

LightJet & Inkjet Raster File Set-up

Technical Data Sheet

The information below is designed to help you set up raster files for output to the LightJet and Inkjet printers. Using these guidelines will help ensure higher quality and fewer delays in the production of your job.

Page Set-up

Files should be set-up either at 100% of final print size, or at a scale proportional to the final size (i.e. 1/2 size, or 1/4 size). When at all possible try to keep it at 100% or 1/2 size. Never use page sizes less than 25% of finished size.

When prints are mounted it is necessary to trim the print somewhat so that the edges are flush with the edge of the board. Therefore a 20x24 will typically trim out to about 19-7/8"x23-7/8". If you must have an exact size please add an extra 1/8" on all sides for prints 20x24 and smaller and 1/4" on all sides for larger prints, so it can be trimmed to fit the substrate. When you send the order in specify both the print size (including the extra bleed) and the trim size. (In some cases this extra image area cause the print to go into the next size category.)

Fonts

Type in a raster image may result in jagged lines and may not be sharp. You can avoid this by setting the file up at 100% of finished size with a ppi of 305 for LightJet prints.

File Format & Type

Files should be flattened and saved as RGB Tiff. Our working color space is Adobe RGB. If you are working in color space such as sRGB that has a smaller gamut, we will convert it, but color accuracy will not be as great.

We cannot print directly from CMYK files. These files must be converted and the results can vary somewhat, depending on how the file was setup. There is an additional charge for converting files from CMYK.

Scanning & Resolutions

Scanning specifications for images to be placed into documents should be determined after you have decided on the final layout and size of the images for

each graphic. It is always best to set files up at 100% of output size. The resolution required depends greatly on the viewing distance. Since larger prints are viewed at greater distances, it is not necessary to use the same ppi as for smaller prints. Use the chart below as a general guide. For more information on scan file sizes see the Robin Technical Data sheet "Scan Resolution Chart"

Image Box Size

Size	16x20	24x36	40x50	48x96
ppi	305	175	150	100

ppi = Pixels per inch

Use an in-between ppi for sizes not listed.

Do not use ppi greater than 305 or less than 100.

Using resolutions less than this can cause the print to look unsharp and have jagged lines. Using resolutions significantly higher than this can result in very large files that are difficult to handle and will produce only marginally better results.

The maximum resolution of the LightJet is 305. Do not use resolutions higher than that.

Scan Quality & Color Reproduction

Before you spend a lot of time putting a file together, make sure your scan is appropriate for the intended job. There are many variables that affect the color and overall quality of a scan: the caliber of the equipment, the skill of the person doing the scan, the intended purpose of the scan, and the color management system being used. These variables can make it difficult to match the original and unless your monitor is calibrated to the output device, you cannot accurately judge color when viewing your monitor.

If we do the scan, we can return the file to you by courier or FTP and you can then manipulate the file as necessary. As long as you don't change the color, density, or contrast, your output color will be as close to the original as can be achieved.

If you are using scans from sources other than Robin, keep the following in mind:

- Scans should be done in RGB and remain in RGB. Scans done in CMYK for offset printing often do not convert well to RGB for digital photo output. If you must use a CMYK scan, it is often best for us to convert it. Please indicate on the job ticket that this needs to be done. (There is an additional charge.)

- Unless your monitor is calibrated to the intended source, you cannot assume the output will match your monitor. To check your scan, probe the neutral colors to make sure they are neutral. Also check your white and black points. Suggested values are 245,245,245 for white and 5,5,5 for black.

See Robin Technical Data Sheet TDS009 "Color Calibration" for more information on how to calibrate your monitor.

- Avoid over-sharpening of scans. If you go too far it will cause artifacts, posterization, blocking up of highlights and shadows, and halo effects. Once these are present we cannot correct them back to normal.
- If your scans need corrections, they are available on a time and materials basis. However, correcting problems in a scan can often cost more than a new scan. Be sure you are starting with a good scan before you invest significant time and money in a job that does not fulfill your expectations.

Color

We have no way of knowing what the color looks like on your screen and therefore cannot judge if the color is going to reproduce the way you envisioned it. The only way for us to make sure you are getting the colors you want is if you give us something to check the color against. If you are unable to give us something to check the color with we offer a color corrected proof for \$12.50. This will allow you to approve the color before making a major investment.

For more information on making sure your color is right see Robin Technical Data Sheets TDS009 "Color Calibration" and TDS101 "Photoshop Color Settings."

Color Matching and Using Pantone Colors

To achieve an exact color match it is best to send a test through with a range of colors in blocks similar to the color you are trying to match. Specifying a spot color and then converting it in Photoshop will not produce an accurate color match.

Other things to keep in mind when using spot colors:

- It is extremely hard to make neutral colors match if part of the job is done at a later time.
- Spot colors used in PhotoShop will not match spot colors used in a vector-based program, such as Quark and Illustrator.

Lighting Conditions

The lighting conditions in which your print will be viewed will make a difference in both the density and color of your finished image. This is especially critical for backlit display transparencies. Colors will appear dramatically different with fluorescent as opposed to tungsten lighting. For critical color we recommend that you do tests and establish a standard before ordering quantities or large prints.