

Epson Color-Managed Workflow: Getting the Color You Expect in Your Prints

These instructions are intended to help our customers that use a color-managed workflow. They cover all the steps you need to enable color management in Adobe® Photoshop® 7 and then print with an Epson printer driver. Workflows for both Mac® OS 10.2 and Windows® XP are included. The Epson Stylus® Photo 2200 printer is used as the example in these steps, but the workflow is similar for other Epson printers.

Carefully follow the instructions in these sections for the best results:

- [Printing With a Color Profile](#)
- [Solving Color Management Problems](#)
- [Printing a Custom Profile Test Target](#)
- [Creating a Custom Profile](#)

Printing With a Color Profile

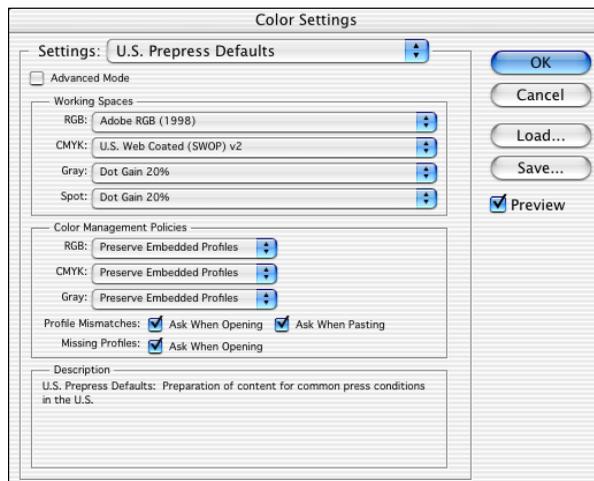
To print an image using a profile, follow the steps in the appropriate section for your operating system below.

- [Macintosh OS X](#)
- [Windows](#)

Macintosh OS X

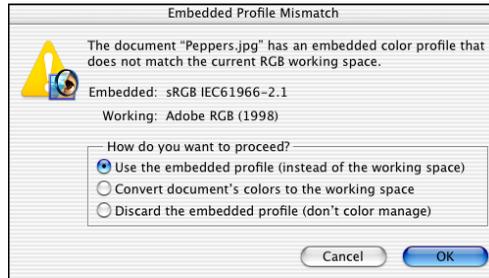
Opening Your Image

1. Open Adobe Photoshop.
2. Select **Color Settings** from the Photoshop menu.

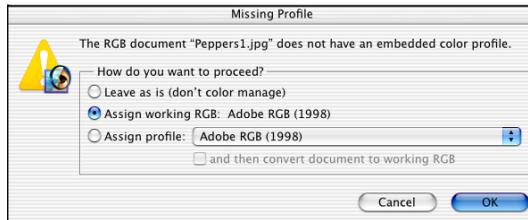


3. Select **U.S. Prepress Defaults** from the Settings pull-down menu. This sets **Adobe RGB (1998)** as the RGB working space and activates warning messages for profile mismatches and missing profiles.
4. Click **OK**.

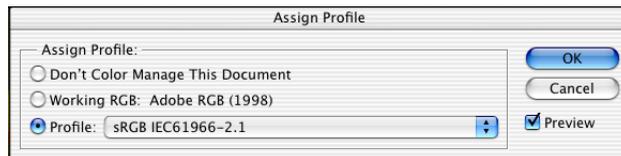
- Open the photo you want to print.
- If you see the message shown below, select **Use the embedded profile (instead of the working space)** option and click **OK**. It is generally best to use the embedded profile.



- If you see the message shown below, select **Assign working RGB: Adobe RGB (1998)** and click **OK**.



- When your image appears, evaluate the color balance and contrast as displayed on your monitor. If they need improvement, select **Image > Mode > Assign Profile**.



