

Preparing Images for Digital Projection.

Image Media: CD Rom.

FORMAT:

1024 pixels Horizontal, 768 pixels Vertical, .JPG (jpeg)

IMAGE SIZE: Your image should fit within a rectangle 1,024 pixels wide and 768 pixels tall. That's the highest resolution of any projector we use. Jamming more pixels into the image won't make it look any better, but could slow down reading the files. In most cases you'll have images that are a little less than this on one side, unless they are an exact 4:3 ratio from a point-and-shoot digital camera. For instance, from a DSLR or 35mm film scan with a 3:2 ratio you'll probably get 1,024 x 683 pixels, or for a vertical you might have 512 x 768 pixels. To see size in pixels in Photoshop go to **IMAGE > SIZE** and then look at the size in pixels, not inches. There is no maximum or minimum size, however we suggest not bigger than about 3,000 pixels on a side since

- a.) the system re-samples them back down to 1,024 x 768 or 800 x 600 anyway, and
- b.) bigger images make bigger files and slow everything down. They won't look any better.

Feel free to bring smaller images, just beware that they probably won't fill the screen. Therefore please resize files from a digital camera since the original files are larger and may slow things down reading from the computer.

FILE SIZE: No specific requirement, although when you follow all these directions you should wind up with files of a couple of hundred kB and certainly less than 1MB. A meg or two isn't bad, but 10 or 20 MB is way too big.

NOTE:

The projector probably is squarer than your photos. If you bring your images directly from your camera you won't fill the screen; the shots will be too short vertically.

Aspect ratio is the ratio of width to height. Computers and projectors have a 4:3 ratio, while SLRs have a wider, shorter 3:2 ratio.

Camera images are wider and shorter than computer screens. If you project an image from an SLR camera it will be squeezed to fit:

For

Uncropped from SLR camera (3:2 ratio)

Cropped to 4:3 ratio to fill screen

If you crop off a little from the sides it will fill the screen.

Method:

Use Photoshop's Marquee tool, select **FIXED ASPECT RATIO**, set it to 4:3, drag the Marquee tool to select your crop, go to **IMAGE > CROP**, and now your image is the shape that will fill the screen. Resize to 1,024 x 768, sharpen at 150%, 0.3 pixel radius, 0 threshold, save as JPG, and you're done.

Non-SLR cameras often shoot in 4:3 ratio.

For the Technically minded

You can ignore this, but since some members ask, here are more details:

MEDIA: CD-ROM ONLY. This means no CD-RW, no cameras, no memory cards, compact flash, smart media, memory sticks, floppies, xD, ZIP disks, Bernoulli drives and no, nothing except ordinary burnt and closed out CDs. Burn the CD at the Slowest speed as this increases compatibility. You must close the session on the disk, even though you're just putting only 3 images on the CD. Why? Simply because we can't guarantee we'll have any way to read those other memory devices at the meeting. Open-session CDs and CD-RWs don't always read properly on other people's computers. We can have enough problems with 35mm slides jamming, that we don't want to be asking for more trouble with the digital show.

IMAGE FILE FORMAT AND SUFFIX: .JPG ONLY. All file names must end in ".jpg." They may NOT end in ".jpeg," since our system may not read them. (Mac users: you must ensure that your file names include this .jpg suffix. Even though JPG images will look fine on your Mac and indicate JPG format, the Windows PC we sometimes use for the show will not recognize images unless they end in ".JPG" and have fairly simple file.) Likewise, no TIFFs, no EPS, no PSDs, no BMPs, no HDR, no SWF, no [DPX](#), no [Cineon](#), no HTML, absolutely, positively **NO RAW, NEF or CRW** and nothing other than JPG. Why? Simply because other file formats may or may not play in whatever system we scrounge up for a given meeting, and the larger ones like TIFF and RAW slow down the system if even it could read them.

COPYRIGHT NOTICES: aren't required anymore for copyright. No one wants to see them in our slide show.

PIXEL ASPECT RATIO: Pixels are Square. Don't worry about it.

DPI: Don't care. Since we are not printing out on paper and we aren't scanning, inches are not involved and thus DPI (dots per inch) means nothing. Set it anyplace you want; it's the size in pixels that matters.

FILE SIZE: No specific requirement, although when you follow all these directions you should wind up with files of a couple of hundred kB and certainly less than 1MB. Some folks bring files of many megabytes, like JPGs straight from a camera, and then everyone has to wait for these to read from the CD. A meg or two isn't bad, but 10 or 20 MB is way too big.

ROTATION: Vertical images must be rotated correctly and not simply flagged by a digital camera. You will have to open the images in a program like iView, Photo Mechanic, Photoshop and rotate them manually. Why? Because otherwise vertical shots may be flipped 90 degrees, whoops!

SHARPENING: Whatever looks good at 100% on your screen if you're fitting files to 1024. If you have bigger images then it doesn't matter since they're re-sampled back to 1024 or 800 and then sharpened by the projection system.

Preferably 150%, 0.3 pixel radius, 0 threshold (or 3 threshold from scanned film).

COLOR PROFILE: (optional) sRGB only. Ignore this if you have no idea what this is. Most cameras and everything do this anyway. Our system usually ignores profiles and presumes sRGB unless we have iView on a Mac, in which case it converts everything back to sRGB anyway, usually. If you used something else like Adobe RGB, the colors will usually be duller or worse. If you tried to get smart and used some other color profile please convert in PhotoShop using IMAGE > MODE > CONVERT TO PROFILE > sRGB.

COLORSPACE: RGB. Forget about this if you don't understand it. You really have to work hard to get an image in a different space so you'd probably know it if it *wasn't* RGB. Just don't try to bring any CMYK or Hexachrome or spot color files. If you do have some oddball colorspace then you can return it to RGB in Photoshop by doing IMAGE > MODE > RGB Color.

BIT DEPTH: 8 Bits/Channel. Again, ignore this if you don't understand it since this is how your images will default. If you understand this you'll know we of course need 8 bit per channel (24 bit per color), since that's the only way you can save as a JPG anyway. Convert to 8-bit in Photoshop by doing IMAGE > MODE > 8 Bits/Channel.

NO OTHER FILES OR SOFTWARE OR PROGRAMS ON YOUR CD.

You may only have .jpgs and that's it. No programs, no HTML, no album programs, no music and sound programs, no quicktime movies, and absolutely no .exe, .ini or autoexec.bats or anything else. Why? Any of these other slick programs often will hang our computer, making it very difficult to present or copy the images. So Murphy's law says if you have a program to play on a Mac, that it will not run on the PC we use. Even if these run flawlessly they still take time to open and close at best, and at worst won't run, hang our system and require a full reboot while 100 members have to wait.

If you do want to show something really slick you've created by all means please bring your own computer, projector, speakers and laser light system, or contact the Committee.