# Printing With a Color Profile version Mar 2012

To print an image using a color ICC profile, follow the steps in the appropriate section depending on your operating system.
To install profiles on Windows, right click on the profiles and select 'Install Profile'.
To install profiles on Mac, drag and drop the profiles to the Library> ColorSync> profiles folder.
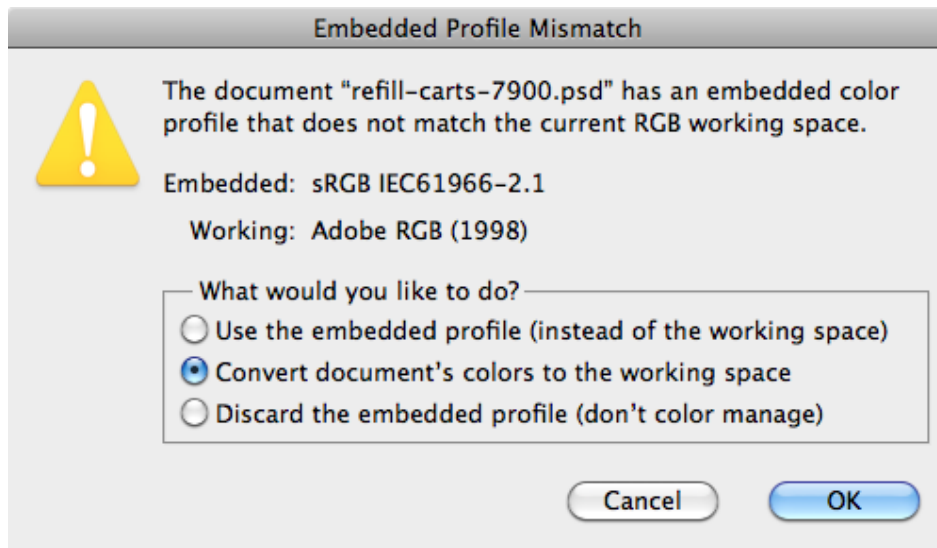
Macintosh OSX and Windows (With Photoshop CS5)
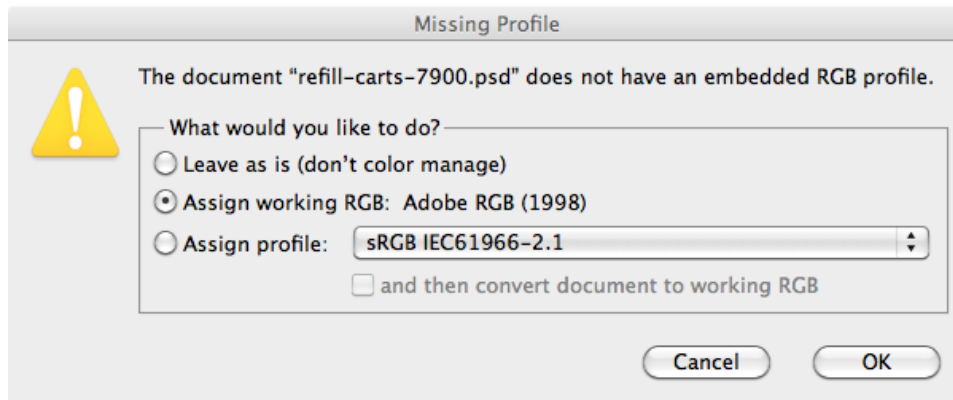
Opening an Image

1.   Open Adobe Photoshop CS5

2.   Select Edit> Color Settings as shown below
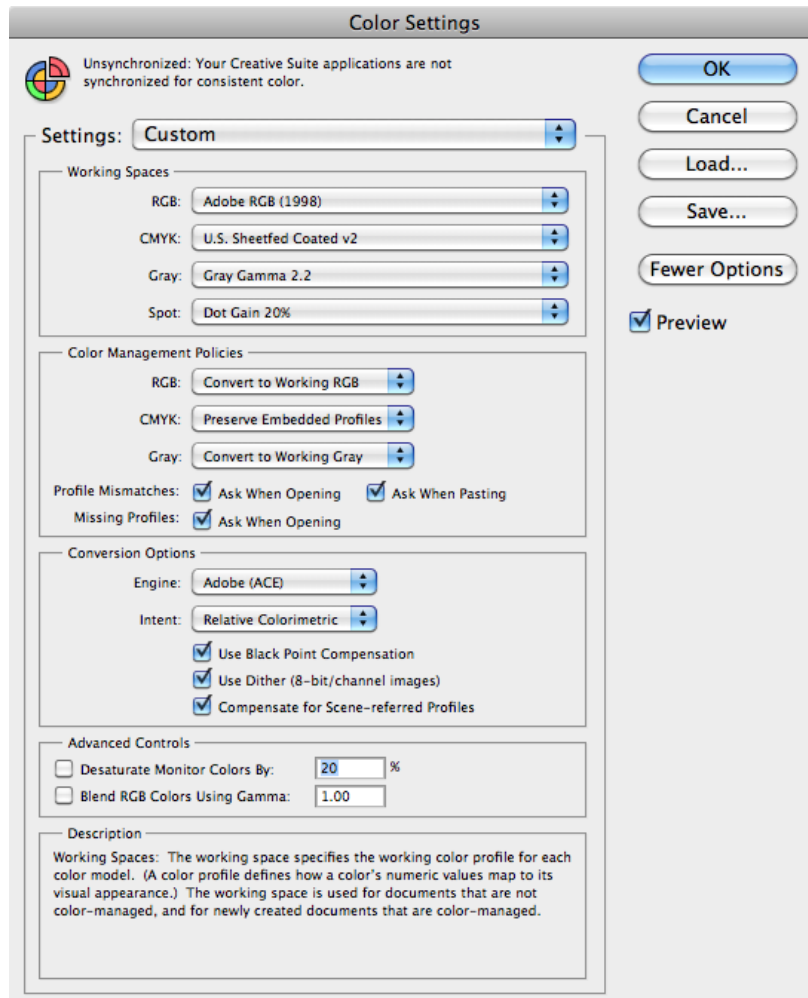
3.   Select the settings as shown above. We use Gray Gamma 2.2 for Piezography, and your needs may be different. We recommend Adobe RGB 1998 for inkjet printing.

