



Digital Photo Imaging Photoshop/PC NT Printing

Photoshop Procedures for Epson Photo ink jet printers using the PC Platform

Produce accurate photographic prints from the Epson Photo 780, 820, 870, 2200, 2000P and other models using several types of Epson papers. Follow these exact steps in order to alleviate any potential problems with color casts and restricted tonal ranges.

Epson papers are the best media to use due to several problems encountered with certain types of papers not accepting inks properly. This leads to ink droplets that pool and dry on the surface rather than absorbing into the paper. The image will also appear low quality due to a loss in sharpness and detail. Kodak papers are notorious for this type of outcome.

Epson Photo Paper, Semi-Gloss, Archival Matte, Photo Luster, and Watercolor are all high-grade papers. The Archival Matte paper will preserve non-archival printer inks for a longer period of time (25 years), compared to the Photo Paper (7 years). For any other ink jet paper life expectancy information consult:

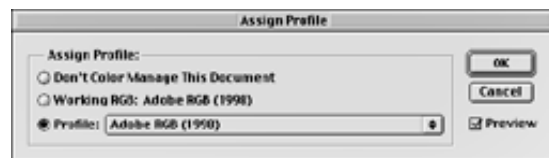
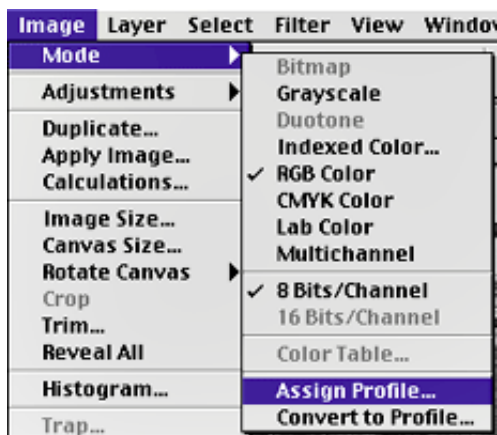
Taking Care of Your Epson Photographs

<http://wilhelm-research.com>

*Finalize your image document in Adobe Photoshop using the Unsharp Mask filter. Be sure to check the highlight and shadow areas for adequate detail. Any image area that registers at a value of 255 in the highlights will lack any printer detail. Detail will also be lost in shadow areas if the black point of the image registers at a value of 0.

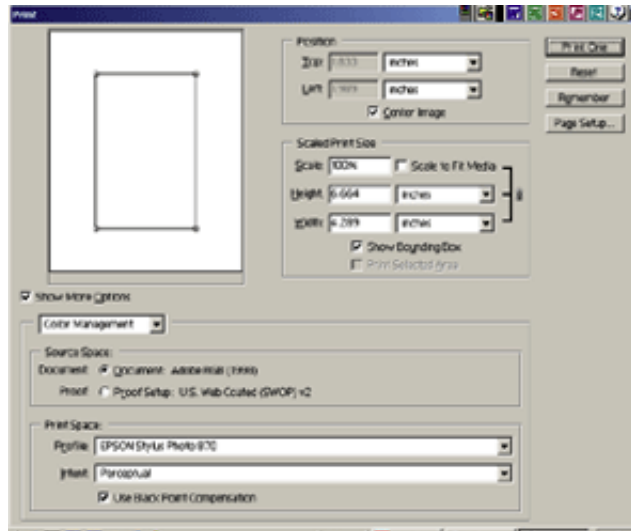
1. Standardize the color space of the document by embedding an ICC profile to the image. First, navigate to the **Image>Mode>Assign Profile** menu. In the **Assign Profile** window, select "**Adobe RGB (1998)**". This color profile is the widest gamut of color recognized in the industry.

* Toggle the Preview checkbox to determine if there is a significant color shift on the image due to any profile conversions. If so, it is possible that the image has been scanned and embedded with a pre-assigned profile that restricted its color space. In this case, it may be best to print from the already pre-assigned profile or attempt a rescan. To alleviate restriction of color space in the future, consult the scanner software preferences to ensure that the color space is set to Adobe RGB (1998).

