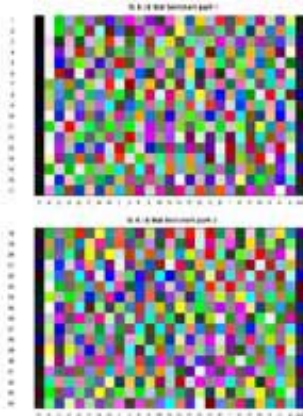# HERMITAGE Photo Services

ICC Printer Profiles

Preparation

These notes will help you to set up your image editing/printing application, and your printer, to print the test charts needed to create your profile.

As well as this document you should have the two TIFF images shown on the left. These are the test charts that you will print and send to us.

Before you print the charts, make sure that your printer is set up correctly. Use the maintenance utility for the printer to ensure that all the nozzles are working correctly and that they are properly aligned.

Remember that the purpose of a printer profile is to optimise the print quality for one printer, using one combination of print settings, one type of ink and one type of paper. If you change any of these then the profile will give you less than optimum results. If you use different papers you should use a unique profile for each.

It is essential that you print the test charts with all colour management turned off, both in your image editing software and in your printer. Follow this procedure carefully, consulting the relevant user manuals and Help files if you are not using the same software and hardware that are described here. In the following instructions, text shown in ***bold italic*** represents the wording you should see on your computer.

Adobe Color Printing Utility (ACPU)

We now recommend the use of the ACPU for printing the target files. This small application can be downloaded from the Adobe website http://kb2.adobe.com/cps/834/cpsid_83497.html The download is a small (56kB) ZIP file containing the program and instructions. Versions are available for both PC and Mac platforms.

Once the files are extracted, it is more convenient to drag the file "Adobe Color Printer Utility.exe" onto the desktop. You may find it convenient to drag the two target files TC9.18 RGB 1_2.tif and TC9.18 RGB 2_2.tif onto the desktop too. To run ACPU, just double-click on the desktop icon. This will open a file selection dialog where you can select one of the target files. The selected file will appear in the ACPU window as below.
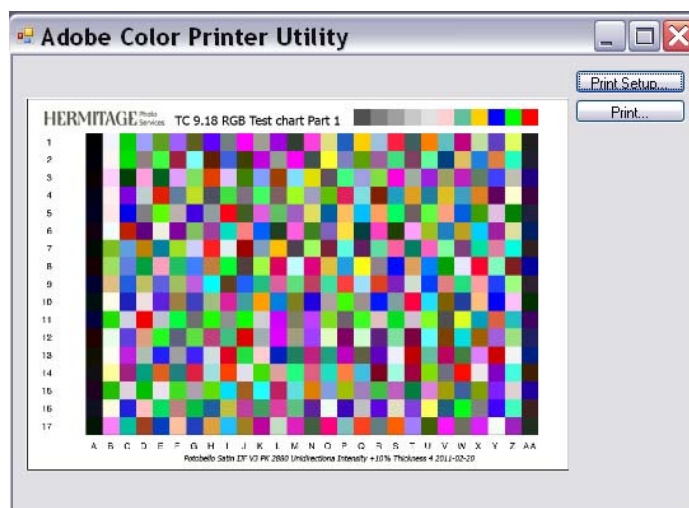
Click "Print", select your printer from the drop-down list, and then click "Properties" to go to the printer set-up dialog.
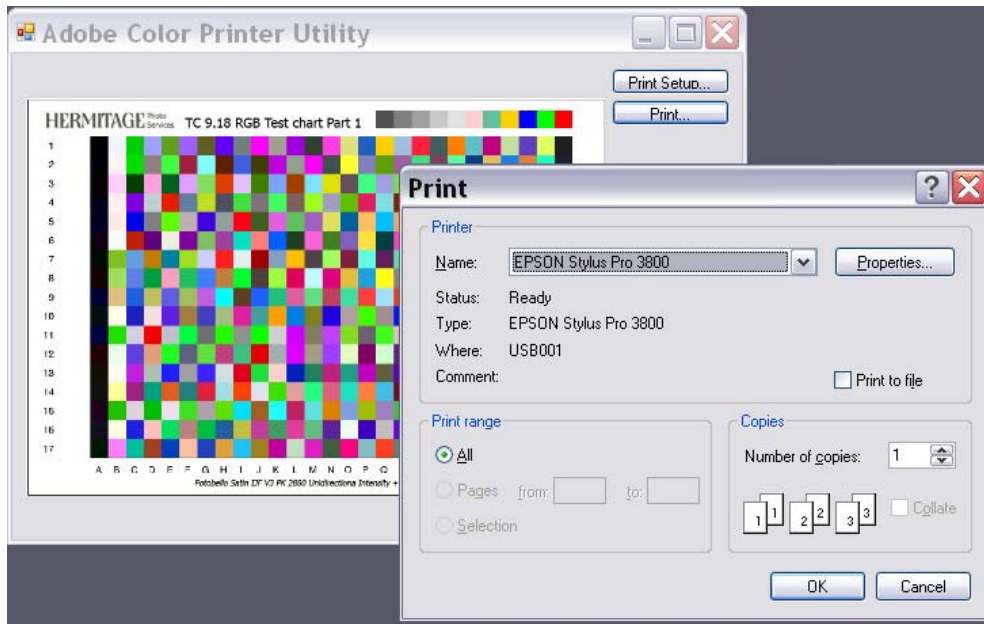
When you get to the printer set-up window, follow the guidance below to disable colour management. Once the printer is set up you will return to the "Print" window as above. Just click "Print" and your target should print.

