Contents

1. License terms....2
2. Welcome to PrintFab!....4
3. Installation and printer setup....6
3.1 Installation....6
3.2 Setting up a printer....6
3.3 Licensing PrintFab....8
4. PrintFab Control Center....9
5. Add / edit printer....11
5.1 Selecting the printer driver....13
6. Printer Toolbox....14
6.1 Print Testpage....14
6.2 Nozzle Check....15
6.3 Clean Print Heads....15
6.4 Align Print Head....15
7. Custom page size editor....16
7.1 Adding a new page size....17
8. "Profiles" - color profile administration....20
8.1 Index card "Printer Profiles"....20
8.2 Index card "Color Spaces"....27
8.3 Creating individual color profiles....28
8.4 Creating ICC color profiles with a spectrophotometer....28
9. Print dialog settings of PrintFab....32
9.1 Index card „Main“....32
9.2 Index card „Layout“....36
9.3 Index card „Color“....38
9.4 Index card „Correction“....45
9.5 Index card “Consumption“....47
9.6 Index card „Ink Ctrl“....49
9.7 Index card „Options“....53
10. Print Preview with Layout Editor....54
10.1 Using the Print Job Preview and the integrated Layout Editor....55
11. Printing from Applications....57
11.1 General information on print dialog settings....57
11.2 Printing PDF Documents....58
11.3 CorelDraw....58
11.4 Photoshop Elements....59
11.5 Photoshop....60
11.6 Indesign....62
12. Problems and solutions....64
12.1 Feedback form....64
12.2 Support forum....64

PrintFab

© by ZEDOnet GmbH

ZEDOnet GmbH

Meinrad-Spieß-Platz 2
87660 Irsee, Germany

email: mail@zedonet.de
http://www.printfab.net

1. License terms

All rights reserved. No part of this manual and the accompanying software may be reproduced or distributed without prior written permission of ZEDOnet.
You may not distribute copies of the program or the accompanying documentation to others either for a fee or without charge. You may not modify the program or translate the program or documentation. Your use of this program indicates your acceptance of these terms or conditions. If you do not agree to these conditions, return the program and documentation to the vendor from whom this software was purchased.

If you are using PrintFab trial version, you may use it for test purposes up to 30 days.

With a personal license key you have the non-exclusive right to use PrintFab only on a single computer (multi user license: on the number of licensed computers). A license is required for every computer where PrintFab is installed.

Disclaimer: ZEDOnet makes no warranties, either expressed or implied, with respect to the program described herein, its quality, performance, merchantability, or fitness for any particular purpose. This program is sold “As is”. The entire risk as to its quality and performance is with the user. In no event will ZEDOnet be liable for direct, indirect, incidental or consequential damage, or damages resulting from loss of use or loss of anticipated profits resulting from any defect in the program even if it has been advised of the possibility of such damage. Some laws do not allow for the exclusion of implied warranties or liabilities for incidental or consequential damages, so the above limitations or exclusions may not apply.

Trademarks: Adobe, Brother, Canon, Epson and HP / Hewlett-Packard, Linux, Microsoft Windows and other brand or product names are the trademarks or registered trademarks of their respective holders.

2. Welcome to PrintFab!

We are happy to welcome you as a user of PrintFab, our innovative enhanced quality printer driver & RIP software.

Key features:

Intelligent printer drivers

No need to adjust settings like gamma, color saturation, color balance etc. Simply choose your printer, paper type and print quality – the rest is done by PrintFabs intelligent printer drivers (of course expert users can control all settings manually).

Our drivers support nearly all features of your printer like special print media, CD/DVD printing on certain printers, photo inks and highest print resolution.

Color management

A highlight of PrintFab is the new integrated color management – it is easy to use and ensures perfect colors. You can choose the document color space, adjust the light source and correct color & grey balance.

Improve your photo quality

Using the color profiles that are included with PrintFab (and additional color profiles either from ZEDOnet's profiling service or your own ICC profiles) each shade of color is perfectly matched in the printout.

It is also possible to add ICC profiles for your scanner or digital camera for perfect color matching from your input device to printer output!

Print Preview / Layout Editor

With the layout editor you can preview a print job and even edit pages, e.g. enlarge or remove sections of a page or delete pages.

CMYK proof printing

The "Pro" version of PrintFab also supports CMYK proof prints with exact colors – directly from applications like Adobe Reader / Acrobat, CorelDraw, Indesign, PhotoShop, QuarkXPress etc.

Color profiling service

Using our profiling service you can further improve print quality – especially if you are using compatible ink cartridges or print media that are not directly supported by our drivers. We create individual color profiles at a very affordable price – no expensive hard- & software is required!

PrintFab can print a color chart page with approx. 700 color patches. The ZEDOnet profiling service will measure the color chart with a spectrophotometer and send you an individual color profile by e-mail.

With an individual color profile, color reproduction becomes more accurate. It also ensures the best print quality on third party paper and ink.

Ink management

PrintFab not only matches document colors to printed colors, it also allows you to control the mix of inks applied to the paper. PrintFab's intelligent ink saving mode can reduce ink consumption by 25-50% without producing pale looking pictures. This is done by limiting the maximum amount of ink used in saturated colors and by using more black ink in dark areas instead of mixing dark shades with color inks. With photo printers, PrintFab can also reduce photo ink consumption and use the darker (and more economic) regular inks instead.

On the first glance you won’t even notice the difference!

3. Installation and printer setup

3.1 Installation

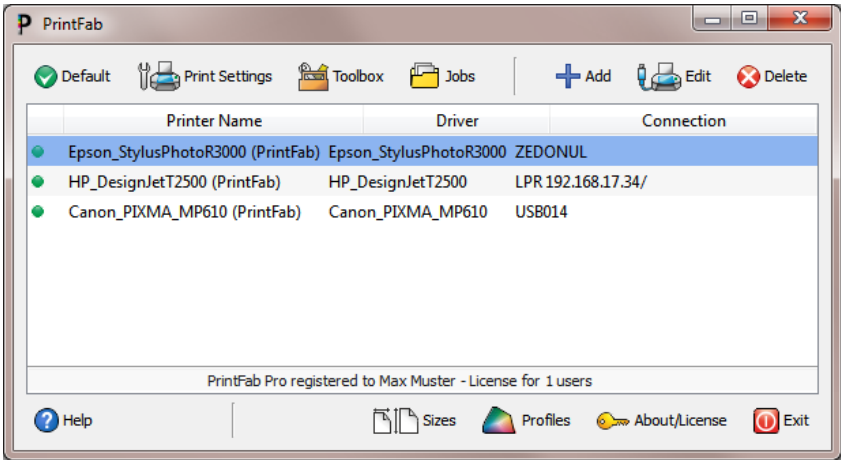
Double click on the self-extracting setup program “Setup PrintFab.exe” to start the installation. The setup tool allows a few customizations, e.g. where to install the software and whether to add a program icon to the desktop and / or start menu.

3.2 Setting up a printer

Before your printer can be used with PrintFab, it must be set up in the PrintFab control center.

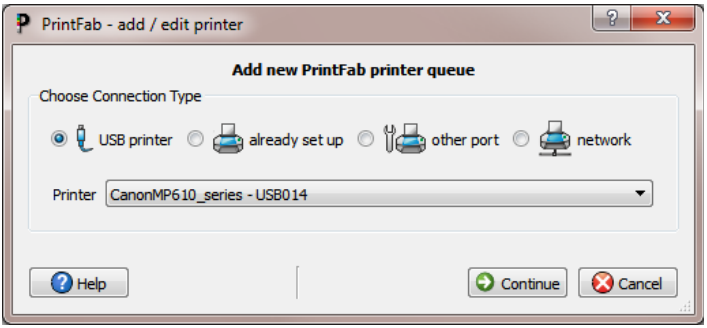
Note: A detailed description of all printer setup options can be found in the chapter "5. Add / edit printer".

Start the control center with the icon "PrintFab". The main window looks as follows, however the list of printers will be empty first:



PrintFab control center – main window

Press the button "Add" to add a new printer. The dialog "Add / edit printer" will open:



Dialog "Add printer"

There are three types of printer connections in the printer setup dialog: “**USB printer**” for a USB printer, "**already set up**" (existing queue) to add a PrintFab driver for a printer that has already been set up using the manufactuer's driver, "**other port**" to choose one of the Windows printer ports (e.g. parallel port) and "**network**" for network printers.

If your printer is connected by USB, choose "**USB Printer**".

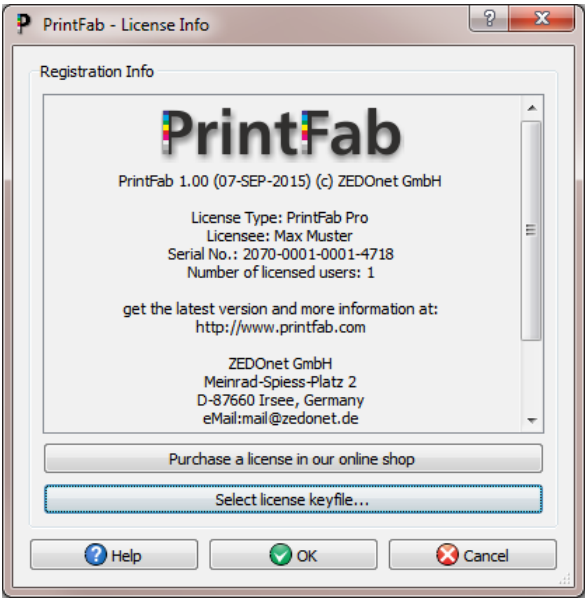
Please read chapter “5. Add / edit printer” for a detailed description of printer setup.

3.3 Licensing PrintFab

After the trial period PrintFab must be activated with a license key file – otherwise a "PrintFab" logo will be added on every printed page.

A license key can be purchased on our web site www.printfab.com. To activate PrintFab with a license key file, start the PrintFab Control Center (click on the icon "PrintFab" or open it using the Windows start menu) and select the option "About / license". In the license info dialog, click "Select license key file". A file selection dialog will open where you can select the key file. After selecting the file click on "Open".

If the key file was accepted, your name and license type will be displayed in the window in the frame "Registration Info".



Another possibility is to start the registration process by double clicking the license key file - the dialog shown above will display your PrintFab license information.

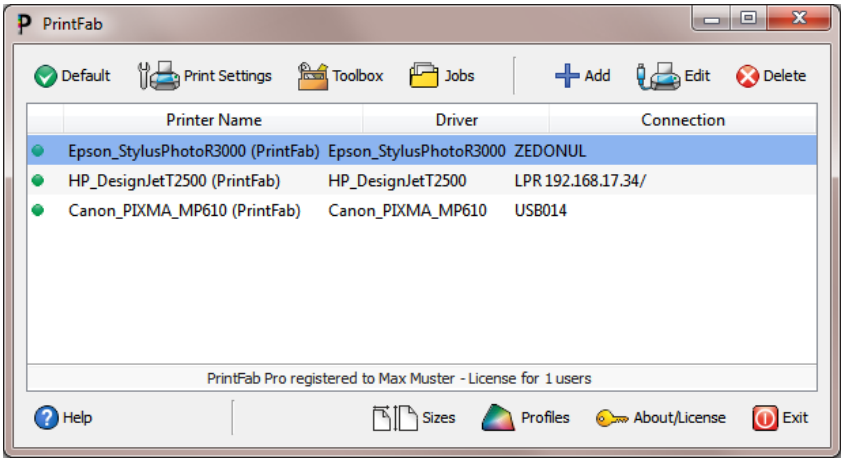
4. PrintFab Control Center

The PrintFab Control Center is PrintFab's central configuration program where you can add or delete printers and adjust other general settings.

