

IC-601

User's Guide Color Centro

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Introduction

1 Introduction

1.1 Welcome

Thank you for purchasing this machine.

This User's Guide describes the functions, operating instructions, precautions for correct operation, and simple troubleshooting guidelines of this machine. In order to obtain maximum performance from this product and use it effectively, please read this User's Guide as necessary.

1.1.1 Composition of User's Guide

Refer to "User's Guide Printer (IC-601)" for more detailed information on "Composition of User's Guide".

1.1.2 User's Guide

This User's Guide is intended for users ranging from those using this machine for the first time to administrators.

It describes basic operations, functions that enable more convenient operations, maintenance procedures, simple troubleshooting operations, and various setting methods of this machine.

Note that basic technical knowledge about the product is required to enable users to perform maintenance work or troubleshooting operations. Limit your maintenance and troubleshooting operations to the areas explained in this manual.

Should you experience any problems, please contact our service representative.

1.2 Conventions used in this manual

1.2.1 Symbols used in this manual

Symbols are used in this manual to express various types of information.
The following describes each symbol related to correct and safe usage of this machine.

Safety Information

⚠ WARNING

- This symbol indicates that a failure to heed the instructions may lead to death or serious injury.

⚠ CAUTION

- This symbol indicates that negligence of the instructions may lead to mishandling that may cause injury or property damage.

NOTICE

This symbol indicates a risk that may result in damage to this machine or originals. Follow the instructions to avoid property damage.

Procedural instruction

- ✓ This check symbol indicates that it is a precondition for steps or information that you should be noted before performing the steps.

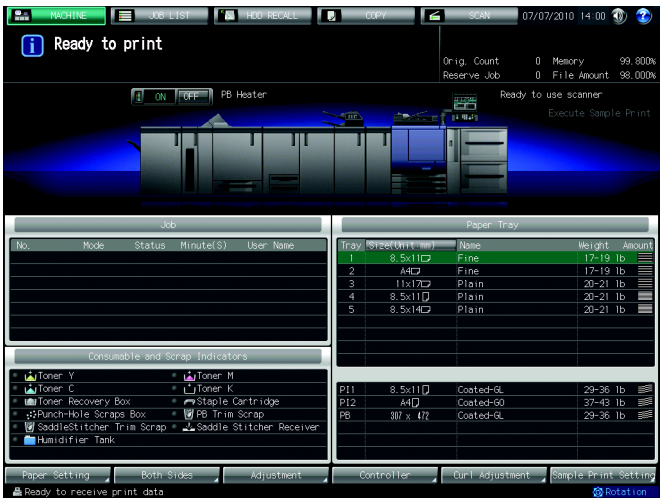
1 This format number "1" represents the first step.

2 This format number represents the order of serial steps.

- ➔ This symbol indicates a supplementary explanation of a procedural instruction.

The operation procedures are described using instruction.

- ➔ This symbol indicates transition of the control panel to access a desired menu item.



The relevant image is shown.

**Reference**

This symbol indicates a reference.

View the reference as required.

Key symbols

[]

Key names on the touch panel or computer screen, or a name of user's guide are indicated by these brackets.

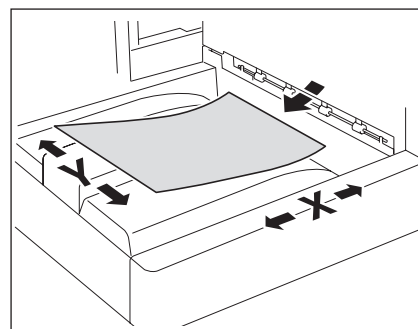
Bold text

Key names, part names, product names and option names on the **Control Panel** are indicated in bold text.

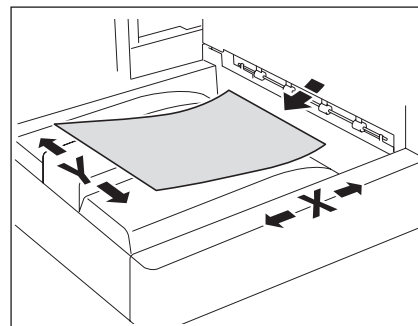
1.2.2 Original and paper indications**Paper size**

The following explains the indication for originals and paper described in this manual.

