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# Introduction

ColorPort is intended for graphic arts professionals who require a calibrated color-managed environment. This guide will help you make good use of ColorPort to enhance your work.

## Overview

ColorPort is a robust application that, through a simple and intuitive interface, lets you create, save, and measure targets, and extract the resultant data.

This is extremely useful in situations where a particular instrument is not supported by a color profiling software application. In this scenario, ColorPort creates, measures, and exports target data using the instrument. The profiling application imports the exported target data where it can subsequently be used to create the desired profile.

ColorPort's rich feature set includes:

- Support for industry standard targets
- Support for all MonacoPROFILER linearization and profile generation targets
- Support for all MonacoPROFILER target building options
- Added support for Eye-One iO and Eye-One iSis devices, and ProfileMaker
- Support for user-defined or custom target generation
- Customize targets for device specific layouts
- Standard and custom paper sizes for target generation
- Onscreen preview of the target, utilizing all target generation parameters
- Portrait/Landscape option for target generation
- Save RGB & CMYK targets in TIFF format
- Save 5-8 color targets as TIFF or DCS 2.0
- Target measurement with industry-standard instruments
- Save/export measurement data in both CGATS and user-defined text formats
- Direct data export to MonacoPROFILER
- Export data for use in ProfileMaker

## About this manual

This guide assumes you have a good understanding of your computer and operating system, and have a working knowledge of a supported measurement device. It also assumes you are familiar with color management.

This manual provides instructions on the basic functions of ColorPort in real-world

settings. You will learn how to quickly and effectively build, measure, save and manage target data. You can also learn advanced concepts such as:

- Customizing targets and device options
- Sharing targets with other X-Rite applications
- Configuring and using supported measurement devices

If you require more information about ColorPort or any of X-Rite's products and services, please visit our website at <http://www.xrite.com>. Our website features extensive customer support information and valuable resources such as:

- User downloads
- Online tutorials

You may also contact one of our helpful customer service representatives at 800-248-9748.

## ***Using help within the application***

If you require assistance within the application, click the Help button to access the online version of this document or to download a printable version.



## ***Minimum system requirements***

MacintoshPower PC® Processor  
Mac OS X version 10.3.9 or higher

Windows Pentium® PC or faster processor  
Microsoft® Windows 2000/XP/Vista.

256 MB of available RAM  
120 MB of available hard-disk space

### Supported measurement devices

Measuring a target with ColorPort requires a supported measurement device. ColorPort supports the following measurement devices:

- X-Rite DTP20 (PULSE)
- X-Rite DTP41/DTP41T
- X-Rite DTP45
- X-Rite DTP70
- X-Rite DTP22
- X-Rite 530
- X-Rite SP62, SP64
- X-Rite 938, 939, 962, 964
- X-Rite SpectroScan
- X-Rite Eye-One, Eye-One iO, Eye-One iSis
- X-Rite ICColor
- ColorPartner ColorScout A

## ***About ColorPort targets***

ColorPort generates TIFF and DCS 2.0 type targets that can be printed from an application of your choice. Immediately after you save a target, you can measure it within ColorPort. The resulting data can then be exported easily for use with other applications.

ColorPort creates:

- Custom targets for profiling and other graphic arts workflows
- Industry standard targets for evaluation of measurement equipment
- Profiling and linearization targets for use in MonacoPROFILER

## ***About X-Rite, Inc.***

X-Rite helps companies grow more profitable by providing hardware, software and support solutions that ensure color accuracy and data communication when color output is critical to business. Our worldwide customer base crosses a variety of markets such as:

- Graphic Arts
- Printing
- Packaging
- Digital and On-Demand Printing
- Manufacturing
- Retail Color Matching.

X-Rite's history of innovation has provided a variety of products that measure and track color data, helping customers achieve more efficient and profitable solutions for managing their businesses and markets. In July, 2006 a new X-Rite organization formed through the acquisition of Amazys Holding AG / GretagMacbeth, that unites the best of both companies' innovation, technology, products and talent. Follow our performance on the NASDAQ exchange, symbol: XRIT.

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# Basic operation

## Creating a target

You can generate a target for a supported measurement device using either a predefined patch set or a new patch set that you create from scratch. For a list of predefined patch sets, see *Supported patch sets by color space*. For a list of supported devices see *Supported measurement devices*.

