IPTC Tags

The tags listed below are part of the International Press Telecommunications Council (IPTC) and the Newspaper Association of America (NAA) Information Interchange Model (IIM). This is an older meta information format, slowly being phased out in favor of XMP -- the newer IPTCCore specification uses XMP format. IPTC information may be found in JPG, TIFF, PNG, MIFF, PS, PDF, PSD, XCF and DNG images.

IPTC information is separated into different records, each of which has its own set of tags. See http://www.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 automagically takes the appropriate part of the date/time string depending on whether a date or time tag is being written. This is very useful when copying date/time values to IPTC from other metadata formats.

IPTC time values include a timezone offset. If written with a value which doesn't include a timezone then the current local timezone offset is used (unless written with a combined date/time, in which case the local timezone offset at the specified date/time is used, which may be different due to changes in daylight savings time).

Note that it is not uncommon for IPTC to be found in non-standard locations in JPEG and TIFF-based images. When reading, the family 1 group name has a number added for non-standard IPTC ("IPTC2", "IPTC3", etc), but when writing only "IPTC" may be specified as the group. To keep the IPTC consistent, ExifTool updates tags in all existing IPTC locations, but will create a new IPTC group only in the standard location.

Record	Tag Name	Writable	Values / Notes
1	IPTCEnvelope	-	--> IPTC EnvelopeRecord Tags
2	IPTCApplication	-	--> IPTC ApplicationRecord Tags
3	IPTCNewsPhoto	-	--> IPTC NewsPhoto Tags
7	IPTCPreObjectData	-	--> IPTC PreObjectData Tags
8	IPTCObjectData	-	--> IPTC ObjectData Tags
9	IPTCPostObjectData	-	--> IPTC PostObjectData Tags
240	IPTCFotoStation	-	--> IPTC FotoStation Tags

IPTC EnvelopeRecord Tags

Tag ID	Tag Name	Writable	Values / Notes
0	EnvelopeRecordVersion	int16u:	
5	Destination	string[0,1024]+	
20	FileFormat	int16u	0 = No ObjectData 1 = IPTC-NAA Digital Newsphoto Parameter Record 2 = IPTC7901 Recommended Message Format 3 = Tagged Image File Format (Adobe/Aldus Image data) 4 = Illustrator (Adobe Graphics data) 5 = AppleSingle (Apple Computer Inc)

			6 = NAA 89-3 (ANPA 1312) 7 = MacBinary II 8 = IPTC Unstructured Character Oriented File Format (UCOFF) 9 = United Press International ANPA 1312 variant 10 = United Press International Down-Load Message 11 = JPEG File Interchange (JFIF) 12 = Photo-CD Image-Pac (Eastman Kodak) 13 = Bit Mapped Graphics File [.BMP] (Microsoft) 14 = Digital Audio File [.WAV] (Microsoft & Creative Labs) 15 = Audio plus Moving Video [.AVI] (Microsoft) 16 = PC DOS/Windows Executable Files [.COM] [.EXE] 17 = Compressed Binary File [.ZIP] (PKWare Inc) 18 = Audio Interchange File Format AIFF (Apple Computer Inc) 19 = RIFF Wave (Microsoft Corporation) 20 = Freehand (Macromedia/Aldus) 21 = Hypertext Markup Language [.HTML] (The Internet Society) 22 = MPEG 2 Audio Layer 2 (Musicom), ISO/IEC 23 = MPEG 2 Audio Layer 3, ISO/IEC 24 = Portable Document File [.PDF] Adobe 25 = News Industry Text Format (NITF) 26 = Tape Archive [.TAR] 27 = Tidningarnas Telegrambyra NITF version (TTNITF DTD) 28 = Ritzaus Bureau NITF version (RBNITF DTD) 29 = Corel Draw [.CDR]
22	FileVersion	int16u	
30	ServiceIdentifier	string[0,10]	
40	EnvelopeNumber	digits[8]	
50	ProductID	string[0,32]+	
60	EnvelopePriority	digits[1]	0 = 0 (reserved) 1 = 1 (most urgent) 2 = 2 3 = 3 4 = 4 5 = 5 (normal urgency) 6 = 6 7 = 7 8 = 8 (least urgent) 9 = 9 (user-defined priority)
70	DateSent	digits[8]	
80	TimeSent	string[11]	
90	CodedCharacterSet	string[0,32]!	(values are entered in the form "ESC X Y[, ...]". The escape sequence for UTF-8 character coding is "ESC % G", but this is displayed as "UTF8" for convenience. Either string may be used when writing. The value of this tag affects the decoding of string values in the Application and NewsPhoto records. This tag is marked as "unsafe" to prevent it from being copied by default in a group operation because existing tags in the destination image may use a different encoding. When creating a new IPTC record from scratch, it is suggested that this be set to "UTF8" if special characters are a possibility)
100	UniqueObjectName	string[14,80]	
120	ARMIdentifier	int16u	
122	ARMVersion	int16u	

