

[Beyond your color expectations]

New Features of ProfileMaker 5.0 Publish Pro

ProfileMaker 5.0

○ New gamut mapping algorithm

LOGO Colorful is THE new gamut mapping meeting the most demanded requirements of our professional customers:

- New and even more perceptually adopted model of chromatic adaption
- Hue correction leading to "cleaner" primaries
- Improved handling of out of gamut colors that is leading to higher saturations and an improved contrast behavior
- Optimized for the best compromise inbetween saturation and level of detail



In general ProfileMaker 5 offers three gamut mapping algorithms dependent on the individual customers needs and priorities. They affect the way one color space is translated into another.

- LOGO Classic is the algorithm used in ProfileMaker 3, and preserves hue and lightness accuracy at the possible expense of saturation.
- LOGO Chroma Plus was developed for ProfileMaker 4, for users who want more color saturation at the possible expense of hue accuracy.
- The new **LOGO Colorful** was developed for ProfileMaker 5 for users who want "clean" and highly saturated colors.

○ Calculate new lightsources into existing profiles

Drag an ICC profile into ProfileMaker. All parameters of the ICC profile will be extracted along with the reference and measurement data. A new lightsource can be selected and the profile can be re-generated with an optimization for another lightsource without having to print or measure a new testchart.

○ Improved correction for optical brightener

An improved correction for optical brightener optimized for the LOGO Colorful gamut mapping has been integrated and will reliably remove possible yellow casts caused by optical brighteners.

○ Extended Batch Mode

The extended Batch Mode works in all ProfileMaker modules and allows the calculation of more than one profile without any further user interaction. An extensive parameter listing provides a comparison between the different profile setups.

- **Generation of ICC4 profiles**

ProfileMaker 5 generates ICC2 and ICC4 compatible profiles. Under edit->preferences you can change the default setting of ICC2 profile standard to ICC4. Please note that you will need an ICC4 compatible application in order to work with ICC4 profiles.

- **Automatic chromatic adaptation within monitor calibration**

A new model of chromatic adaptation for the monitor white point within ProfileMaker 5 monitor profiles is leading to a better visual match.

- **Improved network monitor calibration**

The monitor calibration alignment of ProfileMaker 5 will now also take luminance into consideration. The reference file workflow has been simplified.

Profile Editor 5.0

- Profile Editor in general supports RGB, CMYK and **MultiColor editings**. Even DCS2.0 files can be opened and viewed in true color.



- **Editing list feature for more than one ICC profile editing.**

Perform several editings at once in the selective color correction tool of ProfileEditor. Save and Load individual edit lists. Create an initial editing by hitting the "Add" button.

- **Undo functionality**

Activate/Deactivate several profile editings within the selective color correction tool of ProfileEditor to further evaluate the results.

- **Extended channel control**

Define colors within the selective color correction tool via LCH input (user friendly), Lab input (spot color orientated) or even Device input (for full control over the device). Appearing symbols will provide a warning about possible out of device gamut colors (printer symbol) and out of monitor gamut colors (monitor symbol) on both the side of the chosen and the edited color.

- **Workflow blackpoint editings**

This tool is based on the same handling as the workflow whitepoint editing. Use it in order to edit the blackpoint of your device. Remove possible colorshifts, darken up the blackpoint, etc. Please note that this is a selective editing to the blackpoint with predefined range.

- **Easy gradation and graybalance corrections**

A new button will help you to switch between different modes that also can be triggered by the alt- and shift-keys. You can directly edit the curve(s) with the mouse, vertically drop points without changing anything or even create "big" points that will separate editings left and right from the point.

- **Customized softproofing update**

Under Edit->Preferences you can either set up a custom time for the automatic softproofing update or switch it to manual mode. In manual mode you can push the update button in the image dialog (if you have opened an image) when ever needed in order to manually initiate the softproof update.

- **New easy2use saving of profile editings**

Dependent of your profile editing workflow, ProfileEditor 5 will help you to save your profile editings. It is possible to differentiate between editing the output portion and the softproofing portion of a profile when saving the editings (easy mode). In the advanced mode you can still decide which Rendering Intents shall be saved. Switch between the easy and the advanced mode in order to learn what the easy mode is doing by default.

- **Easy2use description tag handling**

By default the external name of the ICC profile is internally implemented into the desc-tag of the profile in order to avoid possible workflow problems under Adobe Photoshop. This can be changed manually.