For more options for target creation, please refer to *Customizing targets*.

To create a target using a predefined patch set:

1. Launch ColorPort and select the Create Target tab if it is not already active.

The Create Target tab displays the settings last used to create a target and a preview of that target. As the settings are changed to create the new target, the Target Preview image updates in real-time to reflect the changes.

2. Select a measurement device from the Measurement Device list. Configure any changes to the default device settings by clicking the Properties button.
  - NOTE: the Properties button will not be available if the Default Layout checkbox is selected.
  - The default settings in the device Properties window are based on the standard aperture size of the selected device.
  - Click the Properties button to change the settings, if needed, to meet the requirements of your aperture size. For more information, see Advanced Options: *Customizing Device Options*.
3. Select a color space for your target from the Color Space list and configure the Channels option, if applicable.
4. Select a patch set from the Patch Set list. The list includes patch sets containing the same number of colorants as the selected color space. If you change your color space selection, the patch set display will also change.
  - If you are creating a target for use by MonacoPROFILER, select a patch setting beginning with "X-Rite Profile".
  - If you are creating a target based on an Industry Standard patch set, select an ECI or IT8 patch set.
  - If you are creating a patch set from scratch, select New and refer to

### Advanced Options: Creating a new patch set .

5. Check the Profiler Layout checkbox if you wish to select and lock all standard defaults for an X-Rite Profiler target.
  - This option pre-selects and locks all device settings, page orientation and margins, and prevents them from being further edited.
  - Note that the Customize button is still available. You may still configure the Scrambling, Target Ink Limiting and Linearization options in the Customize window.
  - The Page Size option is still enabled as Profiler allows multiple page sizes, but not changes in margin settings.
6. Patch sets have certain parameters that can be customized. To modify the patch set's default settings, click Customize.
  - If you are customizing a Profiler patch set, refer to Advanced Options: *Customizing a Profiler compatible patch set*.
  - If you are customizing an industry standard patch set, refer to Advanced Options: *Customizing an Industry Standard patch set* .
7. Specify the layout for the paper you will use to print the target.
  - To print to a custom paper size, select New from the Paper Size list and enter the dimensions.
  - Select the orientation of your paper (Portrait or Landscape) from the drop-down list.
  - Click the Margins button (below the Paper Size list), and adjust the margin widths to your requirements.
8. Click Save Target... and save the target as a TIFF file(s) or DCS2.0 file. For more information, see *Saving a Target*.

## ***Saving a target***

ColorPort can save new targets that have been created in the Create Target tab. Saving target files also generates the necessary internal CGATS reference files that ColorPort uses for measuring targets in the Measure Target tab. The target image files can be saved in either a TIFF or DCS 2.0 (for 5 color or more) file type.

Immediately after being saved, a new target is available in the Target drop-down list in the Measure Target tab.

To save a new target:

1. Create a new target as described in *Creating a Target*.
2. Click the Save Target... button or select File > Save Target...
  - This action will open a standard Save dialog box. Navigate to the directory in which you wish to store the target image file, and rename the target if desired.
  - Note that if the target is for a 5 color or more color space, you will have the option to save the file in a DCS 2.0 file format. This option is available from the format drop-down list.
3. Confirm the desired file format and click Save.
  - The saved image area is defined by the red outline in the Target Preview image.
  - ColorPort automatically generates the associated CGATS reference file for use in the Measure Target tab.
  - If the target set includes multiple pages, the name shown in the Save dialog box is the base name for the group of saved files. Page numbers are appended to the base file name. For example, the file name "1 Profiler 343 Patch Target .tif" indicates the file is page 1 in a set. A target entitled "Profiler 343 Patch Target.tif" indicates it is a single-page target file.

## ***Measuring a target***

You can measure a printed target with a supported measurement device. ColorPort does not print targets-you must print the target file with another application of your choice. For more information about printing targets, see *Printing a target*.

You may create source targets following the steps outlined in *Creating a Target* or use a predefined target (i.e., a FOGRA media wedge or industry standard target), for which you have the corresponding reference file.

