serial Number'	SerialNumber	no

Index1	Tag Name	Writable
-----	-----	-----
12	MaxAperture	no
16	ExposureTime	no
20	CameraDateTime	no
52	ISO	no
92	SerialNumber	no

Index1	Tag Name	Writable
-----	-----	-----
12	FNumber	no
16	ExposureTime	no
20	CameraDateTime	no
52	ISO	no
88	SerialNumber	no

Tag ID	Tag Name	Writable
-----	-----	-----
'CMSN'	SerialNumber	no
'FWRV'	FirmwareVersion	no
'LSLV'	LSLV	HP TDHD
'TDHD'	TDHD	HP TDHD

Tag ID	Tag Name	Writable
-----	-----	-----
0x0002	CPUVersions	no
0x0003	Quality	no

Tag ID	Tag Name	Writable
-----	-----	-----
'QTY'	Quality	no
'VER'	MakerNoteVersion	no

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
-----	-----	-----
0	KodakModel	string[8]
9	Quality	int8u
10	BurstMode	int8u
12	KodakImageWidth	int16u
14	KodakImageHeight	int16u
16	YearCreated	int16u
18	MonthDayCreated	int8u[2]
20	TimeCreated	int8u[4]
24	BurstMode2?	int16u
27	ShutterMode	int8u
28	MeteringMode	int8u
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
58	VariousModes2?	int16u
60	PanoramaMode?	int16u
62	SubjectDistance?	int16u
64	WhiteBalance	int8u
92	FlashMode	int8u
93	FlashFired	int8u
94	ISOSetting	int16u
96	ISO	int16u
98	TotalZoom	int16u
100	DateTimeStamp	int16u
102	ColorMode	int16u
104	DigitalZoom	int16u
107	Sharpness	int8s

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
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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	Kodak TextualInfo
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	Kodak Processing
	ProcessingParameters	no
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	rational64s
	CameraTemperature	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	USMPParametersLow	no
0x094d	USMPParametersMed	no
0x094e	USMPParametersHigh	no
0x094f	USMPParametersHost	no
0x0950	EdgeSplineLow	no
0x0951	EdgeSplineMed	no
0x0952	EdgeSplineHigh	no
0x0953	USMPParametersHost6MP	no
0x0954	USMPParametersHost3MP	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	SglColDCACThres1	no
0x09f8	SglColDCACThres2	no
0x09f9	SglColDCACThres3	no
0x0a01	DblColDCACThres1	no
0x0a02	DblColDCACThres2	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
0x0bba	DacGainsCoarse	no
0x0bbb	DacGainsFine	no
0x0bbc	DigitalExposureGains	no
0x0bbd	DigitalExposureBiases	no
0x0bbe	BlackClamp	no
0x0bbf	ChannelCoarseGainAdjust	no
0x0bc0	BlackClampOffset	no
0x0bf4	DMPixelThresholdFactor	no
0x0bf5	DMWindowThresholdFactor	no

0x0bf6	DMTrimFraction	no
0x0bf7	DMSmoothRejThresh	no
0x0bf8	DMFillRejThresh	no
0x0bf9	VMWsize	no
0x0bfa	DMErodeRadius	no
0x0bfb	DMNumPatches	no
0x0bfc	DMNoiseScale	no
0x0bfe	BrightDefectThreshold	no
0x0bff	BrightDefectIntegrationMS	no
0x0c00	BrightDefectIsoCode	no
0x0c03	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	HMCOLThresh	no
0x0c0d	HMWsize	no
0x0c0e	HMCOLRejThresh	no
0x0c0f	VMPixThresh	no
0x0c10	VMCOLThresh	no
0x0c11	VMNbands	no
0x0c12	VMCOLDropThresh	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	SBAI11Offset	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
0x0dac	DCS3XXProcessingInfoIFD	no
0x0dad	DCS3XXProcessingInfo	no
0x0dae	IPAVersion	int32u
0x0db6	FinishIPAVersion	no
0x0db7	FinishIPFVersion	no
0x0db8	FinishFileType	int32u
0x0db9	FinishResolution	int32u
0x0dba	FinishNoise	int32u
0x0dbb	FinishSharpening	int32u
0x0dbc	FinishLook	int32u
0x0dbd	FinishExposure	int32u
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
0x0e61	CFAInterpolationMetric	int16u
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	KhufuI0Thresholds	no
0x0f33	KhufuI1Thresholds	no
0x0f34	KhufuI2Thresholds	no
0x0f35	KhufuI3Thresholds	no
0x0f36	KhufuI4Thresholds	no
0x0f37	KhufuI5Thresholds	no
0x0f3c	CondadoDayBVThresh	int16u
0x0f3d	CondadoNeuRange	int16u
0x0f3e	CondadoBVFactor	int16s
0x0f3f	CondadoIllFactor	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	ICC_Profile
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	FifoOnePixelDelay	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

0xfde8 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
-----	-----	-----
'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
'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

Kodak Processing Tags

Index2	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
12	YearCreated	int16u

14	MonthDayCreated	int8u[2]
16	TimeCreated	int8u[4]
30	OpticalZoom	int16u
55	Sharpness	int8s
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
-----	-----	-----
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
-----	-----	-----
20	ExposureTime	int32u
26	WhiteBalance	int8u
28	FNumber	int16u
30	ISO	int16u
32	OpticalZoom	int16u
34	DigitalZoom	int16u
39	FlashMode	int8u
42	ImageRotated	int8u
43	Macro	int8u

Kodak Type6 Tags

These tags are used by the DX3215 and DX3700.

Index1	Tag Name	Writable
-----	-----	-----
16	ExposureTime	int32u
20	ISOSetting?	int32u
24	FNumber	int16u
26	ISO	int16u
28	OpticalZoom	int16u
30	DigitalZoom	int16u
34	Flash	int16u

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
-----	-----	-----
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
-----	-----	-----
0xfc00	SubIFD0	Kodak SubIFD0
		Kodak SubIFD0
0xfc01	SubIFD1	Kodak SubIFD1
		Kodak SubIFD1
0xfc02	SubIFD2	Kodak SubIFD2
		Kodak SubIFD2
0xfc03	SubIFD3	Kodak SubIFD3
		Kodak SubIFD3
0xfc04	SubIFD4	Kodak SubIFD4
		Kodak SubIFD4
0xfc05	SubIFD5	Kodak SubIFD5
		Kodak SubIFD5
0xfc06	SubIFD6	Kodak SubIFD6
		Kodak SubIFD6
0xfcff	SubIFD255	Kodak SubIFD0
0xff00	CameraInfo	Kodak CameraInfo

Kodak SubIFD0 Tags

SubIFD0 through SubIFD5 tags are written a number of newer Kodak models.

Tag ID	Tag Name	Writable
-----	-----	-----
0xfa02	SceneMode	int16u
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
-----	-----	-----
0x0027	ISO	int16u
0x0028	ISO	int16u

Kodak SubIFD2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x6002	SceneModeUsed	int32u
0x6006	OpticalZoom	int32u
0x6103	MaxAperture	int32u
0xf002	SceneModeUsed	int32u
0xf006	OpticalZoom	int32u
0xf103	FNumber	int32u
0xf104	ExposureTime	int32u
0xf105	ISO	int32u

Kodak SubIFD3 Tags

Tag ID	Tag Name	Writable
-----	-----	-----

0x1000	OpticalZoom	int16u
--------	-------------	--------

Kodak SubIFD4 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

Kodak SubIFD5 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x000f	OpticalZoom	int16u

Kodak SubIFD6 Tags

SubIFD6 is written by the M580.

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

Kodak CameraInfo Tags

These tags are used by the P712, P850 and P880.

Tag ID	Tag Name	Writable
-----	-----	-----
0xf900	SensorWidth	int16u
0xf901	SensorHeight	int16u
0xf902	BayerPattern	string
0xf903	SensorFullWidth	int16u
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
-----	-----	-----
12	FNumber	int16u
16	ExposureTime	int32u
20	DateTimeOriginal	string[20]
52	ISO	int16u
87	FirmwareVersion	string[16]
168	UnknownNumber	no
196	UnknownNumber	no

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
-----	-----	-----
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
-----	-----	-----
0x0104	FirmwareVersion	no
0x0203	PictureEffect	no
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
-----	-----	-----
[no tags known]		

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
-----	-----	-----
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	RollGuideElements	no
0xc365	MetadataNumber	no
0xc366	EditTagArray	no
0xc367	Magnification	no
0xc36c	NativeXResolution	no
0xc36d	NativeYResolution	no
0xc36e	KodakEffectsIFD	Kodak SpecialEffects
0xc36f	KodakBordersIFD	Kodak Borders
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
-----	-----	-----
0x0000	DigitalEffectsVersion	no
0x0001	DigitalEffectsName	no
0x0002	DigitalEffectsType	no

Kodak Borders Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0xfa00	SerialNumber	string
0xfa0d	WhiteBalance	int8u
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
-----	-----	-----
'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
-----	-----	-----
'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	Kodak Scrn
'Seri'	SerialNumber	no
'StSV'	ShutterSpeedValue	no

Kodak Scrn Tags

Index2	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
'CMbo'	CameraByteOrder	no
'Cmbo'	CameraByteOrder	no
'DcEM'	DcEM	Kodak DcEM
'DcME'	DcME	Kodak DcME

Kodak DcEM Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

Kodak DcME Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[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
-----	-----	-----
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
-----	-----	-----
'Accelerometer'	Accelerometer	no
'AngularVelocity'	AngularVelocity	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
-----	-----	-----
'JPEG_preview_data'	PreviewImage	no
'JPEG_preview_info'	PreviewInfo	no
'PDA_histogram_data'	PDAHistogram	no

'back_serial_number'	BackSerial	no
'camera_profile'	CameraProfile	Leaf CameraProfile
'icc_camera_profile'	ICC_Profile	ICC_Profile
'icc_camera_to_tone_matrix'	ToneMatrix	no
'icc_camera_to_tone_space_flow'	ToneSpaceFlow	no
'icc_rgb_ws_profile'	RGB_Profile	ICC_Profile
'image_offset'	ImageOffset	no
'pattern_rotation_angle'	PatternAngle	no

Leaf CameraProfile Tags

All Tag ID's in the following table have a leading 'CamProf_' which has been removed.

Tag ID	Tag Name	Writable
-----	-----	-----
'back_type'	CameraBackType	no
'capture_profile'	CaptureProfile	Leaf CaptureProfile
'image_profile'	ImageProfile	Leaf ImageProfile
'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
-----	-----	-----
'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
-----	-----	-----
'back_type'	ImgProfBackType	no
'image_status'	ImageStatus	no
'name'	ImgProfName	no
'rotation_angle'	RotationAngle	no
'shoot_setup'	ShootSetup	Leaf ShootSetup
'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
-----	-----	-----
'back_type'	ShootObjBackType	no
'camera_setup'	CameraSetup	Leaf CameraSetup
'capture_setup'	CaptureSetup	Leaf CaptureSetup
'color_setup'	ColorSetup	Leaf ColorSetup
'look_header'	LookHeader	Leaf LookHeader
'name'	ShootObjName	no
'save_setup'	SaveSetup	Leaf SaveSetup
'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
-----	-----	-----
'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
-----	-----	-----
'Multi_quality'	MultiQuality	no
'back_type'	CaptureObjBackType	no
'name'	CaptureObjName	no
'neutals'	Neutals	Leaf Neutrals
'selection'	Selection	Leaf Selection
'sharpness'	Sharpness	Leaf Sharpness
'single_quality'	SingleQuality	no
'tone_curve'	ToneCurve	Leaf ToneCurve
'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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
[no tags known]		

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
-----	-----	-----
0x0000	MakerNoteVersion	undef[4]
0x0001	MinoltaCameraSettingsOld	Minolta CameraSettings
0x0003	MinoltaCameraSettings	Minolta CameraSettings
0x0004	MinoltaCameraSettings7D	Minolta CameraSettings7D
0x0010	CameraInfoA100	Minolta CameraInfoA100
0x0018	ISInfoA100	Minolta ISInfoA100
	ImageStabilization	no
0x0020	WBInfoA100	Minolta WBInfoA100
0x0040	CompressedImageSize	int32u
0x0081	PreviewImage	undef
0x0088	PreviewImageStart	int32u*
0x0089	PreviewImageLength	int32u*
0x0100	SceneMode	int32u
0x0101	ColorMode	int32u
0x0102	MinoltaQuality	int32u
0x0103	MinoltaQuality	int32u
	MinoltaImageSize	int32u

0x0104	FlashExposureComp	rational64s
0x0105	Teleconverter	int32u
0x0107	ImageStabilization	int32u
0x0109	RawAndJpgRecording	int32u
0x010a	ZoneMatching	int32u
0x010b	ColorTemperature	int32u
0x010c	LensType	int32u
0x0111	ColorCompensationFilter	int32s
0x0112	WhiteBalanceFineTune	int32u
0x0113	ImageStabilization	int32u
0x0114	MinoltaCameraSettings5D	Minolta CameraSettings5D
	CameraSettingsA100	Minolta CameraSettingsA100
0x0115	WhiteBalance	int32u
0x0e00	PrintIM	PrintIM
0x0f00	MinoltaCameraSettings2	no

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
-----	-----	-----
1	ExposureMode	int32u
2	FlashMode	int32u
3	WhiteBalance	int32u 7
4	MinoltaImageSize	int32u
5	MinoltaQuality	int32u
6	DriveMode	int32u
7	MeteringMode	int32u
8	ISO	int32u
9	ExposureTime	int32u
10	FNumber	int32u
11	MacroMode	int32u
12	DigitalZoom	int32u
13	ExposureCompensation	int32u
14	BracketStep	int32u
16	IntervalLength	int32u
17	IntervalNumber	int32u
18	FocalLength	int32u
19	FocusDistance	int32u
20	FlashFired	int32u
21	MinoltaDate	int32u
22	MinoltaTime	int32u
23	MaxAperture	int32u
26	FileNumberMemory	int32u
27	LastFileNumber	int32u
28	ColorBalanceRed	int32u
29	ColorBalanceGreen	int32u
30	ColorBalanceBlue	int32u
31	Saturation	int32u
32	Contrast	int32u
33	Sharpness	int32u
34	SubjectProgram	int32u
35	FlashExposureComp	int32u
36	ISOSetting	int32u
37	MinoltaModelID	int32u
38	IntervalMode	int32u
39	FolderName	int32u
40	ColorMode	int32u
41	ColorFilter	int32u
42	BWFilter	int32u
43	InternalFlash	int32u
44	Brightness	int32u
45	SpotFocusPointX	int32u
46	SpotFocusPointY	int32u

47	WideFocusZone	int32u
48	FocusMode	int32u
49	FocusArea	int32u
50	DECPosition	int32u
51	ColorProfile	int32u
52	DataImprint	int32u
63	FlashMetering	int32u

Minolta CameraSettings7D Tags

Index2	Tag Name	Writable
-----	-----	-----
0	ExposureMode	int16u
2	MinoltaImageSize	int16u
3	MinoltaQuality	int16u
4	WhiteBalance	int16u
14	FocusMode	int16u
16	AFPoints	int16u
21	Flash	int16u
22	FlashMode	int16u
28	ISOSetting	int16u
30	ExposureCompensation	int16s
37	ColorSpace	int16u
38	Sharpness	int16u
39	Contrast	int16u
40	Saturation	int16u
45	FreeMemoryCardImages	int16u
63	ColorTemperature	int16s
64	HueAdjustment	int16u
70	Rotation	int16u
71	FNumber	int16u
72	ExposureTime	int16u
74	FreeMemoryCardImages	int16u
94	ImageNumber	int16u
96	NoiseReduction	int16u
98	ImageNumber2	int16u
113	ImageStabilization	int16u
117	ZoneMatchingOn	int16u

Minolta CameraInfoA100 Tags

Camera information for the Sony DSLR-A100.

Index1	Tag Name	Writable
-----	-----	-----
1	AFSensorActive	int8u
2	AFStatusActiveSensor	int16s
4	AFStatusTop-right	int16s
6	AFStatusBottom-right	int16s
8	AFStatusBottom	int16s
10	AFStatusMiddleHorizontal	int16s
12	AFStatusCenterVertical	int16s
14	AFStatusTop	int16s
16	AFStatusTop-left	int16s
18	AFStatusBottom-left	int16s
20	FocusLocked	int8u
21	AFPoint	int8u
22	AFMode	int8u
45	AFStatusLeft	int16s
47	AFStatusCenterHorizontal	int16s
49	AFStatusRight	int16s
51	AFAreaMode	int8u

Minolta ISInfoA100 Tags

Image stabilization information for the Sony DSLR-A100.

Index1	Tag Name	Writable
-----	-----	-----
0	ImageStabilization	int16u

Minolta WBInfoA100 Tags

White balance information for the Sony DSLR-A100.

Index1	Tag Name	Writable
-----	-----	-----
14	DriveMode	int8u
16	Rotation	int8u
20	ImageStabilizationSetting	int8u
21	DynamicRangeOptimizerMode	int8u
42	ExposureCompensationMode	int8u
43	WBBracketShotNumber	int8u
44	WhiteBalanceBracketing	int8u
45	ExposureBracketShotNumber	int8u
49	FlashFunction	int16u
52	ExposureMode	int16u
54	ColorMode	int16u
56	AverageLV	int16u
60	FrameNumber	int8u
150	WB_RGBLevels	int16u[3]
174	WB_GBRGLevels	int16u[4]
192	WB_RedLevelsTungsten	int16u[7]
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]
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]
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]
1680	MeasuredLV	int8u
1681	BrightnessValue	int8u
4172	TiffMeteringImage	no
18872	ExposureTime	int8u
18874	ISO	int8u
18875	FocusDistance	int8u
18877	LensType	int16uRev
18880	ExposureCompensation	int8s
18881	FlashExposureComp	int8s
18882	ImageStabilization	int8u
18883	BrightnessValue	int8u
18885	MaxAperture	int8u
18887	FNumber	int8u

18908 InternalSerialNumber string[12]

Minolta CameraSettings5D Tags

Index2	Tag Name	Writable
-----	-----	-----
10	ExposureMode	int16u
12	MinoltaImageSize	int16u
13	MinoltaQuality	int16u
14	WhiteBalance	int16u
31	Flash	int16u
32	FlashMode	int16u
37	MeteringMode	int16u
38	ISOSetting	int16u
47	ColorSpace	int16u
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
83	ExposureCompensation	int16u
84	FreeMemoryCardImages	int16u
101	Rotation	int16u
110	ColorTemperature	int16s
113	PictureFinish	int16u
174	ImageNumber	int16u
176	NoiseReduction	int16u
189	ImageStabilization	int16u

Minolta CameraSettingsA100 Tags

Camera settings information for the Sony DSLR-A100.

Index2	Tag Name	Writable
-----	-----	-----
0	ExposureMode	int16u
1	ExposureCompensationSetting	int16u
5	HighSpeedSync	int16u
6	ShutterSpeedSetting	int16u
7	ApertureSetting	int16u
8	ExposureTime	int16u
9	FNumber	int16u
10	DriveMode2	int16u
11	WhiteBalance	int16u
12	FocusMode	int16u
13	AFPointSelected	int16u
14	AFAreaMode	int16u
15	FlashMode	int16u
16	FlashExposureCompSet	int16u
18	MeteringMode	int16u
19	ISOSetting	int16u
20	ZoneMatchingMode	int16u
21	DynamicRangeOptimizer	int16u
22	ColorMode	int16u
23	ColorSpace	int16u
24	Sharpness	int16u
25	Contrast	int16u
26	Saturation	int16u
28	FlashMetering	int16u
29	PrioritySetupShutterRelease	int16u
30	DriveMode	int16u
31	SelfTimerTime	int16u
32	ContinuousBracketing	int16u
33	SingleFrameBracketing	int16u
34	WhiteBalanceBracketing	int16u
35	WhiteBalanceSetting	int16u

36	PresetWhiteBalance	int16u
37	ColorTemperatureSetting	int16u
38	CustomWBSetting	int16u
39	DynamicRangeOptimizerSetting	int16u
50	FreeMemoryCardImages	int16u
52	CustomWBRedLevel	int16u
53	CustomWBGreenLevel	int16u
54	CustomWBBlueLevel	int16u
55	CustomWBError	int16u
56	WhiteBalanceFineTune	int16s
57	ColorTemperature	int16u
58	ColorCompensationFilter	int16s
59	SonyImageSize	int16u
60	SonyQuality	int16u
61	InstantPlaybackTime	int16u
62	InstantPlaybackSetup	int16u
63	NoiseReduction	int16u
64	EyeStartAF	int16u
65	RedEyeReduction	int16u
66	FlashDefault	int16u
67	AutoBracketOrder	int16u
68	FocusHoldButton	int16u
69	AELButton	int16u
70	ControlDialSet	int16u
71	ExposureCompensationMode	int16u
72	AFAssist	int16u
73	CardShutterLock	int16u
74	LensShutterLock	int16u
75	AFAreaIllumination	int16u
76	MonitorDisplayOff	int16u
77	RecordDisplay	int16u
78	PlayDisplay	int16u
80	ExposureIndicator	int16u
81	AELExposureIndicator	int16u
82	ExposureBracketingIndicatorLast	int16u
83	MeteringOffScaleIndicator	int16u
84	FlashExposureIndicator	int16u
85	FlashExposureIndicatorNext	int16u
86	FlashExposureIndicatorLast	int16u
87	ImageStabilization	int16u
88	FocusModeSwitch	int16u
89	FlashType	int16u
90	Rotation	int16u
91	AELock	int16u
94	ColorTemperature	int16u
95	ColorCompensationFilter	int16s
96	BatteryState	int16u

Minolta MMA Tags

This information is found in MOV videos from Minolta models such as the DiIMAGE A2, S414 and 7Hi.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
0	Make	no
24	ModelType	no
38	ExposureTime	no
42	FNumber	no
50	ExposureCompensation	no
72	FocalLength	no

Motorola Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x5500	BuildNumber	string
0x5501	SerialNumber	string
0x6420	CustomRendered	string
0x64d0	DriveMode	string
0x665e	Sensor	string
0x6705	ManufactureDate	string

Nikon Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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	Nikon PreviewIFD
0x0012	FlashExposureComp	undef[4]
0x0013	ISOSetting	int16u[2]
0x0014	ColorBalanceA	Nikon ColorBalanceA
	NRWData	Nikon ColorBalanceB
		Nikon ColorBalanceC
0x0016	ImageBoundary	int16u[4]
0x0017	ExternalFlashExposureComp	undef[4]
0x0018	FlashExposureBracketValue	undef[4]
0x0019	ExposureBracketValue	rational64s
0x001a	ImageProcessing	string
0x001b	CropHiSpeed	int16u[7]
0x001c	ExposureTuning	undef[3]
0x001d	SerialNumber	string!
0x001e	ColorSpace	int16u
0x001f	VRInfo	Nikon VRInfo
0x0020	ImageAuthentication	int8u
0x0021	FaceDetect	Nikon FaceDetect
0x0022	ActiveD-Lighting	int16u
0x0023	PictureControlData	Nikon PictureControl
		Nikon PictureControl2
		Nikon PictureControl3
		Nikon PictureControlUnknown
0x0024	WorldTime	Nikon WorldTime
0x0025	ISOInfo	Nikon ISOInfo
0x002a	VignetteControl	int16u

0x002b	DistortInfo	Nikon DistortInfo
0x002c	UnknownInfo	Nikon UnknownInfo
0x0032	UnknownInfo2	Nikon UnknownInfo2
0x0034	ShutterMode	int16u
0x0035	HDRInfo	Nikon HDRInfo
	HDRInfo2	Nikon HDRInfo2
0x0037	MechanicalShutterCount	int32u
0x0039	LocationInfo	Nikon LocationInfo
0x003d	BlackLevel	int16u[4]
0x003e	ImageSizeRAW	yes
0x003f	WhiteBalanceFineTune	rational64s[2]
0x0044	JPGCompression	yes
0x0045	CropArea	int16u[4]
0x004e	NikonSettings	NikonSettings
0x004f	ColorTemperatureAuto	int16u
0x0080	ImageAdjustment	string
0x0081	ToneComp	string
0x0082	AuxiliaryLens	string
0x0083	LensType	int8u
0x0084	Lens	rational64u[4]
0x0085	ManualFocusDistance	rational64u
0x0086	DigitalZoom	rational64u
0x0087	FlashMode	int8u
0x0088	AFInfo	Nikon AFInfo
		Nikon AFInfo
0x0089	ShootingMode	int16u
0x008b	LensFStops	undef[4]
0x008c	ContrastCurve	undef!
0x008d	ColorHue	string
0x008f	SceneMode	string
0x0090	LightSource	string
0x0091	ShotInfoD40	Nikon ShotInfoD40
	ShotInfoD80	Nikon ShotInfoD80
	ShotInfoD90	Nikon ShotInfoD90
	ShotInfoD3a	Nikon ShotInfoD3a
	ShotInfoD3b	Nikon ShotInfoD3b
	ShotInfoD3X	Nikon ShotInfoD3X
	ShotInfoD3S	Nikon ShotInfoD3S
	ShotInfoD300a	Nikon ShotInfoD300a
	ShotInfoD300b	Nikon ShotInfoD300b
	ShotInfoD300S	Nikon ShotInfoD300S
	ShotInfoD700	Nikon ShotInfoD700
	ShotInfoD780	Nikon ShotInfoD780
	ShotInfoD7500	Nikon ShotInfoD7500
	ShotInfoD800	Nikon ShotInfoD800
	ShotInfoD810	Nikon ShotInfoD810
	ShotInfoD850	Nikon ShotInfoD850
	ShotInfoD5000	Nikon ShotInfoD5000
	ShotInfoD5100	Nikon ShotInfoD5100
	ShotInfoD5200	Nikon ShotInfoD5200
	ShotInfoD7000	Nikon ShotInfoD7000
	ShotInfoD4	Nikon ShotInfoD4
	ShotInfoD4S	Nikon ShotInfoD4S
	ShotInfoD500	Nikon ShotInfoD500
	ShotInfoD6	Nikon ShotInfoD6
	ShotInfoD610	Nikon ShotInfoD610
	ShotInfoZ7II	Nikon ShotInfoZ7II
	ShotInfoZ8	Nikon ShotInfoZ8
	ShotInfoZ9	Nikon ShotInfoZ9
	ShotInfo02xx	Nikon ShotInfo
	ShotInfoUnknown	Nikon ShotInfo
0x0092	HueAdjustment	int16s
0x0093	NEFCompression	int16u
0x0094	SaturationAdj	int16s
0x0095	NoiseReduction	string
0x0096	NEFLinearizationTable	undef!
0x0097	ColorBalance0100	Nikon ColorBalance1
	ColorBalance0102	Nikon ColorBalance2
	ColorBalance0103	Nikon ColorBalance3
	ColorBalance0205	Nikon ColorBalance2

	ColorBalance0209	Nikon ColorBalance4
	ColorBalance02	Nikon ColorBalance2
	ColorBalance0211	Nikon ColorBalance4
	ColorBalance0213	Nikon ColorBalance2
	ColorBalance0215	Nikon ColorBalance4
	ColorBalance0219	Nikon ColorBalance2
	ColorBalanceUnknown1	Nikon ColorBalanceUnknown
	ColorBalanceUnknown2	Nikon ColorBalanceUnknown2
	ColorBalanceUnknown	Nikon ColorBalanceUnknown
0x0098	LensData0100	Nikon LensData00
	LensData0101	Nikon LensData01
	LensData0201	Nikon LensData01
	LensData0204	Nikon LensData0204
	LensData0400	Nikon LensData0400
	LensData0402	Nikon LensData0402
	LensData0403	Nikon LensData0403
	LensData0800	Nikon LensData0800
	LensDataUnknown	Nikon LensDataUnknown
0x0099	RawImageCenter	int16u[2]
0x009a	SensorPixelSize	rational64u[2]
0x009c	SceneAssist	string
0x009d	DateStampMode	int16u
0x009e	RetouchHistory	int16u[10]
0x00a0	SerialNumber	string
0x00a2	ImageDataSize	int32u
0x00a5	ImageCount	int32u
0x00a6	DeletedImageCount	int32u
0x00a7	ShutterCount	int32u!
0x00a8	FlashInfo0100	Nikon FlashInfo0100
	FlashInfo0102	Nikon FlashInfo0102
	FlashInfo0103	Nikon FlashInfo0103
	FlashInfo0106	Nikon FlashInfo0106
	FlashInfo0107	Nikon FlashInfo0107
	FlashInfo0300	Nikon FlashInfo0300
	FlashInfoUnknown	Nikon FlashInfoUnknown
0x00a9	ImageOptimization	string
0x00aa	Saturation	string
0x00ab	VariProgram	string
0x00ac	ImageStabilization	string
0x00ad	AFResponse	string
0x00b0	MultiExposure	Nikon MultiExposure
	MultiExposure2	Nikon MultiExposure
		Nikon MultiExposure2
0x00b1	HighISONoiseReduction	int16u
0x00b3	ToningEffect	string
0x00b6	PowerUpTime	undef
0x00b7	AFInfo2	Nikon AFInfo2V0400
		Nikon AFInfo2
0x00b8	FileInfo	Nikon FileInfo
		Nikon FileInfo
0x00b9	AFTune	Nikon AFTune
0x00bb	RetouchInfo	Nikon RetouchInfo
0x00bd	PictureControlData	Nikon PictureControl
0x00bf	SilentPhotography	yes
0x00c3	BarometerInfo	Nikon BarometerInfo
0x0e00	PrintIM	PrintIM
0x0e01	NikonCaptureData	NikonCapture
0x0e09	NikonCaptureVersion	string^
0x0e0e	NikonCaptureOffsets	Nikon CaptureOffsets
0x0e10	NikonScanIFD	Nikon Scan
0x0e13	NikonCaptureEditVersions	NikonCapture
	NikonCaptureEditVersions	undef!^
0x0e1d	NikonICCProfile	ICC_Profile
0x0ele	NikonCaptureOutput	Nikon CaptureOutput
0x0e22	NEFBitDepth	int16u[4]!

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
-----	-----
About	no
GPSAltitude	no
GPSAltitudeRef	no
GPSImgDirection	no
GPSImgDirectionRef	no
GPSLatitude	no
GPSLatitudeRef	no
GPSLongitude	no
GPSLongitudeRef	no
GPSMapDatum	no
GPSVersionID	no
IPTC	IPTC
Version	no
XMLPackets	XMP

Nikon nine Tags

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

Tag Name	Writable
-----	-----
About	no
Label	no
NineEdits	Nikon NineEdits
Rating	no
Trim	no
Version	no

Nikon NineEdits Tags

XML-based tags used to store editing information.

Tag Name	Writable
-----	-----
FilterParametersBinary	no
FilterParametersCustomCustomData	no
FilterParametersExportExportData	no

Nikon sdc Tags

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

Tag Name	Writable
-----	-----
About	no
AppName	no
AppVersion	no
Version	no

Nikon PreviewIFD Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x00fe	SubfileType	no
0x0103	Compression	no
0x011a	XResolution	no
0x011b	YResolution	no
0x0128	ResolutionUnit	no
0x0201	PreviewImageStart	int32u*
0x0202	PreviewImageLength	int32u*
0x0213	YCbCrPositioning	no

Nikon ColorBalanceA Tags

Index2	Tag Name	Writable
-----	-----	-----

624	WB_RBLevels	int16u[2]!
626	WB_RBLevelsAuto	int16u[2]!
628	WB_RBLevelsDaylight	int16u[14]!
642	WB_RBLevelsIncandescent	int16u[14]!
656	WB_RBLevelsFluorescent	int16u[6]!
662	WB_RBLevelsCloudy	int16u[14]!
676	WB_RBLevelsFlash	int16u[14]!
690	WB_RBLevelsShade	int16u[14]!

Nikon ColorBalanceB Tags

Color balance tags used by the P6000.

Index1	Tag Name	Writable
-----	-----	-----
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]!
5240	WB_RGGBLevelsAuto	int32u[4]!

Nikon ColorBalanceC Tags

Color balance tags used by the P1000, P7000, P7100 and B700.

Index1	Tag Name	Writable
-----	-----	-----
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]!
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]!
276	WB_RGGBLevelsAuto	int32u[4]!

Nikon VRInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	VRInfoVersion	no
4	VibrationReduction	int8u
6	VRMode	int8u
8	VRType	int8u

Nikon FaceDetect Tags

Index2	Tag Name	Writable
-----	-----	-----
1	FaceDetectFrameSize	int16u[2]
3	FacesDetected	int16u
4	Face1Position	int16u[4]
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	Facel1Position	int16u[4]
48	Facel2Position	int16u[4]

Nikon PictureControl Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PictureControlVersion	no
4	PictureControlName	string[20]
24	PictureControlBase	string[20]
48	PictureControlAdjust	int8u
49	PictureControlQuickAdjust	int8u
50	Sharpness	int8u
51	Contrast	int8u
52	Brightness	int8u
53	Saturation	int8u
54	HueAdjustment	int8u
55	FilterEffect	int8u
56	ToningEffect	int8u
57	ToningSaturation	int8u

Nikon PictureControl2 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PictureControlVersion	no
4	PictureControlName	string[20]
24	PictureControlBase	string[20]
48	PictureControlAdjust	int8u
49	PictureControlQuickAdjust	int8u
51	Sharpness	int8u
53	Clarity	int8u
55	Contrast	int8u
57	Brightness	int8u
59	Saturation	int8u
61	Hue	int8u
63	FilterEffect	int8u
64	ToningEffect	int8u
65	ToningSaturation	int8u

Nikon PictureControl3 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PictureControlVersion	no
8	PictureControlName	string[20]
28	PictureControlBase	string[20]
54	PictureControlAdjust	int8u
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
72	ToningEffect	int8u
73	ToningSaturation	int8u

Nikon PictureControlUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PictureControlVersion	no

Nikon WorldTime Tags

Index1	Tag Name	Writable
-----	-----	-----

0	TimeZone	int16s
2	DaylightSavings	int8u
3	DateDisplayFormat	int8u

Nikon ISOInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ISO	int8u
4	ISOExpansion	int16u
6	ISO2	int8u
10	ISOExpansion2	int16u

Nikon DistortInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	DistortionVersion?	no
4	AutoDistortionControl	int8u

Nikon UnknownInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	UnknownInfoVersion?	no

Nikon UnknownInfo2 Tags

Index4	Tag Name	Writable
-----	-----	-----
0	UnknownInfo2Version?	no

Nikon HDRInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	HDRInfoVersion	no
4	HDR	int8u
5	HDRLevel	int8u
6	HDRSmoothing	int8u
7	HDRLevel2	int8u

Nikon HDRInfo2 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	HDRInfoVersion	no
4	HDR	int8u
5	HDRLevel	int8u

Nikon LocationInfo Tags

Tags written by some Nikon GPS-equipped cameras like the AW100.

Index1	Tag Name	Writable
-----	-----	-----
0	LocationInfoVersion	undef[4]
4	TextEncoding	int8u
5	CountryCode	undef[3]
8	POILevel	int8u
9	Location	undef[70]

Nikon MakerNotes0x51 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FirmwareVersion51	no
10	NEFCompression	int16u

Nikon MakerNotes0x56 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FirmwareVersion	no
4	BurstGroupID	int16u

Nikon AFInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	AFAreaMode	int8u
1	AFPoint	int8u
2	AFPointsInFocus	int16u

Nikon ShotInfoD40 Tags

These tags are extracted from encrypted data in D40 and D40X images.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
582	ShutterCount	int32u
586.1	VibrationReduction	int8u & 0x08
729	CustomSettingsD40	NikonCustom SettingsD40

Nikon ShotInfoD80 Tags

These tags are extracted from encrypted data in D80 images.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
586	ShutterCount	int32u
590.1	Rotation	int8u & 0x07
590.2	VibrationReduction	int8u & 0x18
590.3	FlashFired	int8u & 0xe0
708	NikonImageSize	int8u & 0xf0
708.1	ImageQuality	int8u & 0xf0
748	CustomSettingsD80	NikonCustom SettingsD80

Nikon ShotInfoD90 Tags

These tags are extracted from encrypted data in images from the D90 with firmware 1.00.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
693	ISO2	int8u
725	ShutterCount	int32u
884	CustomSettingsD90	NikonCustom SettingsD90

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
-----	-----	-----
0	ShotInfoVersion	no
598	ISO2	int8u
630	ShutterCount	int32u
723.1	NikonImageSize	int8u & 0x18
723.2	ImageQuality	int8u & 0x07
769	CustomSettingsD3	NikonCustom SettingsD3

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
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
16	ImageArea	int8u
605	ISO2	int8u
637	ShutterCount	int32u
639	ShutterCount	int32u
650	PreFlashReturnStrength	int8u
732.1	NikonImageSize	int8u & 0x18
732.2	ImageQuality	int8u & 0x07
778	CustomSettingsD3	NikonCustom SettingsD3

Nikon ShotInfoD3X Tags

These tags are extracted from encrypted data in images from the D3X with firmware 1.00.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
605	ISO2	int8u
640	ShutterCount	int32u
779	CustomSettingsD3X	NikonCustom SettingsD3

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
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
16	ImageArea	int8u
545	ISO2	int8u
578	ShutterCount	int32u
671.1	JPGCompression	int8u & 0x40
718	CustomSettingsD3S	NikonCustom SettingsD3

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
-----	-----	-----
0	ShotInfoVersion	no
604	ISO2	int8u
633	ShutterCount	int32u
721	AFFineTuneAdj	int16u
790	CustomSettingsD300	NikonCustom SettingsD3

Nikon ShotInfoD300b Tags

These tags are extracted from encrypted data in images from the D300 with firmware 1.10.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
613	ISO2	int8u
644	ShutterCount	int32u
732	AFFineTuneAdj	int16u
802	CustomSettingsD300	NikonCustom SettingsD3

Nikon ShotInfoD300S Tags

These tags are extracted from encrypted data in images from the D300S with firmware 1.00.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
613	ISO2	int8u
646	ShutterCount	int32u
804	CustomSettingsD300S	NikonCustom SettingsD3

Nikon ShotInfoD700 Tags

These tags are extracted from encrypted data in images from the D700 with firmware 1.02f.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
613	ISO2	int8u
647	ShutterCount	int32u
804	CustomSettingsD700	NikonCustom SettingsD700

Nikon ShotInfoD780 Tags

These tags are extracted from encrypted data in images from the D780.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
156	OrientOffset	Nikon OrientationInfo

Nikon OrientationInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	RollAngle	fixed32u
4	PitchAngle	fixed32u
8	YawAngle	fixed32u

Nikon ShotInfoD7500 Tags

These tags are extracted from encrypted data in images from the D7500.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
160	OrientOffset	Nikon OrientationInfo

Nikon ShotInfoD800 Tags

These tags are extracted from encrypted data in images from the D800.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
1216	RepeatingFlashOutputExternal	int8u
1218	RepeatingFlashRateExternal	int8u
1219	RepeatingFlashCountExternal	int8u
1234	FlashExposureComp2	int8s
1242	RepeatingFlashRateBuilt-in	int8u
1243	RepeatingFlashCountBuilt-in	int8u
1308	SequenceNumber	int8u
1531	ShutterCount	int32u

1772 CustomSettingsD800 NikonCustom SettingsD800

Nikon ShotInfoD810 Tags

These tags are extracted from encrypted data in images from the D810.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
16	SettingsOffset	Nikon SettingsInfoD810
36	BracketingOffset	Nikon BracketingInfoD810
56	ISOAutoOffset	Nikon ISOAutoInfoD810
64	CustomSettingsOffset	NikonCustom SettingsD810
132	OrientationOffset	Nikon OrientationInfo

Nikon SettingsInfoD810 Tags

Index1	Tag Name	Writable
-----	-----	-----
316	SecondarySlotFunction	int8u & 0x03

Nikon BracketingInfoD810 Tags

Index1	Tag Name	Writable
-----	-----	-----
15	AEBracketingSteps	int8u & 0xff
16	WBBracketingSteps	int8u & 0xff
23	NikonMeteringMode	int8u & 0x03

Nikon ISOAutoInfoD810 Tags

Index1	Tag Name	Writable
-----	-----	-----
4	ISOAutoShutterTime	int8u & 0x3f
5	ISOAutoHiLimit	int8u & 0xff

Nikon ShotInfoD850 Tags

These tags are extracted from encrypted data in images from the D850.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
16	MenuSettingsOffset	Nikon MenuSettingsD850
76	MoreSettingsOffset	Nikon MoreSettingsD850
88	CustomSettingsOffset	NikonCustom SettingsD850
160	OrientationOffset	Nikon OrientationInfo

Nikon MenuSettingsD850 Tags

Index1	Tag Name	Writable
-----	-----	-----
1757	PhotoShootingMenuBankImageArea	int8u & 0x07

Nikon MoreSettingsD850 Tags

Index1	Tag Name	Writable
-----	-----	-----
36	PhotoShootingMenuBank	int8u & 0x03
37	PrimarySlot	int8u & 0x80

Nikon ShotInfoD5000 Tags

These tags are extracted from encrypted data in images from the D5000 with firmware 1.00.

Index	Tag Name	Writable
-----	-----	-----

0	ShotInfoVersion	no
4	FirmwareVersion	no
693	ISO2	int8u
726	ShutterCount	int32u
888	CustomSettingsD5000	NikonCustom SettingsD5000

Nikon ShotInfoD5100 Tags

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
801	ShutterCount	int32u
1031	CustomSettingsD5100	NikonCustom SettingsD5100

Nikon ShotInfoD5200 Tags

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
3032	ShutterCount	int32u
3285	CustomSettingsD5200	NikonCustom SettingsD5200

Nikon ShotInfoD7000 Tags

These tags are extracted from encrypted data in images from the D7000 with firmware 1.01b.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
800	ShutterCount	int32u
1028	CustomSettingsD7000	NikonCustom SettingsD7000

Nikon ShotInfoD4 Tags

These tags are extracted from encrypted data in images from the D4.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
1873	CustomSettingsD4	NikonCustom SettingsD4

Nikon ShotInfoD4S Tags

These tags are extracted from encrypted data in images from the D4S.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
464	SecondarySlotFunction	int8u & 0x03
5964	AEBracketingSteps	int8u & 0xff
5965	WBBracketingSteps	int8u & 0xff
6221	ReleaseMode	int8u & 0xff
6301	CustomSettingsD4S	NikonCustom SettingsD4
6338	MultiSelectorLiveViewMode	int8u & 0xc0
6378	ISOAutoShutterTime	int8u & 0x3f
6379	ISOAutoHiLimit	int8u & 0xff
6461	CustomSettingsD4S	NikonCustom SettingsD4
13579	OrientationInfo	Nikon OrientationInfo
13971	Rotation	int8u & 0x30

Nikon ShotInfoD500 Tags

These tags are extracted from encrypted data in images from the D5 and D500.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
16	RotationInfoOffset	Nikon RotationInfoD500
20	JPGInfoOffset	Nikon JPGInfoD500
44	BracketingOffset	Nikon BracketingInfoD500
80	ShootingMenuOffset	Nikon ShootingMenuD500
88	CustomSettingsOffset	Nikon CustomSettingsD500
160	OrientationOffset	Nikon OrientationInfo
168	OtherOffset	Nikon OtherInfoD500

Nikon RotationInfoD500 Tags

Index1	Tag Name	Writable
-----	-----	-----
26	Rotation	int8u & 0x03
32	Interval	int8u & 0x03
36	IntervalFrame	int8u & 0x03
1330	FlickerReductionIndicator	int8u & 0x01

Nikon JPGInfoD500 Tags

Index1	Tag Name	Writable
-----	-----	-----
36	JPGCompression	int8u & 0x01

Nikon BracketingInfoD500 Tags

Index1	Tag Name	Writable
-----	-----	-----
15	AEBracketingSteps	int8u & 0xff
16	WBBracketingSteps	int8u & 0xff
23	ADLBracketingStep	int8u & 0xf0
24	ADLBracketingType	int8u & 0x0f

Nikon ShootingMenuD500 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PhotoShootingMenuBank	int8u & 0x03
2	PrimarySlot	int8u & 0x80
4	ISOAutoShutterTime	int8u & 0x3f
5	ISOAutoHiLimit	int8u & 0xff
7	FlickerReduction	int8u & 0x20
7.1	PhotoShootingMenuBankImageArea	int8u & 0x07

Nikon CustomSettingsD500 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	CustomSettingsD5 CustomSettingsD500	NikonCustom SettingsD5 NikonCustom SettingsD500

Nikon OtherInfoD500 Tags

Index1	Tag Name	Writable
-----	-----	-----
532	NikonMeteringMode	int8u & 0x03

Nikon ShotInfoD6 Tags

These tags are extracted from encrypted data in images from the D6.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
48	SequenceOffset	Nikon SeqInfoD6

156	OrientationOffset	Nikon OrientationInfo
164	IntervalOffset	Nikon IntervalInfoD6

Nikon SeqInfoD6 Tags

Index1	Tag Name	Writable
-----	-----	-----
36	IntervalShooting	int16u 2
43	ImageArea	int8u

Nikon IntervalInfoD6 Tags

Index1	Tag Name	Writable
-----	-----	-----
380	Intervals	int32u
384	ShotsPerInterval	int32u
388	IntervalExposureSmoothing	int8u
390	IntervalPriority	int8u
424	FocusShiftNumberShots	int8u
428	FocusShiftStepWidth	int8u
432	FocusShiftInterval	int8u 2
436	FocusShiftExposureLock	int8u
526	DiffractionCompensation	int8u
532	FlashControlMode	int8u
538	FlashGNDistance?	no
542	FlashOutput?	int8u
552	FlashRemoteControl?	int8u
556	FlashMasterControlMode	int8u
558	FlashMasterCompensation?	int8s
562	FlashMasterOutput?	int8u
564	FlashWirelessOption?	int8u
714	MovieType?	int8u

Nikon ShotInfoD610 Tags

These tags are extracted from encrypted data in images from the D610.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
1999	CustomSettingsD610	NikonCustom SettingsD610

Nikon ShotInfoZ7II Tags

These tags are extracted from encrypted data in images from the Z7II.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
48	IntervalOffset	Nikon IntervalInfoZ7II
56	PortraitOffset	Nikon PortraitInfoZ7II
136	OrientationOffset	Nikon OrientationInfo
152	OrientationOffset	Nikon OrientationInfo
160	MenuOffset	Nikon MenuInfoZ7II

Nikon IntervalInfoZ7II Tags

Index1	Tag Name	Writable
-----	-----	-----
36	IntervalShooting	int16u 2
43	ImageArea	int8u

Nikon PortraitInfoZ7II Tags

Index1	Tag Name	Writable
-----	-----	-----
160	PortraitImpressionBalance	int8u[2] 2

Nikon MenuInfoZ7II Tags

Index1	Tag Name	Writable
-----	-----	-----
16	MenuSettingsOffsetZ7II	Nikon MenuSettingsZ7II

Nikon MenuSettingsZ7II Tags

These tags are used by the Z5, Z6, Z7, Z6II, Z7II, Z50, Zfc and Zf.

Index1	Tag Name	Writable
-----	-----	-----
92	ReleaseMode	no
160	IntervalDurationHours	int32u
164	IntervalDurationMinutes	int32u
168	IntervalDurationSeconds	int32u
176	Intervals	int32u
180	ShotsPerInterval	int32u
184	IntervalExposureSmoothing	int8u
186	IntervalPriority	int8u
220	FocusShiftNumberShots	int8u
224	FocusShiftStepWidth	int8u
228	FocusShiftInterval	int8u ⁷ / ₈
232	FocusShiftExposureLock	int8u
322	DiffractionCompensation	int8u
323	AutoDistortionControl	int8u
326	NikonMeteringMode	int8u
328	FlashControlMode	int8u
334	FlashGNDistance?	no
338	FlashOutput?	int8u
346	FlashWirelessOption?	int8u
348	FlashRemoteControl?	int8u
352	FlashMasterControlMode	int8u
354	FlashMasterCompensation?	int8s
358	FlashMasterOutput?	int8u
502	MovieFrameSize?	int8u
504	MovieFrameRate?	int8u
506	MovieSlowMotion?	int8u
510	MovieType?	int8u
516	MovieISOAutoManualMode?	int16u
568	MovieActiveD-Lighting?	int8u
572	MovieHighISONoiseReduction?	int8u
574	MovieVignetteControl?	int8u
576	MovieVignetteControlSameAsPhoto?	int8u
577	MovieDiffractionCompensation?	int8u
578	MovieAutoDistortionControl?	int8u
584	MovieFocusMode?	int8u
590	MovieVibrationReduction?	int8u
591	MovieVibrationReductionSameAsPhoto?	int8u
858	HDMIOutputN-Log?	int8u

Nikon ShotInfoZ8 Tags

These tags are extracted from encrypted data in images from the Z8.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
48	SequenceOffset	Nikon SeqInfoZ9
128	AutoCaptureOffset	Nikon AutoCaptureInfo
132	OrientOffset	Nikon OrientationInfo
140	MenuOffset	Nikon MenuInfoZ8

Nikon SeqInfoZ9 Tags

Index1	Tag Name	Writable
-----	-----	-----
32	FocusShiftShooting	int8u ⁷ / ₈
40	IntervalShooting	int16u ⁷ / ₈

Nikon AutoCaptureInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	AutoCapturedFrame	int8u
1	AutoCaptureCriteria	int8u 7
55	AutoCaptureRecordingTime	int8u
56	AutoCaptureWaitTime	int8u
74	AutoCaptureDistanceFar	int8u 7
78	AutoCaptureDistanceNear	int8u 7
95	AutoCaptureCriteriaMotionDirection	int8u 7
99	AutoCaptureCriteriaMotionSpeed	int8u
100	AutoCaptureCriteriaMotionSize	int8u
105	AutoCaptureCriteriaSubjectSize	int8u
106	AutoCaptureCriteriaSubjectType	int8u

Nikon MenuInfoZ8 Tags

Index1	Tag Name	Writable
-----	-----	-----
16	MenuSettingsOffsetZ8	Nikon MenuSettingsZ8
	MenuSettingsOffsetZ8v2	-
		Nikon MenuSettingsZ8v2

Nikon MenuSettingsZ8 Tags

These tags are used by the Z8 firmware 1.00.

Index1	Tag Name	Writable
-----	-----	-----
72	HighFrameRate	int8u
152	MultipleExposureMode	int8u
154	MultiExposureShots	int8u
184	IntervalDurationHours	int32u
188	IntervalDurationMinutes	int32u
192	IntervalDurationSeconds	int32u
200	Intervals	int32u
204	ShotsPerInterval	int32u
208	IntervalExposureSmoothing	int8u
210	IntervalPriority	int8u
244	FocusShiftNumberShots	int8u
248	FocusShiftStepWidth	int8u
252	FocusShiftInterval	int8u 7
256	FocusShiftExposureLock?	int8u
286	PhotoShootingMenuBank	int8u
288	ExtendedMenuBanks	int8u
324	PhotoShootingMenuBankImageArea	int8u
338	AutoISO	int8u
340	ISOAutoHiLimit?	int16u
342	ISOAutoFlashLimit?	int16u
350	ISOAutoShutterTime	no
432	MovieVignetteControl?	int8u
434	DiffractionCompensation	int8u
436	FlickerReductionShooting	int8u
440	FlashControlMode	int8u
548	AFAreaMode	int8u
550	VRMode	int8u
554	BracketSet	int8u
556	BracketProgram	int8u
558	BracketIncrement	int8u
570	HDR	int8u
576	SecondarySlotFunction	int8u
582	HDRLevel	int8u
586	Slot2JpgSize?	int8u
592	DXCropAlert	int8u
594	SubjectDetection	int8u
596	DynamicAFAreaSize	int8u
618	ToneMap?	int8u
622	PortraitImpressionBalance	int8u

636	HighFrequencyFlickerReduction?	int8u
730	MovieImageArea?	int8u & 0x01
740	MovieType?	int8u
742	MovieISOAutoHiLimit?	int16u
744	MovieISOAutoControlManualMode?	int8u
746	MovieISOAutoManualMode?	int16u
820	MovieActiveD-Lighting?	int8u
822	MovieHighISONoiseReduction?	int8u
828	MovieFlickerReduction	int8u
830	MovieMeteringMode?	int8u
832	MovieFocusMode?	int8u
834	MovieAFAreaMode	int8u
836	MovieVRMode?	int8u
840	MovieElectronicVR?	int8u
842	MovieSoundRecording?	int8u
844	MicrophoneSensitivity?	int8u
846	MicrophoneAttenuator?	int8u
848	MicrophoneFrequencyResponse?	int8u
850	WindNoiseReduction?	int8u
882	MovieFrameSize?	int8u
884	MovieFrameRate?	int8u
886	MicrophoneJackPower?	int8u
887	MovieDXCropAlert?	int8u
888	MovieSubjectDetection?	int8u
896	MovieHighResZoom?	int8u
943	CustomSettingsZ8	NikonCustom SettingsZ8
1684	TimeZone	int8u
1690	MonitorBrightness?	int8u
1698	Language?	int8u
1712	AFFineTune?	int8u
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
1758	NonCPULens2MaxAperture?	int16u
1760	NonCPULens3MaxAperture?	int16u
1762	NonCPULens4MaxAperture?	int16u
1764	NonCPULens5MaxAperture?	int16u
1766	NonCPULens6MaxAperture?	int16u
1768	NonCPULens7MaxAperture?	int16u
1770	NonCPULens8MaxAperture?	int16u
1772	NonCPULens9MaxAperture?	int16u
1774	NonCPULens10MaxAperture?	int16u
1776	NonCPULens11MaxAperture?	int16u
1778	NonCPULens12MaxAperture?	int16u
1780	NonCPULens13MaxAperture?	int16u
1782	NonCPULens14MaxAperture?	int16u
1784	NonCPULens15MaxAperture?	int16u
1786	NonCPULens16MaxAperture?	int16u
1788	NonCPULens17MaxAperture?	int16u
1790	NonCPULens18MaxAperture?	int16u
1792	NonCPULens19MaxAperture?	int16u
1794	NonCPULens20MaxAperture?	int16u

1808	HDMIOutputResolution	int8u
1826	AirplaneMode?	int8u
1827	EmptySlotRelease?	int8u
1862	EnergySavingMode?	int8u
1890	USBPowerDelivery?	int8u
1899	SensorShield?	int8u

Nikon MenuSettingsZ8v2 Tags

These tags are used by the Z8 firmware 1.00.

Index1	Tag Name	Writable
-----	-----	-----
72	HighFrameRate	int8u
152	MultipleExposureMode	int8u
154	MultiExposureShots	int8u
184	IntervalDurationHours	int32u
188	IntervalDurationMinutes	int32u
192	IntervalDurationSeconds	int32u
200	Intervals	int32u
204	ShotsPerInterval	int32u
208	IntervalExposureSmoothing	int8u
210	IntervalPriority	int8u
244	FocusShiftNumberShots	int8u
248	FocusShiftStepWidth	int8u
252	FocusShiftInterval	int8u ^{7/8}
256	FocusShiftExposureLock?	int8u
286	PhotoShootingMenuBank	int8u
288	ExtendedMenuBanks	int8u
324	PhotoShootingMenuBankImageArea	int8u
338	AutoISO	int8u
340	ISOAutoHiLimit?	int16u
342	ISOAutoFlashLimit?	int16u
350	ISOAutoShutterTime	no
432	MovieVignetteControl?	int8u
434	DiffractionCompensation	int8u
436	FlickerReductionShooting	int8u
440	FlashControlMode	int8u
548	AFAreaMode	int8u
550	VRMode	int8u
554	BracketSet	int8u
556	BracketProgram	int8u
558	BracketIncrement	int8u
570	HDR	int8u
576	SecondarySlotFunction	int8u
582	HDRLevel	int8u
586	Slot2JpgSize?	int8u
592	DXCropAlert	int8u
594	SubjectDetection	int8u
596	DynamicAFAreaSize	int8u
618	ToneMap?	int8u
622	PortraitImpressionBalance	int8u
636	HighFrequencyFlickerReduction?	int8u
730	MovieImageArea?	int8u & 0x01
740	MovieType?	int8u
742	MovieISOAutoHiLimit?	int16u
744	MovieISOAutoControlManualMode?	int8u
746	MovieISOAutoManualMode?	int16u
820	MovieActiveD-Lighting?	int8u
822	MovieHighISONoiseReduction?	int8u
828	MovieFlickerReduction	int8u
830	MovieMeteringMode?	int8u
832	MovieFocusMode?	int8u
834	MovieAFAreaMode	int8u
836	MovieVRMode?	int8u
840	MovieElectronicVR?	int8u
842	MovieSoundRecording?	int8u
844	MicrophoneSensitivity?	int8u
846	MicrophoneAttenuator?	int8u
848	MicrophoneFrequencyResponse?	int8u

850	WindNoiseReduction?	int8u
878	MovieFrameSize?	int8u
880	MovieFrameRate?	int8u
886	MicrophoneJackPower?	int8u
887	MovieDXCropAlert?	int8u
888	MovieSubjectDetection?	int8u
896	MovieHighResZoom?	int8u
943	CustomSettingsZ8	NikonCustom SettingsZ8
1698	Language?	int8u
1700	TimeZone	int8u
1706	MonitorBrightness?	int8u
1728	AFFineTune?	int8u
1732	NonCPULens1FocalLength?	int16u z
1734	NonCPULens2FocalLength?	int16u z
1736	NonCPULens3FocalLength?	int16u z
1738	NonCPULens4FocalLength?	int16u z
1740	NonCPULens5FocalLength?	int16u z
1742	NonCPULens6FocalLength?	int16u z
1744	NonCPULens7FocalLength?	int16u z
1746	NonCPULens8FocalLength?	int16u z
1748	NonCPULens9FocalLength?	int16u z
1750	NonCPULens10FocalLength?	int16u z
1752	NonCPULens11FocalLength?	int16u z
1754	NonCPULens12FocalLength?	int16u z
1756	NonCPULens13FocalLength?	int16u z
1758	NonCPULens14FocalLength?	int16u z
1760	NonCPULens15FocalLength?	int16u z
1762	NonCPULens16FocalLength?	int16u z
1764	NonCPULens17FocalLength?	int16u z
1766	NonCPULens18FocalLength?	int16u z
1768	NonCPULens19FocalLength?	int16u z
1770	NonCPULens20FocalLength?	int16u z
1812	NonCPULens1MaxAperture?	int32u z
1816	NonCPULens2MaxAperture?	int32u z
1820	NonCPULens3MaxAperture?	int32u z
1824	HDMIOutputResolution	int8u
1828	NonCPULens5MaxAperture?	int32u z
1832	NonCPULens6MaxAperture?	int32u z
1836	NonCPULens7MaxAperture?	int32u z
1840	NonCPULens8MaxAperture?	int32u z
1842	AirplaneMode?	int8u
1843	EmptySlotRelease?	int8u
1844	NonCPULens9MaxAperture?	int32u z
1848	NonCPULens10MaxAperture?	int32u z
1852	NonCPULens11MaxAperture?	int32u z
1856	NonCPULens12MaxAperture?	int32u z
1860	NonCPULens13MaxAperture?	int32u z
1864	NonCPULens14MaxAperture?	int32u z
1868	NonCPULens15MaxAperture?	int32u z
1872	NonCPULens16MaxAperture?	int32u z
1876	NonCPULens17MaxAperture?	int32u z
1878	EnergySavingMode?	int8u
1880	NonCPULens18MaxAperture?	int32u z
1884	NonCPULens19MaxAperture?	int32u z
1888	NonCPULens20MaxAperture?	int32u z
1906	USBPowerDelivery?	int8u
1915	SensorShield?	int8u
2046	PixelShiftShooting	int8u
2048	PixelShiftNumberShots	int8u
2050	PixelShiftDelay	int8u
2052	PlaybackButton	int8u
2054	WBButton	int8u
2056	BracketButton	int8u
2058	LensFunc1ButtonPlaybackMode	int8u
2060	LensFunc2ButtonPlaybackMode	int8u
2062	PlaybackButtonPlaybackMode	int8u
2064	BracketButtonPlaybackMode	int8u

These tags are extracted from encrypted data in images from the Z9.

Index	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
48	SequenceOffset	Nikon SeqInfoZ9
88	Offset13	Nikon Offset13InfoZ9
128	AutoCaptureOffset	Nikon AutoCaptureInfo
132	OrientOffset	Nikon OrientationInfo
140	MenuOffset	Nikon MenuInfoZ9

Nikon Offset13InfoZ9 Tags

Index1	Tag Name	Writable
-----	-----	-----
3048	AFAreaInitialXPosition	int8s u
3049	AFAreaInitialYPosition	int8s u
3050	AFAreaInitialWidth	int8u
3051	AFAreaInitialHeight	int8u

Nikon MenuInfoZ9 Tags

Index1	Tag Name	Writable
-----	-----	-----
16	MenuSettingsOffsetZ9	Nikon MenuSettingsZ9
	MenuSettingsOffsetZ9v3	-
	MenuSettingsOffsetZ9v4	Nikon MenuSettingsZ9v3
		-
		Nikon MenuSettingsZ9v4

Nikon MenuSettingsZ9 Tags

These tags are used by the Z9.

