



An ICC (International Colour Consortium) Profile will tell Photoshop, Lightroom or other image editing applications exactly how your printer prints on a particular paper and, when used correctly, ensures that your prints are 100% colour accurate.

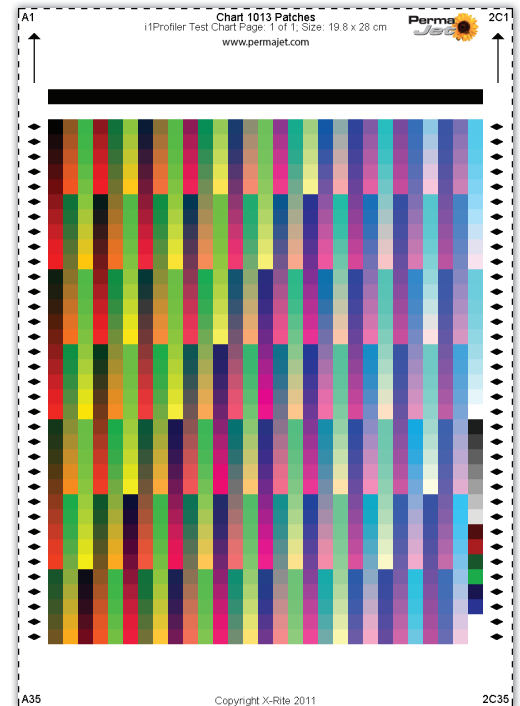
Every printer has a unique fingerprint which is why we recommend a custom ICC Profile, which is calibrated to your exact printer, ink and paper setup. To create a custom ICC Profile you need to print the supplied colour patch, which we will then measure to create your bespoke profile.

It is extremely important that you read and follow these instructions carefully so we can create the best profile for you.

This custom profile service is not suitable for inkjet printers driven by postscript RIPs, colour photocopiers, colour lasers or dye-sublimation processes. The profile we create for you will be valid only for the printer, paper, ink and driver settings that the profiling charts are originally output from.

These instructions include guidance for outputting the patches on Epson, HP and Canon inkjets. If you cannot find or access the settings we describe then we recommend that you contact us by email or telephone for technical support:

T: +44 (0)1789 739200
E: technical@permajet.com
W: www.permajet.com



The profiling chart which is measured to create an ICC profile

Struggling to follow the instructions? Follow along with our videos on [YouTube](https://www.youtube.com).

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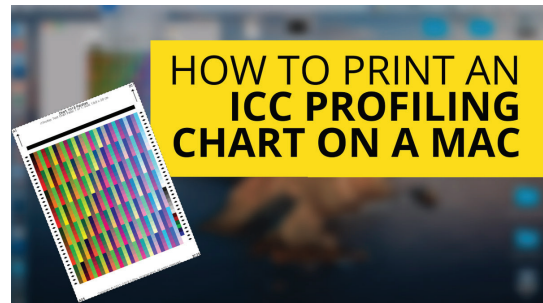
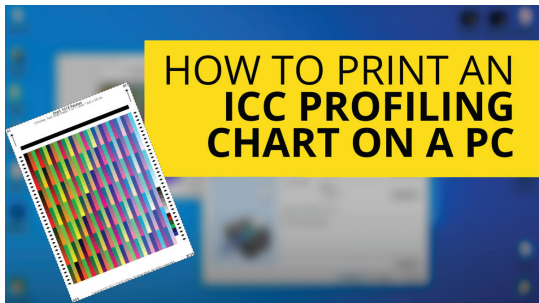
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INSTALL & OPEN THE ADOBE COLOR PRINTER UTILITY

You will find the Adobe Color Printer Utility (ACPU) in the folder with these instructions. Install the ACPU and then open it.

You can follow the process in our video tutorials by clicking below or visiting our YouTube.



