Adobe[®] Digital Negative Converter 6.7 Read Me

What is a Digital Negative (DNG)?

Digital Negative (DNG) is an openly published raw file specification that stores the "raw" pixel data captured by the digital camera sensor before it has been converted to JPEG or TIFF along with standard EXIF metadata, date, time, camera used, and camera settings. This format is freely available for other software and hardware vendors to support.

What is the Adobe (DNG) Converter?

The Adobe DNG Converter enables you to easily convert camera-specific raw files from the supported cameras listed below to a more universal DNG raw file.

What is a "raw" file?

A raw file contains the "raw" data captured by the digital camera sensor before it has been converted to JPEG or TIFF. Cameras that create JPEG or TIFF files process (and in the case of JPEG files, compress) the sensor data. When working with raw files, the file is not compressed or processed in the camera—instead, our software gives the user complete control over the conversion settings. For example, white balance is not applied to the raw file but is stored with the file so the software can default to the originally intended setting. Other information contained in a DNG file includes standard EXIF metadata (just like in JPEG files), date, time, camera used, and camera settings.

Benefits of raw files

Some of the benefits of shooting raw include:

- Smaller files than uncompressed TIFF
- · Does not have the artifacts of compressed JPEGs
- Many key camera parameters, such as white balance, can be modified even after the image is captured
- · You have complete control over conversion settings rather than letting the camera decide
- Access to 16-bit data for greater detail and fidelity
- · Flexibility of converting a single file using multiple conversion settings

Why convert to DNG files?

Unlike most manufacturer-specific raw formats, the Digital Negative is an openly published specification that not only is supported by Adobe, but is also freely available for other software and hardware vendors to support. Consequently, it can be a safer file format to use for long-term archival purposes. Archiving your file as a digital negative eliminates worries that the raw file will no longer be readable once the camera that created it becomes obsolete.

The Digital Negative specification allows for not only all of the pixel information stored in current raw formats, but also for all of the additional, proprietary metadata that many manufacturers include. The Adobe DNG Converter may in some cases ignore some of this proprietary metadata, and only include the basic information necessary for creating a high-quality image file. The original raw file, however, can also be embedded in the new DNG format to ensure proprietary metadata from the manufacturer is not lost.

New Supported Cameras

Support for the following cameras has been added in this update.

EOS 5D Mark III
PowerShot G1 X
PowerShot S100V
FinePix F505EXR
FinePix F605EXR
FinePix F770EXR
FinePix F775EXR
FinePix HS30EXR
FinePix HS33EXR
FinePix X-S1
D4
D800
D800E
E-M5
K-01
NX20
NX210
NX1000
Alpha NEX-VG20
SLT-A57

Below is a complete list of supported cameras and raw formats included in DNG Converter 6.7. The new cameras are highlighted in red.*

Digital Negative (DNG) raw file format

Learn more about the DNG raw file format at www.adobe.com/dng

Canon	Nikon	
EOS 1D	1 V1	
EOS 1Ds	1 J1	
EOS 1D Mark II	D1	
EOS 1D Mark II N	D1H	
EOS 1Ds Mark II	D1X	
EOS 1D Mark III	D4	
EOS 1Ds Mark III	D70	
EOS 1D Mark IV	D100	
EOS 1D X	D200	
EOS 5D	D2H	
EOS 5D Mark II	D2Hs	
EOS 5D Mark III	D3	
EOS 10D	D3X	
EOS 20D	D3s	
EOS 20Da	D300	
EOS 30D	D300s	
EOS 40D	D3000	
EOS 50D	D3100	
EOS 60D	D40	
EOS 300D (Digital Rebel/Kiss Digital)	D40x	
EOS 350D (Digital Rebel XT/EOS Kiss Digital N)	D50	
EOS 400D (Digital Rebel XTi/EOS Kiss Digital X)	D5000	
EOS 450D (Digital Rebel XSi/EOS Kiss X2)	D5100	
EOS 500D (Digital Rebel T1i/EOS Kiss X3 Digital)	D60	
EOS 550D (Digital Rebel T2i/EOS Kiss X4 Digital)	D70s	
EOS 600D (Digital Rebel T3i/EOS Kiss X5 Digital)	D700	
EOS 1100D (Digital Rebel T3/EOS Kiss X50 Digital)	D7000	
EOS 7D	D80	
EOS 1000D (Digital Rebel XS/EOS Kiss F)	D800	
EOS D30	D800E	
EOS D60	D90	
PowerShot 600	D2X	
PowerShot A5	D2Xs	
PowerShot A50	Coolpix 5000	
PowerShot S30	Coolpix 5400	
PowerShot S40	Coolpix 5700	
PowerShot S45	Coolbix 8200	

