Color Calibration

ROBIN IMAGING SERVICES

2106 Central Parkway, Cincinnati, Ohio 45214
513-381-5116 www.RobinImaging.com

Technical Data Sheet

Color calibration used to be solely the province of professional printers and service bureaus. With the proliferation of desktop systems it is important that users understand how to set their color, so that the output matches their expectations.

Monitors

No two monitors display color in the same way. In fact, two identical monitor models can display colors in significantly different ways. Furthermore, monitors will change color and intensity over time, and the appearance of monitors will change dramatically depending on the existing lighting conditions. The goal of monitor calibration and characterization is to calibrate the way your monitor looks to best simulate the printing conditions of your intended output device.

It is important that you start with a good monitor. For critical color tube monitors are generally more accurate than LCD flat panels. We recommend the LaCie Blue and the Sony Artisan for critical work. The Artisan has a calibration built in and does not require a separate device.

Monitor Calibration

Monitor Calibration has gotten a lot easier and the cost has gone way down in recent years. To do it right you need a photometer or a colorimeter, color management software, and a 5000k color corrected viewing light to put beside your monitor.

True monitor calibration involves the use of a photometer, or other light gathering device that measures and adjusts the color temperature of your monitor, to match a known lighting condition.

For viewing images that will be printed, the color temp of your monitor should be set at 5000k and the gamma at 1.8.

Monitor Characterization

Monitor characterization, on the other hand, requires no hardware and the software comes with programs such as PhotoShop. It is an inexpensive way to get your monitor to match a printed piece.
To do this, go to the control panel and click on "Adobe Gamma." This will step you through the process.

Once this is done you may want to retain specific settings for various output devices. If you would like to set up profile for Robin, we can provide you with a print and the file from which it was printed. From that you can adjust your monitor to make it look as close to the print as possible. This profile can then be named and saved.

Helpful Hints

1) Monitor color is easiest to judge in stable low ambient light. The worst possible condition is where there is a large amount of daylight present. Every time the outside conditions change it will make the monitor look different. It is best to have a 5000K viewing source next to your monitor.
2) Monitors drift over time. They should be checked about once a week to make sure they still look right and recalibrated once a month.
3) When using Photoshop it is always a good idea to check your RGB values for neutral tones using the eyedropper to make sure it is neutral.

Links

Color Management Products

Gretag Macbeth offers a complete suite of software and hardware to calibrate just about any device with their Eye-One Color Management Solutions. http://www.i1color.com/

X-Rite - color measuring tools & monitor calibrators www.xrite.com/products/default.asp

Graphic Technology – viewing lights www.gtilite.com

Color Management Info

Chromaticity offers a broad range of hardware, software, classes and books. We recommend "Understanding Color Management" by Abhay Sharma as a good resource. http://www.chromaticity.com/

Graphic Intelligence offers training in color management. http://www.graphintel.com/

PhotoShop Settings

See Robin Technical Data Sheet TDS010 "Photoshop Color Settings" for information on setting your PhotoShop color preferences.