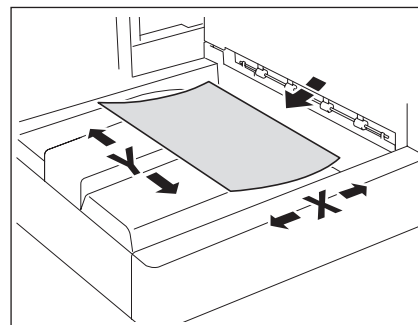
When indicating the original or paper size, the Y side represents the width and the X side the length.

**Paper indication**

☐ indicates the paper size with the length (X) being longer than the width (Y).



☐ indicates the paper size with the length (X) being shorter than the width (Y).





Overview of the Color Centro

2 Overview of the Color Centro

This chapter describes the overview and connection environment of "Color Centro" that is an attached utility to the image controller to provide the printer function of the main body.

2.1 Color Centro

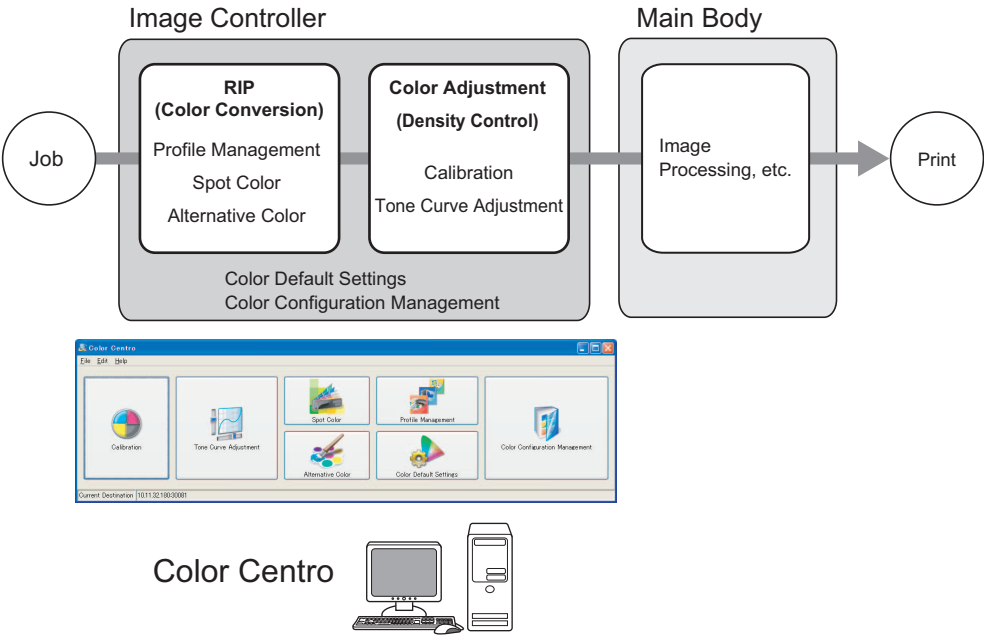
Color Centro is an application which allows you to execute color management of the image controller. For details of the image controller, refer to "User's Guide - Printer (IC-601)".

2.1.1 Roles of Color Centro

Color Centro is an application to realize suitable color printing of the main body, which edits and manages some profiles and color tables which are used for translation processes and color adjustment in the image controller.

This application enables to use the following 7 functions;

	Function	Description
1	Calibration	You can create an adjustment data for the main body by measuring its output condition.
2	Tone Curve Adjustment	You can manually adjust the output density against the input density instructions for each color of CMYK.
3	Spot Color	You can manually adjust hue of Spot Color (Special color or named color) with the density of CMYK.
4	Alternative Color	You can manually adjust the hue of specific RGB or CMYK color with the density of CMYK. You can also select an alternative color from Spot Color.
5	Profile Management	You can copy, create, edit, import or export profiles of 5 types.
6	Color Default Settings	You can manually set Color Default Settings of RGB, CMYK, and others. You can also confirm the default color configuration.
7	Color Configuration Management	You can make and edit Color Configurations or Profile Sets.