4.   Click OK to close the Color Settings window

5.   Open a photo to print

6.   If the message "Embedded Profile Mismatch" shown below appears, select "Convert document's colors to the working space and hit OK
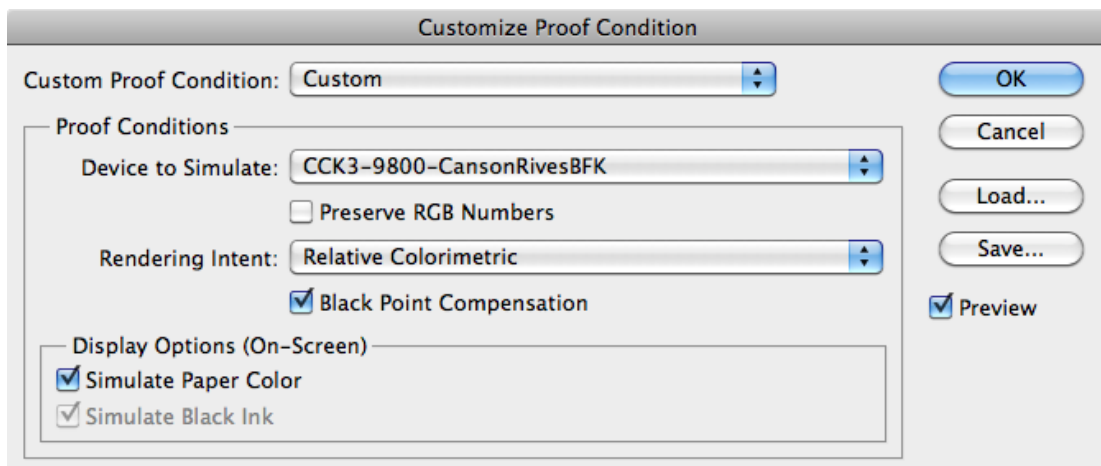
Embedded Profile Mismatch

⚠ The document "refill-carts-7900.psd" has an embedded color profile that does not match the current RGB working space.

Embedded: sRGB IEC61966-2.1

Working: Adobe RGB (1998)

What would you like to do?
- ○ Use the embedded profile (instead of the working space)
- ⦿ Convert document's colors to the working space
- ○ Discard the embedded profile (don't color manage)

(Cancel) (OK)

7. If the message "Missing Profile" shown below appears, select "Assign working RGB: Adobe RGB (1998)" and hit OK

Missing Profile

⚠ The document "refill-carts-7900.psd" does not have an embedded RGB profile.

What would you like to do?
- ○ Leave as is (don't color manage)
- ⦿ Assign working RGB: Adobe RGB (1998)
- ○ Assign profile: sRGB IEC61966-2.1 ⬍
 - ☐ and then convert document to working RGB

(Cancel) (OK)

Selecting Your Print Settings

1. If you like, you can preview the image thru the profile by selecting View> Proof Setup> Custom. Select the printer profile in the Device to Simulate pull down list and Relative Colorimetric as the Rendering Intent and the black Point Compensation checked. If you simulate paper color and black ink, your on screen display will be closer to that of a print rather than the high contrast of the display. Check the Preview box as shown below to view the image thru the printer profile. When viewing on a calibrated monitor, Proof Setup will give you a close preview of the image printed thru the profile. You may need to get used to Soft Proof in order to understand its value. Your display has a huge dynamic range of 3.0 or greater. Super bright and super dark! The Soft Proof is designed to reduce this to that of the Print which has a dynamic range considerably lower.

Customize Proof Condition

Custom Proof Condition: Custom ⬍

Proof Conditions
Device to Simulate: CCK3-9800-CansonRivesBFK ⬍
☐ Preserve RGB Numbers
Rendering Intent: Relative Colorimetric ⬍
☑ Black Point Compensation

