



Guide to File Types

In this guide we're going to be looking at the common file types you will come across in your graphics making. Hopefully this guide will help you to decide the best format to save your work.

GIF - Graphics Interchange Format

The GIF format uses a palette of up to 256 distinct colours from the 24-bit RGB colour space. The colour limitations of the GIF format makes it unsuitable for reproducing colour photographs but it is well-suited for more simple images such as graphics or logos that feature solid areas of colour. The GIF format is lossless compression which preserves very sharp edges on images.

The GIF format is also used to save animations and allows a separate palette of 256 colours for each frame of the animation frame and it also supports the transparency that is necessary in some web graphics.

JPEG - Joint Photographic Experts Group

JPEG is a commonly used method of compression for photographic images and paintings with smooth variations in tone and colour.

The degree of compression can be adjusted, allowing the user to decide whether they wish to have a higher quality image or one that is not so good but has a smaller file size. The compression of JPEG files is a lossy compression, meaning that some visual quality is lost in the process and cannot be restored.

The JPEG format is not suitable for line drawings, textual or iconic graphics where the sharp contrasts between pixels cause defects in the image. It is also not suitable for images that will be edited a great deal as some image quality will be lost every time the image is decompressed and recompressed. It is also not suitable for images that have transparent areas or animations.

PNG - Portable Network Graphics

PNG was created to improve and replace the GIF image format and uses a lossless data compression making it ideal if a graphic will be undergoing a number of modifications. PNG supports palette based, greyscale or RGB images. PNG was designed for transferring images on the Internet, not professional graphics, and so does not support other colour spaces. The PNG format gives a much wider range of transparency options, and colour depths than GIF but it does not support animation. PNG is not a preferred file type for photographic images and saving a photographic file as a GIF would result in a large increase in file size with a reduction in the quality of the images.

Some image editing programs problems compressing PNG, mainly related to lack of full implementation of the PNG compressor library such programs include older versions of Photoshop and Paint for Windows XP.

TIFF - Tagged Image File Format

The TIFF format is a flexible and adaptable file format. It can handle multiple images and data in a single file through the inclusion of tags in the file header. TIFF's ability to store image data in a lossless format makes TIFF files a useful method for archiving images. Unlike JPEG, TIFF files can be edited and resaved with no change to the image quality.

Other File Types

Other file types you may come across frequently in the development of your graphics are brush files and the two main types are ABR, which is supported by Photoshop and JBR, which is supported by Paint Shop Pro. To get these files to work you'll need to install the file in the correct location of your computer's hard drive. With the launch of the new graphics software GIMP, brushes were being created for it and the file extension for GIMP brushes is GBR.

You may also come across ZIP files and RAR which is a way of saving a group of files in a compressed way. To use the anything contained within these files, the contents will need to be extracted using either WinZIP (for ZIP files) or WinRAR (for RAR files).

If you have any questions about this guide please do not hesitate to email us at designers@coldwatermorninggraphics.com.