Index1	Tag Name	Writable
-----	-----	-----
140	MultipleExposureMode	int8u
142	MultiExposureShots	int8u
188	Intervals	int32u
192	ShotsPerInterval	int32u
232	FocusShiftNumberShots	int8u
236	FocusShiftStepWidth	int8u
240	FocusShiftInterval	int8u u
244	FocusShiftExposureLock?	int8u
274	PhotoShootingMenuBank	int8u
276	ExtendedMenuBanks	int8u
308	PhotoShootingMenuBankImageArea	int8u
322	AutoISO	int8u
324	ISOAutoHiLimit?	int16u
326	ISOAutoFlashLimit?	int16u
334	ISOAutoShutterTime	no
416	MovieVignetteControl?	int8u
418	DiffractionCompensation	int8u
420	FlickerReductionShooting	int8u
424	FlashControlMode	int8u
426	FlashMasterCompensation?	int8s
430	FlashGNDistance?	no
434	FlashOutput?	int8u
444	FlashRemoteControl?	int8u
456	FlashWirelessOption?	int8u
528	AFAreaMode	int8u
530	VRMode	int8u
534	BracketSet	int8u
536	BracketProgram	int8u
538	BracketIncrement	int8u
556	SecondarySlotFunction	int8u
572	DXCropAlert	int8u
574	SubjectDetection	int8u
576	DynamicAFAreaSize	int8u

604	MovieImageArea?	int8u & 0x01
614	MovieType?	int8u
616	MovieISOAutoHiLimit?	int16u
618	MovieISOAutoControlManualMode?	int8u
620	MovieISOAutoManualMode?	int16u
696	MovieActiveD-Lighting?	int8u
698	MovieHighISONoiseReduction?	int8u
704	MovieFlickerReduction	int8u
706	MovieMeteringMode?	int8u
708	MovieFocusMode?	int8u
710	MovieAFAreaMode	int8u
712	MovieVRMode?	int8u
716	MovieElectronicVR?	int8u
718	MovieSoundRecording?	int8u
720	MicrophoneSensitivity?	int8u
722	MicrophoneAttenuator?	int8u
724	MicrophoneFrequencyResponse?	int8u
726	WindNoiseReduction?	int8u
748	MovieToneMap?	int8u
754	MovieFrameSize?	int8u
756	MovieFrameRate?	int8u
762	MicrophoneJackPower?	int8u
763	MovieDXCropAlert?	int8u
764	MovieSubjectDetection?	int8u
799	CustomSettingsZ9	NikonCustom SettingsZ9
1426	Language?	int8u
1428	TimeZone	int8u
1434	MonitorBrightness?	no
1456	AFFineTune?	int8u
1552	HDMIOutputResolution	int8u
1565	SetClockFromLocationData?	int8u
1572	AirplaneMode?	int8u
1573	EmptySlotRelease?	int8u
1608	EnergySavingMode?	int8u
1632	RecordLocationData?	int8u
1636	USBPowerDelivery?	int8u
1645	SensorShield?	int8u

Nikon MenuSettingsZ9v3 Tags

These tags are used by the Z9 firmware 3.00.

Index1	Tag Name	Writable
-----	-----	-----
72	HighFrameRate	int8u
154	MultipleExposureMode	int8u
156	MultiExposureShots	int8u
204	Intervals	int32u
208	ShotsPerInterval	int32u
248	FocusShiftNumberShots	int8u
252	FocusShiftStepWidth	int8u
256	FocusShiftInterval	int8u
260	FocusShiftExposureLock?	int8u
290	PhotoShootingMenuBank	int8u
292	ExtendedMenuBanks	int8u
328	PhotoShootingMenuBankImageArea	int8u
342	AutoISO	int8u
344	ISOAutoHiLimit?	int16u
346	ISOAutoFlashLimit?	int16u
354	ISOAutoShutterTime	no
436	MovieVignetteControl?	int8u
438	DiffractionCompensation	int8u
440	FlickerReductionShooting	int8u
444	FlashControlMode	int8u
446	FlashMasterCompensation?	int8s
450	FlashGNDistance?	no
454	FlashOutput?	int8u
548	AFAreaMode	int8u
550	VRMode	int8u
554	BracketSet	int8u

556	BracketProgram	int8u
558	BracketIncrement	int8u
576	SecondarySlotFunction	int8u
592	DXCropAlert	int8u
594	SubjectDetection	int8u
596	DynamicAFAreaSize	int8u
636	HighFrequencyFlickerReduction?	int8u
646	MovieImageArea?	int8u & 0x01
656	MovieType?	int8u
658	MovieISOAutoHiLimit?	int16u
660	MovieISOAutoControlManualMode?	int8u
662	MovieISOAutoManualMode?	int16u
736	MovieActiveD-Lighting?	int8u
738	MovieHighISONoiseReduction?	int8u
744	MovieFlickerReduction	int8u
746	MovieMeteringMode?	int8u
748	MovieFocusMode?	int8u
750	MovieAFAreaMode	int8u
752	MovieVRMode?	int8u
756	MovieElectronicVR?	int8u
758	MovieSoundRecording?	int8u
760	MicrophoneSensitivity?	int8u
762	MicrophoneAttenuator?	int8u
764	MicrophoneFrequencyResponse?	int8u
766	WindNoiseReduction?	int8u
788	MovieToneMap?	int8u
794	MovieFrameSize?	int8u
796	MovieFrameRate?	int8u
802	MicrophoneJackPower?	int8u
803	MovieDXCropAlert?	int8u
804	MovieSubjectDetection?	int8u
812	MovieHighResZoom?	int8u
847	CustomSettingsZ9	NikonCustom SettingsZ9
1474	Language?	int8u
1476	TimeZone	int8u
1482	MonitorBrightness?	int8u
1504	AFFineTune?	int8u
1600	HDMIOutputResolution	int8u
1613	SetClockFromLocationData?	int8u
1620	AirplaneMode?	int8u
1621	EmptySlotRelease?	int8u
1656	EnergySavingMode?	int8u
1680	RecordLocationData?	int8u
1684	USBPowerDelivery?	int8u
1693	SensorShield?	int8u
1754	FocusShiftAutoReset?	int8u
1810	PreReleaseBurstLength	int8u
1812	PostReleaseBurstLength	int8u

Nikon MenuSettingsZ9v4 Tags

These tags are used by the Z9 firmware 4.0.0 and 4.1.0

Index1	Tag Name	Writable
-----	-----	-----
72	HighFrameRate	int8u
154	MultipleExposureMode	int8u
156	MultiExposureShots	int8u
204	Intervals	int32u
208	ShotsPerInterval	int32u
248	FocusShiftNumberShots	int8u
252	FocusShiftStepWidth	int8u
256	FocusShiftInterval	int8u
260	FocusShiftExposureLock?	int8u
290	PhotoShootingMenuBank	int8u
292	ExtendedMenuBanks	int8u
328	PhotoShootingMenuBankImageArea	int8u
342	AutoISO	int8u
344	ISOAutoHiLimit?	int16u
346	ISOAutoFlashLimit?	int16u

354	ISOAutoShutterTime	no
436	MovieVignetteControl?	int8u
438	DiffractionCompensation	int8u
440	FlickerReductionShooting	int8u
444	FlashControlMode	int8u
446	FlashMasterCompensation?	int8s
450	FlashGNDistance?	no
454	FlashOutput?	int8u
548	AFAreaMode	int8u
550	VRMode	int8u
554	BracketSet	int8u
556	BracketProgram	int8u
558	BracketIncrement	int8u
570	HDR	int8u
576	SecondarySlotFunction	int8u
582	HDRLevel	int8u
586	Slot2JpgSize?	int8u
592	DXCropAlert	int8u
594	SubjectDetection	int8u
596	DynamicAFAreaSize	int8u
636	HighFrequencyFlickerReduction?	int8u
646	MovieImageArea?	int8u & 0x01
656	MovieType?	int8u
658	MovieISOAutoHiLimit?	int16u
660	MovieISOAutoControlManualMode?	int8u
662	MovieISOAutoManualMode?	int16u
736	MovieActiveD-Lighting?	int8u
738	MovieHighISONoiseReduction?	int8u
744	MovieFlickerReduction	int8u
746	MovieMeteringMode?	int8u
748	MovieFocusMode?	int8u
750	MovieAFAreaMode	int8u
752	MovieVRMode?	int8u
756	MovieElectronicVR?	int8u
758	MovieSoundRecording?	int8u
760	MicrophoneSensitivity?	int8u
762	MicrophoneAttenuator?	int8u
764	MicrophoneFrequencyResponse?	int8u
766	WindNoiseReduction?	int8u
788	MovieToneMap?	int8u
794	MovieFrameSize?	int8u
796	MovieFrameRate?	int8u
802	MicrophoneJackPower?	int8u
803	MovieDXCropAlert?	int8u
804	MovieSubjectDetection?	int8u
812	MovieHighResZoom?	int8u
847	CustomSettingsZ9v4	NikonCustom SettingsZ9v4
1498	Language?	int8u
1500	TimeZone	int8u
1506	MonitorBrightness?	int8u
1528	AFFineTune?	int8u
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 u
1612	NonCPULens1MaxAperture?	int16s u
1616	NonCPULens2MaxAperture?	int16s u
1620	NonCPULens3MaxAperture?	int16s u
1624	NonCPULens4MaxAperture?	int16s u
1628	NonCPULens5MaxAperture?	int16s u
1632	NonCPULens6MaxAperture?	int16s u
1636	NonCPULens7MaxAperture?	int16s u
1640	NonCPULens8MaxAperture?	int16s u
1644	NonCPULens9MaxAperture?	int16s u
1648	NonCPULens10MaxAperture?	int16s u
1652	NonCPULens11MaxAperture?	int16s u
1656	NonCPULens12MaxAperture?	int16s u
1660	NonCPULens13MaxAperture?	int16s u
1664	NonCPULens14MaxAperture?	int16s u
1668	NonCPULens15MaxAperture?	int16s u
1672	NonCPULens16MaxAperture?	int16s u
1676	NonCPULens17MaxAperture?	int16s u
1680	NonCPULens18MaxAperture?	int16s u
1684	NonCPULens19MaxAperture?	int16s u
1688	NonCPULens20MaxAperture?	int16s u
1704	HDMIOutputResolution	int8u
1717	SetClockFromLocationData?	int8u
1724	AirplaneMode?	int8u
1725	EmptySlotRelease?	int8u
1760	EnergySavingMode?	int8u
1784	RecordLocationData?	int8u
1788	USBPowerDelivery?	int8u
1797	SensorShield?	int8u
1862	AutoCapturePreset	int8u
1864	FocusShiftAutoReset?	int8u
1922	PreReleaseBurstLength	int8u
1924	PostReleaseBurstLength	int8u
1938	VerticalISOButton	int8u
1940	ExposureCompensationButton	int8u
1942	ISOButton	int8u
2002	ViewModeShowEffectsOfSettings?	int8u
2004	DispButton	int8u
2048	ExposureDelay	fixed32u u
2052	CommandDialFrameAdvanceZoom?	int8u
2054	SubCommandDialFrameAdvanceZoom?	int8u
2056	PlaybackButton	int8u
2058	WBButton	int8u
2060	BracketButton	int8u
2062	FlashModeButton	int8u
2064	LensFunc1ButtonPlaybackMode	int8u
2066	LensFunc2ButtonPlaybackMode	int8u
2068	PlaybackButtonPlaybackMode	int8u
2070	BracketButtonPlaybackMode	int8u
2072	FlashModeButtonPlaybackMode	int8u

Nikon ShotInfo Tags

This information is encrypted for ShotInfoVersion 02xx, and some tags are only valid for specific models.

Index1	Tag Name	Writable
-----	-----	-----
0	ShotInfoVersion	no
4	FirmwareVersion	no
16	DistortionControl	int8u
102	VR_0x66?	int8u
106	ShutterCount	int32u
110	DeletedImageCount	int32u
117	VibrationReduction	int8u
130	VibrationReduction	int8u
343	ShutterCount	undef[2]
430	VibrationReduction	int8u
589	ShutterCount	int32u

Nikon ColorBalance1 Tags

Index2	Tag Name	Writable
-----	-----	-----
0	WB_RBGBLevels	int16u[4]!

Nikon ColorBalance2 Tags

This information is encrypted for most camera models.

Index2	Tag Name	Writable
-----	-----	-----
0	WB_RGGBLevels	int16u[4]!

Nikon ColorBalance3 Tags

Index2	Tag Name	Writable
-----	-----	-----
0	WB_RGBBLevels	int16u[4]!

Nikon ColorBalance4 Tags

Index2	Tag Name	Writable
-----	-----	-----
0	WB_GRBGBLevels	int16u[4]!

Nikon ColorBalanceUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ColorBalanceVersion	undef[4]

Nikon ColorBalanceUnknown2 Tags

Index2	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	LensDataVersion	no
6	LensIDNumber	int8u
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
-----	-----	-----
0	LensDataVersion	no
4	ExitPupilPosition	int8u
5	AFAperture	int8u
8	FocusPosition	int8u
9	FocusDistance	int8u
10	FocalLength	int8u
11	LensIDNumber	int8u
12	LensFStops	int8u
13	MinFocalLength	int8u

-- ExifTool 12.92 Tag Names --

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
-----	-----	-----
0	LensDataVersion	no
4	ExitPupilPosition	int8u
5	AFAperture	int8u
8	FocusPosition	int8u
10	FocusDistance	int8u
11	FocalLength	int8u
12	LensIDNumber	int8u
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
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
0	LensDataVersion	no
4	ExitPupilPosition	int8u
5	AFAperture	int8u
11	FocusDistance	int8u
12	FocalLength	int8u
13	LensIDNumber	int8u
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
53	LensMountType	int8u
54	MaxAperture	int16u
56	FNumber	int16u
60	FocalLength	int16u
76	FocusDistanceRangeWidth?	int8u
78	FocusDistance	int16u ²
86	LensDriveEnd?	int8u
88	FocusStepsFromInfinity?	int8u
90	LensPositionAbsolute	int32s

Nikon LensDataUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	FlashInfoVersion	no
4	FlashSource	int8u
6	ExternalFlashFirmware	int8u[2]
8	ExternalFlashFlags	int8u
9.1	FlashCommanderMode	int8u & 0x80
9.2	FlashControlMode	int8u & 0x7f
10	FlashOutput	int8u
	FlashCompensation	int8s
11	FlashFocalLength	int8u
12	RepeatingFlashRate	int8u
13	RepeatingFlashCount	int8u
14	FlashGNDistance	int8u
15	FlashGroupAControlMode	int8u & 0x0f
16	FlashGroupBControlMode	int8u & 0x0f
17	FlashGroupAOutput	int8u
	FlashGroupACompensation	int8s
18	FlashGroupBOutput	int8u
	FlashGroupBCompensation	int8s

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
-----	-----	-----
0	FlashInfoVersion	no
4	FlashSource	int8u
6	ExternalFlashFirmware	int8u[2]
8	ExternalFlashFlags	int8u
9.1	FlashCommanderMode	int8u & 0x80
9.2	FlashControlMode	int8u & 0x7f
10	FlashOutput	int8u
	FlashCompensation	int8s
12	FlashFocalLength	int8u
13	RepeatingFlashRate	int8u
14	RepeatingFlashCount	int8u
15	FlashGNDistance	int8u
16.1	FlashGroupAControlMode	int8u & 0x0f

17.1	FlashGroupBControlMode	int8u & 0xf0
17.2	FlashGroupCControlMode	int8u & 0xf0
18	FlashGroupAOutput	int8u
	FlashGroupACompensation	int8s
19	FlashGroupBOutput	int8u
	FlashGroupBCompensation	int8s
20	FlashGroupCOutput	int8u
	FlashGroupCCompensation	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.

Index1	Tag Name	Writable
-----	-----	-----
0	FlashInfoVersion	no
4	FlashSource	int8u
6	ExternalFlashFirmware	int8u[2]
8	ExternalFlashFlags	int8u
9.1	FlashCommanderMode	int8u & 0x80
9.2	FlashControlMode	int8u & 0x7f
10	FlashOutput	int8u
	FlashCompensation	int8s
12	FlashFocalLength	int8u
13	RepeatingFlashRate	int8u
14	RepeatingFlashCount	int8u
15	FlashGNDistance	int8u
16	FlashColorFilter	int8u
17.1	FlashGroupAControlMode	int8u & 0xf0
18.1	FlashGroupBControlMode	int8u & 0xf0
18.2	FlashGroupCControlMode	int8u & 0xf0
19	FlashGroupAOutput	int8u
	FlashGroupACompensation	int8s
20	FlashGroupBOutput	int8u
	FlashGroupBCompensation	int8s
21	FlashGroupCOutput	int8u
	FlashGroupCCompensation	int8s
27	ExternalFlashCompensation	int8s
29	FlashExposureComp3	int8s
39	FlashExposureComp4	int8s

Nikon FlashInfo0106 Tags

These tags are used by the Df, D610, D3300, D5300, D7100 and Coolpix A.

Index1	Tag Name	Writable
-----	-----	-----
0	FlashInfoVersion	no
4	FlashSource	int8u
6	ExternalFlashFirmware	int8u[2]
8	ExternalFlashFlags	int8u
9.1	FlashCommanderMode	int8u & 0x80
9.2	FlashControlMode	int8u & 0x7f
12	FlashFocalLength	int8u
13	RepeatingFlashRate	int8u
14	RepeatingFlashCount	int8u
15	FlashGNDistance	int8u
16	FlashColorFilter	int8u
17.1	FlashGroupAControlMode	int8u & 0xf0
18.1	FlashGroupBControlMode	int8u & 0xf0
18.2	FlashGroupCControlMode	int8u & 0xf0
39	FlashOutput	int8u
	FlashCompensation	int8s
40	FlashGroupAOutput	int8u
	FlashGroupACompensation	int8s
41	FlashGroupBOutput	int8u
	FlashGroupBCompensation	int8s
42	FlashGroupCOutput	int8u

FlashGroupCCompensation 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
-----	-----	-----
0	FlashInfoVersion	no
4	FlashSource	int8u
6	ExternalFlashFirmware	int8u[2]
8.1	ExternalFlashZoomOverride	int8u & 0x80
8.2	ExternalFlashStatus	int8u & 0x01
9.1	ExternalFlashReadyState	int8u & 0x07
10	FlashCompensation	int8s
12	FlashFocalLength	int8u
13	RepeatingFlashRate	int8u
14	RepeatingFlashCount	int8u
15	FlashGNDistance	int8u
17.1	FlashGroupAControlMode	int8u & 0x0f
18.1	FlashGroupBControlMode	int8u & 0xf0
18.2	FlashGroupCControlMode	int8u & 0x0f
40	FlashGroupAOutput	int8u
	FlashGroupACompensation	int8s
41	FlashGroupBOutput	int8u
	FlashGroupBCompensation	int8s
42	FlashGroupCOutput	int8u
	FlashGroupCCompensation	int8s

Nikon FlashInfo0300 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FlashInfoVersion	no
4	FlashSource	int8u
6	ExternalFlashFirmware	int8u[2]
8	ExternalFlashFlags	int8u
9.1	FlashCommanderMode	int8u & 0x80
9.2	FlashControlMode	int8u & 0x7f
10	FlashCompensation	int8s
13	RepeatingFlashRate	int8u
14	RepeatingFlashCount	int8u
15	FlashGNDistance	int8u
16	FlashColorFilter	int8u
17.1	FlashGroupAControlMode	int8u & 0x0f
18.1	FlashGroupBControlMode	int8u & 0xf0
18.2	FlashGroupCControlMode	int8u & 0x0f
33	FlashOutput	int8u
37	FlashIlluminationPattern	int8u
38	FlashFocalLength	int8u
40	FlashGroupAOutput	int8u
	FlashGroupACompensation	int8s
41	FlashGroupBOutput	int8u
	FlashGroupBCompensation	int8s
42	FlashGroupCOutput	int8u
	FlashGroupCCompensation	int8s

Nikon FlashInfoUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FlashInfoVersion	no

Nikon MultiExposure Tags

Index4	Tag Name	Writable
-----	-----	-----
0	MultiExposureVersion	no

1	MultiExposureMode	int32u
2	MultiExposureShots	int32u
3	MultiExposureAutoGain	int32u

Nikon MultiExposure2 Tags

Index4	Tag Name	Writable
-----	-----	-----
0	MultiExposureVersion	no
1	MultiExposureMode	int32u
2	MultiExposureShots	int32u
3	MultiExposureOverlayMode	int32u

Nikon AFInfo2V0400 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	AFInfo2Version	no
5	AFAreaMode	int8u
10	AFPointsUsed	undef[51]
62	AFImageWidth	int16u
64	AFImageHeight	int16u
66	AFAreaXPosition	int16u
67	FocusPositionHorizontal	int8u 7
68	AFAreaYPosition	int16u
69	FocusPositionVertical	int8u 7
70	AFAreaWidth	int16u
72	AFAreaHeight	int16u
74	FocusResult	int8u

Nikon AFInfo2 Tags

These tags are written by Nikon DSLR's which have the live view feature.

Index1	Tag Name	Writable
-----	-----	-----
0	AFInfo2Version	no
4	ContrastDetectAF	int8u
5	AFAreaMode	int8u
6	PhaseDetectAF	int8u
7	PrimaryAFPoint	int8u
8	AFPointsUsed	undef[7]
	AFPointsUsed	undef[2]
	AFPointsUsed	undef[5]
	AFPointsUsed	undef[17]
	AFPointsUsed	undef[21]
	AFPointsUsed	undef[29]
	AFPointsUsed	undef[20]
	AFPointsUsed	undef[7]
	PrimaryAFPoint	int8u
10	AFPointsUsed	undef[7]
	AFPointsUsed	undef[11]
	AFPointsUsed	undef[14]
16	AFImageWidth	int16u
18	AFImageHeight	int16u
20	AFAreaXPosition	int16u
22	AFAreaYPosition	int16u
24	AFAreaWidth	int16u
26	AFAreaHeight	int16u
28	ContrastDetectAFInFocus	int8u
	AFPointsSelected	undef[20]
42	AFImageWidth	int16u
44	AFImageHeight	int16u
46	AFAreaXPosition	int16u
47	FocusPositionHorizontal	int8u 7
48	AFAreaYPosition	int16u
	AFPointsInFocus	undef[20]
49	FocusPositionVertical	int8u 7
50	AFAreaWidth	int16u

52	AFAreaHeight	int16u
56	PrimaryAFPoint	int8u
68	PrimaryAFPoint	int8u
70	AFImageWidth	int16u
72	AFImageHeight	int16u
74	AFAreaXPosition	int16u
76	AFAreaYPosition	int16u
78	AFAreaWidth	int16u
80	AFAreaHeight	int16u
82	ContrastDetectAFInFocus	int8u

Nikon FileInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
0	FileInfoVersion	no
2	MemoryCardNumber	int16u
3	DirectoryNumber	int16u
4	FileName	int16u

Nikon AFTune Tags

Index1	Tag Name	Writable
-----	-----	-----
0	AFFineTune	int8u
1	AFFineTuneIndex	int8u
2	AFFineTuneAdj	int8s
3	AFFineTuneAdjTele	int8s

Nikon RetouchInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	RetouchInfoVersion	no
5	RetouchNEFProcessing	int8s

Nikon BarometerInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	BarometerInfoVersion	no
6	Altitude	int32s

Nikon CaptureOffsets Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0x0002	FilmType	string
0x0040	MultiSample	string
0x0041	BitDepth	int16u
0x0050	MasterGain	rational64s
0x0051	ColorGain	rational64s[3]
0x0060	ScanImageEnhancer	int32u
0x0100	DigitalICE	string
0x0110	ROCInfo	Nikon ROC
0x0120	GEMInfo	Nikon GEM
0x0200	DigitalDEEShadowAdj	int32u
0x0201	DigitalDEEThreshold	int32u
0x0202	DigitalDEEHighlightAdj	int32u

Nikon ROC Tags

Index4	Tag Name	Writable
-----	-----	-----
0	DigitalROC	int32u

Nikon GEM Tags

Index4	Tag Name	Writable
-----	-----	-----
0	DigitalGEM	int32u

Nikon CaptureOutput Tags

Index4	Tag Name	Writable
-----	-----	-----
2	OutputImageWidth	int32u
3	OutputImageHeight	int32u
4	OutputResolution	int32u

Nikon Type2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0x0005	DistortionInfo	Nikon DistortionInfo
0x0006	VignetteInfo	Nikon VignetteInfo

Nikon DistortionInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	DistortionCorrectionVersion	string[4]
4	DistortionCorrection	int8u
20	RadialDistortionCoefficient1	rational64s $\frac{7}{2}$
28	RadialDistortionCoefficient2	rational64s $\frac{7}{2}$
36	RadialDistortionCoefficient3	rational64s $\frac{7}{2}$

Nikon VignetteInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	VignetteCorrectionVersion	string[4]
36	VignetteCoefficient1	rational64s $\frac{7}{2}$
52	VignetteCoefficient2	rational64s $\frac{7}{2}$
68	VignetteCoefficient3	rational64s $\frac{7}{2}$

Nikon AVI Tags

Nikon-specific RIFF tags found in AVI videos.

Tag ID	Tag Name	Writable
-----	-----	-----
'nctg'	NikonTags	Nikon AVITags

'ncth'	ThumbnailImage	no
'ncvr'	NikonVers	Nikon AVIVers
'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
-----	-----	-----
0x0003	Make	no
0x0004	Model	no
0x0005	Software	no
0x0006	Equipment	no
0x0007	Orientation	no
0x0008	ExposureTime	no
0x0009	FNumber	no
0x000a	ExposureCompensation	no
0x000b	MaxApertureValue	no
0x000c	MeteringMode	no
0x000f	FocalLength	no
0x0010	XResolution	no
0x0011	YResolution	no
0x0012	ResolutionUnit	no
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
-----	-----	-----
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
-----	-----	-----
'NCDB'	NikonNCDB	Nikon NCDB
'NCHD'	MakerNoteVersion	no
'NCM1'	PreviewImage1	no
'NCM2'	PreviewImage2	no
'NCTG'	NikonTags	Nikon NCTG
'NCTH'	ThumbnailImage	no
'NCVW'	PreviewImage	no

Nikon NCDB Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[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
-----	-----	-----

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
0x110829a	ExposureTime	no
0x110829d	FNumber	no
0x1108822	ExposureProgram	no
0x1109204	ExposureCompensation	no
0x1109207	MeteringMode	no
0x110920a	FocalLength	no
0x110a431	SerialNumber	no
0x110a432	LensInfo	no
0x110a433	LensMake	no
0x110a434	LensModel	no
0x110a435	LensSerialNumber	no
0x1200000	GPSVersionID	no
0x1200001	GPSLatitudeRef	no
0x1200002	GPSLatitude	no
0x1200003	GPSLongitudeRef	no
0x1200004	GPSLongitude	no
0x1200005	GPSAltitudeRef	no
0x1200006	GPSAltitude	no
0x1200007	GPSTimeStamp	no
0x1200008	GPSSatellites	no
0x1200010	GPSImgDirectionRef	no
0x1200011	GPSImgDirection	no
0x1200012	GPSMapDatum	no
0x120001d	GPSDateStamp	no
0x2000001	MakerNoteVersion	no
0x2000005	WhiteBalance	no
0x2000007	FocusMode	no
0x200000b	WhiteBalanceFineTune	no
0x200001b	CropHiSpeed	no
0x200001e	ColorSpace	no
0x200001f	VRInfo	Nikon VRInfo
0x2000022	ActiveD-Lighting	no
0x2000023	PictureControlData	Nikon PictureControl Nikon PictureControl2 Nikon PictureControl3 Nikon PictureControlUnknown
0x2000024	WorldTime	Nikon WorldTime
0x2000025	ISOInfo	Nikon ISOInfo
0x200002a	VignetteControl	no
0x200002c	UnknownInfo	Nikon UnknownInfo
0x2000032	UnknownInfo2	Nikon UnknownInfo2
0x2000039	LocationInfo	Nikon LocationInfo
0x200003f	WhiteBalanceFineTune	no
0x200004e	NikonSettings	NikonSettings
0x2000083	LensType	no
0x2000084	Lens	no
0x2000087	FlashMode	no
0x2000098	LensData0100	Nikon LensData00
	LensData0101	Nikon LensData01
	LensData0201	Nikon LensData01
	LensData0204	Nikon LensData0204
	LensData0400	Nikon LensData0400
	LensData0402	Nikon LensData0402
	LensData0403	Nikon LensData0403
	LensData0800	Nikon LensData0800

	LensDataUnknown	Nikon LensDataUnknown
0x20000a7	ShutterCount	no
0x20000a8	FlashInfo0100	Nikon FlashInfo0100
	FlashInfo0102	Nikon FlashInfo0102
	FlashInfo0103	Nikon FlashInfo0103
	FlashInfo0106	Nikon FlashInfo0106
	FlashInfo0107	Nikon FlashInfo0107
	FlashInfoUnknown	Nikon FlashInfoUnknown
0x20000ab	VariProgram	no
0x20000b1	HighISONoiseReduction	no
0x20000b7	AFInfo2	Nikon AFInfo2
0x20000c3	BarometerInfo	Nikon BarometerInfo

Nikon MOV Tags

This information is found in MOV and QT videos from some Nikon cameras.

Index1	Tag Name	Writable
-----	-----	-----
0	Make	no
24	Model	no
38	ExposureTime	no
42	FNumber	no
50	ExposureCompensation	no
68	WhiteBalance	no
72	FocalLength	no
175	Software	no
223	ISO	no

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 SettingsD40 Tags

Custom settings for the Nikon D40.

Index1	Tag Name	Writable
-----	-----	-----
0.1	Beep	int8u & 0x80
0.2	AFAssist	int8u & 0x40
0.3	NoMemoryCard	int8u & 0x20
0.4	ImageReview	int8u & 0x10
1.1	AutoISO	int8u & 0x80
1.2	AutoISOMax	int8u & 0x30
1.3	AutoISOMinShutterSpeed	int8u & 0x07
2.1	ImageReviewTime	int8u & 0x07
3.1	MonitorOffTime	int8u & 0xe0
3.2	MeteringTime	int8u & 0x1c
3.3	SelfTimerTime	int8u & 0x03
3.4	RemoteOnDuration	int8u & 0xc0
4.1	AELockButton	int8u & 0x0e
4.2	AELock	int8u & 0x01
5.1	ShootingModeSetting	int8u & 0x70
5.2	TimerFunctionButton	int8u & 0x07
6.1	Metering	int8u & 0x03
8.1	InternalFlash	int8u & 0x10
8.2	ManualFlashOutput	int8u & 0x07
9	FlashLevel	int8s
10.1	FocusModeSetting	int8u & 0xc0
11.1	AFAreaModeSetting	int8u & 0x30

NikonCustom SettingsD80 Tags

Custom settings for the Nikon D80.

Index1	Tag Name	Writable
-----	-----	-----
0.1	Beep	int8u & 0x80
0.2	AFAssist	int8u & 0x40
0.3	NoMemoryCard	int8u & 0x20
0.4	ImageReview	int8u & 0x10
0.5	Illumination	int8u & 0x08
0.6	MainDialExposureComp	int8u & 0x04
0.7	EVStepSize	int8u & 0x01
1.1	AutoISO	int8u & 0x40
1.2	AutoISOMax	int8u & 0x30
1.3	AutoISOMinShutterSpeed	int8u & 0x0f
2.1	AutoBracketSet	int8u & 0xc0
2.2	AutoBracketOrder	int8u & 0x20
3.1	MonitorOffTime	int8u & 0xe0
3.2	MeteringTime	int8u & 0x1c
3.3	SelfTimerTime	int8u & 0x03
4.1	AELockButton	int8u & 0x1e
4.2	AELock	int8u & 0x01
4.3	RemoteOnDuration	int8u & 0xc0
5.1	CommandDials	int8u & 0x80
5.2	FunctionButton	int8u & 0x78
6.1	GridDisplay	int8u & 0x80
6.2	ViewfinderWarning	int8u & 0x40
6.3	CenterWeightedAreaSize	int8u & 0x0c
6.4	ExposureDelayMode	int8u & 0x20
6.5	MB-D80Batteries	int8u & 0x03
7.1	FlashWarning	int8u & 0x80
7.2	FlashShutterSpeed	int8u & 0x78
7.3	AutoFP	int8u & 0x04
7.4	ModelingFlash	int8u & 0x02
8.1	InternalFlash	int8u & 0xc0
8.2	ManualFlashOutput	int8u & 0x07
9.1	RepeatingFlashOutput	int8u & 0x70
9.2	RepeatingFlashCount	int8u & 0x0f
10.1	RepeatingFlashRate	int8u & 0xf0
10.2	CommanderChannel	int8u & 0x03
11.1	CommanderInternalFlash	int8u & 0xc0
11.2	CommanderGroupAMode	int8u & 0x30
11.3	CommanderGroupBMode	int8u & 0x0c
12.1	CommanderInternalTTLComp	int8u & 0x1f
12.2	CommanderInternalManualOutput	int8u & 0xe0
13.1	CommanderGroupA_TTL-AAComp	int8u & 0x1f
13.2	CommanderGroupAManualOutput	int8u & 0xe0
14.1	CommanderGroupB_TTL-AAComp	int8u & 0x1f
14.2	CommanderGroupBManualOutput	int8u & 0xe0
15.1	CenterAFArea	int8u & 0x80
15.2	FocusAreaSelection	int8u & 0x04
15.3	AFAreaIllumination	int8u & 0x03
16.1	AFAreaModeSetting	int8u & 0xc0

NikonCustom SettingsD90 Tags

Custom settings for the D90.

Index1	Tag Name	Writable
-----	-----	-----
0.1	LightSwitch	int8u & 0x08
2.1	AFAreaModeSetting	int8u & 0x60
2.2	CenterFocusPoint	int8u & 0x10
2.3	AFAssist	int8u & 0x01
2.4	AFPointIllumination	int8u & 0x06
2.5	FocusPointWrap	int8u & 0x08
3.1	AELockForMB-D80	int8u & 0x1c
3.2	MB-D80BatteryType	int8u & 0x03
4.1	Beep	int8u & 0x40
4.2	GridDisplay	int8u & 0x02
4.3	ISODisplay	int8u & 0x0c
4.4	ViewfinderWarning	int8u & 0x01

4.5	NoMemoryCard	int8u & 0x20
5.1	ScreenTips	int8u & 0x04
5.2	FileNumberSequence	int8u & 0x08
5.3	ShootingInfoDisplay	int8u & 0xc0
5.4	LCDIllumination	int8u & 0x20
6.1	EasyExposureComp	int8u & 0x01
6.2	ReverseIndicators	int8u & 0x80
7.1	ExposureControlStepSize	int8u & 0x40
8.1	CenterWeightedAreaSize	int8u & 0x60
8.2	FineTuneOptMatrixMetering	int8u & 0x0f
9.1	FineTuneOptCenterWeighted	int8u & 0xf0
9.2	FineTuneOptSpotMetering	int8u & 0x0f
11.1	CLModeShootingSpeed	int8u & 0x07
11.2	ExposureDelayMode	int8u & 0x40
13.1	AutoBracketSet	int8u & 0xe0
13.2	AutoBracketOrder	int8u & 0x10
14.1	FuncButton	int8u & 0x78
16.1	OKButton	int8u & 0x18
17.1	AELockButton	int8u & 0x38
18.1	CommandDialsReverseRotation	int8u & 0x80
18.2	ShutterReleaseButtonAE-L	int8u & 0x02
19.1	MeteringTime	int8u & 0xf0
19.2	RemoteOnDuration	int8u & 0x03
20.1	SelfTimerTime	int8u & 0xc0
20.2	SelfTimerShotCount	int8u & 0x1e
21.1	PlaybackMonitorOffTime	int8u & 0x1c
21.2	ImageReviewTime	int8u & 0xe0
22.1	MenuMonitorOffTime	int8u & 0xe0
22.2	ShootingInfoMonitorOffTime	int8u & 0x1c
23.1	FlashShutterSpeed	int8u & 0x0f
24.1	InternalFlash	int8u & 0xc0
24.2	ManualFlashOutput	int8u & 0x1f
25.1	RepeatingFlashOutput	int8u & 0x70
25.2	RepeatingFlashCount	int8u & 0x0f
26.1	RepeatingFlashRate	int8u & 0xf0
31.1	FlashWarning	int8u & 0x80
31.2	CommanderInternalTTLComp	int8u & 0x1f
31.3	ModelingFlash	int8u & 0x20
31.4	AutoFP	int8u & 0x40
32.1	CommanderGroupA_TTLComp	int8u & 0x1f
33.1	CommanderGroupB_TTLComp	int8u & 0x1f
34.1	LiveViewAF	int8u & 0xc0

NikonCustom SettingsD3 Tags

Custom settings for the D3, D3S, D3X, D300 and D300S.

Index1	Tag Name	Writable
-----	-----	-----
0.1	CustomSettingsBank	int8u & 0x03
0.2	CustomSettingsAllDefault	int8u & 0x80
1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	AFPointSelection	int8u & 0x10
1.4	DynamicAFArea	int8u & 0x0c
1.5	FocusTrackingLockOn	int8u & 0x03
2.1	AFActivation	int8u & 0x80
2.2	FocusPointWrap	int8u & 0x08
2.3	AFPointIllumination	int8u & 0x60
	AFPointIllumination	int8u & 0x06
2.4	AFPointBrightness	int8u & 0x06
2.5	AFAssist	int8u & 0x01
3.1	AFOnButton	int8u & 0x07
3.2	VerticalAFOnButton	int8u & 0x70
3.3	AF-OnForMB-D10	int8u & 0x70
4.1	FocusTrackingLockOn	int8u & 0x07
4.2	AssignBktButton	int8u & 0x08
4.3	MultiSelectorLiveView	int8u & 0xc0
4.4	InitialZoomLiveView	int8u & 0x30
6.1	ISOStepSize	int8u & 0xc0

6.2	ExposureControlStepSize	int8u & 0x30
6.3	ExposureCompStepSize	int8u & 0x0c
6.4	EasyExposureCompensation	int8u & 0x03
7.1	CenterWeightedAreaSize	int8u & 0xe0
7.2	FineTuneOptCenterWeighted	int8u & 0x0f
8.1	FineTuneOptMatrixMetering	int8u & 0xf0
8.2	FineTuneOptSpotMetering	int8u & 0x0f
9.1	MultiSelectorShootMode	int8u & 0xc0
9.2	MultiSelectorPlaybackMode	int8u & 0x30
9.3	InitialZoomSetting	int8u & 0x0c
9.4	MultiSelector	int8u & 0x01
10.1	ExposureDelayMode	int8u & 0x40
10.2	CLModeShootingSpeed	int8u & 0x07
10.3	CHModeShootingSpeed	int8u & 0x30
11	MaxContinuousRelease	int8u
12.1	ReverseIndicators	int8u & 0x20
12.2	FileNumberSequence	int8u & 0x02
	FileNumberSequence	int8u & 0x08
12.3	RearDisplay	int8u & 0x80
12.4	ViewfinderDisplay	int8u & 0x40
12.5	BatteryOrder	int8u & 0x04
12.6	MB-D10Batteries	int8u & 0x03
12.7	ScreenTips	int8u & 0x10
13.1	Beep	int8u & 0xc0
13.2	ShootingInfoDisplay	int8u & 0x30
13.3	GridDisplay	int8u & 0x02
13.4	ViewfinderWarning	int8u & 0x01
13.5	MultiSelectorPlaybackMode	int8u & 0x03
14.1	PreviewButton	int8u & 0xf8
	FuncButton	int8u & 0xf8
14.2	PreviewButtonPlusDials	int8u & 0x07
	FuncButtonPlusDials	int8u & 0x07
15.1	FuncButton	int8u & 0xf8
	PreviewButton	int8u & 0xf8
15.2	FuncButtonPlusDials	int8u & 0x07
	PreviewButtonPlusDials	int8u & 0x07
16.1	AELockButton	int8u & 0xf8
16.2	AELockButtonPlusDials	int8u & 0x07
17.1	CommandDialsReverseRotation	int8u & 0x80
17.2	CommandDialsChangeMainSub	int8u & 0x40
17.3	CommandDialsApertureSetting	int8u & 0x20
17.4	CommandDialsMenuAndPlayback	int8u & 0x10
17.5	LCDIllumination	int8u & 0x08
17.6	PhotoInfoPlayback	int8u & 0x04
17.7	ShutterReleaseButtonAE-L	int8u & 0x02
17.8	ReleaseButtonToUseDial	int8u & 0x01
18.1	SelfTimerTime	int8u & 0x18
18.2	MonitorOffTime	int8u & 0x07
20.1	FlashSyncSpeed	int8u & 0xe0
	FlashSyncSpeed	int8u & 0xf0
20.2	FlashShutterSpeed	int8u & 0x0f
21.1	AutoBracketSet	int8u & 0xc0
	AutoBracketSet	int8u & 0xe0
21.2	AutoBracketModeM	int8u & 0x30
	AutoBracketModeM	int8u & 0x18
21.3	AutoBracketOrder	int8u & 0x08
	AutoBracketOrder	int8u & 0x04
21.4	ModelingFlash	int8u & 0x01
22.1	NoMemoryCard	int8u & 0x80
22.2	MeteringTime	int8u & 0x0f
23.1	InternalFlash	int8u & 0xc0
25.1	ImageReviewTime	int8u & 0xe0
25.2	PlaybackMonitorOffTime	int8u & 0x1c
26.1	MenuMonitorOffTime	int8u & 0xe0
26.2	ShootingInfoMonitorOffTime	int8u & 0x1c

NikonCustom SettingsD700 Tags

Custom settings for the D700.

Index1	Tag Name	Writable
-----	-----	-----
0.1	CustomSettingsBank	int8u & 0x03
0.2	CustomSettingsAllDefault	int8u & 0x80
1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	AFPointSelection	int8u & 0x10
1.4	DynamicAFArea	int8u & 0x0c
2.1	AFActivation	int8u & 0x80
2.2	FocusPointWrap	int8u & 0x08
2.3	AFPointIllumination	int8u & 0x06
2.4	AFAssist	int8u & 0x01
3.1	FocusTrackingLockOn	int8u & 0x07
3.2	AF-OnForMB-D10	int8u & 0x70
4.1	ISOStepSize	int8u & 0xc0
4.2	ExposureControlStepSize	int8u & 0x30
4.3	ExposureCompStepSize	int8u & 0x0c
4.4	EasyExposureCompensation	int8u & 0x03
5.1	CenterWeightedAreaSize	int8u & 0x70
6.1	FineTuneOptMatrixMetering	int8u & 0xf0
6.2	FineTuneOptSpotMetering	int8u & 0x0f
7.1	ShutterReleaseButtonAE-L	int8u & 0x80
7.2	SelfTimerTime	int8u & 0x30
7.3	MeteringTime	int8u & 0x0f
8.1	PlaybackMonitorOffTime	int8u & 0x38
8.2	MenuMonitorOffTime	int8u & 0x07
9.1	ShootingInfoMonitorOffTime	int8u & 0x38
9.2	ImageReviewTime	int8u & 0x07
10.1	Beep	int8u & 0xc0
10.2	ShootingInfoDisplay	int8u & 0x30
10.3	LCDIllumination	int8u & 0x08
10.4	ExposureDelayMode	int8u & 0x04
10.5	GridDisplay	int8u & 0x02
11.1	FileNumberSequence	int8u & 0x40
11.2	CLModeShootingSpeed	int8u & 0x07
12	MaxContinuousRelease	int8u
13.1	ScreenTips	int8u & 0x08
13.2	BatteryOrder	int8u & 0x04
13.3	MB-D10BatteryType	int8u & 0x03
15.1	FlashSyncSpeed	int8u & 0xf0
15.2	FlashShutterSpeed	int8u & 0x0f
16.1	FlashControlBuilt-in	int8u & 0xc0
16.2	ManualFlashOutput	int8u & 0x1f
17.1	RepeatingFlashOutput	int8u & 0x70
17.2	RepeatingFlashCount	int8u & 0x0f
18.1	RepeatingFlashRate	int8u & 0xf0
18.2	CommanderInternalTTLChannel	int8u & 0x03
20.1	CommanderInternalTTLCompBuiltin	int8u & 0x1f
21.1	CommanderInternalTTLCompGroupA	int8u & 0x1f
22.1	CommanderInternalTTLCompGroupB	int8u & 0x1f
26.1	AutoBracketSet	int8u & 0xc0
26.2	AutoBracketModeM	int8u & 0x30
26.3	AutoBracketOrder	int8u & 0x08
26.4	ModelingFlash	int8u & 0x01
27.1	MultiSelectorShootMode	int8u & 0xc0
27.2	MultiSelectorPlaybackMode	int8u & 0x30
27.3	InitialZoomSetting	int8u & 0x0c
27.4	MultiSelector	int8u & 0x01
28.1	FuncButton	int8u & 0xf8
29.1	PreviewButton	int8u & 0xf8
30.1	AELockButton	int8u & 0xf8
31.1	FuncButtonPlusDials	int8u & 0x70
31.2	PreviewButtonPlusDials	int8u & 0x07
32.1	AELockButtonPlusDials	int8u & 0x70
33.1	CommandDialsReverseRotation	int8u & 0x80
33.2	CommandDialsChangeMainSub	int8u & 0x40
33.3	CommandDialsApertureSetting	int8u & 0x20
33.4	CommandDialsMenuAndPlayback	int8u & 0x10
33.5	ReverseIndicators	int8u & 0x08
33.6	PhotoInfoPlayback	int8u & 0x04

33.7	NoMemoryCard	int8u & 0x02
33.8	ReleaseButtonToUseDial	int8u & 0x01

NikonCustom SettingsD800 Tags

Custom settings for the D800 and D800E.

Index1	Tag Name	Writable
-----	-----	-----
12.1	AutoBracketingSet	int8u & 0xe0
12.2	AutoBracketOrder	int8u & 0x10
12.3	AutoBracketingMode	int8u & 0x0c
22.1	FlashSyncSpeed	int8u & 0xf0
22.2	FlashShutterSpeed	int8u & 0x0f
23.1	FlashControlBuilt-in	int8u & 0xc0
23.2	ManualFlashOutput	int8u & 0x1f
24.1	RepeatingFlashOutput	int8u & 0x70
24.2	RepeatingFlashCount	int8u & 0x0f
25.1	RepeatingFlashRate	int8u & 0xf0
25.2	CommanderChannel	int8u & 0x03
27.1	CommanderInternalFlash	int8u & 0xc0
27.2	CommanderInternalManualOutput	int8u & 0x1f
28.1	CommanderGroupAMode	int8u & 0xc0
28.2	CommanderGroupAManualOutput	int8u & 0x1f
29.1	CommanderGroupBMode	int8u & 0xc0
29.2	CommanderGroupBManualOutput	int8u & 0x1f
30.1	ModelingFlash	int8u & 0x20
30.2	CommanderInternalTTLComp	int8u & 0x1f
31.1	CommanderGroupA_TTL-AAComp	int8u & 0x1f
32.1	CommanderGroupB_TTL-AAComp	int8u & 0x1f

NikonCustom SettingsD810 Tags

Custom settings for the D810.

Index1	Tag Name	Writable
-----	-----	-----
0.1	LightSwitch	int8u & 0x08
0.2	CustomSettingsBank	int8u & 0x03
1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	AFPointSelection	int8u & 0x10
1.4	FocusTrackingLockOn	int8u & 0x07
2.1	AFActivation	int8u & 0x80
2.2	FocusPointWrap	int8u & 0x08
2.3	AFPointBrightness	int8u & 0x06
2.4	AFAssist	int8u & 0x01
3.1	BatteryOrder	int8u & 0x40
3.2	MB-D12BatteryType	int8u & 0x03
4.1	Pitch	int8u & 0x40
4.2	NoMemoryCard	int8u & 0x20
4.3	ISODisplay	int8u & 0x0c
4.4	GridDisplay	int8u & 0x02
5.1	ShootingInfoDisplay	int8u & 0xc0
5.2	LCDIllumination	int8u & 0x20
5.3	ElectronicFront-CurtainShutter	int8u & 0x08
5.4	ScreenTips	int8u & 0x04
5.5	Beep	int8u & 0x03
6.1	ReverseIndicators	int8u & 0x80
6.2	CommandDialsReverseRotation	int8u & 0x18
6.3	EasyExposureCompensation	int8u & 0x03
7.1	ExposureControlStepSize	int8u & 0xc0
7.2	ISOStepSize	int8u & 0x30
7.3	ExposureCompStepSize	int8u & 0x0c
8.1	CenterWeightedAreaSize	int8u & 0xe0
8.2	FineTuneOptMatrixMetering	int8u & 0x0f
9.1	FineTuneOptCenterWeighted	int8u & 0xf0
9.2	FineTuneOptSpotMetering	int8u & 0x0f
10.1	MultiSelectorShootMode	int8u & 0xc0
10.2	MultiSelectorPlaybackMode	int8u & 0x30

10.3	MultiSelector	int8u & 0x01
11.1	ExposureDelayMode	int8u & 0xc0
11.2	CLModeShootingSpeed	int8u & 0x0f
12.1	MaxContinuousRelease	int8u
13.1	AutoBracketSet	int8u & 0xe0
13.2	AutoBracketOrder	int8u & 0x10
13.3	AutoBracketModeM	int8u & 0x0c
14.1	FuncButton	int8u & 0x1f
15.1	PreviewButton	int8u & 0x1f
16.1	AssignBktButton	int8u & 0x07
17.1	AELockButton	int8u & 0x1f
18.1	CommandDialsChangeMainSub	int8u & 0xe0
18.2	CommandDialsMenuAndPlayback	int8u & 0x18
18.3	CommandDialsApertureSetting	int8u & 0x04
18.4	ShutterReleaseButtonAE-L	int8u & 0x02
18.5	ReleaseButtonToUseDial	int8u & 0x01
19.1	StandbyTimer	int8u & 0xf0
20.1	SelfTimerTime	int8u & 0xc0
20.2	SelfTimerShotInterval	int8u & 0x30
20.3	SelfTimerShotCount	int8u & 0x0f
21.1	ImageReviewMonitorOffTime	int8u & 0xe0
21.2	LiveViewMonitorOffTime	int8u & 0x1c
22.1	MenuMonitorOffTime	int8u & 0xe0
22.2	ShootingInfoMonitorOffTime	int8u & 0x1c
23.1	FlashSyncSpeed	int8u & 0xf0
23.2	FlashShutterSpeed	int8u & 0x0f
24.1	FlashControlBuilt-in	int8u & 0xc0
31.1	ModelingFlash	int8u & 0x20
36.1	PlaybackMonitorOffTime	int8u & 0xe0
37.1	MultiSelectorLiveView	int8u & 0xc0
38.1	ShutterSpeedLock	int8u & 0x80
38.2	ApertureLock	int8u & 0x40
38.3	MovieShutterButton	int8u & 0x20
38.4	FlashExposureCompArea	int8u & 0x04
40.1	MovieAELockButtonAssignment	int8u & 0x0f
41.1	MovieFunctionButton	int8u & 0x70
41.2	MoviePreviewButton	int8u & 0x07
42.1	FuncButtonPlusDials	int8u & 0x0f
43.1	PreviewButtonPlusDials	int8u & 0x0f
44.1	AELockButtonPlusDials	int8u & 0x0f
45.1	AssignMovieRecordButton	int8u & 0x0f
46.1	FineTuneOptHighlightWeighted	int8u & 0x0f
47.1	DynamicAreaAFDisplay	int8u & 0x80
47.2	AFPointIllumination	int8u & 0x40
47.3	StoreByOrientation	int8u & 0x18
47.4	GroupAreaAFIllumination	int8u & 0x04
48.1	MatrixMetering	int8u & 0x80
48.2	LiveViewButtonOptions	int8u & 0x30
48.3	AFModeRestrictions	int8u & 0x03
49.1	LimitAFAreaModeSelection	int8u & 0x7e
50.1	AF-OnForMB-D12	int8u & 0x07
51.1	AssignRemoteFnButton	int8u & 0x1f
52.1	LensFocusFunctionButtons	int8u & 0x3f

NikonCustom SettingsD850 Tags

Custom settings for the D850.

Index1	Tag Name	Writable
-----	-----	-----
0.2	CustomSettingsBank	int8u & 0x03
1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	AFPointSelection	int8u & 0x10
1.4	Three-DTrackingFaceDetection	int8u & 0x08
1.5	BlockShotAFResponse	int8u & 0x07
2.1	FocusPointWrap	int8u & 0x08
2.2	AFPointBrightness	int8u & 0x06
4.1	ISODisplay	int8u & 0x08
4.2	GridDisplay	int8u & 0x02

5.1	LCDIllumination	int8u & 0x20
5.2	ElectronicFront-CurtainShutter	int8u & 0x08
6.1	ReverseIndicators	int8u & 0x80
6.2	CommandDialsReverseRotation	int8u & 0x18
6.3	EasyExposureCompensation	int8u & 0x03
7.1	ExposureControlStepSize	int8u & 0xc0
7.2	ISOStepSize	int8u & 0x30
7.3	ExposureCompStepSize	int8u & 0x0c
8.1	CenterWeightedAreaSize	int8u & 0xe0
8.2	FineTuneOptMatrixMetering	int8u & 0x0f
9.1	FineTuneOptCenterWeighted	int8u & 0xf0
9.2	FineTuneOptSpotMetering	int8u & 0x0f
10.1	MultiSelectorShootMode	int8u & 0xe0
10.2	MultiSelectorPlaybackMode	int8u & 0x0c
10.3	MultiSelector	int8u & 0x01
11.1	ExposureDelayMode	int8u & 0xe0
11.2	CLModeShootingSpeed	int8u & 0x0f
12.1	MaxContinuousRelease	int8u
13.1	AutoBracketOrder	int8u & 0x10
13.2	AutoBracketModeM	int8u & 0x0c
14.1	Func1Button	int8u & 0x3f
15.1	PreviewButton	int8u & 0x3f
16.1	AssignBktButton	int8u & 0x07
18.1	CommandDialsChangeMainSub	int8u & 0xe0
18.2	CommandDialsMenuAndPlayback	int8u & 0x18
18.3	CommandDialsApertureSetting	int8u & 0x04
18.4	ReleaseButtonToUseDial	int8u & 0x01
19.1	StandbyTimer	int8u & 0xf0
20.1	SelfTimerTime	int8u & 0xc0
20.2	SelfTimerShotInterval	int8u & 0x30
20.3	SelfTimerShotCount	int8u & 0x0f
21.1	ImageReviewMonitorOffTime	int8u & 0xe0
21.2	LiveViewMonitorOffTime	int8u & 0x1c
22.1	MenuMonitorOffTime	int8u & 0xe0
22.2	ShootingInfoMonitorOffTime	int8u & 0x1c
23.1	FlashSyncSpeed	int8u & 0xf0
23.2	FlashShutterSpeed	int8u & 0x0f
31.1	ModelingFlash	int8u & 0x20
36.1	PlaybackMonitorOffTime	int8u & 0xe0
37.1	MultiSelectorLiveView	int8u & 0xc0
38.1	ShutterSpeedLock	int8u & 0x80
38.2	ApertureLock	int8u & 0x40
38.3	MovieShutterButton	int8u & 0x10
38.4	FlashExposureCompArea	int8u & 0x04
38.5	AutoFlashISOSensitivity	int8u & 0x02
41.1	MovieFunc1Button	int8u & 0xf0
41.2	MoviePreviewButton	int8u & 0x0f
42.1	Func1ButtonPlusDials	int8u & 0x0f
43.1	PreviewButtonPlusDials	int8u & 0x0f
45.1	AssignMovieRecordButtonPlusDials	int8u & 0x0f
46.1	FineTuneOptHighlightWeighted	int8u & 0x0f
47.1	DynamicAreaAFDisplay	int8u & 0x80
47.2	AFPointIllumination	int8u & 0x40
47.3	StoreByOrientation	int8u & 0x18
48.1	MatrixMetering	int8u & 0x80
48.2	LiveViewButtonOptions	int8u & 0x30
48.3	AFModeRestrictions	int8u & 0x03
49.1	LimitAFAreaModeSelection	int8u & 0x7e
52.1	LensFocusFunctionButtons	int8u & 0x3f
66.1	VerticalMultiSelector	int8u & 0xff
67.1	AssignMB-D18FuncButton	int8u & 0x3f
68.1	AssignMB-D18FuncButtonPlusDials	int8u & 0x0f
70.1	AF-OnButton	int8u & 0x3f
71.1	SubSelector	int8u & 0x80
72.1	SubSelectorCenter	int8u & 0x3f
73.1	SubSelectorPlusDials	int8u & 0x0f
74.1	AssignMovieSubselector	int8u & 0xf0
75.1	AssignMovieFunc1ButtonPlusDials	int8u & 0x10
75.2	AssignMoviePreviewButtonPlusDials	int8u & 0x01
76.1	AssignMovieSubselectorPlusDials	int8u & 0x10

77.1	SyncReleaseMode	int8u & 0x80
77.2	ContinuousModeLiveView	int8u & 0x40
78.1	Three-DTrackingWatchArea	int8u & 0x80
78.2	SubjectMotion	int8u & 0x60
78.3	AFActivation	int8u & 0x08
78.4	ShutterReleaseButtonAE-L	int8u & 0x03
79.1	AssignMB-D18AF-OnButton	int8u & 0x7f
80.1	Func2Button	int8u & 0x3f
82.1	AssignMovieFunc2Button	int8u & 0x70

NikonCustom SettingsD5000 Tags

Custom settings for the D5000.

Index1	Tag Name	Writable
-----	-----	-----
0.1	AFAreaModeSetting	int8u & 0x60
0.2	AFAssist	int8u & 0x01
2.1	Beep	int8u & 0xc0
2.2	GridDisplay	int8u & 0x02
2.3	ISODisplay	int8u & 0x08
2.4	NoMemoryCard	int8u & 0x20
3.1	FileNumberSequence	int8u & 0x08
4.1	RangeFinder	int8u & 0x10
4.2	DateImprint	int8u & 0x08
4.3	ReverseIndicators	int8u & 0x80
5.1	EVStepSize	int8u & 0x40
9.1	ExposureDelayMode	int8u & 0x40
11.1	AutoBracketSet	int8u & 0xc0
12.1	TimerFunctionButton	int8u & 0x38
15.1	AELockButton	int8u & 0x38
16.1	ShutterReleaseButtonAE-L	int8u & 0x02
16.2	CommandDialsReverseRotation	int8u & 0x80
17.1	MeteringTime	int8u & 0x70
17.2	RemoteOnDuration	int8u & 0x03
18.1	SelfTimerTime	int8u & 0xc0
18.2	SelfTimerShotCount	int8u & 0x1e
19.1	ImageReviewTime	int8u & 0xe0
20.1	PlaybackMenusTime	int8u & 0xe0
22.1	InternalFlash	int8u & 0xc0
22.2	ManualFlashOutput	int8u & 0x1f
32.1	LiveViewAF	int8u & 0x60

NikonCustom SettingsD5100 Tags

Custom settings for the D5100.

Index1	Tag Name	Writable
-----	-----	-----
0.1	AF-CPrioritySelection	int8u & 0x80
1.1	AFAssist	int8u & 0x01
3.1	Beep	int8u & 0xc0
3.2	NoMemoryCard	int8u & 0x20
3.3	ISODisplay	int8u & 0x08
4.1	FileNumberSequence	int8u & 0x08
5.1	RangeFinder	int8u & 0x10
5.2	ReverseIndicators	int8u & 0x80
6.1	EVStepSize	int8u & 0x40
10.1	ExposureDelayMode	int8u & 0x40
12.1	AutoBracketSet	int8u & 0xc0
13.1	TimerFunctionButton	int8u & 0x38
16.1	AELockButton	int8u & 0x38
17.1	ShutterReleaseButtonAE-L	int8u & 0x02
17.2	CommandDialsReverseRotation	int8u & 0x80
18.1	MeteringTime	int8u & 0x70
18.2	RemoteOnDuration	int8u & 0x03
19.1	SelfTimerTime	int8u & 0xc0
19.2	SelfTimerShotCount	int8u & 0x0f
20.1	ImageReviewTime	int8u & 0xe0
20.2	LiveViewMonitorOffTime	int8u & 0x1c

21.1	PlaybackMenuTime	int8u & 0xe0
23.1	ManualFlashOutput	int8u & 0x1f

NikonCustom SettingsD5200 Tags

Custom settings for the D5200.

Index1	Tag Name	Writable
-----	-----	-----
0.1	AF-CPrioritySelection	int8u & 0x80
0.2	NumberOfFocusPoints	int8u & 0x10
1.1	AFAssist	int8u & 0x01
3.1	Beep	int8u & 0xc0
3.2	NoMemoryCard	int8u & 0x20
3.3	ISODisplay	int8u & 0x08
4.1	FileNumberSequence	int8u & 0x08
5.1	RangeFinder	int8u & 0x04
5.2	ReverseExposureCompDial	int8u & 0x10
5.3	ReverseShutterSpeedAperture	int8u & 0x08
5.4	ReverseIndicators	int8u & 0x80
6.1	EVStepSize	int8u & 0x40
10.1	ExposureDelayMode	int8u & 0x40
12.1	AutoBracketSet	int8u & 0xc0
13.1	FunctionButton	int8u & 0x1f
16.1	AELockButton	int8u & 0x0f
17.1	ShutterReleaseButtonAE-L	int8u & 0x02
18.1	StandbyTimer	int8u & 0xe0
18.2	RemoteOnDuration	int8u & 0x03
19.1	SelfTimerTime	int8u & 0xc0
19.2	SelfTimerShotCount	int8u & 0x0f
20.1	ImageReviewTime	int8u & 0xe0
20.2	LiveViewMonitorOffTime	int8u & 0x1c
21.1	PlaybackMenuTime	int8u & 0xe0
23.1	InternalFlash	int8u & 0xc0
23.2	ManualFlashOutput	int8u & 0x1f

NikonCustom SettingsD7000 Tags

Custom settings for the D7000.