Display Options (On-Screen)
☑ Simulate Paper Color
☑ Simulate Black Ink

(OK) (Cancel) (Load...) (Save...) ☑ Preview

2. Select File> Print

3. You can print with or without the Soft Proof, but you can only print one way using the Document source rather than the Proof source. With the pull down list on the upper right hand side of the window set to Color Management, check Document. Select Photoshop Manages Color in the Color Handling pull down list and select the correct printer ICC profile. Select Relative Colorimetric as the Rendering Intent with Black Point Compensation.
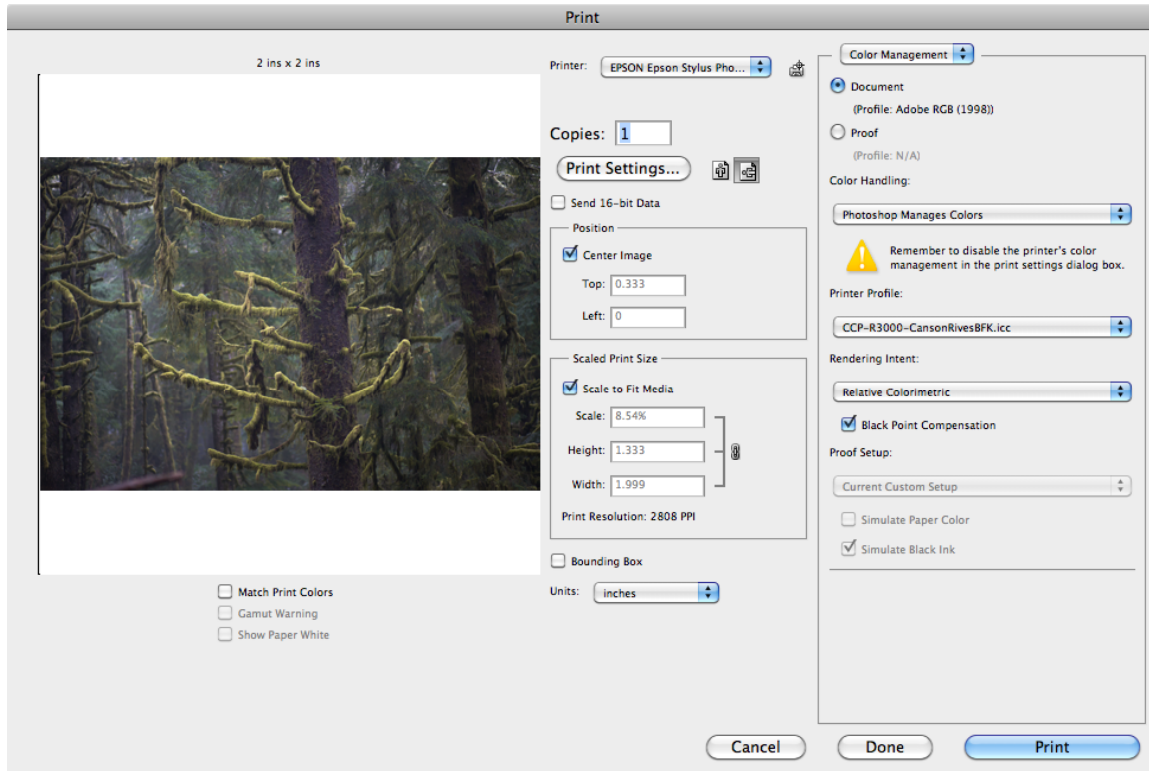
4. Select your printer model in the Printer pull down list. Push the Print Settings button to go to the Epson Print window. Select the Copies & Pages you desire, then select Basic Settings in the pull down list as shown below.
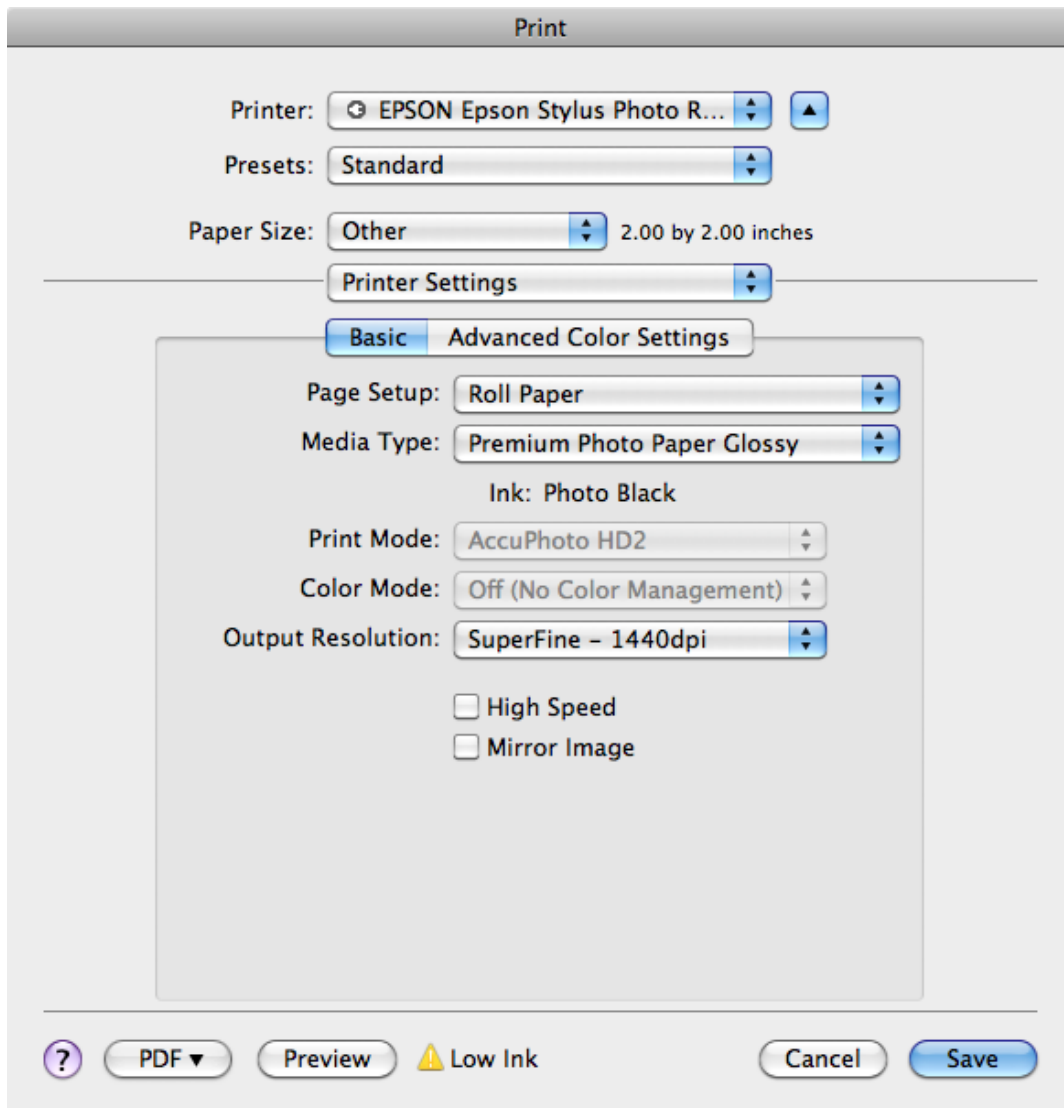
5. Select Output resolution of at least 1440dpi setting for the best print quality. Depending on what printer model and paper you are using, select the appropriate Paper/Media Type setting as per the Printer Specific Media Type Settings page at the end of this document. The Media Setting is critical. You must use ours. Each Media Setting controls the output of ink densities. Our Porfiles were made with only one of two possible settings and they may not seem logical to you. If you choose a Media Setting that is not what we used to make the ICC profile, your color will be off! For the best quality, do NOT check the High Seed box.

6. The Color Mode should be "Off" because Photoshop is managing the color conversion.

7. Click Save and return to Photoshop's Print Window and print your image.
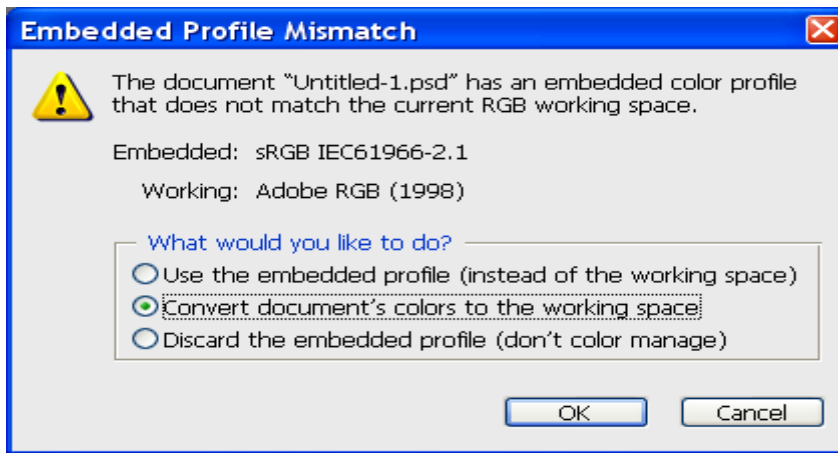
Windows XP (With Photoshop CS3)