PowerShot S50 PowerShot S60 PowerShot S70 PowerShot S90 PowerShot S95 PowerShot S100 PowerShot S100V PowerShot G1 PowerShot G1 X PowerShot G2 PowerShot G3 PowerShot G5 PowerShot G6 PowerShot G9 PowerShot G10 PowerShot G11 PowerShot G12 PowerShot Pro70 PowerShot Pro90 IS PowerShot Pro1 PowerShot SX1 IS Casio EXILIM EX-F1 (DNG) EXILIM EX-FH20 (DNG) EXILIM EX-FH25 (DNG) EXILIM EX-FH100 (DNG) Contax N Digital Epson R-D1 R-D1s R-D1x Fujifilm FinePix E900 FinePix E900 FinePix F505EXR FinePix F550EXR FinePix F605EXR FinePix F700 FinePix F770EXR FinePix F775EXR FinePix HS10 FinePix HS20EXR FinePix HS30EXR FinePix HS33EXR FinePix IS-1 FinePix IS Pro FinePix S100FS FinePix S2 Pro FinePix S20 Pro FinePix S200EXR FinePix S3 Pro FinePix S5 Pro FinePix S5000 Z FinePix S5200/5600 FinePix S6000fd/S6500fd FinePix S7000 Z FinePix S9000/9500 FinePix S9100/9600 FinePix X10 FinePix X100 FinePix X-S1 Hasselblad

H2D (DNG) CF-22 CF-22MS CF-39 CF-39MS CFH-22 CFH-22 CFH-39

Coolpix 8400 Coolpix 8800 Coolpix P6000 Coolpix P7000 Coolpix P7100 Olympus E-10 E-1 E-20 E-3 E-30 E-420 E-450 E-5 E-520 E-600 E-620 E-M5 E-P1 E-P2 E-P3 E-PL1 E-PL1s E-PL2 E-PL3 E-PM1 EVOLT E-300 EVOLT E-330 EVOLT E-400 EVOLT E-410 EVOLT E-500 EVOLT E-510 C-5050 Zoom C-5060 Zoom C-7070 Wide Zoom C-8080 Wide Zoom SP-310 SP-320 SP-350 SP-500 UZ SP-510 UZ SP-550 UZ SP-560 UZ SP-565 UZ SP-570 UZ XZ-1 Panasonic DMC-FX150 DMC-FZ8 DMC-FZ18 DMC-FZ28 DMC-FZ30 DMC-FZ35 DMC-FZ38 DMC-FZ40 (FZ45) DMC-FZ50 DMC-FZ100 DMC-FZ150 DMC-G1 DMC-G2 DMC-G3 DMC-G10 DMC-GF1 DMC-GH1 DMC-GF2 DMC-GF3 DMC-GH2 DMC-GX1 DMC-L1 DMC-L10

DMC-LC1

DMC-LX1 DMC-LX2

DMC-LX3

CFV 503CWD H2D-22 H2D-39 H3D-22 H3D-31 H3D-39 H3DII-22 H3DII-31 H3DII-39 H3DII-39MS H3DII-50 H4D-40 H4D-60 Kodak DCS Pro 14n DCS Pro 14nx DCS Pro SLR/n DCS720x DCS760 EasyShare P712 EasyShare P850 EasyShare P880 EasyShare Z1015 IS EasyShare Z980 EasyShare Z981 EasyShare Z990 Konica Minolta DIMAGE A1 **DIMAGE A2 DIMAGE A200** DiMAGE 5 DIMAGE 7 DiMAGE 7i DiMAGE 7Hi Maxxum 7D / DYNAX 7D ALPHA SWEET DIGITAL (Japan) ALPHA-5 DIGITAL (China) MAXXUM 5D (USA) DYNAX 5D (Europe) Leaf AFi II 6 AFi II 7 Valeo 6 Valeo 11 Valeo 22 Valeo 17 Aptus-II 5 Aptus-II 8 Aptus-II 10R Aptus-II 12 Aptus-II 12R Aptus 17 Aptus 22 Aptus 54s Aptus 65 Aptus 65s Aptus 75 Aptus 75s Aptus AFi II 6 Aptus AFi II 7 Leica **DIGILUX 2 DIGILUX 3** D-LUX 2 D-LUX 3 D-LUX 4 Digital-Modul-R (DNG) M8 (DNG) M9 (DNG)

DMC-LX5

Pentax

*ist D *ist DL *ist DL2 *ist DS *ist DS2 645D K-01 K10D K100D K100D Super K110D K20D K200D K2000 (K-m) K-5 K-7 K-r K-x Q Phase One H 20 H 25 IQ 140 IQ 160 IQ 180 P 20 P 20 + P 21 P 21 + P 25 P 25 + . P 30 P 30 + P 40 + P 45 P 45 + P 65 + Ricoh GR Digital (DNG) GR Digital II (DNG) GR Digital III (DNG) GR Digital IV (DNG) GX100 (DNG) GX200 (DNG) GXR, A12 (DNG) GXR, S10 24-72mm F2.5-4.4 VC (DNG) GXR, GR A12 50mm F2.5 MACRO (DNG) GXR, GR LENS A12 28mm F2.5 (DNG) GXR, GXR P10 (DNG) Samsung Pro 815 (DNG) GX-1S GX-1L GX-10 (DNG) GX-20 (DNG) NX 5 NX10 NX11 NX20 NX100 NX200 NX210 NX1000 TL350 (WB2000) TL500 (EX1) Sigma DP1 DP1s DP2