OPEN THE PAPER PROFILING CHART IN THE ACPU

- Before continuing, make sure your printer has no blocked ink heads by carrying out a basic nozzle check pattern within the printer.
- As soon as you run the ACPU application a window will open asking you to open a TIFF file.
- The file you need to open is called **STEP 3 - Paper_Profiling_Chart.tif** and was included in the same download folder as this PDF.
- The file is formatted for A4 paper. If you are using larger paper or rolls **do not** enlarge the file, you must print it at A4 size (100% - no scaling). The colour patch file must be output without being cropped, enlarged or reduced, or this will cause it to fail.
- Next, select *Print Setup...* and make sure the paper size is set to A4. Ensure “borderless” option is NOT selected as this may scale the print. Then click *OK* and go to *Print...* to set your printer driver options.

SET THE MEDIA/PAPER TYPE

- Select your printer from the dropdown menu and then click *Properties*. Next you need to choose the ‘Media Type’ that is closest matching to the paper that you are printing on.
- This setting is vitally important because it governs the amount of ink that is used. Incorrect media type settings can cause issues such as pooling of ink, fuzziness, and lack of differentiation in shadows and dark colours.
- Once created, the profile will only be accurate for the setting that you select now so it is important to select the right one.
- We have a list of settings that we recommend for our papers which you can find in your box of paper or alternatively on our website: <https://www.permajet.com/support/suggested-media-settings-list-for-permajet-range/>

NOTE: If your printer is not included in the list then you will have to choose the closest media type to the type of paper. If in doubt, please contact us for advice.

DISABLE PRINTER DRIVER COLOUR MANAGEMENT

- All colour management must be disabled so that we can measure how your printer prints, not how the printer driver tries to improve the print. Each printer driver has different options that need to be enabled or disabled when printing the colour patch file. What you are doing is stopping the print driver 'enhancing' (i.e. arbitrarily changing) the colour of your print.
- If you are using the Mac OS you may find that on many printer drivers the colour management options are greyed out when printing from the ACPU. This means that the driver colour management has been automatically disabled and you don't need to do anything.
- Please follow the instructions for your printer model below.

Epson

Under *Colour Settings* or *Mode*, select *Off (No Colour Adjustment)* or *No Colour Adjustment*. On some Windows systems you may have to click *ICM* or *Custom* before the *No Colour Adjustment* option is available.

Canon

Go to *Main > Color/Intensity > Manual* and then click *Set*. Select the *Matching* tab in this new window, then set *Color Correction* to *None*. In some drivers the 'None' option may be found elsewhere. Under *Effects* make sure nothing is checked on.

HP

Under *Paper Type/Quality* in the printer driver's *Features* tab select the paper type that is the closest match for the paper that you are using. In the *Color* tab set *Application Managed Colors* or *Managed by Application*, you may have to select *ICM* before you see these choices. In some drivers you may also find the settings in the *Printer Shortcuts* tab.

NOTE: *If you are in any doubt as to the correct driver settings then please contact us. If you can, save the settings so it is easy for you to recall them later, or at least write them down. On Mac OS you can save a printer preset by going into the Presets drop down menu in the Print dialogue and selecting Save Current Settings as preset... Failure to follow this section of the instructions is the most common cause of problems when profiling.*

PRINT & CHECK THE PROFILING CHART

- Once you have set your printer driver settings, make sure you correctly load a sheet of the paper that you want to profile, coated side facing up, and then click *Print*. If you're not sure which is the coated side you can test this by licking your thumb and forefinger and pinching the corner of the sheet. The coated side will stick to your finger.
- When you have printed the profiling charts please check you have output it at the correct size. On an A4 sheet there should be a white border outside the dashed black line. The correct size of the chart to the dashed line is 19.8 cm by 28.6cm.