Opening an Image

1. Open Adobe Photoshop CS3

2. Select Edit> Color Settings
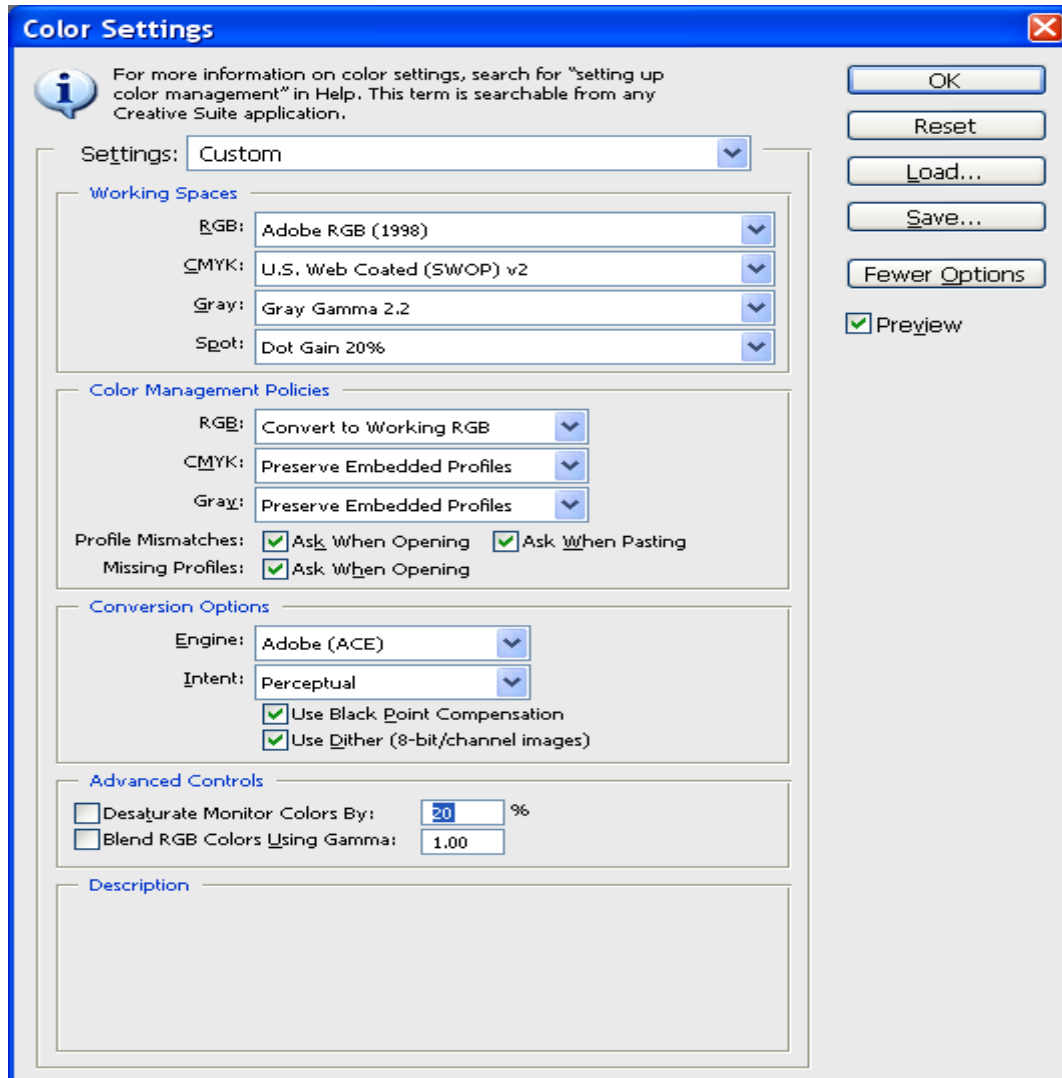
3. Select the settings as shown above

4. Click OK to close the Color Settings window

5. Open an image that you want to print

6. If the message "Embedded Profile Mismatch" shown below appears, select "Convert document's colors to the working space" and hit OK
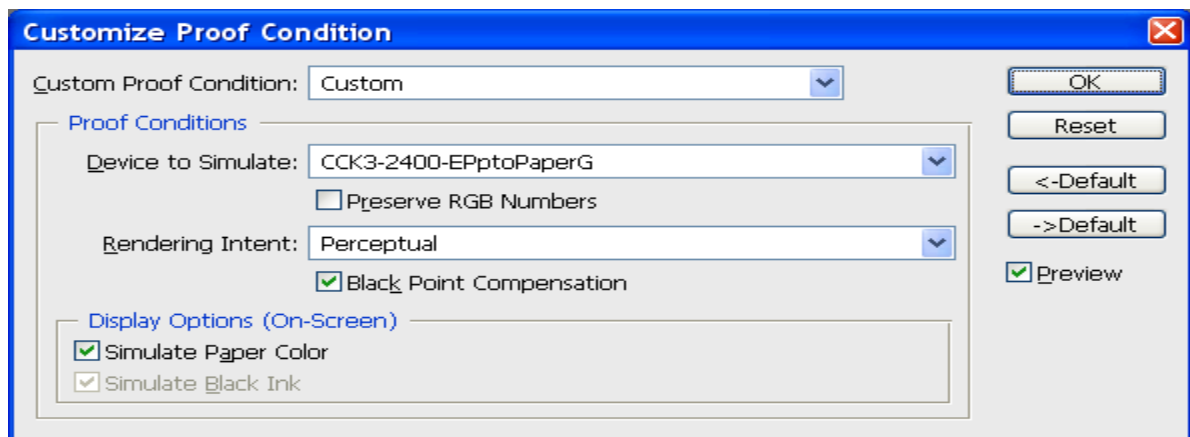
7. If the message "Missing Profile" shown below appears, select "Assign working RGB: Adobe RGB (1998)" and hit OK
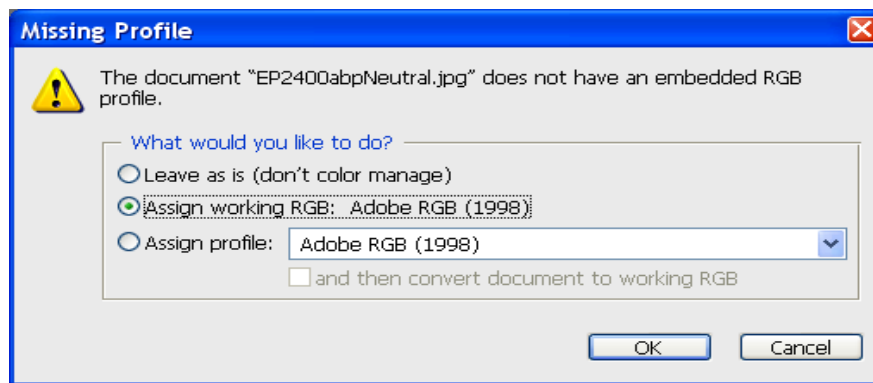

Selecting Your Print Settings

1. You can preview the image thru the profile by selecting View> Proof Setup> Custom. Select the printer profile in the Device to Simulate pull down list and Perceptual as the Rendering Intent. With Perceptual Intent, it makes no difference in the output if the Black Point Compensation box is checked or not. Check the Preview box as shown below to view the image thru the printer profile. When viewing on a calibrated monitor, Proof Setup will give you a close preview of the image printed thru the profile.