To measure a target:

1. Launch ColorPort and select the Measure Target tab if it is not already active.
  - The Measure Target tab displays the settings last used to measure and preview a target. As you change the settings and prepare to measure a new target, the Target Preview image updates in real-time to reflect the changes.
2. Select the desired target from the Target drop-down list. The selected target's

parameters (Creation Date, Target Type, Patches, Page Count) will display below the drop-down list. This information should be consistent with the information slugline on your printed target.

3. Select your measurement device from the Measurement Device list and the appropriate Serial port, if applicable. Click Connect.
4. Measure a printed, dried and trimmed target with your connected device.
  - View the status of the measurements in the Measurement Status pane. The number of measured patches will be displayed against the total number of patches in the target (i.e. - 300/1485). You may also monitor your progress in the Progress Bar.
  - Click the Info button to view information about a selected patch in the Target Preview pane. Select the desired display format for the Measurement Info by clicking the appropriate radio button (Colorimetric, Spectral, Density).
  - Check the Show missing measurements checkbox to outline in green in the Target Preview pane any patches that were not measured.
  - Click the Clear Data... button to clear all measurement data and restore the measurement session to its starting point. This button is only active when there are measurements available to clear.
5. Click the Save Data... button to save the measurement data. Measurement data can be saved in a format of your choice:
  - CGATS formatted file
  - Text file - Tab Delimited or Comma Separated Values (CSV).

For more information about saving target data, see *Target Data Formats*.

## **Managing targets**

ColorPort has a Target Manager that allows you to manage the target reference files you have created. Use the Target Manager to delete unwanted items, import target reference files created on a separate system, and export reference files for sharing with other ColorPort users.

Note: A target must first be saved for it to appear in the Target Manager.

To manage ColorPort target reference files:

1. Select File > Target Manager... or the Target Manager... option from the Target

drop-down list in the Measure Target tab.

2. To import a target into ColorPort, click the Import button.

This will open a standard Open dialog box. Navigate to the directory where your reference file is stored and open it. This will import the file into ColorPort and it will be available immediately for use. NOTE: Fogra Media Wedge target references can be found in a folder called "FograReferences", which was installed on your computer in the same directory where you installed ColorPort.

3. To export a ColorPort target reference file, select the desired file in the file list pane, and click the Export button.

This will open a standard Save As... dialog box. Navigate to the directory where you wish to store the file, rename it if desired, and click Save. The file will now be exported as an XML file type that can be shared with other ColorPort users.

4. To delete an unwanted target reference file, select it from the file list pane and click Delete. You will be presented with a confirmation dialog box. Click OK to complete the deletion.

## Advanced options

### Customizing targets

The Customize option lets you modify a pre-defined patch set or create a new patch set by importing compatible data.

Predefined patch sets are divided into three categories: **X-Rite Profile**, **industry standard**, and **X-Rite linearization**.

- **X-Rite Profile** patch sets contain the label "X-Rite Profile" and are compatible with MonacoPROFILER. This category includes the multicolor (5, 6, 7, or 8 color) patch sets. MonacoPROFILER patch sets can be customized by enabling/disabling the scrambling, linearization, and target ink limit options. The color values of individual patches cannot be modified.
- **Industry standard** patch sets include all supported ECI and IT8 targets, as well as three ProfileMaker targets. These targets can be customized by adding, deleting, and reordering patches, or by tweaking the color values of individual patches.
- **X-Rite Linearization** patch sets are used to generate linearization data for use with MonacoPROFILER targets. These patch sets cannot be customized.

### Creating a new patch set

You can use ColorPort to create a new patch set by importing patch data in a supported format (CGATS.5, CGATS.17, TAB or CSV). Use the new patch set to create a custom target in the Create Target tab.

To create a new patch set by importing data:

1. Launch ColorPort and select the Create Target tab if it is not already active.
2. Select a measurement device from the Measurement Device list. Configure any changes to the default device settings by clicking the Properties button. NOTE: the Properties button will not be available if the Default Layout checkbox is selected.
3. Select a color space for your patch set from the Color Space drop-down list and configure the Channels option, if applicable.