No.	Item	Description
13	Utility/Counter	Displays the Utility Menu Screen and various counters.
14	Mode Memory	Registers/Recalls the desired copy settings. Also recalls previous job settings.
15	Accessibility	Adjusts the response time in touch panel and control panel key operation.
16	Help	Displays the Help Screen that provides information on how to operate the screen currently displayed on the touch panel . Also provides information on various supplies and disposals when pressed with the Machine Screen displayed.
17	Brightness adjustment dial	Adjusts the brightness of the touch panel by being turned.
18	Power Save	Enables temporary use of the machine when the Power Save LED is lit. Also, activates power-saving mode when pressed while the machine is inactive.
19	Power Save LED	Lights when any power-saving mode is activated, or machine power is off due to the timer function.
20	Touch panel	Displays various screens to allow the function setting.

⚠ CAUTION

Do not press hard or pointed objects against the **touch panel** on the **control panel**.

- Otherwise, the glass may be scratched or break and you may be injured. Use fingers to operate the **touch panel**.

⚠ CAUTION

Stop the operation immediately when the Service Call Screen is displayed and copying cannot be continued any more.

- Otherwise, an unexpected trouble may be caused. Write down the report code as stated on the second line of the message, turn off the sub power switch and main power switch in this order, and then disconnect from the power socket. Contact your service representative and inform them of the report code.

NOTICE

*Be sure not to turn off the **main power switch** in usual operation.*

*Be sure not to turn off the **main power switch** before turning off the **sub power switch**.*

*Be sure not to turn off the **main power switch** while the following messages are displayed after turning off the **sub power switch**.*

[Cooling in progress / Power will be off when completed]

[Power off in progress / Please do not turn the main power switch off]

*Turning off the **main power switch** with these messages displayed may cause serious machine trouble such as toner fixation.*

**Reference**

Refer to User's Guide (POD Administrator's Reference) for how to turn off the power.

2.3 Operating environment

This section describes the system requirements for using Color Centro and the interfaces used for connection.

2.3.1 Connectable computers and operating system

Make sure that the computer to be connected meets the following conditions.

Windows

Operating system	Windows 2000/XP/Server 2003/Vista/Server 2008/7 (including 64 bit versions)
CPU	Intel Pentium4 3GHz or more
HDD	3GB or more
Memory	1GB or more / Memory capacity as recommended for your operating system Sufficient memory resource is required for your operating system and the applications to be used.
Drive	CD-ROM drive
Display	1024x768 pixels or more

2.3.2 Interfaces used for connection

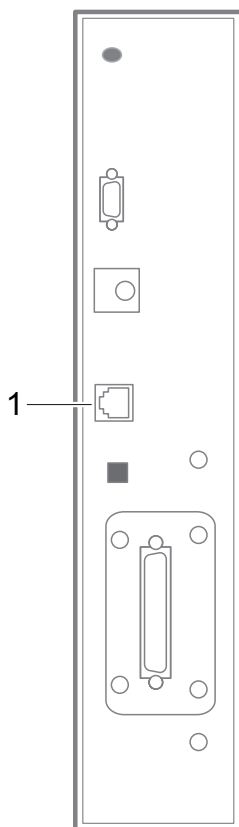
To connect Color Centro to the image controller, use the Ethernet via a network connection.

It supports 1000Base-T, 100Base-TX, and 10Base-T standards.

Connection diagram

The printer cables are connected to the Ethernet port of the image controller.

Lateral side of the image controller



1. Ethernet port (1000BASE-T/100BASE-TX/10Base-T)

2.4 Setup procedure

To use Color Centro, you must complete the setup in advance.

The setup refers to a series of procedures for connecting the image controller to the computer and installing Color Centro to the computer.

Perform the setup using the following procedures.

- 1** Connect this machine to the computer.
- 2** Check that the computer to be used is connected to the network.
- 3** Specify the IP address of the image controller.
- 4** Install Color Centro.
 - Specify the network port for the printer driver according to the connection method or protocol.

Reference

- When you execute the calibration using the measurement instrument, install the driver of the measurement instrument. After installing, execute the measurement test and confirm that there is no problem on the connection.



Reference

For details on the connectable interfaces, refer to page 2-6.

For details on the network settings and confirmation of IP address of the image controller, refer to [User's Guide - POD Administrator's Reference].

3

Precautions for Installation

3 Precautions for Installation

The following describes the information necessary to install Color Centro.

3.1 Introduction

This chapter describes the information you should keep in mind before installing Color Centro.