You can also add color profiles, define new page formats or open the printer toolbox for maintenance tasks.

To start the control center, click on the **icon "PrintFab"** or in the "**Start**" menu choose: "All Programs" -> "PrintFab" -> "PrintFab Control Center".

The main window of the control center contains a list of installed PrintFab printers and two panels with buttons to access all configuration options:



PrintFab control center

The following buttons are available:

a) Printer specific functions:

- **Default** - make the selected printer system default printer
- **Print Settings** - configure printer driver default settings like paper type or print quality
- **Toolbox** - open printer toolbox for maintenance functions e.g. test page, nozzle check, cleaning, head alignment (chapter "6. Printer Toolbox")
- **Jobs** - show the print queue with documents that are being printed

- **Profiles** - opens the color profile administration (chapter "8. "Profiles" - color profile administration“)
- **Sizes** - define custom page sizes and adjust CD print settings (chapter "7. Custom page size editor")

b) Administration of print queues:

A detailed description of these functions can be found in chapter "5. Add / edit printer".

- **Add** - add a new print queue with a PrintFab driver
- **Edit** - change driver settings and port or network settings
- **Delete** - delete a print queue

c) General functions:

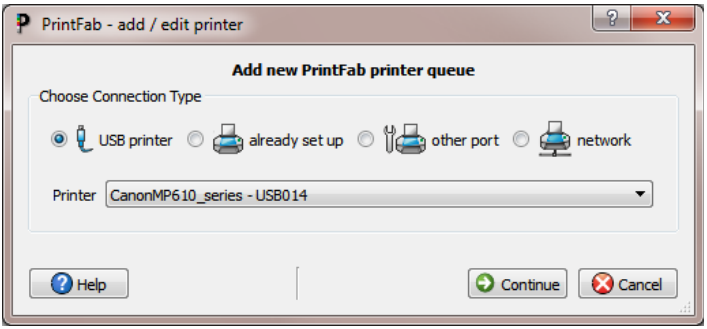
- **About / License** - display license information / activate PrintFab with a personal license key file
- **Help** - open the PrintFab manual

Use "**Exit"** to quit the PrintFab control center program.

5. Add / edit printer

This chapter describes printer setup with PrintFab.

Start the control center with the icon "PrintFab". Press the button "Add" to add a new printer. The dialog "Add / edit printer" will open:



Dialog "Add printer"

There are three types of printer connections in the printer setup dialog: “**USB printer**” for USB printers, "**already set up**" to add a PrintFab driver for a printer that has already been set up using the manufactuer's driver, "**other port**" to choose one of the Windows printer ports (e.g. parallel port) and "**network**" for WiFi or network printers.

USB printer

Use this setting if your printer is directly connected via USB.

The status monitor of the printer manufacturer will not be used in this case - the printer status will however be shown in the printer's list of current print jobs and also when printing using the Print Preview / Layout Editor.

Already set up

With the setting "already set up" all printers are listed that have been set up using manufacturer drivers.

Choose the printer for which you want to add a PrintFab driver and press “Continue”.

Notes:

- The existing driver will not be removed, you can choose between the original driver and the PrintFab driver when printing a document.
- When printing with the PrintFab driver, the resulting print job will be redirected to the print queue of the existing driver. The advantage is that a printer status monitor can be used that informs on printer status and ink levels (only if the manufacturer's driver has a status monitor). The print job itself is not affected, as the manufacturer's printer driver is bypassed.

Other port

With this setting you can choose one of the Windows printer ports, e.g. “LPT1” for a parallel port printer.

Network

With this setting you can configure PrintFab for a WiFi or network printer. Select a network protocol in the drop down box "Connection":

- **Windows network printer**
  A printer that is attached to a Windows PC. Enter the network name of the PC in the field "server" and the printer share name in the file "printer". The share name is visible in the Windows printer properties -> "sharing" -> "share name".

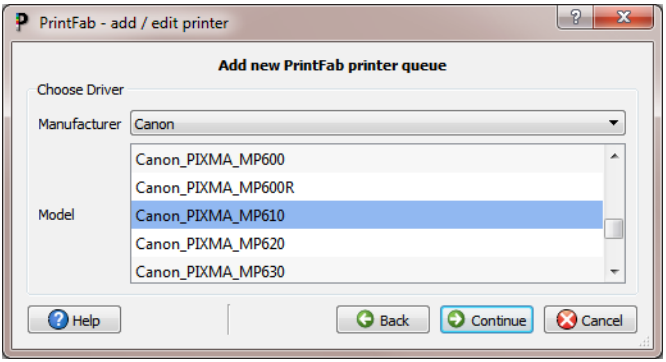
- **Network printer LPD** and **Socket / Jetdirect**
  For printers with built-in network interface / WiFi or for routers with a printer port. Enter the IP address or network name of the device in the field "server". The field "Printer" can be left empty except for routers with several printer ports.

- **Linux network printer (IPP)**
  A printer that accepts IPP protocol or a printer that is attached to a Linux or Apple Mac computer. Enter the computer's network name in the field "server". The field "printer" can be left empty for printers with built-in network interface. For Linux / Mac computers, enter the text "printers/" follwed by the printer share name.

Note:
Most network printers accept several protocols, most of them "Socket / Jetdirect" and "LPD", some also "IPP". If you are in doubt, we recommend to try the setting "Network printer Socket / Jetdirect" first.

5.1 Selecting the printer driver

In the window "**Choose driver"** you should first select the manufacturer of your printer, then select the model name of your printer in the list below.

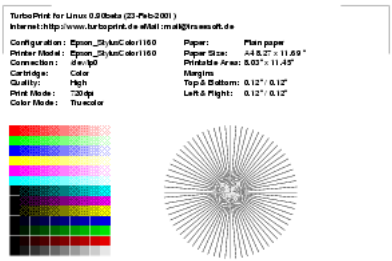


The next step is to enter a "**configuration name"** and a "**short name"** for the printer queue. In most application programs you can choose your printer using this configuration name.

Finally click "OK".

After successful printer setup a dialog will offer to print a test page – thus you can test if all settings are correct. You can also print the test page later from the PrintFab printer "Toolbox".

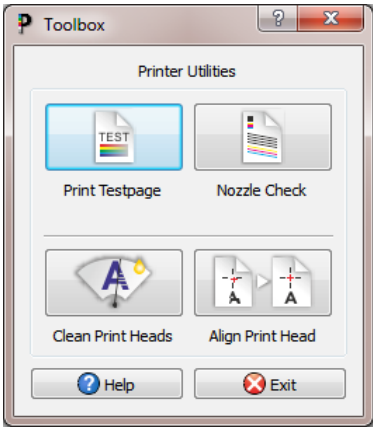
If you have chosen to print a test page the printer should start printing a page that looks like this:



If the printer doesn't print (or doesn't print correctly) read chapter "11. Problems and solutions".

6. Printer Toolbox

The printer toolbox offers printer maintenance functions. It can be opened from the PrintFab control center .



PrintFab Printer Toolbox

Depending on the printer the following functions are available:

- **Print Testpage**
- **Nozzle Check**
- **Clean Print Heads**
- **Align Print Head**

After selecting one of these buttons the selected maintenance job is performed or an additional menu with some further choices will be displayed (e.g. clean black or color print head)..

6.1 Print Testpage

It is recommended to print a test page after adding a printer - or if printing from applications does not work properly. The “test and status page” also contains important information on printer setup.

6.2 Nozzle Check

Use this function to check if the print head is working properly. A sheet of A4 or Letter sized paper is required. For each ink color a test pattern is printed. If one or several lines are missing or “smeared”, the toolbox function “Clean Print Heads” should be executed.

6.3 Clean Print Heads

Starts automatic head cleaning. It is normal that ink nozzles get clogged from time to time, so print quality is reduced (e.g. "banding"). In this case print a “Nozzle Check” page and start print head cleaning if necessary.

> **Attention**: Cleaning consumes some ink, so this function should only be executed if necessary.

6.4 Align Print Head

Align the black & color print heads and / or align bidirectional printing. The alignment procedure depends on the printer model. Usually a page with several lines of test patterns is printed. For each line, the number of the best aligned pattern must be entered (e.g. choose the field where two lines align best or where the least “banding” is visible.

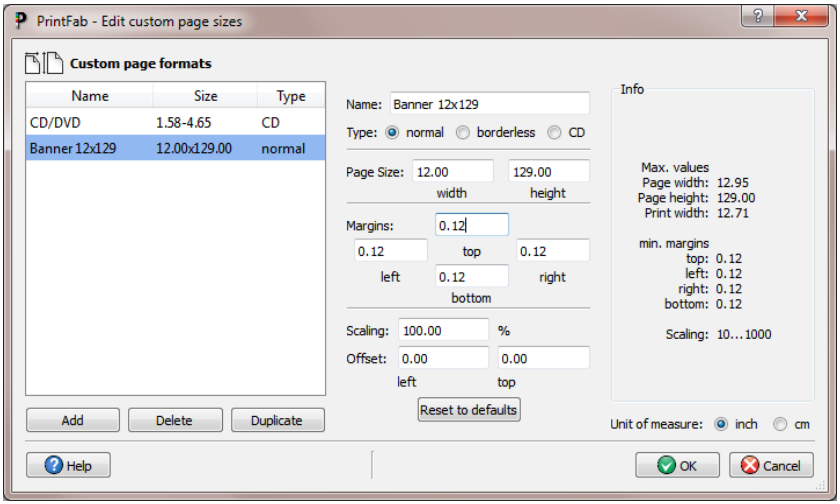
7. Custom page size editor

New printer specific page formats can be defined in this dialog. This is especially important with large format printers and / or roll paper for efficient paper usage.

It is also possible to adjust the printable area of CDs / DVDs – you can specify the CD/DVD diameter and the area around the center hole that cannot be printed on.

Moreover you can set a scale factor (e.g. enlarge from A5 to A4 size) or enter offsets to adjust print position on the page.

You can reach the custom page size editor from the PrintFab control center program with the button "**Sizes**".



Page size editor

All user defined sizes are shown in the list on the left. Page size, margins, scaling and offsets are displayed (or entered) in the middle of the dialog window. An information field on the right shows maximum paper size and minimum margins. The unit of measure can be switched to either "inch" or "cm" (1 inch = 2,54 cm) on the bottom right.

7.1 Adding a new page size

Use the button “Add” to add a new page size. A new list entry named “new format” will appear – you can change the name in the field "name". Choosing a significant name will make it easier to find the size in the application's page setup later.

Three different page types can be chosen:

- **normal**
- **borderless** (only for printers capable of borderless printing)
- **CD** (only for printers that can print on CDs)

Page format “normal” and “borderless”

Please make sure that the correct „**Unit of measure**“ = “inch” or “cm” is selected.

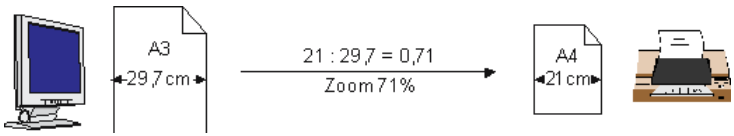
For regular page sizes please enter the dimensions of the paper. The printable area is defined by the left, right, top and bottom margins. For technical reasons most printers leave a small margin at the paper edges, which means that margins must not be smaller than the minimum margins listed in the table on the right.

