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# CANON® PRINTER PROFILING: OSX 10.5

## INTRODUCTION

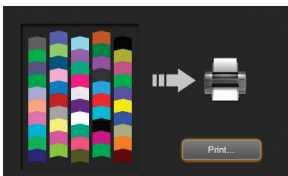
This document explains how to print a profiling test target from an ICC profiling application or Adobe® Photoshop® CS3 or CS4 and apply it in your Canon® print workflow. These instructions are only to be used if you are working with Adobe Photoshop CS4 on Mac® OSX Leopard® (10.5.x).

To print the target, you must send RGB data to the printer with no conversions. Until recently, it has been a simple process to print the ICC profiling target from Photoshop. The simple rule was to turn off the color management in the Photoshop print dialog, then make sure color management was set to off in the printer driver, as well.

However, Apple® has changed its print architecture. While older applications still print the same way, new applications like Adobe's Creative Suite 4 (CS4) now work a little bit differently. When you turn off color management in the Photoshop CS4 print dialog, it turns ON the color management in the "Color Matching" section of Apple's print dialog and greys out the option so you cannot turn it off.

Here are two workaround options. This guide will walk you through the steps to perform both options. Choose the one that best suits your needs.

1. Print directly from an ICC profiling application, such as ColorMunki™ or i1Match. This avoids the new behavior of CS4 and Leopard ColorSync®.
2. Perform a null transform. This is your only option if you are profiling with ProfileMaker™ or MonacoPROFILER® and only have CS4 on Leopard. This requires some additional steps in the profiling process; however, after you have made the profile, there are no unusual workarounds for using it.



Reference

*These steps are written for a Macintosh® running OSX Leopard® 10.5.x.*

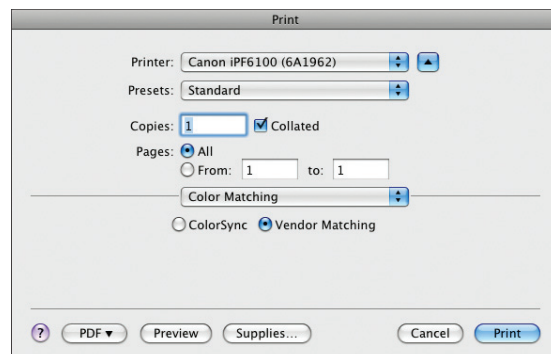
## PRINTING THE TARGET AND CREATING A PROFILE

When printing a target from Photoshop CS3 or Photoshop CS4, the simple rule is to turn off color management in the Photoshop print dialog as well as the printer driver. When printing from applications like i1Match or ColorMunki, simply turn off color management in the driver. Here's how.

### HOW TO PRINT THE TARGET FROM AN ICC PROFILING APPLICATION

This option pertains to ICC profiling applications such as i1Match or ColorMunki.

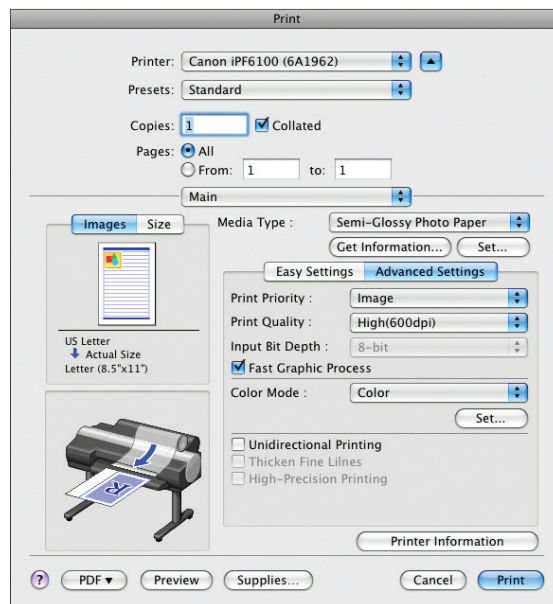
1. From the ICC profiling application, press the **Print** button.
2. In the "Print" dialog, click the "Layout" menu and select **Color Matching** (in previous versions this was referred to as **ColorSync®**).
3. Select **Vendor Matching** (this may be called **Canon Color Matching**). This is critical to turn off color management. **DO NOT** select **ColorSync** because a profile pull-down will appear, and the profile will automatically be applied to your target.



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## CANON® PRINTER PROFILING: OSX 10.5

- From the “Color Matching” menu, select **Main**, then **Advanced Settings**.



- The following settings will affect your print color and must be set to the same settings you will use later when applying the profile.

