

ART2030 - Computers in Art

Understanding File Formats and Resolution

Recommended References:

Photoshop Visual Quickstart Guide

“Overview of Digital File Formats” from GRACOL (Supplement to *Graphic Arts Monthly*)

“File Format Roulette” from NAPL’s Tech Trends Report

“The Importance of File Size” from Digital Output (September 1999)

Overview:

It’s very important for a graphic designer to be familiar with **resolution**, **image mode**, and **file format**, and the appropriate application of each. For general reference, use the following chart for determining proper resolution, image mode, and file format when working with photographic images in Photoshop:

If your image is...	Resolution	Image Mode	File Format
full color and going to be reproduced on a printing press using process color	250 - 300 ppi <i>(preferably 300, no less than 250)</i>	CMYK <i>(the four process colors)</i>	.eps <i>(preferred)</i> .tiff (or .tif) <i>(accepted)</i>
full color and going to be placed on the web	72 ppi <i>(no more and no less)</i>	RGB	.jpg
a black and white photograph to be reproduced on a printing press	250 - 300 ppi <i>(preferably 300, no less than 250)</i>	Grayscale	.eps <i>(preferred)</i> .tiff (or .tif) <i>(accepted)</i>
black and white and going to be placed on the web	72 ppi <i>(no more and no less)</i>	Grayscale	.jpg
straight black and white line art to be reproduced on a printing press (no grays!)	600 - 1200 ppi	Bitmap	.eps <i>(preferred)</i> .tiff (or .tif) <i>(accepted)</i>

NOTE: For our purposes in ART2030, resolution should be set at 200 ppi (pixels per inch) for Project I, and final image should be flattened and saved as a Photoshop document (.psd)