Before the procedure for installing Color Centro, confirm the operating system of your computer and the network environment.

3.2 Installer

You can confirm the Microsoft .Net Framework 2.0, which is necessary for the start of Color Centro, by using this installer. When the Microsoft .Net Framework 2.0 is not installed, the installation screen of the Microsoft .Net Framework 2.0 is displayed at the installation of Color Centro. In this case, install the Microsoft .Net Framework 2.0 following the instruction on the screen.

3.2.1 Operating environment of the installer

Operating system	Windows 2000 Professional (Service Pack 4 or later) Windows XP Professional (Service Pack 3 or later) Windows Server 2003, Standard Edition (Service Pack 2 or later) Windows Server 2003, Enterprise Edition (Service Pack 2 or later) Windows Server 2003 R2, Standard Edition (Service Pack 2 or later) Windows Server 2003 R2, Enterprise Edition (Service Pack 2 or later) Windows XP Professional x64 Edition (Service Pack 2 or later) Windows Server 2003, Standard x64 Edition (Service Pack 2 or later) Windows Server 2003, Enterprise x64 Edition (Service Pack 2 or later) Windows Server 2003 R2, Standard x64 Edition (Service Pack 2 or later) Windows Server 2003 R2, Enterprise x64 Edition (Service Pack 2 or later) Windows Vista Business (Service Pack 2 or later) Windows Vista Enterprise (Service Pack 2 or later) * Windows Vista Ultimate (Service Pack 2 or later) Windows Server 2008 Standard (Service Pack 2 or later) * Windows Server 2008 Enterprise (Service Pack 2 or later) * Windows Server 2008 Standard without Hyper-V (Service Pack 2 or later) * Windows Server 2008 Enterprise without Hyper-V (Service Pack 2 or later) * Windows 7 Professional * Windows 7 Enterprise * Windows 7 Ultimate * • * Supports 32-bit (x86)/64-bit (x64) environment.
CPU	Intel Pentium4 3GHz or more
HDD	3GB or more
Memory	1GB or more / Memory capacity as recommended for your operating system Sufficient memory resource is required for your operating system and the applications to be used.
Display	1024x768 or more

Reference

- Installing the driver to Windows 2000/XP/Server 2003/Vista/Server 2008/7-based computers requires the administrator authority.
- The installer supports installation in both IPv4/IPv6 environments of Windows Vista/Server 2008/7 only. Note that it does not support [Secure Printing] (IPPS) in Windows Vista/Server 2008/7 and [Internet Printing] (IPP) in the IPv6 environment.

3.2.2 Settings of this machine

Before you can use this machine through the network connection, you must configure the network settings for this machine.

TCP/IP Settings for the machine

In [TCP/IP Settings] of this machine, specify the IP address.



Reference

For details on TCP/IP Settings of this machine, refer to [User's Guide - POD Administrator's Reference].



Installation of Color Centro

4 Installation of Color Centro

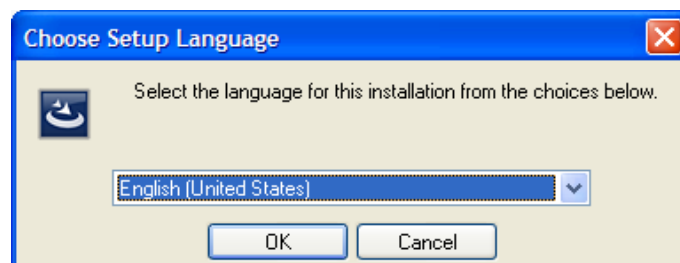
This chapter describes the procedure for installing Color Centro using the installer.