2. Select File> Print

3. With the pull down list on the upper right hand side of the window set to Color Management, check Proof, which will list the profile name selected in the Proof Setup window in step 1 above. Select No Color Management in the Color Handling pull down list and Current Custom Setup in the Proof Setup pull down list as shown below. Do NOT check the Simulate Paper Color box.
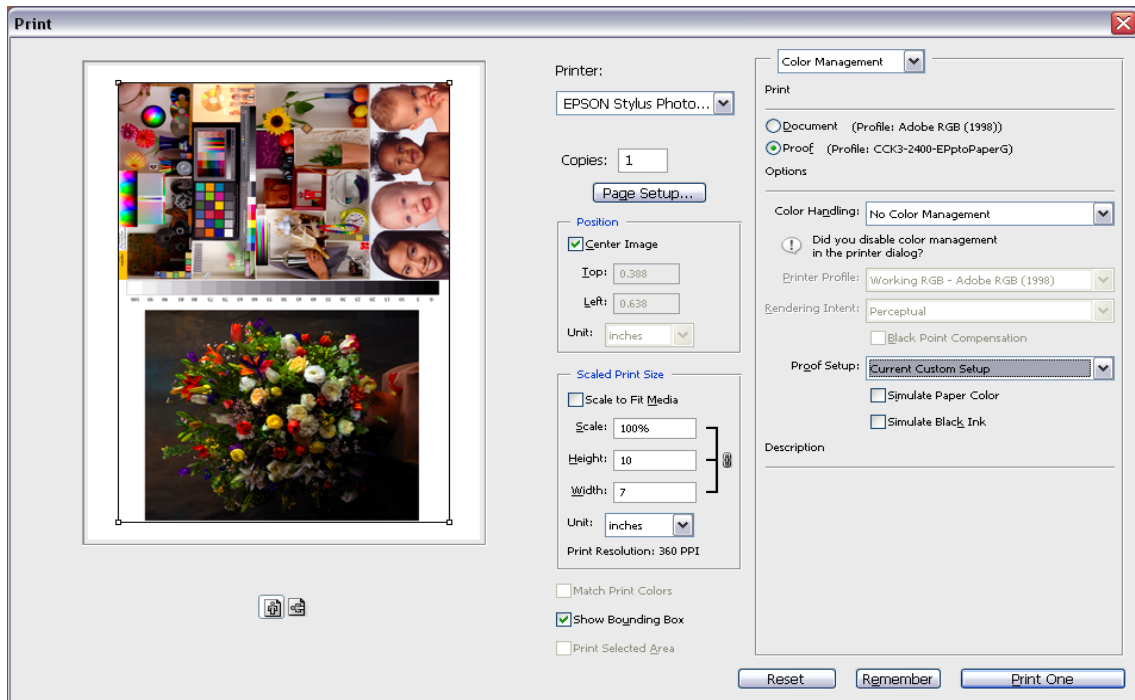

4. Select your printer model in the Printer pull down list. Now push the Page Setup button to go to the Epson print windows.

5. Push the Advanced button for the Epson Printer Properties window shown below.
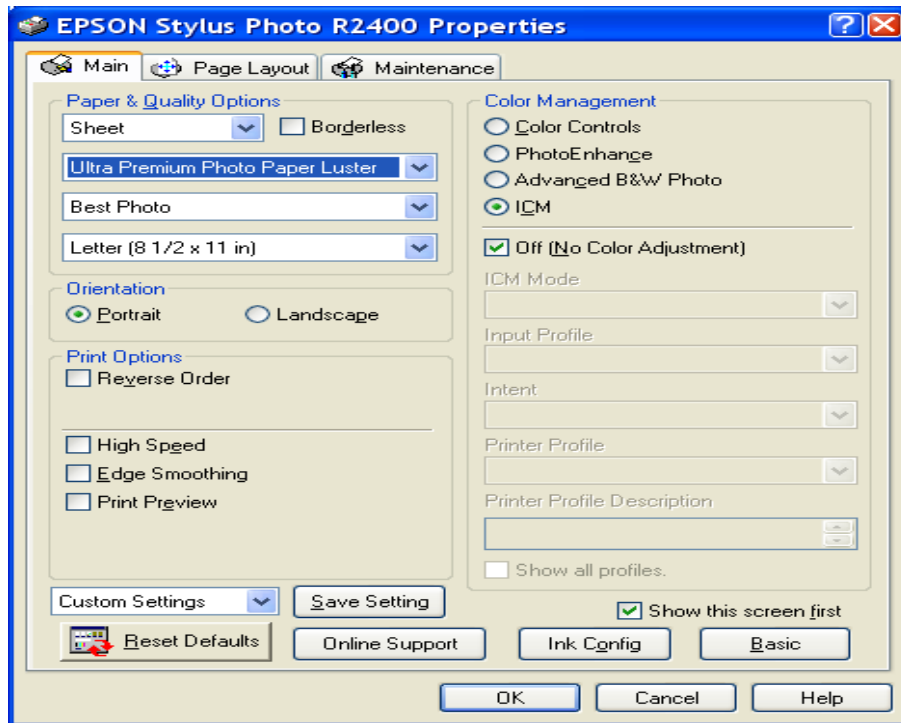
6. In the Paper & Quality Options section, select either Sheet or Roll and the paper size you are using. Select Best Photo for the best print quality. Depending on what printer model and paper you are using, select the appropriate Paper Type setting.
For the best quality, do NOT check the High Seed box. In the Color Management section, select ICM: Off (No Color Adjustment) as shown above.

7. Push OK, which will bring you to the print window shown below. Push Print to print.
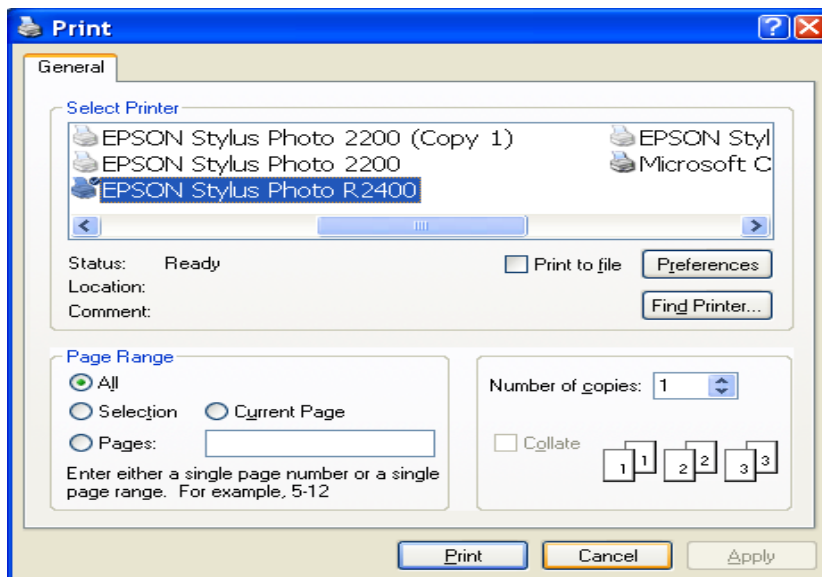
Windows XP (With Photoshop CS2)

Photoshop CS2 is the same as CS3 described above, except for the first print window.

1. Select File> Print With Preview. With the pull down list under the image preview set to Color Management, check Proof, which will list the name of the profile selected in Proof Setup Window, Color Handling: No Color Management and Proof Setup Preset: Current Custom Setup. Do NOT check the Simulate Paper Color box.

2. Push the Print button then follow steps 4-7 in the Windows XP/Photoshop CS3 instructions above to select Print Settings and Color Management, now push Print to print the image.