NOTE: *Prints from Adobe Color Printer Utility often come out a little smaller because it is designed for US and European paper sizes. Do not worry if the chart has printed towards one corner of the paper. As long as we can read the black diamond shapes down each side, it should be fine.*

- Check that there is no ink pooling, bleeding, spreading, mottling or over saturation of ink on the print.
- Check for any signs of line banding caused by blocked ink heads or other print quality issues. If you do find any issues please fix them and then re-print the chart. We cannot create your profile if it has any of these issues and will have to ask you to reprint it.

POST YOUR PRINTS

- Print out and fill in the order form that is on the last page of this document. This form gives us the information we need to create your profile and send it to you.
- Please wait until the chart is dry before placing it in a stiff backed envelope along with the order form - usually leave it for at least 30 minutes to be safe. If you are sending more than one paper type to us to be profiled, please write the product name on the back of each sheet. Do not fold the charts. If you have output them on A3 then you can trim them down to A4 but please don't cut into the dotted line.
- Post it to the address below. Please ensure you pay the correct postage, usually at least **First Class Large Letter**, or we may not receive it:

PermaJet (Profiling Dept)
 1A, Black Hill Ind. Estate
 Sand Barn Lane
 Stratford-Upon-Avon
 Warwickshire
 CV37 0FA

INSTALLING YOUR PROFILE

- Your ICC profile will be sent to you via email, normally within 48 hours of our receiving the printed chart.
- When you receive your profile, it needs to be saved (not opened) in a specific directory or folder in order to be recognised by your ICC-aware applications. Please follow the instructions on the next page or watch our step-by-step videos below.



If you are running Windows

Save the profile from your email application to a safe place on your computer. Next, you just need to right-click on the profile and select *Install Profile* from the menu. You can also manually move the file to: *C:\Windows\System32\Spool\Drivers\Color*

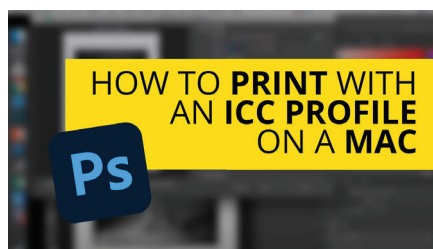
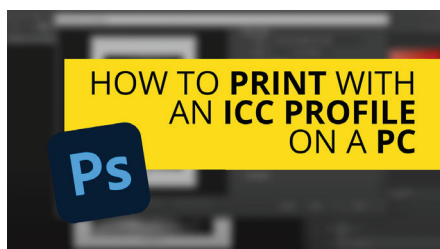
If you are running Mac OS

Save the profile from your email application on to your desktop. Then in the *Finder* (the smiling Mac icon on the left of your dock) hold the *Alt* key down and go to the *Go* menu and down to *Library*. Then open the *ColorSync* folder, and then *Profiles*. Move the profile into that folder.

- Your printing applications may have to be restarted in order to 'see' the new profile.
- Please do not rename the profile as it will still appear in application menus with the name we gave it.
- You can use your profile in Photoshop, Lightroom, Photoshop Elements and other applications. We can't provide instructions for every application so you may want to consult your software manual for advice.

USING YOUR PROFILE IN ADOBE PHOTOSHOP

- Go to *Print* and then choose your printer as per normal.
- Under 'Colour Management' set the *Color Handling* to *Photoshop Manages Colors*. In the *Printer Profile* dropdown menu, you will find your new profile which you need to select. *Black Point Compensation* should be ticked and the *Rendering Intent* can be either *Perceptual*, *Saturation*, *Relative Colormetric* or *Absolute Colormetric*. Which intent suits you best will depend on your image and the colour space of your printer. *Perceptual* is a good choice if you are not sure. Read our blog ['Rendering Intents, Explained'](#) for more information.
- Use the same custom settings in the printer driver as you did for outputting the original colour patches. Remember that the profile will only improve your printed results if you use exactly the same paper, ink and printer driver options. The media setting will be abbreviated in the file name of your profile to remind you. Watch our videos to follow the process.