Select one of the following as the Profile setting:

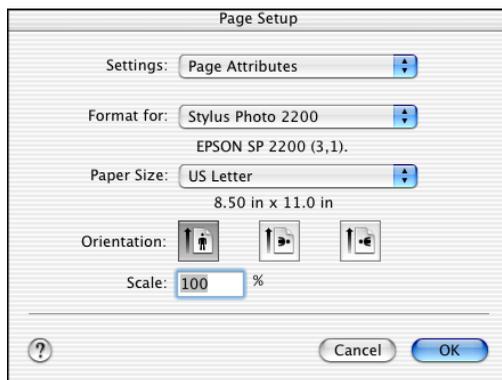
- A different RGB working space, such as **ColorMatch RGB** or **sRGB IEC61966-2.1**
- A scanner profile for your scanner
- A camera profile for your digital camera

Also click the **Preview** box so you can see the effects of your profile choice on the screen.

Note: Assigning a profile to the image doesn't alter the image data, only the interpretation of the data by your software and how it appears on your monitor and in a printout. This is the best way to improve the color balance and contrast in your image.

Selecting Your Print Settings

1. Select **File > Page Setup**. You see this window:



2. Select your printer from the **Format for** menu.
3. Select the size of the paper you loaded as the **Paper Size** setting.
4. Select your image orientation:  (portrait),  (landscape left facing), or  (landscape right facing).
5. Click **OK**.

6. Select File > Print with Preview. You see this window:



7. Click Show More Options, then select Color Management. Additional options appear:



8. Under Print Space: Profile, select a profile for your printer and the paper you'll use for the print.

9. As the Print Space: Intent setting, select Relative Colorimetric.

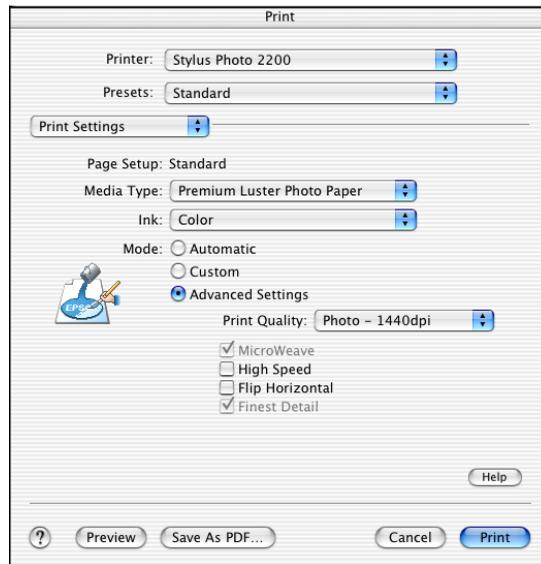
Note: If your image contains very saturated colors, select **Perceptual** instead. This reduces the color saturation so that the colors fit within the printer's color gamut.

10. Select the Use Black Point Compensation checkbox.

Printing Your Color-Managed Photo

1. Click the Print button.
2. Select your printer from the Printer menu.

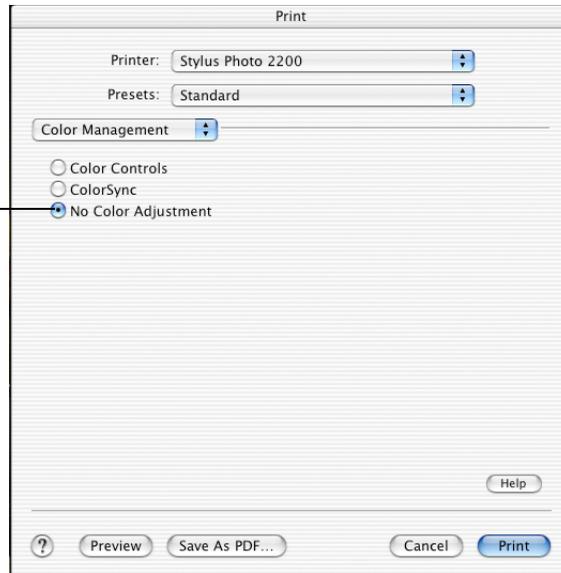
Note: Always select the exact same setting as the **Printer** option in the Print window and the **Format for** option on the Page Setup windows. If the settings are different you may get unexected results.
3. Select **Print Settings** from the pull-down menu.
4. Select the Media Type setting for the paper you'll use for the print.
5. Click the **Advanced Settings** button.
6. Select the **Print Quality** option that will give you the level of quality you want in your print.
7. Turn **off** the High Speed and Edge Smoothing options, if they are available.



