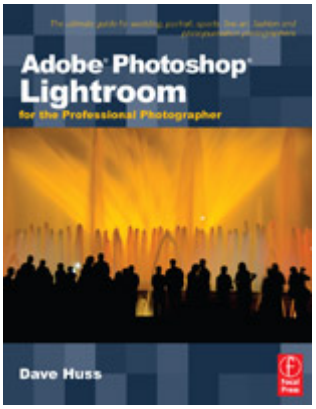
Printing in Photoshop Lightroom

An exclusive tutorial for Adobe Photoshop Lightroom 1 and 2 from author, Dave Huss

Adapted from: *Adobe Photoshop Lightroom 1.1* By Dave Huss



Over the past year I have discovered that producing quality prints using Lightroom is simple for some and for others it has become a real challenge. Some users have thrown in the towel and print their images using Photoshop. While these extra steps might solve the problem, they complicate the workflow. The Print Module in Lightroom can produce quality prints and the focus of this article is how to achieve quality prints using without resorting to Photoshop. Within the Print module you can both layout the image as well as print it. We will not concern ourselves with the layout portion, which is extensive, but rather begin by reviewing some basics on how the Lightroom print engine is designed to print.

Lightroom offers two methods for printing images. Printer managed printing (default) and Lightroom managed printing. Using printer management all of the colors are managed by the printer. Lightroom sends the printer a tagged file, which it uses to define how the printed colors will appear on the paper. In Lightroom managed printing you select a printer profile (designated by printer type and paper type and provided by the printer or paper manufacturer) before printing. When it comes time to print, Lightroom controls all aspects of the color management. It is the best choice for accurate color prints, assuming you don't forget to turn off the color management option on your printer. Which choice is best for you? Do not be too quick to dismiss the printer managed color option. Printers have come a long way in the past few years and I have demonstrated that allowing the printer to manage the color can produce good results. If you are not sure, I recommend that you print a few printer managed photos to see if it works for you.

Regardless of which method you choose, printer or Lightroom managed, the process begins the same way. The Print module can print a lot of images in a single job, but for the sake of this article, we will look at what it takes to print a single photo.

Print Setup

1. In the Library or Develop module, select the photo or photos you want to print. In the Print module, you can also select photos from the Filmstrip. 2. How the image appears in the Print module depends on what template (in the left panel) is selected. If the photo rotation appears

incorrect (like the one shown in figure 1), there are no rotation arrows in the Print module, we'll fix it in the next step.

Figure 1: The Print module showing a landscape (wide) photo when Page Setup expects Portrait.

2. Click the Page Setup button (lower-right) and from the dialog box select the printer, size of paper, and orientation (portrait or landscape) you will use. Make sure you select the printer you are using first. It controls what paper size choices are available to you. You cannot pick the type of media you are using in this dialog box. There is also an option to scale the image. I recommend leaving it at 100%. If you need to resize the image the best way is to jump back to the Layout panel in the Develop module. If you are a Windows user, you can go immediately to the Print Settings by clicking the Properties button while Mac users will take the more scenic route returning back through Lightroom.

Figure 2 Use this dialog box to select the printer, paper size and orientation.

3. After completing Page Setup, go to the Print Job panel. If Draft Mode Printing is selected all other options are grayed out and Lightroom uses the thumbnail as a print source. The resulting photo prints fast and is relatively ugly. The Print Resolution setting has a default setting of 240 dpi. This setting will make an adequate print but if you're using an Epson printer a setting of 360 dpi (which is an even divisor of the maximum dpi) is often recommended. I doubt you will see any difference either in print time or appearance. General rule of thumb is larger images can get by with lower resolution settings.

Figure 3 Set the resolution and sharpening in the Print Job panel

4. Print Sharpening is a feature that confuses some users. It has three settings: Low Medium, and High. What causes confusion is that when the setting is changed, nothing appears to have changed in the photo being previewed. That is because nothing has changed. The sharpening is applied to the image file that is sent to the printer and the original image is unchanged. Which Sharpening setting should you use? It is such a mild, albeit good, sharpening algorithm that you

can use the High setting on nearly every photo without blowing out the edges of objects in the photo.

