

Workshop on Printing and Printing Projects

Introduction

- Printing remains the primary means by which people share their images.
- Increasingly, people are also sharing their images through email, the web, photo frames and on their tvs.
- While these methods may be easy to use for both the sender and viewer, they do not (at least as yet) provide the same level of quality as a print. These alternative viewing modes are generally low-res and use the narrowest range of colours (the sRGB mode).
- A print on a photo printer provides the opportunity to see:
 - A broader range of colours through use of an extended colour mode\
 - Higher resolution and, thus, more detail and accuracy.
- And, a print is more tactile, a very physical thing that can be passed around and shared. The quality and nature of the print varies with the type of print, the paper and the lighting.
- The con to printing is that prints have to be cared for in an appropriate frame or between archival plastic sheets.

Why do we print?

- With digital, you can still take your images to a photo lab at Cavalcade or Walmart/Zehr etc. The key limitation of this is the photos may all end up looking the same. They tend to be balanced toward the middle of the light spectrum. For an average photo taken in day light or well lite this may be fine!!
- However, if there is a broad range of colour, subtle differences in tone and saturation, you may not get what you want.
- When you do your own printing, you can aim for:
 - Accurate colour
 - Add your own personal touch or feel to the image
 - A Wide range of outputs, different sizes, varying types of paper.
- You cannot just get an accurate image but you can exercise your creativity.

Importance of Colour Calibration

- Assuming accurate colour is one of your objectives in printing, you need to do at least 2 key activities before printing:
 - First, Calibrate your monitor. You calibrate your monitor to ensure what you see on your monitor accurately reflects your image. This makes it possible for you match your monitor and printed output.
 - We have talked already about calibration in the club. Let me just add that it is possible to get a calibration device for a reasonable sum and it is a great long term investment.
 - Second, Use ICC printer profiles so Photoshop Elements, Lightroom etc know what printer and what paper you are using. Only when you do this, will you get an accurate output.
 - ICC profiles may come with your printer for paper manufactured by that company (e.g. Epson will give you profiles for Epson paper). If you use other paper, go to the web and obtain the profiles that match your printer.
 - If profiles are not available, you may have to experiment and use a profile that is a close match. (use an Epson matte profile for matte card stock).
 - There is a lot of science to this. But, for most of us, there will still be some trial and error. When all is said and done, you may still decide to increase your brightness or levels a small bit before printing.

Choosing a Photo Printer

- Choosing a photo printer is the first step in getting ready to print at home. You may use an inkjet printer or laser printer designed for the office.
- However, unless you choose a photo printer, you likely will not be able to obtain ICC profiles for your printer and paper. Photo printers generally print at high res and on both matte and glossy paper. Some, though, require you to change print cartridges to switch from matte to glossy.
- Photo printers either dye printers or pigment printers. The pigment printers tend to produce long lasting prints, better B&W prints, overall better quality.
- The printer manufacturers are, of course, selling ink. So, it is important to look at the cost of the cartridges, how much you may use, compare costs from one printer to the next. More professional printers tend to be more efficient than consumer printers. But, they cost much more at the beginning.
- Epson has the longest track record making photo printers, going back over 10+ years now. Canon and HP also make excellent printers.
- Before you buy, make sure that profiles are available for your printer. You may also find that profiles for a new printer lag the introduction of the new printer.
- Costs are coming down and an affordable photo printer may cost between \$300-\$600.

Getting your Image Ready for Print

- To get ready for printing, you need to complete your basic editing.
- First, most people will review whether they want to crop the original or not. If you are cropping the image, you need to be aware of the implications for printing. Do you crop and stay with a standard ratio such as 4"x6" or 8"x10"? If you do, you will be able to easily select paper to match. If you go creative (say a 4"x8" image ratio), you will have white around your image. If you frame the image, you will have to get a custom frame. Watch your cropping at this stage.
- Second, you do your basic editing, adjusting the light levels and curves, adjusting the colour, adding contrast and punch (if you wish). Correcting any abnormalities...etc. NOW, you need to save your file as a master that can be used for multiple sizes or purposes.
- Third, once you have your image cropped and edited, you need to decide what size you want to print the photo. Do you want to do a 4"x6" and 8"x12" etc. You need to go to the resize box and make adjustments. DEMONSTRATE #1.
- Fourth, and, only then, you need to sharpen your image for printing, using either unsharp mask or smart sharpen. DEMONSTRATE #2.
- Fifth, you need to save the image as a TIFF or PSD file and label it for the size you have chosen.

