

## HMI • CANVAS

DIGITAL PRINTING ART SPECIFICATIONS

#### WHAT IS THE MAXIMUM PRINTABLE SIZE?

• 86" x 150"

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• 3/4" thick glass: 15" × 15"

• Other thicknesses: 8" x 8"

#### IS THE IMAGE VIEWABLE FROM ONLY ONE SIDE?

The image is actually viewable from both sides, although up close, one side is slightly sharper than the other. Typically, one side will be the mirror image of the other side. So, if you print words, they will appear correct on one side and in reverse on the opposite side.

If you have a project which includes words or numbers, and you need to be able to read the text from both sides, we can print it using a special "Double-Vision" method.

#### CAN YOU MATCH TO A PANTONE COLOR SWATCH OR PAINT COLOR SWATCH?

Not always. Since the inks have to be able to survive the tempering process (which reaches temperatures of over 980 degrees centigrade), the ceramic ink pigments must be made of inorganic materials. Currently, there is not a non-toxic equivalent for magenta (which is used in mixing Pantone colors), so there are some colors that we cannot match exactly and a color shift may occur:

#### CAN YOU PRINT COPYRIGHTED MATERIAL?

It is illegal to print copyrighted material, unless you have acquired proper licensing and/or written permission from the copyright holder.

#### I WANT TO PRINT AN IMAGE ON GLASS. HOW DO I KNOW WHAT SIZE FILE I NEED?

If you have a vector file, you don't need to be concerned with file size. Since vector images are made up of points, lines, and curves, it can be enlarged without worrying about loss of image quality. (There's also more control over creating effects where you may want one color to be a different opacity than another color.)

If you have a raster file (which is made up of pixels such as photos), then resolution matters. If you enlarge a raster file too much, it will result in a pixelated image. A good guideline is to figure 100 pixels per inch of your final dimensions. So if you have a 72" x 60" glass panel that you want to print a photograph on, the minimum pixel dimensions should be 7200x6000 at original size.



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### DIGITAL PRINTING ART SPECIFICATIONS

## **GLOSSARY OF SPECIFICATION TERMS**

**CMYK:** (Cyan, Magenta, Yellow, Black) color mode is used for print design. This includes logos, business cards, stationary, illustration, packaging and any other designs used for print.

**RGB:** (Red, Green, Blue) color mode is for anything that is computer-based design. This includes websites, apps, banner ad and any other design created for electronic use. This also includes ceramic ink printers.

LOSSY: Lossy image formats approximate what your original image looks like. For example, a lossy image might reduce the amount of colors in your image or analyze the image for any unnecessary data. These clever technical tricks will typically reduce the file size, though they may reduce the quality of your image.

**RASTER:** Raster images are made up of a set grid of dots called pixels, where each pixel is assigned a color value. Unlike a vector image, raster images are resolution dependent. When you change the size of a raster image, you shrink or stretch the pixels themselves, which can result in a significant loss of clarity and produce very blurry images.

JPEG/JPG: JPEG is a lossy raster format that stands for Joint Photo-graphic Experts Group, the technical team that developed it. This is one of the most widely used formats online, typically for photos, email graphics and large web images like banner ads. JPEG images have a sliding scale of compression that decreases file size tremendously, but increases artifacts or pixilation the more the image is compressed.

**TIFF:** TIFF is a lossless raster format that stands for Tagged Image File Format. Because of its extremely high quality, the format is primarily used in photography and desktop publishing. You'll likely encounter TIFF files when you scan a document or take a photo with a professional digital camera. Do note that TIFF files can also be used as a "container" for JPEG images. These files will be much smaller than traditional TIFF files, which are typically very large.

**PNG:** PNG is a lossless raster format that stands for Portable Network Graphics. Think of PNGs as the next-generation GIF. This format has built-in transparency, but can also display higher color depths, which translates into mil-lions of colors. PNGs are a web standard and are quickly becoming one of the most common image formats used online.

LOSSLESS: Lossless image formats capture all of the data of your original file. Nothing from the original file, photo, or piece of art is lost—hence the term "lossless." The file may still be compressed, but all lossless formats will be able to reconstruct your image to its original state.

Al: Al is a proprietary vector image format that stands for Adobe Illustrator. The format is based on both the EPS and PDF standards developed by Adobe. Like those formats, Al files are primarily a vector-based format, though they can also include embedded or linked raster images. Al files can be exported to both PDF and EPS files (for easy reviewing and printing), and also JPEG, PNG, GIF, TIFF and PSD (for web use and further editing).

VECTOR: Vector images are made up of points, lines, and curves that can be infinitely scaled without any loss in image quality.

**EPS:** EPS is an image format that stands for Encapsulated Post-Script. Although it is used primarily as a vector format, an EPS file can include both vector and raster image data. Typically, an EPS file includes a single design element that can be used in a larger design.

**PDF**: PDF stands for Portable Document Format and is an image format used to display documents and graphics correctly, no matter the device, application, operating system or web browser. At its core, PDF files have a powerful vector graphics foundation, but can also display everything from raster graph-ics to form fields to spreadsheets. Because it is a near universal standard, PDF files are often the file format requested by printers to send a final design into production. Both Adobe Photoshop and Illustrator can export straight to PDF, making it easy to start your design and get it ready for printing.