Printer Specific Media Type Settings

R2400~ Glossy papers: Ultra Premium Photo Paper Luster
      Non-glossy papers: Ultra Premium Presentation Matte

2200~ Glossy papers: Ultra Premium Photo Paper Luster
      Non-glossy papers: Enhanced Matte
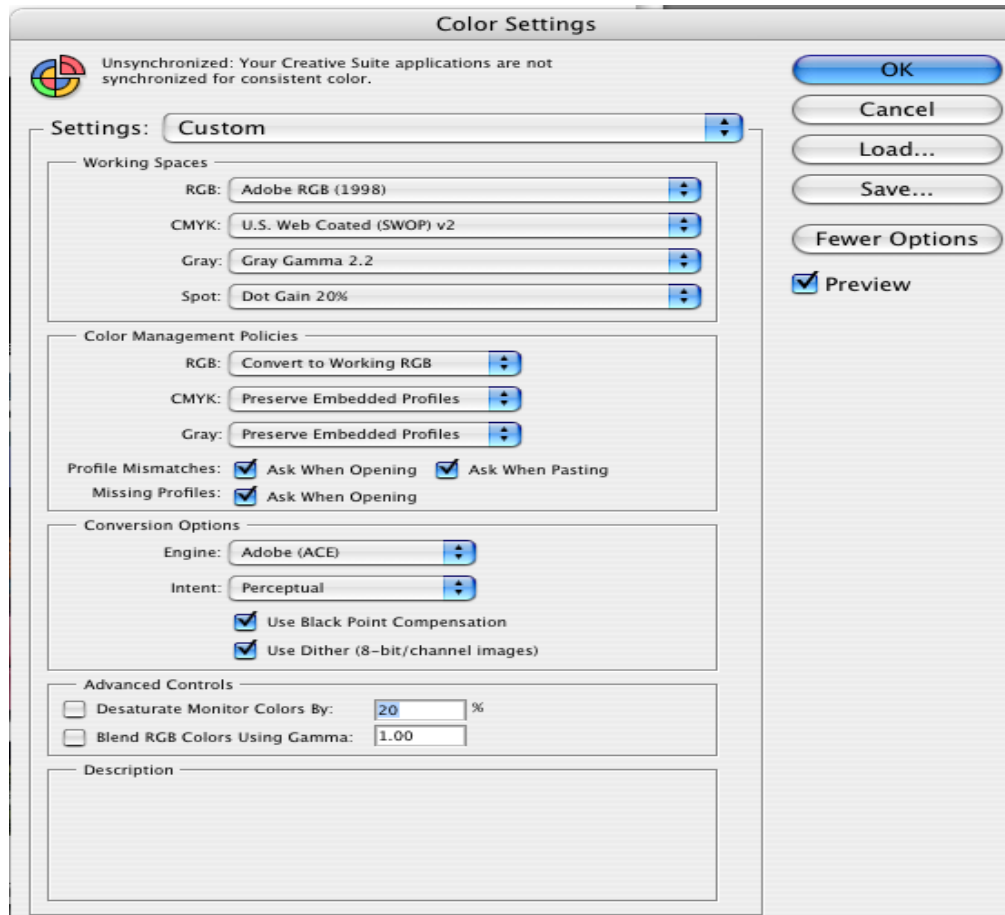
1400~ Glossy papers: Ultra Premium Photo Paper Luster
      Non-glossy papers: Ultra Premium Presentation Matte

3800~ Glossy papers: Ultra Premium Photo Paper Luster
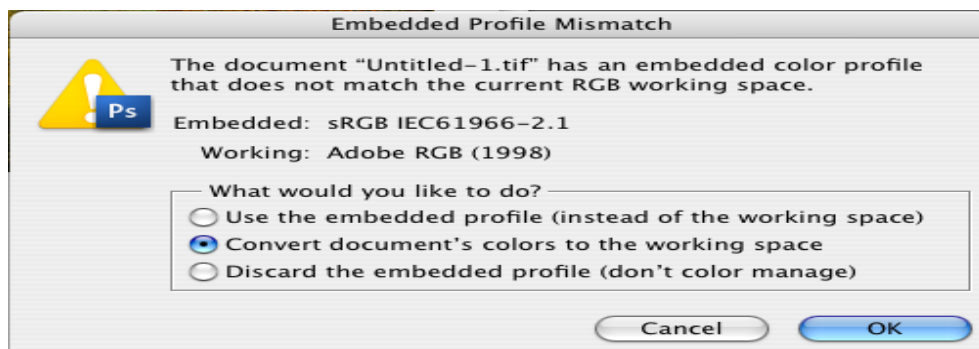   Non-glossy papers: Enhanced Matte

Macintosh OSX (With Photoshop CS3)
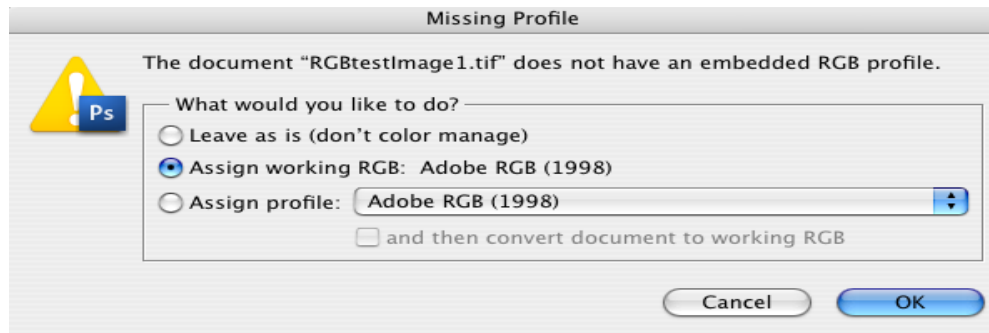
Opening an Image