Once you have printed the first sheet of the target follow the same procedure to print the second sheet. It will be necessary to set up the printer again, since ACPU does not "remember" printer settings from one print to the next.
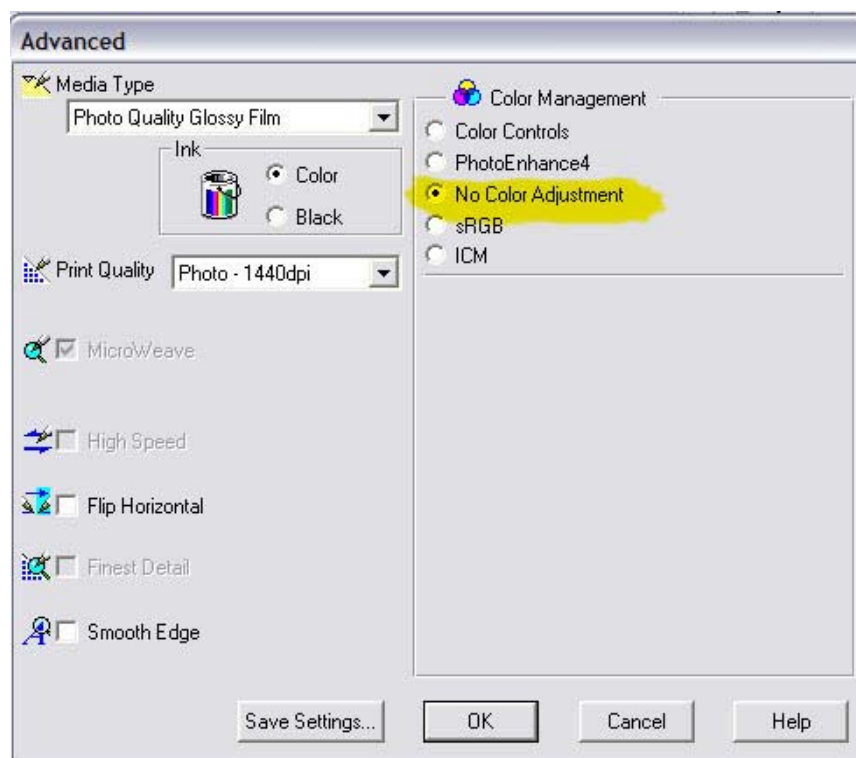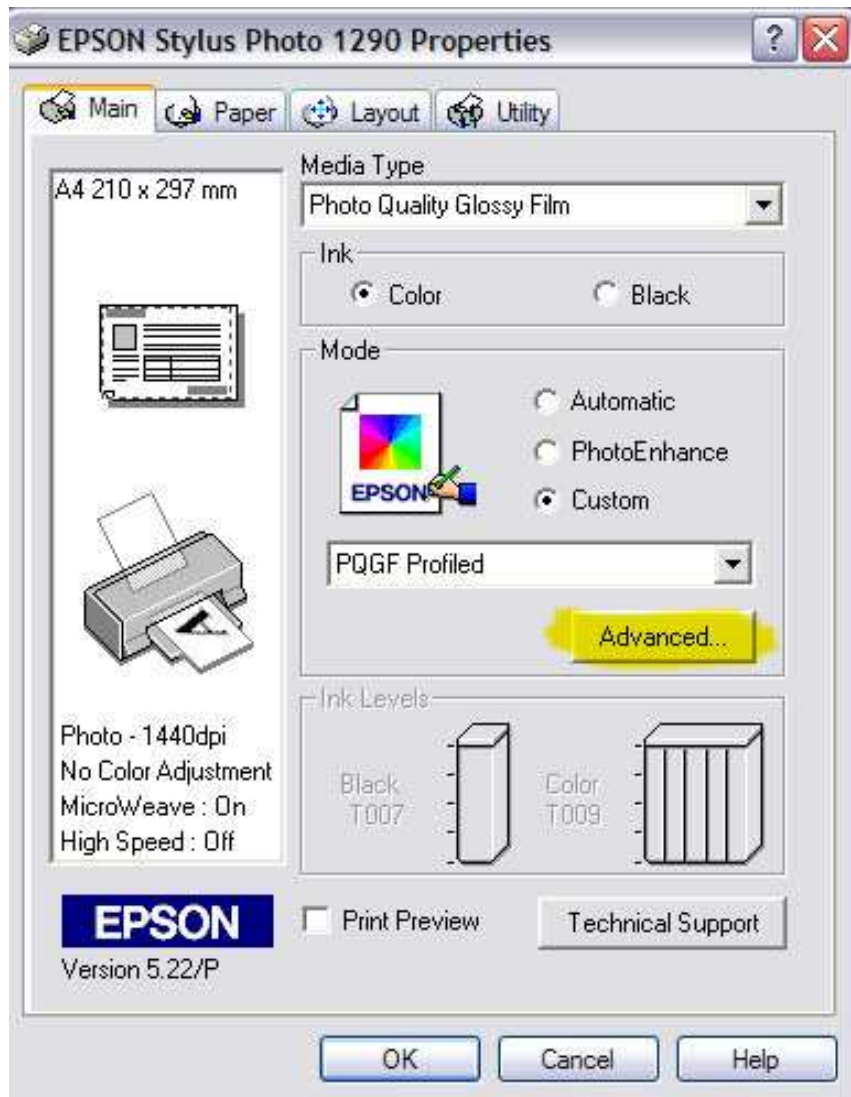
Setting up the printer

