

Adobe® Digital Negative Converter 7.1 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.

Canon	EOS 1D X
Canon	EOS 5D Mark III
Canon	EOS 60Da
Canon	PowerShot G1 X
Canon	PowerShot S100V
Fuji	FinePix F505EXR
Fuji	FinePix F605EXR
Fuji	FinePix F770EXR
Fuji	FinePix F775EXR
Fuji	FinePix HS30EXR
Fuji	FinePix HS33EXR
Fuji	FinePix X-S1
Fuji	X-Pro1
Leaf	Credo 80
Leica	M Monochrome
Leica	X2
Nikon	D4
Nikon	D3200
Nikon	D800
Nikon	D800E
Olympus	OM-D E-M5
Panasonic	Lumix DMC-GF5
Pentax	K-01
Samsung	NX20
Samsung	NX210
Samsung	NX1000
Sony	Alpha NEX-VG20
Sony	Alpha SLT-A37
Sony	SLT-A57

Below is a complete list of supported cameras and raw formats included in DNG Converter 7.1. 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

EOS 1D
EOS 1Ds
EOS 1D Mark II
EOS 1D Mark II N
EOS 1Ds Mark II
EOS 1D Mark III
EOS 1Ds Mark III
EOS 1D Mark IV
EOS 1D X
EOS 5D
EOS 5D Mark II
EOS 5D Mark III
EOS 10D
EOS 20D
EOS 20Da
EOS 30D
EOS 40D
EOS 50D
EOS 60D
EOS 60Da
EOS 300D (Digital Rebel/Kiss Digital)
EOS 350D (Digital Rebel XT/EOS Kiss Digital N)
EOS 400D (Digital Rebel XTi/EOS Kiss Digital X)
EOS 450D (Digital Rebel XSi/EOS Kiss X2)
EOS 500D (Digital Rebel T1i/EOS Kiss X3 Digital)
EOS 550D (Digital Rebel T2i/EOS Kiss X4 Digital)
EOS 600D (Digital Rebel T3i/EOS Kiss X5 Digital)

Nikon

1 V1
1 J1
D1
D1H
D1X
D4
D70
D100
D200
D2H
D2Hs
D3
D3X
D3s
D300
D300s
D3000
D3100
D3200
D40
D40x
D50
D5000
D5100
D60
D70s
D700

EOS 1100D (Digital Rebel T3/EOS Kiss X50 Digital)
EOS 7D
EOS 1000D (Digital Rebel XS/EOS Kiss F)
EOS D30
EOS D60
PowerShot 600
PowerShot A5
PowerShot A50
PowerShot S30
PowerShot S40
PowerShot S45
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

D7000
D80
D800
D800E
D90
D2X
D2Xs
Coolpix 5000
Coolpix 5400
Coolpix 5700
Coolpix 8700
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

FinePix X100
FinePix X-S1
X-Pro1

Hasselblad

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

DiIMAGE A1
DiIMAGE A2
DiIMAGE A200
DiIMAGE 5
DiIMAGE 7
DiIMAGE 7i
DiIMAGE 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

DMC-GH1
DMC-GF2
DMC-GF3
DMC-GF5
DMC-GH2
DMC-GX1
DMC-L1
DMC-L10
DMC-LC1
DMC-LX1
DMC-LX2
DMC-LX3
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

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)
S2 (DNG)
V-LUX 1
V-LUX 3
X1 (DNG)

Mamiya

ZD
DM22
DM28
DM33
DM40
DM56
M18
M22
M31

NX20

NX100
NX200
NX210
NX1000
TL350 (WB2000)
TL500 (EX1)

Sigma

DP1
DP1s
DP2
SD9
SD10
SD14

Sony

A100
A200
A230
A290
A300
A330
A350
A380
A390
A450
A500
A550
A560
A580
A700
A850
A900
Alpha NEX-C3
Alpha NEX-3
Alpha NEX-5
Alpha NEX-5N
Alpha NEX-7
Alpha NEX-VG20
DSC-F828
DSC-R1
DSC-V3
SLT-A33
SLT-A35
SLT-A55V
SLT-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: <http://www.adobe.com/support/forums/main.html>

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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