Some printers can print “**borderless**” but only for certain standard page sizes or certain print widths. One reason is that only for certain sizes ink absorbers are present that prevent ink from getting into the printer mechanics. This means that even for those printers only certain borderless custom page sizes can be defined.

Scaling:

This setting is for scaling print size. For example an A3 sized document can be printed on an A4 printer without having to reformat the document – or an A4 document can be automatically enlarged and printed on A3 paper.

The scale factor can be defined in percent, “100%” means that no scaling is performed. Page size and margins always refer to the actual print size.



Example: Define a custom page format that reduces A3 documents to A4 size

Enter 21.0 x 29.7 cm (or 8.27 x 11.69 inch) – the actual print size is A4. Page margins are left at minimum. The scale factor is calculated as print size divided by document size:

21cm / 29.7cm = 0.707 => "71%" is the correct scale factor

In the application program the dimensions of the new page format will be A3.

If no scaling is desired, enter 100%.

Offset

On some printers paper is not exactly positioned due to mechanical tolerances. Thus the printout may not be positioned exactly as defined by the driver (e.g. printout is shifted to the left or right). Use the "Offset" fields to correct the print position.

The "left" offset specifies how much the printout should be shifted to the right. E.g. 0,1cm means the printout will start 0,1cm further to the right.

This correction is not visible in the application program, only the printer is affected.

Please note that specifying an offset will increase unprintable margins. Moving the printout to the right (left) will increase the unprintable right (left) margin. Accordingly moving to the bottom (top) will increase the unprintable bottom (top) margin.

CD printable

For CDs / DVDs the diameter of the inner circle (center hole) and outer circle can be specified. Also an offset can be specified to adjust the printout horizontally & vertically.

A negative value in the field "**left**" or "**top**" will shift the printout to the left or top, a positive value will shift to the right or bottom.

Deleting a custom page size

Pressing the "Delete" button will delete the currently selected custom page size. No warning will be shown. However, you can undo all changes by leaving the custom page size dialog with the "Cancel" button.

Duplicate

This button duplicates the currently selected page size.

Reset to defaults

Pressing this button will reset page dimensions to maximum values for this printer. Page margins will be reset to minimum values.

Select “OK” to confirm your changes in the custom page size menu. “Cancel” will discard all changes since entering the page size menu.

8. "Profiles" - color profile administration

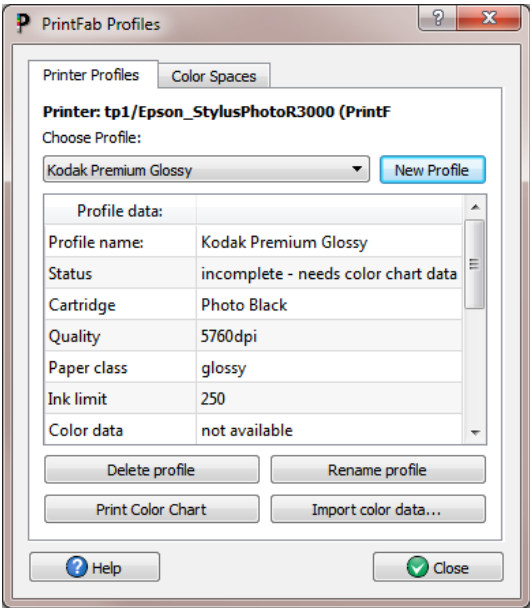
The button "Profiles" on the main window of the PrintFab control center program opens the color profile administration menu.

In PrintFab's profile administration there are two categories of profiles: **Printer profiles** describe the color conversion for a certain printer, type of paper and ink. **Color spaces** describe colors in documents and how they should be interpreted / printed (on any printer as far as possible).

Important: It doesn't make sense to import standard ICC profiles that are available from paper manufacturers or printer manufacturers. Such profiles are for use with the manufacturer's printer driver only – and thus do not produce correct colors using other drivers. The reason is that different printer drivers use different ink mixing and different halftoning algorithms. For accurate colors, the color chart that is measured for a color profile must be printed with PrintFab.

8.1 Index card "Printer Profiles"

Here you can find the list of PrintFab color profiles that you have added to your printer. Only profiles that were created individually for this printer are listed, so initially the list is empty.



List of color profiles

In the drop down list "Choose profile" you can find the profiles that have been added for the current printer. The following information is shown for the selected profile in the table below:

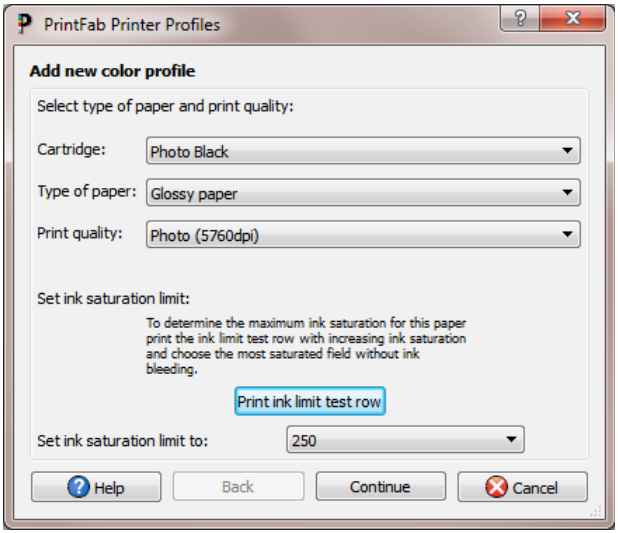
Profile name	with this name the profile is listed in the print dialog's “Media type” or "Paper type" selector
Status	“incomplete” after creation of a new profile entry, “complete” when color profile data have been assigned using “Import color data”.
Cartridge	additional print options (only available for some printers)
Quality	print quality for which the profile was made
Paper class	type of paper, e.g. plain paper, glossy photo paper etc.
Ink limit	**the maximum ink saturation**
Color data	name of color profile and type (ICC / ZEDOnet)
Driver	name of printer driver
User	name of user the profile was created for

Paper manufacturer, Paper, Ink manufacturer, Ink:
additional information on profile

"New Profile"

First create a new profile entry with the button “New profile”. This entry is “empty”, i.e. it doesn't yet contain color correction tables. The new entry can be used to create a new profile using our ZEDOnet profile creation service. If you have the necessary equipment (spectrometer, profile creation software), you can also create and add your own ICC profile.

In the following dialog please select the type of profile you want to create:



In the section “Select type of paper and print quality” choose the desired print parameters for the new profile. It is important to choose these settings carefully because color reproduction changes slightly with print quality, maximum ink saturation, type of paper, etc.

The setting “Cartridge” is only available for some printers. It is used to control printer specific settings like “color” or “photo” print cartridge inserted, gloss optimizer on/off, “matte black” or “glossy black” ink used. Choose the setting that shall also be used for later prints with this profile.

Specify the **type of paper**:

- **Plain paper** for normal paper, e.g. copy paper / (color-) laser paper
- **Matte inkjet paper** for matte coated inkjet paper (not for matte photo paper)
- **Glossy paper** for high quality photo papers (glossy, semi-matte / semi-glossy or pearl)
- **Transparency** for projectors
- **Other paper** for a paper that does not match any choice above
- **Fine Art paper** thick, matte paper usually with a rough surface ("artist's canvas")

You must also select the **print quality** (print resolution) you want to print with on

the chosen paper. In many cases you will select the highest quality. A profile can be used with all resolutions but the best results will be achieved with the resolution at which the profile chart was printed.

The “**Ink saturation limit**” specifies how much ink can be applied to the paper. The default (“300%” for CMY/RGB printers, “250%” for all other printers) will give good results in most cases.

Depending on the paper, a different level of ink is needed to achieve maximum color saturation. The more ink is applied, the more saturated colors can be printed. However, if too much ink is applied the inks will flow (“bleeding”).

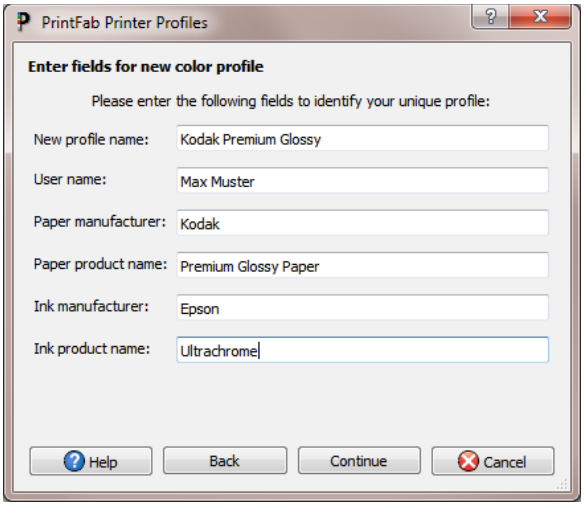
Therefore you can determine the maximum ink level for the chosen paper by printing a line with increasing ink levels. This can be done with the “**Print ink limit test row**” button. You can use the same sheet of paper for this test row that you will use later for printing the color chart.

In the printed ink limit test row, find the box with the highest ink level where the ink does not flow and dries within a few minutes. Set the “ink saturation limit” control to the value printed in this box.

Attention:

If the value you choose is too high, the colors of your profile chart will float and the chart cannot be measured. If the paper transport rolls of your printer smear the printed boxes of your profile chart, you will need to reduce the ink saturation limit and reprint it.

Press "continue" to get to the next dialog page.



Enter a name for your profile and supply information on paper and ink. The profile name will be visible in the print dialog later – choose a significant name so that you will be able to choose the correct profile. Information on paper and ink will be visible in the profile management menu.

Press “Continue” and you will see a summary of all profile information.

“OK” will finally create a new entry in PrintFab’s list of printer profiles.

Important:

- The new profile doesn't yet contain any color correction data. Only when you import ZEDOnet or ICC color correction data the “empty profile” will be completed and usable for printing with correct colors.
-

The next step will be printing a color profile chart (see below).

Profile actions

Delete profile

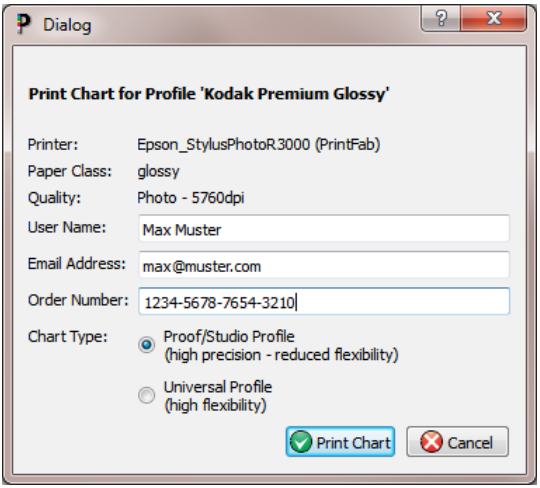
The currently selected profile will be removed from PrintFab’s list of printer profiles.

Print color chart (for ZEDOnet profile creation service)

With this function you can print a color chart for the ZEDOnet profile measurement service. (If you want to create an ICC profile with your own measurement equipment read the next section).

We offer a low cost measuring-service for users of PrintFab. Send us your printed color chart by mail, and we will measure it and return your individual color profile by email.

Some information will be requested before the color chart can be printed:



Enter your name and the email address where we shall send the profile data.

In the next line enter the **order number**. To be able to offer the profile measurement service at a low price we have set up an internet order system where you purchase an order number first (at www.printfab.net).

