About Color

There are several different technologies available for color printing. These different technologies will produce final output that will appear different in varying degrees. The paper or media that is used will also affect the final output. Always confirm that your files are submitted in the correct color space. Although digital printers (Copiers) can deal with several types of color space data: RGB (Red Green Blue), Spot, CMYK and grayscale, some of the data may lie outside the gamut of the printer in question. In order to print this information, colors are converted to the closest colors within their gamut, which may produce a visible shift in the desired output generating unwanted results.

CMYK/RGB

CMYK and RGB are two possible color modes for graphics files.

Save your graphics in CMYK mode. CMYK refers to Cyan, Magenta, Yellow and Black, the ink colors used in Process Color printing. When CMYK inks are added together in various percentages using dot patterns and screen angles, they create the wide range of colors available in printed materials. All Full Color (Process Color) done at Pacific Press is produced in CMYK (Process Color).

RGB refers to Red, Green and Blue, the primary colors used in phosphors of computer screens, as well as in color scanners, televisions, and digital photography. Due to the widespread use of RGB, many graphics applications default to RGB, but printing requires CMYK.

The RGB color space has a greater color range (gamut) than CMYK. When converting from RGB to CMYK, certain colors will be "squeezed" to fit them into the color gamut that is possible in printing. As a result, brighter colors (oranges, bright greens, blues and purples) can be compromised when printed in Process Color.

Spot Colors

Spot Colors, also called solid colors or Pantone (PMS, Pantone Matching System) colors, are premixed inks that are not attainable by combining CMYK inks. They are inks mixed from about a dozen base pigments. A printed swatch book from Pantone is an excellent way to predict color, and is highly recommended.

Pantone also has available a "Solid to Process" guide that show how Pantone Spot Colors will convert to Process colors when the normal equivalents are used.

Art Files and Scanned Images: Don't forget those embedded art files, Please change all your links to the correct color settings

Proof your color before sending the job to be printed. The best way to do this is to print each color separately to see if all your items defined as the right color. If you have a file in red, black, and blue, print only the red, only the blue, and only the black on separate sheets. If you are missing pieces of your layout, it means the color probably isn't specified as one of the spot colors you selected.

Color Tips:

Full Color Printing Tip (FOR THE DI)—Change large areas of black to rich black: 40% cyan, 30% magenta, 30% yellow, 100% black.

Quark Tip—Set picture box background color to none whenever possible.