4. Select New from the Patch Set drop-down list.
5. When the Customize window opens, enter a name for the new patch set in the Target Name field.
6. If you are creating a patch set from scratch, proceed to the next step and add patches manually. If you are creating a patch set by importing patch data, click Import Patches to locate and import a stored patch data file.
7. Add, delete, tweak, or reorder patches as desired.
  - Click the (+) button and enter values manually to add a patch.
  - Highlight a row and click the (-) button to delete a patch.
  - Highlight an individual patch value and enter new values to tweak a patch.
  - Highlight a row and drag it to a new position to reorder patches.
8. When the patch set is configured as desired, click Save. The customized patch set appears as the active selection in the Patch Set list.
9. Configure the Paper Size options as desired.
10. Click the Save Target... button to rename and save the target file to a directory of your choice.

## ***Customizing a MonacoPROFILER-compatible patch set***

To customize a MonacoPROFILER compatible patch set:

1. Launch ColorPort and select the Create Target tab if it is not already active.
2. Select a measurement device from the Measurement Device list. Configure any changes to the default device settings by clicking the Properties button. NOTE: the Properties button will not be available if the Default Layout checkbox is selected.
3. Select a color space for your target from the Color Space drop-down list and configure the Channels option, if applicable.
4. Select a Profiler compatible patch set from the Patch Set list. For a complete list of compatible targets, see *Supported Patch Sets by Color Space*.
5. Click the Customize button.
  - Choosing the Scramble Patches option reorders the sequence of patches in

a target. This is useful when printing from a device that outputs ink non-uniformly (presses). By default, the Scramble Patches setting is enabled. Uncheck this option, if desired.

- To ink-limit the target, check the Target Ink Limiting checkbox, and set the ink limit slider to the desired setting. Ink coverage varies according to printer, ink, and media used--if the ink coverage is too heavy on the printed target, adjust the amount of ink used by selecting a different Target Ink Limit setting, and reprint the patch set. This ensures that the output device will not deliver more ink than the media can absorb. Note that adjusting the Target Ink Limit setting causes a recalculation of the number of patches in the patch set.
  - To use linearization data during target creation, check the Linearization checkbox and select a linearization file from the drop-down list. For more information, see *Customizing targets using linearization*.
6. Click Save. The customized patch set appears as the active selection in the Patch Set drop-down list.
  7. Configure the Paper Size options as desired.
  8. Click the Save Target... button to rename and save the target file to a directory of your choice.

## ***Customizing an industry standard patch set***

For the purposes of this example, industry standard patch sets are defined as ECI 2002 Random, ECI 2002 Visual, IT8.7/3 Basic, IT8.7/3 Extended, IT8.7/4 Random, and IT8.7/4 Visual. All of these patch sets use a CMYK color space. For more information, see [Standard Target Information](#).

To customize an industry standard patch set:

1. Launch ColorPort and select the Create Target tab if it is not already active.
2. Select a measurement device from the Measurement Device list. Configure any changes to the default device settings by clicking the Properties button.
3. Select CMYK from the Color Space drop-down list.
4. Select one of the above mentioned patch sets from the Patch Set list.
5. Click the Customize button.
6. Enter a new name for the customized patch set in the Target Name field.

7. Add, import, delete, tweak, or reorder patches as desired.

Click the (+) button and enter values manually to add a patch.

Click Import Patches, to locate and import a stored patch data file.

Highlight a row and click the (-) button to delete a patch.

Highlight a row and drag it to a new position to reorder patches.

Highlight an individual patch value and enter new values to tweak a patch.

8. When the patch set is configured as desired, click Save. The customized patch set appears as the active selection in the Patch Set list.
1. Configure the Paper Size options as desired.
2. Click the Save Target... button to rename and save the target file to a directory of your choice.

## ***Customizing targets using linearization***

Use the Linearization option to compensate for a non-linear response from the output device that will print the target. When device linearization is "off", the output device may print a different percentage of colorant than was called for by the software. This can result in patch values printing incorrectly, or different patch values printing the same color. Linearization corrects for this condition by optimizing the patch values for the specific device. Using linearization data is not recommended unless the printer or its associated RIP does not have its own linearization option.

To use a linearization file in target creation, you must first create the linearization file by outputting and measuring a supported linearization target and saving the measured data. Once created, the linearization file is imported and referenced during target creation.

You cannot use linearization with all target types. For a list of supported targets, see *Supported patch sets by color space*.

