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ere EXIF After RAW Convers

Printer Friendly Version

Restore your camera specific EXIF information after RAW conversion or editing. (PDF)

The world is built on information - so the saying goes.

Then why do some software developers choose not to keep all the information that our cameras provide us?

If you are like me and use third party RAW conversion software you may find it immensely irritating, as I do, to loose all of your camera specific information that is contained in the EXIF tag, which many RAW converters and editors discard.

EXIF information is a standard format for storing, within the image file, information about shutter speed, aperture, ISO etc. Along with this standard information camera manufactures can include their own unique information such as the lens used, focus mode or other camera specific information. Since this information varies from camera to camera many editors and RAW conversion programs deem this not worthy of keeping with the file. They will discard all but the standard information fields.

Below are two screen shots, one example of full EXIF information, from a Canon 1d MKII, and another of what it looks like after conversion with <u>Capture One</u>, the best currently available RAW conversion software. Yes, we still have the most important information but we no longer have (just to name one) the field "Lens:" . In my workflow I convert all of the RAW files I want to keep to JPGs, for reviewing, display on the web or as slideshows. I often will browse my directory analyzing pictures and technique. I am constantly looking to see what lens I used for a particular shot. To have this information disappear from my JPG conversions is most annoying.

🕌 EXIF Data 🛛 Origio	nal EXIF	X
File: JI9S1018.CR2		2
File size: 8,544KB Image Serial Number: 000-1018	EVIE after conversion	-
Camera Model: Canon EOS-1D Mark II	EXIF Data EXIF diter conversion	
Camera serial number: 0000222612	File: JI9S1018-2.jpg	~
Firmware: Firmware Version 1.2.1	File size: 4,839KB	
Diste/Time: 2005:05:22 13:14:41	Lamera Model: Lanon EUS-TD Mark II Disto /Time: 2005:05:22:12:14:41	
Shutter speed: 1/640 sec	Shutter speed: 1/640 sec	
Aperture: 8	Aperture: 8	
Exposure mode: Program	Exposure mode: Program	
Exposure compensation: +1/3	Exposure compensation: +1/3	
Hash: Utt Metering mode: Evaluative	Flash: Ult Materiae and a Frankration	
Drive mode: Continuous (low): frame 1	Self-timer: 65 secs	
ISO: 500	ISO: 500	
Lens: 100 to 400mm	Focal length: 285mm	
Focal length: 285mm	Image size: 3504 x 2332	
AF mode: Al Servo AF	Color profile: IEC 61966-2.1 Default RGB colour space - sRGB	13
Image size: 3304 x 2330		1944
White balance: Auto		
Color matrix 2: sRGB portrait hue and ch	roma	
Color space: sRGB		
Saturation: Normal		
Sharoness level: 0		
Tone: -2		
Custom Functions:		
CFn 1: Viewfinder display on during expo	osure	
LFn 2: No exposure without LF card	Electric AE leak	
CFn 8: Top I CD panel: ISO_Back I CD	nanel: Remaining shots	
CFn 11: AF point selection: when expos	ure metering active: horizontal=Main dial, vertical=Assist button + Quick dial	
CFn 16: Safety shift in Av or Tv enabled		
CFn 17: Auto expand AF activation area	(7 or 13 AF points)	
CEn 18: Assist button switches to register	ered Ar point	
Criti 20. Al pervo tracking, rast		2



Capture One is outstanding software and the workflow it provides for RAW conversion is the best to date, however I had to find a way to restore all my EXIF data provided by the camera.

I find this additional information very important to me in analyzing my photos and helping me understand how my shooting decisions effect my image. As a Canon user I am provided information about the specific lens used, whether there was a flash, if it fired, focus mode etc. Other manufactures also provide similar information that is very helpful, in analysis, to help you become a better photographer.

There Is A Way

Fortunately, with Chris Breeze's very useful picture handling software <u>BreezeBrowser</u>, there is an easy way to restore this data to your converted or edited files. There is probably other EXIF handling software available that can also accomplish this task, however I find BreezeBrowser to be an excellent management tool for viewing pictures, organizing directories, creating "proofs" and preparing HTML slide shows. I wholeheartedly recommend that anyone involved with digital images have a copy of this software. It is extremely useful software and for additional reading you can see my brief <u>Article on BreezeBrowser</u>.

Chris has understood the importance of the EXIF information and his software is biased toward easy viewing of the most important EXIF data in any of the views. There is always a display showing basic EXIF at the bottom of any viewing window and the full EXIF can be accessed at any time.

BreezeBrowser includes a simple utility to copy this data from the original files to the newly saved or edited files of the same name. Below you can see screen shots of this feature.





Breeze Browser's "EXIF Copy" function

As long as you keep the filenames the same, BreezeBrowser (BB) will take the EXIF data from the files in the current directory and copy it to files of the same name in any directory that you specify. This updating can take place at anytime as long as there exists two files with the same name in different directories. Extensions are ignored and any file that does not have a name match will be skipped. If your software does not allow you to keep names identical you can take advantage of BB's easy renaming feature. I also should mention, that conversions done with BB will retain their full EXIF.

Workflow Makes it Easy

How you manage your workflow will make this task an easy one.



Typical Directory Structure

In the screenshot above you can see an example of my typical directory structure. In my workflow, I place all of my RAW images for one month into one directory - in this case with the default name of the camera's folder. I let Capture One place the conversions into a directory below called "Develops". After I convert a batch of files I then move the RAW files to the directory. called "Raw Processed". From one of these two directories, which contain all my RAW files for the month, I can update the JPGs with the EXIF from the RAW files before I move them out of the "Develops" folder and into their various categories.

I no longer have to be frustrated at not having the information in the EXIF after I convert my images.

Thank you, BreezeBrowser!

UPDATE!

For further study on EXIF and IPTC data click on these links.

This information from the BB help file is of interest regarding EXIF data.

As much of the original EXIF data as possible is written to converted files output as JPEG or TIFF images. For best results it is advisable to keep the THM files which accompany the CRW files. This is because the THM files contain the full EXIF data. If the THM file is not available the EXIF data will be recreated from the CIFF data stored in the CRW file and some data such as the subject distance will not be available. IPTC data is saved in JPEG and TIFF files when converting all raw files.

For a brief description of EXIF and IPTC data check this link on Steve Hoffmann's website

I should also have mentioned the "Export EXIF data" feature which is available as well, and saves the EXIF data to a text file. You can choose to have a text file one for each image with the name of the image as the file name and the txt. extension or one text file containing the EXIF data for multiple images.

Below is a screen shot of the selection box for this feature.

Export EXIF Data	
 One EXIF data file per image Export EXIF data to text files, one image file, but with a ".txt" extens in the text file IMG_0001.txt Store EXIF in a single file, one Export EXIF data to a single text file 	per image. The text file is given the same name as the ion. e.g. The EXIF data for image IMG_001.jpg is stored line per image ile with one line per image using the delimiter specified
Output heading names Use the custom format string b	format string. Delimiter: (must be: , or ; or or ^t) below:
Output Filename: C:\Documents and Settings\Mai	n\My Documents\My Pictures\Jun-05\100EQS1
Breeze Brows	ser's "Export EXIF" function