Electronic Pre-press File Submission Guide

When sending electronic files to a service provider, there are a number of important issues to consider to ensure timely, high-quality production. This booklet is designed to outline Keys Printing's preferred means for receiving client files, while providing additional information on what to look for when preflighting. We have highlighted what we believe are significant topics in electronic pre-press and have offered thorough instructions for assisting customers with generating clean files.

This publication has been divided into two main sections: Fonts and Graphics, followed by a summary and overview of Keys Printing's guidelines.

The focus of this booklet is to provide useful tips and instructions for preparing your electronic files. As organizations continue to bring desktop publishing in-house and as electronic pre-press rapidly evolves, challenges are abundant. There is an endless learning curve for both printers and customers alike. Training and education are more valuable now than ever before. We understand that businesses cannot afford large cost overruns and surprise charges. We hope this guide will help to eliminate those concerns, while answering all of your preflighting questions.

Please feel free to contact us at 864-288-6560. We have a support staff that is ready to assist you at any time. You can also visit our website at www.keysprinting.com for a PDF file of this document and the latest updates to our specifications.

Fonts

Fonts can be one of the most challenging areas of desktop publishing. While they have become easier to work with over the years, fonts are still puzzling for many. We want to begin by providing some general information on font types.

PC and Mac Platforms

Fonts tend to be more difficult to organize on PC's than on Mac systems. This is due to the way PCs' name PostScript fonts. They make it harder to recognize which printer font goes with the appropriate screen font. For example, Times New Roman on a PC names the screen font file TIR_____.pfm and printer font TIR_____.pfb. The Macintosh, on the other hand, creates a screen icon and printer icon and names them both Times New Roman.

True Type fonts (TT fonts) on the PC are called timesnewrom.ttf. While these tend to be easier for the designer to work with (one file, one name), there is some output risk involved. PS fonts, as we mentioned before, are more likely to output with minimal difficulties.

Font Stylization

As printers, we commonly face challenges when clients stylize type using various software programs and then do not supply the fonts that go along with the stylization.

Let us demonstrate with an example using PageMaker. When you type a headline in Helvetica, and then bold it using the bold button on the control palette, be sure you supply the Helvetica bold font along with the job. The same thing would apply if you italicize a font.

Anything you do in "stylizing" needs to have a font to support it. This is why stylization can be so tricky. Software manufacturers, unfortunately, have not helped this situation. Their packages give us the ability to make these selections and then render the fonts to the screen, so we think everything is going to work well. As the example outlines above, this is not always the case. Some programs will allow you to "bold" or "italicize" a font, but there may not be an actual font file to support it. It will look good on the screen and may print to your desktop printer, as this is essentially a screen-capture print. When you submit the file for high resolution output, however, the font will default to it's normal state, substitute an undesired font, or cause the file to error out. If you want a bold font, please browse your font list to be sure a bold version of that font is listed.

TrueType fonts will also appear normally on the screen when there are problems, but will print to a 300-dpi printer with font irregularities. Also, if the correct printer font is not present when the file goes to a high-resolution imagesetter, the job will print out incorrectly.

The most important thing to remember is to include every font used for every job, every time you send us files. You may also send us all of your fonts for us to keep on reserve for processing your files. Please be sure to keep us updated with any new fonts you begin using.

Graphics

To begin reviewing desktop graphics, let's look at the two different forms of graphics: Vector and Raster. We will then compare the file types and the challenges inherent in each.

Vector and Raster

Vector files are file types that are created in drawing programs such as Illustrator, Freehand, or any other programs that are based on line and points. Vector files are infinitely scaleable and will maintain their integrity at large percentages.

Programs such as Photoshop create raster files. They are photo realistic representations of objects, which use different shades of color per pixel. Raster files will lose resolution quality

when enlarged. Raster files should be created the size of intended reproduction or larger. 110% is a general rule of thumb for maximum enlargement, depending on the pixel depth or resolution of the original file. One worthy note: Most all photos or logos that are "saved to disk" from a web page are raster based and 72dpi, which is low resolution and they will print as such.