8. Select **Color Management** from the pull-down menu.

IMPORTANT!

Select **No Color Adjustment**



9. Select **No Color Adjustment**.

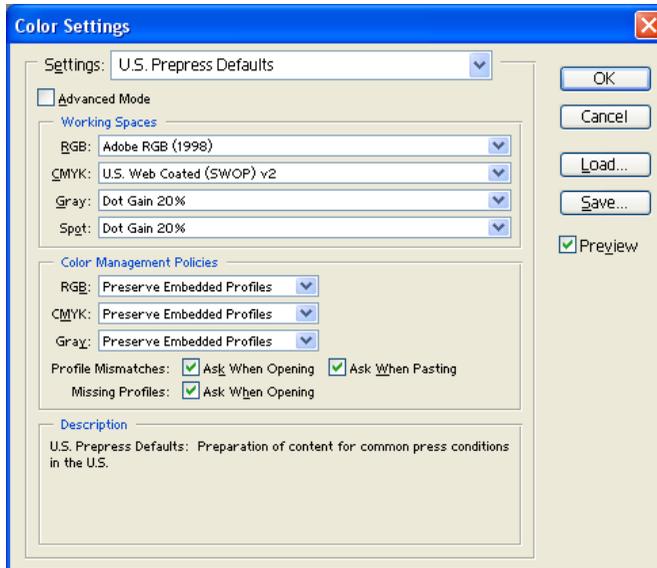
Note: Make sure that you select **No Color Adjustment**. If you don't, the printer driver will apply additional correction to the image data, producing inaccurate results.

10. Click **Print** to print your photo.

Windows

Opening Your Image

1. Open Adobe Photoshop.
2. Select Edit > Color Settings.

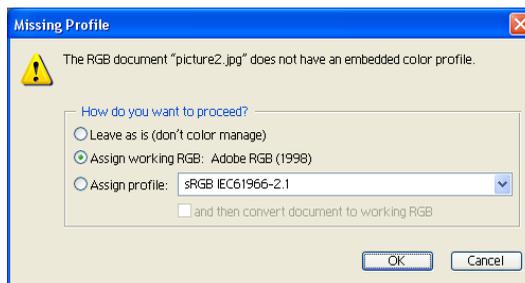


3. Select U.S. Prepress Defaults from the Settings pull-down menu. This sets Adobe RGB (1998) as the RGB working space and activates warning messages for profile mismatches and missing profiles.
4. Click OK.
5. Open the photo you want to print.

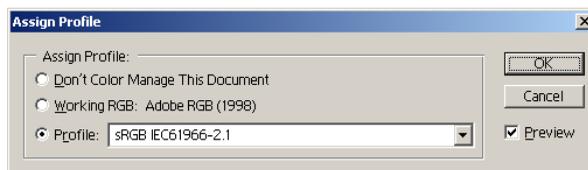
6. If you see the message shown below, select **Use the embedded profile (instead of the working space)** option and click **OK**. It is generally best to use the embedded profile.



7. If you see the message shown below, select **Assign working RGB: Adobe RGB (1998)** and click **OK**.



8. When your image appears, evaluate the color balance and contrast as displayed on your monitor. If they need improvement, select **Image > Mode > Assign Profile**.