4.1 Introduction

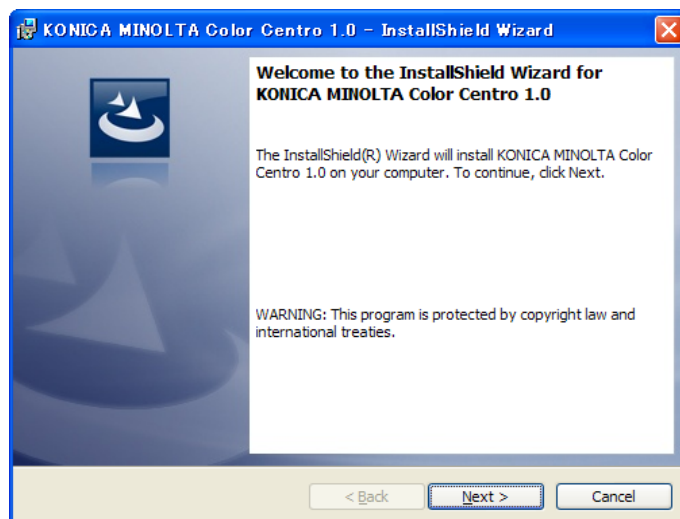
Before installing Color Centro, confirm the description of page 3-2.

4.2 Installing Color Centro

- 1 Insert the installation CD-ROM into the CD-ROM drive of the computer.
 - Make sure that the installer starts, and then go to Step 2.
 - If the installer does not start, double-click [Setup.exe] on the CD-ROM, and then go to Step 2.
 - When installing the driver on a Windows Vista/Server 2008/7-based computer, click [Allow] or [Continue] if the [User Account Control] window appears.
- 2 Select a language, and then click [OK].

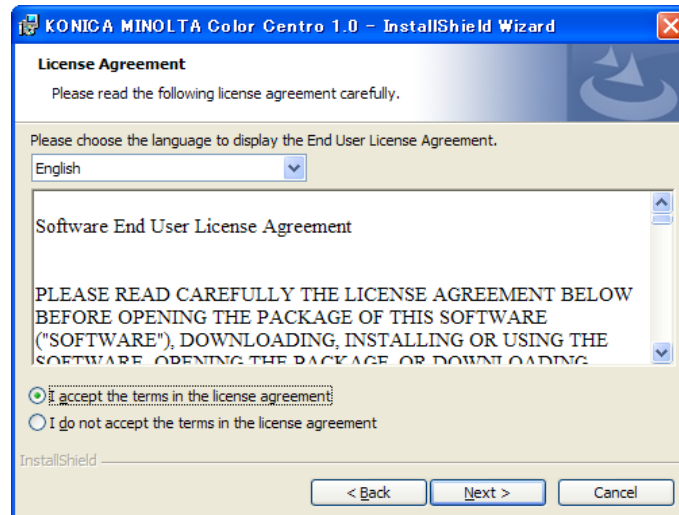


- 3 Click [Next].



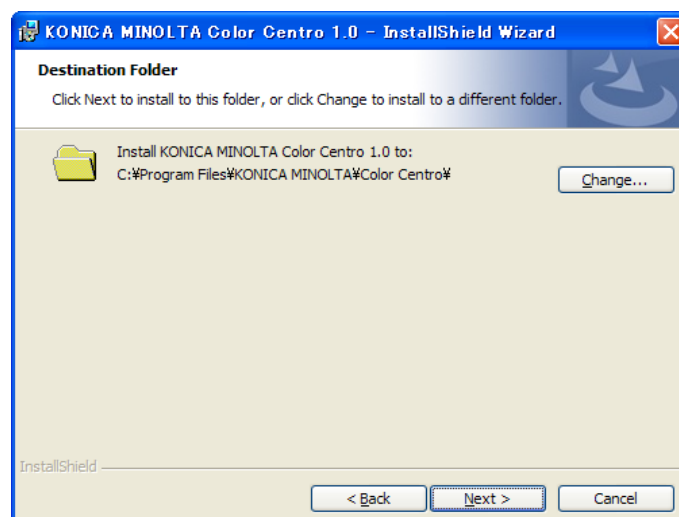
[License Agreement] screen appears.

- 4 Confirm the content. When you agree all the terms, click [I accept the terms in the license agreement] and click [Next].