Resolution

A general rule of thumb in printing is to use twice the Dots Per Inch (DPI) for scanning your images of the line-screen you are using for print. For example, if you are going to print a job at 150 line-screen, you should use a minimum of 300 DPI for any of the images you scan. If you're printing at 175 line, then choose 350 DPI. In theory, line screens below 150 should mean DPI less than 300, however, this is not recommended. When using below 300 DPI, scanners start missing details. This is the boundary where scanners can still pick up good resolution, so we do not recommend scanning below 300 DPI.

It is important to watch resolution because resizing your images may affect your initial scans. For example, if you scan an image at 300 DPI, bring it into Quark (or any other page layout program) and then resize it to 150%, you have just lowered the output resolution of that image to 200 DPI. Always remember to scale your images to their final size before you scan them, so that you maintain their integrity and work with them in your page layout program at 100%.

There are some tolerances with this formula. Having more resolution is not as critical as taking 300 DPI and enlarging it. If you need a little latitude, we do not encourage enlargements more than 10%.

File Types and Clipping Paths

Raster files come in different file types, which retain unlike information. The two types of raster files we recommend are eps and tiff files. While other formats such as jpegs are available and can be used, we do not recommend them.

Eps tiles retain silhouette, or clipping path, information; Tiff files do not. To use clipping paths correctly, open a file in Photoshop. Click on the path tool (which looks like a fountain pen). Begin drawing around the perimeter of the area that you want silhouetted. This is just like the path tool in any vector program. If you click a point, hold it, and then drag it; you can get a nice smooth curve. Go into the paths information box and click on the right arrow at the top of the box that says "save path." Next save your file as an eps format. An option box will appear. Where it says, "flatness," insert the number 4. You're done. Our outline is a very basic description of creating a clipping path tool. If you need additional assistance, please give us a call.

Scanning Guidelines

When scanning black & white halftones, there are a few basic steps to consider. First, it is helpful to know the press on which your job is printing. If it is printing on a web press, then we recommend the tone range of your images be a 2% highlight dot (the lightest area) and an 80%

shadow dot (the darkest area), adjusting the midtones slightly to allow for web gain. We recommend increasing the shadow dot to 88% for sheetfed presses.

When scanning four color images, the Total Maximum Density (dmax) should be no greater than 280. The dmax can be determined by opening your image in PhotoShop and putting your cursor over the darkest black area. Then, total up all of the values in the CMYK file, which appear in the information window.

Digital Photographs

If you are planning on using your digital camera to capture images for your printed piece, be sure to use the high resolution setting on your camera. While low resolution photographs look good on screen and are great for e-mail purposes, they will not print at a high quality. It is recommended that you use a camera with a 2.0 or higher Mega Pixel rating. The images produced by a digital camera are typically 72 dpi RGB JPEG format and need to be converted to CMYK format TIFF images in a program such as Photoshop. The image size also needs to be adjusted. This can be done in Photoshop in the "Image Size" window by changing the dpi (actually pixels/inch) from 72 to 300. BE SURE to check the "constrain proportions" option and uncheck the "resample image" option. Again, we are dealing with images taken with the high resolution setting on your camera.

Gradients and Banding

Banding gradients continue to pose concerns for many using desktop publishers. The challenge is the way some programs create blends. To be sure that a blend will reproduce (print) correctly, we suggest that you create it in Photoshop. The software does an excellent job with blends.

If this is not an option, try using the following guidelines. If you start a blend with CMYK (cyan, magenta, yellow & black) color, finish it with a CMYK color. Do not finish it with white or a spot color. If you want to go from 100% of a PMS color to white, then make it 100% PMS to 1% of the PMS. The results from this process are, usually, just what you're looking for. Please do not submit spot to process color blends.

