



RENDERING INTENTS For Flexi and PhotoPRINT

Rendering Intents can, at times, be both the best things and worst things ever added to RIP software!

Here are the basics to help you understand them a bit clearer:

Here is what they do:

Rendering Intents are used when a design to be printed includes colors that are outside of the printer's color range (color gamut). We don't want those colors not to print, so how would we like them to be brought into range...what color do we want instead?

Here is what they mean:

PERCEPTUAL: (Best for Photographs) The relationship between colors in the original is scaled proportionally to fit into the gamut.

Translation: (using "Red" as an example) the "red" is moved to the edge of the printable range, as well as other reds that were already in range, so as not to lose any highlights or shadows needed in a photograph.

RELATIVE COLORIMETRIC: (best for logos and best color matching) Colors that fall outside of the gamut are brought in to the edge of the gamut.

Translation: the "red" is moved to closest edge of the printer range along the "red hue".

ABSOLUTE COLORIMETRIC: (good for close color matching) Colors that fall outside the color gamut are included but may be relocated to other colors.

Translation: the "red" will be moved to the closest edge of the print area, but that closest color may be more like an "orange".

SATURATION (best for vivid colors rather than color matching) Colors outside of gamut are converted into gamut within the same saturation but different lightness.

Translation: the "red" is moved into printable range where the saturation of the color (NOT ink saturation) is the most; the "red" is no shade of red, but a "real red".

SPOT (non-photographic images only) This moves all colors to the greatest saturation possible.

Translation: All of the colors, not just the "red" are moved to greatest color saturation (NOT ink) to be most vivid.

Here is why we use them:

Of course we don't want to leave holes in our prints by leaving out that "red", but how do we want the color printed? Photos are best translated with Perceptual to maintain the subtleties of the image. Logos are usually best translated with Relative Colorimetric to best match the specified logo color as closely as possible.

Eye-catching posters are probably best translated using Saturation to get the most "Oomph" or "bang for the buck"

Designs are created often with a combination of both bitmap photos and vector logos, so the Dual Rendering Intents allow us to choose the translation method separately for the bitmap and vector images.

Potential Pitfall:

The EYEDROPER TOOL is used to pick a "red" out of a bitmap to fill let's say some vector text. Both now have the same "red", but if I do not have both rendering intents set the same, my print will have two different translated reds! Anytime the Eyedropper Tool is used, make sure the rendering intents match so both the bitmap "red" and vector "red" are translated the same way!