- Media Type: The type of media you select will determine the amount of ink that is laid down. To determine which to select, start by choosing a media name that is similar to the type of paper that is loaded in the printer.
- Print Quality: Select the same print quality you will use in production.
- Unidirectional Printing: If you mark the **Unidirectional**, **Thicken Fine Lines**, or **High Precision Printing** check boxes, make sure to mark these same boxes when printing later.
- Other check boxes: Use the same settings you set here when you print the profile.

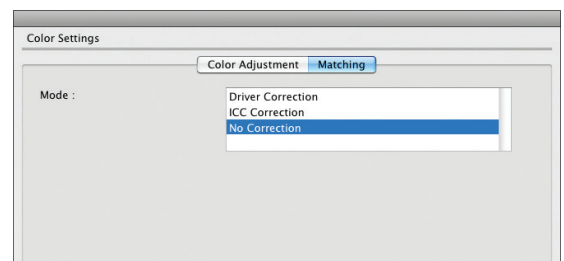
- Next, turn off color management in the Canon print driver.

- Under “Color Mode” click the **Set...** button.

- Do not make any changes in the “Color Adjustment” tab.

- Under the “Matching” tab change the default from **Driver Correction** to **No Correction**. This will turn off color management.

- Click **OK**.



- We recommend saving these settings as a preset in order to use them quickly when printing from your applications.

- Click the “Presets” pull-down and select **Save As...**
- Give your preset a meaningful name that includes the printer, paper type and quality.

- Print and measure your target and build the profile as usual.

## HOW TO PRINT THE TARGET FROM ADOBE PHOTOSHOP CS3 AND CS4

### PERFORMING A NULL TRANSFORM

A null transform is when a source profile has the same name as the destination profile. Since the software will see that the two profiles match, no conversion will be made.

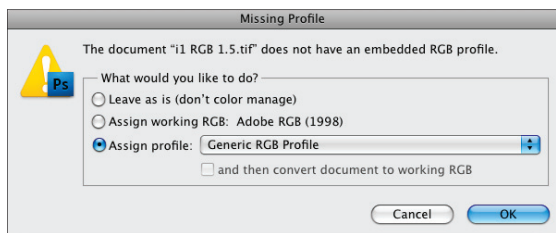
Performing a null transform will fool Apple’s print driver into not color managing your RGB target file. This work around is **only** for printing the ICC profiling target. The process involves a couple of steps we would normally recommend against, so it is very important to follow them exactly to disable Leopard’s color management without inadvertently applying any conversions.



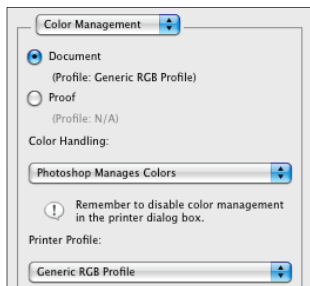
# CANON® PRINTER PROFILING: OSX 10.5

Here is how to perform the null transform to your ICC profile target.

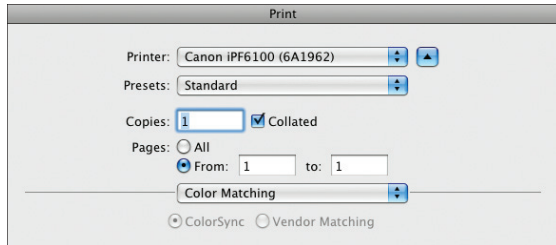
1. Open your target and assign a profile by selecting **Assign Profile**. Select “Generic RGB Profile” from the pull-down.



2. Select **File>Print**. In Photoshop’s print dialog box, set “Color Handling” to **Photoshop Manages Colors**. For the “Printer Profile”, select **Generic RGB Profile**. You will not need to worry about rendering intent or black point compensation.



3. Click **Print**.



4. In the printer driver, select the “Layout” menu and choose **Color Matching** (known as ColorSync in previous versions). Since you selected “No Color Management” in Photoshop’s print dialog, color matching is bypassed. No profile will be applied to your profiling target and the “Color Matching” options will appear greyed out.

5. Click the “Color Matching” menu and select **Main**, then **Advanced Settings**.

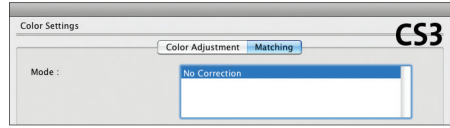
6. The following settings will affect your print color and must be set to the same settings you will use later when applying the profile.

- Media Type: The type of media you select will determine the amount of ink that is laid down. To determine which to select, start by choosing a media name that is similar to the type of paper that is loaded in the printer.
- Print Quality: Select the same print quality you will use in production.
- Unidirectional Printing: If you mark the **Unidirectional**, **Thicken Fine Lines**, or **High Precision Printing** check boxes, make sure to mark these same boxes when printing later.
- Other check boxes: Use the same settings you set here when you print the profile.