- **Softproofing desaturation functionality**

Comparable to Photoshop you can set up a general desaturation amount under edit-preferences in order to reduce the overall saturation of all images opened in ProfileEditor. This can be useful when you are working with colors that are completely out of monitor gamut (see gamut warning in selective color correction for example). With the desaturation feature you lower the saturation of the image until it fits into the monitor gamut by still retaining the overall characteristics.

- **Easy2understand profile informations**

Profile information (profile size, gamut mapping, perceptual rendering, etc.) will no longer be abbreviated by numbers.

- **2D Spot Color Checker in gamut view**

Go into the 2D gamut view and load one or even a few profiles. Define spot colors in Lab and check whether these colors are in- or out of gamut of the selected profile(s). This can be very useful in order to see if a specific spot color can be reproduced by your complete workflow (for example monitor->proofer->press) and where possible problems can appear. Either click on the spot color or on it's crossmark in order to jump to the appropriate lightness value.

- **Upgraded ICC profile post-linearization tool**

The post-linearization tool of ProfileEditor supports RGB, CMYK and MultiColor post-linearizations. Generate a linearization testchart with the Testchart Generator (found in MeasureTool). After printing and measuring the chart you can load the measurement data of the linearization chart in the post-linearization tool of ProfileEditor in order to bring the actual state of the art of the output device back into the ICC profile. This will keep you from restarting the whole profile generation workflow after the output of a device has slightly changed and can also help to bring several proofers of the same kind to the same state of the art.

Color Picker 5.0



- **Choice of Rendering Intent for Lab2Device**

Set up the Rendering Intent of your workflow when calculating the optimal spot color to device transformation of an individual profile in order to achieve more exact results. Automatically benefit from the chromatic adaptation of ColorPicker 5 further improving the spot color to device transformation. ColorPicker extracts the lightsource out of the ProfileMaker ICC profile and is using it for the transformation.

Measure Tool 5.0



- **Spectral workflows in all dialogues**

In order to further support spectral workflows, the conversion spectral->Lab is completely customizable in all dialogues. The appropriate lightsource as well as the observer angle can be chosen and will be saved within the measurement file. ProfileMaker will also extract this information and will select the chosen lightsource in the lightsource chooser when generating ICC profiles later on. The "layout" chooser in the measurement data dialog will allow you to switch between visual, random and "as measured"-layouts for IT8.7/3 and ECI2002 testcharts.

- **Measure and analyze optical density**

- Select density standards, filters and paper/absolute White for the density spot measurement in the spot measurement dialog. Requires a measurement instrument in spectral mode.
- Transform a complete testchart based on spectral measurements into optical density by pushing the appropriate tab in the measurement data dialog.
- Compare optical density in the comparing dialog. For example take two sheets with testcharts from your proofer/press and measure them. Analyse the optical density of each channel and find out possible problems and deviations. Save comparisons as density reports (similar to dE reports)

- **Analyze gradation curves and dot gains**

View gradation curves based on spectral measurement data in the measurement data dialog by pushing the dot gain / gradation curve tabs. Find out about the linearity of your output device and compare the dot gain of your proofer with the dot gain of several standards like DIN/ISO and JIS. Set up tolerance curves that will be drawn as positive and negative deviations from the standard curves.

- **Extract measurement data out of ICC profiles**

Open an ICC profile in the MeasureTool via file->import ICC profile and extract automatically the measurement data. ProfileMaker 5 profiles are a data container. They are not just providing the device characterization, but also contain the reference file data of the testchart, the measurement file data and the spectral information about the used lightsource. It's all in one file.

- **Fogra media wedge reports, generation II**

Select the appropriate reference file ('1x_MW2_FOGRA*.txt' / '2x_MW2_FOGRA*.txt') from the chart dialog which are divided into single (1x) and double (2x) row layouts and measure the FOGRA media wedge 2.0. Open the media wedge reference files (located in 'reference files/other') in a text editor in order to learn more about the individual standard, print technology, paper type, the reference Lab values, etc. You can easily create your own standard by defining new Lab values in the text file and changing the description parts. After measuring and saving the FOGRA media wedge 2.0 you will be asked if you want to create a report. If you agree, you can optionally enter proof workflow specific data and then easily start the report generation. The report will be saved as PDF file and contains two individual reports - one is an abbreviated version with the basic analysis, the other is an extensive version comparing every single patch. Please note that this feature is even available <without a dongle> if you are attaching a GretagMacbeth measurement instrument.

- **Switch between colorimetric and densitometric comparisons in the comparing dialogue and check for tone stability**

The tone stability feature will help you to find out how stable your output device is according to a change of illumination. Select 2 different illuminations and analyse the resulting dE. This information will be important if you are creating an ICC profile for a product that will be used under more than one illumination.

