

What is JPEG / MPEG?

JPEG

JPEG is short for Joint Photographic Experts Group, and is pronounced j-peg. JPEG is designed for compressing either full-color or gray-scale images of natural, real-world scenes. It works well on photographs, naturalistic artwork, and similar material: not so well on lettering, simple cartoons, or line drawings. JPEG handles only still images, but there is a related standard called MPEG for motion pictures.

JPEG is *lossy*, meaning that the decompressed image isn't quite the same as the one you started with. (There are lossless image compression algorithms, but JPEG achieves much greater compression than is possible with lossless methods.) JPEG is designed to exploit known limitations of the human eye, notably the fact that small color changes are perceived less accurately than small changes in brightness. Thus, JPEG is intended for compressing images that will be looked at by humans.

MPEG

MPEG is short for Moving Picture Experts Group, and pronounced m-peg. MPEG achieves high compression rate by storing only the changes from one frame to another, instead of each entire frame. The video information is then encoded using a technique called DCT.MPEG using a type of lossy compression, since some data is removed. The diminishment of data is generally imperceptible to the human eye.

Saving JPEGs

You may convert your reformatted 2D and 3D images to a jpeg format while in:

- (1) Volume Viewer
- (2) Viewer

First you will acquire the images on the Filmer, then you will export them.

(1) Acquiring Images from Volume Viewer

Acquiring Individual Images from Volume Viewer

Click on [Filmer] to open the Mini Filmer screen, and set a 2x2, or 2x3 format. Place the mouse over the image and press the [F1] keyboard key. This will add the image to the Mini Filmer. To export as JPEG, move to the Export section.

Acquiring a batch of images from Volume Viewer

While in Volume Viewer you may create a Batch Rx. Select the 'Output' choice of [Filmer Images], and then start the batch. The images will be created and sent to positions on the Filmer.

Now that the images are on the filmer you may click on [Filmer] (if not already open) to view the mini filmer and set the format to 2x2, or 2x3. To export as JPEG, move to the Export section.



(2) Acquiring Images from Viewer

Acquiring Individual Images from the Viewer

Click on [Filmer] to open the Mini Filmer screen, and set a 2x2, or 2x3 format. Place the mouse over the image(s) and press the [F1] keyboard key. This will add the image(s) to the Mini Filmer. To export as JPEG, move to the Export section.

Acquiring a series of images from the Viewer

Click on [Filmer] to open the Mini Filmer screen. Place the mouse over one of the images and press the [F4] keyboard key. This will open the Batch-filming filming screen. Select your range of images and a 2x2, or 2x3 format, then click [Print].

Exporting the Acquired images as JPEG

Left mouse click on the [Export Data] button, located on the Mini Filmer, to open the Export electronic film screen.

The image quality is adjustable on the Compression Settings screen. Click on [Compression Settings]. The quality defaults to 6 or 7, which should be reasonable for most needs. Click on [Done] to close the Compressions Settings screen.

CD/DVD and USB Key

CD/DVD

Place a CD/DVD in the tray and click on [CD/DVD] when you are ready. The tray will come back out when the job is complete.

USB Key

Place a USB Key in the front of the computer, and then click on [USB Key]. A message will be posted upon completion.

NOTE: Writing jpeg/mpeg files to a CD/DVD is multi-session. This means you will be able to add more jpeg/mpeg files to this CD/DVD in the future. Click on [Quit Data Export].



Saving MPEGs

You may convert your reformatted 2D and 3D images to an mpeg format while in:

- (1) Volume Viewer
- (2) Viewer

First you will acquire the images on the Filmer, then you will export them.

Acquiring the Movie

(1) Acquiring a movie from Volume Viewer

While in Volume Viewer you may create a Batch. Select the [Output] choice of [Filmer Movie], and then start the batch. The images will be created and sent to a single position on the filmer, represented by cine filmstrip icon. To export as MPEG, move to the Export section.

(2) Acquiring a movie from the Viewer

While in the Viewer, click on [Filming], [Film Cine]. The series you are viewing will be captured to the filmer. The images will be sent to a single position on the Filmer represented by a cine filmstrip icon.

Exporting the acquired images as MPEG

Left mouse click on the [Export Data] button, located on the Mini Filmer, to open the 'Export electronic film' screen. The image quality, rotation speed and range of images may be set on the Compression Settings screen. Click on [Compression Settings].

The quality defaults to 6 or 7, which should be reasonable for most needs. To the left you will see a play arrow button to preview the movie file. Click to play it, and then click to the square stop button to stop. Make any necessary changes, and then play again. When you are satisfied, click [Done].

CD/DVD and USB Key

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