8. Open Adobe Photoshop CS3

9. Select Edit> Color Settings as shown below

10. Select the settings as shown above.

11. Click OK to close the Color Settings window

12. Open a photo to print

13. If the message "Embedded Profile Mismatch" shown below appears, select "Convert document's colors to the working space and hit OK
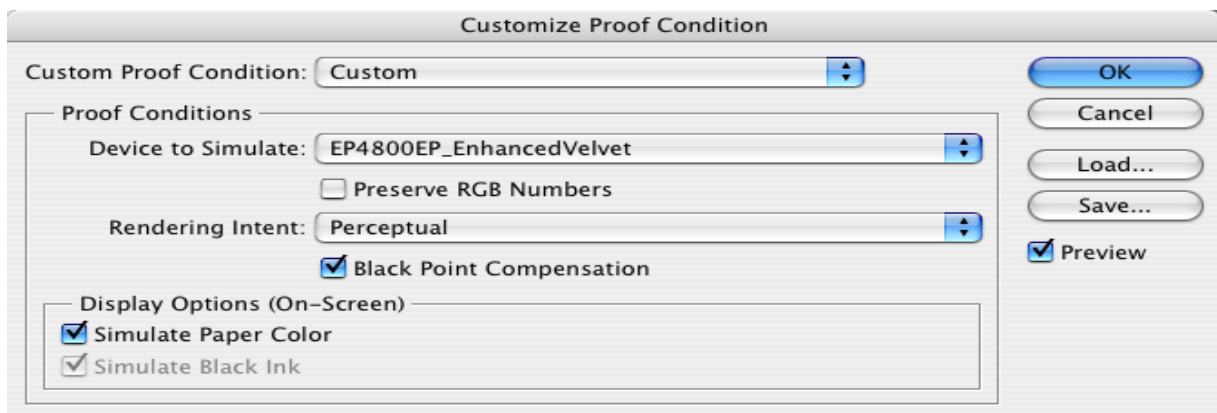
14. If the message "Missing Profile" shown below appears, select "Assign working RGB: Adobe RGB (1998)" and hit OK
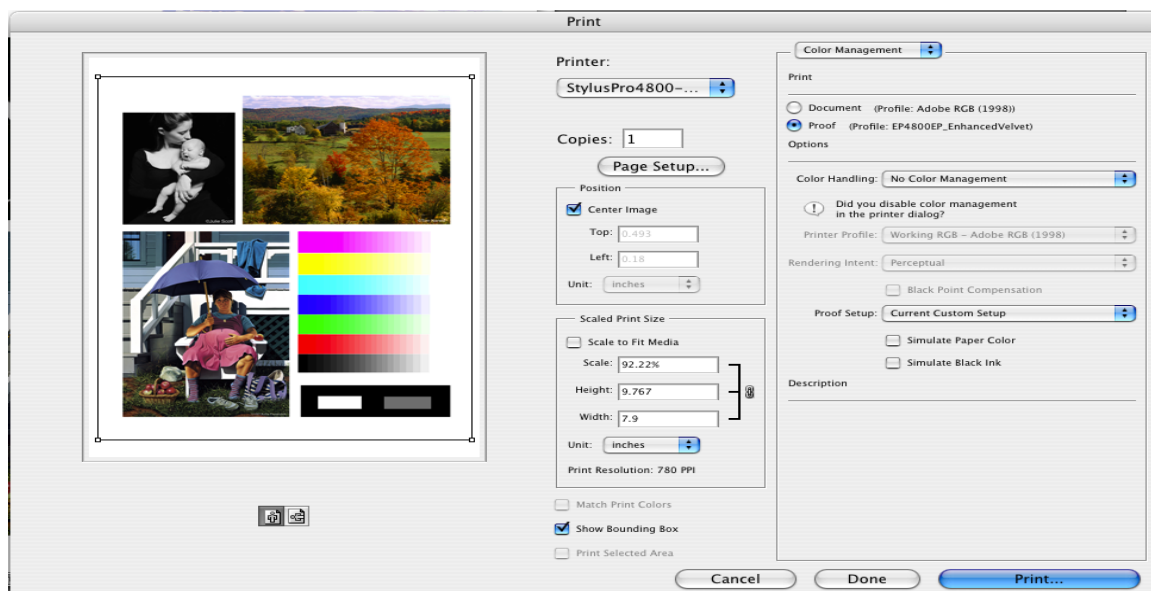

Selecting Your Print Settings

8. You can preview the image thru the profile by selecting View> Proof Setup> Custom. Select the printer profile in the Device to Simulate pull down list and Perceptual as the Rendering Intent. With Perceptual Intent, it makes no difference in the output if the Black Point Compensation box is checked or not. Check the Preview box as shown below to view the image thru the printer profile. When viewing on a calibrated monitor, Proof Setup will give you a close preview of the image printed thru the profile.

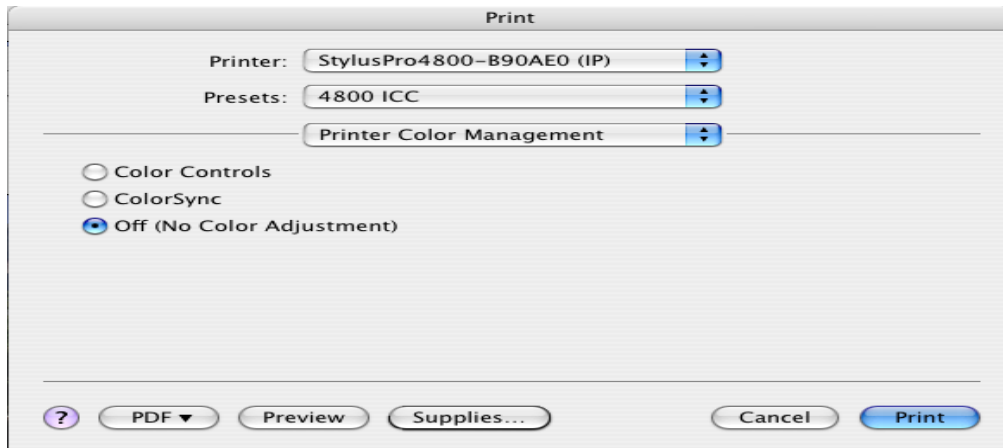**9.** Select File> Print

10. With the pull down list on the upper right hand side of the window set to Color Management, check Proof, which will list the profile name selected in the Proof Setup window in step 1 above. Select No Color Management in the Color Handling pull down list and Current Custom Setup in the Proof Setup pull down list as shown above. Do NOT check the Simulate Paper Color box.