Index1	Tag Name	Writable
-----	-----	-----
0.1	AF-CPrioritySelection	int8u & 0x80
0.2	AF-SPrioritySelection	int8u & 0x20
0.3	NumberOfFocusPoints	int8u & 0x10
0.4	FocusTrackingLockOn	int8u & 0x07
1.1	FocusPointWrap	int8u & 0x08
1.2	AFPointIllumination	int8u & 0x06
1.3	AFAssist	int8u & 0x01
2.1	BatteryOrder	int8u & 0x40
2.2	AF-OnForMB-D11	int8u & 0x1c
2.3	MB-D11BatteryType	int8u & 0x03
3.1	BeepPitch	int8u & 0xc0
3.2	NoMemoryCard	int8u & 0x20
3.3	ISODisplay	int8u & 0x0c
3.4	GridDisplay	int8u & 0x02
3.5	ViewfinderWarning	int8u & 0x01
4.1	ShootingInfoDisplay	int8u & 0xc0
4.2	LCDIllumination	int8u & 0x20
4.3	FileNumberSequence	int8u & 0x08
4.4	ScreenTips	int8u & 0x04
4.5	BeepVolume	int8u & 0x03
5.1	ReverseIndicators	int8u & 0x80
5.2	EasyExposureCompensation	int8u & 0x03
6.1	ExposureControlStep	int8u & 0x40
6.2	ISO SensitivityStep	int8u & 0x10
7.1	CenterWeightedAreaSize	int8u & 0xe0
10.1	ExposureDelayMode	int8u & 0x40
10.2	CLModeShootingSpeed	int8u & 0x07
11	MaxContinuousRelease	int8u

12.1	AutoBracketSet	int8u & 0xe0
12.2	AutoBracketOrder	int8u & 0x10
13.1	FuncButton	int8u & 0xf8
14.1	PreviewButton	int8u & 0xf8
15.1	OKButton	int8u & 0x18
16.1	AELockButton	int8u & 0x38
17.1	CommandDialsReverseRotation	int8u & 0x80
17.2	CommandDialsChangeMainSub	int8u & 0x60
17.3	CommandDialsApertureSetting	int8u & 0x04
17.4	CommandDialsMenuAndPlayback	int8u & 0x18
17.5	ShutterReleaseButtonAE-L	int8u & 0x02
17.6	ReleaseButtonToUseDial	int8u & 0x01
18.1	MeteringTime	int8u & 0xf0
18.2	RemoteOnDuration	int8u & 0x03
19.1	SelfTimerTime	int8u & 0xc0
19.2	SelfTimerInterval	int8u & 0x30
19.3	SelfTimerShotCount	int8u & 0x0f
20.1	ImageReviewTime	int8u & 0xe0
20.2	LiveViewMonitorOffTime	int8u & 0x1c
21.1	MenuMonitorOffTime	int8u & 0xe0
21.2	ShootingInfoMonitorOffTime	int8u & 0x1c
22.1	FlashSyncSpeed	int8u & 0xf0
22.2	FlashShutterSpeed	int8u & 0x0f
23.1	FlashControlBuilt-in	int8u & 0xc0
23.2	ManualFlashOutput	int8u & 0x1f
24.1	RepeatingFlashOutput	int8u & 0x70
24.2	RepeatingFlashCount	int8u & 0x0f
25.1	RepeatingFlashRate	int8u & 0xf0
26.1	CommanderInternalTTLCompBuiltin	int8u & 0x1f
27.1	CommanderInternalTTLCompGroupA	int8u & 0x1f
28.1	CommanderInternalTTLCompGroupB	int8u & 0x1f
30.1	FlashWarning	int8u & 0x80
30.2	ModelingFlash	int8u & 0x20
34.1	LiveViewAFAreaMode	int8u & 0x60
34.2	LiveViewAFMode	int8u & 0x02
35.1	PlaybackMonitorOffTime	int8u & 0xe0

NikonCustom SettingsD4 Tags

Custom settings for the D4 and D4S.

Index1	Tag Name	Writable
-----	-----	-----
0.1	CustomSettingsBank	int8u & 0x03
1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	AFPointSelection	int8u & 0x10
1.4	FocusTrackingLockOn	int8u & 0x07
2.1	AFActivation	int8u & 0x80
2.2	FocusPointWrap	int8u & 0x08
4.1	Pitch	int8u & 0x40
4.2	NoMemoryCard	int8u & 0x20
4.3	GridDisplay	int8u & 0x02
5.1	ShootingInfoDisplay	int8u & 0xc0
5.2	LCDIllumination	int8u & 0x20
5.3	ScreenTips	int8u & 0x04
5.4	Beep	int8u & 0x03
6.1	ReverseIndicators	int8u & 0x80
6.2	RearDisplay	int8u & 0x40
6.3	ViewfinderDisplay	int8u & 0x20
6.4	CommandDialsReverseRotation	int8u & 0x18
6.5	EasyExposureCompensation	int8u & 0x03
7.1	ExposureControlStepSize	int8u & 0xc0
7.2	ISOStepSize	int8u & 0x30
7.3	ExposureCompStepSize	int8u & 0x0c
8.1	CenterWeightedAreaSize	int8u & 0xe0
8.2	FineTuneOptMatrixMetering	int8u & 0x0f
9.1	FineTuneOptCenterWeighted	int8u & 0xf0
9.2	FineTuneOptSpotMetering	int8u & 0x0f
10.1	MultiSelectorShootMode	int8u & 0xc0

10.2	MultiSelectorPlaybackMode	int8u & 0x30
10.3	MultiSelector	int8u & 0x01
11.1	ExposureDelayMode	int8u & 0xc0
11.2	CHModeShootingSpeed	int8u & 0x10
11.3	CLModeShootingSpeed	int8u & 0x0f
12	MaxContinuousRelease	int8u
13.1	AutoBracketSet	int8u & 0xe0
13.2	AutoBracketOrder	int8u & 0x10
13.3	AutoBracketModeM	int8u & 0x0c
14.1	FuncButton	int8u & 0xf8
14.2	FuncButtonPlusDials	int8u & 0x07
15.1	PreviewButton	int8u & 0xf8
15.2	PreviewButtonPlusDials	int8u & 0x07
16.1	AssignBktButton	int8u & 0x07
18.1	CommandDialsChangeMainSub	int8u & 0xe0
18.2	CommandDialsMenuAndPlayback	int8u & 0x18
18.3	CommandDialsApertureSetting	int8u & 0x04
18.4	ShutterReleaseButtonAE-L	int8u & 0x02
18.5	ReleaseButtonToUseDial	int8u & 0x01
19.1	StandbyTimer	int8u & 0xf0
20.1	SelfTimerTime	int8u & 0xc0
20.2	SelfTimerShotCount	int8u & 0x0f
20.3	SelfTimerShotInterval	int8u & 0x30
21.1	ImageReviewMonitorOffTime	int8u & 0xe0
21.2	LiveViewMonitorOffTime	int8u & 0x1c
22.1	MenuMonitorOffTime	int8u & 0xe0
22.2	ShootingInfoMonitorOffTime	int8u & 0x1c
23.1	FlashSyncSpeed	int8u & 0xf0
23.2	FlashShutterSpeed	int8u & 0x0f
31.1	ModelingFlash	int8u & 0x20
36.1	PlaybackMonitorOffTime	int8u & 0xe0
37.1	PlaybackZoom	int8u & 0x01
38.1	ShutterSpeedLock	int8u & 0x80
38.2	ApertureLock	int8u & 0x40
38.3	MovieShutterButton	int8u & 0x30
38.4	FlashExposureCompArea	int8u & 0x04
41.1	MovieFunctionButton	int8u & 0x70
41.2	MoviePreviewButton	int8u & 0x07
42.1	VerticalMultiSelector	int8u & 0x60
42.2	VerticalFuncButton	int8u & 0x1f
43.1	VerticalFuncButtonPlusDials	int8u & 0xf0
43.2	AssignMovieRecordButton	int8u & 0x07
46.1	DynamicAreaAFDisplay	int8u & 0x80
46.2	AFPointIllumination	int8u & 0x60
46.3	StoreByOrientation	int8u & 0x18
46.4	GroupAreaAFIllumination	int8u & 0x04
46.5	AFPointBrightness	int8u & 0x03
47.1	AFOnButton	int8u & 0x70
47.2	VerticalAFOnButton	int8u & 0x07
48.1	SubSelectorAssignment	int8u & 0x80
48.2	MovieSubSelectorAssignment	int8u & 0x07
49.1	SubSelector	int8u & 0xf8
49.2	SubSelectorPlusDials	int8u & 0x07
50.1	MatrixMetering	int8u & 0x80
50.2	LiveViewButtonOptions	int8u & 0x30
50.3	AFModeRestrictions	int8u & 0x03
51.1	LimitAFAreaModeSelection	int8u & 0x7e
52.1	MovieFunctionButtonPlusDials	int8u & 0x10
52.2	MoviePreviewButtonPlusDials	int8u & 0x01
53.1	MovieSubSelectorAssignmentPlusDials	int8u & 0x10
54.1	AssignRemoteFnButton	int8u & 0x1f
55.1	LensFocusFunctionButtons	int8u & 0x3f

NikonCustom SettingsD5 Tags

Custom settings for the D5.

Index1	Tag Name	Writable
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0.1	CustomSettingsBank	int8u & 0x03

1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	NumberOfFocusPoints	int8u & 0x10
1.4	Three-DTrackingFaceDetection	int8u & 0x08
1.5	BlockShotAFResponse	int8u & 0x07
2.1	FocusPointWrap	int8u & 0x08
2.2	AFPointBrightness	int8u & 0x06
4.1	ISODisplay	int8u & 0x08
4.2	GridDisplay	int8u & 0x02
5.1	LCDIllumination	int8u & 0x20
5.2	ElectronicFront-CurtainShutter	int8u & 0x08
6.1	ReverseIndicators	int8u & 0x80
6.2	CommandDialsReverseRotation	int8u & 0x18
6.3	EasyExposureCompensation	int8u & 0x03
7.1	ExposureControlStepSize	int8u & 0xc0
7.2	ISOStepSize	int8u & 0x30
7.3	ExposureCompStepSize	int8u & 0x0c
8.1	CenterWeightedAreaSize	int8u & 0xe0
8.2	FineTuneOptMatrixMetering	int8u & 0x0f
9.1	FineTuneOptCenterWeighted	int8u & 0xf0
9.2	FineTuneOptSpotMetering	int8u & 0x0f
10.1	MultiSelectorShootMode	int8u & 0xe0
10.3	MultiSelector	int8u & 0x01
11.1	ExposureDelayMode	int8u & 0xc0
11.2	CLModeShootingSpeed	int8u & 0x0f
12.1	MaxContinuousRelease	int8u
13.1	AutoBracketOrder	int8u & 0x10
13.2	AutoBracketModeM	int8u & 0x0c
14.1	Func1Button	int8u & 0x3f
15.1	PreviewButton	int8u & 0x3f
16.1	AssignBktButton	int8u & 0x07
18.1	CommandDialsChangeMainSub	int8u & 0xe0
18.2	CommandDialsMenuAndPlayback	int8u & 0x18
18.3	CommandDialsApertureSetting	int8u & 0x04
18.4	ReleaseButtonToUseDial	int8u & 0x01
19.1	StandbyTimer	int8u & 0xf0
20.1	SelfTimerTime	int8u & 0xc0
20.2	SelfTimerShotInterval	int8u & 0x30
20.3	SelfTimerShotCount	int8u & 0x0f
21.1	ImageReviewMonitorOffTime	int8u & 0xe0
21.2	LiveViewMonitorOffTime	int8u & 0x1c
22.1	MenuMonitorOffTime	int8u & 0xe0
22.2	ShootingInfoMonitorOffTime	int8u & 0x1c
23.1	FlashSyncSpeed	int8u & 0xf0
23.2	FlashShutterSpeed	int8u & 0x0f
31.1	ModelingFlash	int8u & 0x20
36.1	PlaybackMonitorOffTime	int8u & 0xe0
37.1	MultiSelectorLiveView	int8u & 0xc0
38.1	ShutterSpeedLock	int8u & 0x80
38.2	ApertureLock	int8u & 0x40
38.3	MovieShutterButton	int8u & 0x10
38.4	FlashExposureCompArea	int8u & 0x04
38.5	AutoFlashISOSensitivity	int8u & 0x02
41.1	MovieFunc1Button	int8u & 0xf0
41.2	MoviePreviewButton	int8u & 0x0f
42.1	Func1ButtonPlusDials	int8u & 0x0f
43.1	PreviewButtonPlusDials	int8u & 0x0f
45.1	AssignMovieRecordButtonPlusDials	int8u & 0x0f
46.1	FineTuneOptHighlightWeighted	int8u & 0x0f
47.1	DynamicAreaAFDisplay	int8u & 0x80
47.2	AFPointIllumination	int8u & 0x40
47.3	StoreByOrientation	int8u & 0x18
48.1	MatrixMetering	int8u & 0x80
48.2	LiveViewButtonOptions	int8u & 0x30
48.3	AFModeRestrictions	int8u & 0x03
49.1	LimitAFAreaModeSelection	int8u & 0x7e
52.1	LensFocusFunctionButtons	int8u & 0x3f
66.1	VerticalMultiSelector	int8u & 0xff
67.1	VerticalFuncButton	int8u & 0x3f
68.1	VerticalFuncPlusDials	int8u & 0x0f

70.1	AF-OnButton	int8u & 0x3f
71.1	SubSelector	int8u & 0x80
72.1	SubSelectorCenter	int8u & 0x3f
73.1	SubSelectorPlusDials	int8u & 0x0f
74.1	AssignMovieSubselector	int8u & 0xf0
75.1	AssignMovieFunc1ButtonPlusDials	int8u & 0x10
75.2	AssignMoviePreviewButtonPlusDials	int8u & 0x01
76.1	AssignMovieSubselectorPlusDials	int8u & 0x10
77.1	SyncReleaseMode	int8u & 0x80
78.1	Three-DTrackingWatchArea	int8u & 0x80
78.2	SubjectMotion	int8u & 0x60
78.3	AFActivation	int8u & 0x08
78.4	ShutterReleaseButtonAE-L	int8u & 0x03
79.1	VerticalAFOnButton	int8u & 0x7f
80.1	Func2Button	int8u & 0x3f
81.1	Func2ButtonPlusDials	int8u & 0x0f
82.1	AssignMovieFunc2Button	int8u & 0x70
83.1	Func3Button	int8u & 0x03

NikonCustom SettingsD500 Tags

Custom settings for the D500.

Index1	Tag Name	Writable
-----	-----	-----
0.1	CustomSettingsBank	int8u & 0x03
1.1	AF-CPrioritySelection	int8u & 0xc0
1.2	AF-SPrioritySelection	int8u & 0x20
1.3	NumberOfFocusPoints	int8u & 0x10
1.4	Three-DTrackingFaceDetection	int8u & 0x08
1.5	BlockShotAFResponse	int8u & 0x07
2.1	FocusPointWrap	int8u & 0x08
2.2	AFPointBrightness	int8u & 0x06
4.1	ISODisplay	int8u & 0x08
4.2	GridDisplay	int8u & 0x02
5.1	LCDIllumination	int8u & 0x20
5.2	ElectronicFront-CurtainShutter	int8u & 0x08
6.1	ReverseIndicators	int8u & 0x80
6.2	CommandDialsReverseRotation	int8u & 0x18
6.3	EasyExposureCompensation	int8u & 0x03
7.1	ExposureControlStepSize	int8u & 0xc0
7.2	ISOStepSize	int8u & 0x30
7.3	ExposureCompStepSize	int8u & 0x0c
8.1	CenterWeightedAreaSize	int8u & 0xe0
8.2	FineTuneOptMatrixMetering	int8u & 0x0f
9.1	FineTuneOptCenterWeighted	int8u & 0xf0
9.2	FineTuneOptSpotMetering	int8u & 0x0f
10.1	MultiSelectorShootMode	int8u & 0xe0
10.2	MultiSelectorPlaybackMode	int8u & 0x0c
10.3	MultiSelector	int8u & 0x01
11.1	ExposureDelayMode	int8u & 0xc0
11.2	CLModeShootingSpeed	int8u & 0x0f
12.1	MaxContinuousRelease	int8u
13.1	AutoBracketOrder	int8u & 0x10
13.2	AutoBracketModeM	int8u & 0x0c
14.1	Func1Button	int8u & 0x3f
15.1	PreviewButton	int8u & 0x3f
16.1	AssignBktButton	int8u & 0x07
18.1	CommandDialsChangeMainSub	int8u & 0xe0
18.2	CommandDialsMenuAndPlayback	int8u & 0x18
18.3	CommandDialsApertureSetting	int8u & 0x04
18.4	ReleaseButtonToUseDial	int8u & 0x01
19.1	StandbyTimer	int8u & 0xf0
20.1	SelfTimerTime	int8u & 0xc0
20.2	SelfTimerShotInterval	int8u & 0x30
20.3	SelfTimerShotCount	int8u & 0x0f
21.1	ImageReviewMonitorOffTime	int8u & 0xe0
21.2	LiveViewMonitorOffTime	int8u & 0x1c
22.1	MenuMonitorOffTime	int8u & 0xe0
22.2	ShootingInfoMonitorOffTime	int8u & 0x1c

23.1	FlashSyncSpeed	int8u & 0xf0
23.2	FlashShutterSpeed	int8u & 0x0f
31.1	ModelingFlash	int8u & 0x20
36.1	PlaybackMonitorOffTime	int8u & 0xe0
37.1	MultiSelectorLiveView	int8u & 0xc0
38.1	ShutterSpeedLock	int8u & 0x80
38.2	ApertureLock	int8u & 0x40
38.3	MovieShutterButton	int8u & 0x10
38.4	FlashExposureCompArea	int8u & 0x04
38.5	AutoFlashISOsensitivity	int8u & 0x02
41.1	MovieFunc1Button	int8u & 0xf0
41.2	MoviePreviewButton	int8u & 0x0f
42.1	Func1ButtonPlusDials	int8u & 0x0f
43.1	PreviewButtonPlusDials	int8u & 0x0f
45.1	AssignMovieRecordButtonPlusDials	int8u & 0x0f
46.1	FineTuneOptHighlightWeighted	int8u & 0x0f
47.1	DynamicAreaAFDisplay	int8u & 0x80
47.2	AFPointIllumination	int8u & 0x40
47.3	StoreByOrientation	int8u & 0x18
47.4	GroupAreaAFIllumination	int8u & 0x04
48.1	MatrixMetering	int8u & 0x80
48.2	LiveViewButtonOptions	int8u & 0x30
48.3	AFModeRestrictions	int8u & 0x03
49.1	LimitAFAreaModeSelection	int8u & 0x7e
52.1	LensFocusFunctionButtons	int8u & 0x3f
66.1	VerticalMultiSelector	int8u & 0xff
67.1	AssignMB-D17FuncButton	int8u & 0x3f
68.1	AssignMB-D17FuncButtonPlusDials	int8u & 0x0f
70.1	AF-OnButton	int8u & 0x3f
71.1	SubSelector	int8u & 0x80
72.1	SubSelectorCenter	int8u & 0x3f
73.1	SubSelectorPlusDials	int8u & 0x0f
74.1	AssignMovieSubselector	int8u & 0xf0
75.1	AssignMovieFunc1ButtonPlusDials	int8u & 0x10
75.2	AssignMoviePreviewButtonPlusDials	int8u & 0x01
76.1	AssignMovieSubselectorPlusDials	int8u & 0x10
77.1	SyncReleaseMode	int8u & 0x80
78.1	Three-DTrackingWatchArea	int8u & 0x80
78.2	SubjectMotion	int8u & 0x60
78.3	AFActivation	int8u & 0x08
78.4	ShutterReleaseButtonAE-L	int8u & 0x03
79.1	AssignMB-D17AF-OnButton	int8u & 0x7f
80.1	Func2Button	int8u & 0x3f
82.1	AssignMovieFunc2Button	int8u & 0x70

NikonCustom SettingsD610 Tags

Custom settings for the D610.

Index1	Tag Name	Writable
-----	-----	-----
0.1	AF-CPrioritySelection	int8u & 0x80
0.2	AF-SPrioritySelection	int8u & 0x20
0.3	NumberOfFocusPoints	int8u & 0x10
0.4	FocusTrackingLockOn	int8u & 0x07
1.1	FocusPointWrap	int8u & 0x08
1.2	AFPointIllumination	int8u & 0x06
1.3	AFAssist	int8u & 0x01
5.1	EasyExposureCompensation	int8u & 0x03
6.1	ExposureControlStep	int8u & 0x40
6.2	ISOsensitivityStep	int8u & 0x10
7.1	CenterWeightedAreaSize	int8u & 0xe0
7.2	FineTuneOptMatrixMetering	int8u & 0x0f
8.1	FineTuneOptCenterWeighted	int8u & 0xf0
8.2	FineTuneOptSpotMetering	int8u & 0x0f
17.1	ShutterReleaseButtonAE-L	int8u & 0x02
18.1	StandbyTimer	int8u & 0xf0
18.2	RemoteOnDuration	int8u & 0x03
19.1	SelfTimerTime	int8u & 0xc0
19.2	SelfTimerShotInterval	int8u & 0x30

19.3	SelfTimerShotCount	int8u & 0x0f
20.1	ImageReviewMonitorOffTime	int8u & 0xe0
20.2	LiveViewMonitorOffTime	int8u & 0x1c
21.1	MenuMonitorOffTime	int8u & 0xe0
21.2	ShootingInfoMonitorOffTime	int8u & 0x1c
35.1	PlaybackMonitorOffTime	int8u & 0xe0

NikonCustom SettingsZ8 Tags

Custom settings for the Z8.

Index1	Tag Name	Writable
-----	-----	-----
1	CustomSettingsBank	int8u
3	AF-CPrioritySelection	int8u
5	AF-SPrioritySelection	int8u
7	BlockShotAFResponse	int8u
11	AFPointSel	int8u
13	StoreByOrientation	int8u
15	AFActivation	int8u
16	AF-OnOutOffFocusRelease?	int8u
17	LimitAF-AreaModeSelPinpoint?	int8u
19	LimitAF-AreaModeSelWideAF_S?	int8u
20	LimitAF-AreaModeSelWideAF_L?	int8u
21	LimitAFAreaModeSelAuto?	int8u
22	FocusPointWrap?	int8u
23	ManualFocusPointIllumination?	int8u
24	DynamicAreaAFAssist?	int8u
25	AF-AssistIlluminator	int8u
26	ManualFocusRingInAFMode	int8u
27	ExposureControlStepSize	int8u
29	EasyExposureCompensation	int8u
31	CenterWeightedAreaSize	int8u
33	FineTuneOptMatrixMetering	int8s
35	FineTuneOptCenterWeighted	int8s
37	FineTuneOptSpotMetering	int8s
39	FineTuneOptHighlightWeighted	int8s
41	ShutterReleaseButtonAE-L	int8u
43	SelfTimerTime	int8u
45	SelfTimerShotCount	int8u
49	SelfTimerShotInterval	int8u
51	PlaybackMonitorOffTime	int8u
53	MenuMonitorOffTime	int8u
55	ShootingInfoMonitorOffTime	int8u
57	ImageReviewMonitorOffTime	int8u
59	CLModeShootingSpeed	int8u
61	MaxContinuousRelease	no
65	SyncReleaseMode?	int8u
69	LimitSelectableImageAreaDX?	int8u
70	LimitSelectableImageArea1To1?	int8u
71	LimitSelectableImageArea16To9?	int8u
72	FileNumberSequence	int8u
73	FocusPeakingLevel?	int8u
75	FocusPeakingHighlightColor?	int8u
81	ContinuousModeDisplay	int8u
83	FlashSyncSpeed	no
85	HighSpeedSync	int8u
87	FlashShutterSpeed	no
89	FlashExposureCompArea	int8u
91	AutoFlashISOsensitivity	int8u
93	ModelingFlash	int8u
95	AutoBracketModeM	int8u
97	AutoBracketOrder	int8u
99	Func1Button	int8u
115	Func2Button	int8u
131	AFOnButton	int8u
143	SubSelector?	int8u
155	AssignMovieRecordButton?	int8u
159	LensFunc1Button	int8u
167	LensFunc2Button	int8u

173	LensControlRing	int8u
175	MultiSelectorShootMode	int8u
179	MultiSelectorPlaybackMode	int8u
183	ShutterSpeedLock	int8u
184	ApertureLock	int8u
186	CmdDialsReverseRotation	int8u
191	UseDialWithoutHold?	int8u
193	ReverseIndicators?	int8u
195	MovieFunc1Button	int8u
199	MovieFunc2Button	int8u
203	MovieAF-OnButton	int8u
215	MovieLensControlRing	int8u
217	MovieMultiSelector?	int8u
221	MovieAFSpeed	int8u
223	MovieAFSpeedApply	int8u
225	MovieAFTrackingSensitivity	int8u
257	LCDIllumination?	int8u
258	ExtendedShutterSpeeds	int8u
259	SubjectMotion	int8u
261	FocusPointPersistence	int8u
263	AutoFocusModeRestrictions?	int8u
267	CHModeShootingSpeed	int8u
273	FlashBurstPriority?	int8u
335	LimitAF-AreaModeSelDynamic_S?	int8u
336	LimitAF-AreaModeSelDynamic_M?	int8u
337	LimitAF-AreaModeSelDynamic_L?	int8u
339	LimitAF-AreaModeSel3DTracking?	int8u
341	PlaybackFlickUp?	int8u
345	PlaybackFlickDown?	int8u
349	ISOStepSize	int8u
355	ReverseFocusRing	int8u
356	EVFImageFrame?	int8u
357	EVFGrid?	int8u
359	VirtualHorizonStyle?	int8u
421	Func1ButtonPlaybackMode?	int8u
423	Func2ButtonPlaybackMode?	int8u
437	MovieRecordButtonPlaybackMode?	int8u
453	WBButtonPlaybackMode	int8u
459	CommandDialPlaybackMode?	int8u
461	CommandDialVideoPlaybackMode?	int8u
463	SubCommandDialPlaybackMode?	int8u
465	SubCommandDialVideoPlaybackMode?	int8u
467	FocusPointLock?	int8u
469	ControlRingResponse	int8u
515	MovieAFAreaMode?	int8u
529	ZebraPatternToneRange?	int8u
531	MovieZebraPattern?	int8u
533	MovieHighlightDisplayThreshold?	int8u
535	MovieMidtoneDisplayValue?	int8u
537	MovieMidtoneDisplayRange?	int8u
541	MovieEVFGrid?	int8u
549	MovieShutterSpeedLock?	int8u
550	MovieFocusPointLock?	int8u
563	MatrixMetering?	int8u
564	AF-CFocusDisplay	int8u
565	FocusPeakingDisplay?	int8u
567	KeepExposure	int8u
585	StarlightView?	int8u
587	EVFWarmDisplayMode?	int8u
589	EVFWarmDisplayBrightness?	int8s
591	EVFReleaseIndicator?	int8u
601	MovieApertureLock?	int8u
607	FlickAdvanceDirection?	int8u
647	PreReleaseBurstLength	int8u
649	PostReleaseBurstLength	int8u
681	ViewModeShowEffectsOfSettings?	int8u
683	DispButton	int8u
753	ExposureDelay	int16u

Custom settings for the Z9.

Index1	Tag Name	Writable
-----	-----	-----
1	CustomSettingsBank	int8u
3	AF-CPrioritySelection	int8u
5	AF-SPrioritySelection	int8u
7	BlockShotAFResponse	int8u
11	AFPointSel	int8u
13	StoreByOrientation	int8u
15	AFActivation	int8u
16	AF-OnOutOfFocusRelease?	int8u
17	LimitAF-AreaModeSelPinpoint?	int8u
19	LimitAF-AreaModeSelWideAF_S?	int8u
20	LimitAF-AreaModeSelWideAF_L?	int8u
21	LimitAFAreaModeSelAuto?	int8u
22	FocusPointWrap?	int8u
23	ManualFocusPointIllumination?	int8u
24	DynamicAreaAFAssist?	int8u
25	AF-AssistIlluminator	int8u
26	ManualFocusRingInAFMode	int8u
27	ExposureControlStepSize	int8u
29	EasyExposureCompensation	int8u
31	CenterWeightedAreaSize	int8u
33	FineTuneOptMatrixMetering	int8s
35	FineTuneOptCenterWeighted	int8s
37	FineTuneOptSpotMetering	int8s
39	FineTuneOptHighlightWeighted	int8s
41	ShutterReleaseButtonAE-L	int8u
43	SelfTimerTime	int8u
45	SelfTimerShotCount	int8u
49	SelfTimerShotInterval	int8u
51	PlaybackMonitorOffTime	int8u
53	MenuMonitorOffTime	int8u
55	ShootingInfoMonitorOffTime	int8u
57	ImageReviewMonitorOffTime	int8u
59	CLModeShootingSpeed	int8u
61	MaxContinuousRelease	no
65	SyncReleaseMode?	int8u
69	LimitSelectableImageAreaDX?	int8u
70	LimitSelectableImageArea1To1?	int8u
71	LimitSelectableImageArea16To9?	int8u
72	FileNumberSequence	int8u
73	FocusPeakingLevel?	int8u
75	FocusPeakingHighlightColor?	int8u
81	ContinuousModeDisplay	int8u
83	FlashSyncSpeed	no
85	HighSpeedSync	int8u
87	FlashShutterSpeed	no
89	FlashExposureCompArea	int8u
91	AutoFlashISOsensitivity	int8u
93	ModelingFlash	int8u
95	AutoBracketModeM	int8u
97	AutoBracketOrder	int8u
99	Func1Button	int8u
115	Func2Button	int8u
131	AFOnButton	int8u
143	SubSelector?	int8u
155	AssignMovieRecordButton?	int8u
159	LensFunc1Button	int8u
167	LensFunc2Button	int8u
173	LensControlRing	int8u
175	MultiSelectorShootMode	int8u
179	MultiSelectorPlaybackMode	int8u
183	ShutterSpeedLock	int8u
184	ApertureLock	int8u
186	CmdDialsReverseRotation	int8u
191	UseDialWithoutHold?	int8u
193	ReverseIndicators?	int8u

195	MovieFunc1Button	int8u
199	MovieFunc2Button	int8u
203	MovieAF-OnButton	int8u
207	MovieMultiSelector?	int8u
215	MovieLensControlRing	int8u
221	MovieAFSpeed	int8u
223	MovieAFSpeedApply	int8u
225	MovieAFTrackingSensitivity	int8u
257	LCDIllumination?	int8u
258	ExtendedShutterSpeeds	int8u
259	SubjectMotion	int8u
261	FocusPointPersistence	int8u
263	AutoFocusModeRestrictions?	int8u
267	CHModeShootingSpeed	int8u
269.1	LimitReleaseModeSelCL?	int8u & 0x02
269.2	LimitReleaseModeSelCH?	int8u & 0x04
269.3	LimitReleaseModeSelC30?	int8u & 0x10
269.4	LimitReleaseModeSelC120?	int8u & 0x40
269.5	LimitReleaseModeSelSelf?	int8u & 0x80
273	FlashBurstPriority?	int8u
277	VerticalFuncButton	int8u
281	Func3Button	int8u
285	VerticalAFOnButton	int8u
293	VerticalMultiSelectorPlaybackMode?	int8u
295	MovieFunc3Button	int8u
335	LimitAF-AreaModeSelDynamic_S?	int8u
336	LimitAF-AreaModeSelDynamic_M?	int8u
337	LimitAF-AreaModeSelDynamic_L?	int8u
339	LimitAF-AreaModeSel3DTracking?	int8u
341	PlaybackFlickUp?	int8u
345	PlaybackFlickDown?	int8u
349	ISOStepSize	int8u
355	ReverseFocusRing	int8u
356	EVFImageFrame?	int8u
357	EVFGrid?	int8u
359	VirtualHorizonStyle?	int8u
373	Func4Button?	int8u
379	AudioButton?	int8u
381	QualityButton?	int8u
399	VerticalMultiSelector?	int8u
421	Func1ButtonPlaybackMode?	int8u
423	Func2ButtonPlaybackMode?	int8u
425	Func3ButtonPlaybackMode?	int8u
431	Func4ButtonPlaybackMode?	int8u
437	MovieRecordButtonPlaybackMode?	int8u
439	VerticalFuncButtonPlaybackMode?	int8u
441	AudioButtonPlaybackMode?	int8u
447	QualityButtonPlaybackMode?	int8u
453	WhiteBalanceButtonPlaybackMode?	int8u
459	CommandDialPlaybackMode?	int8u
463	SubCommandDialPlaybackMode?	int8u
467	FocusPointLock?	int8u
469	ControlRingResponse	int8u
481	VerticalMovieFuncButton?	int8u
505	VerticalMovieAFOnButton?	int8u
515	MovieAFAreaMode?	int8u
527	HDMIViewAssist?	int8u
529	ZebraPatternToneRange?	int8u
531	MovieZebraPattern?	int8u
533	MovieHighlightDisplayThreshold?	int8u
535	MovieMidtoneDisplayValue?	int8u
537	MovieMidtoneDisplayRange?	int8u
541	MovieEVFGrid?	int8u
549	MovieShutterSpeedLock?	int8u
550	MovieFocusPointLock?	int8u
563	MatrixMetering?	int8u
564	AF-CFocusDisplay	int8u
565	FocusPeakingDisplay?	int8u
567	KeepExposure	int8u
585	StarlightView?	int8u

587	EVFWarmDisplayMode?	int8u
589	EVFWarmDisplayBrightness?	int8s
591	EVFReleaseIndicator?	int8u
601	MovieApertureLock?	int8u
607	FlickAdvanceDirection?	int8u

NikonCustom SettingsZ9v4 Tags

Custom settings for the Z9.

Index1	Tag Name	Writable
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1	CustomSettingsBank	int8u
3	AF-CPrioritySelection	int8u
5	AF-SPrioritySelection	int8u
7	BlockShotAFResponse	int8u
11	AFPointSel	int8u
13	StoreByOrientation	int8u
15	AFActivation	int8u
16	AF-OnOutOfFocusRelease?	int8u
17	LimitAF-AreaModeSelPinpoint?	int8u
19	LimitAF-AreaModeSelWideAF_S?	int8u
20	LimitAF-AreaModeSelWideAF_L?	int8u
21	LimitAFAreaModeSelAuto?	int8u
22	FocusPointWrap?	int8u
23	ManualFocusPointIllumination?	int8u
24	DynamicAreaAFAssist?	int8u
25	AF-AssistIlluminator	int8u
26	ManualFocusRingInAFMode	int8u
27	ExposureControlStepSize	int8u
29	EasyExposureCompensation	int8u
31	CenterWeightedAreaSize	int8u
33	FineTuneOptMatrixMetering	int8s
35	FineTuneOptCenterWeighted	int8s
37	FineTuneOptSpotMetering	int8s
39	FineTuneOptHighlightWeighted	int8s
41	ShutterReleaseButtonAE-L	int8u
43	SelfTimerTime	int8u
45	SelfTimerShotCount	int8u
49	SelfTimerShotInterval	int8u
51	PlaybackMonitorOffTime	int8u
53	MenuMonitorOffTime	int8u
55	ShootingInfoMonitorOffTime	int8u
57	ImageReviewMonitorOffTime	int8u
59	CLModeShootingSpeed	int8u
61	MaxContinuousRelease	no
65	SyncReleaseMode?	int8u
69	LimitSelectableImageAreaDX?	int8u
70	LimitSelectableImageArea1To1?	int8u
71	LimitSelectableImageArea16To9?	int8u
72	FileNumberSequence	int8u
73	FocusPeakingLevel?	int8u
75	FocusPeakingHighlightColor?	int8u
81	ContinuousModeDisplay	int8u
83	FlashSyncSpeed	no
85	HighSpeedSync	int8u
87	FlashShutterSpeed	no
89	FlashExposureCompArea	int8u
91	AutoFlashISOSensitivity	int8u
93	ModelingFlash	int8u
95	AutoBracketModeM	int8u
97	AutoBracketOrder	int8u
99	Func1Button	int8u
115	Func2Button	int8u
131	AFOnButton	int8u
143	SubSelector?	int8u
155	AssignMovieRecordButton?	int8u
159	LensFunc1Button	int8u
167	LensFunc2Button	int8u
173	LensControlRing	int8u

175	MultiSelectorShootMode	int8u
179	MultiSelectorPlaybackMode	int8u
183	ShutterSpeedLock	int8u
184	ApertureLock	int8u
186	CmdDialsReverseRotation	int8u
191	UseDialWithoutHold?	int8u
193	ReverseIndicators?	int8u
195	MovieFunc1Button	int8u
199	MovieFunc2Button	int8u
203	MovieAF-OnButton	int8u
207	MovieMultiSelector?	int8u
215	MovieLensControlRing	int8u
221	MovieAFSpeed	int8u
223	MovieAFSpeedApply	int8u
225	MovieAFTrackingSensitivity	int8u
279	LCDIllumination?	int8u
280	ExtendedShutterSpeeds	int8u
281	SubjectMotion	int8u
283	FocusPointPersistence	int8u
285	AutoFocusModeRestrictions?	int8u
289	CHModeShootingSpeed	int8u
293.1	LimitReleaseModeSelCL?	int8u & 0x02
293.2	LimitReleaseModeSelCH?	int8u & 0x04
293.3	LimitReleaseModeSelC30?	int8u & 0x10
293.4	LimitReleaseModeSelC120?	int8u & 0x40
293.5	LimitReleaseModeSelSelf?	int8u & 0x80
297	FlashBurstPriority?	int8u
301	VerticalFuncButton	int8u
305	Func3Button	int8u
309	VerticalAFOnButton	int8u
317	VerticalMultiSelectorPlaybackMode?	int8u
319	MovieFunc3Button	int8u
359	LimitAF-AreaModeSelDynamic_S?	int8u
360	LimitAF-AreaModeSelDynamic_M?	int8u
361	LimitAF-AreaModeSelDynamic_L?	int8u
363	LimitAF-AreaModeSel3DTracking?	int8u
365	PlaybackFlickUp?	int8u
369	PlaybackFlickDown?	int8u
373	ISOStepSize	int8u
379	ReverseFocusRing	int8u
380	EVFImageFrame?	int8u
381	EVFGrid?	int8u
383	VirtualHorizonStyle?	int8u
397	Func4Button?	int8u
403	AudioButton?	int8u
405	QualityButton?	int8u
423	VerticalMultiSelector?	int8u
445	Func1ButtonPlaybackMode?	int8u
447	Func2ButtonPlaybackMode?	int8u
449	Func3ButtonPlaybackMode?	int8u
455	Func4ButtonPlaybackMode?	int8u
461	MovieRecordButtonPlaybackMode?	int8u
463	VerticalFuncButtonPlaybackMode?	int8u
465	AudioButtonPlaybackMode?	int8u
471	QualityButtonPlaybackMode?	int8u
477	WhiteBalanceButtonPlaybackMode?	int8u
483	CommandDialPlaybackMode?	int8u
485	CommandDialVideoPlaybackMode?	int8u
487	SubCommandDialPlaybackMode?	int8u
489	SubCommandDialVideoPlaybackMode?	int8u
491	FocusPointLock?	int8u
493	ControlRingResponse	int8u
505	VerticalMovieFuncButton?	int8u
529	VerticalMovieAFOnButton?	int8u
539	MovieAFAreaMode?	int8u
551	HDMIViewAssist?	int8u
553	ZebraPatternToneRange?	int8u
555	MovieZebraPattern?	int8u
557	MovieHighlightDisplayThreshold?	int8u
559	MovieMidtoneDisplayValue?	int8u

561	MovieMidtoneDisplayRange?	int8u
565	MovieEVFGrid?	int8u
573	MovieShutterSpeedLock?	int8u
574	MovieFocusPointLock?	int8u
587	MatrixMetering?	int8u
588	AF-CFocusDisplay	int8u
589	FocusPeakingDisplay?	int8u
591	KeepExposure	int8u
609	StarlightView?	int8u
611	EVFWarmDisplayMode?	int8u
613	EVFWarmDisplayBrightness?	int8s
615	EVFReleaseIndicator?	int8u
625	MovieApertureLock?	int8u
631	FlickAdvanceDirection?	int8u

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
-----	-----	-----
0x8ae85e	LCHEditor	int8u
0x83a1a25	HistogramXML	undef
0xc89224b	ColorAberrationControl	int8u
0x116fea21	HighlightData	NikonCapture HighlightData
0x2175eb78	D-LightingHQ	int8u
0x2fc08431	StraightenAngle	double
0x374233e0	CropData	NikonCapture CropData
0x39c456ac	PictureCtrl	NikonCapture PictureCtrl
0x3cfc73c6	RedEyeData	NikonCapture RedEyeData
0x3d136244	EditVersionName	string
0x416391c6	QuickFix	int8u
0x56a54260	Exposure	NikonCapture Exposure
0x5f0e7d23	ColorBooster	int8u
0x6a6e36b6	D-LightingHQSelected	int8u
0x753dcbc0	NoiseReduction	int8u
0x76a43200	UnsharpMask	int8u
0x76a43201	Curves	int8u
0x76a43202	ColorBalanceAdj	int8u
0x76a43203	AdvancedRaw	int8u
0x76a43204	WhiteBalanceAdj	int8u
0x76a43205	VignetteControl	int8u
0x76a43206	FlipHorizontal	int8u
0x76a43207	Rotation	int16u
0x84589434	BrightnessData	NikonCapture Brightness
0x890ff591	D-LightingHQData	NikonCapture DLightingHQ
0x926f13e0	NoiseReductionData	NikonCapture NoiseReduction
0x9ef5f6e0	IPTCData	IPTC
0xab5eca5e	PhotoEffects	int8u
0xac6bd5c0	VignetteControlIntensity	int16s
0xb0384e1e	PhotoEffectsData	NikonCapture PhotoEffects
0xb999a36f	ColorBoostData	NikonCapture ColorBoost
0xbf3c6c20	WBAdjData	NikonCapture WBAdjData
0xce5554aa	D-LightingHS	int8u
0xe2173c47	PictureControl	int8u
0xe37b4337	D-LightingHSData	NikonCapture DLightingHS
0xe42b5161	UnsharpData	NikonCapture UnsharpData
0xe9651831	PhotoEffectHistoryXML	undef
0xfe28a44f	AutoRedEye	int8u
0xfe443a45	ImageDustOff	int8u

NikonCapture HighlightData Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ShadowProtection	int8s
1	SaturationAdj	int8s
6	HighlightProtection	int8s

NikonCapture CropData Tags

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	PictureControlActive	int8u
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
-----	-----	-----
0	RedEyeCorrection	int8u

NikonCapture Exposure Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ExposureAdj	int16s
18	ExposureAdj2	double
36	ActiveD-Lighting	int8u
37	ActiveD-LightingMode	int8u

NikonCapture Brightness Tags

Index1	Tag Name	Writable
-----	-----	-----
0	BrightnessAdj	double
8	EnhanceDarkTones	int8u

NikonCapture DLightingHQ Tags

Index4	Tag Name	Writable
-----	-----	-----
0	D-LightingHQShadow	int32u
1	D-LightingHQHighlight	int32u
2	D-LightingHQColorBoost	int32u

NikonCapture NoiseReduction Tags

Index1	Tag Name	Writable
-----	-----	-----
4	EdgeNoiseReduction	int8u
5	ColorMoiréReductionMode	int8u
9	NoiseReductionIntensity	int32u
13	NoiseReductionSharpness	int32u
17	NoiseReductionMethod	int16u
21	ColorMoiréReduction	int8u

23	NoiseReduction	int8u
24	ColorNoiseReductionIntensity	int32u
28	ColorNoiseReductionSharpness	int32u

NikonCapture PhotoEffects Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PhotoEffectsType	int8u
4	PhotoEffectsRed	int16s
6	PhotoEffectsGreen	int16s
8	PhotoEffectsBlue	int16s

NikonCapture ColorBoost Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ColorBoostType	int8u
1	ColorBoostLevel	int32u

NikonCapture WBAdjData Tags

Index1	Tag Name	Writable
-----	-----	-----
0	WBAdjRedBalance	double
8	WBAdjBlueBalance	double
16	WBAdjMode	int8u
20	WBAdjLighting	int16u
24	WBAdjTemperature	int16u
37	WBAdjTint	int32s

NikonCapture DLightingHS Tags

Index4	Tag Name	Writable
-----	-----	-----
0	D-LightingHSAdjustment	int32u
1	D-LightingHSColorBoost	int32u

NikonCapture UnsharpData Tags

Index1	Tag Name	Writable
-----	-----	-----
0	UnsharpCount	int8u
19	Unsharp1Color	int16u
23	Unsharp1Intensity	int16u
25	Unsharp1HaloWidth	int16u
27	Unsharp1Threshold	int8u
46	Unsharp2Color	int16u
50	Unsharp2Intensity	int16u
52	Unsharp2HaloWidth	int16u
54	Unsharp2Threshold	int8u
73	Unsharp3Color	int16u
77	Unsharp3Intensity	int16u
79	Unsharp3HaloWidth	int16u
81	Unsharp3Threshold	int8u
100	Unsharp4Color	int16u
104	Unsharp4Intensity	int16u
106	Unsharp4HaloWidth	int16u
108	Unsharp4Threshold	int8u

Nintendo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x1101	CameraInfo	Nintendo CameraInfo

Nintendo CameraInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ModelID	undef[4]

8	TimeStamp	int32u
24	InternalSerialNumber	undef[4]
40	Parallax	float
48	Category	int16u

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
-----	-----	-----
0x0000	MakerNoteVersion	undef
0x0001	MinoltaCameraSettingsOld	Minolta CameraSettings
0x0003	MinoltaCameraSettings	Minolta CameraSettings
0x0040	CompressedImageSize	int32u
0x0081	PreviewImageData	no
0x0088	PreviewImageStart	no
0x0089	PreviewImageLength	no
0x0100	ThumbnailImage	undef
0x0104	BodyFirmwareVersion	string
0x0200	SpecialMode	int32u[3] u
0x0201	Quality	int16u u
0x0202	Macro	int16u
0x0203	BWMode	int16u
0x0204	DigitalZoom	rational64u
0x0205	FocalPlaneDiagonal	rational64u
0x0206	LensDistortionParams	int16s[6]
0x0207	CameraType	string
0x0208	TextInfo	Olympus TextInfo
0x0209	CameraID	string
0x020b	EpsonImageWidth	int32u
0x020c	EpsonImageHeight	int32u
0x020d	EpsonSoftware	string
0x0280	PreviewImage	int8u
0x0300	PreCaptureFrames	int16u
0x0301	WhiteBoard	int16u
0x0302	OneTouchWB	int16u
0x0303	WhiteBalanceBracket	int16u
0x0304	WhiteBalanceBias	int16u
0x0400	SensorArea	undef[8]
0x0401	BlackLevel	int32u[4]
0x0403	SceneMode	int16u
0x0404	SerialNumber	string
0x0405	Firmware	string
0x0e00	PrintIM	PrintIM
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
0x1005	FlashDevice	int16u
0x1006	ExposureCompensation	rational64s
0x1007	SensorTemperature	int16s
0x1008	LensTemperature	int16s
0x1009	LightCondition	int16u
0x100a	FocusRange	int16u
0x100b	FocusMode	int16u
0x100c	ManualFocusDistance	rational64u
0x100d	ZoomStepCount	int16u
0x100e	FocusStepCount	int16u
0x100f	Sharpness	int16u
0x1010	FlashChargeLevel	int16u

0x1011	ColorMatrix	int16u[9]
0x1012	BlackLevel	int16u[4]
0x1013	ColorTemperatureBG?	int16u
0x1014	ColorTemperatureRG?	int16u
0x1015	WBMode	int16u[2]
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
0x1027	ExternalFlashZoom	int16u
0x1028	ExternalFlashMode	int16u
0x1029	Contrast	int16u
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
0x1036	PreviewImageStart	int32u*
0x1037	PreviewImageLength	int32u*
0x1038	AFResult	int16u
0x1039	CCDScanMode	int16u
0x103a	NoiseReduction	int16u
0x103b	FocusStepInfinity	int16u
0x103c	FocusStepNear	int16u
0x103d	LightValueCenter	rational64s
0x103e	LightValuePeriphery	rational64s
0x103f	FieldCount?	int16u
0x2010	Equipment	Olympus Equipment
	EquipmentIFD	Olympus Equipment
0x2020	CameraSettings	Olympus CameraSettings
	CameraSettingsIFD	Olympus CameraSettings
0x2030	RawDevelopment	Olympus RawDevelopment
	RawDevelopmentIFD	Olympus RawDevelopment
0x2031	RawDev2	Olympus RawDevelopment2
	RawDev2IFD	Olympus RawDevelopment2
0x2040	ImageProcessing	Olympus ImageProcessing
	ImageProcessingIFD	Olympus ImageProcessing
0x2050	FocusInfo	Olympus FocusInfo
	FocusInfoIFD	Olympus FocusInfo
	CameraParameters	undef
0x2100	Olympus2100	Olympus FE
	Olympus2100IFD	Olympus FE
0x2200	Olympus2200	Olympus FE
	Olympus2200IFD	Olympus FE
0x2300	Olympus2300	Olympus FE
	Olympus2300IFD	Olympus FE
0x2400	Olympus2400	Olympus FE
	Olympus2400IFD	Olympus FE
0x2500	Olympus2500	Olympus FE
	Olympus2500IFD	Olympus FE
0x2600	Olympus2600	Olympus FE
	Olympus2600IFD	Olympus FE

0x2700	Olympus2700	Olympus FE
	Olympus2700IFD	Olympus FE
0x2800	Olympus2800	Olympus FE
	Olympus2800IFD	Olympus FE
0x2900	Olympus2900	Olympus FE
	Olympus2900IFD	Olympus FE
0x3000	RawInfo	Olympus RawInfo
	RawInfoIFD	Olympus RawInfo
0x4000	MainInfo	Olympus
	MainInfoIFD	Olympus
0x5000	UnknownInfo	Olympus UnknownInfo
	UnknownInfoIFD	Olympus UnknownInfo

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
-----	-----	-----
'Resolution'	Resolution	no
'Type'	CameraType	no

Olympus Equipment Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	EquipmentVersion	undef[4]
0x0100	CameraType2	string[6]
0x0101	SerialNumber	string[32]
0x0102	InternalSerialNumber	string[32]
0x0103	FocalPlaneDiagonal	rational64u
0x0104	BodyFirmwareVersion	int32u
0x0201	LensType	int8u[6]
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]
0x0302	ExtenderSerialNumber	string[32]
0x0303	ExtenderModel	string
0x0304	ExtenderFirmwareVersion	int32u
0x0403	ConversionLens	string
0x1000	FlashType	int16u
0x1001	FlashModel	int16u
0x1002	FlashFirmwareVersion	int32u
0x1003	FlashSerialNumber	string[32]

Olympus CameraSettings Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	CameraSettingsVersion	undef[4]
0x0100	PreviewImageValid	int32u
0x0101	PreviewImageStart	int32u*
0x0102	PreviewImageLength	int32u*
0x0200	ExposureMode	int16u
0x0201	AELock	int16u
0x0202	MeteringMode	int16u
0x0203	ExposureShift	rational64s
0x0204	NDFilter	yes
0x0300	MacroMode	int16u
0x0301	FocusMode	int16u[n]

0x0302	FocusProcess	int16u[n]
0x0303	AFSearch	int16u
0x0304	AFAreas	int32u[64] ^{7/8}
0x0305	AFPointSelected	rational64s[5]
0x0306	AFFineTune	int8u
0x0307	AFFineTuneAdj	int16s[3]
0x0308	FocusBracketStepSize	int8u
0x0309	AISubjectTrackingMode	int16u
0x0400	FlashMode	int16u
0x0401	FlashExposureComp	rational64s
0x0403	FlashRemoteControl	int16u
0x0404	FlashControlMode	int16u[n]
0x0405	FlashIntensity	rational64s[n]
0x0406	ManualFlashStrength	rational64s[n]
0x0500	WhiteBalance2	int16u
0x0501	WhiteBalanceTemperature	int16u
0x0502	WhiteBalanceBracket	int16s
0x0503	CustomSaturation	int16s[3] ^{7/8}
0x0504	ModifiedSaturation	int16u
0x0505	ContrastSetting	int16s[3]
0x0506	SharpnessSetting	int16s[3]
0x0507	ColorSpace	int16u
0x0509	SceneMode	int16u
0x050a	NoiseReduction	int16u
0x050b	DistortionCorrection	int16u
0x050c	ShadingCompensation	int16u
0x050d	CompressionFactor	rational64u
0x050f	Gradation	int16s[n]
0x0520	PictureMode	int16u[n]
0x0521	PictureModeSaturation	int16s[3]
0x0522	PictureModeHue?	int16s
0x0523	PictureModeContrast	int16s[3]
0x0524	PictureModeSharpness	int16s[3]
0x0525	PictureModeBWFilter	int16s
0x0526	PictureModeTone	int16s
0x0527	NoiseFilter	int16s[3]
0x0529	ArtFilter	int16u[4]
0x052c	MagicFilter	int16u[4]
0x052d	PictureModeEffect	int16s[3]
0x052e	ToneLevel	yes
0x052f	ArtFilterEffect	int16u[20]
0x0532	ColorCreatorEffect	int16s[6]
0x0537	MonochromeProfileSettings	int16s[6]
0x0538	FilmGrainEffect	int16s
0x0539	ColorProfileSettings	int16s[14]
0x053a	MonochromeVignetting	int16s
0x053b	MonochromeColor	int16s
0x0600	DriveMode	int16u[n] ^{7/8}
0x0601	PanoramaMode	int16u ^{7/8}
0x0603	ImageQuality2	int16u
0x0604	ImageStabilization	int32u
0x0804	StackedImage	int32u[2]
0x0900	ManometerPressure	int16u
0x0901	ManometerReading	int32s[2]
0x0902	ExtendedWBDetect	int16u
0x0903	RollAngle	int16s[2]
0x0904	PitchAngle	int16s[2]
0x0908	DateTimeUTC	string

Olympus RawDevelopment Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
0x0109	RawDevEngine	int16u
0x010a	RawDevNoiseReduction	int16u
0x010b	RawDevEditStatus	int16u
0x010c	RawDevSettings	int16u

Olympus RawDevelopment2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	RawDevVersion	undef[4]
0x0100	RawDevExposureBiasValue	rational64s
0x0101	RawDevWhiteBalance	int16u
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
0x010a	RawDevNoiseReduction	int16u
0x010b	RawDevEngine	int16u
0x010c	RawDevPictureMode	int16u
0x010d	RawDevPMSaturation	int16s[3]
0x010e	RawDevPMContrast	int16s[3]
0x010f	RawDevPMSharpness	int16s[3]
0x0110	RawDevPM_BWFilter	int16u
0x0111	RawDevPMPictureTone	int16u
0x0112	RawDevGradation	int16s[3]
0x0113	RawDevSaturation3	int16s[3]
0x0119	RawDevAutoGradation	int16u
0x0120	RawDevPMNoiseFilter	int16u
0x0121	RawDevArtFilter	int16u[4]

Olympus ImageProcessing Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	ImageProcessingVersion	undef[4]
0x0100	WB_RBLevels	int16u[n]
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
0x0636	UnknownBlock2?	undef
0x0805	SensorCalibration	int16s[2]
0x1010	NoiseReduction2	int16u
0x1011	DistortionCorrection2	int16u
0x1012	ShadingCompensation2	int16u
0x101c	MultipleExposureMode	int16u[2]
0x1103	UnknownBlock3?	undef
0x1104	UnknownBlock4?	undef
0x1112	AspectRatio	int8u[2]
0x1113	AspectFrame	int16u[4]
0x1200	FacesDetected	int32u[n]
0x1201	FaceDetectArea	int16s[n]
0x1202	MaxFaces	int32u[3]
0x1203	FaceDetectFrameSize	int16u[6]
0x1207	FaceDetectFrameCrop	int16s[12]
0x1306	CameraTemperature	no
0x1900	KeystoneCompensation	int8u[2]
0x1901	KeystoneDirection	int8u[2]
0x1906	KeystoneValue	int16s[3]

Olympus FocusInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	FocusInfoVersion	undef[4]
0x0209	AutoFocus?	int16u
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
0x031b	AFPointDetails	no
	AFPointDetails	int16u
0x0328	AFInfo	Olympus AFInfo
0x1201	ExternalFlash	int16u[2]
0x1203	ExternalFlashGuideNumber?	rational64s
0x1204	ExternalFlashBounce	int16u
0x1205	ExternalFlashZoom	rational64u
0x1208	InternalFlash	int16u[n]
0x1209	ManualFlash	int16u[2] ⁷ / ₂
0x120a	MacroLED	int16u
0x1500	SensorTemperature	int16s
0x1600	ImageStabilization	undef ⁷ / ₂

Olympus AFInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
[no tags known]		

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
-----	-----	-----
0x0100	BodyFirmwareVersion	string

Olympus RawInfo Tags

These tags are found only in ORF images of some models (eg. C8080WZ).

Tag ID	Tag Name	Writable
-----	-----	-----
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
0x0611	ValidPixelDepth	int16u[2]
0x0612	CropLeft	int16u
0x0613	CropTop	int16u
0x0614	CropWidth	int32u
0x0615	CropHeight	int32u
0x1000	LightSource	int16u
0x1001	WhiteBalanceComp	int16s[3]
0x1010	SaturationSetting	int16s[3]
0x1011	HueSetting	int16s[3]
0x1012	ContrastSetting	int16s[3]
0x1013	SharpnessSetting	int16s[3]
0x2000	CMExposureCompensation	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
-----	-----	-----
	[no tags known]	

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
-----	-----	-----
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
-----	-----	-----
18	Make	no
44	Model	no
94	FNumber	no
131	DateTime1	no
157	DateTime2	no
297	ThumbInfo	Olympus thmb2

Olympus thmb2 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ThumbnailWidth	no
2	ThumbnailHeight	no
4	ThumbnailLength	no
8	ThumbnailImage	no

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
-----	-----	-----
12	Model	no
28	FileNumber	no
38	DateTimeOriginal	no
50	DateTimeEnd	no
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
-----	-----	-----
0	Make	no
24	Model	no
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
-----	-----	-----
0	Make	no
24	Model	no
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
-----	-----	-----
0	Make	no
24	Model	no
40	FNumber	no
48	ExposureCompensation	no
104	MovableInfo	Olympus MovableInfo
114	MovableInfo	Olympus MovableInfo

Olympus MovableInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
4	ISO	no
44	EncoderVersion	no
60	DecoderVersion	no
131	Thumbnail	Olympus Thumbnail

Olympus Thumbnail Tags

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
'OLYM'	OlympusAtom	Olympus OLYM2

Olympus OLYM2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'prms'	MakerNotes	Olympus prms
'scrn'	PreviewInfo	Olympus scrn2
'thmb'	ThumbInfo	Olympus thmb2

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
-----	-----	-----
18	Make	no
44	Model	no
131	DateTime1	no

157	DateTime2	no
383	LensModel	no

Olympus scrn2 Tags

Index1	Tag Name	Writable
-----	-----	-----
2	OlympusPreview	Olympus scrn

Olympus scrn Tags

Information extracted from the "scrn" atom of Olympus MP4 videos.

Index1	Tag Name	Writable
-----	-----	-----
0	PreviewImageLength	no
4	PreviewImage	no

Olympus thmb Tags

Information extracted from the "thmb" atom of Olympus MP4 videos.

Index1	Tag Name	Writable
-----	-----	-----
0	ThumbnailLength	no
4	ThumbnailImage	no

Olympus OLYM Tags

Tags found in the OLYM atom of MP4 videos from the TG-810.

Index1	Tag Name	Writable
-----	-----	-----
14	Make	no
40	Model	no
90	FNumber	no
127	DateTimeOriginal	no
153	DateTime2	no
265	ThumbnailWidth	no
267	ThumbnailHeight	no

PanasonicRaw Tags

These tags are found in IFD0 of Panasonic/Leica RAW, RW2 and RWL images.

Tag ID	Tag Name	Writable
-----	-----	-----
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!
0x000a	BitsPerSample	int16u!
0x000b	Compression	int16u!
0x000e	LinearityLimitRed	int16u
0x000f	LinearityLimitGreen	int16u
0x0010	LinearityLimitBlue	int16u
0x0011	RedBalance	int16u
0x0012	BlueBalance	int16u
0x0013	WBInfo	PanasonicRaw WBInfo
0x0017	ISO	int16u
0x0018	HighISOMultiplierRed	int16u
0x0019	HighISOMultiplierGreen	int16u
0x001a	HighISOMultiplierBlue	int16u
0x001b	NoiseReductionParams	undef[n]!
0x001c	BlackLevelRed	int16u

0x001d	BlackLevelGreen	int16u
0x001e	BlackLevelBlue	int16u
0x0024	WRedLevel	int16u
0x0025	WGreenLevel	int16u
0x0026	WBlueLevel	int16u
0x0027	WBInfo2	PanasonicRaw WBInfo2
0x002d	RawFormat	int16u!
0x002e	JpgFromRaw	JPEG
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
0x0116	RowsPerStrip	no
0x0117	StripByteCounts	no
0x0118	RawDataOffset	no
0x0119	DistortionInfo	PanasonicRaw DistortionInfo
0x011c	Gamma	int16u
0x0120	CameraIFD	PanasonicRaw CameraIFD
0x0121	Multishot	int32u
0x0127	JpgFromRaw2	no
0x013b	Artist	string
0x02bc	ApplicationNotes	XMP
0x8298	Copyright	string
0x83bb	IPTC-NAA	IPTC
0x8769	ExifOffset	EXIF
0x8825	GPSInfo	GPS

PanasonicRaw CameraIFD Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x1001	MultishotOn	no
0x1100	FocusStepNear	no
0x1101	FocusStepCount	no
0x1102	FlashFired	no
0x1105	ZoomPosition	no
0x1200	LensAttached	no
0x1201	LensTypeMake	no
0x1202	LensTypeModel	no
0x1203	FocalLengthIn35mmFormat	no
0x1301	ApertureValue	no
0x1302	ShutterSpeedValue	no
0x1303	SensitivityValue	no
0x1305	HighISOMode	no
0x1412	FacesDetected	no
0x3200	WB_CFA0_LevelDaylight	no
0x3201	WB_CFA1_LevelDaylight	no
0x3202	WB_CFA2_LevelDaylight	no
0x3203	WB_CFA3_LevelDaylight	no
0x3300	WhiteBalanceSet	no
0x3420	WB_RedLevelAuto	no
0x3421	WB_BlueLevelAuto	no
0x3501	Orientation	no
0x3600	WhiteBalanceDetected	no

PanasonicRaw WBInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
0	NumWBEntries	int16u
1	WBType1	int16u
2	WB_RBLevels1	int16u[2]
4	WBType2	int16u
5	WB_RBLevels2	int16u[2]
7	WBType3	int16u

8	WB_RBLevels3	int16u[2]
10	WBType4	int16u
11	WB_RBLevels4	int16u[2]
13	WBType5	int16u
14	WB_RBLevels5	int16u[2]
16	WBType6	int16u
17	WB_RBLevels6	int16u[2]
19	WBType7	int16u
20	WB_RBLevels7	int16u[2]

PanasonicRaw WBInfo2 Tags

Index2	Tag Name	Writable
-----	-----	-----
0	NumWBEntries	int16u
1	WBType1	int16u
2	WB_RGBLevels1	int16u[3]
5	WBType2	int16u
6	WB_RGBLevels2	int16u[3]
9	WBType3	int16u
10	WB_RGBLevels3	int16u[3]
13	WBType4	int16u
14	WB_RGBLevels4	int16u[3]
17	WBType5	int16u
18	WB_RGBLevels5	int16u[3]
21	WBType6	int16u
22	WB_RGBLevels6	int16u[3]
25	WBType7	int16u
26	WB_RGBLevels7	int16u[3]

PanasonicRaw DistortionInfo Tags

Lens distortion correction information.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0002	DistortionParam02	int16s
0x0004	DistortionParam04	int16s
0x0005	DistortionScale	int16s
7.1	DistortionCorrection	int16s & 0x0f
0x0008	DistortionParam08	int16s
0x0009	DistortionParam09	int16s
0x000b	DistortionParam11	int16s
0x000c	DistortionN?	int16s

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
-----	-----	-----
'Header'	Header	SigmaRaw Header
'Header4'	Header4	SigmaRaw Header4
'HeaderExt'	HeaderExt	SigmaRaw HeaderExt
'IMA2'	PreviewImage	no
	JpgFromRaw	no
'IMAG'	PreviewImage	no
'PROP'	Properties	SigmaRaw Properties

SigmaRaw Header Tags

Information extracted from the header of an X3F file.

