

Advanced Printing:

Costco Printing
Using
Calibration Tools and
ICC Profiles

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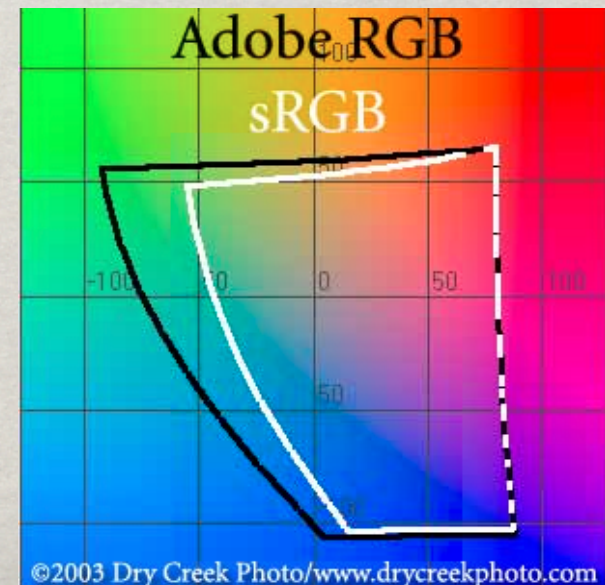
November 26, 2012

Goal

- Print images at Costco that “look like” the image that you see on your monitor
- Introduce monitor calibration and tools to do it.
- Introduce software that will assure that the printed image looks like (i.e. color, saturation and brightness) the image that you see on your monitor
- Discuss step-by-step how to use Costco software to print calibrated images
- NB: This is an overview and the details of the process will not be discussed

Color Space

- “Color Space” is the range of colors that a camera might “see,” a monitor might display or printer may print
- In fact, your camera, monitor and printer all have slightly different color spaces
- The task is to align all three



Monitor Calibration

- ✻ How do you know whether the image on the screen is “accurate”



Monitor Calibration

- Monitor accuracy is defined by industry standards
- With specialized hardware and software one can adjust a monitor's highlights, shadows, contrast and color according to International Code Council (ICC) standards
- Available Tools
 - Datacolor Spyder series
 - ColorMonki
- Each system has both hardware and software for calibration

Printer Driver

- Each printer has software called a “printer driver” that is installed in your computer so that the computer can “talk” with your printer
 - Printer drivers have many functions including how color and its color space is seen and printed by the printer
 - So, when you print your image, its ultimate appearance is influenced by how the printer chooses to see the the highlights, shadows, contrast and color in your image even if the monitor is calibrated.
- The driver in the printer is not calibrated but it can be. But the calibration is tied to the paper you use.

Paper Profile

- Each brand and type of photo paper has an ICC profile that describes how that paper will interpret the highlights, shadows, contrast and color of an image, that is, its color space
- In advanced printing it is critical to assign the correct paper ICC code to the image being printed
- When printing through Lightroom and Photoshop, you may assign the ICC paper profile for the paper you are using to print
- You can get ICC paper profiles from the companies that make the paper (e.g. Epson paper, Red River Paper or Costco paper!)

Costco Paper Profiles

- Costco offers printer profiles to improve the accuracy of your prints
- The Costco website makes available, downloadable paper profiles for printers in every store all over the world
- At Costco Westlake, you may print either on *glossy* or *lustre* paper (and posters on *satın* and *semi-gloss* paper)
- At the Costco website for the Westlake store - a profile for download is available for each of the following
 - Glossy Paper
 - Lustre Paper
 - Satin Poster Paper
 - Semi-Gloss Poster Paper

Color Management

Color Management is the process by which everything is tied together. The following are the steps for using Costco printer profiles

1. Calibrate your monitor (if you do not do this, don't bother with this process, it's not worth it)
2. Download the Costco printer profiles for the store at which you will be printing
3. Store those profiles in Photoshop (I won't discuss how this is done now)
4. Open your image in Photoshop
5. Decide whether you will want to print on glossy or lustre paper

Color Management

6. Assign the Costco profile to the image (This is a specific process in Photoshop. Note that the image will look different when the profile is assigned.)
 - Be sure to assign the correct profile. If you plan to print in *glossy* use that one - if *lustre*, use that one
7. Edit the image to your liking
8. Create a jpg for printing at Costco
9. Send the image to Costco and print
 - Be sure to choose glossy or lustre paper
 - Be sure to turn off auto correct
10. Your final image should match your screen!