To customize a target using linearization:

1. Launch ColorPort and select the Create Target tab if it is not already active.
2. Select a measurement device from the Measurement Device list. Configure any changes to the default device settings by clicking the Properties button.
3. Select a color space for your target from the Color Space list. Linearization targets are only available for RGB, CMYK or PANTONE® Hexachrome color spaces.

4. Select a linearization patch set from the Patch Set list.

Linearization patch sets are available in 5, 10, 20, and 40 step targets. Steps refer to incremental percentages of each colorant from 0% to 100% for CMYK and multi-channel devices, or 100% to 0% for RGB devices.

5. Select the desired paper size and orientation, and configure the margins if necessary.
6. Click the Save Target... button to rename and save the target to a directory of your choice.
7. Print the newly created target in an application of your choice. For more information, see *Printing a target*.
8. Select the Measure Target tab.
9. Select the newly created linearization target from the Target drop-down list.
10. Select and connect to your measurement device.
11. Measure the linearization target.
12. Click the Save Data... button.

ColorPort recognizes that the measurement data is linearized. The Save dialog box will offer the option for ColorPort Linearization (.lin file format). If the data is for use with MonacoPROFILER, select this option. Otherwise, if you plan to use the data in another application, you may save it in Tab Delimited, CSV or CGATS formats.

13. Return to the Create Target tab to create the target to which the linearization data will be applied. Select the desired instrument, color space and paper configuration.
14. Select the desired patch set and click the Customize button.
15. Check the Linearization checkbox.

The caption next the Select... button will indicate "<No File Selected>".

16. Click the Select... button. This will open a standard Open dialog box. Browse to the directory where the previously created linearization data was saved. Select the file and click Open.

The caption next the Select... button will now show the name of the

linearization file.

17. Configure any additional options in the Customize dialog box and click Save.

The Target Preview pane will refresh and display the target with the applied linearization data.

18. Configure the Paper Size options as desired.

19. Click the Save Target... button to rename and save the target file to a directory of your choice.

## ***Customizing device options***

The **Measurement Device** drop-down menu displays spectrophotometers that you can use with ColorPort to measure a target. All new targets in the Create Target tab are automatically configured for the selected measurement device's settings.

Use the **Properties** option to customize device-specific parameters. Changing these settings will modify the patch set you are creating.

To customize device options:

1. Launch ColorPort and select the Create Target tab if it is not already active.
2. Select a measurement device from the Measurement Device list.
3. Click the Properties button. NOTE: the Properties button will not be available if the Default Layout checkbox is selected.
  - The Properties window will display the default parameter settings for the selected device.
  - The default settings are based on the standard aperture size of the selected device. These settings may need to be adjusted to accommodate a different aperture size.
  - Device settings are displayed in mm, cm, or inches units of measure.
4. Customize the settings by moving the appropriate sliders, or enter the new numerical values directly into the text fields.
5. To preview the effects of device settings on a target, click OK. The Target Preview pane will refresh to reflect the new settings.

Note: If you are creating a reference file for an existing target, take patch measurements from the existing target and enter the values in the corresponding device Properties fields.

## ***Sharing targets with X-Rite applications***

ColorPort's saved target data is compatible with all X-Rite applications that use this type of information in their respective functions. ColorPort also offers powerful integration with MonacoPROFILER: compatible measured target data can be directly exported for use in MonacoPROFILER.

To export measurement information to MonacoPROFILER:

1. Create and measure a target created with a MonacoPROFILER compatible patch set. These patch sets, located in the Patch Set list in the Create Target tab, are denoted by "X-Rite" in their name. For more information see *Supported Patch Sets by Color Space*.
2. Click the Save Data... button. ColorPort automatically recognizes the target data as being compatible with Profiler. Select as a file type "MonacoPROFILER 4.7 and newer".
  - If ColorPort detects MonacoPROFILER on the same system, you will have the option to launch Profiler from the Save dialog box.
  - Note: if you are currently running MonacoPROFILER on the same system, you should return to the application and save the data in the current session. Otherwise, this data will be overwritten by ColorPort's exported session file.
3. To Open a MonacoPROFILER session, check the Open Immediately checkbox and click Continue. The Save dialog box will open and allow you to rename the file and specify a location to save it to.

The target data will be saved independently of the MonacoPROFILER Session File.