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
'AEMODE'	MeteringMode	no
'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
'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
'IMAGEBOARDID'	ImageBoardID	no
'IMAGERBOARDID'	ImagerBoardID	no
'IMAGERTEMP'	SensorTemperature	no

'ISO'	ISO	no
'LENSARANGE'	LensApertureRange	no
'LENSFRANGE'	LensFocalRange	no
'LENSMODEL'	LensType	no
'PMODE'	ExposureProgram	no
'RESOLUTION'	Quality	no
'SENSORID'	SensorID	no
'SHUTTER'	ExposureTime	no
'SH_DESC'	ShutterSpeedDisplayed	no
'TIME'	DateTimeOriginal	no
'VERSION_BF'	VersionBF	no
'WB_DESC'	WhiteBalance	no

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
-----	-----
AccelerometerTime	no
AccelerometerX	no
AccelerometerY	no
AccelerometerZ	no
CameraType	no
DateTimeOriginal	no
EmbeddedImage	no
ExposureTime	no
FNumber	no
FirmwareVersion	no
FocalLength	no
FocalPlaneXResolution	no
FrameExposureTime	no
ISO	no
ImageLimitExposureBias	no
ImageModulationExposureBias	no
JSONMetadata	no+
LensTemperature	no
Make	no
Model	no
Orientation	no
SensorSerialNumber	no
SerialNumber	no
SocTemperature	no

PhaseOne Tags

These tags are extracted from the maker notes of Phase One images.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0100	CameraOrientation	no
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
0x010f	RawData	no
0x0110	SensorCalibration	PhaseOne SensorCalibration
0x0112	DateTimeOriginal	no
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
-----	-----	-----
0x0400	SensorDefects	no
0x0401	AllColorFlatField1?	no
0x0407	SerialNumber	string
0x040b	RedBlueFlatField?	no
0x0410	AllColorFlatField2?	no
0x0416	AllColorFlatField3?	no
0x0419	LinearizationCoefficients1	no
0x041a	LinearizationCoefficients2	no

Reconyx Tags

The following tags are extracted from the maker notes of Reconyx Hyperfire cameras such as the HC500, HC600 and PC900.

Index2	Tag Name	Writable
-----	-----	-----
0	MakerNoteVersion	no
1	FirmwareVersion	no
4	FirmwareDate	int16u[2]
6	TriggerMode	string[2]
7	Sequence	int16u[2]
9	EventNumber	int16u[2]
11	DateTimeOriginal	int16u[6]
18	MoonPhase	int16u
19	AmbientTemperatureFahrenheit	int16s
20	AmbientTemperature	int16s
21	SerialNumber	undef[30]
36	Contrast	int16u
37	Brightness	int16u
38	Sharpness	int16u
39	Saturation	int16u
40	InfraredIlluminator	int16u
41	MotionSensitivity	int16u
42	BatteryVoltage	int16u
43	UserLabel	string[22]

Reconyx Type2 Tags

Tags extracted from models such as the UltraFire.

Index1	Tag Name	Writable
-----	-----	-----
24	FirmwareVersion	undef[7]
31	Micro1Version	undef[7]
38	BootLoaderVersion	undef[7]
45	Micro2Version	undef[7]
52	TriggerMode	undef[1]
53	Sequence	int8u[2]

55	EventNumber	int32u
59	DateTimeOriginal	int8u[7]
66	DayOfWeek	int8u
67	MoonPhase	int8u
68	AmbientTemperatureFahrenheit	int16s
70	AmbientTemperature	int16s
72	Illumination	int8u
73	BatteryVoltage	int16u
75	SerialNumber	string[15]
90	UserLabel	string[21]

Reconyx Type3 Tags

Tags extracted from models such as the HF2 PRO.

Index1	Tag Name	Writable
-----	-----	-----
16	FileNumber	int16u
18	DirectoryNumber	int16u
42	FirmwareVersion	int16u[3]
48	FirmwareDate	int16u[2]
52	TriggerMode	string[2]
54	Sequence	int16u[2]
58	EventNumber	int16u[2]
62	DateTimeOriginal	int16u[6]
74	DayOfWeek	int16u
76	MoonPhase	int16u
78	AmbientTemperatureFahrenheit	int16s
80	AmbientTemperature	int16s
82	Contrast	int16u
84	Brightness	int16u
86	Sharpness	int16u
88	Saturation	int16u
90	Flash	int16u
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]

Sanyo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x00ff	MakerNoteOffset	int32u
0x0100	SanyoThumbnail	undef
0x0200	SpecialMode	int32u[3]
0x0201	SanyoQuality	int16u
0x0202	Macro	int16u
0x0204	DigitalZoom	rational64u
0x0207	SoftwareVersion	yes
0x0208	PictInfo	yes
0x0209	CameraID	yes
0x020e	SequentialShot	int16u
0x020f	WideRange	int16u
0x0210	ColorAdjustmentMode	int16u
0x0213	QuickShot	int16u
0x0214	SelfTimer	int16u
0x0216	VoiceMemo	int16u
0x0217	RecordShutterRelease	int16u
0x0218	FlickerReduce	int16u
0x0219	OpticalZoomOn	int16u
0x021b	DigitalZoomOn	int16u
0x021d	LightSourceSpecial	int16u
0x021e	Resaved	int16u
0x021f	SceneSelect	int16u
0x0223	ManualFocusDistance	rational64u
	FaceInfo	-

0x0224	SequenceShotInterval	int16u
0x0225	FlashMode	int16u
0x0e00	PrintIM	PrintIM
0x0f00	DataDump	no

Sanyo FaceInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FacesDetected	int32u
4	FacePosition	int32u[4]

Sanyo MOV Tags

This information is found in Sanyo MOV videos.

Index1	Tag Name	Writable
-----	-----	-----
0	Make	no
24	Model	no
38	ExposureTime	no
42	FNumber	no
50	ExposureCompensation	no
68	WhiteBalance	no
72	FocalLength	no

Sanyo MP4 Tags

This information is found in Sanyo MP4 videos.

Index1	Tag Name	Writable
-----	-----	-----
0	Make	no
24	Model	no
50	FNumber	no
58	ExposureCompensation	no
106	ISO	no
209	Software	no
210	Software	no
241	Thumbnail	Sanyo Thumbnail
242	Thumbnail	Sanyo Thumbnail

Sanyo Thumbnail Tags

Index4	Tag Name	Writable
-----	-----	-----
1	ThumbnailWidth	no
2	ThumbnailHeight	no
3	ThumbnailLength	no
4	ThumbnailOffset	no

Samsung Tags

Tags found in the binary "STMN" format maker notes written by a number of Samsung models.

Index4	Tag Name	Writable
-----	-----	-----
0	MakerNoteVersion	undef[8]
2	PreviewImageStart	int32u*
3	PreviewImageLength	int32u*
11	SamsungIFD	Samsung IFD

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
-----	-----	-----
[no tags known]		

Samsung Type2 Tags

Tags found in the EXIF-format maker notes of newer Samsung models.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	MakerNoteVersion	undef[4]
0x0002	DeviceType	int32u
0x0003	SamsungModelID	int32u
0x0011	OrientationInfo	Samsung OrientationInfo
0x0020	SmartAlbumColor	int16u[2]
0x0021	PictureWizard	Samsung PictureWizard
0x0030	LocalLocationName	string
0x0031	LocationName	string
0x0035	PreviewIFD	Nikon PreviewIFD
		Nikon PreviewIFD
0x0040	RawDataByteOrder	yes
0x0041	WhiteBalanceSetup	int32u
0x0043	CameraTemperature	rational64s
0x0050	RawDataCFAPattern	yes
0x0100	FaceDetect	int16u
0x0120	FaceRecognition	int32u
0x0123	FaceName	string
0xa001	FirmwareName	string
0xa002	SerialNumber	string
0xa003	LensType	int16u[n]
0xa004	LensFirmware	string
0xa005	InternalLensSerialNumber	string
0xa010	SensorAreas	int32u[8]
0xa011	ColorSpace	int16u
0xa012	SmartRange	int16u
0xa013	ExposureCompensation	rational64s
0xa014	ISO	int32u
0xa018	ExposureTime	rational64u
0xa019	FNumber	rational64u
0xa01a	FocalLengthIn35mmFormat	int32u
0xa020	EncryptionKey	int32u[11]!
0xa021	WB_RGGBLevelsUncorrected	int32u[4]
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]
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).

Index8	Tag Name	Writable
--------	----------	----------

-----	-----	-----
0	YawAngle?	rational64s
1	PitchAngle	rational64s
2	RollAngle	rational64s

Samsung PictureWizard Tags

Index2	Tag Name	Writable
-----	-----	-----
0	PictureWizardMode	int16u
1	PictureWizardColor	int16u
2	PictureWizardSaturation	int16u
3	PictureWizardSharpness	int16u
4	PictureWizardContrast	int16u

Samsung APP5 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'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
-----	-----
DepthMapData	no
DepthMapData2	no
DepthMapName	no
DualCameraImage	no
DualCameraImageName	no
DualShotExtra	Samsung DualShotExtra
EmbeddedAudioFile	no
EmbeddedAudioFileName	no
EmbeddedImage	no
EmbeddedImage2	no
EmbeddedImageName	no
EmbeddedVideoFile	no
EmbeddedVideoType	no
MCCData	no
PEg_Info	JSON
RemasterInfo	no
SamsungCaptureInfo	no
SingleShotDepthMap	no
SingleShotMeta	Samsung SingleShotMeta
SurroundShotVideo	no
SurroundShotVideoName	no
TimeStamp	no

Samsung DualShotExtra Tags

Index4	Tag Name	Writable
-----	-----	-----
16	DepthMapWidth	no
17	DepthMapHeight	no

Samsung SingleShotMeta Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'beautyColorLevel'	BeautyColorLevel	no
'beautyRetouchLevel'	BeautyRetouchLevel	no
'blurStrength'	BlurStrength	no
'bokehShape'	BokehShape	no
'colorpopStrength'	ColorpopStrength	no
'depthHWHeight'	DepthHWHeight	no

-- ExifTool 12.92 Tag Names --

'depthHWWidth'	DepthHWWidth	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
-----	-----	-----
0	Make	no
32	Model	no
512	ThumbnailWidth	no
516	ThumbnailHeight	no
520	ThumbnailLength	no
524	ThumbnailImage	no

Samsung INFO Tags

This information is found in MP4 videos from Samsung models such as the SMX-C20N.

Tag ID	Tag Name	Writable
-----	-----	-----
'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
-----	-----	-----
0	Make	no
24	Model	no
46	ExposureTime	no
50	FNumber	no
58	ExposureCompensation	no
106	ISO	no
125	Software	no
244	Thumbnail	Samsung Thumbnail

Samsung Thumbnail Tags

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
'mdl'n'	SamsungModel	no
'svss'	SamsungSvss	Samsung svss

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
-----	-----	-----
[no tags known]		

Ricoh Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	MakerNoteType	string
0x0002	FirmwareVersion	string
0x0005	SerialNumber	undef[16]
	InternalSerialNumber	undef[16]
0x0e00	PrintIM	PrintIM
0x1000	RecordingFormat	int16u
0x1001	ImageInfo	Ricoh ImageInfo
	ExposureProgram	int16u
0x1002	DriveMode	int16u
0x1003	Sharpness	int32u
	WhiteBalance	int16u
0x1004	WhiteBalanceFineTune	int16u
0x1006	FocusMode	int16u
0x1007	AutoBracketing	int16u
0x1009	MacroMode	int16u
0x100a	FlashMode	int16u
0x100b	FlashExposureComp	rational64s
0x100c	ManualFlashOutput	rational64s
0x100d	FullPressSnap	int16u
0x100e	DynamicRangeExpansion	int16u
0x100f	NoiseReduction	int16u
0x1010	ImageEffects	int16u
0x1011	Vignetting	int16u
0x1012	Contrast	int32u
0x1013	Saturation	int32u
0x1014	Sharpness	int32u
0x1015	ToningEffect	int16u
0x1016	HueAdjust	int16u
0x1017	WideAdapter	int16u
0x1018	CropMode	int16u
0x1019	NDFilter	int16u
0x101a	WBBracketShotNumber	int16u
0x1200	AFStatus	int16u
0x1201	AFAreaXPosition1	int32u
0x1202	AFAreaYPosition1	int32u
0x1203	AFAreaXPosition	int32u
0x1204	AFAreaYPosition	int32u
0x1205	AFAreaMode	int16u
0x1307	ColorTempKelvin	int32u
0x1308	ColorTemperature	int32u
0x1500	FocalLength	rational64u
0x1601	SensorWidth	int32u
0x1602	SensorHeight	int32u
0x1603	CroppedImageWidth	int32u
0x1604	CroppedImageHeight	int32u
0x2001	RicohSubdir	Ricoh Subdir

	RicohSubdirIFD	Ricoh Subdir
	RicohRR1Subdir	Ricoh Subdir
0x4001	ThetaSubdir	Ricoh ThetaSubdir

Ricoh ImageInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	RicohImageWidth	int16u
2	RicohImageHeight	int16u
6	RicohDate	int8u[7]
28	PreviewImageStart	int16u*
30	PreviewImageLength	int16u*
32	FlashMode	int8u
33	Macro	int8u
34	Sharpness	int8u
38	WhiteBalance	int8u
39	ISOSetting	int8u
40	Saturation	int8u

Ricoh Subdir Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	ManufactureDate1	string[20]
0x0005	ManufactureDate2	string[20]
0x001a	FaceInfo	Ricoh FaceInfo
0x0029	FirmwareInfo	Ricoh FirmwareInfo
0x002a	NoiseReduction	int32u
0x002c	SerialInfo	Ricoh SerialInfo

Ricoh FaceInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
181	FacesDetected	int8u
182	FaceDetectFrameSize	int16u[2]
188	Face1Position	int16u[4]
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
-----	-----	-----
0	FirmwareRevision	string[12]
12	FirmwareRevision2	string[12]

Ricoh SerialInfo Tags

This information is found in images from the GXR.

Index1	Tag Name	Writable
-----	-----	-----
0	BodyFirmware	string[16]
16	BodySerialNumber	string[16]
32	LensFirmware	string[16]
48	LensSerialNumber	string[16]

Ricoh ThetaSubdir Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
'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
-----	-----	-----
'Azimuth'	Azimuth	no
'Condition'	Condition	no
'Lit'	Lit	no
'Location'	Location	no
'Sign type'	SignType	no
'_audio'	SoundFile	no
'_barcode'	Barcodes	no+

Ricoh AVI Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'mnrt'	MakerNoteRicoh	Ricoh
'rdc2'	RicohRDC2?	no
'thum'	ThumbnailImage	no
'ucmt'	Comment	no

Ricoh RDTA Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	Accelerometer	no
0x0010	TimeStamp	no

Ricoh RDTB Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	Gyroscope	no
0x0010	TimeStamp	no

Ricoh RDTC Tags

Tag ID	Tag Name	Writable
--------	----------	----------

-----	-----	-----
0x0000	MagneticField	no
0x0010	TimeStamp	no

Ricoh RDTG Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	TimeStamp	no
0x0064	FrameNumber	no

Ricoh RDTL Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	GPSTimeDate	no
0x0008	GPSLatitude	no
0x0010	GPSLongitude	no
0x0018	GPSAltitude	no

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
-----	-----	-----
0x0002	SerialNumber	string
0x0003	DriveMode	string
0x0004	ResolutionMode	string
0x0005	AFMode	string
0x0006	FocusSetting	string
0x0007	WhiteBalance	string
0x0008	ExposureMode	string
0x0009	MeteringMode	string
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*
	ChrominanceNoiseReduction	string
0x001b	PreviewImageLength	int32u*
	LuminanceNoiseReduction	string
0x001c	PreviewImageSize	int16u[2]
	PreviewImageStart	int32u*
0x001d	MakerNoteVersion	undef
	PreviewImageLength	int32u*
0x001e	PreviewImageSize	int16u[2]
0x001f	AFPoint	string

	MakerNoteVersion	undef
0x0022	FileFormat	string
0x0024	Calibration	string
0x0026	FileFormat	string
0x0027	LensType	string
	LensType	-
		Sigma LensType
0x002a	LensFocalRange	rational64u[2]
0x002b	LensMaxApertureRange	rational64u[2]
0x002c	ColorMode	int32u
0x0030	LensApertureRange	string
	Calibration	string
0x0031	FNumber	rational64u
0x0032	ExposureTime	rational64u
0x0033	ExposureTime2	string
0x0034	BurstShot	int32u
0x0035	ExposureCompensation	rational64s
0x0039	SensorTemperature	string
0x003a	FlashExposureComp	rational64s
0x003b	Firmware	string
0x003c	WhiteBalance	string
0x003d	PictureMode	string
0x0048	LensApertureRange	string
0x0049	FNumber	rational64u
0x004a	ExposureTime	rational64u
0x004b	ExposureTime2	string
0x004d	ExposureCompensation	rational64s
0x0055	SensorTemperature	string
0x0056	FlashExposureComp	rational64s
0x0057	Firmware2	string
0x0058	WhiteBalance	string
0x0059	DigitalFilter	string
0x0084	Model	string
0x0086	ISO	int16u
0x0087	ResolutionMode	string
0x0088	WhiteBalance	string
0x008c	Firmware	string
0x011f	CameraCalibration	float[9]
0x0120	WBSettings	Sigma WBSettings
0x0121	WBSettings2	Sigma WBSettings2

Sigma WBSettings Tags

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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]

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
-----	-----	-----
0x0010	CameraInfo	Sony CameraInfo
	CameraInfo2	Sony CameraInfo2
	CameraInfo3	Sony CameraInfo3
	CameraInfoUnknown	Sony CameraInfoUnknown
0x0020	FocusInfo	Sony FocusInfo
	MoreInfo	Sony MoreInfo
0x0102	Quality	int32u
0x0104	FlashExposureComp	rational64s
0x0105	Teleconverter	int32u
0x0112	WhiteBalanceFineTune	int32u
0x0114	CameraSettings	Sony CameraSettings
	CameraSettings2	Sony CameraSettings2
	CameraSettings3	Sony CameraSettings3
	CameraSettingsUnknown	Sony CameraSettingsUnknown
0x0115	WhiteBalance	int32u
0x0116	ExtraInfo	Sony ExtraInfo
	ExtraInfo2	Sony ExtraInfo2
	ExtraInfo3	Sony ExtraInfo3
0x0e00	PrintIM	PrintIM
0x1000	MultiBurstMode	undef
0x1001	MultiBurstImageWidth	int16u
0x1002	MultiBurstImageHeight	int16u
0x1003	Panorama	Sony Panorama
0x2001	PreviewImage	undef
0x2002	Rating	int32u
0x2004	Contrast	int32s
0x2005	Saturation	int32s
0x2006	Sharpness	int32s
0x2007	Brightness	int32s
0x2008	LongExposureNoiseReduction	int32u
0x2009	HighISONoiseReduction	int16u
0x200a	HDR	int32u
0x200b	MultiFrameNoiseReduction	int32u
0x200e	PictureEffect	int16u
0x200f	SoftSkinEffect	int32u
0x2010	Tag2010a	Sony Tag2010a
	Tag2010b	Sony Tag2010b
	Tag2010c	Sony Tag2010c
	Tag2010d	Sony Tag2010d
	Tag2010e	Sony Tag2010e
	Tag2010f	Sony Tag2010f
	Tag2010g	Sony Tag2010g
	Tag2010h	Sony Tag2010h
	Tag2010i	Sony Tag2010i
0x2011	VignettingCorrection	int32u
0x2012	LateralChromaticAberration	int32u
0x2013	DistortionCorrectionSetting	int32u
0x2014	WShiftAB_GM	int32s[2]
0x2016	AutoPortraitFramed	int16u
0x2017	FlashAction	int32u
0x201a	ElectronicFrontCurtainShutter	int32u
0x201b	FocusMode	int8u
0x201c	AFAreaModeSetting	int8u
0x201d	FlexibleSpotPosition	int16u[2]
0x201e	AFPointSelected	int8u
0x2020	AFPointsUsed	no
0x2021	AFTracking	int8u
0x2022	FocalPlaneAFPointsUsed	no
0x2023	MultiFrameNREffect	int32u
0x2026	WShiftAB_GM_Precise	int32s[2]%
0x2027	FocusLocation	int16u[4]
0x2028	VariableLowPassFilter	int16u[2]

0x2029	RAWFileType	int16u
0x202a	Tag202a	Sony Tag202a
0x202b	PrioritySetInAWB	int8u
0x202c	MeteringMode2	int16u
0x202d	ExposureStandardAdjustment	rational64s
0x202e	Quality	int16u[2]
0x202f	PixelShiftInfo	undef
0x2031	SerialNumber	string
0x2032	Shadows	int32s
0x2033	Highlights	int32s
0x2034	Fade	int32s
0x2035	SharpnessRange	int32s
0x2036	Clarity	int32s
0x2037	FocusFrameSize	no
0x2039	JPEG-HEIFSwitch	int16u
0x2044	HiddenInfo	Sony HiddenInfo
0x204a	FocusLocation2	int16u[4]
0x3000	ShotInfo	Sony ShotInfo
0x900b	Tag900b	Sony Tag900b
0x9050	Tag9050a	Sony Tag9050a
	Tag9050b	Sony Tag9050b
	Tag9050c	Sony Tag9050c
	Tag9050d	Sony Tag9050d
0x9400	Tag9400a	Sony Tag9400a
	Tag9400b	Sony Tag9400b
	Tag9400c	Sony Tag9400c
0x9401	Tag9401	Sony Tag9401
0x9402	Tag9402	Sony Tag9402
0x9403	Tag9403	Sony Tag9403
0x9404	Tag9404a	Sony Tag9404a
	Tag9404b	Sony Tag9404b
	Tag9404c	Sony Tag9404c
0x9405	Tag9405a	Sony Tag9405a
	Tag9405b	Sony Tag9405b
0x9406	Tag9406	Sony Tag9406
	Tag9406b	Sony Tag9406b
0x940a	Tag940a	Sony Tag940a
0x940c	Tag940c	Sony Tag940c
0x940e	AFInfo	Sony AFInfo
	Tag940e	Sony Tag940e
0x9416	Sony_0x9416	Sony Tag9416
0xb000	FileFormat	int8u[4]
0xb001	SonyModelID	int16u
0xb020	CreativeStyle	string
0xb021	ColorTemperature	int32u
0xb022	ColorCompensationFilter	int32u
0xb023	SceneMode	int32u
0xb024	ZoneMatching	int32u
0xb025	DynamicRangeOptimizer	int32u
0xb026	ImageStabilization	int32u
0xb027	LensType	int32u
0xb028	MinoltaMakerNote	Minolta
0xb029	ColorMode	int32u
0xb02a	LensSpec	int8u[8]
0xb02b	FullImageSize	int32u[2]
0xb02c	PreviewImageSize	int32u[2]
0xb040	Macro	int16u
0xb041	ExposureMode	int16u
0xb042	FocusMode	int16u
0xb043	AFAreaMode	int16u
0xb044	AFIlluminator	int16u
0xb047	JPEGQuality	int16u
0xb048	FlashLevel	int16s
0xb049	ReleaseMode	int16u
0xb04a	SequenceNumber	int16u
0xb04b	Anti-Blur	int16u
0xb04e	FocusMode	int16u
0xb04f	DynamicRangeOptimizer	int16u
0xb050	HighISONoiseReduction2	int16u
0xb052	IntelligentAuto	int16u

0xb054 WhiteBalance int16u

Sony CameraInfo Tags

Camera information for the A700, A850 and A900.

Index1	Tag Name	Writable
-----	-----	-----
0	LensSpec	undef[8]
20	FocusModeSetting	int8u
21	AFPointSelected	int8u
25	AFPoint	int8u
30	AFStatusActiveSensor	int16s
32	AFStatusUpper-left	int16s
34	AFStatusLeft	int16s
36	AFStatusLower-left	int16s
38	AFStatusFarLeft	int16s
40	AFStatusBottomAssist-left	int16s
42	AFStatusBottom	int16s
44	AFStatusBottomAssist-right	int16s
46	AFStatusCenter-7	int16s
48	AFStatusCenter-horizontal	int16s
50	AFStatusCenter-9	int16s
52	AFStatusCenter-10	int16s
54	AFStatusCenter-11	int16s
56	AFStatusCenter-12	int16s
58	AFStatusCenter-vertical	int16s
60	AFStatusCenter-14	int16s
62	AFStatusTopAssist-left	int16s
64	AFStatusTop	int16s
66	AFStatusTopAssist-right	int16s
68	AFStatusFarRight	int16s
70	AFStatusUpper-right	int16s
72	AFStatusRight	int16s
74	AFStatusLower-right	int16s
76	AFStatusCenterF2-8	int16s
304	AFMicroAdjValue	int8u
305	AFMicroAdjMode	int8u & 0x80
305.1	AFMicroAdjRegisteredLenses	int8u & 0x7f

Sony CameraInfo2 Tags

Camera information for the DSLR-A200, A230, A290, A300, A330, A350, A380 and A390.

Index1	Tag Name	Writable
-----	-----	-----
0	LensSpec	undef[8]
20	AFPointSelected	int8u
21	FocusModeSetting	int8u
24	AFPoint	int8u
27	AFStatusActiveSensor	int16s
29	AFStatusTop-right	int16s
31	AFStatusBottom-right	int16s
33	AFStatusBottom	int16s
35	AFStatusMiddleHorizontal	int16s
37	AFStatusCenterVertical	int16s
39	AFStatusTop	int16s
41	AFStatusTop-left	int16s
43	AFStatusBottom-left	int16s
45	AFStatusLeft	int16s
47	AFStatusCenterHorizontal	int16s
49	AFStatusRight	int16s

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
-----	-----	-----
0	LensSpec	undef[8]
14	FocalLength	int16u
16	FocalLengthTeleZoom	int16u
20	AFPointSelected	int8u
21	FocusMode	int8u
24	AFPoint	int8u
25	FocusStatus	int8u
27	AFStatusActiveSensor	int16s
28	AFPointSelected	int8u
29	FocusMode	int8u
	AFStatusTop-right	int16s
31	AFStatusBottom-right	int16s
32	AFPoint	int8u
33	AFStatusActiveSensor	int16s
	AFStatusBottom	int16s
35	AFStatus15	Sony AFStatus15
	AFStatusMiddleHorizontal	int16s
37	AFStatusCenterVertical	int16s
39	AFStatusTop	int16s
41	AFStatusTop-left	int16s
43	AFStatusBottom-left	int16s
45	AFStatusLeft	int16s
47	AFStatusCenterHorizontal	int16s
49	AFStatusRight	int16s

Sony AFStatus15 Tags

AF Status information for models with 15-point AF.

Index1	Tag Name	Writable
-----	-----	-----
0	AFStatusUpper-left	int16s
2	AFStatusLeft	int16s
4	AFStatusLower-left	int16s
6	AFStatusFarLeft	int16s
8	AFStatusTopHorizontal	int16s
10	AFStatusNearRight	int16s
12	AFStatusCenterHorizontal	int16s
14	AFStatusNearLeft	int16s
16	AFStatusBottomHorizontal	int16s
18	AFStatusTopVertical	int16s
20	AFStatusCenterVertical	int16s
22	AFStatusBottomVertical	int16s
24	AFStatusFarRight	int16s
26	AFStatusUpper-right	int16s
28	AFStatusRight	int16s
30	AFStatusLower-right	int16s
32	AFStatusUpper-middle	int16s
34	AFStatusLower-middle	int16s

Sony CameraInfoUnknown Tags

Index1	Tag Name	Writable
-----	-----	-----
	[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
-----	-----	-----
14	DriveMode2	int8u
16	Rotation	int8u
20	ImageStabilizationSetting	int8u
21	DynamicRangeOptimizerMode	int8u

43	BracketShotNumber	int8u
44	WhiteBalanceBracketing	int8u
45	BracketShotNumber2	int8u
46	DynamicRangeOptimizerBracket	int8u
47	ExposureBracketShotNumber	int8u
63	ExposureProgram	int8u
65	CreativeStyle	int8u
109	ISOSetting	int8u
111	ISO	int8u
119	DynamicRangeOptimizerMode	int8u
121	DynamicRangeOptimizerLevel	int8u
2118	ShutterCount	int32u
2491	FocusPosition	int8u
4368	TiffMeteringImage	no

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
-----	-----	-----
0x0001	MoreSettings	Sony MoreSettings
0x0002	FaceInfo	Sony FaceInfo
	FaceInfoA	Sony FaceInfoA
0x0107	TiffMeteringImage	no
0x0201	MoreInfo0201	Sony MoreInfo0201
0x0401	MoreInfo0401	Sony MoreInfo0401

Sony MoreSettings Tags

Index1	Tag Name	Writable
-----	-----	-----
1	DriveMode2	int8u
2	ExposureProgram	int8u
3	MeteringMode	int8u
4	DynamicRangeOptimizerSetting	int8u
5	DynamicRangeOptimizerLevel	int8u
6	ColorSpace	int8u
7	CreativeStyleSetting	int8u
8	ContrastSetting	int8s
9	SaturationSetting	int8s
10	SharpnessSetting	int8s
13	WhiteBalanceSetting	int8u
14	ColorTemperatureSetting	int8u
15	ColorCompensationFilterSet	int8s
16	FlashMode	int8u
17	LongExposureNoiseReduction	int8u
18	HighISONoiseReduction	int8u
19	FocusMode	int8u
21	MultiFrameNoiseReduction	int8u
22	HDRSetting	int8u
23	HDRLevel	int8u
24	ViewingMode	int8u
25	FaceDetection	int8u
26	CustomWB_RBLevels	int16uRev[2]
30	BrightnessValue	int8u
	ExposureCompensationSet	int8u
31	ISO	int8u
	FlashExposureCompSet	int8u
32	FNumber	int8u
	LiveViewAFMethod	int8u
33	ExposureTime	int8u
	ISO	int8u
34	FNumber	int8u
35	FocalLength2	int8u
	ExposureTime	int8u
36	ExposureCompensation2	int16s
37	FocalLength2	int8u
	ISO	int8u

38	FlashExposureCompSet2	int16s
	ExposureCompensation2	int16s
	FNumber	int8u
39	ExposureTime	int8u
40	Orientation2	int8u
41	FocusPosition2	int8u
	FocalLength2	int8u
42	FlashAction	int8u
	ExposureCompensation2	int16s
43	FocusPosition2	int8u
44	FocusMode2	int8u
	FlashAction	int8u
	FlashExposureCompSet2	int16s
46	FocusMode2	int8u
	Orientation2	int8u
47	FocusPosition2	int8u
48	FlashAction	int8u
50	FocusMode2	int8u
119	FlashAction2	int8u
120	FlashActionExternal	int8u
124	FlashActionExternal	int8u
130	FlashStatus	int8u
134	FlashStatus	int8u

Sony FaceInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
0	FacesDetected	int16s
1	Face1Position	int16u[4]
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
-----	-----	-----
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
-----	-----	-----
283	ImageCount	int32u
293	ShutterCount	int32u
330	ShutterCount	int32u

Sony MoreInfo0401 Tags

Index1	Tag Name	Writable
-----	-----	-----
1102	ShotNumberSincePowerUp	int32u

Sony CameraSettings Tags

Camera settings for the A200, A300, A350, A700, A850 and A900.

Index2	Tag Name	Writable
-----	-----	-----
0	ExposureTime	int16u
1	FNumber	int16u
2	HighSpeedSync	int16u
3	ExposureCompensationSet	int16u
4	DriveMode	int16u & 0xff
5	WhiteBalanceSetting	int16u
6	WhiteBalanceFineTune	int16u
7	ColorTemperatureSet	int16u
8	ColorCompensationFilterSet	int16u
12	ColorTemperatureCustom	int16u
13	ColorCompensationFilterCustom	int16u
15	WhiteBalance	int16u
16	FocusModeSetting	int16u
17	AFAreaMode	int16u
18	AFPointSetting	int16u
19	FlashMode	int16u
20	FlashExposureCompSet	int16u
21	MeteringMode	int16u
22	ISOSetting	int16u
24	DynamicRangeOptimizerMode	int16u
25	DynamicRangeOptimizerLevel	int16u
26	CreativeStyle	int16u
27	ColorSpace	int16u
28	Sharpness	int16u
29	Contrast	int16u
30	Saturation	int16u
31	ZoneMatchingValue	int16u
34	Brightness	int16u
35	FlashControl	int16u
40	PrioritySetupShutterRelease	int16u
41	AFIlluminator	int16u
42	AFWithShutter	int16u
43	LongExposureNoiseReduction	int16u
44	HighISONoiseReduction	int16u
45	ImageStyle	int16u
46	FocusModeSwitch	int16u
47	ShutterSpeedSetting	int16u
48	ApertureSetting	int16u
60	ExposureProgram	int16u
61	ImageStabilizationSetting	int16u
62	FlashAction	int16u
63	Rotation	int16u
64	AELock	int16u
76	FlashAction2	int16u
77	FocusMode	int16u
80	BatteryState	int16u
81	BatteryLevel	int16u
83	FocusStatus	int16u
84	SonyImageSize	int16u
85	AspectRatio	int16u
86	Quality	int16u
88	ExposureLevelIncrements	int16u
106	RedEyeReduction	int16u
154	FolderNumber	int16u & 0x3ff
155	ImageNumber	int16u & 0x3fff

Sony CameraSettings2 Tags

Camera settings for the A230, A290, A330, A380 and A390.

Index2	Tag Name	Writable
-----	-----	-----
0	ExposureTime	int16u
1	FNumber	int16u

2	HighSpeedSync	int16u
3	ExposureCompensationSet	int16u
4	WhiteBalanceSetting	int16u
5	WhiteBalanceFineTune	int16u
6	ColorTemperatureSet	int16u
7	ColorCompensationFilterSet	int16u
8	CustomWB_RGBLevels	int16u[3]
11	ColorTemperatureCustom	int16u
12	ColorCompensationFilterCustom	int16u
14	WhiteBalance	int16u
15	FocusModeSetting	int16u
16	AFAreaMode	int16u
17	AFPointSetting	int16u
18	FlashExposureCompSet	int16u
19	MeteringMode	int16u
20	ISOSetting	int16u
22	DynamicRangeOptimizerMode	int16u
23	DynamicRangeOptimizerLevel	int16u
24	CreativeStyle	int16u
25	Sharpness	int16u
26	Contrast	int16u
27	Saturation	int16u
31	FlashControl	int16u
37	LongExposureNoiseReduction	int16u
38	HighISONoiseReduction	int16u
39	ImageStyle	int16u
40	ShutterSpeedSetting	int16u
41	ApertureSetting	int16u
60	ExposureProgram	int16u
61	ImageStabilizationSetting	int16u
62	FlashAction	int16u
63	Rotation	int16u
64	AELock	int16u
76	FlashAction2	int16u
77	FocusMode	int16u
83	FocusStatus	int16u
84	SonyImageSize	int16u
85	AspectRatio	int16u
86	Quality	int16u
88	ExposureLevelIncrements	int16u
126	DriveMode	int16u & 0xff
127	FlashMode	int16u
131	ColorSpace	int16u

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
-----	-----	-----
0	ShutterSpeedSetting	int8u
1	ApertureSetting	int8u
2	ISOSetting	int8u
3	ExposureCompensationSet	int8u
4	DriveModeSetting	int8u
5	ExposureProgram	int8u
6	FocusModeSetting	int8u
7	MeteringMode	int8u
9	SonyImageSize	int8u
10	AspectRatio	int8u
11	Quality	int8u
12	DynamicRangeOptimizerSetting	int8u
13	DynamicRangeOptimizerLevel	int8u
14	ColorSpace	int8u
15	CreativeStyleSetting	int8u
16	ContrastSetting	int8s
17	SaturationSetting	int8s
18	SharpnessSetting	int8s
22	WhiteBalanceSetting	int8u

23	ColorTemperatureSetting	int8u
24	ColorCompensationFilterSet	int8s
25	CustomWB_RGBLevels	int16uRev[3]
32	FlashMode	int8u
33	FlashControl	int8u
35	FlashExposureCompSet	int8u
36	AFAreaMode	int8u
37	LongExposureNoiseReduction	int8u
38	HighISONoiseReduction	int8u
39	SmileShutterMode	int8u
40	RedEyeReduction	int8u
45	HDRSetting	int8u
46	HDRLevel	int8u
47	ViewingMode	int8u
48	FaceDetection	int8u
49	SmileShutter	int8u
50	SweepPanoramaSize	int8u
51	SweepPanoramaDirection	int8u
52	DriveMode	int8u
53	MultiFrameNoiseReduction	int8u
54	LiveViewAFSetting	int8u
56	PanoramaSize3D	int8u
131	AFButtonPressed	int8u
132	LiveViewMetering	int8u
133	ViewingMode2	int8u
134	AELock	int8u
135	FlashStatusBuilt-in	int8u
136	FlashStatusExternal	int8u
139	LiveViewFocusMode	int8u
153	LensMount	int8u
268	SequenceNumber	int8u
276	FolderNumber	int32u & 0xffc000
276.1	ImageNumber	int32u & 0x3fff
512	ShotNumberSincePowerUp2	int32u
643	AFButtonPressed	int8u
644	LiveViewMetering	int8u
645	ViewingMode2	int8u
646	AELock	int8u
647	FlashStatusBuilt-in	int8u
648	FlashStatusExternal	int8u
651	LiveViewFocusMode	int8u
780	SequenceNumber	int8u
788	ImageNumber	int16u & 0x3fff
790	FolderNumber	int16u & 0x3ff
1008	LensE-mountVersion	int16u
1011	LensFirmwareVersion	int16u
1015	LensType2	int16u
1024	ImageNumber	int16u & 0x3fff
1026	FolderNumber	int16u & 0x3ff

Sony CameraSettingsUnknown Tags

Index2	Tag Name	Writable
-----	-----	-----
	[no tags known]	

Sony ExtraInfo Tags

Extra hardware information for the A850 and A900.

Index1	Tag Name	Writable
-----	-----	-----
1	BatteryTemperature	int8u
2	BatteryUnknown?	no
8	BatteryVoltage?	no
10	ImageStabilization2?	int8u
12	BatteryLevel	int8u
26	ExtraInfoVersion	int8u[4]

Sony ExtraInfo2 Tags

Extra hardware information for the A230/290/330/380/390.

Index1	Tag Name	Writable
-----	-----	-----
4	BatteryLevel	int8u
18	ImageStabilization	int8u

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
-----	-----	-----
0	BatteryUnknown?	int16u
2	BatteryTemperature	int8u
4	BatteryLevel	int8u
6	BatteryVoltage1	int16u
8	BatteryVoltage2	int16u
17	ImageStabilization	int8u
20	BatteryState	int8u
	ExposureProgram	int8u
	ModeDialPosition	int8u
22	MemoryCardConfiguration	int8u & 0xc0
	CameraOrientation	int8u
24	CameraOrientation	int8u & 0x30

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
-----	-----	-----
1	PanoramaFullWidth	int32u
2	PanoramaFullHeight	int32u
3	PanoramaDirection	int32u
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
-----	-----	-----
1200	MeterInfo?	Sony MeterInfo
4392	ReleaseMode3	int8u
4396	ReleaseMode2	int8u
4404	SelfTimer	int8u
4408	FlashMode	int8u
4414	StopsAboveBaseISO	int16u
4416	BrightnessValue	int16u
4420	DynamicRangeOptimizer	int8u
4424	HDRSetting	int8u
4428	ExposureCompensation	int16s
4446	PictureProfile	int8u
4447	PictureProfile	int8u
4451	PictureEffect2	int8u
4464	Quality2	int8u
4468	MeteringMode	int8u
4469	ExposureProgram	int8u

4476 WB_RGBLevels int16u[3]

Sony MeterInfo Tags

Information possibly related to metering. Extracted only if the Unknown option is used.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	SequenceImageNumber	int32u
4	SequenceFileNumber	int32u
8	ReleaseMode2	int32u
438	SonyDateTime	undef[7]
804	DynamicRangeOptimizer	int8u
1204	MeterInfo?	Sony MeterInfo
4392	ReleaseMode3	int8u
4396	ReleaseMode2	int8u
4404	SelfTimer	int8u
4408	FlashMode	int8u
4414	StopsAboveBaseISO	int16u
4416	BrightnessValue	int16u
4420	DynamicRangeOptimizer	int8u
4424	HDRSetting	int8u
4428	ExposureCompensation	int16s
4450	PictureProfile	int8u
4451	PictureProfile	int8u
4455	PictureEffect2	int8u
4468	Quality2	int8u
4472	MeteringMode	int8u
4473	ExposureProgram	int8u
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
-----	-----	-----
0	SequenceImageNumber	int32u
4	SequenceFileNumber	int32u
8	ReleaseMode2	int32u
512	DigitalZoomRatio	int8u
528	SonyDateTime	undef[7]
768	DynamicRangeOptimizer	int8u
1168	MeterInfo?	Sony MeterInfo

4356	ReleaseMode3	int8u
4360	ReleaseMode2	int8u
4368	SelfTimer	int8u
4372	FlashMode	int8u
4378	StopsAboveBaseISO	int16u
4380	BrightnessValue	int16u
4384	DynamicRangeOptimizer	int8u
4388	HDRSetting	int8u
4392	ExposureCompensation	int16s
4414	PictureProfile	int8u
4415	PictureProfile	int8u
4419	PictureEffect2	int8u
4432	Quality2	int8u
4436	MeteringMode	int8u
4437	ExposureProgram	int8u
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
-----	-----	-----
0	SequenceImageNumber	int32u
4	SequenceFileNumber	int32u
8	ReleaseMode2	int32u
510	SonyDateTime	undef[7]
892	DynamicRangeOptimizer	int8u
1292	MeterInfo?	Sony MeterInfo
4480	ReleaseMode3	int8u
4484	ReleaseMode2	int8u
4492	SelfTimer	int8u
4496	FlashMode	int8u
4502	StopsAboveBaseISO	int16u
4504	BrightnessValue	int16u
4508	DynamicRangeOptimizer	int8u
4512	HDRSetting	int8u
4538	PictureProfile	int8u
4539	PictureProfile	int8u
4543	PictureEffect2	int8u
4560	MeteringMode	int8u
4561	ExposureProgram	int8u
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
-----	-----	-----
0	SequenceImageNumber	int32u
4	SequenceFileNumber	int32u
8	ReleaseMode2	int32u
540	DigitalZoomRatio	int8u
556	SonyDateTime	undef[7]
808	DynamicRangeOptimizer	int8u
1208	MeterInfo?	Sony MeterInfo
4444	ReleaseMode3	int8u
4448	ReleaseMode2	int8u
4456	SelfTimer	int8u
4460	FlashMode	int8u
4466	StopsAboveBaseISO	int16u
4468	BrightnessValue	int16u
4472	DynamicRangeOptimizer	int8u
4476	HDRSetting	int8u

4480	ExposureCompensation	int16s
4502	PictureProfile	int8u
4503	PictureProfile	int8u
4507	PictureEffect2	int8u
4520	Quality2	int8u
4524	MeteringMode	int8u
4525	ExposureProgram	int8u
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
6290	LensMount	int8u
6291	LensType2	int16u
6294	LensType	int16u
6296	DistortionCorrParamsPresent	int8u
6297	DistortionCorrParamsNumber	int8u
6444	AspectRatio	int8u
6792	AspectRatio	int8u

Sony Tag2010f Tags

Valid for DSC-RX100M2, DSC-QX10/QX100.

Index1	Tag Name	Writable
-----	-----	-----
4	ReleaseMode2	int32u
80	DynamicRangeOptimizer	int8u
480	MeterInfo?	Sony MeterInfo
4116	ReleaseMode3	int8u
4120	ReleaseMode2	int8u
4128	SelfTimer	int8u
4132	FlashMode	int8u
4138	StopsAboveBaseISO	int16u
4140	BrightnessValue	int16u
4144	DynamicRangeOptimizer	int8u
4148	HDRSetting	int8u
4152	ExposureCompensation	int16s
4174	PictureProfile	int8u
4175	PictureProfile	int8u
4179	PictureEffect2	int8u
4192	Quality2	int8u
4196	MeteringMode	int8u
4197	ExposureProgram	int8u
4204	WB_RGBLevels	int16u[3]
4404	FocalLength	int16u
4406	MinFocalLength	int16u
4408	MaxFocalLength	int16u
4412	SonyISO	int16u
6444	AspectRatio	int8u

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
-----	-----	-----
4	ReleaseMode2	int32u
80	DynamicRangeOptimizer	int8u
524	ReleaseMode3	int8u
528	ReleaseMode2	int8u
536	SelfTimer	int8u
540	FlashMode	int8u
546	StopsAboveBaseISO	int16u
548	BrightnessValue	int16u

552	DynamicRangeOptimizer	int8u
556	HDRSetting	int8u
560	ExposureCompensation	int16s
582	PictureProfile	int8u
583	PictureProfile	int8u
587	PictureEffect2	int8u
600	Quality2	int8u
604	MeteringMode	int8u
605	ExposureProgram	int8u
612	WB_RGBLevels	int16u[3]
812	FocalLength	int16u
814	MinFocalLength	int16u
816	MaxFocalLength	int16u
836	SonyISO	int16u
904	MeterInfo?	Sony MeterInfo
6300	DistortionCorrParams	int16s[16]
6333	LensFormat	int8u
6334	LensMount	int8u
6335	LensType2	int16u
6338	LensType	int16u
6340	DistortionCorrParamsPresent	int8u
6341	DistortionCorrParamsNumber	int8u
6488	AspectRatio	int8u

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
-----	-----	-----
4	ReleaseMode2	int32u
80	DynamicRangeOptimizer	int8u
524	ReleaseMode3	int8u
528	ReleaseMode2	int8u
536	SelfTimer	int8u
540	FlashMode	int8u
546	StopsAboveBaseISO	int16u
548	BrightnessValue	int16u
552	DynamicRangeOptimizer	int8u
556	HDRSetting	int8u
560	ExposureCompensation	int16s
582	PictureProfile	int8u
583	PictureProfile	int8u
587	PictureEffect2	int8u
600	Quality2	int8u
604	MeteringMode	int8u
605	ExposureProgram	int8u
612	WB_RGBLevels	int16u[3]
812	FocalLength	int16u
814	MinFocalLength	int16u
816	MaxFocalLength	int16u
838	SonyISO	int16u
904	MeterInfo?	Sony MeterInfo
920	MeterInfo?	Sony MeterInfo
6348	DistortionCorrParams	int16s[16]
6381	LensFormat	int8u
6382	LensMount	int8u
6383	LensType2	int16u
6386	LensType	int16u
6388	DistortionCorrParamsPresent	int8u
6389	DistortionCorrParamsNumber	int8u
6444	AspectRatio	int8u

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
-----	-----	-----
4	ReleaseMode2	int32u
78	DynamicRangeOptimizer	int8u
516	ReleaseMode3	int8u
520	ReleaseMode2	int8u
528	SelfTimer	int8u
529	FlashMode	int8u
535	StopsAboveBaseISO	int16u
537	BrightnessValue	int16u
539	DynamicRangeOptimizer	int8u
543	HDRSetting	int8u
547	ExposureCompensation	int16s
567	PictureProfile	int8u
568	PictureProfile	int8u
572	PictureEffect2	int8u
583	Quality2	int8u
587	MeteringMode	int8u
588	ExposureProgram	int8u
594	WB_RGBLevels	int16u[3]
778	FocalLength	int16u
780	MinFocalLength	int16u
782	MaxFocalLength	int16u
800	SonyISO	int16u
877	MeterInfo?	Sony MeterInfo9
6096	DistortionCorrParams	int16s[16]
6129	LensFormat	int8u
6130	LensMount	int8u
6131	LensType2	int16u
6134	LensType	int16u
6136	DistortionCorrParamsPresent	int8u
6137	DistortionCorrParamsNumber	int8u
6284	AspectRatio	int8u

Sony MeterInfo9 Tags

Information possibly related to metering. Extracted only if the Unknown option is used.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
0	HiddenDataOffset	int32u
1	HiddenDataLength	int32u

Sony ShotInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
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	Sony FaceInfo1
94	FaceInfo2	Sony FaceInfo2

Sony FaceInfo1 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	Face1Position	int16u[4]
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
-----	-----	-----
0	Face1Position	int16u[4]
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
-----	-----	-----
2	FacesDetected	no
189	FaceDetection	no

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
--------	----------	----------

-----	-----	-----
0	SonyMaxAperture	int8u
1	SonyMinAperture	int8u
32	Shutter	int16u[3]
49	FlashStatus	int8u
50	ShutterCount	int32u
58	SonyExposureTime	int16u
60	SonyFNumber	int16u
63	ReleaseMode2	int8u
76	ShutterCount2	int32u
81	SonyDateTime2	undef[6]
103	ReleaseMode2	int8u
124	InternalSerialNumber	int8u[4] ⁷ / ₂
240	InternalSerialNumber	int8u[5]
261	LensMount	int8u
262	LensFormat	int8u
263	LensType2	int16u
265	LensType	int16u
267	DistortionCorrParamsPresent	int8u
276	APS-CSizeCapture	int8u
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
-----	-----	-----
0	SonyMaxAperture	int8u
1	SonyMinAperture	int8u
38	Shutter	int16u[3]
57	FlashStatus	int8u
58	ShutterCount	int32u
70	SonyExposureTime	int16u
72	SonyFNumber	int16u
75	ReleaseMode2	int8u
80	ShutterCount2	int32u
82	ShutterCount2	int32u
88	ShutterCount2	int32u
97	SonyTimeMinSec	no
107	ReleaseMode2	int8u
109	ReleaseMode2	int8u
115	ReleaseMode2	int8u
136	InternalSerialNumber	int8u[6] ⁷ / ₂
261	LensMount	int8u
262	LensFormat	int8u
263	LensType2	int16u
265	LensType	int16u
267	DistortionCorrParamsPresent	int8u
276	APS-CSizeCapture	int8u
278	LensSpecFeatures	undef[2]
415	ShutterCount3	int32u
459	ShutterCount3	int32u
461	ShutterCount3	int32u
491	APS-CSizeCapture	int8u
493	LensSpecFeatures	undef[2]
494	APS-CSizeCapture	int8u
496	LensSpecFeatures	undef[2]
538	APS-CSizeCapture	int8u
540	LensSpecFeatures	undef[2]
	APS-CSizeCapture	int8u
542	LensSpecFeatures	undef[2]

Sony Tag9050c Tags

Valid from July 2020 for ILCE-1/7SM3, ILME-FX3.

Index1	Tag Name	Writable
-----	-----	-----
38	Shutter	int16u[3]
57	FlashStatus	int8u
58	ShutterCount	int32u 7
70	SonyExposureTime	int16u
72	SonyFNumber	int16u
75	ReleaseMode2	int8u
80	ShutterCount2	int32u
102	SonyExposureTime	int16u
104	SonyFNumber	int16u
107	ReleaseMode2	int8u
136	InternalSerialNumber	int8u[6] 7
138	InternalSerialNumber	int8u[6] 7

Sony Tag9050d Tags

Valid for ILCE-6700/7CM2/7CR/ZV-E1.

Index1	Tag Name	Writable
-----	-----	-----
10	ShutterCount	int32u
26	SonyExposureTime	int16u
28	SonyFNumber	int16u
31	ReleaseMode2	int8u
56	InternalSerialNumber	int8u[6] 7

Sony Tag9400a Tags

Valid for many DSC, NEX and SLT models

Index1	Tag Name	Writable
-----	-----	-----
8	SequenceImageNumber	int32u
12	SequenceFileNumber	int32u
16	ReleaseMode2	int8u
18	DigitalZoom	int8u
26	ShotNumberSincePowerUp	int32u
34	SequenceLength	int8u
40	CameraOrientation	int8u
41	Quality2	int8u
68	SonyImageHeight	int16u 7
82	ModelReleaseYear	int8u 7

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
-----	-----	-----
8	SequenceImageNumber	int32u
12	SequenceFileNumber	int32u
16	ReleaseMode2	int8u
18	DigitalZoom	int8u
22	ShotNumberSincePowerUp	int32u
30	SequenceLength	int8u
36	CameraOrientation	int8u
37	Quality2	int8u
63	SonyImageHeight	int16u 7
70	ModelReleaseYear	int8u 7

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/WX350/WX500,

ILCE-1/7/7C/7R/7S/7M2/7M3/7RM2/7RM3/7RM4/7SM2/7SM3/9/9M2/5000/
5100/6000/6100/6300/6400/6500/6600/QX1, ILCA-68/77M2/99M2.

Index1	Tag Name	Writable
-----	-----	-----
9	ReleaseMode2	int8u
10	ShotNumberSincePowerUp	int32u
18	SequenceImageNumber	int32u
22	SequenceLength	int8u
26	SequenceFileNumber	int32u
30	SequenceLength	int8u
41	CameraOrientation	int8u
42	Quality2	int8u
83	ModelReleaseYear	int8u
307	ShutterType	int8u
313	ShutterType	int8u
319	ShutterType	int8u

Sony Tag9401 Tags

Index1	Tag Name	Writable
-----	-----	-----
994	ISOInfo	Sony ISOInfo
1012	ISOInfo	Sony ISOInfo
1102	ISOInfo	Sony ISOInfo
1176	ISOInfo	Sony ISOInfo
1181	ISOInfo	Sony ISOInfo
1182	ISOInfo	Sony ISOInfo
1185	ISOInfo	Sony ISOInfo
1186	ISOInfo	Sony ISOInfo
1210	ISOInfo	Sony ISOInfo
1437	ISOInfo	Sony ISOInfo
1588	ISOInfo	Sony ISOInfo
1590	ISOInfo	Sony ISOInfo
1612	ISOInfo	Sony ISOInfo
1619	ISOInfo	Sony ISOInfo
1656	ISOInfo	Sony ISOInfo
1720	ISOInfo	Sony ISOInfo
1758	ISOInfo	Sony ISOInfo
1767	ISOInfo	Sony ISOInfo

Sony ISOInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ISOSetting	int8u
2	ISOAutoMin	int8u
4	ISOAutoMax	int8u

Sony Tag9402 Tags

Index1	Tag Name	Writable
-----	-----	-----
4	AmbientTemperature	int8s
22	FocusMode	int8u & 0x7f
23	AFAreaMode	int8u
45	FocusPosition2	int8u

Sony Tag9403 Tags

Index1	Tag Name	Writable
-----	-----	-----
5	CameraTemperature	int8s

Sony Tag9404a Tags

Index1	Tag Name	Writable
-----	-----	-----
11	ExposureProgram	int8u
13	IntelligentAuto	int8u

25	LensZoomPosition	int16u
----	------------------	--------

Sony Tag9404b Tags

Index1	Tag Name	Writable
-----	-----	-----
12	ExposureProgram	int8u
14	IntelligentAuto	int8u
30	LensZoomPosition	int16u
32	FocusPosition2	int8u

Sony Tag9404c Tags

Index1	Tag Name	Writable
-----	-----	-----
11	ExposureProgram	int8u
13	IntelligentAuto	int8u

Sony Tag9405a Tags

Valid for SLT, NEX, ILCE-3000/3500 and several DSC models.

Index1	Tag Name	Writable
-----	-----	-----
1536	DistortionCorrParamsPresent	int8u
1537	DistortionCorrection	int8u
1539	LensFormat	int8u
1540	LensMount	int8u
1541	LensType2	int16u
1544	LensType	int16u
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
-----	-----	-----
4	SonyISO	int16u
6	BaseISO	int16u
10	StopsAboveBaseISO	int16u
14	SonyExposureTime2	int16u
16	ExposureTime	rational32u
20	SonyFNumber	int16u
22	SonyMaxApertureValue	int16u
36	SequenceImageNumber	int32u
52	ReleaseMode2	int8u
62	SonyImageWidthMax	int16u
64	SonyImageHeightMax	int16u
66	HighISONoiseReduction	int8u
68	LongExposureNoiseReduction	int8u
70	PictureEffect2	int8u
72	ExposureProgram	int8u
74	CreativeStyle	int8u
82	Sharpness	int8s
90	DistortionCorrParamsPresent	int8u
91	DistortionCorrection	int8u
93	LensFormat	int8u
94	LensMount	int8u
96	LensType2	int16u
98	LensType	int16u
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
-----	-----	-----
5	BatteryTemperature	int8u
6	BatteryLevelGrip1	int8u
7	BatteryLevel	int8u
8	BatteryLevelGrip2	int8u

Sony Tag9406b Tags

Index1	Tag Name	Writable
-----	-----	-----
5	BatteryLevel	int8u
7	BatteryLevel2	int8u

Sony Tag940a Tags

These tags are currently extracted for SLT models only.

Index1	Tag Name	Writable
-----	-----	-----
4	AFPointsSelected	int32u

Sony Tag940c Tags

E-mount cameras only.

Index1	Tag Name	Writable
-----	-----	-----
8	LensMount2	int8u
9	LensType3	int16u
11	CameraE-mountVersion	int16u
13	LensE-mountVersion	int16u
20	LensFirmwareVersion	int16u 7

Sony AFInfo Tags

These tags are currently extracted for SLT models only.

Index1	Tag Name	Writable
-----	-----	-----
2	AFType	int8u
4	AFStatusActiveSensor	int16s
5	FocusMode	int8u
7	AFPoint	int8u
8	AFPointInFocus	int8u
9	AFPointAtShutterRelease	int8u
10	AFAreaMode	int8u
11	FocusMode	int8u
16	AFPointsUsed	int8u[10]
17	AFStatus15	Sony AFStatus15
	AFStatus19	Sony AFStatus19
55	AFPoint	int8u
56	AFPointInFocus	int8u
57	AFPointAtShutterRelease	int8u
58	AFAreaMode	int8u
59	AFStatusActiveSensor	int16s
67	ExposureProgram	int8u
80	AFMicroAdj	int8s

125	AFStatus79	Sony AFStatus79
366	AFPointsUsed	int32u
381	AFMicroAdj	int8s
382	ExposureProgram	int8u

Sony AFStatus19 Tags

AF Status information for models with 19-point AF.

Index1	Tag Name	Writable
-----	-----	-----
0	AFStatusUpperFarLeft	int16s
2	AFStatusUpper-leftHorizontal	int16s
4	AFStatusFarLeftHorizontal	int16s
6	AFStatusLeftHorizontal	int16s
8	AFStatusLowerFarLeft	int16s
10	AFStatusLower-leftHorizontal	int16s
12	AFStatusUpper-leftVertical	int16s
14	AFStatusLeftVertical	int16s
16	AFStatusLower-leftVertical	int16s
18	AFStatusFarLeftVertical	int16s
20	AFStatusTopHorizontal	int16s
22	AFStatusNearRight	int16s
24	AFStatusCenterHorizontal	int16s
26	AFStatusNearLeft	int16s
28	AFStatusBottomHorizontal	int16s
30	AFStatusTopVertical	int16s
32	AFStatusUpper-middle	int16s
34	AFStatusCenterVertical	int16s
36	AFStatusLower-middle	int16s
38	AFStatusBottomVertical	int16s
40	AFStatusUpperFarRight	int16s
42	AFStatusUpper-rightHorizontal	int16s
44	AFStatusFarRightHorizontal	int16s
46	AFStatusRightHorizontal	int16s
48	AFStatusLowerFarRight	int16s
50	AFStatusLower-rightHorizontal	int16s
52	AFStatusFarRightVertical	int16s
54	AFStatusUpper-rightVertical	int16s
56	AFStatusRightVertical	int16s
58	AFStatusLower-rightVertical	int16s

Sony AFStatus79 Tags

AF Status information for models with 79-point AF.