11. Select your printer model in the Printer pull down list. Push the Print button to go to the Epson Print window. Select the Copies & Pages you desire, then select Print Settings in the pull down list as shown below.
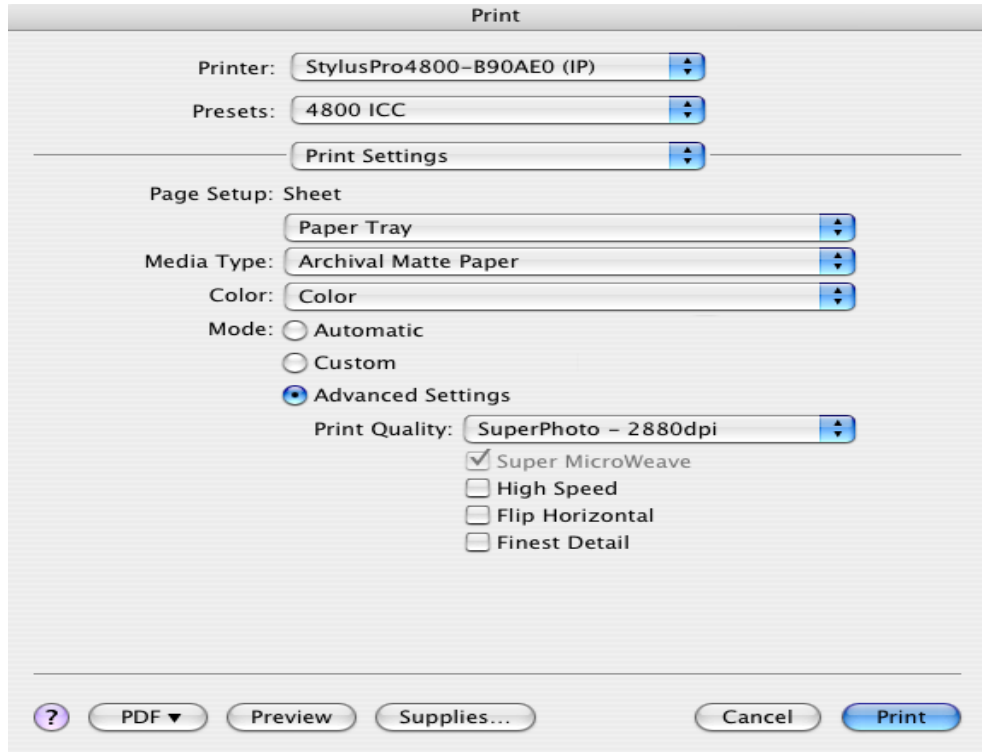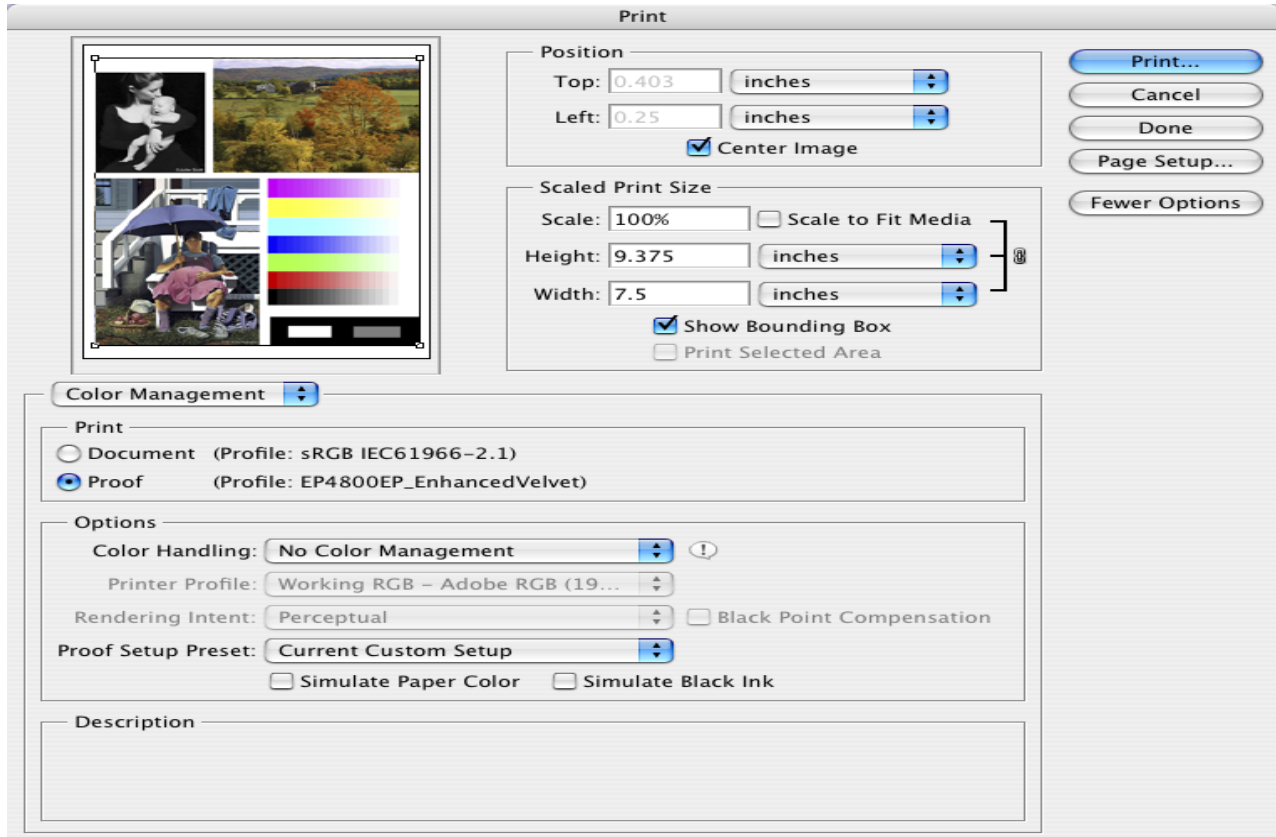

12. Select Best Photo or 2880dpi for the best print quality. Depending on what printer model and paper you are using, select the appropriate Paper/Media Type setting. For the best quality, do NOT check the High Seed box.

13. Select Printer Color Management now in the pull down list as shown below. Select Off (No Color Adjustment) then push the Print button to print the image.

Macintosh OSX (With Photoshop CS2)

Photoshop CS2 is the same as CS3 described above, except for the first print window.

1. Select File> Print With Preview as shown below. With the pull down list under the image preview set to Color Management, check Proof, which will list the name of the profile selected in Proof Setup Window, Color Handling: No Color Management and Proof Setup Preset: Current Custom Setup as shown below. Do NOT check the Simulate Paper Color box.

Print

Position
Top: 0.403   inches
Left: 0.25   inches
☑ Center Image

Scaled Print Size
Scale: 100%   ☐ Scale to Fit Media
Height: 9.375   inches
Width: 7.5   inches
☑ Show Bounding Box
☐ Print Selected Area

Print... | Cancel | Done | Page Setup... | Fewer Options

Color Management ▼

Print
○ Document (Profile: sRGB IEC61966–2.1)
● Proof   (Profile: EP4800EP_EnhancedVelvet)

Options
Color Handling: No Color Management ⚠
Printer Profile: Working RGB – Adobe RGB (19...
Rendering Intent: Perceptual   ☐ Black Point Compensation
Proof Setup Preset: Current Custom Setup
☐ Simulate Paper Color   ☐ Simulate Black Ink

Description

3. Push the Print button then follow steps 4-6 in the Mac OSX/Photoshop CS3 instructions above to select Print Settings and Color Management, now push Print to print the image.

Solving Color Management Problems

If you select the wrong combination of source profile, printer profile and color management settings, you'll get unexpected results.

• If the printed image is darker than expected with a strong green cast, color management has probably been turned off in both Photoshop and Epson. Return to the instructions depending on your operating system. In the Print window, make sure the Document is *not* Untagged RGB. Make sure the correct profile is selected in the profile pull down list for the printer, ink and paper combination you are using.

• If the printed image is lighter than expected with a strong red cast, color management has probably been selected in both the Photoshop and Epson print windows. Return to the instructions depending on your operating system. In the Print window, make sure the correct profile is selected and in the Epson print window make sure No Color Adjustment is selected.

• If the printed image is lacking a color and/or the colors are not accurate (ex: if the green is printing cyan that means the yellow is not printing). Print a nozzle check to make sure all ink positions are printing fully and the correct color. If a position is not printing, first check the level of ink in that position cartridge then second make sure the vent hole is not blocked.

Printer Specific Media Type Settings

Glossy papers: Ultra Premium Photo Paper Luster
Non-glossy papers: Ultra Premium Presentation Matte aka/ Enhanced Matte