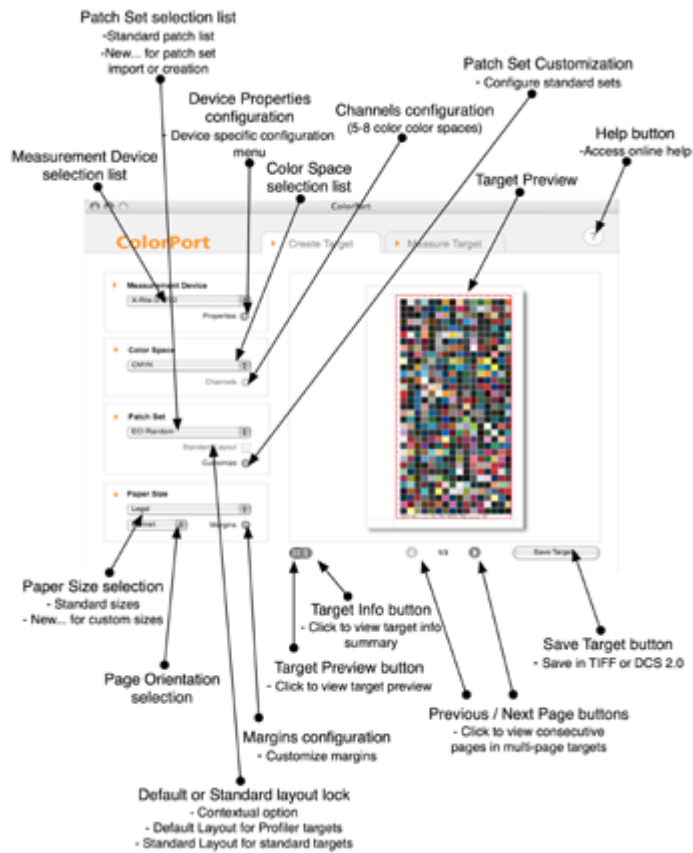
4. You can now work with the exported data in an automatically configured session of MonacoPROFILER.
  - ColorPort automatically exports both linearization and profiling target data, if applicable.
  - Note: You will not be able to use the MonacoPROFILER Back/Previous button to re-measure patches while operating within a ColorPort generated session file. This is because ColorPort supports instruments, page sizes,

and patch configurations that MonacoPROFILER does not.

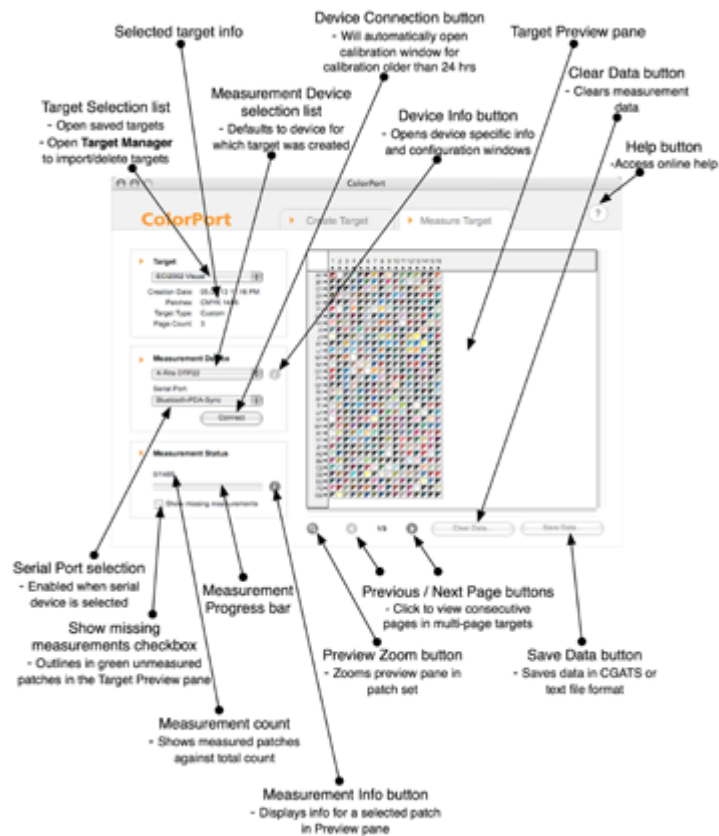
## Appendices



## Create Target tab interface



## Measure Target tab interface



## ***Printing a target***

You cannot print a target using the ColorPort application. Save the target as a TIFF or DCS2.0 file and print it using your standard workflow application. If you are outputting a multi-channel target, your output device must have a RIP capable of handling extra channels.