Index1	Tag Name	Writable
-----	-----	-----
0	AFStatus_00_B4	int16s
2	AFStatus_01_C4	int16s
4	AFStatus_02_D4	int16s
6	AFStatus_03_E4	int16s
8	AFStatus_04_F4	int16s
10	AFStatus_05_G4	int16s
12	AFStatus_06_H4	int16s
14	AFStatus_07_B3	int16s
16	AFStatus_08_C3	int16s
18	AFStatus_09_D3	int16s
20	AFStatus_10_E3	int16s
22	AFStatus_11_F3	int16s
24	AFStatus_12_G3	int16s
26	AFStatus_13_H3	int16s
28	AFStatus_14_B2	int16s
30	AFStatus_15_C2	int16s
32	AFStatus_16_D2	int16s
34	AFStatus_17_E2	int16s
36	AFStatus_18_F2	int16s
38	AFStatus_19_G2	int16s
40	AFStatus_20_H2	int16s
42	AFStatus_21_C1	int16s

44	AFStatus_22_D1	int16s
46	AFStatus_23_E1	int16s
48	AFStatus_24_F1	int16s
50	AFStatus_25_G1	int16s
52	AFStatus_26_A7_Vertical	int16s
54	AFStatus_27_A6_Vertical	int16s
56	AFStatus_28_A5_Vertical	int16s
58	AFStatus_29_C7_Vertical	int16s
60	AFStatus_30_C6_Vertical	int16s
62	AFStatus_31_C5_Vertical	int16s
64	AFStatus_32_E7_Vertical	int16s
66	AFStatus_33_E6_Center_Vertical	int16s
68	AFStatus_34_E5_Vertical	int16s
70	AFStatus_35_G7_Vertical	int16s
72	AFStatus_36_G6_Vertical	int16s
74	AFStatus_37_G5_Vertical	int16s
76	AFStatus_38_I7_Vertical	int16s
78	AFStatus_39_I6_Vertical	int16s
80	AFStatus_40_I5_Vertical	int16s
82	AFStatus_41_A7	int16s
84	AFStatus_42_B7	int16s
86	AFStatus_43_C7	int16s
88	AFStatus_44_D7	int16s
90	AFStatus_45_E7	int16s
92	AFStatus_46_F7	int16s
94	AFStatus_47_G7	int16s
96	AFStatus_48_H7	int16s
98	AFStatus_49_I7	int16s
100	AFStatus_50_A6	int16s
102	AFStatus_51_B6	int16s
104	AFStatus_52_C6	int16s
106	AFStatus_53_D6	int16s
108	AFStatus_54_E6_Center	int16s
110	AFStatus_55_F6	int16s
112	AFStatus_56_G6	int16s
114	AFStatus_57_H6	int16s
116	AFStatus_58_I6	int16s
118	AFStatus_59_A5	int16s
120	AFStatus_60_B5	int16s
122	AFStatus_61_C5	int16s
124	AFStatus_62_D5	int16s
126	AFStatus_63_E5	int16s
128	AFStatus_64_F5	int16s
130	AFStatus_65_G5	int16s
132	AFStatus_66_H5	int16s
134	AFStatus_67_I5	int16s
136	AFStatus_68_C11	int16s
138	AFStatus_69_D11	int16s
140	AFStatus_70_E11	int16s
142	AFStatus_71_F11	int16s
144	AFStatus_72_G11	int16s
146	AFStatus_73_B10	int16s
148	AFStatus_74_C10	int16s
150	AFStatus_75_D10	int16s
152	AFStatus_76_E10	int16s
154	AFStatus_77_F10	int16s
156	AFStatus_78_G10	int16s
158	AFStatus_79_H10	int16s
160	AFStatus_80_B9	int16s
162	AFStatus_81_C9	int16s
164	AFStatus_82_D9	int16s
166	AFStatus_83_E9	int16s
168	AFStatus_84_F9	int16s
170	AFStatus_85_G9	int16s
172	AFStatus_86_H9	int16s
174	AFStatus_87_B8	int16s
176	AFStatus_88_C8	int16s
178	AFStatus_89_D8	int16s
180	AFStatus_90_E8	int16s
182	AFStatus_91_F8	int16s

184	AFStatus_92_G8	int16s
186	AFStatus_93_H8	int16s
188	AFStatus_94_E6_Center_F2-8	int16s

Sony Tag940e Tags

E-mount models.

Index1	Tag Name	Writable
6662	TiffMeteringImageWidth	no
6663	TiffMeteringImageHeight	no
6664	TiffMeteringImage	no

Sony Tag9416 Tags

Valid for the ILCE-1/6700/7CM2/7CR/7M4/7RM5/7SM3/9M3, ILME-FX3/FX30, ZV-E1/E10M2.

Index1	Tag Name	Writable
0	Tag9416_0000	no
4	SonyISO	no
6	StopsAboveBaseISO	no
10	SonyExposureTime2	no
12	ExposureTime	no
16	SonyFNumber2	no
18	SonyMaxApertureValue	no
29	SequenceImageNumber	no
43	ReleaseMode2	no
53	ExposureProgram	no
55	CreativeStyle	no
72	LensMount	no
73	LensFormat	no
74	LensMount	no
75	LensType2	no
77	LensType	no
79	DistortionCorrParams	no
112	PictureProfile	no
113	FocalLength	no
115	MinFocalLength	no
117	MaxFocalLength	no
2191	VignettingCorrParams	no
2193	VignettingCorrParams	no
2205	VignettingCorrParams	no
2229	APS-CSizeCapture	no
2231	APS-CSizeCapture	no
2277	APS-CSizeCapture	no
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
'BC: '	Barcode	no
'BarCode: '	Barcode	no
'Capt: '	SensorTemperature	no
'FWVer: '	FirmwareVersion	no
'IFD'	PIC_IFD	Sony
'Temp: '	CameraTemperature	no
'Temp:C1bt: '	BoardTemperature	no
'TextInfo1'	TextInfo1	no
'TextInfo2'	TextInfo2	no
'VR Enable C: '	VibrationReduction	no

'barcode:'	Barcode	no
------------	---------	----

Sony Ericsson Tags

Maker notes found in images from some Sony Ericsson phones.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0201	PreviewImageStart	int32u*
0x0202	PreviewImageLength	int32u*
0x2000	MakerNoteVersion	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
-----	-----	-----
0x0000	SRF2Key	no
0x0001	DataKey	no

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
-----	-----	-----
0x7200	SR2SubIFDOffset	no
0x7201	SR2SubIFDLength	no
0x7221	SR2SubIFDKey	no
0x7240	IDC_IFD	SonyIDC
0x7241	IDC2_IFD	SonyIDC
0x7250	MRWInfo	MinoltaRaw

Sony SRF2 Tags

These tags are found in the SRF2 through SRF5 IFD's.

Tag ID	Tag Name	Writable
-----	-----	-----
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	WBGreencldy	no
0x00c5	WBBlueCloudy	no
0x00c6	WBRedFluorescent	no
0x00c7	WBGreencldy	no
0x00c8	WBBlueFluorescent	no
0x00c9	WBRedTungsten	no
0x00ca	WBGreencldy	no
0x00cb	WBBlueTungsten	no
0x00cc	WBRedFlash	no
0x00cd	WBGreencldy	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
-----	-----	-----
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	Sony SR2DataIFD
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
-----	-----	-----
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
-----	-----	-----
8	JpgFromRawStart	no
12	JpgFromRawLength	no
22	SonyImageWidth	no
24	SonyImageHeight	no
27	Orientation	no
29	ImageQuality	no
52	Comment	no
76	DateTimeOriginal	no
84	ModifyDate	no
102	ExposureTime	no

106	FNumber	no
108	ExposureCompensation	no
112	FocalLength	no
118	Flash	no

Sony rtmd Tags

These tags are extracted from the 'rtmd' timed metadata of MP4 videos from some models when the ExtractEmbedded option is used.

Tag ID	Tag Name	Writable
-----	-----	-----
0x8000	FNumber	no
0x8109	ExposureTime	no
0x810a	MasterGainAdjustment	no
0x810b	ISO	no
0x810c	ElectricalExtenderMagnification	no
0x8500	GPSVersionID	no
0x8501	GPSLatitudeRef	no
0x8502	GPSLatitude	no
0x8503	GPSLongitudeRef	no
0x8504	GPSLongitude	no
0x8507	GPSTimeStamp	no
0x8509	GPSStatus	no
0x850a	GPSMeasureMode	no
0x8512	GPSMapDatum	no
0x851d	GPSDateStamp	no
0xe303	WhiteBalance	no
0xe304	DateTime	no
0xe43b	PitchRollYaw	no
0xe44b	Accelerometer	no

SonyIDC Tags

Tags written by the Sony Image Data Converter utility in ARW images.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0201	IDCPreviewStart	int32u*
0x0202	IDCPreviewLength	int32u*
0x8000	IDCCreativeStyle	int32u
0x8001	CreativeStyleWasChanged	int32u
0x8002	PresetWhiteBalance	int32u
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
0x8021	GrayPoint	int16u[4]
0x8022	D-RangeOptimizerMode	int16u
0x8023	D-RangeOptimizerValue	int32s
0x8024	D-RangeOptimizerHighlight	int32s
0x8026	HighlightColorDistortReduct	int16u
0x8027	NoiseReductionValue	int32s
0x8028	EdgeNoiseReduction	int32s
0x8029	ColorNoiseReduction	int32s
0x802d	D-RangeOptimizerShadow	int32s
0x8030	PeripheralIllumCentralRadius	int32s
0x8031	PeripheralIllumCentralValue	int32s
0x8032	PeripheralIllumPeriphValue	int32s
0x8040	DistortionCompensation	int32s
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
0x900e	InclinationCorrection	int32u
0x900f	InclinationAngle	int32s
0x9010	Cropping	int32u
0x9011	CropArea	int32u[4]
0x9012	PreviewImageSize	int32u[2]
0x9013	PxShiftPeriphEdgeNR	int32s
0x9014	PxShiftPeriphEdgeNRValue	int32s
0x9017	WhitesAdj	int32s
0x9018	BlacksAdj	int32s
0x9019	HighlightsAdj	int32s
0x901a	ShadowsAdj	int32s
0xd000	CurrentVersion	int32u
0xd001	VersionIFD	SonyIDC
0xd100	VersionCreateDate	string
0xd101	VersionModifyDate	string

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
-----	-----	-----
0x0e00	PrintIM	PrintIM

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
-----	-----	-----
'CRW '	AdobeCRW	CanonRaw
'Koda'	AdobeKoda	Kodak IFD
'Leaf'	AdobeLeaf	Leaf SubIFD
'MRW '	AdobeMRW	MinoltaRaw
'MakN'	MakerNoteApple	Apple
	MakerNoteNikon	Nikon
	MakerNoteCanon	Canon
	MakerNoteCasio	Casio
	MakerNoteCasio2	Casio Type2
	MakerNoteDJIInfo	DJI Info
	MakerNoteDJI	DJI
	MakerNoteFLIR	FLIR
	MakerNoteFujiFilm	FujiFilm
	MakerNoteGE	GE
	MakerNoteGE2	FujiFilm

MakerNoteHasselblad	Unknown
MakerNoteHP	HP
MakerNoteHP2	HP Type2
MakerNoteHP4	HP Type4
MakerNoteHP6	HP Type6
MakerNoteISL	Unknown
MakerNoteJVC	JVC
MakerNoteJVCText	JVC Text
MakerNoteKodak1a	Kodak
MakerNoteKodak1b	Kodak
MakerNoteKodak2	Kodak Type2
MakerNoteKodak3	Kodak Type3
MakerNoteKodak4	Kodak Type4
MakerNoteKodak5	Kodak Type5
MakerNoteKodak6a	Kodak Type6
MakerNoteKodak6b	Kodak Type6
MakerNoteKodak7	Kodak Type7
MakerNoteKodak8a	Kodak Type8
MakerNoteKodak8b	Kodak Type8
MakerNoteKodak8c	Kodak Type8
MakerNoteKodak9	Kodak Type9
MakerNoteKodak10	Kodak Type10
MakerNoteKodak11	Kodak Type11
MakerNoteKodak12	Kodak Type11
MakerNoteKodakUnknown	Kodak Unknown
MakerNoteKyocera	Unknown
MakerNoteMinolta	Minolta
MakerNoteMinolta2	Olympus
MakerNoteMinolta3	undef
MakerNoteMotorola	Motorola
MakerNoteNikon2	Nikon Type2
MakerNoteNikon3	Nikon
MakerNoteNintendo	Nintendo
MakerNoteOlympus	Olympus
MakerNoteOlympus2	Olympus
MakerNoteOlympus3	Olympus
MakerNoteLeica	Panasonic
MakerNoteLeica2	Panasonic Leica2
MakerNoteLeica3	Panasonic Leica3
MakerNoteLeica4	Panasonic Leica4
MakerNoteLeica5	Panasonic Leica5
MakerNoteLeica6	Panasonic Leica6
MakerNoteLeica7	Panasonic Leica6
MakerNoteLeica8	Panasonic Leica5
MakerNoteLeica9	Panasonic Leica9
MakerNoteLeica10	Panasonic
MakerNotePanasonic	Panasonic
MakerNotePanasonic2	Panasonic Type2
MakerNotePanasonic3	Panasonic
MakerNotePentax	Pentax
MakerNotePentax2	Pentax Type2
MakerNotePentax3	Casio Type2
MakerNotePentax4	Pentax Type4
MakerNotePentax5	Pentax
MakerNotePentax6	Pentax S1
MakerNotePhaseOne	PhaseOne
MakerNoteReconyx	Reconyx
MakerNoteReconyx2	Reconyx Type2
MakerNoteReconyx3	Reconyx Type3
MakerNoteRicohPentax	Pentax
MakerNoteRicoh	Ricoh
MakerNoteRicoh2	Ricoh Type2
MakerNoteRicohText	Ricoh Text
MakerNoteSamsung1a	undef
MakerNoteSamsung1b	Samsung
MakerNoteSamsung2	Samsung Type2
MakerNoteSanyo	Sanyo
MakerNoteSanyoC4	Sanyo
MakerNoteSanyoPatch	Sanyo
MakerNoteSigma	Sigma

	MakerNoteSony	Sony
	MakerNoteSony2	Olympus
	MakerNoteSony3	Olympus
	MakerNoteSony4	Sony PIC
	MakerNoteSony5	Sony
	MakerNoteSonyEricsson	Sony Ericsson
	MakerNoteSonySRF	Sony SRF
	MakerNoteUnknownText	undef
	MakerNoteUnknownBinary	undef
	MakerNoteUnknown	Unknown
'Pano'	AdobePano	PanasonicRaw
'RAF'	AdobeRAF	FujiFilm RAF
'SR2'	AdobeSR2	Sony SR2Private

DNG OriginalRaw Tags

This table defines tags extracted from the DNG OriginalRawFileData information.

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	SeqID	no
1	SeqType	no
2	SeqFrameInfo	no
3	SeqIndex	no
7	SeqCount	no
11	SeqFinal	no

DNG ProfileDynamicRange Tags

Index1	Tag Name	Writable
-----	-----	-----
0	PDRVersion	no
2	DynamicRange	no
4	HintMaxOutputValue	no

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
-----	-----
ON1_SettingsData	PLIST
ON1_SettingsMetadataCreated	no
ON1_SettingsMetadataModified	no
ON1_SettingsMetadataName	no
ON1_SettingsMetadataPluginID	no
ON1_SettingsMetadataTimestamp	no
ON1_SettingsMetadataUsage	no
ON1_SettingsMetadataVisibleToUser	no

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
-----	-----
AuthorIdentifier	no
AuthorName	no
DocumentID	no
Format	no
InstanceID	no
Relationship	no
ThumbnailHash	no+
ThumbnailURL	no
Title	no

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
-----	-----	-----
'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
'cast//name'	Cast	no+
'codirectors//name'	Codirectors	no+
'directors//name'	Directors	no+
'producers//name'	Producers	no+
'screenwriters//name'	Screenwriters	no+
'studio//name'	Studio	no+

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 <https://exiftool.org/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
-----	-----	-----
0x0000	NullRecord	undef
0x0001	FreeBytes	undef
0x0032	CanonColorInfo1	no
0x0805	CanonFileDescription	string[32]
	UserComment	string[256]
0x080a	CanonRawMakeModel	CanonRaw MakeModel
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
0x1010	ShutterReleaseMethod	int16u
0x1011	ShutterReleaseTiming	int16u

0x1016	ReleaseSetting	int16u
0x101c	BaseISO	int16u
0x1028	CanonFlashInfo?	int16u[4]
0x1029	CanonFocalLength	Canon FocalLength
0x102a	CanonShotInfo	Canon ShotInfo
0x102c	CanonColorInfo2	no
0x102d	CanonCameraSettings	Canon CameraSettings
0x1030	WhiteSample	CanonRaw WhiteSample
0x1031	SensorInfo	Canon SensorInfo
0x1033	CustomFunctions10D	CanonCustom Functions10D
	CustomFunctionsD30	CanonCustom FunctionsD30
	CustomFunctionsD60	CanonCustom FunctionsD30
	CustomFunctionsUnknown	CanonCustom FuncsUnknown
0x1038	CanonAFInfo	Canon AFInfo
0x1093	CanonFileInfo	Canon FileInfo
0x10a9	ColorBalance	Canon ColorBalance
0x10ae	ColorTemperature	int16u
0x10b4	ColorSpace	int16u
0x10b5	RawJpgInfo	CanonRaw RawJpgInfo
0x1803	ImageFormat	CanonRaw ImageFormat
0x1804	RecordID	int32u
0x1806	SelfTimerTime	int32u
0x1807	TargetDistanceSetting	float
0x180b	SerialNumber	int32u
	UnknownNumber?	yes
0x180e	TimeStamp	CanonRaw TimeStamp
0x1810	ImageInfo	CanonRaw ImageInfo
0x1813	FlashInfo	CanonRaw FlashInfo
0x1814	MeasuredEV	float
0x1817	FileNumber	int32u
0x1818	ExposureInfo	CanonRaw ExposureInfo
0x1834	CanonModelID	int32u
0x1835	DecoderTable	CanonRaw DecoderTable
0x183b	SerialNumberFormat	int32u
0x2005	RawData	no
0x2007	JpgFromRaw	resize^
0x2008	ThumbnailImage	resize^
0x2804	ImageDescription	CanonRaw
0x2807	CameraObject	CanonRaw
0x3002	ShootingRecord	CanonRaw
0x3003	MeasuredInfo	CanonRaw
0x3004	CameraSpecification	CanonRaw
0x300a	ImageProps	CanonRaw
0x300b	ExifInformation	CanonRaw

CanonRaw MakeModel Tags

Index1	Tag Name	Writable
-----	-----	-----
0	Make	string[6]
6	Model	string

CanonRaw WhiteSample Tags

Index2	Tag Name	Writable
-----	-----	-----
1	WhiteSampleWidth	no
2	WhiteSampleHeight	no
3	WhiteSampleLeftBorder	no
4	WhiteSampleTopBorder	no
5	WhiteSampleBits	no

CanonRaw RawJpgInfo Tags

Index2	Tag Name	Writable
-----	-----	-----
1	RawJpgQuality	int16u
2	RawJpgSize	int16u
3	RawJpgWidth	int16u
4	RawJpgHeight	int16u

CanonRaw ImageFormat Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FileFormat	int32u
1	TargetCompressionRatio	float

CanonRaw TimeStamp Tags

Index4	Tag Name	Writable
-----	-----	-----
0	DateTimeOriginal	int32u
1	TimeZoneCode	int32s
2	TimeZoneInfo	int32u

CanonRaw ImageInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	FlashGuideNumber	float
1	FlashThreshold	float

CanonRaw ExposureInfo Tags

Index4	Tag Name	Writable
-----	-----	-----
0	ExposureCompensation	float
1	ShutterSpeedValue	float
2	ApertureValue	float

CanonRaw DecoderTable Tags

Index4	Tag Name	Writable
-----	-----	-----
0	DecoderTableNumber	no
2	CompressedDataOffset	no
3	CompressedDataLength	no

KyoceraRaw Tags

Tags for Kyocera Contax N Digital RAW images.

Index1	Tag Name	Writable
-----	-----	-----
1	FirmwareVersion	no
12	Model	no
25	Make	no
33	DateTimeOriginal	no
52	ISO	no
56	ExposureTime	no
60	WB_RGGBLevels	no
88	FNumber	no
104	MaxAperture	no
112	FocalLength	no
124	Lens	no

MinoltaRaw Tags

These tags are used in Minolta RAW format (MRW) images.

Tag ID	Tag Name	Writable
-----	-----	-----
"\0PRD"	MinoltaPRD	MinoltaRaw PRD
"\0RIF"	MinoltaRIF	MinoltaRaw RIF
"\0TTW"	MinoltaTTW	EXIF
"\0WBG"	MinoltaWBG	MinoltaRaw WBG

MinoltaRaw PRD Tags

Index1	Tag Name	Writable
-----	-----	-----
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
23	BayerPattern	int8u

MinoltaRaw RIF Tags

Index1	Tag Name	Writable
-----	-----	-----
1	Saturation	int8s
2	Contrast	int8s
3	Sharpness	int8s
4	WBMode	int8u 7
5	ProgramMode	int8u
6	ISOSetting	int8u
7	ColorMode	int8u
8	WB_RBLevelsTungsten	int16u[2]
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
57	BWFilter	int8u
58	ZoneMatching	int8u
59	Hue	int8s
60	ColorTemperature	int8u
74	ZoneMatching	int8u
76	ColorTemperature	int8u
77	ColorFilter	int8u
78	ColorTemperature	int8u
79	ColorFilter	int8u
80	RawDataLength	no

MinoltaRaw WBG Tags

Index1	Tag Name	Writable
-----	-----	-----
0	WBScale	int8u[4]
4	WB_GBRGLevels	int16u[4]
	WB_RGGBLevels	int16u[4]

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.

Index1	Tag Name	Writable
-----	-----	-----

0	JFIFVersion	no:
2	ResolutionUnit	int8u:
3	XResolution	int16u:
5	YResolution	int16u:
7	ThumbnailWidth	no
8	ThumbnailHeight	no
9	ThumbnailTIFF	no

JFIF Extension Tags

Thumbnail images extracted from the JFXX segment.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0010	ThumbnailImage	no
0x0011	ThumbnailTIFF	no
0x0013	ThumbnailTIFF	no

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
-----	-----	-----
"\x01CompObj"	CompObj	FlashPix CompObj
"\x05Audio Info"	AudioInfo	FlashPix AudioInfo
"\x05Data Object"	DataObject	FlashPix DataObject
"\x05DocumentSummaryInformation"	DocumentInfo	FlashPix DocumentInfo
"\x05Extension List"	Extensions	FlashPix Extensions
"\x05Global Info"	GlobalInfo	FlashPix GlobalInfo
"\x05Image Contents"	Image	FlashPix Image
"\x05Image Info"	ImageInfo	FlashPix ImageInfo
"\x05Operation"	Operation	FlashPix Operation
"\x05Screen Nail"	ScreenNail	no
"\x05SummaryInformation"	SummaryInfo	FlashPix SummaryInfo
"\x05Transform"	Transform	FlashPix Transform
'Audio Stream'	AudioStream	no
'BasicFileInfo'	BasicFileInfo	no
'Contents'	Contents	XMP
'Current User'	CurrentUser	no
'ICC Profile 0001'	ICC_Profile	ICC_Profile
'IeImg'	EmbeddedImage	no
'IeImg_class'	EmbeddedImageClass	no
'IeImg_rect'	EmbeddedImageRectangle	no
'Preview'	PreviewImage	no
'Property'	PreviewInfo	FlashPix PreviewInfo
'Subimage 0000 Header'	SubimageHdr	FlashPix SubimageHdr
'WordDocument'	WordDocument	FlashPix WordDocument
'_eeJPG'	EmbeddedImage	no

'_eeLink'	LinkedFileName	no
'_eePNG'	EmbeddedPNG	no

FlashPix CompObj Tags

Index4	Tag Name	Writable
-----	-----	-----
0	CompObjUserTypeLen	no
1	CompObjUserType	no

FlashPix AudioInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

FlashPix DataObject Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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	MMClips	no
0x000b	ScaleCrop	no
0x000c	HeadingPairs	no
0x000d	TitleOfParts	no
0x000e	Manager	no
0x000f	Company	no
0x0010	LinksUpToDate	no
0x0011	CharCountWithSpaces	no
0x0013	SharedDoc	no
0x0016	HyperlinksChanged	no
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
-----	-----	-----
0x0001	ExtensionName	no
0x0002	ExtensionClassID	no
0x0003	ExtensionPersistence	no
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
-----	-----	-----
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
-----	-----	-----
0x1000000	NumberOfResolutions	no
0x1000002	ImageWidth	no
0x1000003	ImageHeight	no
0x1000004	DefaultDisplayHeight	no
0x1000005	DefaultDisplayWidth	no
0x1000006	DisplayUnits	no
0x2000000	SubimageWidth	no
0x2000001	SubimageHeight	no
0x2000002	SubimageColor	no
0x2000003	SubimageNumericalFormat	no
0x2000004	DecimationMethod	no
0x2000005	DecimationPrefilterWidth	no
0x2000007	SubimageICC_Profile	no
0x3000001	JPEGTables	no
0x3000002	MaxJPEGTableIndex	no

FlashPix ImageInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x21000000	FileSource	no
0x21000001	SceneType	no
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	no
0x23000002	GroupCaption	no
0x23000003	CaptionText	no
0x23000004	People	no

0x23000007	Things	no
0x2300000a	DateTimeOriginal	no
0x2300000b	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
0x25000004	BrightnessValue	no
0x25000005	ExposureCompensation	no
0x25000006	SubjectDistance	no
0x25000007	MeteringMode	no
0x25000008	LightSource	no
0x25000009	FocalLength	no
0x2500000a	MaxApertureValue	no
0x2500000b	Flash	no
0x2500000c	FlashEnergy	no
0x2500000d	FlashReturn	no
0x2500000e	BackLight	no
0x2500000f	SubjectLocation	no
0x25000010	ExposureIndex	no
0x25000011	SpecialEffectsOpticalFilter	no
0x25000012	PerPictureNotes	no
0x26000000	SensingMethod	no
0x26000001	FocalPlaneXResolution	no
0x26000002	FocalPlaneYResolution	no
0x26000003	FocalPlaneResolutionUnit	no
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
0x29000003	TypeOfOriginal	no

FlashPix Operation Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0x0000	Dictionary	no

-- ExifTool 12.92 Tag Names --

0x0001	CodePage	no
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
0x0022	CreatedBy	no
0x0023	DocumentID	no
0x80000000	LocaleIndicator	no

FlashPix Transform Tags

Tag ID	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
13	PreviewImageWidth	no
23	PreviewImageHeight	no

FlashPix SubimageHdr Tags

Index4	Tag Name	Writable
-----	-----	-----
1	SubimageWidth	no
2	SubimageHeight	no
3	SubimageTileCount	no
4	SubimageTileWidth	no
5	SubimageTileHeight	no
6	NumChannels	no

FlashPix WordDocument Tags

Tags extracted from the Microsoft Word document stream.

-- ExifTool 12.92 Tag Names --

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	Identification	no
0x0003	LanguageCode	no
0x0005	DocFlags	no
9.1	System	no
9.2	Word97	no

FlashPix DocTable Tags

Tags extracted from the Microsoft Word document table.

Tag Name	Writable
-----	-----
CommentBy	no
DOP	FlashPix DOP
LastSavedBy	no
ModifyDate	no

FlashPix DOP Tags

Microsoft office document properties.

Index1	Tag Name	Writable
-----	-----	-----
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

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>
for the official specification.

Tag ID	Tag Name	Writable
-----	-----	-----
0xb000	MPFVersion	no
0xb001	NumberOfImages	no
0xb002	MPImageList	MPF MPImage
0xb003	ImageUIDList	no
0xb004	TotalFrames	no
0xb101	MPIndividualNum	no
0xb201	PanOrientation	no
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
-----	-----	-----
0.1	MPImageFlags	no
0.2	MPImageFormat	no
0.3	MPImageType	no
4	MPImageLength	no
8	MPImageStart	no
12	DependentImage1EntryNumber	no
14	DependentImage2EntryNumber	no

InfiRay Tags

InfiRay Version Tags

This table lists tags found in the InfiRay APP2 IJPEG version header, found in JPEGs taken with the P2 Pro camera app.

Index1	Tag Name	Writable
-----	-----	-----
0	IJPEGVersion	no
12	IJPEGOrgType	no
13	IJPEGDispType	no
14	IJPEGRotate	no
15	IPEGMirrorFlip	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	TempImageWidth	no
60	TempImageHeight	no
62	TempImageBpp	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 IJPEG camera factory defaults and calibration data.

Index1	Tag Name	Writable
-----	-----	-----
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 IJPEG picture temperature information.

Index1	Tag Name	Writable
-----	-----	-----
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 IJPEG visual-infrared mixing mode section.

Index1	Tag Name	Writable
-----	-----	-----
0	MixMode	no
1	FusionIntensity	no
5	OffsetAdjustment	no
9	CorrectionAsix	no

InfiRay OpMode Tags

This table lists tags found in the InfiRay APP7 IJPEG camera operation mode section.

Index1	Tag Name	Writable
-----	-----	-----
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 IJPEG picture isothermal information.

Index1	Tag Name	Writable
-----	-----	-----
0	IsothermalMax	no
4	IsothermalMin	no
8	ChromaBarMax	no
12	ChromaBarMin	no

InfiRay Sensor Tags

This table lists tags found in the InfiRay APP9 IJPEG sensor information chunk.

Index1	Tag Name	Writable
-----	-----	-----
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

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>

for the official specification.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	StimVersion	no
0x0001	ApplicationData	no
0x0002	ImageArrangement	no
0x0003	ImageRotation	no
0x0004	ScalingFactor	no
0x0005	CropXSize	no
0x0006	CropYSize	no
0x0007	CropX	Stim CropX
0x0008	CropY	Stim CropY
0x0009	ViewType	no
0x000a	RepresentativeImage	no
0x000b	ConvergenceBaseImage	no
0x000c	AssumedDisplaySize	no
0x000d	AssumedDistanceView	no
0x000e	RepresentativeDisparityNear	no
0x000f	RepresentativeDisparityFar	no
0x0010	InitialDisplayEffect	no
0x0011	ConvergenceDistance	no
0x0012	CameraArrangementInterval	no
0x0013	ShootingCount	no

Stim CropX Tags

Index1	Tag Name	Writable
-----	-----	-----
0	CropXCommonOffset	no
2	CropXViewpointNumber	no
3	CropXOffset	no
7	CropXViewpointNumber2	no
8	CropXOffset2	no

Stim CropY Tags

Index1	Tag Name	Writable
-----	-----	-----
0	CropYCommonOffset	no
2	CropYViewpointNumber	no
3	CropYOffset	no
7	CropYViewpointNumber2	no
8	CropYOffset2	no

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
-----	-----	-----

'HGHT'	PreviewImageHeight	no
'QUAL'	PreviewQuality	no
'SPMO'	DataLength?	no
'WDTH'	PreviewImageWidth	no

GoPro Tags

GoPro GPMF Tags

Tags extracted from the GPMF box of GoPro MP4 videos, the APP6 "GoPro" segment of JPEG files, and from the "gpmd" 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
-----	-----	-----
'AALP'	AudioLevel	no
'ACCL'	Accelerometer	no
'ALLD'	AutoLowLightDuration	no
'ATTD'	Attitude	no
'ATTR'	AttitudeTarget	no
'AUDO'	AudioSetting	no
'BPOS'	Controller?	no
'CASN'	CameraSerialNumber	no
'CORI'	CameraOrientation	no
'CSEN'	CoyoteSense	no
'CYTS'	CoyoteStatus	no
'DEVC'	DeviceContainer	GoPro GPMF
'DVID'	DeviceID?	no
'DVNM'	DeviceName	no
'DZOM'	DigitalZoom	no
'EISA'	ElectronicImageStabilization	no
'EMPT'	Empty?	no
'ESCS'	EscapeStatus?	no
'EXPT'	MaximumShutterAngle	no
'FACE'	FaceDetected	no
'FCNM'	FaceNumbers	no
'FMWR'	FirmwareVersion	no
'FWVS'	OtherFirmware	no
'GLPI'	GPSPos	GoPro GLPI
'GPRI'	GPSRaw?	GoPro GPRI
'GPS5'	GPSInfo	GoPro GPS5
'GPSA'	GPSAltitudeSystem	no
'GPSF'	GPSMeasureMode	no
'GPSP'	GPSHPositioningError	no
'GPSU'	GPSDateTime	no
'GRAV'	GravityVector	no
'GYRO'	Gyroscope	no
'HUES'	PredominantHue	no
'IORI'	ImageOrientation	no
'ISOE'	ISOSpeeds	no
'ISOG'	ImageSensorGain	no
'KBAT'	BatteryStatus	GoPro KBAT
'LNED'	LocalPositionNED	no
'MAGN'	Magnetometer	no
'MINF'	Model	no
'MTRX'	AccelerometerMatrix	no
'MUID'	MediaUniqueID	no
'MWET'	MicrophoneWet	no
'OREN'	AutoRotation	no
'ORIN'	InputOrientation	no
'ORIO'	OutputOrientation	no
'PHDR'	HDRSetting	no
'PIMN'	AutoISOMin	no
'PIMX'	AutoISOMax	no
'PRES'	PhotoResolution	no
'PRTN'	ProTune	no
'PTCL'	ColorMode	no

-- ExifTool 12.92 Tag Names --

'PTEV'	ExposureCompensation	no
'PTSH'	Sharpness	no
'PTWB'	WhiteBalance	no
'RATE'	Rate	no
'RMRK'	Comments	no
'SCAL'	ScaleFactor?	no
'SCEN'	SceneClassification	no
'SCPR'	ScaledPressure	no
'SHUT'	ExposureTimes	no
'SIMU'	ScaledIMU	no
'SIUN'	SIUnits?	no
'SROT'	SensorReadoutTime	no
'STMP'	TimeStamp	no
'STNM'	StreamName?	no
'STRM'	NestedSignalStream	GoPro GPMF
'SYST'	SystemTime	no
'TMPC'	CameraTemperature	no
'TSMP'	TotalSamples?	no
'TYPE'	StructureType?	no
'UNIF'	InputUniformity	no
'UNIT'	Units?	no
'VERS'	MetadataVersion	no
'VFOV'	FieldOfView	no
'VFRH'	VisualFlightRulesHUD	no
'WBAL'	ColorTemperatures	no
'WNDM'	WindProcessing	no
'WRGB'	WhiteBalanceRGB	no
'YAVG'	LumaAverage	no

GoPro GLPI Tags

Index	Tag Name	Writable
-----	-----	-----
0	GPSTimeStamp	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
-----	-----	-----
0	GPSTimeStampRaw	no
1	GPSLatitudeRaw	no
2	GPSLongitudeRaw	no
3	GPSAltitudeRaw	no
6	GPSSpeedRaw	no
7	GPSTrackRaw	no

GoPro GPS5 Tags

Index	Tag Name	Writable
-----	-----	-----
0	GPSLatitude	no
1	GPSLongitude	no
2	GPSAltitude	no
3	GPSSpeed	no
4	GPSSpeed3D	no

GoPro KBAT Tags

Battery status information found in GoPro Karma videos.

Index	Tag Name	Writable
-----	-----	-----
0	BatteryCurrent	no

-- ExifTool 12.92 Tag Names --

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
-----	-----	-----
8	FirmwareVersion	no
23	SerialNumber	no
87	OtherSerialNumber	no
102	Model	no

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
-----	-----
AECAggressiveness	no
AECCurrentExpIndex	no
AECCurrentSensorLuma	no
AECEnable	no
AECExposureIndexAdjStep	no
AECHighLumaRegionCount	no
AECHighLumaRegionThreshold	no
AECIndoorIdx	no
AECLumaTarget	no
AECLumaTolerance	no
AECMode	no
AECOutdoorIdx	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
AFGrossStep	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
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AFTraceStats22	no
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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
AWBRedGainRef1	no
AWBRedGainRef2	no
AWBRedGainRef3	no
AWBRedGainRef4	no
AWBRedGainRef5	no
AWBRedGainRef6	no
AWBRedGainRef7	no
AWBRedGainRef8	no
AWBSampleDecision	no
AWBSnapshotBGain	no
AWBSnapshotRGain	no
AntiBandingPixelClk	no
AntiBandingPixelClkPerLine	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
CurrResol	no
DayltConvChrmA_M	no
DayltConvChrmA_P	no
DayltConvChrmB_M	no
DayltConvChrmB_P	no
DayltConvChrmC_M	no
DayltConvChrmC_P	no
DayltConvChrmD_M	no
DayltConvChrmD_P	no
DayltConvChrmKCb	no
DayltConvChrmKCr	no
DayltConvLumaK	no
DayltConvLumaV0	no
DayltConvLumaV1	no
DayltConvLumaV2	no
DefConvChrmA_M	no
DefConvChrmA_P	no
DefConvChrmB_M	no

DefConvChrmB_P	no
DefConvChrmC_M	no
DefConvChrmC_P	no
DefConvChrmD_M	no
DefConvChrmD_P	no
DefConvChrmKCb	no
DefConvChrmKCr	no
DefConvLumaK	no
DefConvLumaV0	no
DefConvLumaV1	no
DefConvLumaV2	no
DefCorC0	no
DefCorC1	no
DefCorC2	no
DefCorC3	no
DefCorC4	no
DefCorC5	no
DefCorC6	no
DefCorC7	no
DefCorC8	no
DefCorK0	no
DefCorK1	no
DefCorK2	no
DefLumaGammaMode	no
DefRgbGammaMode	no
DefectPixCorEnable	no
DefectPixMaxThresh	no
DefectPixMinThresh	no
DiscardFrstFrm	no
FrmSkipPttrn	no
GammaEnable	no
HJREnable	no
HJRMaxNumFrames	no
HJROneToTwoOffset	no
HJRTextureThreshold	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
R2ABlueCtbl00	no
R2ABlueCtbl01	no
R2ABlueCtbl02	no
R2ABlueCtbl03	no
R2ABlueCtbl04	no
R2ABlueCtbl05	no
R2ABlueCtbl06	no
R2ABlueCtbl07	no
R2ABlueCtbl08	no

R2ABlueCtbl09	no
R2ABlueCtbl10	no
R2ABlueCtbl11	no
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R2ABlueCtbl30	no
R2ABlueCtbl31	no
R2ABlueStbl00	no
R2ABlueStbl01	no
R2ABlueStbl02	no
R2ABlueStbl03	no
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R2ABlueStbl05	no
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R2ABlueStbl27	no
R2ABlueStbl28	no
R2ABlueStbl29	no
R2ABlueStbl30	no
R2ABlueStbl31	no
R2ACx	no
R2ACy	no
R2AGreenCtbl00	no
R2AGreenCtbl01	no
R2AGreenCtbl02	no
R2AGreenCtbl03	no
R2AGreenCtbl04	no
R2AGreenCtbl05	no
R2AGreenCtbl06	no
R2AGreenCtbl07	no
R2AGreenCtbl08	no
R2AGreenCtbl09	no
R2AGreenCtbl10	no
R2AGreenCtbl11	no
R2AGreenCtbl12	no

R2AGreenCtbl13	no
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R2AGreenCtbl28	no
R2AGreenCtbl29	no
R2AGreenCtbl30	no
R2AGreenCtbl31	no
R2AGreenStbl00	no
R2AGreenStbl01	no
R2AGreenStbl02	no
R2AGreenStbl03	no
R2AGreenStbl04	no
R2AGreenStbl05	no
R2AGreenStbl06	no
R2AGreenStbl07	no
R2AGreenStbl08	no
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R2AGreenStbl26	no
R2AGreenStbl27	no
R2AGreenStbl28	no
R2AGreenStbl29	no
R2AGreenStbl30	no
R2AGreenStbl31	no
R2AHeight	no
R2AIntervals	no
R2ARedCtbl00	no
R2ARedCtbl01	no
R2ARedCtbl02	no
R2ARedCtbl03	no
R2ARedCtbl04	no
R2ARedCtbl05	no
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R2ARedCtbl08	no
R2ARedCtbl09	no
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R2ARedCtbl13	no
R2ARedCtbl14	no
R2ARedCtbl15	no
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R2ARedCtbl29	no
R2ARedCtbl30	no
R2ARedCtbl31	no
R2ARedStbl00	no
R2ARedStbl01	no
R2ARedStbl02	no
R2ARedStbl03	no
R2ARedStbl04	no
R2ARedStbl05	no
R2ARedStbl06	no
R2ARedStbl07	no
R2ARedStbl08	no
R2ARedStbl09	no
R2ARedStbl10	no
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R2ARedStbl14	no
R2ARedStbl15	no
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R2ARedStbl23	no
R2ARedStbl24	no
R2ARedStbl25	no
R2ARedStbl26	no
R2ARedStbl27	no
R2ARedStbl28	no
R2ARedStbl29	no
R2ARedStbl30	no
R2ARedStbl31	no
R2ATbl00	no
R2ATbl01	no
R2ATbl02	no
R2ATbl03	no
R2ATbl04	no
R2ATbl05	no
R2ATbl06	no
R2ATbl07	no
R2ATbl08	no
R2ATbl09	no
R2ATbl10	no
R2ATbl11	no
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R2ATbl15	no
R2ATbl16	no
R2ATbl17	no
R2ATbl18	no
R2ATbl19	no
R2ATbl20	no
R2ATbl21	no
R2ATbl22	no

R2ATbl23	no
R2ATbl24	no
R2ATbl25	no
R2ATbl26	no
R2ATbl27	no
R2ATbl28	no
R2ATbl29	no
R2ATbl30	no
R2ATbl31	no
R2AWidth	no
R2D65BlueCtbl00	no
R2D65BlueCtbl01	no
R2D65BlueCtbl02	no
R2D65BlueCtbl03	no
R2D65BlueCtbl04	no
R2D65BlueCtbl05	no
R2D65BlueCtbl06	no
R2D65BlueCtbl07	no
R2D65BlueCtbl08	no
R2D65BlueCtbl09	no
R2D65BlueCtbl10	no
R2D65BlueCtbl11	no
R2D65BlueCtbl12	no
R2D65BlueCtbl13	no
R2D65BlueCtbl14	no
R2D65BlueCtbl15	no
R2D65BlueCtbl16	no
R2D65BlueCtbl17	no
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R2D65BlueCtbl21	no
R2D65BlueCtbl22	no
R2D65BlueCtbl23	no
R2D65BlueCtbl24	no
R2D65BlueCtbl25	no
R2D65BlueCtbl26	no
R2D65BlueCtbl27	no
R2D65BlueCtbl28	no
R2D65BlueCtbl29	no
R2D65BlueCtbl30	no
R2D65BlueCtbl31	no
R2D65BlueStbl00	no
R2D65BlueStbl01	no
R2D65BlueStbl02	no
R2D65BlueStbl03	no
R2D65BlueStbl04	no
R2D65BlueStbl05	no
R2D65BlueStbl06	no
R2D65BlueStbl07	no
R2D65BlueStbl08	no
R2D65BlueStbl09	no
R2D65BlueStbl10	no
R2D65BlueStbl11	no
R2D65BlueStbl12	no
R2D65BlueStbl13	no
R2D65BlueStbl14	no
R2D65BlueStbl15	no
R2D65BlueStbl16	no
R2D65BlueStbl17	no
R2D65BlueStbl18	no
R2D65BlueStbl19	no
R2D65BlueStbl20	no
R2D65BlueStbl21	no
R2D65BlueStbl22	no
R2D65BlueStbl23	no
R2D65BlueStbl24	no
R2D65BlueStbl25	no
R2D65BlueStbl26	no
R2D65BlueStbl27	no

R2D65BlueStbl28	no
R2D65BlueStbl29	no
R2D65BlueStbl30	no
R2D65BlueStbl31	no
R2D65Cx	no
R2D65Cy	no
R2D65GreenCtbl00	no
R2D65GreenCtbl01	no
R2D65GreenCtbl02	no
R2D65GreenCtbl03	no
R2D65GreenCtbl04	no
R2D65GreenCtbl05	no
R2D65GreenCtbl06	no
R2D65GreenCtbl07	no
R2D65GreenCtbl08	no
R2D65GreenCtbl09	no
R2D65GreenCtbl10	no
R2D65GreenCtbl11	no
R2D65GreenCtbl12	no
R2D65GreenCtbl13	no
R2D65GreenCtbl14	no
R2D65GreenCtbl15	no
R2D65GreenCtbl16	no
R2D65GreenCtbl17	no
R2D65GreenCtbl18	no
R2D65GreenCtbl19	no
R2D65GreenCtbl20	no
R2D65GreenCtbl21	no
R2D65GreenCtbl22	no
R2D65GreenCtbl23	no
R2D65GreenCtbl24	no
R2D65GreenCtbl25	no
R2D65GreenCtbl26	no
R2D65GreenCtbl27	no
R2D65GreenCtbl28	no
R2D65GreenCtbl29	no
R2D65GreenCtbl30	no
R2D65GreenCtbl31	no
R2D65GreenStbl00	no
R2D65GreenStbl01	no
R2D65GreenStbl02	no
R2D65GreenStbl03	no
R2D65GreenStbl04	no
R2D65GreenStbl05	no
R2D65GreenStbl06	no
R2D65GreenStbl07	no
R2D65GreenStbl08	no
R2D65GreenStbl09	no
R2D65GreenStbl10	no
R2D65GreenStbl11	no
R2D65GreenStbl12	no
R2D65GreenStbl13	no
R2D65GreenStbl14	no
R2D65GreenStbl15	no
R2D65GreenStbl16	no
R2D65GreenStbl17	no
R2D65GreenStbl18	no
R2D65GreenStbl19	no
R2D65GreenStbl20	no
R2D65GreenStbl21	no
R2D65GreenStbl22	no
R2D65GreenStbl23	no
R2D65GreenStbl24	no
R2D65GreenStbl25	no
R2D65GreenStbl26	no
R2D65GreenStbl27	no
R2D65GreenStbl28	no
R2D65GreenStbl29	no
R2D65GreenStbl30	no
R2D65GreenStbl31	no

R2D65Height	no
R2D65Intervals	no
R2D65RedCtbl00	no
R2D65RedCtbl01	no
R2D65RedCtbl02	no
R2D65RedCtbl03	no
R2D65RedCtbl04	no
R2D65RedCtbl05	no
R2D65RedCtbl06	no
R2D65RedCtbl07	no
R2D65RedCtbl08	no
R2D65RedCtbl09	no
R2D65RedCtbl10	no
R2D65RedCtbl11	no
R2D65RedCtbl12	no
R2D65RedCtbl13	no
R2D65RedCtbl14	no
R2D65RedCtbl15	no
R2D65RedCtbl16	no
R2D65RedCtbl17	no
R2D65RedCtbl18	no
R2D65RedCtbl19	no
R2D65RedCtbl20	no
R2D65RedCtbl21	no
R2D65RedCtbl22	no
R2D65RedCtbl23	no
R2D65RedCtbl24	no
R2D65RedCtbl25	no
R2D65RedCtbl26	no
R2D65RedCtbl27	no
R2D65RedCtbl28	no
R2D65RedCtbl29	no
R2D65RedCtbl30	no
R2D65RedCtbl31	no
R2D65RedStbl00	no
R2D65RedStbl01	no
R2D65RedStbl02	no
R2D65RedStbl03	no
R2D65RedStbl04	no
R2D65RedStbl05	no
R2D65RedStbl06	no
R2D65RedStbl07	no
R2D65RedStbl08	no
R2D65RedStbl09	no
R2D65RedStbl10	no
R2D65RedStbl11	no
R2D65RedStbl12	no
R2D65RedStbl13	no
R2D65RedStbl14	no
R2D65RedStbl15	no
R2D65RedStbl16	no
R2D65RedStbl17	no
R2D65RedStbl18	no
R2D65RedStbl19	no
R2D65RedStbl20	no
R2D65RedStbl21	no
R2D65RedStbl22	no
R2D65RedStbl23	no
R2D65RedStbl24	no
R2D65RedStbl25	no
R2D65RedStbl26	no
R2D65RedStbl27	no
R2D65RedStbl28	no
R2D65RedStbl29	no
R2D65RedStbl30	no
R2D65RedStbl31	no
R2D65Tb100	no
R2D65Tb101	no
R2D65Tb102	no
R2D65Tb103	no

R2D65Tb104	no
R2D65Tb105	no
R2D65Tb106	no
R2D65Tb107	no
R2D65Tb108	no
R2D65Tb109	no
R2D65Tb110	no
R2D65Tb111	no
R2D65Tb112	no
R2D65Tb113	no
R2D65Tb114	no
R2D65Tb115	no
R2D65Tb116	no
R2D65Tb117	no
R2D65Tb118	no
R2D65Tb119	no
R2D65Tb120	no
R2D65Tb121	no
R2D65Tb122	no
R2D65Tb123	no
R2D65Tb124	no
R2D65Tb125	no
R2D65Tb126	no
R2D65Tb127	no
R2D65Tb128	no
R2D65Tb129	no
R2D65Tb130	no
R2D65Tb131	no
R2D65Width	no
R2TL84BlueCtbl00	no
R2TL84BlueCtbl01	no
R2TL84BlueCtbl02	no
R2TL84BlueCtbl03	no
R2TL84BlueCtbl04	no
R2TL84BlueCtbl05	no
R2TL84BlueCtbl06	no
R2TL84BlueCtbl07	no
R2TL84BlueCtbl08	no
R2TL84BlueCtbl09	no
R2TL84BlueCtbl10	no
R2TL84BlueCtbl11	no
R2TL84BlueCtbl12	no
R2TL84BlueCtbl13	no
R2TL84BlueCtbl14	no
R2TL84BlueCtbl15	no
R2TL84BlueCtbl16	no
R2TL84BlueCtbl17	no
R2TL84BlueCtbl18	no
R2TL84BlueCtbl19	no
R2TL84BlueCtbl20	no
R2TL84BlueCtbl21	no
R2TL84BlueCtbl22	no
R2TL84BlueCtbl23	no
R2TL84BlueCtbl24	no
R2TL84BlueCtbl25	no
R2TL84BlueCtbl26	no
R2TL84BlueCtbl27	no
R2TL84BlueCtbl28	no
R2TL84BlueCtbl29	no
R2TL84BlueCtbl30	no
R2TL84BlueCtbl31	no
R2TL84BlueStbl00	no
R2TL84BlueStbl01	no
R2TL84BlueStbl02	no
R2TL84BlueStbl03	no
R2TL84BlueStbl04	no
R2TL84BlueStbl05	no
R2TL84BlueStbl06	no
R2TL84BlueStbl07	no
R2TL84BlueStbl08	no

R2TL84BlueStbl09	no
R2TL84BlueStbl10	no
R2TL84BlueStbl11	no
R2TL84BlueStbl12	no
R2TL84BlueStbl13	no
R2TL84BlueStbl14	no
R2TL84BlueStbl15	no
R2TL84BlueStbl16	no
R2TL84BlueStbl17	no
R2TL84BlueStbl18	no
R2TL84BlueStbl19	no
R2TL84BlueStbl20	no
R2TL84BlueStbl21	no
R2TL84BlueStbl22	no
R2TL84BlueStbl23	no
R2TL84BlueStbl24	no
R2TL84BlueStbl25	no
R2TL84BlueStbl26	no
R2TL84BlueStbl27	no
R2TL84BlueStbl28	no
R2TL84BlueStbl29	no
R2TL84BlueStbl30	no
R2TL84BlueStbl31	no
R2TL84Cx	no
R2TL84Cy	no
R2TL84GreenCtbl00	no
R2TL84GreenCtbl01	no
R2TL84GreenCtbl02	no
R2TL84GreenCtbl03	no
R2TL84GreenCtbl04	no
R2TL84GreenCtbl05	no
R2TL84GreenCtbl06	no
R2TL84GreenCtbl07	no
R2TL84GreenCtbl08	no
R2TL84GreenCtbl09	no
R2TL84GreenCtbl10	no
R2TL84GreenCtbl11	no
R2TL84GreenCtbl12	no
R2TL84GreenCtbl13	no
R2TL84GreenCtbl14	no
R2TL84GreenCtbl15	no
R2TL84GreenCtbl16	no
R2TL84GreenCtbl17	no
R2TL84GreenCtbl18	no
R2TL84GreenCtbl19	no
R2TL84GreenCtbl20	no
R2TL84GreenCtbl21	no
R2TL84GreenCtbl22	no
R2TL84GreenCtbl23	no
R2TL84GreenCtbl24	no
R2TL84GreenCtbl25	no
R2TL84GreenCtbl26	no
R2TL84GreenCtbl27	no
R2TL84GreenCtbl28	no
R2TL84GreenCtbl29	no
R2TL84GreenCtbl30	no
R2TL84GreenCtbl31	no
R2TL84GreenStbl00	no
R2TL84GreenStbl01	no
R2TL84GreenStbl02	no
R2TL84GreenStbl03	no
R2TL84GreenStbl04	no
R2TL84GreenStbl05	no
R2TL84GreenStbl06	no
R2TL84GreenStbl07	no
R2TL84GreenStbl08	no
R2TL84GreenStbl09	no
R2TL84GreenStbl10	no
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
R2TL84Tb100	no
R2TL84Tb101	no
R2TL84Tb102	no
R2TL84Tb103	no
R2TL84Tb104	no
R2TL84Tb105	no
R2TL84Tb106	no
R2TL84Tb107	no
R2TL84Tb108	no
R2TL84Tb109	no
R2TL84Tb110	no
R2TL84Tb111	no
R2TL84Tb112	no
R2TL84Tb113	no
R2TL84Tb114	no
R2TL84Tb115	no
R2TL84Tb116	no
R2TL84Tb117	no
R2TL84Tb118	no
R2TL84Tb119	no
R2TL84Tb120	no
R2TL84Tb121	no
R2TL84Tb122	no
R2TL84Tb123	no
R2TL84Tb124	no
R2TL84Tb125	no
R2TL84Tb126	no
R2TL84Tb127	no
R2TL84Tb128	no
R2TL84Tb129	no
R2TL84Tb130	no
R2TL84Tb131	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

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
-----	-----	-----
'Exif'	EXIF	EXIF
'asoc'	Association	Jpeg2000
'bfdb'	BinaryDataType	no
'bfil'	BinaryFilter	no
'bidb'	BinaryData	no
'bpcc'	BitsPerComponent	no
'brob'	BrotliXMP	XMP
	BrotliEXIF	EXIF
	BrotliJUMB	Jpeg2000
'c2sh'	C2PASaltHash	no
'cbor'	CBORData	CBOR
'cdef'	ComponentDefinition	no
'cgrp'	ColorGroup	no
'chck'	DigitalSignature	no
'cmap'	ComponentMapping	no
'colr'	ColorSpecification	Jpeg2000 ColorSpec
'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	Jpeg2000 FileType
'gtso'	GraphicsTechnologyStandardOutput	no
'hrgm'	GainMapImage	no
'ihdr'	ImageHeader	Jpeg2000 ImageHeader
'inst'	InstructionSet	no
'jP '	JP2Signature	no
'jp2c'	ContiguousCodestream	no
	PreviewImage	no
'jp2h'	JP2Header	Jpeg2000
'jp2i'	IntellectualProperty	XMP
'jpch'	CodestreamHeader	Jpeg2000
'jplh'	CompositingLayerHeader	Jpeg2000
'json'	JSONData	JSON
'jumb'	JUMBFBox	Jpeg2000
'jumd'	JUMBFDescr	Jpeg2000 JUMD
'jxlc'	JXLCodestream	no
'jxlp'	PartialJXLCodestream	no
'lbl '	Label	no
'mdat'	MediaData	no
'mp7b'	MPEG7Binary	no
'nlst'	NumberList	no
'opct'	Opacity	no
'pclr'	Palette	no
'prfl'	Profile	no
'res '	Resolution	Jpeg2000
'resc'	CaptureResolution	Jpeg2000 CaptureResolution
'resd'	DisplayResolution	Jpeg2000 DisplayResolution
'roid'	ROIDescription	no
'rreq'	ReaderRequirements	no
'uinf'	UUIDInfo	Jpeg2000
'ulst'	UUIDList	no
'url '	URL	no
'uuid'	UUID-EXIF	EXIF
	UUID-EXIF2	EXIF
	UUID-EXIF_bad	EXIF
	UUID-IPTC	IPTC
	UUID-IPTC2	IPTC
	UUID-XMP	XMP
	UUID-GeoJP2	EXIF
	UUID-Photoshop	Photoshop
	UUID-C2PAClaimSignature	CBOR
	UUID-Signature	no
	UUID-Unknown	no
'xml '	XML	XMP XML
	XMP	-
		XMP

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
-----	-----	-----
0	ColorSpecMethod	int8s!
1	ColorSpecPrecedence	int8s!
2	ColorSpecApproximation	int8s!
3	ICC_Profile	ICC_Profile
	ColorSpace	int32u!

ColorSpecData

undef[\$size-3]!

Jpeg2000 FileType Tags

Index4	Tag Name	Writable
-----	-----	-----
0	MajorBrand	no
1	MinorVersion	no
2	CompatibleBrands	no

Jpeg2000 ImageHeader Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageHeight	no
4	ImageWidth	no
8	NumberOfComponents	no
10	BitsPerComponent	no
11	Compression	no

Jpeg2000 JUMD Tags

Information extracted from the JUMBF description box.

