

Scanning Tips

Information to Know Before Scanning

- How will the image be used?
- Will you enlarge the image?
- Is the image for Web pages, PowerPoint presentation or printed?
- Always scan larger than needed by making the percentage larger than 100%. The image can be reduced. If you scan too small the image will appear out of focus when you enlarge.
- Communicate with the print shop where the project will be printed

Dots Per Inch

- Dots per inch (dpi)-The number of dots in a linear inch. DPI measurements are used to describe the resolution of printers and scanner, where printed images and words are made up to a series of round dots. The greater the DPI number, the higher the resolution.

What Resolution to Use

- Print quality = 300 dpi
- Web Image = 150 dpi then reduce to 72 dpi in PhotoShop.
- PowerPoint Presentation = 150 dpi then reduce to 72 dpi in PhotoShop

What Color Scheme to Use

- RGB (red, green, & black) for computer printers
- CYMK (cyan, yellow, magenta, & black) for print shop quality
- Grayscale is the different tints of one color

Output File Formats

Below is a list of some of the common file types for output.

.bmp - A bitmap mapped file format for pictures, supported by most Windows Programs. Window bitmap files support 1-, 4-, 16-, 24- and 32 bit color. Windows bitmap files are saved with the filename extension .bmp.

.gif – Graphic files often used for fancy text, graphics, logos, and animations. GIF (Graphics Interchange Format) is a 256 color or less representation of the original with no image alteration except for reduced number of colors. GIF compresses left to right, top and bottom and looks for repetitive patterns. GIF defaults to 256 colors, but some images will still look fine with as little as 3 bits of color information per pixel. Trying lower bit

settings will make the file smaller but can severely distort color rendition. Convert images to Indexed color before saving as a GIF or use Photoshop's Gif89a export feature. You can always use the one step undo to get back to a true color image and try again if there is too much color distortion by trying a lower bit setting when using indexed color. Areas with subtle graduation usually don't index very well. Believe it or not selecting the graded area and adding about 10% noise to it before indexed color produces acceptable results.

.jpg – Image file often used for full-color photographs. JPEG files can be made from grayscale images or true color, 24 bit, 16.7 million color images. Files are compressed using a lossy compression algorithm. JPEG looks for areas of the image that are about the same and reconstructed to create an image. JPEG has adjustable percentages or compression when saving and compresses very well. Photos compress with acceptable distortion via JPEG but text and lines usually suffer from jaggy & fuzzy edges. A new variation of JPEG is Progressive JPEG, which loads at successively higher resolutions (out of focus) until the entire file is loaded.

.pdf – Portable Document File for displaying facsimiles of documents including fonts, graphics, layouts, etc. **Files are not digitally editable.**

.txt – ASCII text file; basic text without any formatting like bold or italic.

.wmf - A file format **supporting 24-bit color and used to store and exchange image data between Windows-based programs.** Windows metafiles are saved with the filename extension.wmf.