Select one of the following as the Profile setting:

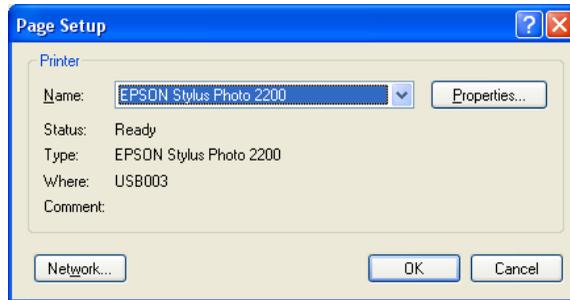
- A different RGB working space, such as **ColorMatch RGB** or **sRGB IEC61966-2.1**
- A scanner profile for your scanner
- A camera profile for your digital camera

Also click the **Preview** box so you can see the effects of your profile choice on the screen.

Note: Assigning a profile to the image doesn't alter the image data, only the interpretation of the data by your software and how it appears on your monitor and in a printout. This is the best way to improve the color balance and contrast in your image.

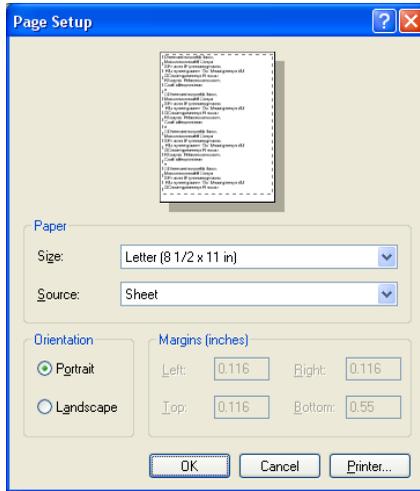
Selecting Your Print Settings

1. Select **File > Page Setup**.
2. Click the **Printer** button.

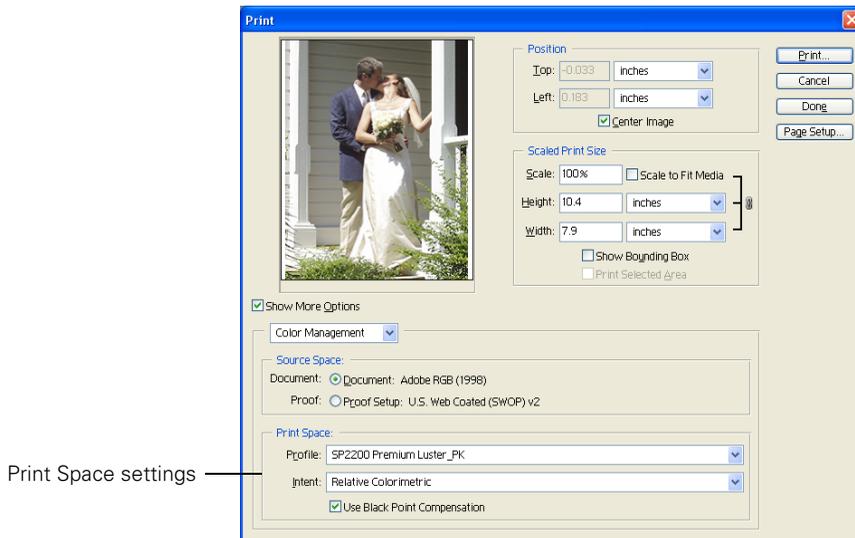


3. Make sure the correct printer is selected, then click **OK**.

4. Select the size of your paper as the **Size** setting.



5. Select Portrait or Landscape for the orientation of your image.
6. Click OK.
7. Select File > Print with Preview.
8. Click Show More Options, then select Color Management from the pull-down menu. Additional options appear:



9. Under Print Space: Profile, select a profile for your printer and the paper you'll use for the print.

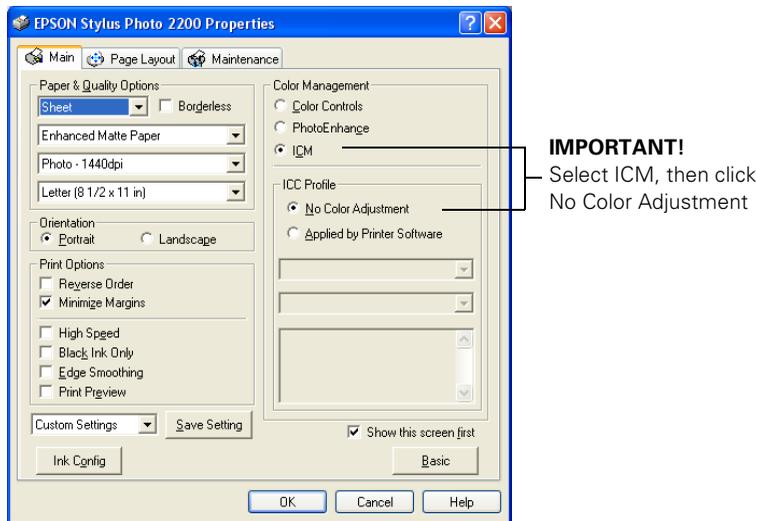
10. As the Print Space: Intent setting, select **Relative Colorimetric**.

Note: If your image contains very saturated colors, select **Perceptual** instead. This reduces the color saturation so that the colors fit within the printer's color gamut.

11. Select the **Use Black Point Compensation** checkbox.

Printing Your Color-Managed Photo

1. Click the **Print** button.
2. Make sure your printer is selected, and click the **Properties** button.
3. Click the **Advanced** button.
4. Select the paper type setting for the paper you'll use for the print, then select the correct resolution setting.



5. Turn **off** the High Speed and Edge Smoothing options, if they are available.

6. Click the **ICM** button under Color Management.

7. Click the **No Color Adjustment** button.

Note: Make sure that you select **No Color Adjustment**. If you don't, the printer driver will apply additional correction to the image data, producing inaccurate results.

8. Click OK.
9. Click OK to print.

Solving Color Management Problems

If you selected the wrong combination of source profile, printer profile, and color management settings, you'll get unexpected results. Try these solutions:

- If your printed image is darker than expected and has a strong green cast, you probably turned off color management in both Photoshop and the Epson printer driver.

Return to the Print with Preview instructions for Adobe Photoshop (for instructions, click [Mac OS X](#) or [Windows](#)). Make sure the Source Space - Document option is *not* set to **Untagged RGB**. Also make sure you selected the correct profile for your printer in the Print Space - Profile pull-down menu.

- If your printed image is lighter than expected and has a strong red cast, you probably turned on color management in both Photoshop and the Epson printer driver.

Return to the printer software instructions for [Mac OS X](#) or [Windows](#). Make sure to select **No Color Adjustment** in the printer driver Advanced screen or Color Management menu to turn off color management in your Epson printer driver.

Printing a Custom Profile Test Target

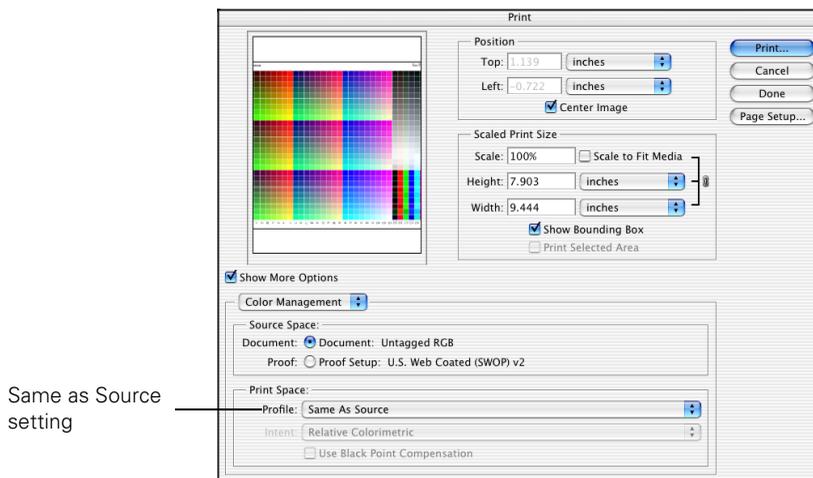
Follow the steps in this section to create and print individual custom profile test targets for each paper type you plan to print on.

