## NAME

exif − shows EXIF information in JPEG files

## SYNOPSIS

**exif [** *OPTION* **] [** *file...* **]**

## DESCRIPTION

**exif** is a small command-line utility to show and change EXIF information in JPEG files.

Most digital cameras produce EXIF files, which are JPEG files with extra tags that contain information about the image. The **exif** command-line utility allows you to read EXIF information from and write EXIF information to those files. **exif** internally uses the **libexif** library.

Each input file given on the command line is acted upon in turn, using all the options given. Execution will be aborted immediately if one file is not readable or does not contain EXIF tags.

As EXIF tags are read, any unknown ones are discarded and known ones are automatically converted into the correct format, if they aren't already. Corrupted MakerNote tags are also removed, but no format changes are made.

## OPTIONS

**−v, −−version**

Display the **exif** version number.

**−i, −−ids**

Show ID numbers instead of tag names.

**−t, −−tag=**_TAG_

Select only this *TAG*. *TAG* is the tag title, the short tag name, or the tag number (hexadecimal numbers are prefixed with 0x), from the IFD specified with −−ifd. The tag title is dependent on the current locale, whereas name and number are locale-independent.

**−−ifd=**_IFD_

Select a tag or tags from this *IFD*. Valid IFDs are "0", "1", "EXIF", "GPS", and "Interoperability". Defaults to "0".

**−l, −−list−tags**

List all known EXIF tags and IFDs. A JPEG image must be provided, and those tags which appear in the file are shown with an asterisk in the corresponding position in the list.

**−|, −−show−mnote**

Show the contents of the MakerNote tag. The contents of this tag are nonstandard (and often undocumented) and may therefore not be recognized, or if they are recognized they may not necessarily be interpreted correctly.

**−−remove**

Remove the tag or (if no tag is specified) the entire IFD.

**−s, −−show−description**

Show description of tag. The −−tag option must also be given.

**−e, −−extract−thumbnail**

Extract the thumbnail, writing the thumbnail image to the file specified with −−output.

**−r, −−remove−thumbnail**

Remove the thumbnail from the image, writing the new image to the file specified with −−output.

**-n, −−insert−thumbnail=**_FILE_

Insert *FILE* as thumbnail. No attempt is made to ensure that the contents of *FILE* are in a valid thumbnail format.

**−−no-fixup**

Do not attempt to fix EXIF specification violations when reading tags. When used in conjunction with −−create-exif, this option inhibits the creation of the mandatory tags. **exif** will otherwise remove illegal or unknown tags, add some mandatory tags using default values, and change the data

type of some tags to match that required by the specification.

**−o, −−output=**_FILE_

Write output image to _FILE_. If this option is not given and an image file must be written, the name used is the same as the input file with the suffix ".modified.jpeg".

**−−set−value=**_VALUE_

Set the data for the tag specified with −−tag and −−ifd to _VALUE_. Compound values consisting of multiple components are separated with spaces.

**−c, −−create-exif**

Create EXIF data if it does not exist. Mandatory tags are created with default values unless the −−no-fixup option is given. This option can be used instead of specifying an input file name in most cases, to operate on the default values of the mandatory set of EXIF tags. In this case, the −−output option has no effect and no file is written.

**−m, −−machine−readable**

Produce output in a machine-readable (tab-delimited) format. The −−xml-output and −−machine−readable options are mutually exclusive.

**−w, −−width=**_N_

Set the maximum width of the output to N characters (default 80). This does not apply to some output formats (e.g. XML).

**−x, −−xml-output**

Produce output in an XML format (when possible). The −−xml-output and −−machine−readable options are mutually exclusive. Note that the XML schema changes with the locale, and it sometimes produces invalid XML. This option is not recommended.

**−d, −−debug**

Show debugging messages. Also, when processing a file that contains corrupted data, this option causes **exif** to attempt to continue processing. Normally, corrupted data causes an abort.

## Help options

**−?, −−help**

Show help message.

**−−usage**

Display brief usage message.

## EXAMPLES

Display all recognized EXIF tags in an image and the tag contents, with bad tags fixed:

    exif image.jpg

Display a table listing all known EXIF tags and whether each one exists in the given image:

    exif −−list-tags −−no-fixup image.jpg

Display details on all XResolution tags found in the given image:

    exif −−tag=XResolution −−no-fixup image.jpg

Display the raw contents of the "Model" tag in the given image (with a newline character appended):

    exif −−ifd=0 −−tag=Model −−machine-readable image.jpg

Extract the thumbnail into the file thumbnail.jpg:

    exif −−extract-thumbnail −−output=thumbnail.jpg image.jpg

Display a list of the numeric values of only the EXIF tags in the thumbnail IFD (IFD 1) and the tag values:

    exif −−ids −−ifd=1 −−no-fixup image.jpg

Display the meaning of tag 0x9209 in the "EXIF" IFD according to the EXIF specification:

    exif −−show-description −−ifd=EXIF −−tag=0x9209

Add an Orientation tag with value "Bottom-left" (4) to an existing image, leaving the existing tags untouched:

exif −−output=new.jpg −−ifd=0 −−tag=0x0112 −−set-value=4 −−no-fixup image.jpg

Add a YCbCr Sub-Sampling tag with value 2,1 (a.k.a YCbCr 4:2:2) to an existing image and fix the existing tags, if necessary:

exif −−output=new.jpg −−tag=YCbCrSubSampling −−ifd=0 −−set-value='2 1' image.jpg

Remove the "User Comment" tag from an image:

exif −−output=new.jpg −−remove −−tag="User Comment" −−ifd=EXIF image.jpg

Display a table with all known EXIF tags, highlighting mandatory ones:

exif −cl

## AUTHOR

**exif** was written by Lutz Mueller <lutz@users.sourceforge.net> and numerous contributors.  This man page is Copyright © 2002-2012 Thomas Pircher, Dan Fandrich and others.

## SEE ALSO

**https://libexif.github.io/**