



# Fundamental Photoshop

Little things make a big difference when working in Photoshop

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## Preparing Your Work before Going to Printers

It's very easy to screw up images that will be printed on a commercial printing press using CMYK inks (cyan, magenta, yellow, and black.) But with some good preventive "medicine", you can avoid most problems and end up with high-quality results.

Let's take a look at how to safeguard your work before it goes to the printer. First off, most images destined for a printing press must be converted to CMYK mode. If you don't convert to CMYK, then your image will most likely print as grayscale because many output devices aren't capable of converting an image to CMYK mode on the fly.

When you convert a layered RGB file to CMYK mode, you'll be asked if you'd like to merge the layers within the image. There's a good reason for that. If you don't merge the layers, the appearance of the image will most likely change. The changes can be subtle, but just as often they can be dramatic, and certainly unwanted. That's because the math used to combine the layers is much simpler when working in RGB mode, where Photoshop doesn't have to worry about things such as how much black ink to use or the total amount of ink used in the image. So, if at all possible, merge the layers when you convert to CMYK mode.

If you decide not to merge your layers when converting to CMYK mode, then be very careful anytime you use the Multiply blending mode (which is automatically used in the Drop Shadow Layer Style). It can easily create drying problems due to



excessive ink coverage. You can check your total ink use by clicking on the tiny eyedropper icon in the Info palette and choosing Total Ink. Next, move your cursor over the darkest areas of your image and make sure the numbers don't exceed the total ink limit that's being used for your document. To find your total ink limit, just type "d," then click on your Foreground Color Swatch and add up all the CMYK numbers that show up in the Color Picker.

Another thing that causes your image to look different after converting to CMYK mode is that not all colors that you can create in RGB mode can be reproduced using CMYK inks. That means you need to be careful anytime you're choosing a color or adjusting your image, otherwise you might end up with colors that shift when converting the image to CMYK mode.

When you're choosing a color, be sure to look out for the warning triangle that shows up in the Color Picker (see image above). It indicates that the color you've chosen will shift when you convert to CMYK mode. Anytime you see that symbol, be sure to click on it to get the closest color that is reproducible. Also, don't assume that Photoshop's tools will automatically use colors that are appropriate for CMYK mode. For instance, the presets that come with the Gradient tool do not use printable colors, so be sure to edit them and click on the warning triangle for each of the colors used.

When adjusting an image, you can get an idea of what your image will look

like after it's converted to CMYK mode by choosing View>New View and then choosing View>Proof Colors. That way you'll have two views of the same image: One shows the current content (RGB) and the other shows you what will happen when the image is converted to CMYK mode. That way, you can see how the colors will look when you convert to CMYK, and you'll be able to make educated decisions as to how much you can adjust your image.

Or, to see exactly which areas are going to change, choose Gamut Warning from the View menu and Photoshop will cover the colors with gray that will shift. This isn't overly useful because it doesn't indicate how extreme the shift will be.

When printing on a commercial printing press, you're not going to see as much detail as you do in Photoshop. If you sharpen an image so it looks good onscreen, it will often look soft when printed. So, before sharpening your image, choose View>New View so you get two views of the same document. View one of them at 100% so you can see what's really going on, and view the second one at 50% to simulate the printed result. Sharpen the image until the 50% version looks good and the 100% version doesn't show any obvious problems.

Next time you're getting ready for the printer, take these precautions, and the results will be your reward. ■

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