By indicating this order number you prove that the measuring fee is already paid and ensure that you will be sent your individual profile by email without any further requests.

You can choose between two **Chart types**:

- **Proof / studio** for higher color precision
  Profiles created with this chart type only support a limited number of “ink control” settings in the print dialog (with photo printers the usage of bright cyan and bright magenta cannot be set individually). These charts contain more color shades but less combinations of photo inks and the corresponding regular inks (e.g. photo magenta and magenta).
- **Universal profile** for higher ink control flexibility
  With this profile all ink control settings are available in the print dialog.

Now insert the sheet of paper where the ink saturation row was printed on.

> **Important**: Make sure that you rotate the sheet so that it will be printed on the blank section (i.e. insert the paper with the blank section leading – so the test row would be overprinted last)

Start the printout by pressing **"Print chart"**. It will take some time until the printer starts printing since the color chart must be calculated first.

Let the printed page dry for at least two hours and do not touch it. Put this color profile chart (do not fold it) in a robust envelope and mail it to:

ZEDOnet GmbH
- PrintFab color profiles -
Meinrad-Spiess-Platz 2
D-87660 Irsee
Germany

Since all information needed is printed on the profile sheet, you do not need to include an accompanying letter. Within approx. 14 days after your chart arrives, we will send the calculated PrintFab profile to the email address you specified.

Import color data

Imports color correction data for the currently selected profile entry. Files from ZEDOnet profile creation service or user-created ICC profiles are accepted. Choose your profile data file in the file selection dialog.

> **Please note**: Application programs may have to be closed and opended again before the new profile is available in the print dialog.

The new profile will be shown in the “Paper Type" or Media Type” selection of the print settings.

Important: It doesn't make sense to import standard ICC profiles that are available from paper manufacturers or printer manufacturers. Such profiles are for use with the manufacturer's printer driver only – and thus do not produce correct colors using other drivers. The reason is that different printer drivers use different ink mixing and different halftoning algorithms. For accurate colors, the color chart that is measured for a color profile must be printed with PrintFab.

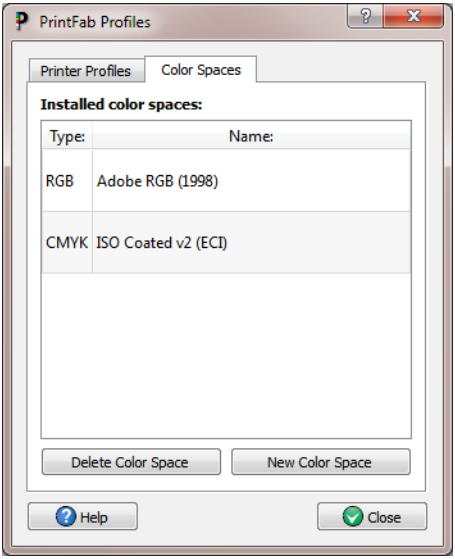
Rename profile

Change the name of the profile which is shown in the print dialog as "paper type" or "media type".

8.2 Index card "Color Spaces"

(only available in PrintFab Home L and PrintFab Pro)

Color spaces are required to interpret the colors of a document. The PrintFab driver must be set to the same color space that is used in a document or application program. Some common color spaces are already predefined in PrintFab. Additional color spaces can be added as ICC profiles using this dialog.



Select "**New Color Space**" to add an ICC color profile. Color profiles for RGB devices (e.g. monitor, scanner, digital camera) and CMYK devices (e.g. offset printing) can be imported and used for printing RGB or CMYK documents.

Select your ICC profile in the file selection dialog - PrintFab will display the profile name, copyright and profile type (RGB / CMYK). Press "OK" to install the profile.

After adding the profile, an additional RGB or CMYK color space will be available in the print settings (index card "Color") and also in applications that offer PrintFab settings in the print dialog. Please note that the correct "Color Mode" must be selected (Color RGB / CMYK Proof) to have the new color space listed. An application program may have to be restarted before the new color space will be available.

The button "**Delete Color Space"** removes the selected color space from the list.

8.3 Creating individual color profiles

Individual color profiles can either be created inexpensively by the ZEDOnet profile creation service, or by yourself if the necessary measurement equipment is available.

First create a new profile entry with appropriate settings (e.g. Paper class, print quality) in PrintFab's profile administration (as explained in section “8.1 Index card "Printer Profiles"”).

Afer that print a "color chart" – a page that contains a large number of color patches that will be measured with a spectrophotometer later:

a) Printing color charts for the ZEDOnet profile creation service

The necessary color chart can be printed with the "Print color chart” button in the “Profiles” dialog of the PrintFab control center.

b) Printing color charts for creating ICC profiles with own measurement equipment

If you have the necessary measurement equipment available, you can create your own profiles and use them with PrintFab. A detailed description can be found in the next chapter.

8.4 Creating ICC color profiles with a spectrophotometer

If you have access to a spectrophotometer (e.g. EyeOne, ColorMunki, Spyder) and color profiling software, you can create your own color profiles for PrintFab. The following steps are necessary:

Creating a new profile entry in PrintFab

Open the PrintFab Control Center, dialog "Profiles", tab "Printer profiles". Add a new profile entry with the button "New Profile". Among others, the following settings must be made (the comple description can be found in chapter 8.1 Index card "Printer Profiles"):

Cartridge - e.g. matte black or photo black

Type of paper - e.g. coated inkjet paper or (semi) glossy photo paper

Print quality - select a print resolution and quality

Ink saturation limit - limit ink amount, if necessary

On the next dialog page a "profile name" can be specified.

The new profile will be visible as an additional "Paper" in the printer driver settings dialog.

Printing the profile color chart

The next step is to print a profile color chart that is supplied with your profiling software. Depending on the software, RGB profiles and maybe also CMYK profiles can be created. Usually there are TIFF profile color chart files or an option to export a chart file or to print the color chart directly. The section "Differences between RGB and CMYK profiles" further below explains which profile type is suitable for which purpose.

To print the profile color chart, you need a photo editing or printing program that can print without color management. For CMYK charts, the software must also support CMYK printing, e.g. Photoshop oder CorelPhotoPaint (the "Adobe Color Print Utility" can be used only for RGB charts).

Settings in the Photoshop print dialog

Select "Photoshop Manages Colors". As "Printer Profile", choose "Working RGB" or "Working CMYK" - this means that Photoshop doesn't perform printer color management. Photoshop may show a color management warning which can be ignored.

PrintFab driver settings dialog

Tab "Main":

Paper - select the profile entry that you just added (at the end of the list)

Tab "Color":

Color Mode - select "Color (RGB)" or "CMYK Proof" depending on the profile chart type

Intent - "No correction"

Creating the ICC profile

The printed chart will now be measured with the spectrophotometer and an ICC profile will be created - follow the instructions of your color profile creation software.

Using the profile

The resulting ICC profile can be used either in PrintFab (recommended) or in an application software that supports ICC profiles. It is important that color

management is done either in the PrintFab driver or in the application software - otherwise the profile will be applied twice and colors will be wrong.

We will explain the two color management methods for the software Photoshop.

Color management in PrintFab (recommended)

Import the ICC profile in the "Profiles" dialog of PrintFab Control Center, (tab "Printer profiles" -> button "Import color data").

In the Photoshop print dialog, select "Photoshop Manages Colors". As "Printer Profile", choose the document profile - this means that Photoshop doesn't perform printer color management. Photoshop may show a color management warning which can be ignored.

In the PrintFab driver settings, make the following settings:

Tab "Main":

Paper - select the profile entry that you added

Tab "Color":

Color Mode - select "Color (RGB)" or "CMYK Proof" depending on the *document* type

Intent - e.g. "Perception" or "Perception Photo" for RGB photo printing, "Colorimetric relative" for CMYK proof printing

Color Space - select the color space of the *document* to be printed, e.g. "sRGB" or "ISO Coated"

Please note that some features like printer color simulation in PrintFab Preview and "ink save mode" can be used only when color management is done by PrintFab.

Color management in Photoshop

Add the ICC profile to the Windows color profiles folder (usually done by the profiling software).

In the Photoshop print dialog, select "PhotoShop manages colors" and "Printer profile"=<the icc profile you created>

In the PrintFab driver settings, use the same settings as when printing the ICC profile chart:

Tab "Main":

Paper - select the profile entry that you added

Tab "Color":

Color Mode - "Color (RGB)" or "CMYK Proof" depending on the profile chart type

Intent - "No correction"

Differences between RGB and CMYK profiles

Depending on the profile creation software, you can create RGB and/or CMYK profiles. Both types of profiles can be used for printing correct colors with RGB **and** CMYK documents. PrintFab calculates the necessary conversion automatically.

Each profile type has its pros and cons:

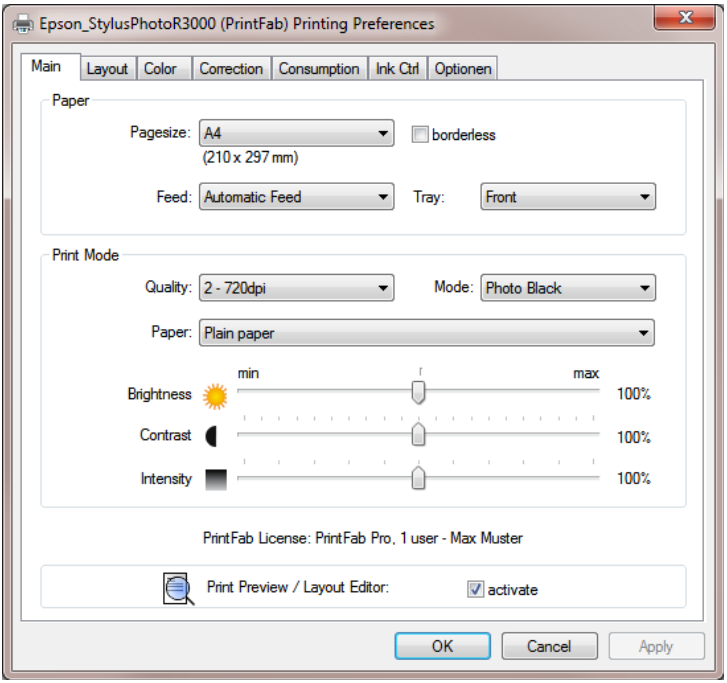
- RGB profiles need less color patches than CMYK profiles for achieving the same color accuracy. If your profile creation software only offers CMYK color charts with less than 500 patches, prefer printing an RGB chart.
- Only with CMYK profiles the generation of black can be determined by your profile creation software. With RGB profiles, PrintFab always uses its standard way of generating black.

9. Print dialog settings of PrintFab

In almost all applications a printout is started with the menu option “Print…” (located in the “File” menu). In the print dialog select your PrintFab driver and press the “settings” button to open the detailed printer driver settings.
The settings are split into submenus on several index cards:

9.1 Index card „Main“

The most frequently used settings can be found on this index card.



Pagesize

The paper size, e.g. Letter, A4, etc.

- Page sizes of photo papers are sometimes identified by their measurement in inches (e.g. 4x6“ = 10x15 cm)
- Additional paper sizes can be added with the „Custom Page Size Editior“ (see chapter "7. Custom page size editor").

borderless

This option is only available if borderless printing is possible with the selected page size.

Notes:

- Borderless printing is not supported by all printers
- When a custom page size is selected, the "borderless" option is not shown as the borderless mode is set in the custom page size editor.

overlap

When printing borderless the document is slightly enlarged in order to let it overlap the page borders a little bit. This ensures that even with minor mechanical deviations of the printer no white margins will be visible at any border.