USING YOUR PROFILE IN ADOBE LIGHTROOM

- Go to the *Print* module and select the printer and paper size in *Page Set Up* as per normal.
- Click on *Print Settings* and use the same settings in the printer driver as you did for outputting the original colour patches. Remember that the profile will only improve your printed results if you use exactly the same paper, ink and printer driver options.
- Scroll down the options on the right of the screen until you see the *Print Job* section.

- Go to the *Colour Management* options and click on the *Profile* menu. The first time you use a profile you will have to go to *Other...* and then find the profile in the list and check the box next to its name. This will bring it into the 'Profile' menu.
- Select the profile and then choose either *Perceptual* or *Relative* rendering intent. Which intent suits you best will depend on your image and the colour space of your printer. Perceptual is a good choice if you are not sure.
- Click *Print* when you have set any other options such as borders and sizing.

TESTING & EVALUATION

When you evaluate your first print with your new profile please make sure you look at the print under daylight and not artificial light. Allow a few minutes for the print to dry first.

Below are a list of the most common problems and their solutions:

The print has a colour cast, usually magenta.

This is usually an indication that the print has not been printed with the same driver settings as the colour patches were. Double check the driver settings, and especially make sure all colour adjustment is off in the driver. If it is and you still have a cast then it may be that the colour patches were printed incorrectly. Contact us for more advice.

The print doesn't match the monitor.

A print and monitor will never match exactly but under the correct conditions they can appear very similar. Check your monitor is calibrated and if the print appears darker than the monitor it may mean you should recalibrate to a lower luminance level. The most common cause of prints not matching the monitor is the light source the print is viewed under. Make sure you view the print in bright daylight and that you use Photoshop or Lightroom's soft-proofing features. See our support pages and blog for more details.

The prints were coming out fine at first but now they aren't accurate.

A profile cannot change but the behaviour of your printer can over time. The print head can degrade over time, new printer drivers or software that cause colour shifts, and changes to ink or paper by manufacturers can all contribute to a change in appearance of your prints. In most cases re-profiling will solve any problems.



Profiling Service form

YOUR DETAILS

Name:

Address:

.....

.....

.....

Phone:

Email:

Operating System:

Windows

☐

Mac

☐

Which OS version is installed? (e.g.

Windows 10, Monterey)

.....

Driver version installed:

.....

**Windows users - have you turned off the
colour management in the printer driver?**

YES / NO

Did you use the Adobe Color Printer Utility?

YES / NO

PRINTER INFO

Printer Model:

Ink Manufacturer:

Paper Name:

Paper Name:

Media Setting Selected:

Media Setting Selected:

.....

.....

Paper Name:

Paper Name:

Media Setting Selected:

Media Setting Selected:

.....

.....

NON-PERMAJET PAPER

When using non-PermaJet papers, please refer to the profiling area on our website where we sell vouchers for the production of these profiles: www.permajet.com/product-category/colour-management/custom-icc-profile-service/

For my non-PermaJet papers I wish to redeem Profiling Circle Vouchers.

SIGNATURE & CONFIRMATION

I agree to the terms and conditions stated on this form and have read and understood the instructions for outputting the target patch.

Signed:

Date:

**Please post (LARGE LETTER) to: PermaJet (Profiling Dept), 1A Black Hill Ind.
Estate, Sand Barn Lane, Stratford-upon-Avon, Warwickshire, CV37 0FA**

Terms & Conditions:

1. Failure to follow the instructions contained in this PDF may result in an inaccurate profile. PermaJet cannot be held responsible for any such inaccuracy.
2. All colour matches between devices are subject to gamut, consistency and capabilities of the hardware, software and the lighting conditions that the results are viewed under.
3. Changes to device settings, media, inks or failure to maintain the device may invalidate any profiles created by PermaJet.
4. PermaJet cannot be held responsible for the failure of any third party software to accurately implement an ICC profile created by us.
5. PermaJet cannot be held responsible for any consequential losses due to the use of any profiles created by PermaJet or its agent. The customer is responsible for the evaluation and testing.