When you're ready to print the test target, follow the steps for your operating system.

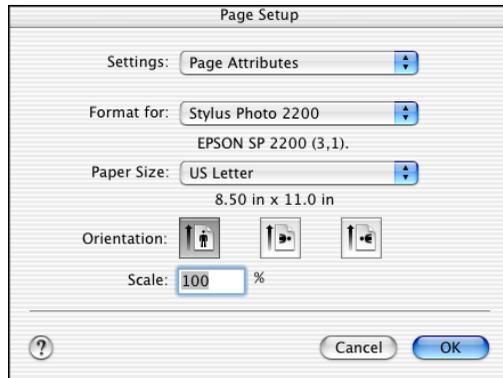
- [Macintosh OS X](#)
- [Windows](#)

Macintosh OS X

1. Open Adobe Photoshop and open the profile target file provided by your profile-building software manufacturer.
2. If you see a missing profile screen, select **Leave as is (don't color manage)**.
3. Select **File > Print with Preview**.
4. In the Print window, click the **Show More Options** checkbox, then choose **Color Management** in the drop-down menu.
5. Select **Same as Source** as the Print Space: Profile setting.



6. Click the Page Setup button.



7. Select your printer from the Format for pull-down menu.

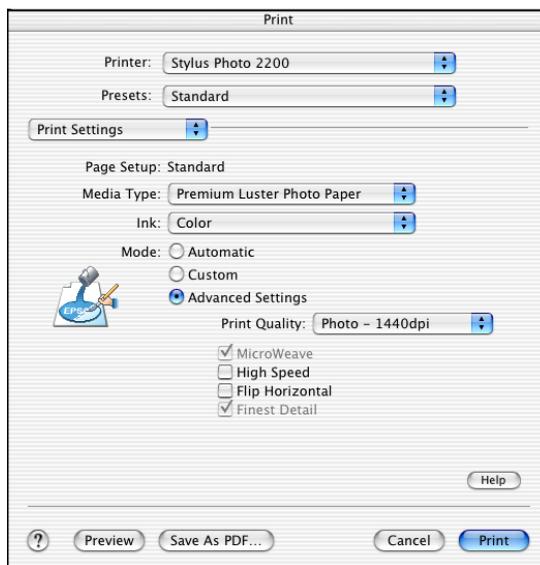
8. Select the size of the paper you loaded as the Paper Size setting.

9. Select your image orientation:  (portrait),  (landscape left facing), or .

10. Click OK.

11. Click the Print button.

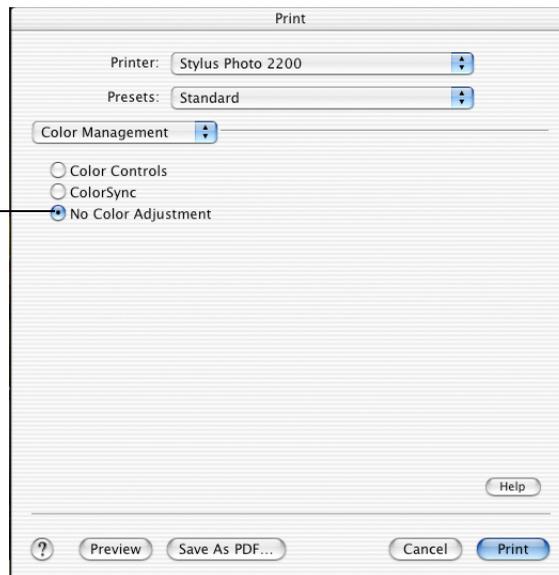
12. Select your printer from the Printer menu.



Note: Always select the exact same setting as the **Printer** option in the Print window and the **Format for** option on the Page Setup windows. If the settings are different you may get unexpected results.