Tag ID	Tag Name	Writable
-----	-----	-----
'id'	JUMDID	no
'label'	JUMDLabel	no
'sig'	JUMDSignature	no
'toggles'	JUMDToggles?	no
'type'	JUMDType	no

Jpeg2000 CaptureResolution Tags

Index1	Tag Name	Writable
-----	-----	-----
0	CaptureYResolution	no
4	CaptureXResolution	no
8	CaptureYResolutionUnit	no
9	CaptureXResolutionUnit	no

Jpeg2000 DisplayResolution Tags

Index1	Tag Name	Writable
-----	-----	-----
0	DisplayYResolution	no
4	DisplayXResolution	no
8	DisplayYResolutionUnit	no
9	DisplayXResolutionUnit	no

APP12 Tags

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
-----	-----	-----
'Aperture'	Aperture	no
'ColorMode'	ColorMode	no
'ConTake'	ConTake	no
'ExpBias'	ExposureCompensation	no
'FNumber'	FNumber	no
'FWare'	FirmwareVersion	no
'Flash'	Flash	no
'FocusMode'	FocusMode	no
'FocusPos'	FocusPos	no
'ID'	ID	no

'ImageSize'	ImageSize	no
'LightS'	LightS	no
'Macro'	Macro	no
'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
-----	-----	-----
0x0001	Quality	int32u/
0x0002	Comment	string/
0x0003	Copyright	string/

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>

for the AFCP specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'IPTC'	IPTC	IPTC
'Nail'	ThumbnailImage	no
'PrVw'	PreviewImage	no
'TEXT'	Text	no

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
-----	-----
DCTermsLocation	DarwinCore DCTermsLocation Struct
DCContinent	string_
DCCoordinatePrecision	string_
DCCoordinateUncertaintyInMeters	string_
DCCountry	string_
DCCountryCode	string_
DCCounty	string_
DCDecimalLatitude	string_
DCDecimalLongitude	string_
DCFootprintSpatialFit	string_
DCFootprintSRS	string_
DCFootprintWKT	string_

DCGeodeticDatum	string_
DCGeoreferencedBy	string_
DCGeoreferencedDate	string_
DCGeoreferenceProtocol	string_
DCGeoreferenceRemarks	string_
DCGeoreferenceSources	string_
DCGeoreferenceVerificationStatus	string_
DCHigherGeography	string_
DCHigherGeographyID	string_
DCIsland	string_
DCIslandGroup	string_
DCLocality	string_
DCLocationAccordingTo	string_
DCLocationID	string_
DCLocationRemarks	string_
DCMaximumDepthInMeters	string_
DCMaximumDistanceAboveSurfaceInMeters	string_
DCMaximumElevationInMeters	string_
DCMinimumDepthInMeters	string_
DCMinimumDistanceAboveSurfaceInMeters	string_
DCMinimumElevationInMeters	string_
DCMunicipality	string_
DCPointRadiusSpatialFit	string_
DCStateProvince	string_
DCVerbatimCoordinates	string_
DCVerbatimCoordinateSystem	string_
DCVerbatimDepth	string_
DCVerbatimElevation	string_
DCVerbatimLatitude	string_
DCVerbatimLocality	string_
DCVerbatimLongitude	string_
DCVerbatimSRS	string_
DCVerticalDatum	string_
DCWaterBody	string_
DCEvent	DarwinCore Event Struct
EventDay	integer_
EventEarliestDate	date_
EventEndDayOfYear	integer_
EventDate	date_
EventID	string/_
EventRemarks	lang-alt_
EventTime	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	DarwinCore MaterialSample Struct
FossilSpecimenMaterialSampleID	string_
GeologicalContext	DarwinCore GeologicalContext Struct
GeologicalContextBed	string_
EarliestAgeOrLowestStage	string_
EarliestEonOrLowestEonothem	string_
EarliestEpochOrLowestSeries	string_
EarliestEraOrLowestErathem	string_
EarliestPeriodOrLowestSystem	string_
GeologicalContextFormation	string_
GeologicalContextID	string_
GeologicalContextGroup	string_
HighestBiostratigraphicZone	string_
LatestAgeOrHighestStage	string_
LatestEonOrHighestEonothem	string_

LatestEpochOrHighestSeries	string_
LatestEraOrHighestErathem	string_
LatestPeriodOrHighestSystem	string_
LithostratigraphicTerms	string_
LowestBiostratigraphicZone	string_
GeologicalContextMember	string_
HumanObservation	DarwinCore Event Struct
HumanObservationDay	integer_
HumanObservationEarliestDate	date_
HumanObservationEndDayOfYear	integer_
HumanObservationEventDate	date_
HumanObservationEventID	string/_
HumanObservationEventRemarks	lang-alt_
HumanObservationEventTime	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	DarwinCore Identification Struct
DateIdentified	date_
IdentificationID	string_
IdentificationQualifier	string_
IdentificationReferences	string_
IdentificationRemarks	string_
IdentificationVerificationStatus	string_
IdentifiedBy	string_
IdentifiedByID	string_
TypeStatus	string_
VerbatimIdentification	string_
LivingSpecimen	DarwinCore MaterialSample Struct
LivingSpecimenMaterialSampleID	string_
MachineObservation	DarwinCore Event Struct
MachineObservationDay	integer_
MachineObservationEarliestDate	date_
MachineObservationEndDayOfYear	integer_
MachineObservationEventDate	date_
MachineObservationEventID	string/_
MachineObservationEventRemarks	lang-alt_
MachineObservationEventTime	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	DarwinCore MaterialSample Struct
MaterialSampleID	string_
MeasurementOrFact	DarwinCore MeasurementOrFact Struct
MeasurementAccuracy	string_
MeasurementDeterminedBy	string_
MeasurementDeterminedDate	date_
MeasurementID	string_
MeasurementMethod	string_
MeasurementRemarks	string_

MeasurementType	string_
MeasurementUnit	string_
MeasurementValue	string_
Occurrence	DarwinCore Occurrence Struct
OccurrenceAssociatedMedia	string_
OccurrenceAssociatedOccurrences	string_
OccurrenceAssociatedReferences	string_
OccurrenceAssociatedSequences	string_
OccurrenceAssociatedTaxa	string_
OccurrenceBehavior	string_
OccurrenceCatalogNumber	string_
OccurrenceDegreeOfEstablishment	string_
OccurrenceDisposition	string_
OccurrenceEstablishmentMeans	string_
OccurrenceGeoreferenceVerificationStatus	string_
OccurrenceIndividualCount	string_
OccurrenceIndividualID	string_
OccurrenceLifeStage	string_
OccurrenceDetails	string_
OccurrenceID	string_
OccurrenceRemarks	string_
OccurrenceStatus	string_
OccurrenceOrganismQuantity	string_
OccurrenceOrganismQuantityType	string_
OccurrenceOtherCatalogNumbers	string_
OccurrencePathway	string_
OccurrencePreparations	string_
OccurrencePreviousIdentifications	string_
OccurrenceRecordedBy	string_
OccurrenceRecordedByID	string_
OccurrenceRecordNumber	string_
OccurrenceReproductiveCondition	string_
OccurrenceSex	string_
Organism	DarwinCore Organism Struct
OrganismAssociatedOccurrences	string_
OrganismAssociatedOrganisms	string_
OrganismID	string_
OrganismName	string_
OrganismRemarks	string_
OrganismScope	string_
OrganismPreviousIdentifications	string_
PreservedSpecimen	DarwinCore MaterialSample Struct
PreservedSpecimenMaterialSampleID	string_
Record	DarwinCore Record Struct
RecordBasisOfRecord	string_
RecordCollectionCode	string_
RecordCollectionID	string_
RecordDataGeneralizations	string_
RecordDatasetID	string_
RecordDatasetName	string_
RecordDynamicProperties	string_
RecordInformationWithheld	string_
RecordInstitutionCode	string_
RecordInstitutionID	string_
RecordOwnerInstitutionCode	string_
ResourceRelationship	DarwinCore ResourceRelationship Struct
RelatedResourceID	string_
RelationshipAccordingTo	string_
RelationshipEstablishedDate	date_
RelationshipOfResource	string_
RelationshipOfResourceID	string_
RelationshipRemarks	string_
ResourceID	string_
ResourceRelationshipID	string_
Taxon	DarwinCore Taxon Struct
TaxonAcceptedNameUsage	string_
TaxonAcceptedNameUsageID	string_
TaxonClass	string_
TaxonCultivarEpithet	string_
TaxonFamily	string_

TaxonGenus	string_
TaxonHigherClassification	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_
TaxonSubgenus	string_
TaxonConceptID	string_
TaxonID	string_
TaxonTaxonomicStatus	string_
TaxonRank	string_
TaxonRemarks	string_
TaxonVerbatimTaxonRank	string_
TaxonVernacularName	lang-alt_

DarwinCore DCTermsLocation Struct

Field Name	Writable
-----	-----
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
-----	-----
Day	integer
EarliestDate	date
EndDayOfYear	integer
EventDate	date
EventID	string
EventRemarks	lang-alt
EventTime	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
-----	-----
MaterialSampleID	string

DarwinCore GeologicalContext Struct

Field Name	Writable
-----	-----
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
-----	-----
DateIdentified	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
-----	-----
MeasurementAccuracy	string
MeasurementDeterminedBy	string
MeasurementDeterminedDate	date
MeasurementID	string
MeasurementMethod	string
MeasurementRemarks	string
MeasurementType	string
MeasurementUnit	string
MeasurementValue	string

DarwinCore Occurrence Struct

Field Name	Writable
-----	-----
AssociatedMedia	string
AssociatedOccurrences	string
AssociatedReferences	string
AssociatedSequences	string
AssociatedTaxa	string
Behavior	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

DarwinCore Organism Struct

Field Name	Writable
-----	-----
AssociatedOccurrences	string
AssociatedOrganisms	string
OrganismID	string
OrganismName	string
OrganismRemarks	string
OrganismScope	string
PreviousIdentifications	string

DarwinCore Record Struct

Field Name	Writable
-----	-----
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
-----	-----
RelatedResourceID	string
RelationshipAccordingTo	string
RelationshipEstablishedDate	date
RelationshipOfResource	string
RelationshipOfResourceID	string
RelationshipRemarks	string
ResourceID	string
ResourceRelationshipID	string

DarwinCore Taxon Struct

Field Name	Writable
-----	-----
AcceptedNameUsage	string
AcceptedNameUsageID	string
Class	string
CultivarEpithet	string
Family	string
Genus	string
HigherClassification	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
Subgenus	string
TaxonConceptID	string
TaxonID	string
TaxonRank	string
TaxonRemarks	string
TaxonomicStatus	string
VerbatimTaxonRank	string
VernacularName	lang-alt

FotoStation Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	IPTC	IPTC
0x0002	SoftEdit	FotoStation SoftEdit
0x0003	ThumbnailImage	yes
0x0004	PreviewImage	yes

FotoStation SoftEdit Tags

Index4	Tag Name	Writable
-----	-----	-----
0	OriginalImageWidth	int32s
1	OriginalImageHeight	int32s
2	ColorPlanes	int32s
3	XYResolution	int32s
4	Rotation	int32s
6	CropLeft	int32s
7	CropTop	int32s
8	CropRight	int32s
9	CropBottom	int32s
11	CropRotation	int32s

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
-----	-----	-----
2	SoftEdit	PhotoMechanic SoftEdit

PhotoMechanic SoftEdit Tags

Tag ID	Tag Name	Writable
-----	-----	-----
209	RawCropLeft	int32s
210	RawCropTop	int32s
211	RawCropRight	int32s
212	RawCropBottom	int32s
213	ConstrainedCropWidth	int32s
214	ConstrainedCropHeight	int32s
215	FrameNum	int32s
216	Rotation	int32s
217	CropLeft	int32s
218	CropTop	int32s
219	CropRight	int32s
220	CropBottom	int32s
221	Tagged	int32s
222	ColorClass	int32s
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
-----	-----
ColorClass	integer
CountryCode	string/
CreatorIdentity	string+
EditStatus	string
PMVersion	string

Prefs	string
Tagged	boolean
TimeCreated	string/

Microsoft Tags

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
-----	-----
CameraSerialNumber	string
CreatorAppID	string
CreatorOpenWithUIOptions	string
DateAcquired	date
FlashManufacturer	string
FlashModel	string
ItemSubType	string
LastKeywordIPTC	string+
LastKeywordXMP	string+
LensManufacturer	string
LensModel	string/
RatingPercent	string

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
-----	-----
RegionInfoDateRegionsValid	date_
RegionInfoMP	Microsoft RegionInfo Struct
RegionInfoRegions	Microsoft Regions Struct_+
RegionPersonDisplayName	string_+
RegionPersonEmailDigest	string_+
RegionPersonLiveIdCID	string_+
RegionPersonSourceID	string_+
RegionRectangle	string_+

Microsoft RegionInfo Struct

Field Name	Writable
-----	-----
DateRegionsValid	date
Regions	Microsoft Regions Struct+

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
-----	-----
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
-----	-----
Brightness	string/
CameraModelID	string/
Contrast	string/
ExposureCompensation	string/
PanoramicStitchCameraMotion	string
PanoramicStitchMapType	string
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
-----	-----	-----
0	PanoramicStitchVersion	int32u
1	PanoramicStitchCameraMotion	int32u
2	PanoramicStitchMapType	int32u
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 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
-----	-----
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
DateModified	no
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
E-mail2	no
E-mail3	no
E-mailAddress	no
E-mailDisplayName	no
E-mailList	no
EncodedBy	Unicode/
EncodedBy	no
EncodingTime	date/
EndDate	no
EntryType	no
EpisodeName	no
Event	no
Event	no
ExifVersion	no
ExposureBias	no
ExposureProgram	no
ExposureTime	no
F-stop	no
FileAs	no
FileCount	no
FileSize	no
FileType	no
FileVersion	no

FirstName	no
FlagColor	no
FlagStatus	no
FlashMode	no
FocalLength	no
FocalLength35mm	no
Folder	no
FolderName	no
FolderPath	no
FormatTag	no
FourCC	no
FrameHeight	no
FrameRate	no
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/
MediaClassSecondaryID	GUID/
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/
OtherAddress	no
OtherCity	no
OtherCountry-Region	no
OtherPOBox	no
OtherPostalCode	no
OtherStateOrProvince	no
OtherStreet	no
Owner	no
POBox	no
Pager	no
Pages	no
ParentalRating	Unicode/
ParentalRating	no
ParentalRatingReason	no
PartOfSet	no
PartOfSet	no
PartOfSet	no
Participants	no
Path	no
PeakValue	no
PerceivedType	no
Period	Unicode/
Period	no
PersonalTitle	no
PixelAspectRatioX	no
PixelAspectRatioY	no
PlaylistIndex	no
PostalCode	no
PrimaryE-mail	no
PrimaryPhone	no
Priority	no
Producer	Unicode/+
Producers	no
ProductName	no
ProductVersion	no
Profession	no

ProgramDescription	no
ProgramMode	no
ProgramName	no
Project	no
PromotionURL	Unicode/
Protected	no
ProtectionType	no
Provider	no
Provider	Unicode/
ProviderLogoURL	no
ProviderRating	no
ProviderStyle	no
ProviderURL	no
Publisher	Unicode/
Publisher	no
RadioBand	no
RadioFormat	no
Rating	no
RatingOrg	no
ReadStatus	no
RecordingTime	no
RecordingTime	no
RecordingTimeDay	no
RecordingTimeMonth	no
RecordingTimeYear	no
RecordingTimeYearMonth	no
RecordingTimeYearMonthDay	no
ReleaseDate	no
ReleaseDateDay	no
ReleaseDateMonth	no
ReleaseDateYear	no
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
Sync01	no
Sync02	no
Sync03	no
Sync04	no
Sync05	no
Sync06	no
Sync07	no
Sync08	no
Sync09	no
Sync10	no
Sync11	no
Sync12	no
Sync13	no
Sync14	no
Sync15	no
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
TotalBitrate	no
TotalDuration	no
TotalEditingTime	no
TotalFileSize	no
TotalSize	no
TrackNumber	no
TrackNumber	no
TrackingID	no
Type	no
Type	no
URL	no
UniqueFileIdentifier	no
Untitled0	no
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

GIMP Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
'header'	Header	GIMP Header
0x0011	Compression	no
0x0013	Resolution	GIMP Resolution
0x0014	Tattoo	no
0x0015	Parasites	GIMP Parasite
0x0016	Units	no

GIMP Header Tags

Index1	Tag Name	Writable
-----	-----	-----
9	XCFVersion	no
14	ImageWidth	no
18	ImageHeight	no
22	ColorMode	no

GIMP Resolution Tags

Index4	Tag Name	Writable
-----	-----	-----
0	XResolution	no
1	YResolution	no

GIMP Parasite Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'exif-data'	ExifData	EXIF
'gimp-comment'	Comment	no
'gimp-image-metadata'	XML	XMP XML
'gimp-metadata'	XMP	XMP
'icc-profile'	ICC_Profile	ICC_Profile
'icc-profile-name'	ICCProfileName	no
'iptc-data'	IPTCData	IPTC
'jpeg-exif-data'	JPEGExifData	EXIF

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 <<https://exiftool.org/MIE1.1-20070121.pdf>> for the official MIE specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'0Type'	SubfileType	string
'0Vers'	MIEVersion	string
'1Directory'	SubfileDirectory	string
'1Name'	SubfileName	string
'2MIME'	SubfileMIMEType	string
'Meta'	Meta	MIE Meta
'data'	SubfileData	undef
'rsrc'	SubfileResource	undef
'zmd5'	MD5Digest	string
'zmie'	TrailerSignature	undef

MIE Meta Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Audio'	Audio	MIE Audio
'Camera'	Camera	MIE Camera
'Document'	Document	MIE Doc
'EXIF'	EXIF	EXIF
'Geo'	Geo	MIE Geo
'ICCProfile'	ICC_Profile	ICC_Profile
'ID3'	ID3	ID3
'IPTC'	IPTC	IPTC
'Image'	Image	MIE Image
'MakerNotes'	MakerNotes	MIE MakerNotes
'Preview'	Preview	MIE Preview
'Thumbnail'	Thumbnail	MIE Thumbnail
'Video'	Video	MIE Video
'XMP'	XMP	XMP

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
-----	-----	-----
'0Type'	RelatedAudioFileType	string
'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
-----	-----	-----
'Brightness'	Brightness	int8s
'ColorBalance'	ColorBalance	rational64u[3]
'ColorTemperature'	ColorTemperature	int32u
'Contrast'	Contrast	int8s
'DigitalZoom'	DigitalZoom	rational64u
'ExposureComp'	ExposureCompensation	rational64s
'ExposureMode'	ExposureMode	string
'ExposureTime'	ExposureTime	rational64u
'FirmwareVersion'	FirmwareVersion	string
'Flash'	Flash	MIE Flash
'FocusMode'	FocusMode	string
'ISO'	ISO	int16u
'ISOSetting'	ISOSetting	int16u
'ImageNumber'	ImageNumber	int32u
'ImageQuality'	ImageQuality	string
'ImageStabilization'	ImageStabilization	int8u
'Lens'	Lens	MIE Lens
'Make'	Make	string
'MeasuredEV'	MeasuredEV	rational64s
'Model'	Model	string
'Orientation'	Orientation	MIE Orient
'OwnerName'	OwnerName	string
'Saturation'	Saturation	int8s
'SensorSize'	SensorSize	rational64u[2]
'SerialNumber'	SerialNumber	string
'Sharpness'	Sharpness	int8s
'ShootingMode'	ShootingMode	string

MIE Flash Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'ExposureComp'	FlashExposureComp	rational64s
'Fired'	FlashFired	int8u
'GuideNumber'	FlashGuideNumber	string
'Make'	FlashMake	string
'Mode'	FlashMode	string
'Model'	FlashModel	string
'SerialNumber'	FlashSerialNumber	string
'Type'	FlashType	string

MIE Lens Tags

All recorded lens parameters (focal length, aperture, etc) include the effects of the extender if present.

Tag ID	Tag Name	Writable
-----	-----	-----
'Extender'	Extender	MIE Extender
'FNumber'	FNumber	rational64u
'FocalLength'	FocalLength	rational64u
'FocusDistance'	FocusDistance	rational64u
'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
-----	-----	-----
'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
-----	-----	-----
'Azimuth'	Azimuth	rational64s
'Declination'	Declination	rational64s
'Elevation'	Elevation	rational64s
'RightAscension'	RightAscension	rational64s
'Rotation'	Rotation	rational64s

MIE Doc Tags

Information describing the main document, image or file.

Tag ID	Tag Name	Writable
-----	-----	-----
'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
-----	-----	-----
'Address'	Address	string
'City'	City	string
'Country'	Country	string
'GPS'	GPS	MIE GPS
'PostalCode'	PostalCode	string
'State'	State	string
'UTM'	UTM	MIE UTM

MIE GPS Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Altitude'	GPSAltitude	rational64s
'Bearing'	GPSTDestBearing	rational64s
'DateTime'	GPSDateTime	string
'Datum'	GPSMapDatum	string
'Differential'	GPSDifferential	int8u
'Distance'	GPSTDestDistance	rational64s
'Heading'	GPSTTrack	rational64s
'Latitude'	GPSTLatitude	rational64s[n]
'Longitude'	GPSTLongitude	rational64s[n]
'MeasureMode'	GPSTMeasureMode	int8u
'Satellites'	GPSTSatellites	string
'Speed'	GPSTSpeed	rational64s

MIE UTM Tags

Tag ID	Tag Name	Writable
--------	----------	----------

-----	-----	-----
'Datum'	UTMMapDatum	string
'Easting'	UTMEasting	string
'Northing'	UTMNorthing	string
'Zone'	UTMZone	int8s

MIE Image Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'0Type'	FullSizeImageType	string
'1Name'	FullSizeImageName	string
'BitDepth'	BitDepth	int16u
'ColorSpace'	ColorSpace	string
'Components'	ComponentsConfiguration	string
'Compression'	CompressionRatio	rational32u
'ImageSize'	ImageSize	int16u[n]
'OriginalImageSize'	OriginalImageSize	int16u[n]
'Resolution'	Resolution	rational64u[n]
'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
-----	-----	-----
'Canon'	Canon	MIE Canon
'Casio'	Casio	MIE Unknown
'FujiFilm'	FujiFilm	MIE Unknown
'Kodak'	Kodak	MIE Unknown
'KonicaMinolta'	KonicaMinolta	MIE Unknown
'Nikon'	Nikon	MIE Unknown
'Olympus'	Olympus	MIE Unknown
'Panasonic'	Panasonic	MIE Unknown
'Pentax'	Pentax	MIE Unknown
'Ricoh'	Ricoh	MIE Unknown
'Sigma'	Sigma	MIE Unknown
'Sony'	Sony	MIE Unknown

MIE Canon Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'VRD'	CanonVRD	CanonVRD

MIE Unknown Tags

Tag ID	Tag Name	Writable
-----	-----	-----
[no tags known]		

MIE Preview Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'0Type'	PreviewImageType	string
'1Name'	PreviewImageName	string
'ImageSize'	PreviewImageSize	int16u[n]
'data'	PreviewImage	undef

MIE Thumbnail Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'0Type'	ThumbnailImageType	string
'1Name'	ThumbnailImageName	string
'ImageSize'	ThumbnailImageSize	int16u[n]
'data'	ThumbnailImage	undef

MIE Video Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'0Type'	RelatedVideoFileType	string
'1Name'	RelatedVideoFileName	string
'Codec'	Codec	string
'Duration'	Duration	rational64u 7
'data'	RelatedVideoFile	undef

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
-----	-----
Comment	yes
Duration	no
Extensions	GIF Extensions
FrameCount	no
GIFVersion	no
ScreenDescriptor	GIF Screen
Text	no
TransparentColor	no

GIF Extensions Tags

Tags extracted from GIF89a application extensions.

Tag ID	Tag Name	Writable
-----	-----	-----
'C2PA_GIF/'	JUMBF	Jpeg2000
'ICCRGBG1/012'	ICC_Profile	ICC_Profile
'MIDICTRL/Jon'	MIDIControl	GIF MIDIControl
'MIDISONG/Dm7'	MIDISong	no
'NETSCAPE/2.0'	Animation	GIF Animation
'XMP Data/XMP'	XMP	XMP

GIF MIDIControl Tags

Information extracted from the MIDI control block extension.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
1	AnimationIterations	no

GIF Screen Tags

Information extracted from the GIF logical screen descriptor.

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
2	ImageHeight	no
4.1	HasColorMap	no

4.2	ColorResolutionDepth	no
4.3	BitsPerPixel	no
5	BackgroundColor	no
6	PixelAspectRatio	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
-----	-----	-----
0	BMPVersion	no
4	ImageWidth	no
8	ImageHeight	no
12	Planes	no
14	BitDepth	no
16	Compression	no
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
60	RedEndpoint	no
72	GreenEndpoint	no
84	BlueEndpoint	no
96	GammaRed	no
100	GammaGreen	no
104	GammaBlue	no
108	RenderingIntent	no
112	ProfileDataOffset	no
116	ProfileSize	no

BMP OS2 Tags

Information extracted from OS/2-format BMP images.

Index1	Tag Name	Writable
-----	-----	-----
0	BMPVersion	no
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
-----	-----
EmbeddedJPG	no
EmbeddedPNG	no
ICC_Profile	ICC_Profile
LinkedProfileName	no

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
-----	-----	-----
4	PixelFormat	no
4.1	Alpha	no
4.2	BitDepth	no
4.3	ColorSpace	no

4.4	Flags	no
6	ImageWidth	no
7	ImageHeight	no
8	ImageLength	no

BPG Extensions Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	EXIF	EXIF
0x0002	ICC_Profile	ICC_Profile
0x0003	XMP	XMP
0x0004	ThumbnailBPG	no
0x0005	AnimationControl?	no

WPG Tags

Tags extracted from WordPerfect Graphics (WPG) images.

Tag Name	Writable
-----	-----
ImageHeightInches	no
ImageWidthInches	no
Records	no+
RecordsV2	no+
WPGVersion	no

ICO Tags

Information extracted from Windows ICO (icon) and CUR (cursor) files.

Index1	Tag Name	Writable
-----	-----	-----
2	ImageType	no
4	ImageCount	no
6	IconDir	ICO IconDir

ICO IconDir Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
1	ImageHeight	no
2	NumColors	no
4	ColorPlanes	no
	HotspotX	no
6	BitsPerPixel	no
	HotspotY	no
8	ImageLength	no

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
-----	-----	-----
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	FilloOval	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	Photoshop ICC_Profile
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

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
-----	-----	-----
'IHDR'	ImageHeader	PNG ImageHeader
'PLTE'	Palette	no
'acTL'	AnimationControl	PNG AnimationControl
'bKGD'	BackgroundColor	no
'cHRM'	PrimaryChromaticities	PNG PrimaryChromaticities
'cICP'	CICodePoints	PNG CICodePoints
'caBX'	JUMBF	Jpeg2000
'cpIp'	OLEInfo	FlashPix
'dSIG'	DigitalSignature	no
'eXIf'	eXIf	EXIF
'fRAc'	FractalParameters	no
'gAMA'	Gamma	yes!
'gIFg'	GIFGraphicControlExtension	no
'gIFt'	GIFPlainTextExtension	no
'gIFx'	GIFApplicationExtension	no
'hIST'	PaletteHistogram	no
'iCCP'	ICC_Profile	ICC_Profile
'iCCP-name'	ProfileName	yes
'iDOT'	AppleDataOffsets	no
'iTXt'	InternationalText	PNG TextualData
'meTa'	MeTa	XMP XML
'oFFs'	ImageOffset	no
'pCAL'	PixelCalibration	no
'pHYs'	PhysicalPixel	PNG PhysicalPixel
'sBIT'	SignificantBits	no
'sCAL'	SubjectScale	PNG SubjectScale
'sPLT'	SuggestedPalette	no
'sRGB'	SRGBRendering	yes!
'sTER'	StereoImage	PNG StereoImage
'tEXt'	TextualData	PNG TextualData
'tIME'	ModifyDate	yes
'tRNS'	Transparency	no
'tXMP'	XMP	XMP
'vpAg'	VirtualPage	PNG VirtualPage
'zTXt'	CompressedText	PNG TextualData
'zxIf'	zxIf	EXIF

PNG ImageHeader Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
4	ImageHeight	no
8	BitDepth	no
9	ColorType	no
10	Compression	no
11	Filter	no
12	Interlace	no

PNG AnimationControl Tags

Tags found in the Animation Control chunk. See https://wiki.mozilla.org/APNG_Specification for details.

Index4	Tag Name	Writable
-----	-----	-----
0	AnimationFrames	no
1	AnimationPlays	no

PNG PrimaryChromaticities Tags

Index4	Tag Name	Writable
-----	-----	-----
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 CIColorPoints Tags

These tags are found in the PNG cICP chunk and belong to the PNG-cICP family 1 group.

Index1	Tag Name	Writable
-----	-----	-----
0	ColorPrimaries	no
1	TransferCharacteristics	no
2	MatrixCoefficients	no
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 'iTXt' 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
-----	-----	-----
'Artist'	Artist	string
'Author'	Author	string
'Collection'	Collection	string
'Comment'	Comment	string

'Copyright'	Copyright	string
'Creation Time'	CreationTime	string
'Description'	Description	string
'Disclaimer'	Disclaimer	string
'Document'	Document	string
'Label'	Label	string
'Make'	Make	string
'Model'	Model	string
'Raw profile type 8bim'	Photoshop_Profile	Photoshop
'Raw profile type APP1'	APP1_Profile	EXIF
		XMP
'Raw profile type exif'	EXIF_Profile	EXIF
'Raw profile type icc'	ICC_Profile	ICC_Profile
'Raw profile type icm'	ICC_Profile	ICC_Profile
'Raw profile type iptc'	IPTC_Profile	Photoshop
'Raw profile type xmp'	XMP_Profile	XMP
'Software'	Software	string
'Source'	Source	string
'TimeStamp'	TimeStamp	string
'Title'	Title	string
'URL'	URL	string
'Warning'	PNGWarning	string
'XML:com.adobe.xmp'	XMP	XMP
'aesthetic_score'	AestheticScore	string
'create-date'	CreateDate	string
'modify-date'	ModDate	string
'parameters'	Parameters	string

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
-----	-----	-----
0	PixelsPerUnitX	int32u
4	PixelsPerUnitY	int32u
8	PixelUnits	int8u

PNG SubjectScale Tags

Index1	Tag Name	Writable
-----	-----	-----
0	SubjectUnits	no
1	SubjectPixelWidth	no
2	SubjectPixelHeight	no

PNG StereoImage Tags

Index1	Tag Name	Writable
-----	-----	-----
0	StereoMode	no

PNG VirtualPage Tags

Index4	Tag Name	Writable
-----	-----	-----
0	VirtualImageWidth	no
1	VirtualImageHeight	no
2	VirtualPageUnits	no

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
--------	----------	----------

-----	-----	-----
'BACK'	Background	MNG Background
'BASI'	BasisObject	MNG BasisObject
'CLIP'	ClipObjects	MNG ClipObjects
'CLON'	CloneObject	MNG CloneObject
'DBYK'	DropByKeyword	no
'DEFI'	DefineObject	MNG DefineObject
'DHDR'	DeltaPNGHeader	MNG DeltaPNGHeader
'DISC'	DiscardObjects	no
'DROP'	DropChunks	no
'FRAM'	Frame	no
'JHDR'	JNGHeader	MNG JNGHeader
'LOOP'	Loop	MNG Loop
'MAGN'	MagnifyObject	MNG MagnifyObject
'MHDR'	MNGHeader	MNG MNGHeader
'MOVE'	MoveObjects	MNG MoveObjects
'ORDR'	OrderingRestrictions	no
'PAST'	PasteImage	MNG PasteImage
'PPLT'	PartialPalette	no
'PROM'	PromoteParent	MNG PromoteParent
'SAVE'	SaveObjects	no
'SEEK'	SeekPoint	no
'SHOW'	ShowObjects	MNG ShowObjects
'TERM'	TerminationAction	MNG TerminationAction
'eXPi'	ExportImage	MNG ExportImage
'fPRI'	FramePriority	MNG FramePriority
'nEED'	ResourcesNeeded	no
'pHYg'	GlobalPixelSize	PNG PhysicalPixel

MNG Background Tags

Index1	Tag Name	Writable
-----	-----	-----
0	BackgroundColor	no
6	MandatoryBackground	no
7	BackgroundImageID	no
9	BackgroundTiling	no

MNG BasisObject Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
4	ImageHeight	no
8	BitDepth	no
9	ColorType	no
10	Compression	no
11	Filter	no
12	Interlace	no
13	RedSample	no
17	GreenSample	no
21	BlueSample	no
25	AlphaSample	no
26	Viewable	no

MNG ClipObjects Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FirstObject	no
2	LastObject	no
4	DeltaType	no
5	ClipBoundary	no

MNG CloneObject Tags

Index1	Tag Name	Writable
-----	-----	-----
0	SourceID	no
2	CloneID	no

4	CloneType	no
5	DoNotShow	no
6	ConcreteFlag	no
7	LocalDeltaType	no
8	DeltaXY	no

MNG DefineObject Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ObjectID	no
2	DoNotShow	no
3	ConcreteFlag	no
4	XYLocation	no
12	ClippingBoundary	no

MNG DeltaPNGHeader Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ObjectID	no
2	ImageType	no
3	DeltaType	no
4	BlockSize	no
12	BlockLocation	no

MNG JNGHeader Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
4	ImageHeight	no
8	ColorType	no
9	BitDepth	no
10	Compression	no
11	Interlace	no
12	AlphaBitDepth	no
13	AlphaCompression	no
14	AlphaFilter	no
15	AlphaInterlace	no

MNG Loop Tags

Index1	Tag Name	Writable
-----	-----	-----
0	NestLevel	no
1	IterationCount	no
5	TerminationCondition	no
6	IterationMinMax	no
14	SignalNumber	no

MNG MagnifyObject Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FirstObjectID	no
2	LastObjectID	no
4	XMethod	no
5	XMag	no
7	YMag	no
9	LeftMag	no
11	RightMag	no
13	TopMag	no
15	BottomMag	no
17	YMethod	no

MNG MNGHeader Tags

Index4	Tag Name	Writable
-----	-----	-----

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
-----	-----	-----
0	FirstObject	no
2	LastObject	no
4	DeltaType	no
5	DeltaXY	no

MNG PasteImage Tags

Index1	Tag Name	Writable
-----	-----	-----
0	DestinationID	no
2	TargetDeltaType	no
3	TargetXY	no
11	SourceID	no
13	CompositionMode	no
14	Orientation	no
15	OffsetOrigin	no
16	OffsetXY	no
24	BoundaryOrigin	no
25	PastClippingBoundary	no

MNG PromoteParent Tags

Index1	Tag Name	Writable
-----	-----	-----
0	NewColorType	no
1	NewBitDepth	no
2	FillMethod	no

MNG ShowObjects Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FirstObject	no
2	LastObject	no
4	ShowMode	no

MNG TerminationAction Tags

Index1	Tag Name	Writable
-----	-----	-----
0	TerminationAction	no
1	IterationEndAction	no
2	Delay	no
6	IterationMax	no

MNG ExportImage Tags

Index1	Tag Name	Writable
-----	-----	-----
0	SnapshotID	no
2	SnapshotName	no

MNG FramePriority Tags

Index1	Tag Name	Writable
-----	-----	-----
0	DeltaType	no
2	Priority	no

FLIF Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0	ImageType	no
1	BitDepth	no
2	ImageWidth	no
3	ImageHeight	no
4	AnimationFrames	no
5	Encoding	no
'eXif'	EXIF	EXIF
'eXmp'	XMP	XMP
'iCCP'	ICC_Profile	ICC_Profile

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
-----	-----	-----
'ANTa'	ANTa	DjVu Ant
'ANTz'	CompressedAnnotation	DjVu Ant
'FORM'	FORM	DjVu Form
'INCL'	IncludedFileID	no
'INFO'	INFO	DjVu Info

DjVu Ant Tags

Information extracted from annotation chunks.

Tag ID	Tag Name	Writable
-----	-----	-----
'metadata'	Metadata	DjVu Meta
'xmp'	XMP	XMP

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
-----	-----	-----
'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

-- ExifTool 12.92 Tag Names --

'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
-----	-----	-----
0	SubfileType	no

DjVu Info Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
2	ImageHeight	no
4	DjVuVersion	no
6	SpatialResolution	no
8	Gamma	no
9	Orientation	no

DPX Tags

Tags extracted from DPX (Digital Picture Exchange) images.

Index1	Tag Name	Writable
-----	-----	-----
0	ByteOrder	no
8	HeaderVersion	no
16	DPXFileSize	no
20	DittoKey	no
36	ImageFileName	no
136	CreateDate	no
160	Creator	no
260	Project	no
460	Copyright	no
660	EncryptionKey	no
768	Orientation	no
770	ImageElements	no
772	ImageWidth	no
776	ImageHeight	no
780	DataSign	no
800	ComponentsConfiguration	no
801	TransferCharacteristic	no
802	ColorimetricSpecification	no
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

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
-----	-----	-----
'_flags'	Flags	no
'_ver'	EXRVersion	no
'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
'dataWindow'	DataWindow	no
'displayWindow'	DisplayWindow	no
'envmap'	EnvironmentMap	no
'exif'	EXIF	EXIF
'expTime'	ExposureTime	no
'focus'	FocusDistance	no
'framesPerSecond'	FramesPerSecond	no
'isoSpeed'	ISO	no
'keyCode'	KeyCode	no
'latitude'	GPSLatitude	no
'lineOrder'	LineOrder	no
'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	XMP

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
-----	-----	-----
32	ZISRAWVersion	no
48	PrimaryFileGUID	no
64	FileGUID	no

MRC Tags

Tags extracted from Medical Research Council (MRC) format imaging

files. See <https://www.ccpem.ac.uk/mrc_format/mrc2014.php> for the specification.

Index4	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
1	ImageHeight	no
2	ImageDepth	no
3	ImageMode	no
4	StartPoint	no
7	GridSize	no
10	CellWidth	no
11	CellHeight	no
12	CellDepth	no
13	CellAlpha	no
14	CellBeta	no
15	CellGamma	no
16	ImageWidthAxis	no
17	ImageHeightAxis	no
18	ImageDepthAxis	no
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
-----	-----	-----
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
92	Dose	no
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
248	ProjectionMode	no
252	ObjectiveLens	no
268	HighMagnificationMode	no
284	ProbeMode	no
288	EFTEMon	no
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
354	SlitInserted	no
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
468	CetaFramesSummed	no
472	DirectDetElectronCounting	no
473	DirectDetAlignFrames	no
490	Bitmask3	no
518	PhasePlate	no
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
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
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

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
-----	-----
TimeStampList	no

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
-----	-----	-----
'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	EXIF
		XMP
'profile-exif'	EXIF_Profile	EXIF
'profile-icc'	ICC_Profile	ICC_Profile
'profile-iptc'	IPTC_Profile	Photoshop
'profile-xmp'	XMP_Profile	XMP
'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

PCX Tags

Tags extracted from PC Paintbrush images.

Index1	Tag Name	Writable
-----	-----	-----
0	Manufacturer	no
1	Software	no
2	Encoding	no
3	BitsPerPixel	no
4	LeftMargin	no
6	TopMargin	no

8	ImageWidth	no
10	ImageHeight	no
12	XResolution	no
14	YResolution	no
65	ColorPlanes	no
66	BytesPerLine	no
68	ColorMode	no
70	ScreenWidth	no
72	ScreenHeight	no

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
-----	-----	-----
3	PGFVersion	no
8	ImageWidth	no
12	ImageHeight	no
16	PyramidLevels	no
17	Quality	no
18	BitsPerPixel	no
19	ColorComponents	no
20	ColorMode	no
21	BackgroundColor	no

PSP Tags

Tags extracted from Paint Shop Pro images (PSP, PSPIMAGE, PSPFRAME, PSPSHAPE, PSPTUBE and TUB extensions).

Tag ID	Tag Name	Writable
-----	-----	-----
'FileVersion'	FileVersion	no
0x0000	ImageInfo	PSP Image
		PSP Image
0x0001	CreatorInfo	PSP Creator
0x000a	ExtendedInfo	PSP Ext

PSP Image Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ImageWidth	no
4	ImageHeight	no
8	ImageResolution	no
16	ResolutionUnit	no
17	Compression	no
19	BitsPerSample	no
21	Planes	no
23	NumColors	no

PSP Creator Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	Title	no
0x0001	CreateDate	no
0x0002	ModifyDate	no
0x0003	Artist	no
0x0004	Copyright	no
0x0005	Description	no
0x0006	CreatorAppID	no
0x0007	CreatorAppVersion	no

PSP Ext Tags

Tag ID	Tag Name	Writable
-----	-----	-----

0x0003 EXIFInfo EXIF

PhotoCD Tags

Tags extracted from Kodak Photo CD Image Pac (PCD) files.

Index1	Tag Name	Writable
-----	-----	-----
7	SpecificationVersion	no
9	AuthoringSoftwareRelease	no
11	ImageMagnificationDescriptor	no
13	CreateDate	no
17	ModifyDate	no
21	ImageMedium	no
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
133	CharacterEscapeSequence?	no
165	PhotoFinisherName	no
228	SceneBalanceAlgorithmRevision	no
230	SceneBalanceAlgorithmCommand	no
325	SceneBalanceAlgorithmFilmID	no
331	CopyrightStatus	no
332	CopyrightFileName	no
1538	Orientation	no
1538.1	ImageWidth	no
1538.2	ImageHeight	no
1538.3	CompressionClass	no

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/rgb/> for the specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'_command'	Command	no
'_comment'	Comment	no
'_orient'	Orientation	no
'colorcorr'	ColorCorrection	no
'exposure'	Exposure	no
'format'	Format	no
'gamma'	Gamma	no
'pixaspect'	PixelAspectRatio	no
'primaries'	ColorPrimaries	no
'software'	Software	no
'view'	View	no

Other PFM Tags

Tags extracted from Portable FloatMap images. See <http://www.pauldebevec.com/Research/HDR/PFM/> for the specification.

Tag Name	Writable
-----	-----
ByteOrder	no
ColorSpace	no
ImageHeight	no
ImageWidth	no

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 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
-----	-----	-----
'Encrypt'	Encrypt	PDF Encrypt
'Info'	Info	PDF Info
'Root'	Root	PDF Root
'_linearized'	Linearized	no

PDF Encrypt Tags

Tags extracted from the document Encrypt dictionary.

Tag ID	Tag Name	Writable
-----	-----	-----
'Filter'	Encryption	no
'P'	UserAccess	no

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-pdfx 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
-----	-----	-----
'AAPL:Keywords'	AppleKeywords	string+
'Author'	Author	string
'CreationDate'	CreateDate	date
'Creator'	Creator	string
'Keywords'	Keywords	string+
'ModDate'	ModifyDate	date
'Producer'	Producer	string
'Subject'	Subject	string
'Title'	Title	string
'Trapped'	Trapped	string!

PDF Root Tags

This is the PDF document catalog.

Tag ID	Tag Name	Writable
--------	----------	----------

-----	-----	-----
'AF'	AF	PDF AF
'AcroForm'	AcroForm	PDF AcroForm
'Lang'	Language	no
'MarkInfo'	MarkInfo	PDF MarkInfo
'Metadata'	Metadata	PDF Metadata
'PageLayout'	PageLayout	no
'PageMode'	PageMode	no
'Pages'	Pages	PDF Pages
'Perms'	Perms	PDF Perms
'Version'	PDFVersion	no

PDF AF Tags

Processed only for C2PA information if AFRelationship is
"/C2PA_Manifest".

Tag ID	Tag Name	Writable
-----	-----	-----
'EF'	EF	PDF EF

PDF EF Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'F'	F_	PDF F

PDF F Tags

C2PA JUMBF metadata extracted from "/C2PA_Manifest" file.

Tag ID	Tag Name	Writable
-----	-----	-----
'_stream'	JUMBF	Jpeg2000

PDF AcroForm Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'_has_xfa'	HasXFA	no

PDF MarkInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Marked'	TaggedPDF	no

PDF Metadata Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'XML_stream'	XMP	XMP

PDF Pages Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Count'	PageCount	no
'Kids'	Kids	PDF Kids

PDF Kids Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Kids'	Kids	PDF Kids
'Metadata'	Metadata	PDF Metadata
'PieceInfo'	PieceInfo	PDF PieceInfo
'Resources'	Resources	PDF Resources

PDF PieceInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'AdobePhotoshop'	AdobePhotoshop	PDF AdobePhotoshop
'Illustrator'	Illustrator	PDF Illustrator

PDF AdobePhotoshop Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Private'	Private	PDF Private

PDF Private Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'ImageResources'	ImageResources	PDF ImageResources

PDF ImageResources Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'_stream'	_stream	Photoshop

PDF Illustrator Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Private'	Private	PDF AIPrivate

PDF AIPrivate Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'AIMetaData'	AIMetaData	PDF AIMetaData
'AIPDFPrivateData'	AIPDFPrivateData	PostScript
'AIPrivateData'	AIPrivateData	PostScript
'ContainerVersion'	ContainerVersion	no
'CreatorVersion'	CreatorVersion	no
'RoundTripVersion'	RoundTripVersion	no

PDF AIMetaData Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'_stream'	_stream	PostScript

PDF Resources Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'ColorSpace'	ColorSpace	PDF ColorSpace
'Properties'	Properties	PDF Properties
'XObject'	XObject	PDF XObject

PDF ColorSpace Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'CS0'	CS0	PDF DefaultRGB
'Cs1'	Cs1	PDF DefaultRGB
'DefaultCMYK'	DefaultCMYK	PDF DefaultRGB
'DefaultRGB'	DefaultRGB	PDF DefaultRGB

PDF DefaultRGB Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'ICCBased'	ICCBased	PDF ICCBased

PDF ICCBased Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'_stream'	_stream	ICC_Profile

PDF Properties Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'MC'	MC	PDF MC

PDF MC Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Metadata'	Metadata	PDF Metadata

PDF XObject Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Im'	Im	PDF Im

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
-----	-----	-----
'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
-----	-----	-----
'DocMDP'	DocMDP	PDF Signature
'FieldMDP'	FieldMDP	PDF Signature
'UR3'	UR3	PDF Signature

PDF Signature Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'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	PDF Reference

PDF Reference Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'TransformParams'	TransformParams	PDF TransformParams

PDF TransformParams Tags

Tag ID	Tag Name	Writable
--------	----------	----------

'Action'	FieldPermissions	no
'Annots'	AnnotationUsageRights	no+
'Document'	DocumentUsageRights	no+
'EF'	EmbeddedFileUsageRights	no+
'Fields'	FormFields	no+
'Form'	FormUsageRights	no+
'FormEX'	FormExtraUsageRights	no+
'Msg'	UsageRightsMessage	no
'P'	ModificationPermissions	no
'Signature'	SignatureUsageRights	no+

PostScript Tags

Tag ID	Tag Name	Writable
'AI12_BuildNumber'	AIBuildNumber	no
'AI3_ColorUsage'	AIColorUsage	no
'AI5_FileFormat'	AIFileFormat	no
'AI5_NumLayers'	AINumLayers	no
'AI5_RulerUnits'	AIRulerUnits	no
'AI5_TargetResolution'	AITargetResolution	no
'AI8_CreatorVersion'	AICreatorVersion	no
'AI9_ColorModel'	AIColorModel	no
'Author'	Author	string
'BeginDocument'	EmbeddedFile	PostScript
'BeginICCPProfile'	ICC_Profile	ICC_Profile
'BeginPhotoshop'	PhotoshopData	Photoshop
'BoundingBox'	BoundingBox	no
'Copyright'	Copyright	string
'CreationDate'	CreateDate	string
'Creator'	Creator	string
'EmbeddedFileName'	EmbeddedFileName	no
'For'	For	string
'ImageData'	ImageData	no
'Keywords'	Keywords	string
'ModDate'	ModifyDate	string
'Pages'	Pages	no
'Routing'	Routing	string
'Subject'	Subject	string
'TIFFPreview'	TIFFPreview	no
'Title'	Title	string
'Version'	Version	string
'begin_xml_packet'	XMP	XMP

ID3 Tags

ExifTool extracts ID3 and Lyrics3 information from MP3, MPEG, WAV, AIFF, OGG, FLAC, APE, 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 for a list of ISO 639-2 language codes.

Tag Name	Writable
ID3v1	ID3 v1
ID3v1_Enh	ID3 v1_Enh
ID3v2_2	ID3 v2_2
ID3v2_3	ID3 v2_3
ID3v2_4	ID3 v2_4

ID3 v1 Tags

Index1	Tag Name	Writable
3	Title	no
33	Artist	no
63	Album	no
93	Year	no

-- ExifTool 12.92 Tag Names --

97	Comment	no
125	Track	no
127	Genre	no

ID3 v1 Enh Tags

ID3 version 1 "Enhanced TAG" information (not part of the official spec).

Index1	Tag Name	Writable
-----	-----	-----
4	Title2	no
64	Artist2	no
124	Album2	no
184	Speed	no
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
-----	-----	-----
'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
'PIC-1'	PictureFormat	no
'PIC-2'	PictureType	no
'PIC-3'	PictureDescription	no
'POP'	Popularimeter	no
'RVA'	RelativeVolumeAdjustment	no
'SLT'	SynLyrics	ID3 SynLyrics
'TAL'	Album	no
'TBP'	BeatsPerMinute	no
'TCM'	Composer	no
'TCO'	Genre	no
'TCP'	Compilation	no
'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

-- ExifTool 12.92 Tag Names --

'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 SynLyrics Tags

The following tags are extracted from synchronized lyrics/text frames.

Tag Name	Writable
-----	-----
SynchronizedLyricsDescription	no
SynchronizedLyricsText	no+
SynchronizedLyricsType	no

ID3 v2.3 Tags

ID3 version 2.3 tags. Includes some non-standard tags written by other software.

Tag ID	Tag Name	Writable
-----	-----	-----
'APIC'	Picture	no
'APIC-1'	PictureMIMETYPE	no
'APIC-2'	PictureType	no
'APIC-3'	PictureDescription	no
'COMM'	Comment	no
'GEOB'	GeneralEncapsulatedObject	ID3 GEOB
'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	ID3 Private
'SYLT'	SynLyrics	ID3 SynLyrics
'TALB'	Album	no
'TBPM'	BeatsPerMinute	no
'TCAT'	PodcastCategory	no
'TCMP'	Compilation	no
'TCOM'	Composer	no
'TCON'	Genre	no
'TCOP'	Copyright	no
'TDAT'	Date	no
'TDES'	PodcastDescription	no
'TDLY'	PlaylistDelay	no

-- ExifTool 12.92 Tag Names --

'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	Olympus DSS
'XSOA'	AlbumSortOrder	no
'XSOP'	PerformerSortOrder	no
'XSOT'	TitleSortOrder	no

ID3 GEOB Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'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	Jpeg2000

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
----------	----------

-----	-----
AverageLevel	no
PeakValue	no
WM_CollectionGroupID	no
WM_CollectionID	no
WM_ContentID	no
WM_MediaClassPrimaryID	no
WM_MediaClassSecondaryID	no
WM_Provider	no
XMP	XMP

ID3 v2.4 Tags

ID3 version 2.4 tags. Includes some non-standard tags written by other software.

Tag ID	Tag Name	Writable
-----	-----	-----
'APIC'	Picture	no
'APIC-1'	PictureMIMETYPE	no
'APIC-2'	PictureType	no
'APIC-3'	PictureDescription	no
'COMM'	Comment	no
'GEOB'	GeneralEncapsulatedObject	ID3 GEOB
'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	ID3 Private
'RVA2'	RelativeVolumeAdjustment	no
'SYLT'	SynLyrics	ID3 SynLyrics
'TALB'	Album	no
'TBPM'	BeatsPerMinute	no
'TCAT'	PodcastCategory	no
'TCMP'	Compilation	no
'TCOM'	Composer	no
'TCON'	Genre	no
'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	Olympus DSS
'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
-----	-----	-----
'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

ITC Tags

This information is found in iTunes Cover Flow data files.

Tag ID	Tag Name	Writable
-----	-----	-----
'data'	ImageData	no
'itch'	Itch	ITC Header
'item'	Item	ITC Item

ITC Header Tags

Index1	Tag Name	Writable
-----	-----	-----
16	DataType	no

ITC Item Tags

Index4	Tag Name	Writable
-----	-----	-----
0	LibraryID	no
2	TrackID	no
4	DataLocation	no
5	ImageType	no
7	ImageWidth	no
8	ImageHeight	no

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 only top-level metadata in QuickTime-based files; it extracts other track-specific and timed metadata, but can not yet edit tags in these locations (with the exception of track-level date/time tags).

Beware that the Keys tags are actually stored inside the ItemList in the file, so deleting the ItemList group as a block (ie. "-ItemList:all=") also deletes Keys tags. Instead, to preserve Keys tags the ItemList tags may be deleted individually with "-QuickTime:ItemList:all=".

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 "eng" is treated as a default language when reading, but not when writing.

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
-----	-----	-----
'GPS '	GPSTimeList2?	no
'IDIT'	DateTimeOriginal	string
'PICT'	PreviewPICT	no
'_htc'	HTCInfo	QuickTime HTCInfo
'ardt'	ARDroneFile	no
'frea'	Kodak_frea	Kodak frea
'free'	KodakFree	Kodak Free
	Pittasoft	QuickTime Pittasoft
	ThumbnailImage	no
	Free?	no
'ftyp'	FileType	QuickTime FileType
'gdat'	GPSTime	QuickTime Stream
'gps0'	GPSTime	QuickTime Stream
'gsen'	GSensor	QuickTime Stream
'junk'	Junk?	no
'mdat'	MediaData?	no
'mdat-offset'	MediaDataOffset	no
'mdat-size'	MediaDataSize	no
'meco'	OtherMeta	QuickTime OtherMeta
'meta'	Meta	QuickTime Meta
'moof'	MovieFragment	QuickTime MovieFragment
'moov'	Movie	QuickTime Movie
'mpvd'	MotionPhotoVideo	yes
'nbmt'	NextbaseMeta	QuickTime Stream
'pict'	PreviewPICT	no
'pnot'	Preview	QuickTime Preview
'prrt'	ARDroneTelemetry	no
'sefd'	SamsungTrailer	Samsung Trailer
'skip'	CanonSkip	Canon Skip
	PreviewImage	no
	SkipInfo	-
	Skip?	no
'thm '	ThumbnailImage	no
'thum'	ThumbnailImage	no
'udat'	GPSLog	no
'udta'	KenwoodData	QuickTime Stream
	LIGO_JSON	QuickTime Stream
	FLIRData	FLIR UserData
'uuid'	XMP	XMP
	UUID-PROF	QuickTime Profile
	UUID-Flip	QuickTime Flip
	UUID-Canon2	Canon uuid2
	SensorData	QuickTime Tags360Fly
	SensorData	no
	JUMBF	Jpeg2000
	CBOR	CBOR
	PreviewImage	no
	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 76 different formats of timed GPS metadata from video files.

Tag Name	Writable
-----	-----
Accelerometer	no
AccelerometerData	no
AngularVelocity	no
CTMD	Canon CTMD
CameraDateTime	no
CameraModel	no
Car	no

DateTimeOriginal	no
DateTimeStamp	no
Distance	no
ExposureCompensation	no
ExposureTime	no
FNumber	no
FrameNumber	no
GPSAltitude	no
GPSDOP	no
GPSTimeStamp	no
GPSLatitude	no
GPSLatitude2	no
GPSLongitude	no
GPSLongitude2	no
GPSSatellites	no
GPSSpeed	no
GPSSpeedRef	no
GPSTimeStamp	no
GPSTrack	no
GPSTrackRef	no
GSensor	no
INSV	QuickTime INSV_MakerNotes
ISO	no
JpgFromRaw	no
KiloCalories	no
PreviewImage	no
PreviewInfo	QuickTime PreviewInfo
RVMI_gReV	QuickTime RVMI_gReV
RVMI_sReV	QuickTime RVMI_sReV
RawGSensor	no
SampleDateTime	no
SampleDuration	no
SampleTime	no
Text	no
TimeCode	no
Unknown00?	no
Unknown01?	no
Unknown02?	no
Unknown03?	no
UserLabel	no
VerticalSpeed	no
VideoTimeStamp	no
cam0	QuickTime cam0
cam1	QuickTime cam1
cam2	QuickTime cam2
cam3	QuickTime cam3
cam4	QuickTime cam4
cam5	QuickTime cam5
cam6	QuickTime cam6
cam7	QuickTime cam7
fdsc	GoPro fdsc
gpmd_Kingslim	QuickTime Stream
gpmd_Rove	QuickTime Stream
gpmd_FMAS	QuickTime Stream
gpmd_Wolfbox	QuickTime Stream
gpmd_GoPro	GoPro GPMF
marl	GM marl
mebx	QuickTime Keys
mett	Parrot mett
rtmd	Sony rtmd
tx3g	QuickTime tx3g

QuickTime INSV MakerNotes Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x000a	SerialNumber	no
0x0012	Model	no
0x001a	Firmware	no
0x002a	Parameters	no

QuickTime PreviewInfo Tags

Preview stored by TomTom Bandit ActionCam.

Index1	Tag Name	Writable
-----	-----	-----
8	PreviewImage	no

QuickTime RVMI gReV Tags

GPS information extracted from the RVMI box of MOV videos.

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
0x0004	AngleAxis	no

QuickTime camm1 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	PixelExposureTime	no
0x0008	RollingShutterSkewTime	no

QuickTime camm2 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	AngularVelocity	no

QuickTime camm3 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	Acceleration	no

QuickTime camm4 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	Position	no

QuickTime camm5 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	GPSLatitude	no
0x000c	GPSLongitude	no

0x0014	GPSAltitude	no
--------	-------------	----

QuickTime camm6 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	GPSTimeStamp	no
0x000c	GPSMeasureMode	no
0x0010	GPSLatitude	no
0x0018	GPSLongitude	no
0x0020	GPSAltitude	no
0x0024	GPSHorizontalAccuracy	no
0x0028	GPSVerticalAccuracy	no
0x002c	GPSVelocityEast	no
0x0030	GPSVelocityNorth	no
0x0034	GPSVelocityUp	no
0x0038	GPSSpeedAccuracy	no

QuickTime camm7 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	MagneticField	no

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
-----	-----	-----
'Encoded_With'	EncodedWith	yes
'album'	Album	yes
'apple.photos.variation-identifier'	ApplePhotosVariationIdentifier	int64s
'artist'	Artist	yes
'artwork'	Artwork	yes
'author'	Author	yes
'camera.framereadouttimeinmicroseconds'	FrameReadoutTime	yes
'camera.identifier'	CameraIdentifier	yes
'collection.user'	UserCollection	yes
'com.android.capture.fps'	AndroidCaptureFPS	yes
'com.android.version'	AndroidVersion	yes
'com.apple.photos.captureMode'	CaptureMode	yes
'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	QuickTime FaceInfo
'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

-- ExifTool 12.92 Tag Names --

'displayname'	DisplayName	yes
'encoder'	Encoder	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
'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
'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
'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
'software'	Software	yes
'still-image-time'	StillImageTime	no
'title'	Title	yes
'version'	Version	yes
'video-orientation'	VideoOrientation	no
'year'	Year	yes

QuickTime FaceInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'crec'	FaceRec	QuickTime FaceRec

QuickTime FaceRec Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'cits'	FaceItem	QuickTime Keys

QuickTime tx3g Tags

Tags extracted from the tx3g sbtn timed metadata of Yuneec drones, and subtitle text in some other videos.

Tag ID	Tag Name	Writable
-----	-----	-----
'Alt'	GPSAltitude	no
'DateTime'	DateTime	no
'GimPitch'	GimbalPitch	no
'GimRoll'	GimbalRoll	no
'GimYaw'	GimbalYaw	no
'Lat'	GPSLatitude	no
'Lon'	GPSLongitude	no

-- ExifTool 12.92 Tag Names --

'Pitch'	Pitch	no
'Roll'	Roll	no
'Text'	Text	no
'Yaw'	Yaw	no

QuickTime HTCInfo Tags

Tags written by some HTC camera phones.

Tag ID	Tag Name	Writable
-----	-----	-----
'slmt'	Unknown_slmt?	no

QuickTime Pittasoft Tags

Tags found in Pittasoft Blackvue dashcam "free" data.

Tag ID	Tag Name	Writable
-----	-----	-----
'3gf '	AccelData	QuickTime Stream
'cppt'	Copyright	no
'gps '	GPSLog	no
'ptnm'	OriginalFileName	no
'ptrh'	Ptrh	QuickTime Pittasoft
'sttm'	StartTime	no
'thum'	PreviewImage	no

QuickTime FileType Tags

Index4	Tag Name	Writable
-----	-----	-----
0	MajorBrand	no
1	MinorVersion	no
2	CompatibleBrands	no

QuickTime OtherMeta Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'mere'	MetaRelation	QuickTime MetaRelation
'meta'	Meta	QuickTime Meta

QuickTime MetaRelation Tags

Index4	Tag Name	Writable
-----	-----	-----
[no tags known]		

QuickTime Meta Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'bxml'	BinaryXML?	no
'dinf'	DataInfo	QuickTime DataInfo
'free'	Free?	no
'hdlr'	Handler	QuickTime Handler
'idat'	MetaImageSize	no
'iinf'	ItemInformation	QuickTime ItemInfo
		QuickTime ItemInfo
'iloc'	ItemLocation	no
'ilst'	ItemList	QuickTime ItemList
'ipmc'	IPMPCControl?	no
'ipro'	ItemProtection?	no
'iprp'	ItemProperties	QuickTime ItemProp
'iref'	ItemReference	QuickTime ItemRef
'keys'	Keys	QuickTime Keys
'pitm'	PrimaryItemReference	no
'uuid'	MetaVersion	no
	UUID-Unknown?	no
'xml '	XML	XMP XML

QuickTime DataInfo Tags

MP4 data information box.

Tag ID	Tag Name	Writable
-----	-----	-----
'dref'	DataRef	QuickTime DataRef

QuickTime DataRef Tags

MP4 data reference box.

Tag ID	Tag Name	Writable
-----	-----	-----
"url\0"	URL	no
'url '	URL	no
'urn '	URN	no

QuickTime Handler Tags

Index1	Tag Name	Writable
-----	-----	-----
4	HandlerClass	no
8	HandlerType	no
12	HandlerVendorID	no
24	HandlerDescription	no

QuickTime ItemInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'infe'	ItemInfoEntry	no

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
-----	-----	-----
'----'	iTunesInfo	QuickTime iTunesInfo
'@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
'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
'cprt'	Copyright	string
'desc'	Description	string/

'disk'	DiskNumber	undef
'dscp'	Description	string/
'egid'	EpisodeGlobalUniqueID	string
'geID'	GenreID	int32s
'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
'itnu'	iTunesU	int8s
'keyw'	Keyword	string
'ldes'	LongDescription	string
'ownr'	Owner	string
'pcst'	Podcast	int8s
'perf'	Performer	string
'pgap'	PlayGap	int8s
'plID'	AlbumID	int32s[2]
'prID'	ProductID	string
'purd'	PurchaseDate	string
'purl'	PodcastURL	string
'rate'	RatingPercent	string
'rldt'	ReleaseDate	string
'rtng'	Rating	int8s
'sdes'	StoreDescription	string
'sfID'	AppleStoreCountry	int32s
'shwm'	ShowMovement	int8s
'snal'	PreviewImage	string
'soaa'	SortAlbumArtist	string
'soal'	SortAlbum	string
'soar'	SortArtist	string
'soco'	SortComposer	string
'sonm'	SortName	string
'sosn'	SortShow	string
'stik'	MediaType	int8s
'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
"\xa9ART"	Artist	string
"\xa9alb"	Album	string
"\xa9ard"	ArtDirector	string
"\xa9arg"	Arranger	string
"\xa9aut"	Author	string/
"\xa9cmt"	Comment	string
"\xa9com"	Composer	string/
"\xa9con"	Conductor	string
"\xa9cpy"	Copyright	string/
"\xa9day"	ContentCreateDate	string
"\xa9des"	Description	string
"\xa9dir"	Director	string
"\xa9enc"	EncodedBy	string
"\xa9gen"	Genre	string
"\xa9grp"	Grouping	string
"\xa9lyr"	Lyrics	string
"\xa9mvc"	MovementCount	int16s
"\xa9mvi"	MovementNumber	int16s
"\xa9mvn"	MovementName	string
"\xa9nam"	Title	string
"\xa9nrt"	Narrator	string

-- ExifTool 12.92 Tag Names --

"\xa9ope"	OriginalArtist	string
"\xa9prd"	Producer	string
"\xa9pub"	Publisher	string
"\xa9sne"	SoundEngineer	string
"\xa9sol"	Soloist	string
"\xa9st3"	Subtitle	string
"\xa9too"	Encoder	string
"\xa9trk"	Track	string
"\xa9wrk"	Work	string
"\xa9wrt"	Composer	string
"\xa9xpd"	ExecutiveProducer	string
"\xa9xyz"	GPSCoordinates	string

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
-----	-----	-----
'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	QuickTime EncodingParams
'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
'iTunMOVI'	iTunMOVI	PLIST
'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
-----	-----	-----
'abrt'	AudioAvailableBitRateRange	no

'acbf'	AudioBitRateControlMode	no
'acef'	AudioExtendFrequencies	no
'brat'	AudioCurrentTargetBitRate	no
'cdcv'	AudioComponentVersion	no
'cmnc'	AudioAvailableNumberChannels	no
'init'	AudioIsInitialized	no
'lmrc'	AudioDoesSampleRateConversion	no
'mdel'	AudioMinimumDelayMode	no
'mnip'	AudioMinimumNumberInputPackets	no
'mnop'	AudioMinimumNumberOutputPackets	no
'oppr'	AudioOutputPrecedence	no
'pad0'	AudioZeroFramesPadded	no
'pakb'	AudioMaximumPacketByteSize	no
'pakd'	AudioRequiresPacketDescription	no
'pakf'	AudioPacketFrameSize	no
'prmm'	AudioCodecPrimeMethod	no
'srcq'	AudioQualitySetting	no
'tbuf'	AudioInputBufferSize	no
'ubuf'	AudioUsedInputBufferSize	no
'ursr'	AudioUseRecommendedSampleRate	no
'vbrq'	AudioVBRQuality	no
'vers'	AudioEncodingParamsVersion	no
'vpk?'	AudioHasVariablePacketByteSizes	no

QuickTime ItemProp Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'ipco'	ItemPropertyContainer	QuickTime ItemPropCont
'ipma'	ItemPropertyAssociation	no

QuickTime ItemPropCont Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'auxC'	AuxiliaryImageType	no
'avlC'	AV1Configuration	QuickTime AV1Config
'clap'	CleanAperture	no
'clli'	ContentLightLevel	QuickTime ContentLightLevel
'colr'	ICC_Profile	ICC_Profile
	ColorRepresentation	QuickTime ColorRep
'hvcC'	HEVCConfiguration	QuickTime HEVCCConfig
'irot'	Rotation	int8u!
'ispe'	ImageSpatialExtent	no
'pasp'	PixelAspectRatio	int32u!
'pixi'	ImagePixelDepth	no
'rloc'	RelativeLocation	no

QuickTime AV1Config Tags

Index1	Tag Name	Writable
-----	-----	-----
0	AV1ConfigurationVersion	no
1	SeqProfile?	no
1.1	SeqLevelIdx0?	no
2	SeqTier0?	no
2.1	HighBitDepth?	no
2.2	TwelveBit?	no
2.3	ChromaFormat	no
2.4	ChromaSamplePosition	no
3	InitialDelaySamples?	no

QuickTime ContentLightLevel Tags

Index2	Tag Name	Writable
-----	-----	-----
0	MaxContentLightLevel	no
1	MaxPicAverageLightLevel	no

QuickTime ColorRep Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ColorProfiles	no
4	ColorPrimaries	no
6	TransferCharacteristics	no
8	MatrixCoefficients	no
10	VideoFullRangeFlag	no

QuickTime HEVCConfig Tags

Index1	Tag Name	Writable
-----	-----	-----
0	HEVCConfigurationVersion	no
1	GeneralProfileSpace	no
1.1	GeneralTierFlag	no
1.2	GeneralProfileIDC	no
2	GenProfileCompatibilityFlags	no
6	ConstraintIndicatorFlags	no
12	GeneralLevelIDC	no
13	MinSpatialSegmentationIDC	no
15	ParallelismType	no
16	ChromaFormat	no
17	BitDepthLuma	no
18	BitDepthChroma	no
19	AverageFrameRate	no
21	ConstantFrameRate	no
21.1	NumTemporalLayers	no
21.2	TemporalIDNested	no

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
-----	-----	-----
'aux1'	AuxiliaryImageRef	no
'cdsc'	ContentDescribes	no
'ding'	DerivedImageRef	no
'thmb'	ThumbnailRef	no

QuickTime MovieFragment Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'meta'	Meta	QuickTime Meta
'mfhd'	MovieFragmentHeader	QuickTime MovieFragHdr
'traf'	TrackFragment	QuickTime TrackFragment

QuickTime MovieFragHdr Tags

Index4	Tag Name	Writable
-----	-----	-----
1	MovieFragmentSequence	no

QuickTime TrackFragment Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'meta'	Meta	QuickTime Meta

QuickTime Movie Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'cmov'	CompressedMovie	QuickTime CMovie
'gps '	GPSTimeList?	no

'htka'	HTCTrack	QuickTime Track
'iods'	InitialObjectDescriptor?	no
'meco'	OtherMeta	QuickTime OtherMeta
'meta'	Meta	QuickTime Meta
'mvhd'	MovieHeader	QuickTime MovieHeader
'trak'	Track	QuickTime Track
'udta'	UserData	QuickTime UserData
'uuid'	UUID-USMT	QuickTime UserMedia
	UUID-Canon	Canon uuid
	GarminGPS	QuickTime Stream
	GarminGPS	no
	UUID-Unknown?	no

QuickTime CMovie Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'dcom'	Compression	no

QuickTime Track Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'mdia'	Media	QuickTime Media
'meco'	OtherMeta	QuickTime OtherMeta
'meta'	Meta	QuickTime Meta
'tapt'	TrackAperture	QuickTime TrackAperture
'tkhd'	TrackHeader	QuickTime TrackHeader
'tref'	TrackRef	QuickTime TrackRef
'udta'	UserData	QuickTime UserData
'uuid'	UUID-USMT	QuickTime UserMedia
	SphericalVideoXML	XMP
	UUID-Unknown?	no

QuickTime Media Tags

MP4 media box.