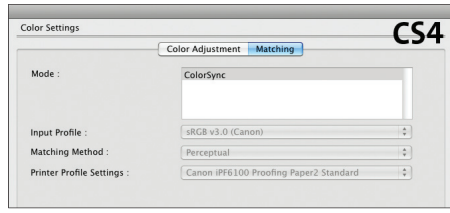
7. To turn off color management in the Canon print driver, click the **Set...** button under “Color Mode”. Do not make any changes in the “Color Adjustment” tab.

8. Select the “Matching” tab. This is where Photoshop CS3 and CS4 differ.

- In CS3 the mode shows as “No Correction”. Click **OK**.



- In CS4, the mode shows “ColorSync” with profile settings. Don’t worry, all profiles are being bypassed. Click **OK**.



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# CANON® PRINTER PROFILING: OSX 10.5

9. We recommend saving these settings as a preset in order to use them quickly when printing from your applications.

- From the “Presets” pull-down, select **Save As**.
- Give your preset a meaningful name that includes the printer, paper type and quality.

10. Print and measure your target and build the profile as usual.

## USING YOUR NEW PROFILE

Once you’ve printed the target and created a new profile, select one of the following options to use it.

## HOW TO PRINT FROM PHOTOSHOP

If you print from Photoshop, follow these steps to disable color management in the Canon driver. When using your profile, be sure to use the same printer driver settings.

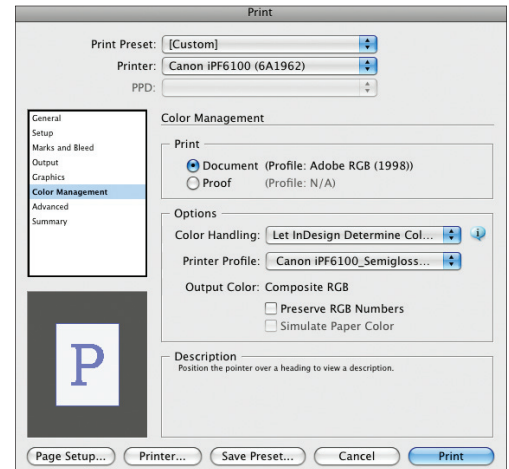
1. In the “Photoshop” print dialog, select **Photoshop Manages Colors** and your new printer profile.
2. Use your saved presets or the exact same settings you set in the “Main” window.
3. Click the **Set...** button and select **No Correction**. Color management will be disabled in the “Color Matching” window in the Canon driver.

## HOW TO PRINT FROM OTHER GRAPHICS APPLICATIONS

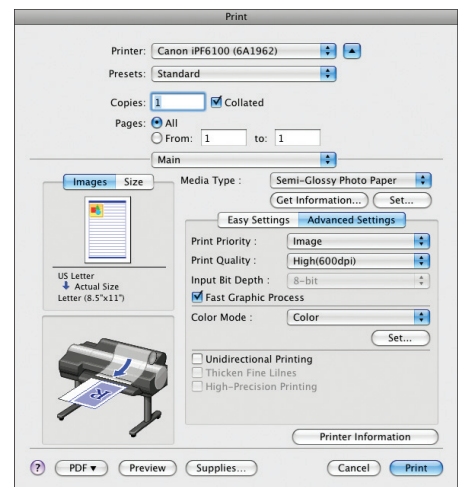
Unlike Photoshop, applications such as InDesign® will not automatically disable color management in the “Color Matching” window in the Canon driver. When printing from these applications utilizing your new custom profile, follow these instructions:

1. Open your file and select **File > Print**.

2. From the “Color Management” tab, set “Color Handling” to **Application Determines Colors**. Set the “Printer Profile” to your new custom built profile.



3. If you saved your presets when you profiled your printer, use the “Presets” pull-down and select the saved presets for your printer, media type, and print quality.
4. If you did not save your presets or you want to make sure all of your presets are the same as before, select **Printer** from the “Applications” dialog box to set up the print driver.



**NEED TO KNOW**

## **CANON® PRINTER PROFILING: OSX 10.5**

5. Click the “Layout” menu. Select **Color Matching** and make sure **Vendor Matching** (this may be called **Canon Color Matching**) is selected.
6. Click on the “Color Matching” menu and select **Main**. Use the same Media Type and Print Quality you used when you made the profile.
7. Under “Color Mode” click the **Set...** button.
8. Behind the “Matching” tab make sure **No Correction** is selected.
9. When you have made all changes in the application color management window and the printer driver, print your document.



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