The first step in setting up the printer is to choose the appropriate paper type and printer resolution in the printer driver. These will depend on the type of paper that you are using - remember that the profile is only valid for this paper, printed with the settings that you choose now.

It is essential that you turn off all colour management in the printer settings. In the **Epson** control panel below, this will be found by clicking the *Advanced* button which will give you another set of options.

In this second window you can select the correct paper and resolution. Under *Color Management* select *No Color Adjustment*.

It is best to save the settings with a descriptive name so that you can recall them easily when you come to print in future. These are the settings that you will use every time you print using your custom profile with this paper.

The later Epson printer drivers are, surprisingly, somewhat less intuitive. For example, in the R1800 driver it is necessary to select *ICM* in the *Advanced* settings before the *Off [No Color Adjustment]* option becomes available. (See below)
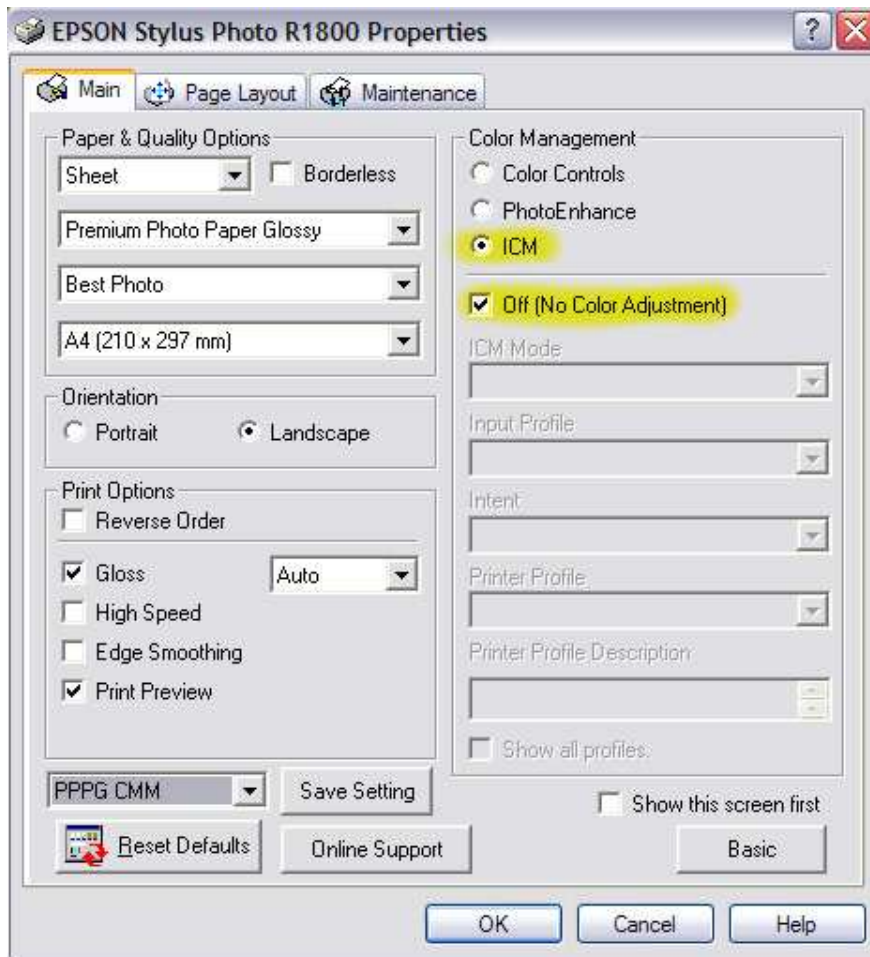
Other print drivers will be different but the objective is the same - to disable any colour management or adjustment in the printer driver. Sometimes the required settings are a bit less obvious. For example, in the **Canon** driver shown below, you will need to select *Manual* in the *Color Adjustment* box.
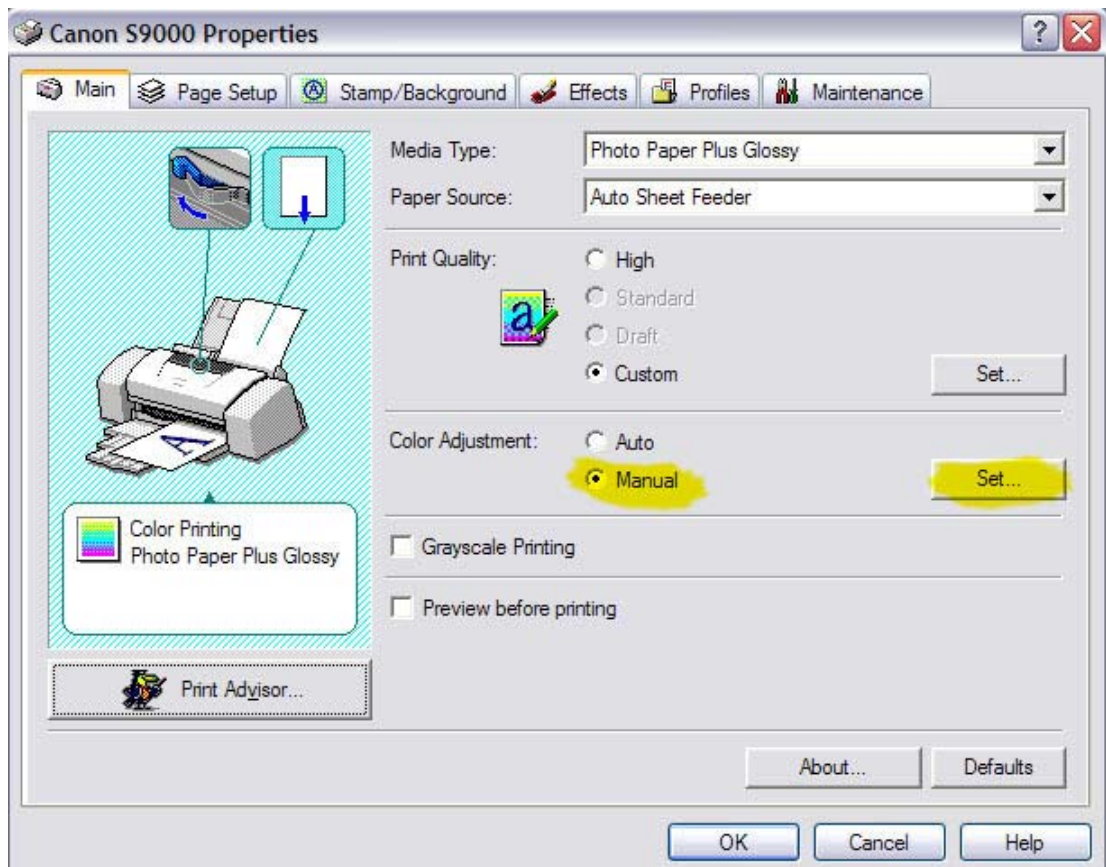
This will open up other options as shown. Here, all the sliders should be set to zero to avoid any manual adjustment. Not quite so obvious is the **Print Type** box. This must be set to **None** otherwise the print driver will apply its own intelligence to the colour adjustment, depending on the nature of the image. This would destroy the consistency that we are trying to ensure!
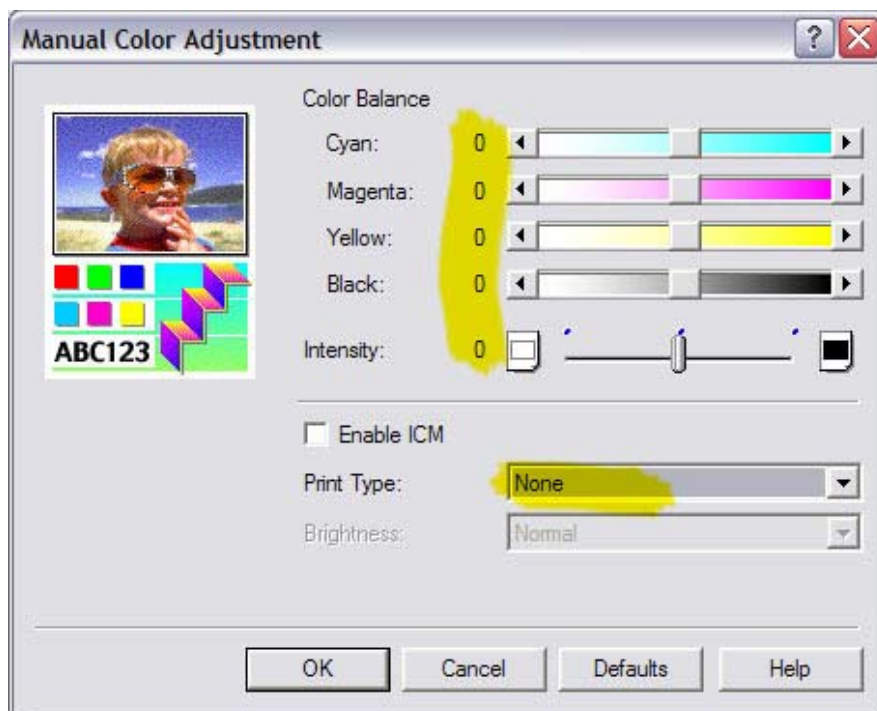
For **Hewlett Packard** printers, make sure that you choose **Application Managed Color** from the colour management dialog.