- **TESTCHART GENERATOR, Generate RGB, CMYK and MultiColor testcharts**

The Testchart Generator supports conventional testcharts (RGB, CMYK, Hexachrome(TM), CMYKRedBlue, CMYKRedGreen) and MultiColor (n-color with or without CMYK) testcharts. Completely customize the testchart format, the amount of patches, the patch size, the file format and the measurement instrument optimization incl. preview and zoom into the testchart.

- **TESTCHART GENERATOR, Include separation settings into the testchart**

The separation setting you are going to use for the profile generation can also be applied to the testchart generation. ProfileMaker 5 will by default extract these separation settings out of the reference files and use it for the profile generation.

MultiColor Plug-Ins for Adobe Photoshop

The Adobe Photoshop Plug-Ins support RGB, CMYK and MultiColor ProfileMaker 5 ICC profiles and are based on the latest version of the LogoSync CMM. A download of the Plug-Ins is possible from www.gretagmacbeth.com.

- **Multicolor Separation Plug-In**

This first Plug-In takes care of the MultiColor Separation. Lab/RGB/CMYK images in Photoshop can be separated into MultiColor by using a ProfileMaker 5 MultiColor ICC profile. You can apply editings to the multichannel data with all Adobe Photoshop tools. The multi channel data will not be displayed in true colors since Photoshop does currently not support color management of multi channel files.

- **Multicolor Soft- and Hard Proof Plug-In**

This second Plug-In takes care of the soft- and hard proof or MultiColor separations. The MultiColor separation as a result of the first Plug-In can be soft proofed on the monitor and the data can be matched to the proofer ICC profile in order to achieve a simulation of the MultiColor output on the screen.

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New Features of ProfileMaker 5.0 Photostudio Pro

ProfileMaker 5.0 Digital Camera Module

The Digital Camera Module has been completely reworked and provides a lot of new features along with an outstanding Digital Camera Profile Quality.

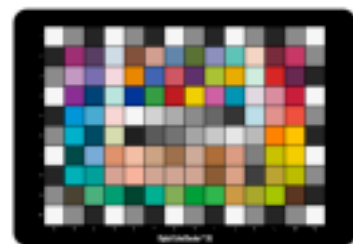


- **Photo task options** (product shoots, artwork reproduction, portrait, etc.); allow you to customize the camera profile for the type of scene being photographed.
- **Neutral gray balance tool** enables you to color-balance your camera profiles.
- New algorithms provide **better tone and color transitions**.
- A setting for photographic lighting enables you to measure the color of your strobe or continuous lighting and use the measurement to make a customized profile for that lighting condition.
- **Spot color support** reduces the time required for manual adjustment of spot colors.
 - If logos or certain product colors are photographed with a digital camera, spectral sensitivity of the camera might lead to color variations in the raw picture. Since there is a limit to the number of color control points and color patches on a test chart for the ICC profile, it may be the case that your important spot colors are the ones that are not optimally reproduced. But now you can use the absolutely unique **Spot Colors** function to make custom colors a control point and thus optimize the ICC profile for the correct reproduction of the spot colors.

New Digital Color Checker SG

The New Digital Color Checker SG is the perfect chart for the new ProfileMaker Digital camera Module offering the following advantages:

- Semi gloss high saturated colors
- Better color sampling for more accurate profiles
- A variety of skin tone representations used in the cosmetic industry for unmatched skin tones rendering
- Integration of the industry standard memory colors from the well known 24 patch ColorChecker



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Features of the new ProfileMaker 5.0 DeviceLink module

The Device Link module allows you to connect two profiles, such as a scanner, standard working space, or printing press source profile and a proofer or press destination profile. ProfileMaker Device Link profiles applied to printing, proofing or workflow solutions (like iQueue) can solve different workflow problems, produce optimized results and can – thanks to the special “save ink” functionality – save money by minimizing the costs for printing inks.

- Change separation settings in existing profiles to save inks (without changing the overall characteristics) by selecting the same profile as source and destination.
- Intelligently preserve black and automatically aim for the smallest possible deltaE at the same time.
- Clean Black preserves CMYK black values. For example, a color of CMYK 0 0 0 85 will remain without CMY contamination.
- Clean Primaries preserves primary colors so that, for example, a logo based on a pure 100% cyan will remain as defined, without being contaminated with MYK colors after conversion.
- The DeviceLink module avoids possible workflow problems according to problematic total ink coverages and gives out warnings.