13. Select **Print Settings** from the pull-down menu.
14. Select the Media Type setting for the paper you loaded.
15. Click the **Advanced Settings** button.
16. Select **Photo - 1440dpi** as the Print Quality setting, though you can select a lower or higher quality setting.
17. Turn *off* the High Speed and Edge Smoothing options, if they are available.
18. Select **Color Management** from the pull-down menu.
19. Click **No Color Adjustment**.

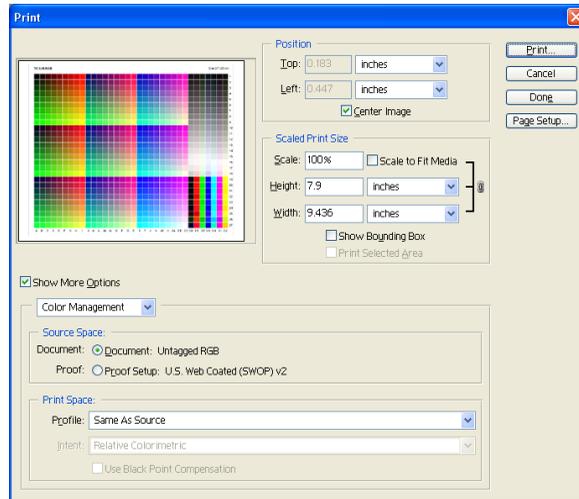
IMPORTANT!
Select No Color
Adjustment



20. Click **Print** to print your test target.
21. Repeat these steps to print a test target for each paper type you plan to print on.

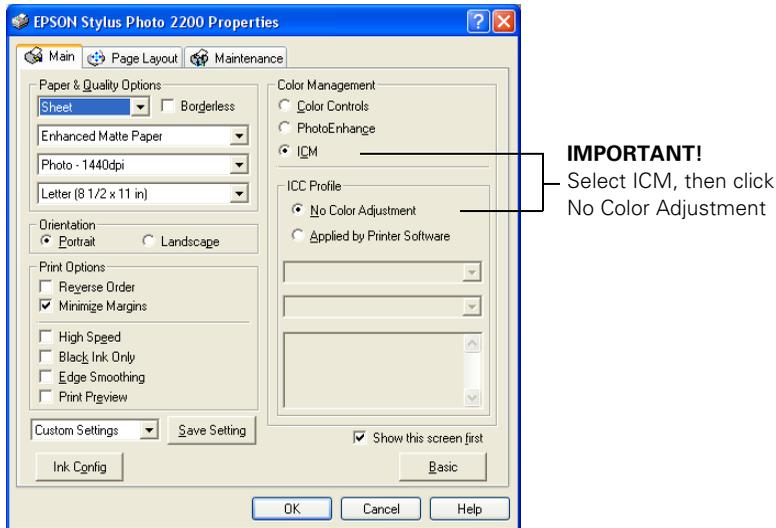
Windows

1. Open Adobe Photoshop and open the profile target file.
2. If you see a missing profile screen, select **Leave as is (don't color manage)**.
3. Select **File > Print with Preview**.



4. In the Print window, click the **Show More Options** checkbox, then choose **Color Management** in the drop-down menu.
5. Select **Same as Source** as the Print Space: Profile setting.
6. Click the **Print** button.
7. Click the **Properties** button.
8. Click the **Advanced** button.

9. Select the paper type setting for the paper you'll use for the print, then select the correct resolution setting.



10. Turn **off** the High Speed and Edge Smoothing options, if they are available.
11. Click the ICM button under Color Management.
12. Click the No Color Adjustment button.
13. Click OK.
14. Click OK to print.
15. Repeat these steps to print a test target for each paper type you plan to print on.

Creating a Custom Profile

If you're creating a custom profile for your printer, follow the instructions provided with your profile-building software (such as Monaco Systems MonacoEZcolor™ or GretagMacbeth® ProfileMaker™) to create your custom profile using the test target you printed. Once you create the profile, be sure to place it in the correct folder on your computer, as recommended by Microsoft® or Apple®.