FILE FORMATS
FOR WEB & PRINT
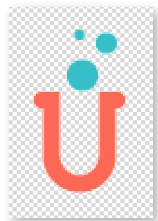
Web Image File Formats

Preparing images and graphics for use on the web correctly is an important concern, but understanding what format to use, what size to make them, what color profile to attach to them and how they will look on screen is even more important.

JPEG/JPG – best for web images

· The JPG image format is best suited for photographs.

· JPG is a "lossy" compression format that is designed to compress color and grayscale continuous-tone images.

· JPGs do not work as well on graphics with finer details such as logos, illustrations with fine lines, and images with text or lettering.

· Images saved as a JPG format can be compressed on a scale from 0–12. 0 is the lowest quality with noticeable compression lines and degradation. 12 is the highest quality.

· JPGs do not support transparency.
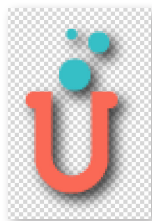
PNG – best for type, graphics, logos

· PNG stands for Portable Network Graphic.

· PNG is a raster format and does support transparency.

· PNGs can support small file sizes but not animation.

· PNGs are not ideal for with full-color images since they use a maximum of 256 colors.

· PNGs come in two flavors, PNG 8 and PNG 24. PNG 8 is 256 colors (also called index color) and allows for transparency.
PNG 24 supports full color and allows for full transparency even with drop shadows, however PNG 24 format produces larger files.

GIF – best for type, graphics, logos

Stands for the Graphics Interchange Format. Developed by CompuServe in 1987 as an alternative to JPEGs, it is better suited to graphics, lines, text, detail, and flat areas of color.

· GIFs are limited to a color space of 256 colors, commonly known as Index Color.

· GIFs are compressed using LZW compression that allows for non-destructive compressing of the file and thus smaller file size for faster downloading.

· GIFs are used for images that have few color transitions and little detail due to the limited color range of 256 colors for the image.

· GIFS can be arranged together to form an animation sequence.

· GIF also supports transparency, where the background color can be set to transparent in order to let the color on the underlying Web page show through.

· GIFs do not blend or transition from one color to another as well as a JPEG. GIFs use dithering to simulate a transition.

· GIFs can be interlaced for faster previewing but the file size becomes larger when this option is used.

SVG – best for type, graphics, logos

· SVG stands for Scalable Vector Graphic, which means the vector format creates smooth shapes, type, and graphics when displayed.

· SVG elements take up much less space than JPG or PNG formats.

· SVGs offer good flexibility. Editing SVG files in CSS allows you to change the graphics settings on the site (in the HTML) without having to edit the original graphic.

· SVG is available in Photoshop and Illustrator.

· SVG files can be used for print or web.

PNG 8 with transparency

PNG 8 with transparent drop shadow

PNG 24 with fully transparent drop shadow

FILE FORMATS
FOR WEB & PRINT

Print File Formats

Preparing images and graphics for use requires different formats than images and graphics for web use.

JPEG/JPG – best for images

- While JPG image format is best suited for photographs for web use, a JPG for print is not the best format. Since a JPG is a "lossy" compression format that is designed to compress images, it can leave compression lines in the image that cannot be removed.
- JPGs for the web are used at 72 PPI, while JPG images for print are used at 300 PPI, magnifying the compression lines.
- Photoshop or TIF files are better than JPGs for print purposes.

PNG and GIF files – Web only

- PNG and GIF files are best for web or mobile, but not for print due to the limited color range of the image.

BMP file - not used for much

- BMP stands for Bitmap.
- BMP is he native file format of the Windows platform.
- BMP formats do not allow for image compression.
- BMP images are crisp and precise, but being pixel dependent they don't scale well. On the web, the detail comes at the cost of file size and that's why you won't see BMP images used on the web.
- For print, there are better formats than BMP files.

TIF files – Print only

- TIF stands for Tagged Image Format File.
- A TIF is an image format file for high-quality graphics.
- TIF format was created in the 1986 as a file format for scanned images in an attempt to get all companies to use one standard file format instead of multiple.
- TIF files can be compressed using LZW compression to reduce the file's size.
- TIF files can be saved as a layered file from Photoshop.
- TIF files have limited transparency support.
- There is no big advantage of using a TIF file over a Photoshop file as Photoshop files are becoming more universally accepted over TIF files.

EPS – for type, graphics, logos, images (outdated)

- EPS stands for Encapsulated PostScript
- EPS is a standard graphic file format for exchanging images, drawings , text, logos or images.
- An EPS file can include both raster and vector data.
- EPS files were most common when files were saved from Adobe Illustrator. Native AI files have replaced EPS files.
- EPS files were more common in the past when multiple companies had different software and an EPS file format was the best way to have vector and image files that could be used across multiple applications.
- EPS files are not really necessary in todays world of file formats but are still used.

PSD files – Print only

- PSD stands for Photoshop Document, it is the default format that Photoshop uses for saving data.
- A PSD file is a layered image file used in Adobe Photoshop.
- PSD files work with many Adobe and Microsoft products.
- PSD files support transparency within Photoshop as well as other applications outside of Photoshop
- PSD files can be either raster OR vector or a combination of both.

PDF – best for type, graphics, logos and images

- PDF stands for Portable Document Format.
- PDF files can render vector art as vector and raster art as raster, even if they are in the same file. Most applications can export to a PDF file.
- A PDF can be used for print and for display on a web site as well.
- PDFs are easy to create, read and used by virtually everyone.
- The PDF format allows you to integrate various types of content; Text, images and vector graphics, videos, animations, audio files, 3D models, interactive fields, hyper links, and buttons.