IPTC ApplicationRecord Tags

Tag ID	Tag Name	Writable	Values / Notes
0	ApplicationRecordVersion	int16u:	
3	ObjectTypeReference	string[3,67]	
4	ObjectAttributeReference	string[4,68]+	
5	ObjectName	string[0,64]	
7	EditStatus	string[0,64]	
8	EditorialUpdate	digits[2]	01 = Additional language
10	Urgency	digits[1]	0 = 0 (reserved) 1 = 1 (most urgent) 2 = 2 3 = 3 4 = 4 5 = 5 (normal urgency) 6 = 6 7 = 7 8 = 8 (least urgent) 9 = 9 (user-defined priority)
12	SubjectReference	string[13,236]+	
15	Category	string[0,3]	
20	SupplementalCategories	string[0,32]+	
22	FixtureIdentifier	string[0,32]	
25	Keywords	string[0,64]+	
26	ContentLocationCode	string[3]+	
27	ContentLocationName	string[0,64]+	
30	ReleaseDate	digits[8]	
35	ReleaseTime	string[11]	
37	ExpirationDate	digits[8]	
38	ExpirationTime	string[11]	
40	SpecialInstructions	string[0,256]	
42	ActionAdvised	digits[2]	01 = Object Kill 02 = Object Replace 03 = Object Append 04 = Object Reference
45	ReferenceService	string[0,10]+	
47	ReferenceDate	digits[8]+	
50	ReferenceNumber	digits[8]+	
55	DateCreated	digits[8]	
60	TimeCreated	string[11]	
62	DigitalCreationDate	digits[8]	
63	DigitalCreationTime	string[11]	
65	OriginatingProgram	string[0,32]	
70	ProgramVersion	string[0,10]	
75	ObjectCycle	string[1]	'a' = Morning 'b' = Both Morning and Evening 'p' = Evening
80	By-line	string[0,32]+	
85	By-lineTitle	string[0,32]+	
90	City	string[0,32]	

92	Sub-location	string[0,32]	
95	Province-State	string[0,32]	
100	Country-PrimaryLocationCode	string[3]	
101	Country-PrimaryLocationName	string[0,64]	
103	OriginalTransmissionReference	string[0,32]	
105	Headline	string[0,256]	
110	Credit	string[0,32]	
115	Source	string[0,32]	
116	CopyrightNotice	string[0,128]	
118	Contact	string[0,128]+	
120	Caption-Abstract	string[0,2000]	
121	LocalCaption	string[0,256]	(I haven't found a reference for the format of tags 121, 184-188 and 225-232, so I have just make them writable as strings with reasonable length. Beware that if this is wrong, other utilities won't be able to read these tags as written by ExifTool)
122	Writer-Editor	string[0,32]+	
125	RasterizedCaption	undef[7360]	
130	ImageType	string[2]	
131	ImageOrientation	string[1]	'L' = Landscape 'P' = Portrait 'S' = Square
135	LanguageIdentifier	string[2,3]	
150	AudioType	string[2]	'0T' = Text Only '1A' = Mono Actuality '1C' = Mono Question and Answer Session '1M' = Mono Music '1Q' = Mono Response to a Question '1R' = Mono Raw Sound '1S' = Mono Scener '1V' = Mono Voicer '1W' = Mono Wrap '2A' = Stereo Actuality '2C' = Stereo Question and Answer Session '2M' = Stereo Music '2Q' = Stereo Response to a Question '2R' = Stereo Raw Sound '2S' = Stereo Scener '2V' = Stereo Voicer '2W' = Stereo Wrap
151	AudioSamplingRate	digits[6]	
152	AudioSamplingResolution	digits[2]	
153	AudioDuration	digits[6]	
154	AudioOutcue	string[0,64]	
184	JobID	string[0,64]	
185	MasterDocumentID	string[0,256]	
186	ShortDocumentID	string[0,64]	
187	UniqueDocumentID	string[0,128]	
188	OwnerID	string[0,128]	

