

A Few Printing Resolution Guidelines

For Printing Grayscale or Color Images (photo images and graphics)

Useful scaled printing resolutions are shown below for common printing destinations, and they indicate the final size at the paper. This number is also the scan resolution if printing at 100% or original size. See Chapter 6 about scaling to print other sizes.

For photo-quality inkjet printers

240 to 300 ppi for color or grayscale, at printer's good setting on good photo paper.

300 ppi sometimes may be a little better than 240 ppi, but the difference is often hard to see, and convenience usually makes the decision.

For reports on inkjet Premium paper

Use a decent printer quality setting for the text, and photos up around 240 ppi.

For inkjet printer using plain copy paper

150 ppi is plenty for images on plain copy paper

For digital lab printing services

Wal-Mart, Costco, Ofoto, Shutterfly, Snapfish, etc.

Up to 300 ppi, for up through 8x10 inch size.

Inquire about pixel dimensions for poster size prints, which are likely much less than 300 ppi.

For dye-sublimation printers

Ppi up near the dye-sub printer's dpi rating, which will be around 300 dpi

For laser printers, B&W or Color

300x300 dpi printer (54 lpi) – 100 ppi

600x600 dpi printer (85 lpi) – 150 ppi

1200x1200 dpi printer (100 lpi) – 200 ppi

For commercial offset printing

(including publishing in books and magazines)

Image ppi between 1.5 and 2.0 (minimum and maximum) multiplied times the lpi specification for the screen process. Assuming 150 lpi, then most editors will routinely ask for 300 ppi, scaled to final size (300 ppi is 150 lpi x 2.0).

For printing in newspapers and newsprint

150 to 200 ppi (85 or 100 lpi) at final size.

For Printing Line Art Mode Images (text pages, line drawings, sheet music)

For laser printers

300x300 dpi printer – 300 ppi

600x600 dpi printer – 600 ppi

1200x1200 dpi printer – 1200 ppi

300 ppi line art is fine for casual purposes.

600 ppi is best for more critical work.

For inkjet printers

600 ppi for best – but at least 300 ppi.

For Fax

200 ppi, see Chapter 11

For commercial offset printing

(including publishing in books or magazines)

800 to 1200 ppi commercially for line art

For printing in newspapers

600 ppi is enough, cartoons for example

For video screens and web pages

Forget about 72 or 96 ppi, that mythical concept doesn't exist. However, scanning at 75 or 100 ppi does create roughly original size on many screens, if that is the image size you want. You can always resample a large image smaller later for the screen.

For computer screens, including web pages

Regardless of mode, use the necessary scanning resolution to create the desired image size in pixels from the photo size, see Chapter 5. For example:

6x4 inches at 100 ppi gives 600x400 pixel size

For TV screens – see page 54.

For PowerPoint screens – see page 54.

Graphics for web images (for example logos or screen shots of dialog boxes, as opposed to continuous tone photo images) are often much better images as GIF files instead of JPG files (higher quality and smaller file than JPG), if reduced to 16 colors index mode using an Adaptive palette with Nearest Color (instead of allowing dithering). See Chapter 14.