

Color Management: Creating a Custom ICC Profile Procedure for Printing a Target File in Photoshop for Gretag MacBeth i1 Color

This README is designed to guide you through the process of printing out the two test targets in Photoshop and also explains the settings used to print the test targets from Photoshop.

1. Open up test file called "TC9.18 RGB i1 1.2.tif" & "TC9.18 RGB i1 1.2.tif" in Photoshop. If your version of Photoshop gives you a profile mismatch message select the option to not color manage the file, as it is a raw, test file used to make the profile.
2. Select File/Page Setup to confirm orientation, printer, paper size and media feed for your printer.
3. Select File/Print with Preview, click on the advanced tab and select color management if it isn't already available in the lower 1/2 of the Print with Preview window on the left side.
4. In the middle of the screen on the left, there should be an option for "Color Management", if you do not see this but see "Output" instead, select output and change the option to "Color Management". In the Print Space option select "No Color Management" for Photoshop CS2 or "same as source" for earlier versions of Photoshop. (See the screen shots: Photoshop CS2.No.Color.Mgmt.jpg for Photoshop CS2 or Photoshop_CS_Same_as_Source.jpg for Photoshop CS or earlier versions of Photoshop.
5. Click Print.
6. The following settings are for your printer's print driver, and vary according to each printer. The concept for the printing stays the same in that we are disabling any color correction or ICC workflow from the printer driver side.

For Epson Printers on Glossy Paper: select "Premium Glossy Photo Paper" for your paper type in the pull down menu, Select "No Color Adjustment", SuperFine-1440 dpi, and turn off the high speed option. (See the screen shots epson_r1800_print1.jpg and epson_r1800_print2.jpg for a visual guide.)

For Epson Printers on Matte or Watercolor Paper: select "Watercolor paper radiant white" for your paper type in the pull down menu, Select "No Color Adjustment", SuperFine-1440 dpi, and turn off the high speed option. (See the screen shots epson_r2400_watercolor1.jpg and epson_r2400_watercolor2.jpg for a visual guide.)

For HP Printers: select the Paper Type/Quality in the pulldown menu. Select "HP Premium Plus Photo Paper" for paper type, "Maximum dpi" for Quality, and "Application Managed Colors" for the Color option. (See the screen shot hp_8750_print.jpg for a visual guide.)

For Canon Printers: select the Quality & Media in the pulldown menu. Select "Photo Paper Pro" for media type, and "fine" setting in the detailed setting print mode option. (See the screen shot canon_print1.jpg and canon_print2.jpg for a visual guide.) Select the Color Options pulldown menu and set Color Correction to "None".

NOTE: You can save this setting with the name "No Color Adj" or "ICC print workflow" so that you can easily recall the settings for your color managed workflow.

7. Click Print. Remember to print the second target the exact same way as the first. (You shouldn't have to change any of the settings, but it is good practice to double check all of your settings.)

Bring prints to class so that the target patches can be read and a custom profile can be created.

Procedure for Attaching the ICC profile Once the Custom Profile has Been Created

After profile is created, repeat steps 1–7 above, but now select the new profile that has been created as the print space (keep rendering intent on perceptual for a more realistic color or relative colorimetric for saturated colors). Each paper will have its own printer setup and matching ICC profile connected to it. You will specify the corresponding ICC profile with Photoshop's "print space" option which is available with the Print with Preview, Color Management option. Remember that the printer driver's color management is not being used and the setup that was used in step 6 should be used.

If you have any questions, email Andrew at andrew@behladesign.com

©2005–2007 Andrew Behla