The level of enlargement can be selected by the „overlap“ slider. Position „min“ means no enlargement at all.

Hint: If even in the „max“ position there is still a white margin visible at one border, you can define a new borderless page size in the „Custom Page Size Editor“ where you can edit printing position and enlargement individually.

Feed

The input feed (e.g. manual or automatic).

Tray

The output tray (only for printers that support different output trays).

Quality

Almost every printer offers several print modes. Generally, the higher the print quality the longer the printout will take. So you will probably choose a lower print quality for draft and test printouts and one of the highest qualities for the final printout.

Paper

Specify the medium you want to print on (i.e. the type of paper or a different media type like transparency, printable CD, etc.). Internally, PrintFab chooses the appropriate color profile for this medium and adapts other printing parameters like printing speed, amount of ink, interleaving, etc.

To achieve a good color quality it is very important that you set the correct media type. As an alternative you can select a similar medium, e.g. “Inkjet Paper” for any matte coated inkjet paper or “Glossy” for any glossy or semi-glossy coated photo paper. But keep in mind that you can only obtain exact colors if the paper is supported directly.

Adding new papers

You can further improve the color quality – especially if your preferred paper is not supported directly – with an individual PrintFab color profile for your printer and your preferred paper by the ZEDOnet profile measuring service. Read more about individual color profiles in the description of the PrintFab printer profiles section “8. Profiles - color profile administration".

Cartridge

This setting is only available for certain printers to control printer specific options, e.g.

- black or color print head inserted in the printer
- 4-color printhead or 6-color photo printhead used
- matte black or photo black ink cartridge used
- gloss optimizer on or off
- normal or economy print mode

Brightness

Use this slider to render the printout lighter or darker. The higher the value the brighter your printouts will get and vice versa.

> **Note:** Only intermediate colors will be changed, black and white will remain unchanged - i.e. pure black will be printed as pure black, white as pure white. If you also want to brighten the black parts of a printout you can reduce the contrast with the control described next.

Contrast

Use this slider to increase or decrease the contrast of your printout. With a decreased contrast white will stay unchanged, i.e. only dark colors will become brighter. With an increased contrast bright colors will become brighter and dark colors will become darker.

Intensity

Decreases the amount of applied ink. Hence the complete printout will become paler (move slider to „low“).

A lower saturation is good for printing test prints and in cases where too much ink is applied. You can easily save ink with this slider, however this will result in visibly paler printouts – to save ink without that impact, preferably use the „ink control“ sliders.

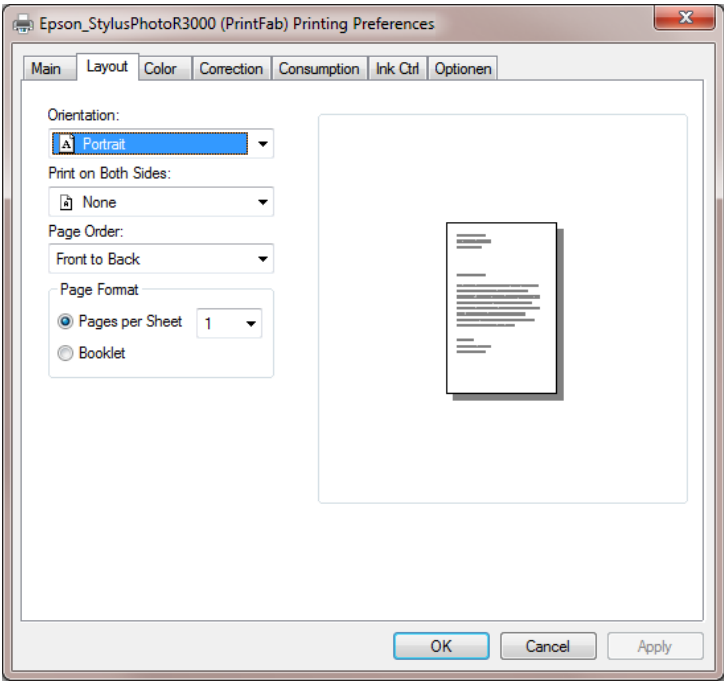
Print Preview / Layout Editor

To activate the preview function, check the box „Print Preview“. Before printing, PrintFab will display a preview window where you can confirm or abort the print job. With the integrated Layout Editor you can even modify the print job before it is sent to the printer. You can scale, crop and move contents, delete or add pages.

A description of the Layout Editor can be found in chapter "10. Print Preview with Layout Editor".

9.2 Index card „Layout“

Page orientation and duplex mode can be chosen here as well as page ordering (front to rear or rear to front), multiple pages per sheet (n-up) or brochure printing.



Duplex

Activate "Duplex" mode if you want the printer to use both paper sides. You can choose between „portrait“ and „landscape“ format – depending on which side the pages should be turned over later.

Note: the duplex setting is only available for printers that support automatic duplexing. A manual duplex mode is currently not offered by PrintFab.

Copies

If you need several copies, enter the desired number of printouts ("1" means no copies).

Pages On Sheet

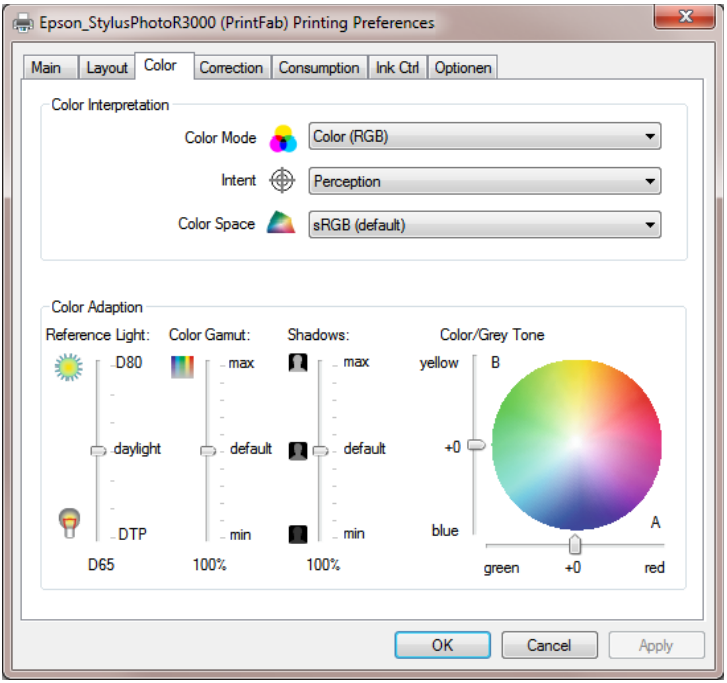
With this function you can print several scaled down pages on one sheet of paper.

1 - one page per sheet (default)

2 - print two pages on one sheet; the printout is rotated by 90 degrees

4 - print four pages on one sheet

9.3 Index card „Color“



Color Mode

Specifies whether the printout is done in grayscale or in color. You can choose between the following options:

Grayscale

For printing grayscale documents with photos use this setting as the dithering quality is better than in the “grayscale fast” mode. Only black ink is used. The calculation of print jobs takes longer than in the ”fast” grayscale mode.

Grayscale Fast – default setting for B/W printers

This mode produces fast printouts without colors at a medium dithering quality. Use this mode with fast printers when printing larger documents.

Gray Photo

Recommended setting for high-quality black & white photos. Brighter shades

of gray are printed by mixing primay colors, thus looking less grainy. On some printers also grey photo ink is used. This is the only „Gray“ mode where “Color / Grey Tone” settings take effect (e.g. to achieve a sepia color balance).

Color - RGB – default setting for color printers

This is the correct setting for printing most documents or photos in color. PrintFab assumes that the colors of your document belong to an RGB color space (which you can specify with the “Color Space” control).

Note for professionals:

Documents that are already separated into the four standard colors “CMYK” for pre-press must be printed in “CMYK Proof” mode described below. This ensures that the colors will be processed correctly. PrintFab cannot detect the color mode (CMYK or RGB) automatically. If you get major color deviations the reason may be that RGB mode was used with CMYK data.

Special color modes of „PrintFab Pro“

PrintFab Pro offers two additional color modes for printing „proofs“ in prepress production. These color modes are designed especially for printing PDF- and Postscript documents based on the CMYK color model.

CMYK Proof – only PrintFab Pro

CMYK Proof (Mix Black) – only PrintFab Pro

In “CMYK Proof” mode the black (“K”) color channel of the document is printed using black ink. Thus colors can reproduced more exactly.

In “CMYK Proof (Mix Black)” mode lighter shades of gray are printed by mixing primay colors. Thus shades of gray are looking less grainy.

When using CMYK color mode specify the CMYK color space with the "Color Space" control. PrintFab cannot detect the color mode automatically.

Hint: If you get major color deviations, the reason may be that inappropriately CMYK-Proof mode was used with RGB data.

Intent (Rendering intent)

As the color spaces of your computer display and your printer are different (printers normally cannot reproduce as luminous colors as displays can) an exact reproduction of all colors is not possible. Therefore you need to find a compromise. It is up to you to decide how the colors of your document shall be transferred into printable colors. With some printer drivers not all rendering intents are available as they are not yet provided with new PrintFab color

profiles. If there are no PrintFab profiles available for your printer you can generate an individual color profile - see chapter “8. Profiles - color profile administration".

The following rendering intents are available:

Perception – Standard setting

The color space of the document is reduced to fit into the printer’s color space. All colors are shifted homogeneously in a way that the overall perception of the image colors will not be changed. As it is mostly the very intense colors that cannot be printed, color saturation and contrast will have to be reduced slightly. Thus the color balance of the printout will be correct.

Perception Photo – optimized for photographs

The color reproduction is optimized for digital photos. Contrast and color saturation are reduced as little as possible to achieve vivid and brilliant colors. As a consequence some details may be lost in very dark or very saturated parts of the image.

Perception Inksave - optimized for low ink consumption

Color reproduction is also optimized for digital photos, but some additional steps taken to reduce ink consumption. Ink consumption is decreased only to a certain extent to keep the image quality as high as possible. Additionally all colors are reproduced a bit “cooler” to save yellow ink and very intense colors are printed a bit less saturated.

With this setting you save on average about 20%-35% of ink without a noticeable loss in print quality. (even in comparison with the original printer driver of the printer manufacturer).

Saturation

The color reproduction is optimized for diagrams and charts but not suitable for digital images. The printer driver tries to achieve very luminous colors.

Colorimetric Absolute (PrintFab Pro only)

This setting is designed especially for printing CMYK documents in prepress production. All colors that can be printed will be reproduced exactly. However colors that cannot be printed must be reduced in saturation. Depending on the paper used, details could be lost - especially in darker or very luminous parts of the image.

When printing standard RGB documents with this intent, only a small part of the colors can be reproduced exactly (RGB color spaces are bigger than CMYK spaces and especially many dark colors cannot be reproduced exactly). Thus this intent is not useful for printing RGB documents; RGB pictures appear too dark in this mode.

Colorimetric Relative (PrintFab Pro only)

Same as above but additionally the white point of the document is adapted to the white point of the chosen paper. This intent should be used when printing with the „CMYK-Proof“ mode (see below).

Colorimetric Relative (PrintFab Pro only)

Same as "Colorimetric Relative" but additionally the black point of the document is adapted to the deepest black the printer can print of the chosen paper. This intent can be used when printing with the „CMYK-Proof“ mode on paper that cannot reproduce deep blacks.