Printing an Image in Photoshop or Lightroom

- For both Photoshop and Lightroom, printing is a 2 step process.
- Step 1, you set up the print job in the software. You select:
 - Paper type
 - Turn off printer manages printing
 - Select paper profile
 - Select rendering intent.
- Step 2, you select print and go out to the printer dialogue box. Here you:
 - Select paper type, glossy, matte etc
 - Turn off printer colour management.
- DEMONSTRATE #3 AND 4

Printing Options and Issues

- When doing your printing, you have a number of key decisions to make.
 - What is your image size? If you are going to mat your photo, you want to make the print slightly larger than the mat opening.
 - What type of paper do you want to use? Do you want glossy, semi-glossy, baryta type, or matte etc? There are advantages and disadvantages and debates as to what is best. While you can have fun experimenting, it is best to select a paper and stick with it for a while.
 - What size of paper? Do you want to print standard 4"x6" or 8"x10" or do you want to print sizes such as 12"x18" or 10"x15".
- What can go wrong? And, how to avoid it?
 - You put the paper in upside down.
 - You did not select the right paper type or profile.
 - You did not turn off colour management at the printer. This is a major issue and can lead to dark and muddy images.
 - You are running out of ink and need to replenish one or more colours. Usually not an immediate issue.
 - You have not used your printer for a while and the heads are clogged. Using the head cleaning routine usually works.
 - Other issues?
 - DISCUSSION AND PROBELM SOLVING.

Caring for your Prints

- Handle carefully. Prints take time to dry and can smudge depending on the paper and type of ink.
- Wait 24 hours before framing as the paper gives off a gas that can fog the glass when framed.
- Protect your prints from direct sunlight or heat.
- Frame your images, making sure you use archival mats and backings. Otherwise, the print may discolour.
- Protect between archival plastic sheeting.

Framing your own Prints – Key Steps

- You can save money if you have the equipment and tools to frame your photos. However, this requires investment up front of at least \$200+ and the cost of materials.
- If you are doing larger prints and/or prints of an odd size, framing and matting on your own does make sense. The more custom it is the more costly it will be at the frame shop.
- The key steps in framing include:
 - Making, having made or buying frames. The cost is less if you use standard sizes. A key issue here is deciding on the type of frame, wood vs metal, black vs brown, modern vs traditional.
 - Cutting glass to fit. This is not difficult but does require practice.
 - Cutting mats and backing for your photos. A key issue here is selecting the colour of the mat. Do you want the mat to add a dimension to your photo or just be neutral? Unless you are using standard photos, the mats have to be cut to size. Many stores will do this almost at cost.
 - Assembling the framed photo. Some stores will give you a discount if you assemble the frame, glass and mat/backing yourself. This takes practice but can save money.
- If you want to do some of the work yourself, the best option is to:
 - Start by assembling your package yourself
 - Then, buy a mat cutter and cut your own mats but buy your frames and glass
 - Only then, when you are comfortable cutting your mats would you want to move on to making your own frames and cutting glass. If you have an equipped workshop, you may want to explore this final step.

Other Ways to use your Printer – other projects

- **Greeting Cards/Note Cards.** Templates are available for you to prepare your own cards (usually from the card manufacturer). If you want a quality result, you need to ensure that you have an ICC profile for your card stock (or can use a similar one from another source). Even with a template, you likely will have to experiment setting a custom paper size and experiment with centering the card in the right place on the paper. DEMONSTRATION.
- **Calendars.** Photoshop Elements does come with a calendar template. EXPLORE.

Final Comments/Discussion