

Photoshop Mastery

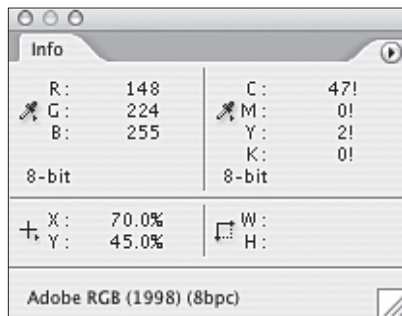
Taking Photoshop to the next level

■ BY BEN WILLMORE

What Flavor of RGB is That?

Many Photoshop techniques rely on the RGB numbers that appear in the Info palette. If you've ever had trouble getting consistent results when working with those numbers, you might have been using distinctly different types of RGB without realizing it. Beware, different "flavors" of RGB don't always mix well.

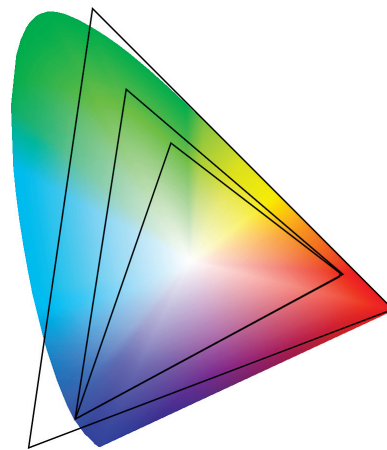
The RGB numbers that appear in the Info palette are a description of how much red, green, and blue light is needed to create the color that appears under your cursor. The RGB numbers alone are not enough to define a color; you also have to indicate which flavor of red, green, and blue is being used.



The RGB numbers represent how much Red, Green, and Blue light is needed to create a color.

The flavor of RGB being used is determined by the Color Profile attached to an image. You can find this information by choosing Palette Options from the side menu of the Info palette (Window>Info or press F8) and turning on the Document Profile checkbox. Click OK to close the Info Palette Options dialog and now a name appears at the bottom of the Info palette that will reflect the flavor of RGB that's being used in the active document.

The following diagram shows the difference between three of the most common choices you'll find being used. The colored background represents the most vivid colors your eyes are capable of seeing and the three corners of each triangle represent the shades of red,



Sample Color Spaces from smallest to largest: sRGB, Adobe RGB, and ProPhoto RGB

green, and blue used by the three different Color Spaces that are commonly used. (Note: Color Spaces is the official name for what I've been referring to as flavors of RGB.) As you can see, the difference in how vivid the red, green, and blue colors are varies greatly between the Color Spaces shown.

The numbers in the Info palette can vary from zero to 255. When one of

the numbers hits 255, it indicates that you're using as much of a particular color (R, G, or B) as possible. Looking at the diagram, you can see that green will produce radically different results depending on which flavor of RGB is being used, which means that the same RGB numbers will produce different results using different flavors of RGB.

Anytime a technique calls for you to take the RGB numbers from one document and use them in a technique with a different document, you'll need to make sure you're using the same flavor of RGB in both documents.

If you find that the two documents use different flavors of RGB, you'll need to choose Edit>Convert to Profile and set the Destination Space pop-up menu to the Color Profile used in the second document so that they both use the same kind of RGB. Converting will attempt to maintain the look of the image while changing the RGB numbers that make up the image so they can be used in the second document and produce identical results.

The next time you plan to use the RGB numbers in the Info palette, just make sure they're the same flavor of RGB and you shouldn't have any problems producing consistent color between documents. ■



Converting the sRGB image (left) to Adobe RGB (middle) and ProPhoto RGB (right) causes the RGB numbers to change in order to produce identical colors in each Color Space.

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