No Correction (for printing color charts)

Color management is switched off, printed colors will not match document colors. This setting should only be chosen to print a profile chart when creating an ICC profile.

Color Space (color profile of document)

This control specifies how the colors of a document will be interpreted. There exist different RGB and CMYK color spaces. Thus, to correctly interpret RGB or CMYK values PrintFab needs to know to which color space they belong. There are different RGB and CMYK color models as they are referring to certain displays (RGB) or press colors (CMYK).

The following color models are available in PrintFab – additional profiles can be added with the PrintFab Toolbox:

RGB-Profiles

sRGB (default setting for mode “Color”)

This is the most common RGB color space for digital photos on PCs and for digital cameras. (Gamma value approx. 2.2)

Apple RGB

This color space is used with most Apple Macintosh computer displays. (Gamma value approx. 1.8 -> Pictures will be printed brighter than with sRGB)

If your documents are printed too dark with “sRGB” choose “AppleRGB”.

Additional RGB color spaces can be added with the color profile administration menu by loading the appropriate ICC color profile (see chapter "8. Profiles - color profile administration“.

CMYK-profiles

(only PrintFab Pro – available when printing documents in CMYK color mode)

The first three profiles are „generic“ profiles, which approximately reproduce the colors of printing presses of the corresponding region.

Additional ICC-profiles can be added with the color profile admistration (e.g. a color profile provided by a printing house)

EURO (default setting in color mode „CMYK Proof“)

color space compatible to the European standard for offset printing

USA

color space compatible to the American standard for offset printing

JAPAN

color space compatible to the Japanese standard for offset printing

ISO Coated v2 (ECI)

European standard profile for offset printing - included with the kind permission of ECI, the European Color Initiative. The most current version and additional profiles are available on the web site www.eci.org.

This profile is a common standard in offset printing.

Reference Light

Choose for which illumination the colors of your printouts shall be optimized.

> **Technical background:**
>
> Colors look different when illuminated with different lighting, an effect that is also known as color metamerism. The red colors of a photo look more intense when viewed in artificial lighting (e.g. a desk lamp) than when viewed in daylight. That's why a photo may look correct in artificial light but pale when viewed in daylight - or vice versa, a picture that looks good in daylight may look reddish when viewed with a desk lamp. The intensity of this effect depends very much on the ink and is therefore not relevant for some printers.
>
> This is also important for prepress simulation (proofing). Printouts with different printer models (and hence with different inks) can be nearly identical only at a certain type of illumination.

The illumination is specified by the color temperature. The settings range between D50 (good artificial light) and D80 (bluish daylight). The average daylight corresponds to D65.

Light with 5000K color temperature (D50) is the reference illumination for pre-press.

When printing digital photos better results are normally achieved with reference lighting set to D65 to D80 (warmer skin colors, prevention of blue color tones turning purple).

With ICC color profiles only measurement data for D50 light are available. If a different illumination is chosen an approximation will be used (chromatic adaption formula).

Color Saturation

Change the color intensity with this slider:

Higher intensity => more vivid colors

lower intensity => less vivid colors

This setting is not effective with the rendering intents "Colorimetric Absolute" and "Colorimetric Relative" as these intents exclude any color space modification.

Color / Grey Tone

Use this control to change the color or gray balance. This setting relates to the CIELab color system which describes a color by three components:

L = Brightness: 0 = black … 100 = white

A = color component 1: negative = green, positive = red

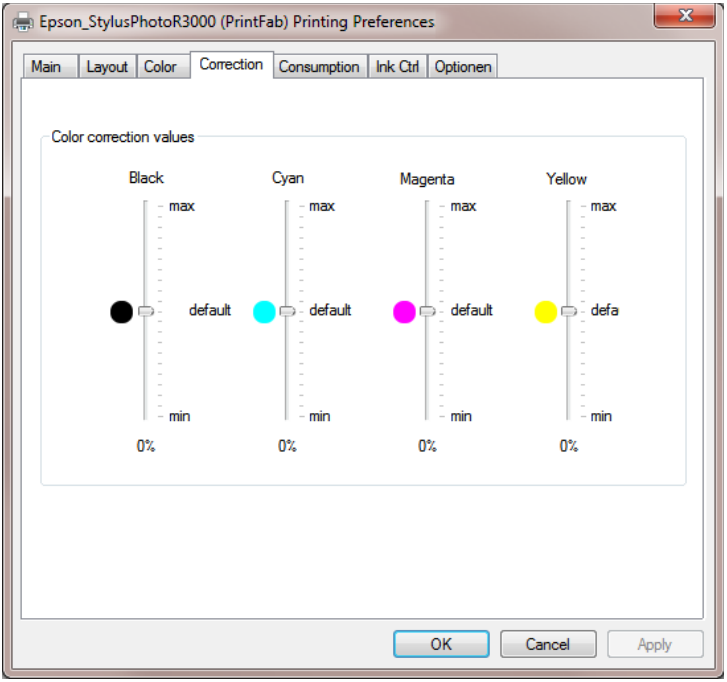
B = color component 2: negative = blue, positive = yellow

With the slider „A“ the color balance can be turned more greenish (negative values) or more reddish (positive values). Comparably the slider „B“ turns the color tuning more bluish (negative values) or yellowish (positive values).

The “Color/Grey Tone” setting is disabled when printing with the rendering intents “Colorimetric Absolut” or “Colorimetric Relative”.

> **Note:**
> Tuning the color balance slightly bluish (e.g. B = -5) does not only comply with our viewing habits (e.g. most types of paper have bluish optical brighteners) but as a side effect also reduces ink consumption (yellow is the color consumed most when printing photos). This may be a reason why many manufacturer's printer drivers print slightly bluish.

9.4 Index card „Correction“



Individual color correction

If necessary, use these controls to correct color reproduction by adjusting the intensities of black, cyan, magenta and yellow ink. This may be useful if you use different ink and / or paper. Of course, color reproduction can be corrected more accurately by creating an individual color profile.

With the option “use individual color correction” you can enable or disable these controls.

> **Attention**:
> These controls influence all color modes, even the colorimetric intents. Thus color reproduction of a perfect color profile would be falsified. Use these controls only if you are unsatisfied with color reproduction and need to adjust a color cast.

Black

Adjusts the amount of black ink. The higher the value, the more black ink is

applied.

Cyan

Adjusts the amount of cyan ink (light cyan ink is adjusted in the same way, if present).

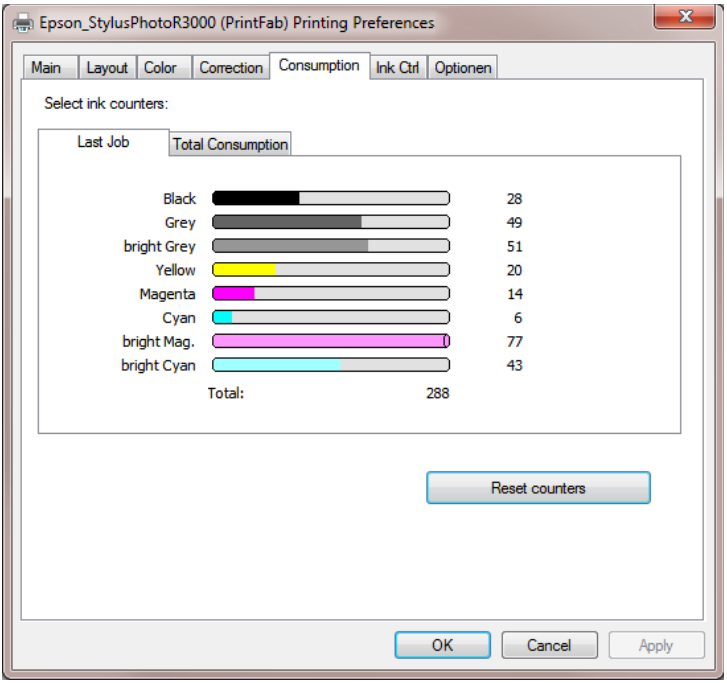
Magenta

Adjusts the amount of magenta ink (light magenta ink is adjusted in the same way, if present).

Yellow

Adjusts the amount of yellow ink.

9.5 Index card “Consumption“



PrintFab calculates how much ink is used for every printout. As ink droplets are counted, this cannot be converted into mililiters of ink. However the ink consumption values can be used to compare how much ink is consumed of each color and to evaluate the effekt of any ink saving measures.

This index card shows the ink consumption values of the last printout and total values of all previous printouts.

Consider that the job must have been finished completely before the numbers for the last printout will be available.

The “Total Consumption” pane shows the total ink counters of all previous jobs.

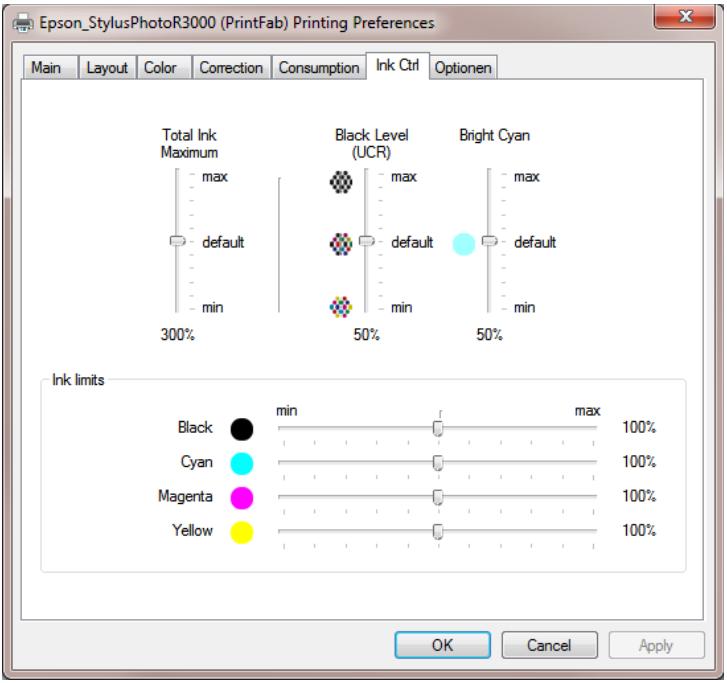
You can reset the ”Total Consumption” counters with the PrintFab control center program (button “Edit” printer → switch “Reset ink counters now”).

If you activate the “Print Simulation” option, the next document is only processed but not actually printed. Thus you can get a projection of the ink consumption with different settings without wasting ink and paper. The “Print Simulation”

option is automatically disabled after the next print job.

You can use the ink counter values for optimizing your print settings. This is especially interesting when a printer is using combined color cartridges (one cartridge containing three or more different inks). The total ink counter values show which color will run out first – so you can react and reduce the consumption of this color with PrintFab's ink control settings (see “9.6 Index card Ink Ctrl“). This helps to extend the cartridge life and avoids throwing away cartridges with half of the other inks left.

9.6 Index card „Ink Ctrl“



The controls of this menu page enable you to optimize the print quality or to reduce the ink consumption – whereas high quality and low ink consumption are not necessarily mutually exclusive. With PrintFab you can save ink without a noticeable loss in print quality.

Black Level / UCR (under color removal)

The generation of grayscales with colored or black ink is influenced with this slider. The advantage of using more black ink is a lower ink consumption whereas mixing grayscales with more color leads to smoother and less grainy colors. Bright tones of gray are ideally generated with colored ink, whereas with darker gray tones, black ink is used increasingly instead of using colors. The “black level” control determines the usage of black ink when mixing colors.