During the printing process, it is important to make sure that scaling or unwanted color management of the target does not occur: the goal is to send unchanged target values to the printer. You can print the target using any application that you normally use to print images, as long as the color values are passed directly to the printer with neither the application nor the printer driver making any conversions.

Before outputting a target, be sure your output device is working properly. If you are working with a device that has a linearization option, linearize the device before outputting the target. Load the appropriate media and output the target at 100%.

## ***Media / Resolution***

Materials such as colorants and substrates place limits on the gamut of reproducible color. For that reason, it is important that you use the same material throughout the measurement and reproduction process. For example, if you are creating and measuring a target for use in profile creation, use the same colorants and substrate or paper when you print the target as you will with the final product.

ColorPort sets the appropriate target resolution. No adjustments are required. If you decide to change the target's resolution, be sure to maintain the same patch size parameters. If you alter the output size, you will affect the patch parameters stored in the reference file, and ColorPort may not be able to measure the target.

## ***Curing time***

Once the target set is printed, wait some amount of time until the ink is dry. This is especially important when printing to an inkjet printer. Even if the ink appears to be dry when it leaves the printer, the color is not stable. The only way to be sure is to take a few measurements, wait a while, and retake the measurements. When there is little or no difference in measurement results, the ink is dry and the target is ready for measurements.

Once you know how long a particular paper and ink combination takes to dry, you can set the target aside for that amount of time in the future.

## **Target Size**

The target set may require trimming to be usable by certain measurement devices. The target file you created and saved in ColorPort includes all information that appeared inside the red bounding box in ColorPort's Target Preview pane. The user determines the final paper size when printing the target. If the target is printed on oversized stock, and the measurement device requires a smaller size (i.e., strip readers), the individual target pages will need to be trimmed to size. For more information, refer to your device's documentation for leader, trailer, and margins requirements.

When trimming targets, refrain from cutting off the slug-line (printed line of target parameters on each target page) that is used to identify the target.

## **Standard target information**

The following industry standard targets are included with ColorPort for standard and custom target creation:

ECI2002 (Random and Visual)  
1485 color patches  
CMYK

IT8.7/3 Basic  
182 color patches  
CMYK

IT8.7/3 Extended  
968 color patches (60 white patches to fill page layout)  
CMYK

IT8.7/4 (Random and Visual)  
1617 color patches  
CMYK

FOGRA Media Wedge  
34 color patches  
2 graduated black and chromatic grey wedges  
Color patches are defined in percentage dot areas of the CMYK process colors

Note: you must import the FOGRA Media Wedge target into ColorPort before you can use it. For more information about importing targets, see [Managing Targets](#) .

## Printing with Adobe Photoshop

The following example uses *Adobe Photoshop 7.0* as the printing application.

You can configure Adobe Photoshop's Color Settings to control how it displays, interprets, communicates, and modifies the target. This example assumes the target is opened and printed without any changes to the default resolution.

To print a target:

1. Launch Adobe Photoshop.
2. Configure the **Color Settings** dialog box.
  - a. Select Color Settings from the Edit menu (Windows) or Photoshop menu (Macintosh).
  - b. Under Color Management Policies, check the Missing Profiles: Ask When Opening checkbox. If this option is not enabled, select it from the predefined Settings drop-down list.

Note: these settings are configured to pass the target without altering its values and may not be appropriate for processing images using your regular imaging workflow.

3. Open the target TIFF or DCS 2.0 file:
  - a. Select File > Open.
  - b. Navigate to your saved TIFF or DCS 2.0 target file, select it and click Open.
  - c. The Missing Profile dialog box will open. Select the Leave as is (don't color manage) radio button, and click OK.
4. The opened target contains all information displayed inside the red bounding box in ColorPort's Target Preview pane. If you decide to change the resolution, be sure to adjust the image size so the patch size parameters do not change.
5. Print the image file:
  - a. Select File > Print with Preview...
  - b. Check the Show More Options checkbox if it is not already selected.
  - c. Select Color Management from the drop-down list below the checkbox.
  - d. Select the Source Space > Document radio button. Since no profile is assigned, the source space is untagged.
  - e. Select Same As Source from the Print Space > Profile drop-down list. This setting passes the color values unchanged to the printer driver.

