Adobe® Digital Negative Converter 3.0 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.

Supported Cameras

Support for the following cameras has been added from DNG 2.4 to 3.0.

- Fujifilm FinePix S3 Pro
- Sony DSC-V3

Below is a complete list of supported cameras in this 3.0 version.

Canon
- EOS-1D
- EOS-1Ds
- EOS-1D Mark II
- EOS-1Ds Mark II
- EOS 10D
- EOS 20D
- EOS D30
- EOS D60
- EOS 300D (Digital Rebel/Kiss Digital)
- PowerShot 600
- PowerShot A5
- PowerShot A50
- PowerShot Pro 1
- PowerShot S30
- PowerShot S40
- PowerShot S45
- PowerShot S50
- PowerShot S60
- PowerShot S70
- PowerShot G1
- PowerShot G2
- PowerShot G3
- PowerShot G5
- PowerShot G6
- PowerShot Pro70
- PowerShot Pro90 IS

Contax
- N Digital

Epson
- R-D1

Fujifilm
- FinePix F700
- FinePix S5000 Z
- FinePix S7000 Z
- FinePix S2 Pro
- FinePix S20 Pro
- FinePix S3 Pro

Kodak
- DCS 14n
- DCS Pro 14nx
- DCS720x
- DCS760
- DCS Pro SLR/n

Konica Minolta
- DiMAGE A1
- DiMAGE A2
- DiMAGE A200
- DiMAGE 5
- DiMAGE 7
- DiMAGE 7i
- DiMAGE 7Hi
- Maxxum 7D (North America)
- DYNAX 7D (Europe)
- Alpha 7 (Asia)

Leaf
- Valeo 6
- Valeo 11
- Valeo 22

Leica
- Digilux 2

Nikon
- D1
- D1H
- D1X
- D100
- D2H
- D70
- Coolpix 5000
- Coolpix 5400
- Coolpix 5700
- Coolpix 8700

Olympus
- E-10
- E-1
- E-20
- C-5050 Zoom
- C-5060 Zoom
- C-8080 Wide Zoom

Panasonic
- DMC-LC1

Pentax
- *ist D

Sigma
- SD9
- SD10

Sony
- DSC-F828
- DSC-V3

How to Use the Adobe DNG Converter

1. 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.
2. Select the folder of images you would like to convert to DNG.
3. Select the location you would like the new DNG files to be saved.
4. 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.
5. Preferences are set to "Compressed (lossless)" and "Preserve Raw Image" by default. You can change those preferences by clicking on "Change Preference…" Below is a description of the different settings.
   - Image Conversion Method:
     - Preserve Raw Image – the image data is stored in the original "mosaic" format, if possible, which maximizes the amount of data preserved. Mosaic image data can be converted to linear data but the reverse is not possible.
     - Convert to Linear Image – 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.
6. Click on "Convert"
7. A dialog will appear showing the status of the conversion.

How to open DNG files in Adobe Photoshop® CS2 and Photoshop Elements

To view and open DNG files from within Photoshop Elements software you'll need to ensure you have the latest Camera Raw 3.0 plug-in. Photoshop CS2 ships with the Camera Raw 3.0 plug-in. Those using Photoshop CS will need to upgrade to Photoshop CS2 to use the Camera Raw 3.0 plug-in. You can get the latest Camera Raw version on Adobe.com at:

Mac:
http://www.adobe.com/support/downloads/product.jsp?product=40&platform=Macintosh

Win:
http://www.adobe.com/support/downloads/product.jsp?product=40&platform=Windows

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

The Adobe DNG Converter will be updated periodically to support newly released camera formats.

Thank you for your interest in the Adobe DNG Converter. Adobe offers a full line of digital imaging products to help you get the most out of your photographs. To learn more, visit Adobe.com.

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