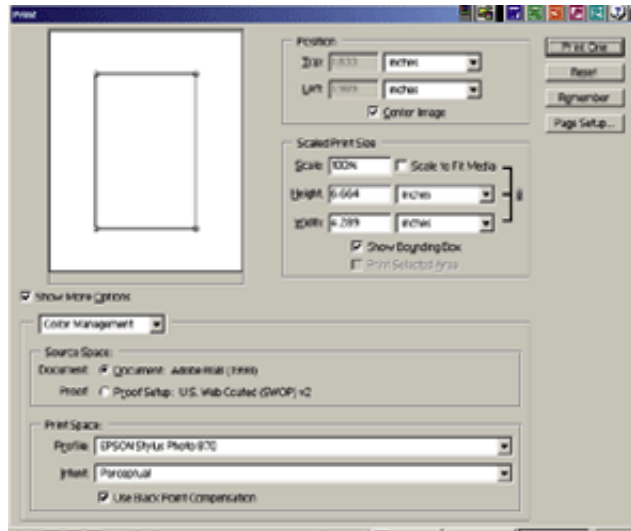
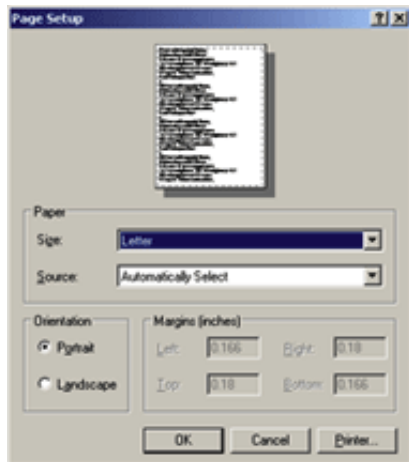


2. In Photoshop, go to the **File>Print with Preview** menu. In the Print Preview window, **Center Image** box and **Show More Options**. Choose **Color Management** and select the **Document** as the Source Space. In the Print Space, select a specific **Epson printer/paper profile** and set the Intent to **Relative Colorimetric** (select Printer Color Management for non-Epson papers). Click on **Page Setup**.

* The Document Source Space should read the ICC profile selected in Step 1.

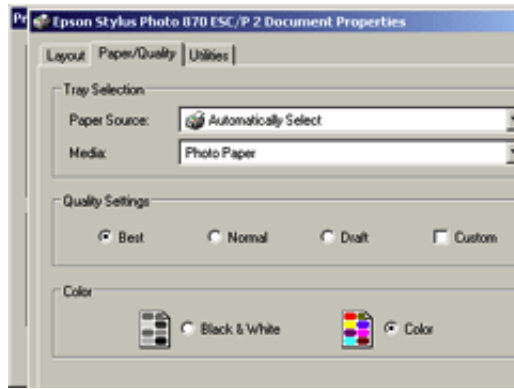
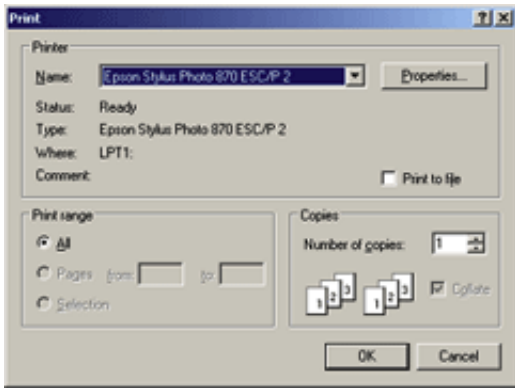


3. In the **Page Setup** window, choose the Paper Size (Letter 8 1/2 x 11") and set the Orientation of the image (Longer width = Landscape, Longer height = Portrait). Select **OK** and click **Print** in the next window.



4. In the **Print** window, click on **Properties** and choose the proper Media Type (ex. Photo Paper). Select the Color ink for all images (b/w, color). Next, in the **Custom** area choose **PhotoEnhance** and **Nature** (People for less saturated colors). Select **OK** in both windows to return to the Print window and go to Step 5.