Note: You don't need to go through this setup every time. Once you have the print settings the way you want, save them as a Print Template and you can call them all up immediately with a single mouse click in the Page Setup dialog box.

Printer Controlled Color Management

This is the simple solution as long as you make sure everything is set up correctly.

1. Choose Manage By Printer.

2. Press the Print button and locate the Color Matching settings. Select ICM Method for Image Color Management (Windows) or select ColorSync in the Color Management settings (Mac OS). This ensures the correct printer driver software is applied before printing the image. These settings are accessed in the Print Document dialog box by choosing Setup>Properties and clicking the Advanced button for Windows. For Mac users, Color Matching (not Color Management) is found in the pop-up menu below the Presets menu.

Figure 4 Color matching settings for Mac and Windows

A special note for Epson users running under the Leopard operating system. At the time I am writing this article you may not, depending on your printer, be able to change the Color Matching to ColorSync – the option may appear grayed out. If it is, finish the steps in this section and the photo will still print out nicely. If you have any issues, check with www.epson.com and make sure you have the latest printer driver. If you are using Windows, you don't have to do anything except look smug.

3. Now, select Print Settings and make sure you have the correct paper type selected.

Figure 5 Make sure you have the correct paper selected.

4. Click the Print button. To save some ink, look at the photo as the paper begins to exit the printer and kill the print job if it looks like it is out of whack. The paper is already history, by killing the job, you can save some ink.

Lightroom Controlled Color Management

To make the best possible prints, you need to use Lightroom to mange the printer color management. This method uses ICC profiles that are made for specific papers for your printer that you need to download from either from the printer or the paper manufacturer web page. Not all printers have profiles. Typically, profiles are only offered for high-end consumer and

professional printers. So, if you bought a photo printer that only costs $60, odds are that you will not find a profile and should print using printer managed color.

1. The first step is to download and install the profiles for the printer and paper you are using. For example, Epson provides, free of charge, four different ICC color profiles for my 1800. Why four? Because Epson makes four different paper types for use on this printer – glossy, matte, fine art, and canvas. What if you want to use a paper made by a different manufacturer? You can go to their web site and download an ICC profile that matches their paper with your specific printer. If you are using a printer that is several years old – consider buying a new printer. It is a far better thing to buy a new printer than to curse the fact that the manufacturer doesn't upgrade the ICC profiles for it older printers.

Figure 6-Manufacturers offer profiles that allow the best possible printing on the selected paper. (Epson and HP)

2. Now that the profiles are installed, you next step is to click on the Profile. If this is your first time, your choices will be Managed by Printer and Other. Click on Other to see the profiles available. Is the profile box blank? Most probably, you have downloaded but did not install the profiles. When you see the list of profiles, click on the ones that you want to appear in the Color Management area of the Print Job panel and click OK.

Figure 7 – This shows a list of the installed profiles on the system

3. Now, the profiles you choose appear in the Color management area. Select the profile that matches the printer and the media that you are using for the print job.

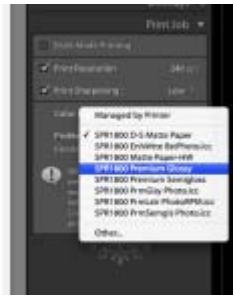


Figure 8 Selected Profiles appear in the Print Job pane

4. The last step is to choose the Rendering Intent. The two choices are Relative and Perceptual. Rather than provide a technical definition here are some generally accepted guidelines. For images that do not have large areas of bright saturated colors, choose Relative. If you are printing fine art photos on matte paper or printing images with lots of dark colors consider Perceptual.

Figure 9 - Select the appropriate color rendering intent

5. Click the Print button. The most important step is to from Color Management ensure that color management of the printer is turned off. If you leave it on, both Lightroom and the printer will attempt to do color management and the usual symptom is a light magenta cast on the finished print.

That's pretty much all there is to it. Once you have everything set up correctly, you should experience accurate quality prints every time. Once every thing works right, I again remind you to save it all as a Print Setting. The cardinal rules to remember are to ensure that the ICC color settings are correct for printer managed printing and to make sure that color management is turned off on the printer when using a profile. If you are still experiencing problems with a specific printer, make sure that you are using the most current profiles and check the Lightroom section of the Adobe User to User Forum to see if someone else is having the same issue.