In the default setting black ink is only used in darker gray tones to avoid visible black dots.

Shifting the slider upwards leads to black ink being used for brighter gray tones and further replaces more color by black ink in the darker gray tones. Each drop of black ink drop substitutes for three drops of colored ink – in this way a considerable amount of ink can be saved. As a drawback, your printout may be slightly rougher.

In contrast, shifting the slider downwards leads to even darker gray tones being printed using colors without using black ink. As a result you get finer gradations but the ink consumption will be higher.

Note:

This control is only available if pure black ink can be used. Some printers only use pure black when printing on plain paper.

This function is not supported when using ICC printer profiles.

PrintFab Pro: In “CMYK Proof” mode the mixing of black is performed according to the CMYK data of the source document as much as possible. When reproducing color tones that the printer cannot produce as prescribed there may be modifications of this precept – e.g. additional color may be added to black tones in order to obtain a deeper black.
The setting “Black Level (UCR)” is not effective for the color mode “CMYK Proof” mode. However it affects the “CMYK Proof (mixblack)” mode.

Bright Cyan / Bright Magenta / Photo Inks

(These controls are not available with ICC color profiles)

The use of the additional colors “bright cyan” and “bright magenta” of photo printers can be controlled with these sliders. You can reduce the use of the bright inks (values < 50) by replacing them with the corresponding dark inks. This results in a decreased total ink consumption but produces slightly grainier printouts. Conversely you can use more bright inks with values greater than 50.

When using printers with combined ink cartridges (several colors within the same cartridge) the consumption of all colors should be balanced – i.e. if significantly more bright cyan has already been consumed than dark cyan, you should shift the slider downwards to save bright ink (respectively upwards to save dark ink).

Depending on the internal color profile, there are either two sliders for controlling the usage of “bright cyan“ and “bright magenta“ separately, or a single “Photo Inks“ slider that changes the usage of both inks concurrently.

Ink Limits

Total Ink Maximum

With this control you can limit the maximum amount of ink applied per printer

dot. Its purpose is mainly to prevent an oversoaking of the paper and “bleeding” of the colors.

For example “300%” means that a maximum of 100% of the yellow, magenta and cyan inks may be applied at the same time. With “400%” an additional 100% of black ink may be applied.

Higher values cause a richer black (with higher ink consumption), lower values result in a lower ink consumption (with a lower intensity of black).

If excessive ink is applied resulting in smearing (“bleeding”), you can reduce the amount of applied ink by shifting this slider towards lower values. (You may also use the control “Color Saturation” of the “Main“ index card).

Separate ink limit sliders for black, cyan, magenta and yellow inks

With these controls you can limit the maximum applied amount of every ink color separately. As only highly saturated colors are affected, most colors will remain unchanged. With its integrated color profile generator, PrintFab tries to adapt the affected colors as much as possible to keep the overall color balance unchanged.

The intensity of colors does not increase linearly with the amount of applied ink. Instead it increases similar to a saturation curve, i.e. in the upper region an application of 20% more ink results in only a 1% increase in color saturation. By cutting back in this region, you can save ink quite effectively without a noticeable loss in print quality. Hence ink is saved in the portions of the image with intense colors.

In case of a printer with a combined ink cartridge (several colors within the same cartridge) it is important to preemptively reduce the limit of the ink that tends to be used up first (in most cases the yellow ink) - this way the lifetime of the cartridge can usually be prolonged up to 30%.

Also you can reduce the amount of ink consumption with single ink printers by cutting back the ink peaks - and you can use this setting without having to consider the remaining ink levels.

If you have chosen „Perception Inksave“ as rendering intent some ink limits are already active. The “Separate Ink Limits” controls will then additionally reduce the ink limits (sliders downwards) or lessen the limitations (sliders upwards).

Exception - black ink limit:

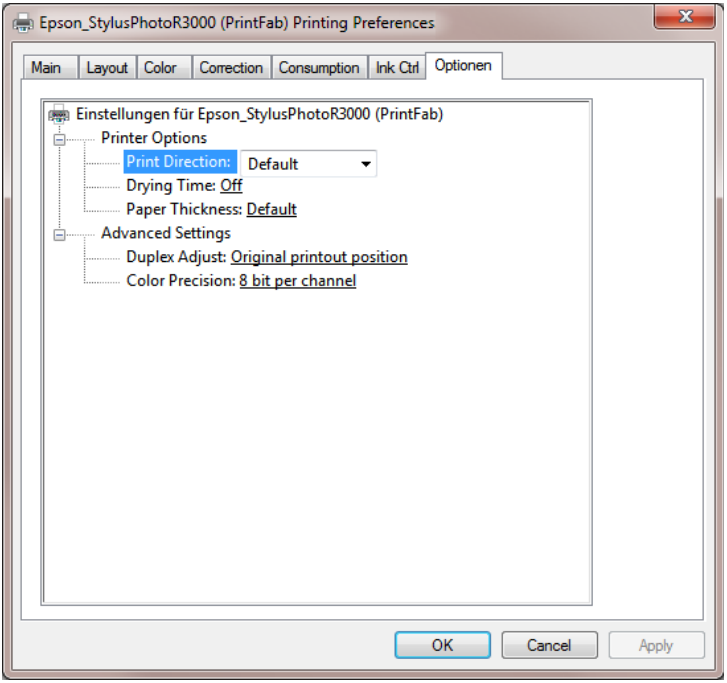
To achieve very dark shades of colors not only pure black ink is used but the color inks yellow, magenta and cyan are added.

The control “black ink limit” does not change the use of the black ink. Instead the

amount of color inks which are added to dark shades is changed. As a result the consumption of color inks is reduced when lowering the black ink limit. If you increase the black ink limit, more colored ink will be added to dark gray and black areas - resulting in deeper and darker gray/black shades.

9.7 Index card „Options“

All printer specific options are arranged on this index card, e.g. settings for roll paper cutter, ink drying pauses, etc.



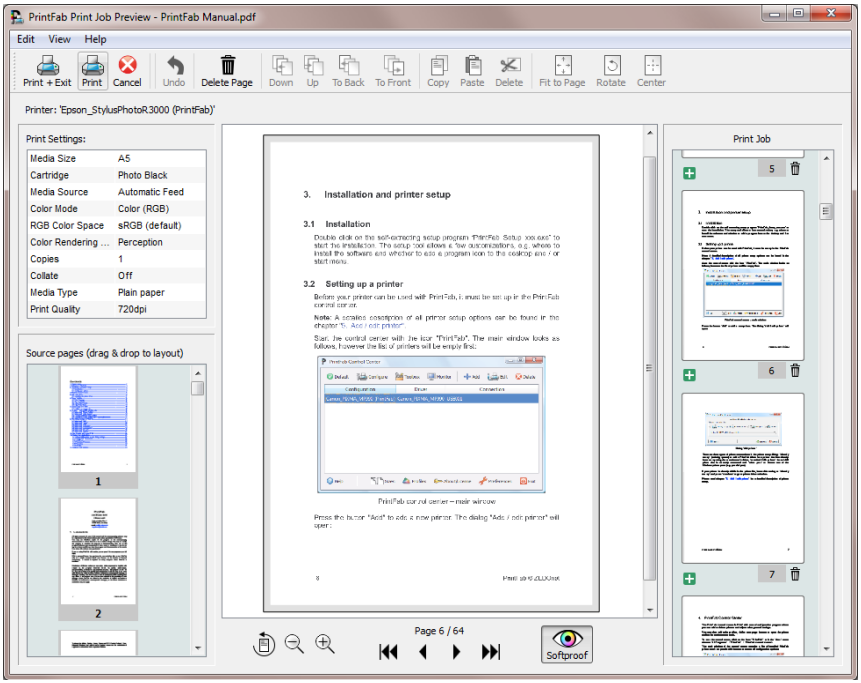
The setting "Color Precision" selects which color depth is used when processing the colors sent from the application. The option "16 bit" may improve rendering of color gradients but increases processing times. As only few applications send print data with 16 bit color depth the default is to process colors only with 8 bit accuracy.

10. Print Preview with Layout Editor

The preview function shows the complete print job on screen before it is sent to the printer. So you can preview each page and then decide whether it shall be printed or not.

With the integrated Layout Editor you can even modify the print job before actually sending it to the printer. You can scale, crop and move contents, delete or add pages. Further you can also cut out some snippets from different pages of the job and combine them on a new page – this can be convenient when printing web pages where you may want to remove ads or other navigation buttons and enlarge some special contents.

To activate the preview function, mark the checkbox „Print Preview“ on the first index card of the PrintFab print settings dialog. After each print job that is sent, PrintFab now displayw this preview window. Only if you click the „Print“ button in the Print Job Preview window, the job is actually forwarded to the printer.



10.1 Using the Print Job Preview and the integrated Layout Editor

The window is split into 6 areas:

- Toolbar with buttons on the top
- Table with print settings
- left column: original pages of the print job
- right column: pages of the edited print job
- middle column: editor area where the currently selected page can be modified
- navigation area below the editor area

Function overview

A new print job (right column) is created out of the pages of the original print job (shown in the left column). Initially the new print job is just an unmodified copy of the original print job.
Now you can modify each page as required, combine or delete and add pages.

Change print settings

In the print settings table, you can click on entries (e.g. "Paper", "Resolution") to change them.

Softproof (simulate printed colors)

In the navigation area below the editor area there is a "softproof" button (symbol "eye") that lets you simulate printed colors. When it is enabled, changes to print settings (like "media type" and "color space") will also change the document colors in the preview window.

N-Up printing

In the pull down menu "Edit" you can find options to change the print layout to 2 or 4 pages per sheet.

Page editing

First select a page of the new print job in the right column. It will be displayed enlarged in the editor area in the middle of the window.
A copy of the original print job page is placed as a „print object“ on this page. Using the mouse you can select this object and move it. When the object is selected, small "handles" are displayed on the edges and borders of its frame.
When you move the handles on the edges, the object's size changes. Moving

the middle handles of the frame results in cropping the object. Thus you can cut off parts of the page and just use snippets.
Objects can also be rotated by angles of 90 degrees (button „rotate“).

Combining pages

To combine snippets from different pages, select a page from the original print job (left column) and drag it into the editor field („drag & drop“). Thus a new print object is added to the page which can now be resized, cropped, etc. In the same manner you can add additional objects containing other pages.

Changing the order of print objects

If objects overlap each other, their order can be changed with the buttons “up”, “down“, “to back”, “to front”. These functions are also available in the context menu that shows up when clicking an object with the right mouse button.

The “delete” button removes selected objects in the editor.

Adding new pages, removing existing pages

To add additional pages to your print job, press the button “+” in the right column at the appropriate position where the page shall be inserted.
Then add print objects via drag&drop from the original print job in the left column.

A complete page (and all of its print objects) can be removed from the print job with the button “Delete page”.

Print document

Press the “Print” button to send the print job to the printer. All changes that you have made in the print job will be applied. If you just wanted to review the document without changing it, the document will be printed as sent from your application. Additionally, the Print Job Preview window is closed.