- f. Uncheck the Scaled Print Size > Scale to Fit Media checkbox. Be sure 100% is entered in the Scale field.
- g. To select a different paper size, click Page Setup... and change the paper size selection.
- h. Click the Print... button; when the Print dialog box opens, click Print.

## **Target data formats**

You can save target measurement data (even prior to completing all measurements) in one of two file formats:

CGATS.17

Text file - Tab Delimited or Comma Separated Values (CSV)

To save target data, click the Save Data... button in the Measure Target tab, or select File > Save Data...

The CGATS.17 file format includes patch measurements, all device and spectral values.

The CSV and Tab Delimited option saves the following data in a combination of your choice to the selected file format:

Colorimetric data

§ Lab, LCH and XYZ

§ Illuminant and Observer

Spectral Reflectance data

Densitometric data

§ VCMY

§ Minus paper

§ Status: A, E and T

Note: ColorPort will automatically detect if the data is a valid MonacoPROFILER target when saving. If ColorPort recognizes the target data as being a valid MonacoPROFILER target, the Save dialog box will have an additional option to export a MonacoPROFILER session file. For more information, see [Sharing Targets with X-Rite Applications](#).

When exporting measurement data as a CGATS, tab-delimited, or csv file, you can choose the spectral range used by traditional X-Rite devices such as the PULSE (400-700 nm), or the range used by traditional GretagMacBeth devices such as the Eye-One (380-730 nm).

NOTE: If you have measurements taken with a traditional X-Rite device and choose the larger range when exporting the measurements, the upper and lower measurement values will contain extrapolated, rather than measured, data. Similarly, saving measurement data

obtained with a traditional GretagMacBeth device to a file containing only 400-700nm will result in the loss of the upper and lower measurement values.

## ***CGATS information***

You can import CGATS information into ColorPort formatted in:

CGATS.5  
CGATS.17

You can save measured ColorPort target information formatted in:

CGATS.17

## Supported patch sets by color space

Color Space	Available Patch Sets	MonacoPROFILER Compatibility	Customize
RGB	X-Rite Profile 343 Patches X-Rite Profile 729 Patches X-Rite Profile 1728 Patches  X-Rite Linearization 5 Step* X-Rite Linearization 10 Step* X-Rite Linearization 20 Step* X-Rite Linearization 40 Step*	Compatible	"X-Rite" targets can be linearized, scrambled, and ink limited using the <b>Customize</b> option  Linearization targets cannot be customized
CMYK	X-Rite Profile 378 Patches X-Rite Profile 530 Patches X-Rite Profile 917 Patches X-Rite Profile 1379 Patches X-Rite Profile 2989 Patches  X-Rite Linearization 5 Step* X-Rite Linearization 10 Step* X-Rite Linearization 20 Step* X-Rite Linearization 40 Step*	Compatible	Linearization targets cannot be customized
	ECI Random ECI Visual IT8.7/3 Basic IT8.7/3 Extended IT8.7/4 Random IT8.7/4 Visual	IT8.7/3 Basic is not MonacoPROFILER compatible.  Other standard targets are compatible if not customized	Cannot be linearized, scrambled, or ink-limited  Individual patch values can be tweaked using the <b>Customize</b> option
PANTONE® Hexa-chrome®	X-Rite Profile 1511 Patches  X-Rite Linearization 5 Step* X-Rite Linearization 10 Step* X-Rite Linearization 20 Step* X-Rite Linearization 40 Step*	Compatible	"X-Rite" targets can be linearized, scrambled, and ink limited using the <b>Customize</b> option  Linearization targets cannot be customized
5 Color	X-Rite Profile 1133 Patches	Compatible if not linearized	"X-Rite" targets can be linearized, scrambled, and ink limited using the <b>Customize</b> option
6 Color	X-Rite Profile 1511 Patches		
7 Color	X-Rite Profile 2412 Patches		
8 Color	X-Rite Profile 4982 Patches		
New...	User defined	Not Compatible	

\* Linearization targets are only used with MonacoPROFILER compatible patch sets.