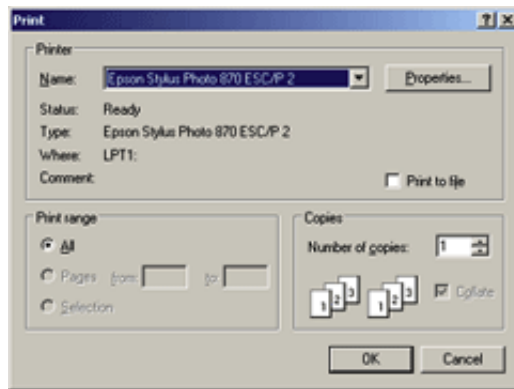
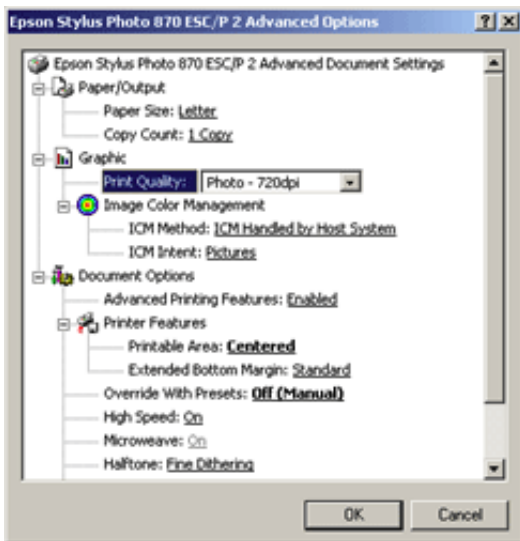
* Panel options will vary depending on Epson printer/software combination.



5. In the **Advanced Options** window, set the Print Quality to **720/1440dpi**. To center the image go to the Printable Area and choose **Centered**. When the settings are complete click **OK** in both windows to print.

* Panel options will vary depending on Epson printer/software combination.

** If any steps are missed, prints render a color cast due to multiple color conversions.



Note-

Fresh ink jet prints will take about 15 minutes to dry, and may appear slightly dark immediately after printing. Ink jet prints dry slightly up in density and will reveal crucial shadow detail once dry. This is the exact opposite of traditional photographic prints.

-Topics Of Relevance-

B/W Images

Certain color casts are detectable when printing b/w images with standard ink jet printers. This occurs because CMYK inks are used to reproduce and simulate black and white tones. Dedicated b/w piezography quadtone printers are a recent solution to eliminating similar problems of low quality and unwanted color detection. These specially formulated systems are only available as a dedicated conversion kit for several designated Epson printers. The quadtone process employs high-performance quad black inks with additional hardware and software to achieve a truer photographic result.

Metamerism

Metamerism is a color shift that is detectable when images are displayed under a variety of

lighting conditions. Printers that use pigment encounter more of a color shift than most standard dye-based ink jet printers. Final prints can take on color shifts ranging from a cool green to a warm magenta when displayed under a variety of light sources. The Epson 2000P uses pigment based archival color inks expected to last 200 years. A high precision piezography process weaves a fine web of detail by sending an electronic charge through specially designed quartz crystals that change shape and squirt microscopic droplets onto a paper medium. Giclée is defined as a fully archival piezography process that employs paper mediums such as watercolor and canvas for reproduction.

For other methods of printing B/W images using duotones and quadtones:

<http://www.luminous-landscape.com/tutorials/duotone.shtml>

For methods of printing Photoshop documents using a PC, consult the Photoshop Essays section at:

<http://computer-darkroom.co.uk/>

For more information on the Giclée process:

<http://www.digitalpainter.com/inkjetgiclee.htm>

For Epson printer descriptions and comparisons:

http://www.tssphoto.com/sp/dg/news/13_recommend.html

<http://www.epson.com>

[Photo 820](#)

[Photo 870/890/1270/1280](#)

[Photo 2200](#)

[Photo 2000P](#)

*© 2002-2006 by Tonal Range, L.L.C.. All Rights Reserved.
Copying of this material is strongly encouraged for the benefit of education.*