Tag ID	Tag Name	Writable
-----	-----	-----
'hdlr'	Handler	QuickTime Handler
'mdhd'	MediaHeader	QuickTime MediaHeader
'minf'	MediaInfo	QuickTime MediaInfo

QuickTime MediaHeader Tags

Index4	Tag Name	Writable
-----	-----	-----
0	MediaHeaderVersion	no
1	MediaCreateDate	int32u
2	MediaModifyDate	int32u
3	MediaTimeScale	no
4	MediaDuration	no
5	MediaLanguageCode	no

QuickTime MediaInfo Tags

MP4 media info box.

Tag ID	Tag Name	Writable
-----	-----	-----
'dinf'	DataInfo	QuickTime DataInfo
'gmhd'	GenMediaHeader	QuickTime GenMediaHeader
'hdlr'	Handler	QuickTime Handler
'hmhd'	HintHeader	QuickTime HintHeader
'nmhd'	NullMediaHeader?	no
'smhd'	AudioHeader	QuickTime AudioHeader
'stbl'	SampleTable	QuickTime SampleTable
'vmhd'	VideoHeader	QuickTime VideoHeader

QuickTime GenMediaHeader Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'gmin'	GenMediaInfo	QuickTime GenMediaInfo
'text'	Text?	no
'tmcd'	TimeCode	QuickTime TimeCode

QuickTime GenMediaInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
0	GenMediaVersion	no
1	GenFlags	no
4	GenGraphicsMode	no
6	GenOpColor	no
12	GenBalance	no

QuickTime TimeCode Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'tcmi'	TCMediaInfo	QuickTime TCMediaInfo

QuickTime TCMediaInfo Tags

Index1	Tag Name	Writable
-----	-----	-----
4	TextFont	no
6	TextFace	no
8	TextSize	no
12	TextColor	no
18	BackgroundColor	no
24	FontName	no

QuickTime HintHeader Tags

MP4 hint media header.

Index2	Tag Name	Writable
-----	-----	-----
2	MaxPDUSize	no
3	AvgPDUSize	no
4	MaxBitrate	no
6	AvgBitrate	no

QuickTime AudioHeader Tags

MP4 audio media header.

Index2	Tag Name	Writable
-----	-----	-----
2	Balance	no

QuickTime SampleTable Tags

MP4 sample table box.

Tag ID	Tag Name	Writable
-----	-----	-----
'co64'	ChunkOffset64?	no
'cslg'	CompositionToDecodeTimelineMapping?	no
'ctts'	CompositionTimeToSample?	no
'padb'	SamplePaddingBits?	no
'sbgp'	SampleToGroup?	no
'sdtg'	IndependentAndDisposableSamples?	no
'sgpd'	SampleGroupDescription?	no
'stco'	ChunkOffset?	no
'stdp'	SampleDegradationPriority?	no
'stps'	PartialSyncSamples	no

'stsc'	SampleToChunk?	no
'stds'	AudioSampleDesc	QuickTime AudioSampleDesc
	VideoSampleDesc	QuickTime ImageDesc
	HintSampleDesc	QuickTime HintSampleDesc
	MetaSampleDesc	QuickTime MetaSampleDesc
	OtherSampleDesc	QuickTime OtherSampleDesc
'stsh'	ShadowSyncSampleTable?	no
'stss'	SyncSampleTable?	no
'stsz'	SampleSizes?	no
'stts'	VideoFrameRate	no
	TimeToSampleTable?	no
'stz2'	CompactSampleSizes?	no
'subs'	Sub-sampleInformation?	no

QuickTime AudioSampleDesc Tags

MP4 audio sample description. This hybrid atom contains both data and child atoms.

ID/Index	Tag Name	Writable
-----	-----	-----
4	AudioFormat	no
20	AudioVendorID	no
24	AudioChannels	no
26	AudioBitsPerSample	no
32	AudioSampleRate	no
'SA3D'	SpatialAudio	QuickTime SpatialAudio
'btrt'	BitrateInfo	QuickTime Bitrate
'chan'	AudioChannelLayout	QuickTime ChannelLayout
'damr'	DecodeConfig	QuickTime DecodeConfig
'pinf'	PurchaseInfo	QuickTime ProtectionInfo
'sinf'	ProtectionInfo	QuickTime ProtectionInfo
'wave'	Wave	QuickTime Wave

QuickTime SpatialAudio Tags

Spatial Audio tags.

Index1	Tag Name	Writable
-----	-----	-----
0	SpatialAudioVersion	no
1	AmbisonicType	no
2	AmbisonicOrder	no
6	AmbisonicChannelOrdering	no
7	AmbisonicNormalization	no
8	AmbisonicChannels	no
12	AmbisonicChannelMap	no

QuickTime Bitrate Tags

Index4	Tag Name	Writable
-----	-----	-----
0	BufferSize	no
1	MaxBitrate	no
2	AverageBitrate	no

QuickTime ChannelLayout Tags

Audio channel layout.

Index1	Tag Name	Writable
-----	-----	-----
4	LayoutFlags	no
6	AudioChannels	no
8	AudioChannelTypes	no
12	NumChannelDescriptions	no
16	Channel1Label	no
20	Channel1Flags	no
24	Channel1Coordinates	no
36	Channel2Label	no

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40	Channel2Flags	no
44	Channel2Coordinates	no
56	Channel3Label	no
60	Channel3Flags	no
64	Channel3Coordinates	no
76	Channel4Label	no
80	Channel4Flags	no
84	Channel4Coordinates	no
96	Channel5Label	no
100	Channel5Flags	no
104	Channel5Coordinates	no
116	Channel6Label	no
120	Channel6Flags	no
124	Channel6Coordinates	no
136	Channel7Label	no
140	Channel7Flags	no
144	Channel7Coordinates	no
156	Channel8Label	no
160	Channel8Flags	no
164	Channel8Coordinates	no

QuickTime DecodeConfig Tags

Index1	Tag Name	Writable
-----	-----	-----
0	EncoderVendor	no
4	EncoderVersion	no

QuickTime ProtectionInfo Tags

Child atoms found in "sinf" and/or "pinf" atoms.

Tag ID	Tag Name	Writable
-----	-----	-----
'enda'	Endianness	no
'frma'	OriginalFormat	no
'schi'	SchemeInfo	QuickTime SchemeInfo
'schm'	SchemeType	QuickTime SchemeType

QuickTime SchemeInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'cert'	Certificate	no
'iviv'	InitializationVector	no
'key '	KeyID	no
'name'	UserName	no
'righ'	Rights	QuickTime Rights
'user'	UserID	no

QuickTime Rights Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'aver'	VersionRestrictions	no
'medi'	MediaFlags	no
'mode'	ModeFlags	no
'plat'	Platform	no
'song'	ItemID	no
'tool'	ItemTool	no
'tran'	TransactionID	no
'veID'	ItemVendorID	no

QuickTime SchemeType Tags

Index1	Tag Name	Writable
-----	-----	-----
4	SchemeType	no
8	SchemeVersion	no
10	SchemeURL	no

QuickTime Wave Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'enda'	Endianness	no
'frma'	PurchaseFileFormat	no

QuickTime ImageDesc Tags

ID/Index	Tag Name	Writable
-----	-----	-----
2	CompressorID	no
10	VendorID	no
16	SourceImageWidth	no
17	SourceImageHeight	no
18	XResolution	no
20	YResolution	no
25	CompressorName	no
41	BitDepth	no
'CDI1'	CDI1	Canon CDI1
'CMP1'	CMP1	Canon CMP1
'JPEG'	JPEGInfo?	no
'avcC'	AVCConfiguration?	no
'btrt'	BitrateInfo	QuickTime Bitrate
'clap'	CleanAperture	QuickTime CleanAperture
'colr'	ColorRepresentation	QuickTime ColorRep
'fiel'	VideoFieldOrder	no
'gama'	Gamma	no
'pasp'	PixelAspectRatio	no
'st3d'	Stereoscopic3D	no
'sv3d'	SphericalVideo	QuickTime sv3d

QuickTime CleanAperture Tags

Index8	Tag Name	Writable
-----	-----	-----
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.m>

d>

for the specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'proj'	Projection	QuickTime proj
'svhd'	MetadataSource	no

QuickTime proj Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'cbmp'	CubemapProj	QuickTime cbmp
'equi'	EquirectangularProj	QuickTime equi
'prhd'	ProjectionHeader	QuickTime prhd

QuickTime cbmp Tags

Index4	Tag Name	Writable
-----	-----	-----
1	Layout	no
2	Padding	no

QuickTime equi Tags

Index4	Tag Name	Writable
-----	-----	-----
1	ProjectionBoundsTop	no
2	ProjectionBoundsBottom	no
3	ProjectionBoundsLeft	no
4	ProjectionBoundsRight	no

QuickTime prhd Tags

Index4	Tag Name	Writable
-----	-----	-----
1	PoseYawDegrees	no
2	PosePitchDegrees	no
3	PoseRollDegrees	no

QuickTime HintSampleDesc Tags

MP4 hint sample description.

ID/Index	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0x0004	MetaFormat	no
0x0008	MetaType	no
'btrt'	BitrateInfo	QuickTime Bitrate
'keys'	Keys	QuickTime Keys

QuickTime OtherSampleDesc Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0004	OtherFormat	no
0x0018	PlaybackFrameRate	no
'ftab'	FontTable	no
'mrld'	MarlinDictionary	GM mrld
'mrlh'	MarlinHeader	GM mrlh
'mrlv'	MarlinValues	GM mrlv
'name'	OtherName	no

QuickTime VideoHeader Tags

MP4 video media header.

Index2	Tag Name	Writable
-----	-----	-----
2	GraphicsMode	no
3	OpColor	no

QuickTime TrackAperture Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'clef'	CleanApertureDimensions	no
'enof'	EncodedPixelsDimensions	no
'prof'	ProductionApertureDimensions	no

QuickTime TrackHeader Tags

Index4	Tag Name	Writable
-----	-----	-----
0	TrackHeaderVersion	no
1	TrackCreateDate	int32u
2	TrackModifyDate	int32u
3	TrackID	no
5	TrackDuration	no
8	TrackLayer	no
9	TrackVolume	no
10	MatrixStructure	fixed32s[9]!
19	ImageWidth	no
20	ImageHeight	no

QuickTime TrackRef Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'cdsc'	ContentDescribes	no
'chap'	ChapterListTrackID	no
'mpod'	ElementaryStreamTrack	no
'tmcd'	TimeCode	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
-----	-----	-----
'@day'	ContentCreateDate	string/
'@mak'	Make	string/
'@mod'	Model	string/
'@sec'	SamsungSec	Samsung sec
'@swr'	SoftwareVersion	string/
'@xyz'	GPSCoordinates	string/
'AllF'	PlayAllFrames	int8u
'CAME'	SerialNumberHash	string
'CNCV'	CompressorVersion	string
'CNFV'	FirmwareVersion	string
'CNMN'	Model	string/
'CNOP'	CanonCNOP	Canon CNOP
'CNTH'	CanonCNTH	Canon CNTH
'DcMD'	KodakDcMD	Kodak DcMD
'FFMV'	FujiFilmFFMV	FujiFilm FFMV
'FIRM'	FirmwareVersion	string/
'FOV\0'	FieldOfView	string
'GPMF'	GoProGPMF	GoPro GPMF
'GoPr'	GoProType	string
'INFO'	SamsungINFO	Samsung INFO
'LEIC'	LeicaLEIC	Panasonic PANA
'LENS'	LensSerialNumber	string
'LOOP'	LoopStyle	int32u
'Lvlm'	LevelMeter?	rational64s
'MMA0'	MinoltaMMA0	Minolta MMA
'MMA1'	MinoltaMMA1	Minolta MMA
'MVTG'	FujiFilmMVTG	EXIF
'NCDT'	NikonNCDT	Nikon NCDT
'PANA'	PanasonicPANA	Panasonic PANA
'PENT'	PentaxPENT	Pentax PENT
'PXMN'	MakerNotePentax5b	Pentax
	MakerNotePentax5c	Pentax
	MakerNotePentaxUnknown	string

'PXTH'	PentaxPreview	Pentax PXTH
'QVMI'	CasioQVMI	EXIF
'RDTA'	RicohRDTA	Ricoh RDTA
'RDTB'	RicohRDTB	Ricoh RDTB
'RDTC'	RicohRDTC	Ricoh RDTC
'RDTG'	RicohRDTG	Ricoh RDTG
'RDTL'	RicohRDTL	Ricoh RDTL
'RICO'	RicohInfo	JPEG
'RMKN'	RicohRMKN	EXIF
'RTHU'	PreviewImage	no
'SDLN'	PlayMode	string
'SNum'	SerialNumber	string/
'Selo'	PlaySelection	int8u
'TAGS'	FujiFilmTags	FujiFilm MOV
	KodakTags	Kodak MOV
	KonicaMinoltaTags	Minolta MOV1
	MinoltaTags	Minolta MOV2
	NikonTags	Nikon MOV
	OlympusTags1	Olympus MOV1
	OlympusTags2	Olympus MOV2
	OlympusTags3	Olympus MP4
	OlympusTags4	Olympus MOV3
	PentaxTags	Pentax MOV
	SamsungTags	Samsung MP4
	SanyoMOV	Sanyo MOV
	SanyoMP4	Sanyo MP4
	UnknownTags?	string
'TTMD'	TomTomMetaData	QuickTime TomTom
'WLOC'	WindowLocation	int16u
'XMP_'	XMP	XMP
'Xtra'	MicrosoftXtra	Microsoft Xtra
'_cx_'	CX?	rational64s
'_cy_'	CY?	rational64s
'_yaw'	Yaw	rational64s/
'album'	Album	string/
'albr'	AlbumArtist	string
'angl'	CameraAngle	string
'apmd'	ApertureMode	undef
'auth'	Author	string/
'ccid'	ContentID	string
'cdis'	ContentDistributorID	string
'chpl'	ChapterList	no
'clfn'	ClipFileName	string
'clid'	ClipID	string
'clsf'	Classification	undef/
'cmid'	CameraID	string
'cmmn'	Model	string/
'coll'	CollectionName	string/
'cprt'	Copyright	string/
'cver'	CodeVersion	string
'cvru'	CoverURI	string
'date'	DateTimeOriginal	string
'dscp'	Description	string/
'finm'	OriginalFileName	no
'gnre'	Genre	string/
'hinf'	HintTrackInfo	QuickTime HintTrackInfo
'hinv'	HintVersion	string
'hnti'	HintInfo	QuickTime HintInfo
'htcb'	HTCBinary	QuickTime HTCBinary
'icnu'	IconURI	string
'infi'	CameraInfo	QuickTime Nextbase
'info'	FirmwareVersion	string
'infu'	InfoURL	string
'kgtt'	TrackType	string
'kywd'	Keywords	no
'loci'	LocationInformation	undef/
'lrcu'	LyricsURI	string
'lvlm'	LevelMeter?	rational64s
'manu'	Make	no
'mcvr'	PreviewImage	string

'meta'	Meta	QuickTime Meta
'modl'	Model	no
'name'	Name	string
'perf'	Performer	string/
'pmcc'	GarminSettings	string
'pose'	pose	Kodak pose
'ptch'	Pitch	rational64s/
'ptv'	PrintToVideo	QuickTime Video
'rads'	Rads?	rational64s
'reel'	ReelName	string
'roll'	Roll	rational64s/
'rtng'	Rating	undef/
'scen'	Scene	string
'scrn'	OlympusPreview	Olympus scrn
'shot'	ShotName	string
'slnr'	SerialNumber	string
'smta'	SamsungSmta	Samsung smta
'tags'	Audible_tags	Audible tags
'thmb'	MakerNotePentax5a	Pentax
	OlympusThumbnail	Olympus thmb
	ThumbnailImage	string
	ThumbnailPNG	string
	UnknownThumbnail	string
'time'	TimeStamp	no
'titl'	Title	string/
'urat'	UserRating	undef/
'uuid'	GarminSoftware	string
	GarminModel	no
	UUID-Unknown?	no
'vndr'	Vendor	string
'vrot'	AccelerometerData	no
'yrrc'	Year	undef/
"\xa9ART"	Artist	string
"\xa9TIM"	StartTimecode	string
"\xa9TSC"	StartTimeScale	string
"\xa9TSZ"	StartTimeSampleSize	string
"\xa9alb"	Album	string
"\xa9arg"	Arranger	string
"\xa9ark"	ArrangerKeywords	string
"\xa9cmt"	Comment	string
"\xa9cok"	ComposerKeywords	string
"\xa9com"	Composer	string
"\xa9cpy"	Copyright	string
"\xa9day"	ContentCreateDate	string
"\xa9dir"	Director	string
"\xa9ed1"	Edit1	string
"\xa9ed2"	Edit2	string
"\xa9ed3"	Edit3	string
"\xa9ed4"	Edit4	string
"\xa9ed5"	Edit5	string
"\xa9ed6"	Edit6	string
"\xa9ed7"	Edit7	string
"\xa9ed8"	Edit8	string
"\xa9ed9"	Edit9	string
"\xa9enc"	EncoderID	string
"\xa9fmt"	Format	string
"\xa9fpt"	Pitch	string
"\xa9frl"	Roll	string
"\xa9fyw"	Yaw	string
"\xa9gen"	Genre	string
"\xa9gpt"	CameraPitch	string
"\xa9grl"	CameraRoll	string
"\xa9grp"	Grouping	string
"\xa9gyw"	CameraYaw	string
"\xa9inf"	Information	string
"\xa9isr"	ISRCCode	string
"\xa9lab"	RecordLabelName	string
"\xa9lal"	RecordLabelURL	string
"\xa9lyr"	Lyrics	string
"\xa9mak"	Make	string

"\xa9mal"	MakerURL	string
"\xa9mdl"	Model	string/
"\xa9mod"	Model	string
"\xa9nam"	Title	string
"\xa9pdk"	ProducerKeywords	string
"\xa9phg"	RecordingCopyright	string
"\xa9prd"	Producer	string
"\xa9prf"	Performers	string
"\xa9prk"	PerformerKeywords	string
"\xa9prl"	PerformerURL	string
"\xa9req"	Requirements	string
"\xa9snk"	SubtitleKeywords	string
"\xa9snm"	Subtitle	string
"\xa9src"	SourceCredits	string
"\xa9swf"	SongWriter	string
"\xa9swk"	SongWriterKeywords	string
"\xa9swr"	SoftwareVersion	string
"\xa9too"	Encoder	string
"\xa9trk"	Track	string
"\xa9wrt"	Composer	string/
"\xa9xsp"	SpeedX	string
"\xa9xyz"	GPSCoordinates	string
"\xa9ysp"	SpeedY	string
"\xa9zsp"	SpeedZ	string

QuickTime TomTom Tags

Tags found in TomTom Bandit Action Cam MP4 videos.

Tag ID	Tag Name	Writable
-----	-----	-----
'TTAD'	TomTomAD	QuickTime Stream
'TTHL'	TomTomHL?	no
'TTID'	TomTomID	no
'TTVD'	TomTomVD	no
'TTVI'	TomTomVI?	no

QuickTime HintTrackInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'dimmm'	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
'trpy'	TotalBytes	no

QuickTime HintInfo Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'rtp '	RealtimeStreamingProtocol	no
'sdp '	StreamingDataProtocol	no

QuickTime HTCBinary Tags

Index4	Tag Name	Writable
-----	-----	-----

[no tags known]

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
-----	-----	-----
'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
'NBCD'	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

-- ExifTool 12.92 Tag Names --

'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-FiMACAddress	no
'Wi-Fi Password'	Wi-FiPassword	no
'Wi-Fi SSID'	Wi-FiSSID	no
'what3words'	What3Words	no

QuickTime Video Tags

Index1	Tag Name	Writable
0	DisplaySize	no
6	SlideShow	no

QuickTime UserMedia Tags

Tag ID	Tag Name	Writable
'MTDT'	MetaData	QuickTime MetaData

QuickTime MetaData Tags

Tag ID	Tag Name	Writable
0x0001	Title	no
0x0003	ProductionDate	no
0x0004	Software	no
0x0005	Product	no
0x000a	TrackProperty	no
0x000b	TimeZone	no
0x000c	ModifyDate	no

QuickTime MovieHeader Tags

Index4	Tag Name	Writable
0	MovieHeaderVersion	no
1	CreateDate	int32u
2	ModifyDate	int32u
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
0	PreviewDate	int32u
2	PreviewVersion	no
3	PreviewAtomType	no
5	PreviewAtomIndex	no

QuickTime SkipInfo Tags

Tag ID	Tag Name	Writable
'thma'	ThumbnailImage	no
'ver '	Version	no

QuickTime Profile Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'APRF'	AudioProfile	QuickTime AudioProf
'FPRF'	FileGlobalProfile	QuickTime FileProf
'OLYM'	OlympusOLYM	Olympus OLYM
'VPRF'	VideoProfile	QuickTime VideoProf

QuickTime AudioProf Tags

Index4	Tag Name	Writable
-----	-----	-----
0	AudioProfileVersion?	no
1	AudioTrackID	no
2	AudioCodec	no
3	AudioCodecInfo?	no
4	AudioAttributes	no
5	AudioAvgBitrate	no
6	AudioMaxBitrate	no
7	AudioSampleRate	no
8	AudioChannels	no

QuickTime FileProf Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FileProfileVersion?	no
1	FileFunctionFlags	no

QuickTime VideoProf Tags

Index4	Tag Name	Writable
-----	-----	-----
0	VideoProfileVersion?	no
1	VideoTrackID	no
2	VideoCodec	no
3	VideoCodecInfo?	no
4	VideoAttributes	no
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.

Index4	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0x0001	Accel360Fly	QuickTime Accel360Fly
0x0002	Gyro360Fly	QuickTime Gyro360Fly
0x0003	Mag360Fly	QuickTime Mag360Fly
0x0005	GPS360Fly	QuickTime GPS360Fly
0x0006	Rot360Fly	QuickTime Rot360Fly

0x00fa Fusion360Fly QuickTime Fusion360Fly

QuickTime Accel360Fly Tags

Index1	Tag Name	Writable
-----	-----	-----
1	AccelMode?	no
2	SampleTime	no
10	AccelYPR	no

QuickTime Gyro360Fly Tags

Index1	Tag Name	Writable
-----	-----	-----
1	GyroMode?	no
2	SampleTime	no
10	GyroYPR	no

QuickTime Mag360Fly Tags

Index1	Tag Name	Writable
-----	-----	-----
1	MagMode?	no
2	SampleTime	no
10	MagnetometerXYZ	no

QuickTime GPS360Fly Tags

Index1	Tag Name	Writable
-----	-----	-----
1	GPSTimeStamp	no
2	SampleTime	no
10	GPSLatitude	no
14	GPSLongitude	no
18	GPSAltitude	no
22	GPSSpeed	no
24	GPSTrack	no
26	Acceleration	no

QuickTime Rot360Fly Tags

Index1	Tag Name	Writable
-----	-----	-----
1	RotMode?	no
2	SampleTime	no
10	RotationXYZ	no

QuickTime Fusion360Fly Tags

Index1	Tag Name	Writable
-----	-----	-----
1	FusionMode?	no
2	SampleTime	no
10	FusionYPR	no

QuickTime ImageFile Tags

Tags used in QTIF QuickTime Image Files.

Tag ID	Tag Name	Writable
-----	-----	-----
'idat'	ImageData	no
'idsc'	ImageDescription	QuickTime ImageDesc
'iicc'	ICC_Profile	ICC_Profile

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
-----	-----	-----
'ALPH'	ALPH	RIFF ALPH
'ANIM'	ANIM	RIFF ANIM
'ANMF'	ANMF	RIFF ANMF
'C2PA'	JUMBF	Jpeg2000
'CSET'	CharacterSet	RIFF CSET
'EXIF'	EXIF	EXIF
	UnknownEXIF	no
'ICCP'	ICC_Profile	ICC_Profile
'IDIT'	DateTimeOriginal	no
'JUNK'	OlympusJunk	Olympus AVI
	CasioJunk	EXIF
	RicohJunk	Ricoh AVI
	PentaxJunk	Pentax Junk
	PentaxJunk2	Pentax Junk2
	LucasJunk	QuickTime Stream
	TextJunk	no
'JUNQ'	OldXMP	no
'LIST_INFO0'	Info	RIFF Info
'LIST_INFO'	Info	RIFF Info
'LIST_Tdat'	Tdat	RIFF Tdat
'LIST_adtl'	AssociatedDataList	RIFF
'LIST_exif'	Exif	RIFF Exif
'LIST_hdrl'	Hdr1	RIFF Hdr1
'LIST_hydt'	PentaxData	Pentax AVI
'LIST_ncdt'	NikonData	Nikon AVI
'LIST_pntx'	PentaxData2	Pentax AVI
'SGLT'	BikeBroAccel	QuickTime Stream
'SLLT'	BikeBroGPS	QuickTime Stream
'VP8 '	VP8Bitstream	RIFF VP8
'VP8L'	VP8L	RIFF VP8L
'VP8X'	VP8X	RIFF VP8X
'XMP\0'	XMP	XMP
'XMP '	XMP	XMP
'_PMX'	XMP	XMP
'aXML'	AXML	XMP XML
'acid'	Acidizer	RIFF Acidizer
'afsp'	Afsp	no
'bext'	BroadcastExtension	RIFF BroadcastExt
'cue '	CuePoints	no
'ds64'	DataSize64	RIFF DS64
'fact'	NumberOfSamples	no
'fmt '	AudioFormat	RIFF AudioFormat
'gps0'	GPSTrack	QuickTime Stream
'gsen'	GSensor	QuickTime Stream
'guan'	Guano	no
'iXML'	IXML	XMP XML
'id3 '	ID3	ID3
'inst'	Instrument	RIFF Instrument
'labl'	CuePointLabel	no
'list'	ListType	no
'ltxt'	LabeledText	no
'note'	CuePointNote	no
'olym'	Olym	Olympus WAV
'plst'	Playlist	no
'smpl'	Sampler	RIFF Sampler
'tx_USER'	UserText	RIFF UserText
'tx_Unknown'	Text	no

RIFF ALPH Tags

WebP alpha chunk.

Index1	Tag Name	Writable
-----	-----	-----
0	AlphaPreprocessing	no
0.1	AlphaFiltering	no
0.2	AlphaCompression	no

RIFF ANIM Tags

WebP animation chunk.

Index1	Tag Name	Writable
-----	-----	-----
0	BackgroundColor	no
4	AnimationLoopCount	no

RIFF ANMF Tags

WebP animation frame chunk.

Index1	Tag Name	Writable
-----	-----	-----
12	Duration	no

RIFF CSET Tags

Index2	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
'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'	ArchivalLocation	no
'IART'	Artist	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'	Commissioned	no
'ICMT'	Comment	no

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'ICNM'	Cinematographer	no
'ICNT'	Country	no
'ICOP'	Copyright	no
'ICRD'	DateCreated	no
'ICRP'	Cropped	no
'IDIM'	Dimensions	no
'IDIT'	DateTimeOriginal	no
'IDPI'	DotsPerInch	no
'IDST'	DistributedBy	no
'IEDT'	EditedBy	no
'IENC'	EncodedBy	no
'IENG'	Engineer	no
'IGNR'	Genre	no
'IKEY'	Keywords	no
'ILGT'	Lightness	no
'ILGU'	LogoURL	no
'ILIU'	LogoIconURL	no
'ILNG'	Language	no
'IMBI'	MoreInfoBannerImage	no
'IMBU'	MoreInfoBannerURL	no
'IMED'	Medium	no
'IMIT'	MoreInfoText	no
'IMIU'	MoreInfoURL	no
'IMUS'	MusicBy	no
'INAM'	Title	no
'IPDS'	ProductionDesigner	no
'IPLT'	NumColors	no
'IPRD'	Product	no
'IPRO'	ProducedBy	no
'IRIP'	RippedBy	no
'IRTD'	Rating	no
'ISBJ'	Subject	no
'ISFT'	Software	no
'ISGN'	SecondaryGenre	no
'ISHP'	Sharpness	no
'ISMP'	TimeCode	no
'ISRC'	Source	no
'ISRF'	SourceForm	no
'ISTD'	ProductionStudio	no
'ISTR'	Starring	no
'ITCH'	Technician	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
'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
-----	-----	-----
[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
-----	-----	-----
'ecor'	Make	no
'emdl'	Model	no
'emnt'	MakerNotes	no
'erel'	RelatedImageFile	no
'etim'	TimeCreated	no
'eucm'	UserComment	no
'ever'	ExifVersion	no

RIFF Hdrl Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'IDIT'	DateTimeOriginal	no
'ISMP'	TimeCode	no
'LIST_odml'	OpenDML	RIFF OpenDML
'LIST_strl'	Stream	RIFF Stream
'avih'	AVIHeader	RIFF AVIHeader

RIFF OpenDML Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'dmlh'	ExtendedAVIHeader	RIFF ExtAVIHdr

RIFF ExtAVIHdr Tags

Index4	Tag Name	Writable
-----	-----	-----
0	TotalFrameCount	no

RIFF Stream Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'strd'	StreamData	RIFF StreamData
'strf'	AudioFormat	RIFF AudioFormat
	VideoFormat	BMP
'strh'	StreamHeader	RIFF StreamHeader
'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
-----	-----	-----
'AVIF'	AVIF	EXIF
'CASI'	CasioData	Casio AVI
'Zora'	VendorName	no
'unknown'	UnknownData	no

RIFF AudioFormat Tags

Index2	Tag Name	Writable
-----	-----	-----
0	Encoding	no
1	NumChannels	no
2	SampleRate	no
4	AvgBytesPerSec	no
7	BitsPerSample	no

RIFF StreamHeader Tags

Index4	Tag Name	Writable
-----	-----	-----
0	StreamType	no
1	AudioCodec	no
	VideoCodec	no
	Codec	no
5	AudioSampleRate	no
	VideoFrameRate	no
	StreamSampleRate	no
8	AudioSampleCount	no
	VideoFrameCount	no
	StreamSampleCount	no
10	Quality	no
11	SampleSize	no

RIFF AVIHeader Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FrameRate	no
1	MaxDataRate	no
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 for the WebP container specification.

Index1	Tag Name	Writable
-----	-----	-----
0	VP8Version	no
6	ImageWidth	no
6.1	HorizontalScale	no
8	ImageHeight	no
8.1	VerticalScale	no

RIFF VP8L Tags

This chunk is found in lossless WebP files.

Index1	Tag Name	Writable
-----	-----	-----
1	ImageWidth	no
2	ImageHeight	no

RIFF VP8X Tags

This chunk is found in extended WebP files.

Index1	Tag Name	Writable
-----	-----	-----
0	WebP_Flags	no
4	ImageWidth	no
6	ImageHeight	no

RIFF Acidizer Tags

Index1	Tag Name	Writable
-----	-----	-----
0	AcidizerFlags	no
4	RootNote	no
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
-----	-----	-----
0	Description	no
256	Originator	no
288	OriginatorReference	no
320	DateTimeOriginal	no
338	TimeReference	no
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
-----	-----	-----
0	RIFFSize64	no
1	DataSize64	no
2	NumberOfSamples64	no

RIFF Instrument Tags

Index1	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
0	Manufacturer	no
1	Product	no
2	SamplePeriod	no
3	MIDIUnityNote	no
4	MIDIPitchFraction	no
5	SMPTEFormat	no
6	SMPTEOffset	no
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
-----	-----	-----
28	GPSAltitude	no
40	Accelerometer	no
56	GPSSpeed	no
60	GPSLatitude	no
64	GPSLongitude	no
68	GPSTimeStamp	no

FLAC Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	StreamInfo	FLAC StreamInfo
0x0001	Padding?	no
0x0002	Application_riff	RIFF
	ApplicationUnknown?	no
0x0003	SeekTable?	no
0x0004	VorbisComment	Vorbis Comments
0x0005	CueSheet?	no
0x0006	Picture	FLAC Picture

FLAC StreamInfo Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
'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
-----	-----	-----
0	PictureType	no
1	PictureMimeType	no
2	PictureDescription	no
3	PictureWidth	no
4	PictureHeight	no
5	PictureBitsPerPixel	no
6	PictureIndexedColors	no
7	PictureLength	no
8	Picture	no

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 Camaro.

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
-----	-----
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
EngineTorqureReq	no
FuelCapacity	no
FuelLevel	no
GPSAltitude	no
GPSTime	no
GPSFix	no
GPSLatitude	no
GPSLongitude	no
GPSTrack	no
Gear	no
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
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 mrlld 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
-----	-----
Channel01	GM Channel Struct
Channel01Description	no_
Channel01DispMax	no_
Channel01DispMin	no_
Channel01Flags	no_
Channel01ID	no_
Channel01Interval	no_
Channel01Max	no_
Channel01Min	no_
Channel01Multiplier	no_
Channel01Name	no_
Channel01Num	no_
Channel01Offset	no_
Channel01Type	no_
Channel01Units	no_

GM Channel Struct

Information stored for each channel in the Marlin dictionary.

Field Name	Writable
-----	-----
ID	no
Type	no
Num	no
Units	no
Flags	no
Interval	no
Min	no
Max	no
DispMin	no
DispMax	no
Multiplier	no
Offset	no
Name	no
Description	no

GM mrlh Tags

The Marlin PDR header.

Index1	Tag Name	Writable
-----	-----	-----
0	MarlinDataVersion	no

GM mrlv Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
'date'	Date1	no
'lang'	Language	no
'ldat'	Date2	no
'ltim'	Time2	no
'swvs'	SoftwareVersion	no
'time'	Time1	no
'tstm'	StartTime	no
'unit'	Units	no
'zone'	TimeZone	no

Parrot Tags

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
-----	-----	-----
'P1'	ParrotV1	Parrot V1
'P2'	ParrotV2	Parrot V2
'P3'	ParrotV3	Parrot V3
'E1'	ParrotTimeStamp	Parrot TimeStamp
'E2'	ParrotFollowMe	Parrot FollowMe
'E3'	ParrotAutomation	Parrot Automation
'application/arcore-accel'	ARCoreAccel	Parrot ARCoreAccel
'application/arcore-custom-event'	ARCoreCustom	Parrot ARCoreCustom
'application/arcore-gyro'	ARCoreGyro	Parrot ARCoreGyro
'application/arcore-video-0'	ARCoreVideo	Parrot ARCoreVideo

Parrot V1 Tags

Parrot version 1 streaming metadata.

Index1	Tag Name	Writable
-----	-----	-----
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
36.1	GPSSatellites	no
40	AltitudeFromTakeOff	no
44	DistanceFromHome	no
48	SpeedX	no
50	SpeedY	no
52	SpeedZ	no
54	Binning	no
54.1	FlyingState	no
55	Animation	no
55.1	PilotingMode	no

Parrot V2 Tags

Parrot version 2 basic streaming metadata.

Index1	Tag Name	Writable
-----	-----	-----
4	Elevation	no
8	GPSLatitude	no
12	GPSLongitude	no
16	GPSAltitude	no
16.1	GPSSatellites	no
20	GPSVelocityNorth	no
22	GPSVelocityEast	no
24	GPSVelocityDown	no
26	AirSpeed	no
28	DroneQuaternion	no
36	FrameView	no
44	CameraPan	no

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46	CameraTilt	no
48	ExposureTime	no
50	ISO	no
52	Binning	no
52.1	FlyingState	no
53	Animation	no
53.1	PilotingMode	no
54	WifiRSSI	no
55	Battery	no
'Groups'	Groups	no

Parrot V3 Tags

Parrot version 3 basic streaming metadata.

Index1	Tag Name	Writable
-----	-----	-----
4	Elevation	no
8	GPSLatitude	no
12	GPSLongitude	no
16	GPSAltitude	no
16.1	GPSSatellites	no
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
64	LinkGoodput	no
64.1	LinkQuality	no
68	WifiRSSI	no
69	Battery	no
70	Binning	no
70.1	FlyingState	no
71	Animation	no
71.1	PilotingMode	no

Parrot TimeStamp Tags

Parrot streaming metadata timestamp extension.

Index1	Tag Name	Writable
-----	-----	-----
4	TimeStamp	no

Parrot FollowMe Tags

Parrot streaming metadata follow-me extension.

Index1	Tag Name	Writable
-----	-----	-----
4	GPSTargetLatitude	no
8	GPSTargetLongitude	no
12	GPSTargetAltitude	no
16	Follow-meMode	no
17	Follow-meAnimation	no

Parrot Automation Tags

Parrot streaming metadata automation extension.

Index1	Tag Name	Writable
-----	-----	-----
4	GPSFramingLatitude	no

8	GPSFramingLongitude	no
12	GPSFramingAltitude	no
16	GPSDestLatitude	no
20	GPSDestLongitude	no
24	GPSDestAltitude	no
28	AutomationAnimation	no
29	AutomationFlags	no

Parrot ARCoreAccel Tags

ARCore accelerometer data.

Index1	Tag Name	Writable
-----	-----	-----
4	AccelerometerUnknown?	no
5	Accelerometer	no

Parrot ARCoreCustom Tags

Index1	Tag Name	Writable
-----	-----	-----
[no tags known]		

Parrot ARCoreGyro Tags

ARCore accelerometer data.

Index1	Tag Name	Writable
-----	-----	-----
4	GyroscopeUnknown?	no
5	Gyroscope	no

Parrot ARCoreVideo Tags

Index1	Tag Name	Writable
-----	-----	-----
[no tags known]		

AAC Tags

Tags extracted from Advanced Audio Coding (AAC) files.

Tag ID	Tag Name	Writable
-----	-----	-----
'Bit016-017'	ProfileType	no
'Bit018-021'	SampleRate	no
'Bit023-025'	Channels	no
'Encoder'	Encoder	no

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
-----	-----	-----
'FLAC'	FLAC	FLAC
'ID3'	ID3	ID3
'Opus'	Opus	Opus
'theora'	Theora	Theora
'vorbis'	Vorbis	Vorbis

Vorbis Tags

Information extracted from Ogg Vorbis files. See
<<http://www.xiph.org/vorbis/doc/>> for the Vorbis specification.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	Identification	Vorbis Identification
0x0003	Comments	Vorbis Comments

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
-----	-----	-----
'ACTOR'	Actor	no
'ALBUM'	Album	no
'ARTIST'	Artist	no+
'COMMENT'	Comment	no
'COMPOSER'	Composer	no
'CONTACT'	Contact	no+
'COPYRIGHT'	Copyright	no
'COVERART'	CoverArt	no
'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	FLAC Picture
'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

Vorbis Identification Tags

Index1	Tag Name	Writable
-----	-----	-----
0	VorbisVersion	no
4	AudioChannels	no
5	SampleRate	no
9	MaximumBitrate	no
13	NominalBitrate	no
17	MinimumBitrate	no

Opus Tags

Information extracted from Ogg Opus files. See <https://www.opus-codec.org/docs/> for the specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'OpusHead'	Header	Opus Header
'OpusTags'	Comments	Vorbis Comments

Opus Header Tags

Index1	Tag Name	Writable
-----	-----	-----
0	OpusVersion	no
1	AudioChannels	no
4	SampleRate	no
8	OutputGain	no

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
-----	-----	-----
0x0080	Identification	Theora Identification
0x0081	Comments	Vorbis Comments

Theora Identification Tags

Tags extracted from the Theora identification header.

Index1	Tag Name	Writable
-----	-----	-----
0	TheoraVersion	no
7	ImageWidth	no
10	ImageHeight	no
13	XOffset	no
14	YOffset	no
15	FrameRate	no
23	PixelAspectRatio	no
29	ColorSpace	no
30	NominalVideoBitrate	no
33	Quality	no
34	PixelFormat	no

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
-----	-----	-----
'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
-----	-----	-----
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
-----	-----	-----
0	APEVersion	no
1	CompressionLevel	no
3	Channels	no
4	SampleRate	no
10	TotalFrames	no
12	FinalFrameBlocks	no

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
-----	-----	-----
'_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
-----	-----	-----
'cvrx'	Audible_cvr_x	Audible cvrx
'meta'	Audible_meta	Audible meta
'tseg'	Audible_tseg	Audible tseg

Audible cvrx Tags

Audible cover art information in M4B audio books.

Tag Name	Writable
-----	-----
CoverArt	no
CoverArtType	no

Audible meta Tags

Information found in Audible M4B "meta" atom.

Tag ID	Tag Name	Writable
-----	-----	-----
'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
-----	-----	-----
'meta'	Audible_meta2	Audible meta
'tshd'	ChapterNumber	no

MPC Tags

Tags used in Musepack (MPC) audio files. ExifTool also extracts ID3 and APE information from these files.

Tag ID	Tag Name	Writable
-----	-----	-----
'Bit032-063'	TotalFrames	no
'Bit080-081'	SampleRate	no
'Bit084-087'	Quality	no
'Bit088-093'	MaxBand	no
'Bit096-111'	ReplayGainTrackPeak	no
'Bit112-127'	ReplayGainTrackGain	no

-- ExifTool 12.92 Tag Names --

'Bit128-143'	ReplayGainAlbumPeak	no
'Bit144-159'	ReplayGainAlbumGain	no
'Bit179'	FastSeek	no
'Bit191'	Gapless	no
'Bit216-223'	EncoderVersion	no

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
-----	-----	-----
'Bit11-12'	MPEGAudioVersion	no
'Bit13-14'	AudioLayer	no
'Bit16-19'	AudioBitrate	no
'Bit20-21'	SampleRate	no
'Bit24-25'	ChannelMode	no
'Bit26'	MSStereo	no
'Bit26-27'	ModeExtension	no
'Bit27'	IntensityStereo	no
'Bit28'	CopyrightFlag	no
'Bit29'	OriginalMedia	no
'Bit30-31'	Emphasis	no

MPEG Video Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'Bit00-11'	ImageWidth	no
'Bit12-23'	ImageHeight	no
'Bit24-27'	AspectRatio	no
'Bit28-31'	FrameRate	no
'Bit32-49'	VideoBitrate	no

MPEG Xing Tags

These tags are extracted from the Xing/Info frame.

Tag Name	Writable
-----	-----
Encoder	no
LameHeader	MPEG Lame
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
-----	-----	-----
9	LameMethod	no
10	LameLowPassFilter	no
20	LameBitrate	no
24	LameStereoMode	no

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
-----	-----
AudioStreamType	no

Duration	no
VideoStreamType	no
_AC3	M2TS AC3
_H264	H264
_MISB	MISB

M2TS AC3 Tags

Tags extracted from AC-3 audio streams.

Tag Name	Writable
-----	-----
AudioBitrate	no
AudioChannels	no
AudioSampleRate	no
SurroundMode	no

H264 Tags

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

Tag Name	Writable
-----	-----
ImageHeight	no
ImageWidth	no
MDPM	H264 MDPM

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
-----	-----	-----
0x0013	TimeCode	no
0x0018	DateTimeOriginal	no
0x0070	Camera1	H264 Camera1
0x0071	Camera2	H264 Camera2
0x007f	Shutter	H264 Shutter
0x00a0	ExposureTime	no
0x00a1	FNumber	no
0x00a2	ExposureProgram	no
0x00a3	BrightnessValue	no
0x00a4	ExposureCompensation	no
0x00a5	MaxApertureValue	no
0x00a6	Flash	no
0x00a7	CustomRendered	no
0x00a8	WhiteBalance	no
0x00a9	FocalLengthIn35mmFormat	no
0x00aa	SceneCaptureType	no
0x00b0	GPSVersionID	no
0x00b1	GPSLatitudeRef	no
0x00b2	GPSLatitude	no
0x00b5	GPSLongitudeRef	no
0x00b6	GPSLongitude	no
0x00b9	GPSAltitudeRef	no
0x00ba	GPSAltitude	no
0x00bb	GPSTimeStamp	no
0x00be	GPSStatus	no
0x00bf	GPSMeasureMode	no
0x00c0	GPSDOP	no
0x00c1	GPSSpeedRef	no
0x00c2	GPSSpeed	no

0x00c3	GPSTrackRef	no
0x00c4	GPSTrack	no
0x00c5	GPSImgDirectionRef	no
0x00c6	GPSImgDirection	no
0x00c7	GPSMapDatum	no
0x00ca	GPSTimeStamp	no
0x00e0	MakeModel	H264 MakeModel
0x00e1	RecInfo	H264 RecInfo
0x00e4	Model	no
0x00ee	FrameInfo	H264 FrameInfo

H264 Camera1 Tags

Index1	Tag Name	Writable
-----	-----	-----
0	ApertureSetting	no
1	Gain	no
1.1	ExposureProgram	no
2.1	WhiteBalance	no
3	Focus	no

H264 Camera2 Tags

Index1	Tag Name	Writable
-----	-----	-----
1	ImageStabilization	no

H264 Shutter Tags

Index2	Tag Name	Writable
-----	-----	-----
1.1	ExposureTime	no

H264 MakeModel Tags

Index2	Tag Name	Writable
-----	-----	-----
0	Make	no

H264 RecInfo Tags

Recording information stored by some Canon video cameras.

Index1	Tag Name	Writable
-----	-----	-----
0	RecordingMode	no

H264 FrameInfo Tags

Frame rate information stored by some Canon video cameras.

Index1	Tag Name	Writable
-----	-----	-----
0	CaptureFrameRate	no
1	VideoFrameRate	no

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
-----	-----	-----
'060E2B34030101010E01030302000000'	Security	MISB Security
'060e2b3402030101434e415644494147'	ChurchillNav	MISB ChurchillNav
'060e2b34020b01010e01030101000000'	UASDataLink	MISB UASDataLink
'<other>'	Unknown	MISB Unknown

MISB Security Tags

Tags extracted from the MISB ST 0102.11 Security Metadata local set.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	SecurityClassification	no
0x0002	ClassifyingCountryCodeMethod	no
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
0x000d	ObjectCountryCodes	no
0x000e	ClassificationComments	no
0x000f	UMID	no
0x0010	StreamID	no
0x0011	TransportStreamID	no
0x0015	ItemDesignatorID	no
0x0016	SecurityVersion	no
0x0017	ClassifyingCountryCodingMethodDate	no
0x0018	ObjectCountryCodingMethodDate	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
-----	-----	-----
[no tags known]		

MISB UASDatalink Tags

Tags extracted from the MISB ST 0601.11 UAS Datalink local set.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0001	Checksum	no
0x0002	GPSTimeDate	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
0x0023	WindDirection	no
0x0024	WindSpeed	no
0x0025	StaticPressure	no
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
0x0030	SecurityLocalMetadataSet	MISB Security
0x0031	DifferentialPressure	no
0x0032	AngleOfAttack	no
0x0033	VerticalSpeed	no
0x0034	SideslipAngle	no
0x0035	AirfieldBarometricPressure	no
0x0036	AirfieldElevation	no
0x0037	RelativeHumidity	no
0x0038	GPSSpeed	no
0x0039	GroundRange	no
0x003a	FuelRemaining	no
0x003b	CallSign	no
0x003c	WeaponLoad	no
0x003d	WeaponFired	no
0x003e	LaserPRFCode	no
0x003f	SensorFieldOfViewName	no
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	MISB Unknown
0x004a	VMTIDDataSet	MISB Unknown
0x004b	SensorEllipsoidHeight	no
0x004c	AlternateEllipsoidHeight	no
0x004d	OperationalMode	no
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	MISB Unknown
0x0060	TargetWidthExtended	no
0x0061	RangeImageLocalSet	MISB Unknown
0x0062	GeoregistrationLocalSet	MISB Unknown

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0x0063	CompositeImagingLocalSet	MISB Unknown
0x0064	SegmentLocalSet	MISB Unknown
0x0065	AmendLocalSet	MISB Unknown
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
-----	-----	-----
[no tags known]		

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
-----	-----	-----
0x0000	ChapterDisplay	Matroska
0x0003	TrackType	no
0x0005	ChapterString	no
0x0006	VideoCodecID	no
	AudioCodecID	no
	CodecID	no
0x0008	TrackDefault	no
0x0009	ChapterTrackNumber?	no
0x000e	Slices	Matroska
0x000f	ChapterTrack	Matroska
0x0011	ChapterTimeStart	no
0x0012	ChapterTimeEnd	no
0x0016	CueRefTime?	no
0x0017	CueRefCluster?	no
0x0018	ChapterFlagHidden?	no
0x001a	VideoScanType	no
0x001b	BlockDuration?	no
0x001c	TrackLacing?	no
0x001f	AudioChannels	no
0x0020	BlockGroup	Matroska
0x0021	Block?	no
0x0022	BlockVirtual?	no
0x0023	SimpleBlock?	no
0x0024	CodecState?	no
0x0025	BlockAdditional?	no
0x0026	BlockMore	Matroska
0x0027	Position	no
0x002a	CodecDecodeAll	no
0x002b	PrevSize	no
0x002e	TrackEntry	Matroska
0x002f	EncryptedBlock?	no
0x0030	ImageWidth	no
0x0033	CueTime?	no
0x0035	AudioSampleRate	no
0x0036	ChapterAtom	Matroska
0x0037	CueTrackPositions	Matroska
0x0039	TrackUsed	no
0x003a	ImageHeight	no
0x003b	CuePoint	Matroska
0x003f	CRC-32?	no
0x004b	BlockAdditionalID?	no

0x004c	LaceNumber?	no
0x004d	FrameNumber?	no
0x004e	Delay?	no
0x004f	ClusterDuration?	no
0x0057	TrackNumber	no
0x005b	CueReference	Matroska
0x0060	Video	Matroska
0x0061	Audio	Matroska
0x0067	TimeCode?	no
0x0068	TimeSlice	Matroska
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
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
0x0485	TagBinary	no
0x0487	TagString	no
0x0489	Duration	no
0x050d	ChapterProcessPrivate?	no
0x0598	ChapterFlagEnabled?	no
0x05a3	TagName	no
0x05b9	EditionEntry	Matroska
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
0x07e2	ContentEncryptionKeyID?	no
0x07e3	ContentSignature?	no
0x07e4	ContentSignatureKeyID?	no
0x07e5	ContentSignatureAlgorithm	no
0x07e6	ContentSignatureHashAlgorithm	no
0x0d80	MuxingApp	no
0x0dbb	Seek	Matroska
0x1031	ContentEncodingOrder?	no
0x1032	ContentEncodingScope?	no
0x1033	ContentEncodingType	no
0x1034	ContentCompression	Matroska
0x1035	ContentEncryption	Matroska
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
0x14b3	AspectRatioType	no
0x14ba	DisplayHeight	no
0x14bb	CropTop	no
0x14cc	CropLeft	no
0x14dd	CropRight	no
0x15aa	TrackForced	no
0x15ee	MaxBlockAdditionID?	no
0x1741	WritingApp	no
0x1854	SilentTracks	Matroska
0x18d7	SilentTrackNumber	no
0x21a7	AttachedFile	Matroska
0x2240	ContentEncoding	Matroska
0x2264	AudioBitsPerSample	no
0x23a2	CodecPrivate?	no
0x23c0	Targets	Matroska
0x23c3	ChapterPhysicalEquivalent	no
0x23c4	TagChapterUID	no
0x23c5	TagTrackUID	no
0x23c6	TagAttachmentUID	no
0x23c9	TagEditionUID	no
0x23ca	TargetType	no
0x2532	SignedElement?	no
0x2624	TrackTranslate	Matroska
0x26a5	TrackTranslateTrackID?	no
0x26bf	TrackTranslateCodec	no
0x26fc	TrackTranslateEditionUID?	no
0x27c8	SimpleTag	Matroska
0x28ca	TargetTypeValue	no
0x2911	ChapterProcessCommand	Matroska
0x2922	ChapterProcessTime?	no
0x2924	ChapterTranslate	Matroska
0x2933	ChapterProcessData?	no
0x2944	ChapterProcess	Matroska
0x2955	ChapterProcessCodecID?	no
0x29a5	ChapterTranslateID?	no
0x29bf	ChapterTranslateCodec	no
0x29fc	ChapterTranslateEditionUID?	no
0x2d80	ContentEncodings	Matroska
0x2de7	MinCache?	no
0x2df8	MaxCache?	no
0x2e67	ChapterSegmentUID?	no
0x2ebc	ChapterSegmentEditionUID?	no
0x2fab	TrackOverlay?	no
0x3373	Tag	Matroska
0x3384	SegmentFileName	no
0x33a4	SegmentUID?	no
0x33c4	ChapterUID?	no
0x33c5	TrackUID	no
0x3446	TrackAttachmentUID	no
0x35a1	BlockAdditions	Matroska
0x38b5	OutputAudioSampleRate	no
0x3ba9	Title	no
0x3d7b	ChannelPositions?	no
0x3e5b	SignatureElements	Matroska
0x3e7b	SignatureElementList	Matroska
0x3e8a	SignatureAlgo	no
0x3e9a	SignatureHash	no
0x3ea5	SignaturePublicKey?	no
0x3eb5	Signature?	no
0x7670	Projection	Matroska Projection
0x2b59c	TrackLanguage	no
0x2b59d	TrackLanguageIETF	no
0x3314f	TrackTimecodeScale	no
0x383e3	FrameRate	no
0x3e383	VideoFrameRate	no
	DefaultDuration	no

0x58688	VideoCodecName	no
	AudioCodecName	no
	CodecName	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	Matroska
0x14d9b74	SeekHead	Matroska
0x254c367	Tags	Matroska
0x549a966	Info	Matroska
0x654ae6b	Tracks	Matroska
0x8538067	SegmentHeader	Matroska
0x941a469	Attachments	Matroska
0xa45dfa3	EBMLHeader	Matroska
0xb538667	SignatureSlot	Matroska
0xc53bb6b	Cues	Matroska
0xf43b675	Cluster	Matroska

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.m>
 for the specification.

Tag ID	Tag Name	Writable
-----	-----	-----
0x7671	ProjectionType	no
0x7672	EquirectangularProj	QuickTime equi
	CubemapProj	QuickTime cbmp
	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
-----	-----	-----
'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_RECORDED'	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	XMP
'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	XMP

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
-----	-----	-----
0	MOIVersion	no
6	DateTimeOriginal	no
14	Duration	no
128	AspectRatio	no
132	AudioCodec	no
134	AudioBitrate	no
218	VideoBitrate	no

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
-----	-----
AAFManufacturerID?	no
AES3PCMDescriptor	MXF
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	MXF
AddressLine	no
AddressLine	no
AddressNameValueSets?	no
AddressSets?	no
AdvertisingMaterialReference	no
AestheticValue	no
AlphaMaximumRef	no
AlphaMinimumRef	no
AlphaSampleDepth	no
AlphaTransparency	no
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	MXF
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	MXF
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	MXF
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
CBESTartOffset	no
CDCIEssenceDescriptor	MXF
CISACLegalEntityID?	no
CaptionDescription	MXF
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
CipherAlgorithm?	no
CipherAlgorithmAES128CBC?	no
Citizenship	no
Citizenship	no
CityName	no
CityName	no
ClassDefinitions?	no
Classification	MXF
ClassificationAndMarkingSystem	no
ClassificationComment	no
ClassificationComment	no
ClassificationNameValueSets?	no
ClassificationReason	no
ClassificationSets?	no
ClassifiedBy	no
ClassifyingCountryCode	no
ClipCreationDateTime	no
ClipFramework	MXF
ClipID	no
ClipIDArray?	no
ClipKind	no
ClipNumber	no
ClipNumber	no
ClipShotSets?	no
CloneCount	no
ClosedBodyPartition?	no
ClosedCaptionSubtitlesFlag	no
ClosedCompleteBodyPartition?	no
ClosedCompleteHeader	MXF Header
ClosedGOPIndicator	no
ClosedHeader	MXF Header
CodecDefinition?	no
CodecDefinition?	no
CodecDefinitions?	no
CodecEssenceDescriptor?	no
CodecEssenceKinds?	no
CodedContentScanningKind	no
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	MXF
CompleteFooter?	no
ComponentAttributes?	no
ComponentDataDefinition	no
ComponentDepth	no
ComponentKLVDData?	no
ComponentMaximumRef	no
ComponentMinimumRef	no
ComponentUserComments?	no
ComponentsInSequence?	no
CompositionRendering?	no
ComputedKeyData	no

ComputedKeyFrames	no
ComputedKeySounds	no
ComputedKeywords	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	MXF
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	MXF
ContentValue	no
ContextDescription	no
ContiguousDataFlag	no
Contract	MXF
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
CountryName	no
CountryName	no
CountryName	no
CreateDate	no
CryptographicContext	MXF
CryptographicContextID?	no
CryptographicContextLink?	no
CryptographicContextObject?	no
CryptographicFramework	MXF
CryptographicFrameworkLabel?	no
CryptographicKeyID?	no
Csiz	no
Cue-InWords	no
Cue-InWords	no
Cue-OutWords	no
Cue-OutWords	no
CueWords	MXF
CulturalValue	no
CurrencyCode	no
CurrencyName	no
CurrentNumberInSequence	no
CurrentNumberInSequence	no
CurrentRepeatNumber	no
CutPoint	no
DMFramework	MXF
DMSegment	MXF
DMSegment	MXF
DMSegment	MXF
DMSegment	MXF
DOI?	no
DVBParentalRating	no
DataDefinition?	no
DataDefinitions?	no
DataDeviceKind	no
DataDeviceParameterName	no
DataDeviceParameterSetting	no
DataEnhancementOrModificationDescription	no
DataEssenceCoding	no
DataEssenceCodingID?	no
DateTimeDropFrameFlag	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
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	MXF
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
DisplayF20offset	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	MXF
EssenceContainerFormat?	no
EssenceContainerFormat?	no
EssenceContainers?	no
EssenceData?	no
EssenceDescription?	no
EssenceIsIdentified	no
EssenceLength	no
EssenceLocators?	no
EssenceStreamID	no
Event	MXF
EventAbsoluteDuration	no
EventAbsoluteDuration?	no
EventAbsoluteDurationFrameCount	no
EventAnnotationSets?	no
EventElapsedTimeToEnd	no
EventElapsedTimeToStart	no
EventEndTimeOffset	no
EventEndTimecodeOffset?	no
EventIndication	no
EventIndication	no
EventOrigin	no
EventSets?	no
EventStart	no
EventStartTimeOffset	no
EventStartTimecodeOffset?	no
EventTrack	MXF
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	MXF
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	MXF
GenericPackage	MXF
GenericPayloads?	no
GenericPictureEssenceDescriptor	MXF
GenericSoundEssenceDescriptor	MXF
GenericTrack	MXF
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	MXF
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	MXF
Identification	MXF
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	MXF
JPEGTableID?	no
JobFunctionCode	no
JobFunctionName	no
JobFunctionName	no
JobTitle	no
JobTitle	no
Jurisdiction	no
Jurisdiction	no
KAGSize	no
KLVDDataDefinitions?	no
KLVDDataParentProperties?	no
KLVDDataType?	no
KLVDDataValue?	no
KLVMetadataSequence?	no
KeyCode?	no
KeyData	no
KeyDataOrProgram	no
KeyFrame	no
KeyFrameSampleCount	no
KeyFrames	no
KeyPoint	MXF
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
LocalEventStartDateTime	no
LocalEventStartDateTime	no
LocalFestivalDateTime	no
LocalFilePath	no
LocalFilePath	no
LocalID	no
LocalLastModifyDate	no
LocalModifyDate	no
LocalStartDateTime	no
LocalTagEntries?	no
LocalTagUniqueID?	no

LocalTagValue	no
LocalTapeNumber	no
LocalTargetID	no
LocalTargetID	no
LocalUserDateTime	no
Location	MXF
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	MXF
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	MXF
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	MXF
NITFLayerTargetID	no
NITFLayerTargetID	no
NMEADocumentText	no
NOLACode	no
NameSuffix	no
NameSuffix	no
NameValue	MXF
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	MXF
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	MXF Header

OpenHeader	MXF Header
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	MXF
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
PackageID?	no
PackageKLVDData?	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	MXF
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	MXF
PersonDescription	no
PersonDescription	no
PersonOrganizationSets?	no
PersonSets?	no
PhysicalInstanceKind	no
PhysicalMediaLength?	no
PhysicalMediaLocation	no
PictureComponentSizing?	no
PictureDisplayRate	no
PictureFormat	MXF
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
PostTableArray?	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	MXF
PresentationAspectRatio	no
PresentationGammaEquation	no

PresentationGammaEquation?	no
PresenterName	no
PreviousNumberInSequence	no
PreviousNumberInSequence	no
PreviousRepeatNumber	no
PrimaryExtendedSpokenLanguageCode	no
PrimaryOriginalLanguageCode	no
PrimaryPackage?	no
PrimarySpokenLanguageCode	no
Primer	MXF
Processing	MXF
ProcessingSet?	no
ProducerName	no
ProductFormat	no
ProductFormat	no
ProductionFramework	MXF
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	MXF
Properties?	no
PropertyType?	no
Publication	MXF
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	MXF
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	MXF
RightsComment	no

RightsComment	no
RightsConditionDescription	no
RightsConditionDescription	no
RightsManagementAuthority	no
RightsManagementAuthority	no
RightsSets?	no
RightsStartDateTime	no
RightsStopDateTime	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	MXF
SceneNumber	no
SceneNumber	no
SceneSettingPeriodSets?	no
SceneShotSets?	no
ScramblingKeyKind	no
ScramblingKeyValue	no
Scripting	MXF
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	MXF
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	MXF
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	MXF
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	MXF
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	MXF
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
StreamPositionIndicator	no
StreetName	no
StreetName	no
StreetNumber	no
StreetNumber	no
StringElementType?	no
StructuralComponent	MXF
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	MXF
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	MXF
TimecodeCreationDateTime?	no
TimecodeEndDateTime?	no
TimecodeEventEndDateTime?	no
TimecodeEventStartDateTime?	no
TimecodeKind	no
TimecodeLastModifyDate?	no

TimecodeModifyDate?	no
TimecodeSourceKind	no
TimecodeStartDateTime?	no
TimecodeStreamData?	no
TimecodeTimebase	no
TimecodeTimebase	no
TimecodeUserBitsFlag	no
TimepointValue?	no
TimingBiasCorrection	no
TimingBiasCorrectionDescription	no
TitleKind	no
TitleKind	no
Titles	MXF
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	MXF
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
URL	no
URL	no
URL	no
URN	no
UTCEndDateTime	no
UTCEventEndDateTime	no
UTCEventEndDateTime	no
UTCEventStartDateTime	no
UTCEventStartDateTime	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	MXF
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
VideoTestResult	no
VideoWatermarkKind	no
ViewportAspectRatio	no
ViewportHeight	no
ViewportImageCenterCCoordinate	no
ViewportImageCenterYCoordinate	no
ViewportWidth	no
VoiceTalentName	no
WAVESummary?	no
WaveAudioDescriptor	MXF
Weighting	no
WhiteReferenceLevel	no
Work-in-ProgressFlag	no
WorkingTitle	no
WorkingTitle	no
XMLDocumentText?	no
XMLDocumentText	no
XMLDocumentText	no
XMLDocumentText?	no
XOsiz	no
XTOsiz	no

XTsiz	no
Xsiz	no
YOsiz	no
YTOsiz	no
YTsiz	no
Ysiz	no

MXF Header Tags

Index1	Tag Name	Writable
-----	-----	-----
0	MXFVersion	no
24	FooterPosition	no
32	HeaderSize	no

DV Tags

The following tags are extracted from DV videos.