Discard print job

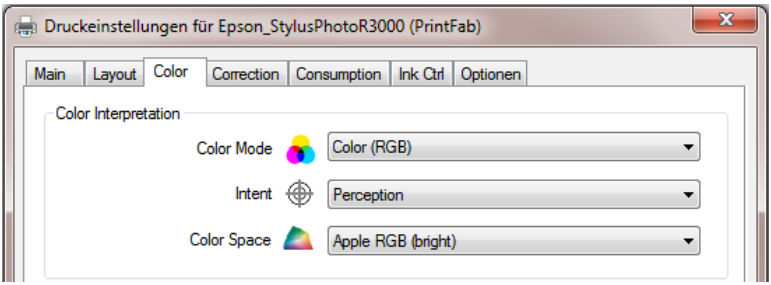
By clicking on “Cancel” the complete print job (and all changes that you made) will be discarded and the Print Job Preview program is closed.

11. Printing from Applications

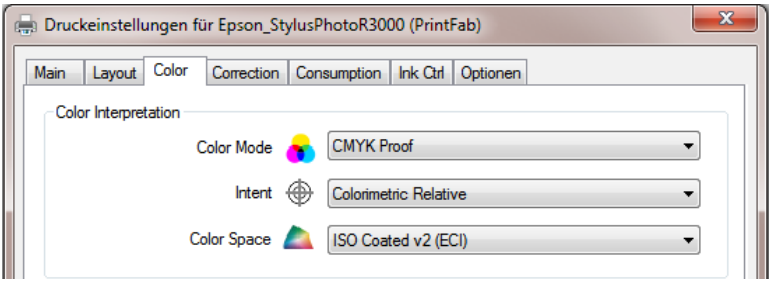
11.1 General information on print dialog settings

It is important that the same color mode that is used in the document is chosen in the PrintFab driver settings, tab “Color”.

For RGB documents select “Mode” = “Color (RGB)”. Also select the correct document color space (default: “sRGB”) and the desired rendering intent (default: “Perception”).



For CMYK documents choose “Mode” = “CMYK Proof” or “Mode” = “CMYK Proof (Mix Black)” for smoother dithering. The intent should be set to “Colorimetric Relative”. It is important to select the same color space as in the document or application. If the color space is not available, install it in PrintFab Control Center, button "Profiles" -> "Color Spaces".



A detailed description of all print dialog settings can be found in chapter 9 "Print dialog settings of PrintFab", page 32.

11.2 Printing PDF Documents

Suitable for printing PDF documents are Acrobat Pro and also the freely available Adobe Reader.

If you create PDF documents for a print house, make sure to export them in "CMYK" color space only. For correct proof printing from Acrobat or Adobe Reader, *disable "include color profiles"* in the PDF export settings. Otherwise Acrobat / Adobe Reader may perform a profile conversion and colors will be slightly changed.

Also make sure that the PrintFab driver settings have been set correctly for CMYK printing (see above).

Acrobat Pro

Normally, no settings have to be changed in the Acrobat print dialog. If colors are incorrect, check the following settings:

In the print dialog, section “Copies & Pages” press “Advanced...” .

In the In the “Advanced Print Setup” dialog, section “Output”, select

"Color Management" = “Acrobat color management”.
“Color Profile” = (Color profile of document)

Adobe Reader

Check the "Advanced" settings in Acrobat Reader's print dialog: The option "Let printer determine colors" must be *enabled*, "Print as Image" must be *disabled*,

If text or graphics are not printed properly, you can activate the option “Print as Image” in Acrobat Reader’s print dialog, “Additional Options…”. However, in this case the document will be converted to RGB color space, which means that no exact CMYK proof print is possible (saturated colors will be printed too bright).

11.3 CorelDraw

Normally, no settings have to be changed in the print dialog - the default settings in Coreldraw and PrintFab are for RGB printing.

If you create documents for a print house, you should make a "CMYK proof print". In the print job all document objects will be converted to CMYK color space - this means that colors are the same as when exporting a PDF document in CMYK mode.
In the Coreldraw print dialog, tab "Color" choose "Output color as: CMYK". Then go to tab "General" and press "Preferences..." to open the driver settings and

configure PrintFab for CMYK proof printing (see above).

11.4 Photoshop Elements

Normally, no settings have to be changed in the print dialog - the default settings in Photoshop Elements (PSE) and PrintFab are for printing photos in sRGB color space.

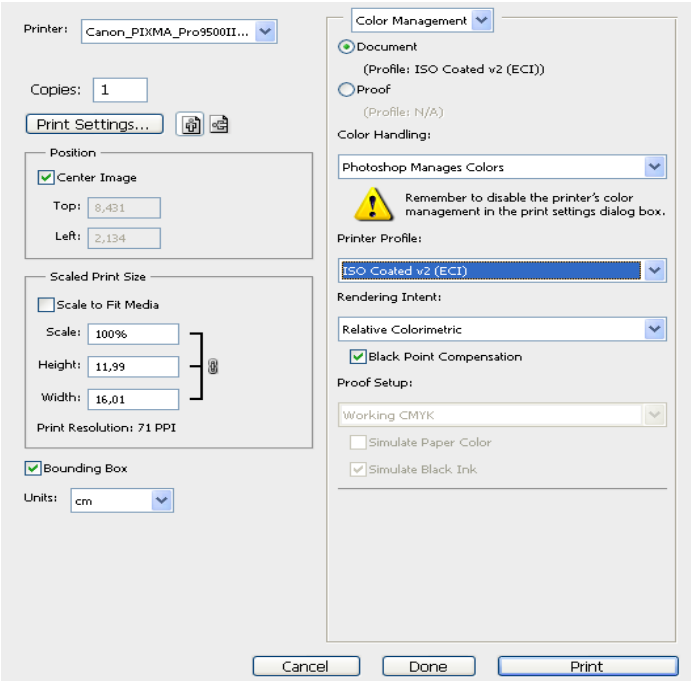
If you are printing photos that were created in a wider color space like AdobeRGB and want to reproduce the wider range of colors, you have to configure PSE and PrintFab appropriately.

From the PSE print dialog open "More options" -> "Color management". Choose "Photoshop Elements Manages Colors" and "Printer Profile = AdobeRGB".

Also in the PrintFab driver settings "AdobeRGB" must be chosen. In the PSE print dialog, click on "Change settings" and then on "Extended settings" to open the driver settings. On tab "Colors" choose "Color space = AdobeRGB".

11.5 Photoshop

Open the Photoshop print dialog “Print with Preview”.



In the “Color Management” options select

“Print” = “Document”
“Options / Color Handling” = “Photoshop Manages Colors”
"Printer Profile" = <Profile of Document>

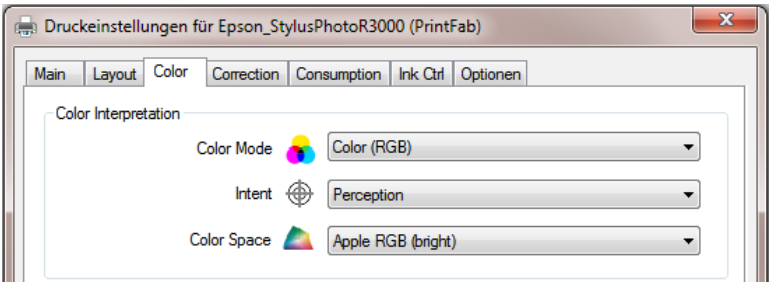
or

“Printer Profile” = “sRGB” (see annotation below)

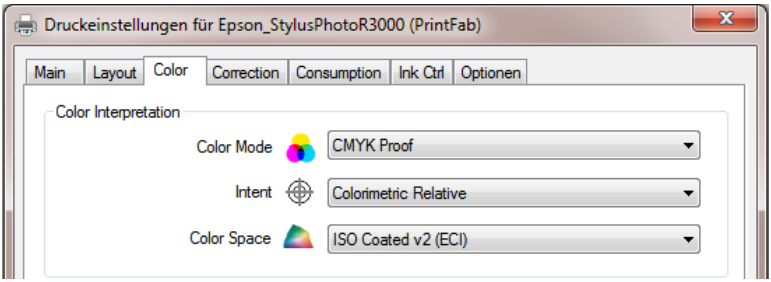
Press "Print Settings" to open the PrintFab driver settings (older versions of Photoshop before CS4: the button “Print...” will open the Windows print dialog where you can access driver settings). Choose the PrintFab driver and select the “PrintFab Settings” menu.

Choose the correct media type and print quality. Then click on tab “Color” and select the color mode (RGB / CMYK) and color space of your document.

Document in RGB color space:



or Document in CMYK color space:



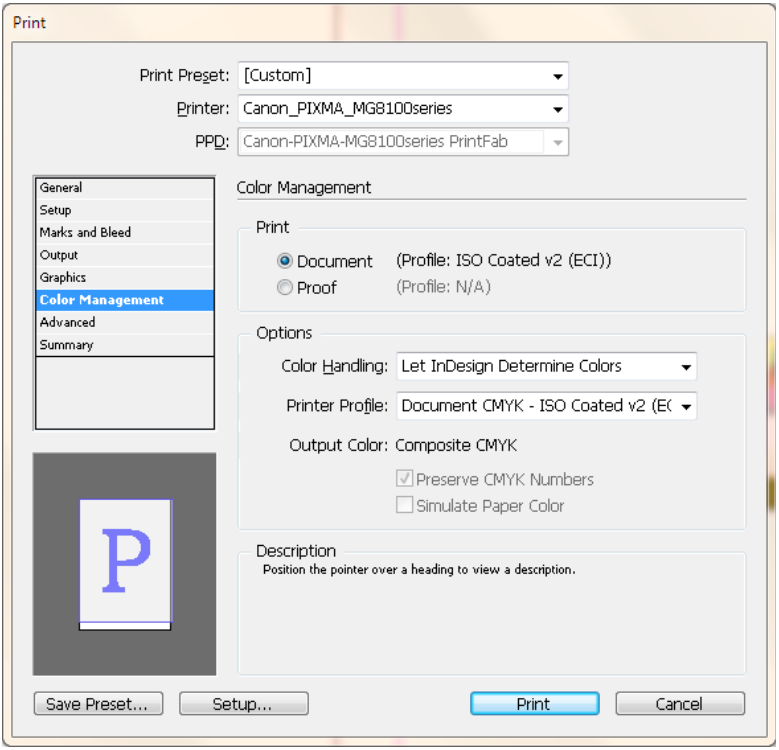
If you chose “Photoshop Manages Colors” and "Printer Profile = sRGB" in Photoshop's print dialog, the document will be converted to sRGB color space. Please note that for technical reasons colors that cannot be represented by sRGB will lose intensity.
The PrintFab driver color settings must be:

Color Mode = “Color (RGB)”
Intent = “Perception”
Color Space = “sRGB”

11.6 Indesign

This section describes how to create a CMYK proof print from Indesign. In the print job all document objects will be converted to CMYK color space - this means that colors are the same as when exporting a PDF document in CMYK mode.

Choose “Color” = “Composite CMYK” in “Output” settings of the Indesign print dialog.



In “Color Management” settings choose

“Print” = “Document”
“Color Handling: Let Indesign Determine Colors”
“Profile” = “Document CMYK - ...”

Use the button “Printer...” to open the PrintFab driver settings. Open tab “Color” and make the following settings:

Color Mode = “CMYK Proof” or ”CMYK Proof (Mix Black)”
Intent = “Colorimetric Relative” or “Colorimetric Absolute”
Color Space = … (choose the CMYK color space of your document)

12. Problems and solutions

12.1 Feedback form

Please send your feedback on PrintFab to our support team – use this form:

www.printfab.com/feedback.html

12.2 Support forum

You can also visit our support forum to find solutions or post questions:

www.printfab.com/en/support.html