RGB and Color Naming

All files that are RGB (red, green, blue) must be converted to CMYK before you send them to us. This is important because by converting the files yourself, you will see any color shifts that may have happened. You can then make any necessary changes before sending out your files. Our RIP (raster image processor) will automatically convert RGB images to CMYK usually with satisfactory results. However, it is strongly recommended that you perform the conversion prior to submitting the files.

If you have Vector files, which have used Pantone (PMS) colors, be sure that the PMS names match the names in your layout document.

If you want to have a PMS color added in your document, create one color (e.g. Pantone 123 CV). If you want a percentage of that color, then do not make a new color (e.g. 20% Pantone 123 CV). This will end up generating an extra piece of film or plate when the job is output, which will be an additional cost. We suggest outputting separations of your files for your own review purposes to be sure you have not accidentally left in an extra selection.

General Guidelines

The following guidelines apply for all desktop publishing programs (Quark, PageMaker etc.)

When creating a new document, be sure the document is the correct size. If you want a 6" x 9" book, size your pages to 6" x 9". Many times, a document comes to us as either a 12" x 9" (spread), or it is oversized. Optimally, Keys Printing would prefer the document at the correct trim size.

If you have a 300 page book, please do not create 300 document files. It will end up costing you the time it will take someone to process your files. This could get expensive. If you want to break the pages up, we suggest creating three files of 100 pages each.

When creating a rule, do not use a hairline. In most programs, "hairline" equals 1 DPI on whatever imaging device you are using. At 2540 DPI, a hairline is almost non-existent. The lowest you should go is .5 point.

Please do not attempt to trap your jobs for Keys Printing. Our software programs will override any trapping that you establish.

Please name and supply your fonts correctly. See the section on Stylizing in the Fonts section of this guide, if you have any questions.

Try not to rotate or inverse photos or graphics in a layout program. The best place to make these changes is in the original program where the photos or graphics are created. In other words, if your photo is scanned into Photoshop, rotate the photo using that program, before you place it in your page layout program. If the need to be scaled (enlarged or reduced), please do that in Photoshop or your photo editing software as well.

Software Supported

Below is a listing of the applications we support.

- Quark Xpress
- Adobe Photoshop
- Page Maker
- Adobe Illustrator
- Macromedia FreeHand
- Adobe InDesign
- Microsoft Word
- *Microsoft Publisher (not preferred)
- *Corel Draw (not preferred)

* Recommend supplying PS file or a PDF with these formats. It is in your best interest, due to font and graphic irregularities.

Keys Printing supports both Mac and PC platforms.

If you use a program not listed, please contact us for further discussion.

PDF files

PDF files (high resolution PDF files) generally work well. Please create these files on the "Print", "Print Optimized", or "Press" settings when using Distiller. PDF's created on the "Screen" setting are low resolution and unacceptable for printing. Please inquire about "job option" or "compression" settings when creating PDF files if you are uncertain. You are welcome, and we encourage you to submit your PDF file or a test PDF file for us to determine if it is usable. There are many settings and exceptions involved in PDF files. Submitting a test file and consulting with us is the best option to avoid creating confusion. You may e-mail a test file to your project manager, salesperson, or the prepress manager directly. You may also submit the file via our FTP site by visiting our website at www.keysprinting.com . You will need to look under the "Customer Tools" section and reference the "FTP instructions". If you e-mail a file to the prepress manager, Kerry Harrison, at kerry.harrison@keysprinting.com, please list your salesperson in the e-mail and what project the test file pertains to.

Summary

Sending electronic files to a service provider can sometimes cause problems, which can ultimately delay the production of your job. We hope that the information provided will be of value to you and your staff when preparing your files. Here are a few very important points that we hope you remember each time you submit your files to Keys Printing.

Job (files) must be accompanied with approved final hard-copy, color broken if applicable.

All fonts must be supplied.

All graphics must be present with the correct resolution.

All images must be of an acceptable format in Grayscale or CMYK

Thank You for choosing Keys Printing Company for your printing needs.