S2 (DNG)	SD9	
V-LUX 1	SD10	
V-LUX 3	SD14	
X1 (DNG)		
	Sony	
Mamiya	A100	
	A200	
	A230	
DM22	A290	
DM28	A300	
DM33	A330	
DM40	A350	
DM56	A 380	
M18	Δ300	
M22	A450	
M31	A500	
	A550	
	A550	
	A500	
	A300	
	A850	
	A000	
	A900 Alaba NEX C2	
	Alpha NEX-VG20	
	DSC-F828	
	DSC-R1	
	DSC-V3	
	SLI-A33	
	SLI-A35	
	SL1-A55V	
	SL1-A57	
	SLT-A65	
	SLT-A77	

*Adobe is often able to provide preliminary support for raw files from new camera models not listed above. The Camera Raw plug-in will read these images but profiling and testing is not complete. If you have any problems with this update, please refer to the support Web site at http://www.adobe.com/support/.

Note: Hasselblad support is for the 3FR file format as well as FFF files generated from the Hasselblad Phocus software.

How to Use the Adobe DNG Converter

- 1. Exit the DNG Converter
- 2. Open the download file and double-click Adobe DNG Converter and follow the on-screen instructions.
- 3. The DNG Converter is now available in your Programs(Windows) or Applications(Mac) directory
- 4. Launch the Adobe DNG Converter by double-clicking on the icon.
 - You can also drag and drop individual images or a folder of images directly onto the Adobe DNG Converter icon. This will automatically launch the converter.
- 5. Select the folder of images you would like to convert to DNG.
- 6. Select the location you would like the new DNG files to be saved.
- 7. Select the name you would like to use for the new DNG files.
 - If you select "Document Name," the existing name of the file will be used with the new DNG extension added.
 - You can choose to add serial numbers or letters to the name. An example of the name will appear after "Name Example."
 - Begin numbering: Enter the starting serial number if you would like it to be different than one.
 - File Extension: The file extension is automatically set to DNG. You can choose the extension to be either upper or lower case.
- 8. Preferences are set to apply lossless compression and preserve the mosaic format by default. You can change those preferences by clicking on "Change Preference..." then setting custom compatibility options. Below is a description of the alternative settings.
 - Linear (demosaiced) The image data is stored in an interpolated("demosaiced") format. This
 can be useful if a camera's particular mosaic pattern is not supported by a DNG reader. The
 default "mosaic" format maximizes the amount of data preserved. Mosaic image data can be
 converted to linear data but the reverse is not possible.
 - Uncompressed No compression will be applied to the raw image data.

9. Click on "Convert"

10. A dialog will appear showing the status of the conversion.

Technical Support

If you have any problems with the Adobe DNG Converter, please post them on the Adobe User to User Forum at: <u>http://www.adobe.com/support/forums/main.html</u>

Release Notes

DNG Converter 5.4 and subsequent updates include new DNG Compatibility conversion options. These choices help address the additional options available with the new DNG 1.3 Specification (http://www.adobe.com/dng)

- Camera Raw 2.4 and later: The DNG file will be readable by Camera Raw 2.4 (Photoshop CS) and later, and Lightroom 1.0 and later
- Camera Raw 4.1 and later: The DNG file will be readable by Camera Raw 4.1 (Photoshop CS3) and later, and Lightroom 1.1 and later. The DNG file will often be readable by earlier versions, depending on the camera model
- Camera Raw 4.6 and later: The DNG file will be readable by Camera Raw 4.6 (Photoshop CS3) and later, and Lightroom 2.1 and later. The DNG file will often be readable by earlier versions, depending on the camera model
- Camera Raw 5.4 and later: The DNG file will be readable by Camera Raw 5.4 (Photoshop CS4) and later, and Lightroom 2.4 and later. The DNG file will often be readable by earlier versions, depending on the camera model
- Custom:
 - Backward Version Option: DNG 1.1, DNG 1.3 (default 1.3)
 - Checkbox: Linear (demosaiced) (default unchecked)
 - Checkbox: Uncompressed (default unchecked)

This version of the DNG Converter is now provided with an installation utility. The installation utility is designed to place the DNG Converter application in the Application(Mac) or Programs(Win) directory and install a set of color profiles required for the DNG Converter to function properly. These profiles are copied to a common resource location.

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May 1, 2012