It is essential that the charts are printed without colour management. ACPU will ensure that the file itself is not colour managed but it is up to you to disable colour management in the printer driver. If you have any doubts about disabling all colour management, then e-mail us with your printer type for detailed instructions.

After you have printed the charts

You will see, at the top of each chart, in the "title bar" a row of nine colour patches. These are not used for profiling but are provided so that you can verify that the two parts have been printed with the same colour settings. These patches should look *identical* on each of the charts. If the colours look different, it is almost certain that you have printed one of the charts incorrectly. These charts cannot be used for profiling.

 When you are happy that the charts are correct, leave them to dry for at least 12 hours. In this time be very careful not to scratch the surface or damage it in any way. Even papers that claim to be "instant drying" can be vulnerable when first printed, and any blemishes in the printed charts can affect the accuracy of the profile.

It's worth taking a good look at the printed charts because they show what your printer/ink/paper combination is capable of. The 918 squares cover the complete range of colours, including fully saturated red, green and blue. It is important to realise that printer profiling cannot increase the range of colours that you can print. What it will do is to ensure that the colours that you can print are reproduced accurately, that transitions between colours are smooth, and that greys are genuinely grey.

If you are sending more than one set of charts be sure to identify them clearly. Any marking must be done near the edges of the prints, outside the black border. ***Do not mark the prints, or apply adhesive labels, on the back within the printed area.***

When the prints are completely dry, put them into a board-backed A4 envelope. Print and complete the Order Form included in this document and enclose it with your printed charts. Post to the address given on the Order Form. If you feel the need to send your charts by Recorded Delivery or Special Delivery, please notify us in advance. If the "front office" is unmanned for a few minutes when the post arrives, there will be nobody to sign for the delivery, and *your order will be delayed by at least one working day*.

Payment methods and delivery

You can if you wish, enclose a cheque or Postal Order with your prints. Alternatively you can pay using a credit or debit card through PayPal. If you choose this method, we will send you an e-mail invoice via PayPal when we receive your order. By clicking on a link in the invoice you can pay securely using any recognised credit or debit card.

We aim to complete the profiles within 24 hours of receiving cleared payment. Delivery is by e-mail so it is important that you give us your correct e-mail address. The e-mail delivery will include instructions for saving and using your profile. If e-mail is not convenient, profiles can be supplied on CD for a small extra charge.