Tag Name	Writable
-----	-----
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

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
-----	-----	-----
'Compressed'	Compressed	no
'Duration'	Duration	no
'FlashVersion'	FlashVersion	no
'FrameCount'	FrameCount	no
'FrameRate'	FrameRate	no
'ImageHeight'	ImageHeight	no
'ImageWidth'	ImageWidth	no
0x0045	FlashAttributes	no
0x004d	XMP	XMP

Flash FLV Tags

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

Tag ID	Tag Name	Writable
-----	-----	-----
0x0008	Audio	Flash Audio
0x0009	Video	Flash Video
0x0012	Meta	Flash Meta

Flash Audio Tags

Information extracted from the Flash Audio header.

Tag ID	Tag Name	Writable
-----	-----	-----
'Bit0-3'	AudioEncoding	no
'Bit4-5'	AudioSampleRate	no

'Bit6'	AudioBitsPerSample	no
'Bit7'	AudioChannels	no

Flash Video Tags

Information extracted from the Flash Video header.

Tag ID	Tag Name	Writable
-----	-----	-----
'Bit4-7'	VideoEncoding	no

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
-----	-----	-----
'audiocodecid'	AudioCodecID	no
'audiodatarate'	AudioBitrate	no
'audiodelay'	AudioDelay	no
'audiosamplerate'	AudioSampleRate	no
'audiosamplesize'	AudioSampleSize	no
'audiosize'	AudioSize	no
'bytelenlength'	ByteLength	no
'canSeekToEnd'	CanSeekToEnd	no
'canseekontime'	CanSeekOnTime	no
'createdby'	CreatedBy	no
'creationdate'	CreateDate	no
'cuePoints'	CuePoint	Flash CuePoint
'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	XMP
'metadatatcreator'	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
-----	-----	-----
'name'	Name	no
'parameters'	Parameter	Flash Parameter
'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
-----	-----	-----
[no tags known]		

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
-----	-----	-----
'CONT'	CONT	Real ContentDescr
'MDPR'	MDPR	Real MediaProps
'PROP'	PROP	Real Properties
'RJMD'	RJMD	Real Metadata

Real ContentDescr Tags

Sequence	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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	Real FileInfo

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
-----	-----	-----
'Audiences'	Audiences	no
'Audio Format'	AudioFormat	no
'Content Rating'	ContentRating	no
'Creation Date'	CreateDate	no
'Description'	Description	no
'File ID'	FileID	no
'Generated By'	Software	no
'Indexable'	Indexable	no
'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
-----	-----	-----
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

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
-----	-----	-----
'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
-----	-----	-----
'ra3'	RA3	Real AudioV3
'ra4'	RA4	Real AudioV4
'ra5'	RA5	Real AudioV5

Real AudioV3 Tags

Sequence	Tag Name	Writable
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
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
-----	-----	-----
'txt'	Text	no
'url'	URL	no

Red Tags

Tags extracted from Redcode R3D video files.

Tag ID	Tag Name	Writable
-----	-----	-----
'RED1'	Red1Header	Red RED1
'RED2'	Red2Header	Red RED2
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
-----	-----	-----
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
-----	-----	-----
7	RedcodeVersion	no
76	ImageWidth	no
80	ImageHeight	no
86	FrameRate	no

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
-----	-----	-----
'(c) '	Copyright	no
'ANNO'	Annotation	no
'APPL'	ApplicationData	no
'AUTH'	Author	no
'COMM'	Common	AIFF Common
'COMT'	Comment	AIFF Comment
'FVER'	FormatVersion	AIFF FormatVers
'ID3 '	ID3	ID3
'NAME'	Name	no

AIFF Common Tags

Index2	Tag Name	Writable
-----	-----	-----
0	NumChannels	no
1	NumSampleFrames	no
3	SampleSize	no
4	SampleRate	no
9	CompressionType	no
11	CompressorName	no

AIFF Comment Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	CommentTime	no
0x0001	MarkerID	no
0x0002	Comment	no

AIFF FormatVers Tags

Index4	Tag Name	Writable
-----	-----	-----
0	FormatVersionTime	no

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
-----	-----
SimpleIndex	no
TimecodeIndex	no
Header	ASF Header
Data	no
XMP	XMP
Index	no
MediaIndex	no

ASF Header Tags

Tag Name	Writable
-----	-----
Padding	no
ScriptCommand	no
ContentBranding	ASF ContentBranding
ContentEncryption	no
DigitalSignature	no
ExtendedContentEncryption	no
HeaderExtension	ASF HeaderExtension
ContentDescription	ASF ContentDescr
ErrorCorrection	no
StreamBitrateProps	no
CodecList	ASF CodecList
FileProperties	ASF FileProperties
StreamProperties	ASF StreamProperties
ExtendedContentDescr	ASF ExtendedDescr
BitrateMutualExclusion	no
Marker	no

ASF ContentBranding Tags

Tag Name	Writable
-----	-----
BannerImageType	no
BannerImage	no
BannerImageURL	no
CopyrightURL	no

ASF HeaderExtension Tags

Tag Name	Writable
-----	-----
ExtendedStreamProps	no
AdvancedContentEncryption	no
MetadataLibrary	ASF ExtendedDescr
TimecodeIndexParms	no
Compatibility	no
LanguageList	no
AdvancedMutualExcl	no
BandwidthSharing	no
Reserved1	no
Metadata	ASF ExtendedDescr
GroupMutualExclusion	no
StreamPrioritization	no
IndexParameters	no

ASF ExtendedDescr Tags

Tag Name	Writable
-----	-----
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
MediaIsDelay	no
MediaIsFinale	no
MediaIsLive	no
MediaIsPremiere	no
MediaIsRepeat	no
MediaIsSAP	no
MediaIsStereo	no
MediaIsSubtitled	no
MediaIsTape	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	ASF Picture
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
----------	----------

-----	-----
PictureType	no
PictureMIMEType	no
PictureDescription	no
Picture	no

ASF ContentDescr Tags

Tag Name	Writable
-----	-----
Title	no
Author	no
Copyright	no
Description	no
Rating	no

ASF CodecList Tags

Tag Name	Writable
-----	-----
AudioCodecDescription	no
AudioCodecName	no
OtherCodecDescription	no
OtherCodecName	no
VideoCodecDescription	no
VideoCodecName	no

ASF FileProperties Tags

Index1	Tag Name	Writable
-----	-----	-----
0	FileID	no
16	FileLength	no
24	CreationDate	no
32	DataPackets	no
40	Duration	no
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
-----	-----	-----
0	StreamType	no
16	ErrorCorrectionType	no
32	TimeOffset	no
48	StreamNumber	no
54	AudioCodecID	no
	ImageWidth	no
56	AudioChannels	no
58	AudioSampleRate	no
	ImageHeight	no

WTV Tags

Tags found in Windows recorded TV (WTV) videos.

Tag ID	Tag Name	Writable
-----	-----	-----
'table.0.entries.legacy_attr'	Metadata	WTV Metadata

WTV Metadata Tags

ExifTool will extract any tag found, even if not in this table.

Tag Name	Writable
-----	-----
ATSCContent	no
ActualSoftPostPadding	no
ActualSoftPrePadding	no
Bitrate?	no
BrandingImageID	no
BrandingName	no
ContentProtected	no
ContentProtectedPercent	no
DTVContent	no
Duration	no
EncodeTime	no
EndTime	no
ExpirationDate?	no
ExpirationSpan?	no
Genre	no
HDCContent	no
HardPostPadding	no
HardPrePadding	no
InBandRatingAttributes	no
InBandRatingLevel	no
InBandRatingSystem	no
KeepUntil	no
Language	no
MediaClassPrimaryID	no
MediaClassSecondaryID	no
MediaCredits	no
MediaIsDelay	no
MediaIsFinale	no
MediaIsLive	no
MediaIsMovie	no
MediaIsPremiere	no
MediaIsRepeat	no
MediaIsSAP	no
MediaIsSport	no
MediaIsStereo	no
MediaIsSubtitled	no
MediaIsTape	no
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
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
Watched	no

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
-----	-----	-----
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

-- ExifTool 12.92 Tag Names --

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

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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	RadiopharmaceuticalStartDateTime	no
0018,1079	RadiopharmaceuticalStopDateTime	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	TableLateralIncrement	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	XRyTubeCurrent	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
0018,1403	CassetteSize	no
0018,1404	ExposuresOnPlate	no
0018,1405	RelativeXRyExposure	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
0018,7044	GridPitch	no
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
0018,7064	ExposureStatus	no
0018,7065	PhototimerSetting	no
0018,8150	ExposureTimeInMicroSec	no
0018,8151	XRayTubeCurrentInMicroAmps	no
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	MRTransmitCoilSequence	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	MRImageFrameTypeSequence	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
0018,9330	XRATubeCurrentInMilliAmps	no
0018,9332	ExposureInMilliAmpSec	no
0018,9333	ConstantVolumeFlag	no
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	CTDIvol	no
0018,9346	CTDI PhantomTypeCodeSequence	no
0018,9351	CalciumScoringMassFactorPatient	no
0018,9352	CalciumScoringMassFactorDevice	no
0018,9353	EnergyWeightingFactor	no
0018,9360	CTAdditionalXRATSourceSequence	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	XRATReceptorType	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
0018,9436	ExposureControlSensRegionLeftEdge	no
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	TableXPositionToIsocenter	no
0018,9467	TableYPositionToIsocenter	no
0018,9468	TableZPositionToIsocenter	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	XRaysGeometrySequence	no
0018,9477	IrradiationEventIDSequence	no
0018,9504	XRays3DFrameTypeSequence	no
0018,9506	ContributingSourcesSequence	no
0018,9507	XRays3DAcquisitionSequence	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
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0018,9525	ApplicationVersion	no
0018,9526	ApplicationManufacturer	no
0018,9527	AlgorithmType	no
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0018,9530	XRays3DReconstructionSequence	no
0018,9531	ReconstructionDescription	no
0018,9538	PerProjectionAcquisitionSequence	no
0018,9601	DiffusionBMatrixSequence	no
0018,9602	DiffusionBValueXX	no
0018,9603	DiffusionBValueXY	no
0018,9604	DiffusionBValueXZ	no
0018,9605	DiffusionBValueYY	no
0018,9606	DiffusionBValueYZ	no
0018,9607	DiffusionBValueZZ	no
0018,9701	DecayCorrectionDateTime	no
0018,9715	StartDensityThreshold	no
0018,9722	TerminationTimeThreshold	no
0018,9725	DetectorGeometry	no
0018,9727	AxialDetectorDimension	no
0018,9735	PETPositionSequence	no
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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	ImageDataTypeSequence	no
0018,9808	DataType	no
0018,980B	AliasedDataType	no
0018,A001	ContributingEquipmentSequence	no
0018,A002	ContributionDateTime	no
0018,A003	ContributionDescription	no
0019,1002	NumberOfCellsIInDetector	no
0019,1003	CellNumberAtTheta	no
0019,1004	CellSpacing	no
0019,100F	HorizFrameOfRef	no
0019,1011	SeriesContrast	no
0019,1012	LastPseq	no
0019,1013	StartNumberForBaseline	no
0019,1014	EndNumberForBaseline	no
0019,1015	StartNumberForEnhancedScans	no
0019,1016	EndNumberForEnhancedScans	no
0019,1017	SeriesPlane	no
0019,1018	FirstScanRas	no
0019,1019	FirstScanLocation	no
0019,101A	LastScanRas	no
0019,101B	LastScanLoc	no
0019,101E	DisplayFieldOfView	no
0019,1023	TableSpeed	no
0019,1024	MidScanTime	no
0019,1025	MidScanFlag	no
0019,1026	DegreesOfAzimuth	no
0019,1027	GantryPeriod	no
0019,102A	XRayOnPosition	no
0019,102B	XRayOffPosition	no
0019,102C	NumberOfTriggers	no
0019,102E	AngleOfFirstView	no
0019,102F	TriggerFrequency	no
0019,1039	ScanFOVType	no
0019,1040	StatReconFlag	no
0019,1041	ComputeType	no
0019,1042	SegmentNumber	no
0019,1043	TotalSegmentsRequested	no
0019,1044	InterscanDelay	no
0019,1047	ViewCompressionFactor	no
0019,104A	TotalNoOfRefChannels	no
0019,104B	DataSizeForScanData	no
0019,1052	ReconPostProcflag	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
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0019,10A8	UserData02	no
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0019,10AA	UserData04	no
0019,10AB	UserData05	no
0019,10AC	UserData06	no
0019,10AD	UserData07	no
0019,10AE	UserData08	no
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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
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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	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
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0020,1209	NumberOfSeriesRelatedInstances	no

0020,31xx	SourceImageIDs	no
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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	OriginalImageIdentNomenclature	no
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0020,9153	TriggerDelayTime	no
0020,9156	FrameAcquisitionNumber	no
0020,9157	DimensionIndexValues	no
0020,9158	FrameComments	no
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0020,9162	InConcatenationNumber	no
0020,9163	InConcatenationTotalNumber	no
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0020,9165	DimensionIndexPointer	no
0020,9167	FunctionalGroupPointer	no
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0020,9222	DimensionIndexSequence	no
0020,9228	ConcatenationFrameOffsetNumber	no
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0020,9241	NominalPercentageOfCardiacPhase	no
0020,9245	NominalPercentOfRespiratoryPhase	no
0020,9246	StartingRespiratoryAmplitude	no
0020,9247	StartingRespiratoryPhase	no
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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
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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
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0021,1056	IntegerSlop	no
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0021,1059	IntegerSlop	no
0021,105A	IntegerSlop	no
0021,105B	FloatSlop	no
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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	CenterRCoordOfPlaneImage	no
0027,1043	CenterACoordOfPlaneImage	no
0027,1044	CenterSCoordOfPlaneImage	no
0027,1045	NormalRCoord	no
0027,1046	NormalACoord	no
0027,1047	NormalsSCoord	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
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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
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
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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
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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	ICCProfile	no
0028,2110	LossyImageCompression	no
0028,2112	LossyImageCompressionRatio	no
0028,2114	LossyImageCompressionMethod	no
0028,3000	ModalityLUTSequence	no
0028,3002	LUTDescriptor	no
0028,3003	LUTExplanation	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	StudyIDIssuer	no
0032,0032	StudyVerifiedDate	no
0032,0033	StudyVerifiedTime	no
0032,0034	StudyReadDate	no
0032,0035	StudyReadTime	no
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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	RequestingPhysicianIDSequence	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
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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	XRaysOutput	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	PersonTelephoneNumbers	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	UniqueImageIden	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
0062,0002	SegmentSequence	no
0062,0003	SegmentedPropertyCategoryCodeSeq	no
0062,0004	SegmentNumber	no
0062,0005	SegmentLabel	no
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	GraphicLayerRecDisplayGrayscaleValue	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
0070,0100	PresentationSizeMode	no
0070,0101	PresentationPixelSpacing	no
0070,0102	PresentationPixelAspectRatio	no
0070,0103	PresentationPixelMagRatio	no
0070,0306	ShapeType	no
0070,0308	RegistrationSequence	no
0070,0309	MatrixRegistrationSequence	no
0070,030A	MatrixSequence	no

0070,030C	FrameOfRefTransformationMatrixType	no
0070,030D	RegistrationTypeCodeSequence	no
0070,030F	FiducialDescription	no
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
0070,0403	RelativeOpacity	no
0070,0404	ReferencedSpatialRegistrationSeq	no
0070,0405	BlendingPosition	no
0072,0002	HangingProtocolName	no
0072,0004	HangingProtocolDescription	no
0072,0006	HangingProtocolLevel	no
0072,0008	HangingProtocolCreator	no
0072,000A	HangingProtocolCreationDateTime	no
0072,000C	HangingProtocolDefinitionSequence	no
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	UPSPProgressInformationSequence	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	UPSListStatus	no
0088,0130	StorageMediaFileSetID	no
0088,0140	StorageMediaFileSetUID	no
0088,0200	IconImageSequence	no
0088,0904	TopicTitle	no
0088,0906	TopicSubject	no
0088,0910	TopicAuthor	no
0088,0912	TopicKeywords	no
0100,0410	SOPInstanceStatus	no
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
0400,0100	DigitalSignatureUID	no
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
0400,0561	OriginalAttributesSequence	no
0400,0562	AttributeModificationDateTime	no
0400,0563	ModifyingSystem	no
0400,0564	SourceOfPreviousValues	no
0400,0565	ReasonForTheAttributeModification	no
1000,xxx0	EscapeTriplet	no
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1000,xxx2	HuffmanTableSize	no
1000,xxx3	HuffmanTableTriplet	no
1000,xxx4	ShiftTableSize	no
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
2110,0010	PrinterStatus	no
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	SaveCompInstancesAfterMediaCreate	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
3002,0002	RTImageLabel	no
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	FluenceModeID	no
3004,0001	DVHType	no
3004,0002	DoseUnits	no
3004,0004	DoseType	no
3004,0006	DoseComment	no
3004,0008	NormalizationPoint	no
3004,000A	DoseSummationType	no
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
3004,0070	DVHMinimumDose	no
3004,0072	DVHMaximumDose	no
3004,0074	DVHMeanDose	no
3006,0002	StructureSetLabel	no
3006,0004	StructureSetName	no
3006,0006	StructureSetDescription	no
3006,0008	StructureSetDate	no
3006,0009	StructureSetTime	no
3006,0010	ReferencedFrameOfReferenceSequence	no
3006,0012	RTReferencedStudySequence	no
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	ToleranceTableNumber	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	TableTopLongitudinalSetupDisplacement	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	ReferencedToleranceTableNumber	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
300E,0004	ReviewDate	no
300E,0005	ReviewTime	no
300E,0008	ReviewerName	no
4000,0000	TextGroupLength	no
4000,0010	Arbitrary	no
4000,4000	TextComments	no
4008,0040	ResultsID	no
4008,0042	ResultsIDIssuer	no
4008,0050	ReferencedInterpretationSequence	no
4008,0100	InterpretationRecordedDate	no
4008,0101	InterpretationRecordedTime	no
4008,0102	InterpretationRecorder	no
4008,0103	ReferenceToRecordedSound	no
4008,0108	InterpretationTranscriptionDate	no
4008,0109	InterpretationTranscriptionTime	no
4008,010A	InterpretationTranscriber	no
4008,010B	InterpretationText	no
4008,010C	InterpretationAuthor	no
4008,0111	InterpretationApproverSequence	no
4008,0112	InterpretationApprovalDate	no
4008,0113	InterpretationApprovalTime	no
4008,0114	PhysicianApprovingInterpretation	no
4008,0115	InterpretationDiagnosisDescription	no
4008,0117	InterpretationDiagnosisCodeSeq	no
4008,0118	ResultsDistributionListSequence	no
4008,0119	DistributionName	no
4008,011A	DistributionAddress	no
4008,0200	InterpretationID	no
4008,0202	InterpretationIDIssuer	no
4008,0210	InterpretationTypeID	no
4008,0212	InterpretationStatusID	no
4008,0300	Impressions	no
4008,4000	ResultsComments	no
4FFE,0001	MACParametersSequence	no
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

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 for the specification.

Tag ID	Tag Name	Writable
-----	-----	-----
'AUTHOR'	Author	no
'BACKGRND'	Background	no
'COMMENT'	Comment	no
'DATE'	CreateDate	no
'DATE-END'	ObservationDateEnd	no
'DATE-OBS'	ObservationDate	no
'HISTORY'	History	no
'INSTRUME'	Instrument	no
'OBJECT'	Object	no
'OBSERVER'	Observer	no
'REFERENC'	Reference	no
'TELESCOP'	Telescope	no
'TIME-END'	ObservationTimeEnd	no
'TIME-OBS'	ObservationTime	no

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
-----	-----	-----
'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

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
-----	-----	-----
'abstract'	Abstract	no
'author'	Author	no
'classification'	Classification	no
'content-language'	ContentLanguage	no
'copyright'	Copyright	no
'dc'	DC	HTML dc
'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	HTML equiv
'keywords'	Keywords	no+
'mssmarttagspreventparsing'	NoMSSmartTags	no
'ncc'	NCC	HTML ncc
'o'	Office	HTML Office
'originator'	Originator	no
'owner'	Owner	no
'prod'	Prod	HTML prod
'progid'	ProgID	no
'rating'	Rating	no
'refresh'	Refresh	no
'resource-type'	ResourceType	no
'revisit-after'	RevisitAfter	no
'robots'	Robots	no+
'title'	Title	no
'vw96'	VW96	HTML vw96

HTML dc Tags

Dublin Core schema tags (also used in XMP).

Tag ID	Tag Name	Writable
-----	-----	-----
'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
-----	-----	-----
'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
'imagemetoolbar'	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
-----	-----	-----
'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
-----	-----	-----
'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
-----	-----	-----
'recengineer'	RecEngineer	no
'reclocation'	RecLocation	no

HTML vw96 Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'objecttype'	ObjectType	no

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
-----	-----	-----
0	DatabaseName	no
9	CreateDate	no
10	ModifyDate	no
11	LastBackupDate	no
12	ModificationNumber	no
15	PalmFileType	no

Palm MOBI Tags

Information extracted from the MOBI header of Mobipocket and Amazon Kindle KF7 and KF8 files.

Index4	Tag Name	Writable
-----	-----	-----
0	Compression	no
1	UncompressedTextLength	no
3	Encryption	no
6	MobiType	no
7	CodePage	no
9	MobiVersion	no
21	BookName	no
26	MinimumVersion	no

Palm EXTH Tags

Information extracted from the MOBI extended header.

Tag ID	Tag Name	Writable
-----	-----	-----
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
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
0x0195	RentalFlag	no
0x0196	RentalExpirationDate	no
0x01f5	CDEType	no
0x01f6	LastUpdateTime	no
0x01f7	UpdatedTitle	no
0x01f8	ASIN2	no
0x020c	Language	no
0x020d	Alignment	no
0x0217	CreatorBuildNumber2	no

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
-----	-----	-----
'announce'	Announce	no
'announce-list'	AnnounceList1	no
'comment'	Comment	no
'created by'	Creator	no
'creation date'	CreateDate	no
'encoding'	Encoding	no
'info'	Info	Torrent Info
'url-list'	URLList1	no

Torrent Info Tags

Tag ID	Tag Name	Writable
--------	----------	----------

-----	-----	-----
'file-duration'	File1Duration	no
'file-media'	File1Media	no
'files'	Files	Torrent Files
'length'	Length	no
'md5sum'	MD5Sum	no
'name'	Name	no
'name.utf-8'	NameUTF-8	no
'piece length'	PieceLength	no
'pieces'	Pieces	no
'private'	Private	no
'profiles'	Profiles	Torrent Profiles

Torrent Files Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'length'	File1Length	no
'md5sum'	File1MD5Sum	no
'path'	File1Path	no
'path.utf-8'	File1PathUTF-8	no

Torrent Profiles Tags

Tag ID	Tag Name	Writable
-----	-----	-----
'acodec'	Profile1AudioCodec	no
'height'	Profile1Height	no
'vcodec'	Profile1VideoCodec	no
'width'	Profile1Width	no

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
-----	-----	-----
0	MachineType	no
2	TimeStamp	no
9	ImageFileCharacteristics	no
10	PEType	no
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

EXE PEVersion Tags

Information extracted from the VS_VERSION_INFO structure of Windows PE files.

Index4	Tag Name	Writable
-----	-----	-----
2	FileVersionNumber	no
4	ProductVersionNumber	no
6	FileFlagsMask	no
7	FileFlags	no
8	FileOS	no
9	ObjectFileType	no
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
-----	-----
BuildDate	no
BuildVersion	no
CharacterSet	no
Comments	no
CompanyName	no
Copyright	no
FileDescription	no
FileVersion	no
InternalName	no
LanguageCode	no
LegalCopyright	no
LegalTrademarks	no
OriginalFileName	no
PrivateBuild	no
ProductName	no
ProductVersion	no
SpecialBuild	no

EXE MachO Tags

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

Index	Tag Name	Writable
-----	-----	-----
0	CPUArchitecture	no
1	CPUByteOrder	no
2	CPUCount	no
3	CPUType	no+
4	CPUSubtype	no+
5	ObjectFileType	no
6	ObjectFlags	no

EXE PEF Tags

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

Index4	Tag Name	Writable
-----	-----	-----
2	CPUArchitecture	no
3	PEFVersion	no
4	TimeStamp	no

EXE ELF Tags

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

Index1	Tag Name	Writable
-----	-----	-----
4	CPUArchitecture	no
5	CPUByteOrder	no
16	ObjectFileType	no
18	CPUType	no

EXE AR Tags

Information extracted from static libraries.

Index1	Tag Name	Writable
-----	-----	-----
16	CreateDate	no

EXE CHM Tags

Tags extracted from Microsoft Compiled HTML files.

Index4	Tag Name	Writable
-----	-----	-----
1	CHMVersion	no
5	LanguageCode	no

LNK Tags

Information extracted from MS Shell Link (Windows shortcut) files.

Index1	Tag Name	Writable
-----	-----	-----
0x0014	Flags	no
0x0018	FileAttributes	no
0x001c	CreateDate	no
0x0024	AccessDate	no
0x002c	ModifyDate	no
0x0034	TargetFileSize	no
0x0038	IconIndex	no
0x003c	RunWindow	no
0x0040	HotKey	no
0x10000	ItemID	LNK ItemID
0x20000	LinkInfo	LNK LinkInfo
0x30004	Description	no
0x30008	RelativePath	no
0x30010	WorkingDirectory	no
0x30020	CommandLineArguments	no
0x30040	IconFileName	no
0xa0000000	UnknownData	LNK UnknownData
0xa0000001	EnvVarData	LNK UnknownData
0xa0000002	ConsoleData	LNK ConsoleData
0xa0000003	TrackerData	LNK TrackerData
0xa0000004	ConsoleFEData	LNK ConsoleFEData
0xa0000005	SpecialFolderData	LNK UnknownData
0xa0000006	DarwinData	LNK UnknownData
0xa0000007	IconEnvData	LNK UnknownData
0xa0000008	ShimData	LNK UnknownData
0xa0000009	PropertyStoreData	LNK UnknownData
0xa000000b	KnownFolderData	LNK UnknownData
0xa000000c	VistaIDListData	LNK UnknownData

LNK ItemID Tags

Tag ID	Tag Name	Writable
-----	-----	-----
0x0032	Item0032	LNK Item0032

LNK Item0032 Tags

Index1	Tag Name	Writable
-----	-----	-----
14	TargetFileDOSName	no

LNK LinkInfo Tags

Tag Name	Writable
-----	-----
CommonNetworkRelLink	no
CommonPathSuffix	no
DeviceName	no
DriveSerialNumber	no
DriveType	no
LocalBasePath	no
NetName	no
NetProviderType	no
VolumeID	no
VolumeLabel	no

LNK UnknownData Tags

Index1	Tag Name	Writable
-----	-----	-----
	[no tags known]	

LNK ConsoleData Tags

Index1	Tag Name	Writable
-----	-----	-----
8	FillAttributes	no
10	PopupFillAttributes	no
12	ScreenBufferSize	no
16	WindowSize	no
20	WindowOrigin	no
32	FontSize	no
36	FontFamily	no
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
-----	-----	-----
16	MachineID	no

LNK ConsoleFEData Tags

Index1	Tag Name	Writable
-----	-----	-----
8	CodePage	no

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 and AMFM font files.

Tag ID	Tag Name	Writable
-----	-----	-----
'AFM'	AFM	Font AFM
'PFM'	PFMHeader	Font PFM
'PSInfo'	PSFontInfo	Font PSInfo
'fontname'	FontName	no
'name'	Name	Font Name
'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
-----	-----	-----
'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
-----	-----	-----
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
-----	-----	-----
'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 Name Tags

The following tags are extracted from the TrueType font "name" table found in OTF, TTF, TTC and DFONT 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
--------	----------	----------

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

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 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
-----	-----	-----
'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'	ABLabel	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
-----	-----	-----
'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
'Rule'	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
'X-microsoft-cdo-insttype'	InstanceType	no
'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
-----	-----	-----
'Body'	Body	no
'Dcreated'	CreateDate	no
'Last-modified'	ModifyDate	no
'Version'	Version	no

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
-----	-----
ByteOrderMark	no
ColumnCount	no
Delimiter	no
LineCount	no
MIMEEncoding	no
Newlines	no
Quoting	no
RowCount	no
WordCount	no

RSRC Tags

Tags extracted from Mac OS resource files, DFONT files and "." sidcar 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
-----	-----	-----
'8BIM'	PhotoshopInfo	Photoshop
'POST_0x01f5'	PostscriptFont	PostScript
'STR_0xbff3'	ApplicationMissingMsg	no
'STR_0xbff4'	CreatorApplication	no
'STR#_0x0080'	Keywords	no
'TEXT_0x0080'	Description	no
'sfnt'	Font	Font Name
'usro_0x0000'	OpenWithApplication	no
'vers_0x0001'	ApplicationVersion	no

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
-----	-----
CompressionFactor	no
OriginalFileSize	no
OriginalFileType	no
RawzorCreatorVersion	no
RawzorRequiredVersion	no

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
-----	-----	-----
2	ZipRequiredVersion	no
3	ZipBitFlag	no
4	ZipCompression	no
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
-----	-----	-----
2	Compression	no
3	Flags	no
4	ModifyDate	no
8	ExtraFlags	no
9	OperatingSystem	no
10	ArchivedFileName	no
11	Comment	no

ZIP RAR Tags

These tags are extracted from RAR archive files.

Index1	Tag Name	Writable
-----	-----	-----
0	CompressedSize	no
4	UncompressedSize	no
8	OperatingSystem	no
13	ModifyDate	no
18	PackingMethod	no
25	ArchivedFileName	no

ZIP RAR5 Tags

These tags are extracted from RAR v5 and 7z archive files.

Tag Name	Writable
-----	-----
ArchivedFileName	no
CompressedSize	no
FileVersion	no
ModifyDate	no
OperatingSystem	no

UncompressedSize

no

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
-----	-----	-----
'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
'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

OOXML Tags

The Office Open XML (OOXML) format was introduced with Microsoft Office 2007 and is used by file types such as DOCX, PPTX and XLSX. 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
-----	-----
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
DocumentNumber	no

Editor	no
ForwardTo	no
Group	no
HeadingPairs	no
HiddenSlides	no
HyperlinkBase	no
HyperlinksChanged	no
Keywords	no
Language	no
LastModifiedBy	no
LastPrinted	no
Lines	no
LinksUpToDate	no
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
SharedDoc	no
Slides	no
Source	no
Status	no
TelephoneNumber	no
Template	no
TitlesOfParts	no
TotalEditTime	no
Typist	no
Words	no

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
-----	-----
Author	no
Comment	no
Copyright	no
Keywords	no
Projects	no+
Title	no

ISO Tags

Tags extracted from ISO 9660 disk images.

Tag ID	Tag Name	Writable
-----	-----	-----
0x0000	BootRecord	ISO BootRecord
0x0001	PrimaryVolume	ISO PrimaryVolume

ISO BootRecord Tags

Index1	Tag Name	Writable
-----	-----	-----

7	BootSystem	no
39	BootIdentifier	no

ISO PrimaryVolume Tags

Index1	Tag Name	Writable
-----	-----	-----
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

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
-----	-----	-----
0x0002	RSRC	RSRC
0x0009	ATTR	MacOS XAttr

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
-----	-----
XAttrAppleMailDateReceived	no
XAttrAppleMailDateSent	no
XAttrAppleMailIsRemoteAttachment	no
XAttrFinderInfo	no
XAttrLastUsedDate	no
XAttrMDItemDownloadedDate	no
XAttrMDItemFinderComment	no
XAttrMDItemWhereFroms	yes!

XAttrMDLabel	no
XAttrQuarantine	yes!
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
-----	-----
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!
MDItemFSCreatorCode	no
MDItemFSFinderFlags	no
MDItemFSHasCustomIcon	no
MDItemFSInvisible	no
MDItemFSIsExtensionHidden	no

MDItemFSIsStationery	no
MDItemFSLabel	yes!
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!+
MDItemVersion	no
MDItemVideoBitRate	no
MDItemWhereFroms	no
MDItemWhiteBalance	no

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	Group	Writable
-----	-----	-----
Adobe	Adobe	yes!
BaseName	System	no
CanonDR4	CanonVRD	yes!^
CanonVRD	CanonVRD	yes!^
Comment	File	yes
CurrentIPTCDigest	File	no
Directory	System	yes!
EXIF	EXIF	yes!
EmbeddedVideo	File	no
Error	ExifTool	no
ExifByteOrder	File	yes
ExifToolVersion	ExifTool	no
ExifUnicodeByteOrder	-	yes
FileAccessDate	System	no
FileAttributes	System	no
FileBlockCount	System	no
FileBlockSize	System	no
FileCreateDate	System	yes!
FileDeviceID	System	no
FileDeviceNumber	System	no
FileGroupID	System	yes!
FileHardLinks	System	no
FileInodeChangeDate	System	no
FileInodeNumber	System	no
FileModifyDate	System	yes!
FileName	System	yes!
FilePath	System	no
FilePermissions	System	yes!
FileSequence	ExifTool	no
FileSize	System	no
FileType	File	no
FileTypeExtension	File	no
FileUserID	System	yes!
ForceWrite	-	yes
Geolocate	-	yes
GeolocationBearing	ExifTool	no
GeolocationCity	ExifTool	no
GeolocationCountry	ExifTool	no
GeolocationCountryCode	ExifTool	no
GeolocationDistance	ExifTool	no
GeolocationFeatureCode	ExifTool	no
GeolocationFeatureType	ExifTool	no
GeolocationPopulation	ExifTool	no
GeolocationPosition	ExifTool	no
GeolocationRegion	ExifTool	no
GeolocationSubregion	ExifTool	no
GeolocationTimeZone	ExifTool	no
GeolocationWarning	ExifTool	no

Geosync	-	yes
Geotag	-	yes
Geotime	-	yes
HardLink	-	yes!
ICC_Profile	ICC_Profile	yes!
ID3Size	File	no
IPTC	IPTC	yes!
ImageDataHash	File	no
ImageHeight	File	no
ImageWidth	File	no
JPEGDigest	File	no
JPEGImageLength	File	no
JPEGQualityEstimate	File	no
JUMBF	JUMBF	no
MIMEType	File	no
MaxVal	File	no
NewGUID	ExifTool	no
Now	ExifTool	no
NumPlanes	File	no
OtherImage	File	no
PageCount	File	no
PreviewImage	File	yes
PreviewJXL	File	no
PreviewPDF	File	no
PreviewPNG	File	no
PreviewTIFF	File	no
PreviewWMF	File	no
ProcessingTime	ExifTool	no
RAFCompression	File	no
RAFVersion	File	no
ResourceForkSize	System	no
SphericalVideoXML	GSpherical	yes!
SymLink	-	yes!
TestName	-	yes!
ThumbnailImage	File	no
Trailer	File	yes!
Validate	ExifTool	no
Warning	ExifTool	no
XML	XML	no
XMP	XMP	yes!
XResolution	File	no
YResolution	File	no
ZoneIdentifier	System	yes!

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	Derived From	Writable
-----	-----	-----
AdvancedSceneMode	Model SceneMode AdvancedSceneType	no
Aperture	FNumber ApertureValue	no
AudioBitrate	MPEG:MPEGAudioVersion MPEG:SampleRate MPEG:VBRBytes MPEG:VBRFrames	no
AutoFocus	Nikon:PhaseDetectAF Nikon:ContrastDetectAF	no
AvgBitrate	QuickTime::MediaDataSize QuickTime::Duration	no
BlueBalance	WB_RGGBLevels WB_RGBGLevels	no

	WB_RBGGLevels	
	WB_GRBGLevels	
	WB_GRGBLevels	
	WB_GBRGLevels	
	WB_RGBLevels	
	WB_GRBLevels	
	WB_RBLevels	
	WBBlueLevel	
	WBGreenLevel	
CDDBDiscPlayTime	CDDb1Info	no
CDDBDiscTracks	CDDb1Info	no
CFAPattern	CFARRepeatPatternDim	no
	CFAPattern2	
CircleOfConfusion	ScaleFactor35efl	no
ConditionalFEC	FlashExposureComp	no
	FlashBits	
DOF	FocalLength	no
	Aperture	
	CircleOfConfusion	
	FocusDistance	
	SubjectDistance	
	ObjectDistance	
	ApproximateFocusDistance	
	FocusDistanceLower	
	FocusDistanceUpper	
DateCreated	Kodak:YearCreated	no
	Kodak:MonthDayCreated	
DateTimeCreated	IPTC:DateCreated	no
	IPTC:TimeCreated	
DateTimeOriginal	DateTimeCreated	no
	DateCreated	
	TimeCreated	
DateTimeOriginal	ID3:RecordingTime	no
	ID3:Year	
	ID3:Date	
	ID3:Time	
DepthMapTiff	DepthMapData	no
	DepthMapWidth	
	DepthMapHeight	
DigitalCreationDate	IPTC:DigitalCreationDate	no
	IPTC:DigitalCreationTime	
DigitalZoom	Canon:ZoomSourceWidth	no
	Canon:ZoomTargetWidth	
	Canon:DigitalZoom	
DriveMode	ContinuousDrive	no
	SelfTimer	
Duration	AIFF:SampleRate	no
	AIFF:NumSampleFrames	
Duration	APE:SampleRate	no
	APE:TotalFrames	
	APE:BlocksPerFrame	
	APE:FinalFrameBlocks	
Duration	FLAC:SampleRate	no
	FLAC:TotalSamples	
Duration	FileSize	no
	ID3Size	
	MPEG:AudioBitrate	
	MPEG:VideoBitrate	
	MPEG:VBRFrames	
	MPEG:SampleRate	
	MPEG:MPEGAudioVersion	
Duration	RIFF:FrameRate	no
	RIFF:FrameCount	
	VideoFrameRate	
	VideoFrameCount	
Duration	RIFF:AvgBytesPerSec	no
	FileSize	
	FrameCount	
	VideoFrameCount	
Duration	Vorbis:NominalBitrate	no

	FileSize	
ExtenderStatus	Olympus:Extender	no
	Olympus:LensType	
	MaxApertureValue	
FOV	FocalLength	no
	ScaleFactor35efl	
	FocusDistance	
FileNumber	DirectoryIndex	yes
	FileIndex	
Flash	XMP:FlashFired	yes
	XMP:FlashReturn	
	XMP:FlashMode	
	XMP:FlashFunction	
	XMP:FlashRedEyeMode	
	XMP:Flash	
FlashType	FlashBits	no
FocalLength35efl	FocalLength	no
	ScaleFactor35efl	
FocusDistance	Sony:FocusPosition	no
	FocalLength	
FocusDistance2	Sony:FocusPosition2	no
	FocalLengthIn35mmFormat	
GPSAltitude	GPS:GPSAltitude	no
	GPS:GPSAltitudeRef	
	XMP:GPSAltitude	
	XMP:GPSAltitudeRef	
GPSAltitude	QuickTime:GPSCoordinates	no
GPSAltitude	QuickTime:LocationInformation	no
GPSAltitudeRef	QuickTime:GPSCoordinates	no
GPSAltitudeRef	QuickTime:LocationInformation	no
GPSTimeStamp	GPS:GPSTimeStamp	no
	GPS:GPSTimeStamp	
GPSTimeStamp	Parrot:GPSLatitude	no
	Main:CreateDate	
	SampleTime	
GPSTimeStamp	Sony:GPSTimeStamp	no
	Sony:GPSTimeStamp	
GPSTimeStamp	GPS:GPSTimeStamp	no
	GPS:GPSTimeStampRef	
GPSTimeStampRef	XMP-exif:GPSTimeStamp	no
GPSTimeStampRef	GPS:GPSTimeStamp	no
	GPS:GPSTimeStampRef	
GPSTimeStampRef	XMP-exif:GPSTimeStamp	no
GPSTimeStampRef	GPS:GPSTimeStamp	yes/
	GPS:GPSTimeStampRef	
GPSTimeStampRef	QuickTime:GPSCoordinates	no
GPSTimeStampRef	QuickTime:LocationInformation	no
GPSTimeStampRef	Sony:GPSTimeStamp	no
	Sony:GPSTimeStampRef	
GPSTimeStampRef	XMP-exif:GPSTimeStamp	no
GPSTimeStampRef	GPS:GPSTimeStamp	yes/
	GPS:GPSTimeStampRef	
GPSTimeStampRef	QuickTime:GPSCoordinates	no
GPSTimeStampRef	QuickTime:LocationInformation	no
GPSTimeStampRef	Sony:GPSTimeStamp	no
	Sony:GPSTimeStampRef	
GPSTimeStampRef	XMP-exif:GPSTimeStamp	no
GPSTimeStampRef	GPS:GPSTimeStamp	yes/
	GPS:GPSTimeStampRef	
GPSTimeStampRef	QuickTime:GPSCoordinates	no
GPSTimeStampRef	QuickTime:LocationInformation	no
GPSTimeStampRef	Sony:GPSTimeStamp	no
	Sony:GPSTimeStampRef	
GPSTimeStampRef	XMP-exif:GPSTimeStamp	no
GPSTimeStampRef	GPS:GPSTimeStamp	yes!
	GPS:GPSTimeStampRef	
GPSTimeStampRef	Sony:GPSTimeStampOffset	no
GPSTimeStampRef	Sony:GPSTimeStampLength	
HyperfocalDistance	FocalLength	no
	Aperture	
	CircleOfConfusion	
IDCPreviewImage	IDCPreviewStart	no
	IDCPreviewLength	
ISO	Canon:CameraISO	no
	Canon:BaseISO	
	Canon:AutoISO	
ImageHeight	IFD0:SensorTopBorder	no

ImageHeight	IFD0:SensorBottomBorder	
	Main:PostScript:ImageData	no
	PostScript:BoundingBox	
ImageSize	ImageWidth	no
	ImageHeight	
	ExifImageWidth	
	ExifImageHeight	
	RawImageCroppedSize	
ImageWidth	IFD0:SensorLeftBorder	no
	IFD0:SensorRightBorder	
ImageWidth	Main:PostScript:ImageData	no
	PostScript:BoundingBox	
JpgFromRaw	JpgFromRawStart	yes
	JpgFromRawLength	
Lens	Canon:MinFocalLength	no
	Canon:MaxFocalLength	
Lens35efl	Canon:MinFocalLength	no
	Canon:MaxFocalLength	
	Lens	
	ScaleFactor35efl	
LensID	LensType	no
	FocalLength	
	MaxAperture	
	MaxApertureValue	
	MinFocalLength	
	MaxFocalLength	
	LensModel	
	LensFocalRange	
	LensSpec	
	LensType2	
	LensType3	
	LensFocalLength	
	RFLensType	
LensID	LensModel	no
	Lens	
	XMP-aux:LensID	
	Make	
LensID	Nikon:LensIDNumber	no
	LensFStops	
	MinFocalLength	
	MaxFocalLength	
	MaxApertureAtMinFocal	
	MaxApertureAtMaxFocal	
	MCUVersion	
	Nikon:LensType	
LensID	Ricoh:LensFirmware	no
LensID	XMP-aux:LensID	no
	Make	
	LensInfo	
	FocalLength	
	LensModel	
	MaxApertureValue	
LensSpec	Nikon:Lens	no
	Nikon:LensType	
LensType	LensTypeMake	no
	LensTypeModel	
LightValue	Aperture	no
	ShutterSpeed	
	ISO	
MPImage	MPImageStart	no
	MPImageLength	
	MPImageType	
Megapixels	ImageSize	no
OriginalDecisionData	OriginalDecisionDataOffset	yes!
OtherImage	OtherImageStart	yes
	OtherImageLength	
	OtherImageStart (1)	
	OtherImageLength (1)	
PeakSpectralSensitivity	FLIR:PlanckB	no
PreviewImage	PreviewImageStart	yes

	PreviewImageLength	
	PreviewImageValid	
	PreviewImageStart (1)	
	PreviewImageLength (1)	
PreviewImage	ScreenNail	no
PreviewImageSize	PreviewImageWidth	no
	PreviewImageHeight	
PreviewJXL	PreviewJXLStart	no
	PreviewJXLLength	
	PreviewJXLStart (1)	
	PreviewJXLLength (1)	
RedBalance	WB_RGGBLevels	no
	WB_RGBGLevels	
	WB_RBGBLevels	
	WB_GRBGLevels	
	WB_GRGBLevels	
	WB_GBRGLevels	
	WB_RGBLevels	
	WB_GRBLevels	
	WB_RBLevels	
	WBRedLevel	
	WBGreenLevel	
RedEyeReduction	CanonFlashMode	no
	FlashBits	
RicohPitch	Ricoh:Accelerometer	no
RicohRoll	Ricoh:Accelerometer	no
Rotation	QuickTime:MatrixStructure	yes!
	QuickTime:HandlerType	
RunTimeSincePowerUp	Apple:RunTimeValue	no
	Apple:RunTimeScale	
ScaleFactor35efl	FocalLength	no
	FocalLengthIn35mmFormat	
	Composite:DigitalZoom	
	FocalPlaneDiagonal	
	SensorSize	
	FocalPlaneXSize	
	FocalPlaneYSize	
	FocalPlaneResolutionUnit	
	FocalPlaneXResolution	
	FocalPlaneYResolution	
	ExifImageWidth	
	ExifImageHeight	
	CanonImageWidth	
	CanonImageHeight	
	ImageWidth	
	ImageHeight	
ShootingMode	CanonExposureMode	no
	EasyMode	
	BulbDuration	
ShutterCurtainHack	FlashBits	no
	ShutterCurtainSync	
ShutterSpeed	ExposureTime	no
	ShutterSpeedValue	
	BulbDuration	
SingleShotDepthMapTiff	SingleShotDepthMap	no
	SegWidth	
	SegHeight	
SubSecCreateDate	EXIF:CreateDate	yes
	SubSecTimeDigitized	
	OffsetTimeDigitized	
SubSecDateTimeOriginal	EXIF:DateTimeOriginal	yes
	SubSecTimeOriginal	
	OffsetTimeOriginal	
SubSecModifyDate	EXIF:ModifyDate	yes
	SubSecTime	
	OffsetTime	
ThumbnailImage	ThumbnailOffset	yes
	ThumbnailLength	
ThumbnailTIFF	SubfileType	no
	Compression	

	ImageWidth	
	ImageHeight	
	BitsPerSample	
	PhotometricInterpretation	
	StripOffsets	
	SamplesPerPixel	
	RowsPerStrip	
	StripByteCounts	
	PlanarConfiguration	
	Orientation	
VolumeSize	ISO:VolumeBlockCount	no
	ISO:VolumeBlockSize	
WB_RGBLevels	KDC_IFD:WhiteBalance	no
	WB_RGBLevelsAuto	
	WB_RGBLevelsFluorescent	
	WB_RGBLevelsTungsten	
	WB_RGBLevelsDaylight	
	WB_RGBLevels4	
	WB_RGBLevels5	
	WB_RGBLevelsShade	
WB_RGBLevels	KodakIFD:WhiteBalance	no
	WB_RGBMul0	
	WB_RGBMul1	
	WB_RGBMul2	
	WB_RGBMul3	
	WB_RGBCoeffs0	
	WB_RGBCoeffs1	
	WB_RGBCoeffs2	
	WB_RGBCoeffs3	
	KodakIFD:ColorTemperature	
	Kodak:WB_RGBLevels	
WB_RGGBLevels	Canon:WhiteBalance	no
	WB_RGGBLevelsAsShot	
	WB_RGGBLevelsAuto	
	WB_RGGBLevelsDaylight	
	WB_RGGBLevelsCloudy	
	WB_RGGBLevelsTungsten	
	WB_RGGBLevelsFluorescent	
	WB_RGGBLevelsFlash	
	WB_RGGBLevelsCustom	
	WB_RGGBLevelsShade	
	WB_RGGBLevelsKelvin	
WB_RGGBLevels	WB_RGGBLevelsUncorrected	no
	WB_RGGBLevelsBlack	
ZoomedPreviewImage	ZoomedPreviewStart	no
	ZoomedPreviewLength	

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	Refers To	Writable
-----	-----	-----
AllDates	DateTimeOriginal CreateDate ModifyDate	yes
Canon	FileName Model DateTimeOriginal ShootingMode ShutterSpeed Aperture MeteringMode ExposureCompensation	yes

	ISO	
	Lens	
	FocalLength	
	ImageSize	
	Quality	
	Flash	
	FlashType	
	ConditionalFEC	
	RedEyeReduction	
	ShutterCurtainHack	
	WhiteBalance	
	FocusMode	
	Contrast	
	Sharpness	
	Saturation	
	ColorTone	
	ColorSpace	
	LongExposureNoiseReduction	
	FileSize	
	FileNumber	
	DriveMode	
	OwnerName	
	SerialNumber	
ColorSpaceTags	ExifIFD:ColorSpace	yes
	ExifIFD:Gamma	
	InteropIFD:InteropIndex	
	ICC_Profile	
Common	FileName	yes
	FileSize	
	Model	
	DateTimeOriginal	
	ImageSize	
	Quality	
	FocalLength	
	ShutterSpeed	
	Aperture	
	ISO	
	WhiteBalance	
	Flash	
CommonIFD0	IFD0:ImageDescription	yes
	IFD0:Make	
	IFD0:Model	
	IFD0:Software	
	IFD0:ModifyDate	
	IFD0:Artist	
	IFD0:Copyright	
	IFD0:Rating	
	IFD0:RatingPercent	
	IFD0:DNGLensInfo	
	IFD0:PanasonicTitle	
	IFD0:PanasonicTitle2	
	IFD0:XPTitle	
	IFD0:XPComment	
	IFD0:XPAuthor	
	IFD0:XPKeywords	
	IFD0:XPSubject	
ImageDataMD5	ImageDataHash	yes
LargeTags	CanonVRD	yes
	DLOData	
	EXIF	
	ICC_Profile	
	IDCPreviewImage	
	ImageData	
	IPTC	
	JpgFromRaw	
	OriginalRawImage	
	OtherImage	
	PreviewImage	
	ThumbnailImage	
	TIFFPreview	

	XML	
	XMP	
	ZoomedPreviewImage	
MakerNotes	MakerNotes	yes
	MakerNoteApple	
	MakerNoteCanon	
	MakerNoteCasio	
	MakerNoteCasio2	
	MakerNoteDJI	
	MakerNoteDJIInfo	
	MakerNoteFLIR	
	MakerNoteFujiFilm	
	MakerNoteGE	
	MakerNoteGE2	
	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	
	MakerNoteNikon	
	MakerNoteNikon2	
	MakerNoteNikon3	
	MakerNoteNintendo	
	MakerNoteOlympus	
	MakerNoteOlympus2	
	MakerNoteOlympus3	
	MakerNoteLeica	
	MakerNoteLeica2	
	MakerNoteLeica3	
	MakerNoteLeica4	
	MakerNoteLeica5	
	MakerNoteLeica6	
	MakerNoteLeica7	
	MakerNoteLeica8	
	MakerNoteLeica9	
	MakerNoteLeica10	
	MakerNotePanasonic	
	MakerNotePanasonic2	
	MakerNotePanasonic3	
	MakerNotePentax	
	MakerNotePentax2	
	MakerNotePentax3	
	MakerNotePentax4	
	MakerNotePentax5	
	MakerNotePentax6	

	MakerNotePhaseOne	
	MakerNoteReconyx	
	MakerNoteReconyx2	
	MakerNoteReconyx3	
	MakerNoteRicoh	
	MakerNoteRicoh2	
	MakerNoteRicohPentax	
	MakerNoteRicohText	
	MakerNoteSamsungla	
	MakerNoteSamsunglb	
	MakerNoteSamsung2	
	MakerNoteSanyo	
	MakerNoteSanyoC4	
	MakerNoteSanyoPatch	
	MakerNoteSigma	
	MakerNoteSony	
	MakerNoteSony2	
	MakerNoteSony3	
	MakerNoteSony4	
	MakerNoteSony5	
	MakerNoteSonyEricsson	
	MakerNoteSonySRF	
	MakerNoteUnknownText	
	MakerNoteUnknownBinary	
	MakerNoteUnknown	
Nikon	Model	yes
	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	IFD0:YCbCrPositioning	yes
	IFD0:YCbCrCoefficients	
	IFD0:TransferFunction	
	ExifIFD:ComponentsConfiguration	
	ExifIFD:CompressedBitsPerPixel	
	InteropIFD:InteropIndex	
	InteropIFD:InteropVersion	
	InteropIFD:RelatedImageWidth	
	InteropIFD:RelatedImageHeight	
ls-1	FilePermissions	yes
	FileHardLinks	
	FileUserID	
	FileGroupID	
	FileSize#	
	FileModifyDate	
	FileName	

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>
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	Derived From	Writable
-----	-----	-----
City	IPTC:City XMP-photoshop:City XMP-iptcExt:LocationShownCity CurrentIPTCDigest IPTCDigest	yes
Copyright	EXIF:Copyright IPTC:CopyrightNotice XMP-dc:Rights CurrentIPTCDigest IPTCDigest	yes
Country	IPTC:Country-PrimaryLocationName XMP-photoshop:Country XMP-iptcExt:LocationShownCountryName CurrentIPTCDigest	yes

CreateDate	IPTCDigest	
	Composite:SubSecCreateDate	yes
	EXIF:CreateDate	
	IPTC:DigitalCreationDate	
	IPTC:DigitalCreationTime	
	XMP-xmp:CreateDate	
	CurrentIPTCDigest	
Creator	IPTCDigest	
	EXIF:Artist	yes+
	IPTC:By-line	
	XMP-dc:Creator	
	CurrentIPTCDigest	
DateTimeOriginal	IPTCDigest	
	Composite:SubSecDateTimeOriginal	yes
	EXIF:DateTimeOriginal	
	IPTC:DateCreated	
	IPTC:TimeCreated	
	XMP-photoshop:DateCreated	
	CurrentIPTCDigest	
Description	IPTCDigest	
	EXIF:ImageDescription	yes
	IPTC:Caption-Abstract	
	XMP-dc:Description	
	CurrentIPTCDigest	
Keywords	IPTCDigest	
	IPTC:Keywords	yes+
	XMP-dc:Subject	
	CurrentIPTCDigest	
Location	IPTCDigest	
	IPTC:Sub-location	yes
	XMP-iptcCore:Location	
	XMP-iptcExt:LocationShownSublocation	
	CurrentIPTCDigest	
ModifyDate	IPTCDigest	
	Composite:SubSecModifyDate	yes
	EXIF:ModifyDate	
	XMP-xmp:ModifyDate	
	CurrentIPTCDigest	
Orientation	IPTCDigest	
	EXIF:Orientation	yes
Rating	XMP-xmp:Rating	yes
State	IPTC:Province-State	yes
	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
 for the official specification.

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

Tag Name	Writable
-----	-----
Collections	MWG CollectionInfo Struct+
CollectionName	string_+
CollectionURI	string_+

MWG CollectionInfo Struct

Field Name	Writable
-----	-----
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>
for the official specification.

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

Tag Name	Writable
-----	-----
KeywordInfo	MWG KeywordInfo Struct
HierarchicalKeywords	MWG KeywordStruct Struct_+
HierarchicalKeywords1Applied	boolean_+
HierarchicalKeywords1Children	MWG KeywordStruct Struct_+
HierarchicalKeywords2Applied	boolean_+
HierarchicalKeywords2Children	MWG KeywordStruct Struct_+
HierarchicalKeywords3Applied	boolean_+
HierarchicalKeywords3Children	MWG KeywordStruct Struct_+
HierarchicalKeywords4Applied	boolean_+
HierarchicalKeywords4Children	MWG KeywordStruct Struct_+
HierarchicalKeywords5Applied	boolean_+
HierarchicalKeywords5Children	MWG KeywordStruct Struct_+
HierarchicalKeywords6Applied	boolean_+
HierarchicalKeywords6	string_+
HierarchicalKeywords5	string_+
HierarchicalKeywords4	string_+
HierarchicalKeywords3	string_+
HierarchicalKeywords2	string_+
HierarchicalKeywords1	string_+

MWG KeywordInfo Struct

Field Name	Writable
-----	-----
Hierarchy	MWG KeywordStruct Struct+

MWG KeywordStruct Struct

Field Name	Writable
-----	-----
Applied	boolean
Children	MWG KeywordStruct Struct+
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>
for the official specification.

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

Tag Name	Writable
-----	-----
RegionInfo	MWG RegionInfo Struct
RegionAppliedToDimensions	Dimensions Struct_
RegionAppliedToDimensionsH	real_
RegionAppliedToDimensionsUnit	string_
RegionAppliedToDimensionsW	real_
RegionList	MWG RegionStruct Struct_+
RegionArea	Area Struct_+
RegionAreaD	real_+
RegionAreaH	real_+
RegionAreaUnit	string_+

RegionAreaW	real_+
RegionAreaX	real_+
RegionAreaY	real_+
RegionBarcodeValue	string_+
RegionDescription	string_+
RegionExtensions	MWG Extensions Struct_+
RegionFocusUsage	string_+
RegionName	string_+
RegionRotation	real_+
RegionSeeAlso	string_+
RegionType	string_+

MWG RegionInfo Struct

Field Name	Writable
-----	-----
AppliedToDimensions	Dimensions Struct
RegionList	MWG RegionStruct Struct+

MWG RegionStruct Struct

Field Name	Writable
-----	-----
Area	Area Struct
BarcodeValue	string
Description	string
Extensions	MWG Extensions Struct
FocusUsage	string
Name	string
Rotation	real
Type	string
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
-----	-----
[no tags known]	

NOTES

This document generated automatically by
Image::ExifTool::BuildTagLookup.

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SEE ALSO

[Image::ExifTool\(3pm\)](#)