200	ObjectPreviewFileFormat	int16u	0 = No ObjectData 1 = IPTC-NAA Digital Newsphoto Parameter Record 2 = IPTC7901 Recommended Message Format 3 = Tagged Image File Format (Adobe/Aldus Image data) 4 = Illustrator (Adobe Graphics data) 5 = AppleSingle (Apple Computer Inc) 6 = NAA 89-3 (ANPA 1312) 7 = MacBinary II 8 = IPTC Unstructured Character Oriented File Format (UCOFF) 9 = United Press International ANPA 1312 variant 10 = United Press International Down-Load Message 11 = JPEG File Interchange (JFIF) 12 = Photo-CD Image-Pac (Eastman Kodak) 13 = Bit Mapped Graphics File [.BMP] (Microsoft) 14 = Digital Audio File [.WAV] (Microsoft & Creative Labs) 15 = Audio plus Moving Video [.AVI] (Microsoft) 16 = PC DOS/Windows Executable Files [.COM][.EXE] 17 = Compressed Binary File [.ZIP] (PKWare Inc) 18 = Audio Interchange File Format AIFF (Apple Computer Inc) 19 = RIFF Wave (Microsoft Corporation) 20 = Freehand (Macromedia/Aldus) 21 = Hypertext Markup Language [.HTML] (The Internet Society) 22 = MPEG 2 Audio Layer 2 (Musicom), ISO/IEC 23 = MPEG 2 Audio Layer 3, ISO/IEC 24 = Portable Document File [.PDF] Adobe 25 = News Industry Text Format (NITF) 26 = Tape Archive [.TAR] 27 = Tidningarnas Telegrambyra NITF version (TTNITF DTD) 28 = Ritzaus Bureau NITF version (RBNITF DTD) 29 = Corel Draw [.CDR]
201	ObjectPreviewFileVersion	int16u	
202	ObjectPreviewData	undef[0,256000]	
221	Prefs	string[0,64]	(PhotoMechanic preferences)
225	ClassifyState	string[0,64]	
228	SimilarityIndex	string[0,32]	
230	DocumentNotes	string[0,1024]	
231	DocumentHistory	string[0,256]	
232	ExifCameraInfo	string[0,4096]	
255	CatalogSets	string[0,256]+	(written by iView MediaPro)

IPTC NewsPhoto Tags

Tag ID	Tag Name	Writable	Values / Notes
0	NewsPhotoVersion	int16u:	

10	IPTCPictureNumber	string[16]	(4 numbers: 1-Manufacturer ID, 2-Equipment ID, 3-Date, 4-Sequence)
20	IPTCImageWidth	int16u	
30	IPTCImageHeight	int16u	
40	IPTCPixelWidth	int16u	
50	IPTCPixelHeight	int16u	
55	SupplementalType	int8u	0 = Main Image 1 = Reduced Resolution Image 2 = Logo 3 = Rasterized Caption
60	ColorRepresentation	int16u	0x0 = No Image, Single Frame 0x100 = Monochrome, Single Frame 0x300 = 3 Components, Single Frame 0x301 = 3 Components, Frame Sequential in Multiple Objects 0x302 = 3 Components, Frame Sequential in One Object 0x303 = 3 Components, Line Sequential 0x304 = 3 Components, Pixel Sequential 0x305 = 3 Components, Special Interleaving 0x400 = 4 Components, Single Frame 0x401 = 4 Components, Frame Sequential in Multiple Objects 0x402 = 4 Components, Frame Sequential in One Object 0x403 = 4 Components, Line Sequential 0x404 = 4 Components, Pixel Sequential 0x405 = 4 Components, Special Interleaving
64	InterchangeColorSpace	int8u	1 = X,Y,Z CIE 2 = RGB SMPTE 3 = Y,U,V (K) (D65) 4 = RGB Device Dependent 5 = CMY (K) Device Dependent 6 = Lab (K) CIE 7 = YCbCr 8 = sRGB
65	ColorSequence	int8u	
66	ICC_Profile	no	
70	ColorCalibrationMatrix	no	
80	LookupTable	no	
84	NumIndexEntries	int16u	
85	ColorPalette	no	
86	IPTCBitsPerSample	int8u	
90	SampleStructure	int8u	0 = OrthogonalConstangSampling 1 = Orthogonal4-2-2Sampling 2 = CompressionDependent
100	ScanningDirection	int8u	0 = L-R, Top-Bottom 1 = R-L, Top-Bottom 2 = L-R, Bottom-Top 3 = R-L, Bottom-Top 4 = Top-Bottom, L-R 5 = Bottom-Top, L-R 6 = Top-Bottom, R-L 7 = Bottom-Top, R-L
102	IPTCImageRotation	int8u	0 = 0 1 = 90 2 = 180 3 = 270
110	DataCompressionMethod	int32u	
120	QuantizationMethod	int8u	0 = Linear Reflectance/Transmittance 1 = Linear Density 2 = IPTC Ref B 3 = Linear Dot Percent

			4 = AP Domestic Analogue 5 = Compression Method Specific 6 = Color Space Specific 7 = Gamma Compensated
125	EndPoints	no	
130	ExcursionTolerance	int8u	0 = Not Allowed 1 = Allowed
135	BitsPerComponent	int8u	
140	MaximumDensityRange	int16u	
145	GammaCompensatedValue	int16u	

IPTC PreObjectData Tags

Tag ID	Tag Name	Writable	Values / Notes
10	SizeMode	no	0 = Size Not Known 1 = Size Known
20	MaxSubfileSize	no	
90	ObjectSizeAnnounced	no	
95	MaximumObjectSize	no	

IPTC ObjectData Tags

Tag ID	Tag Name	Writable	Values / Notes
10	SubFile	no+	

IPTC PostObjectData Tags

Tag ID	Tag Name	Writable	Values / Notes
10	ConfirmedObjectSize	no	

IPTC FotoStation Tags

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

(This document generated automatically by Image::ExifTool::BuildTagLookup)
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<-- ExifTool Tag Names