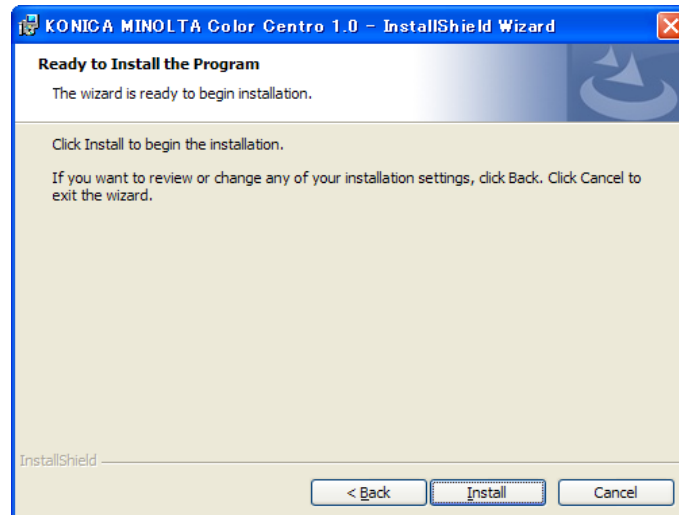
- If you disagree, you will not be able to install the driver.
- In the language display box, you can change the language used with the license agreement as required.

- 5 Select the destination folder and click [Next].

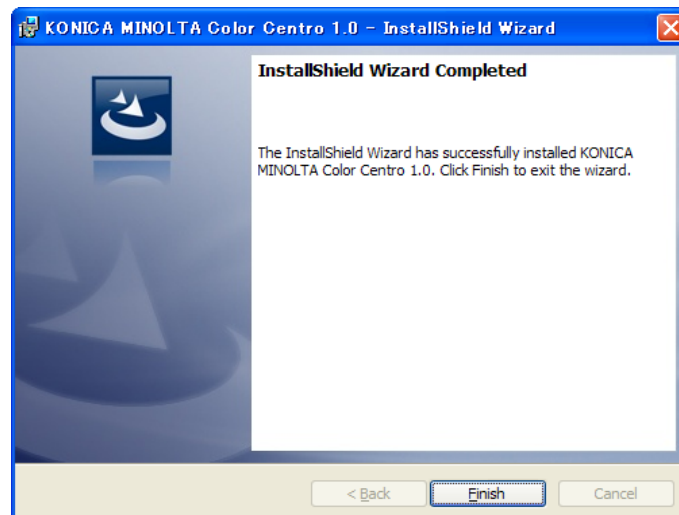


- By default, Color Centro is installed to C:\Program Files\KONICA MINOLTA\Color Centro.
- If you want to change the destination folder, click [Change] and select the desired location on the displayed screen and click [OK].

6 Click [Install].



7 Click [Finish].



The installation is complete.

- The short cut icon appears on the desktop.
- Readme for Color Centro is installed as well as Color Centro in the selected installation location.



Basic Information

5 Basic Information

This chapter describes launch procedure, exit procedure, and screens of Color Centro.

5.1 Launch Color Centro

This section describes how to launch Color Centro.

To use Color Centro, it is necessary to connect to the image controller. You cannot launch Color Centro without connecting to the image controller.

By connecting to the image controller, Color Centro can acquire the information of the main body. You can switch the connection when there are two or more image controllers.

5.1.1 Login

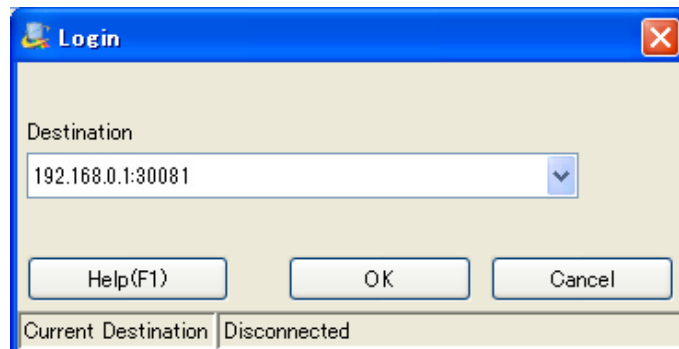
To launch Color Centro, login procedure is necessary first.

- ✓ To login, the IP address and the port number are necessary. When the port number is unknown, confirm the JSP settings of the image controller. (default: 30081)
- ✓ Confirm that the image controller can communicate.
- ✓ Color Centro is the Java Application. When the Java application is blocked by the firewall, [Windows Security Alert] screen is displayed. In this case, select the option corresponding to your network environment, and click [Allow access] to allow the communication by Java application on your network.

- 1 Select [Start] -> [All Programs] -> [KONICA MINOLTA] -> [Color Centro] -> [KONICA MINOLTA Color Centro].

→ Or double-click the short cut key on the Desktop screen.

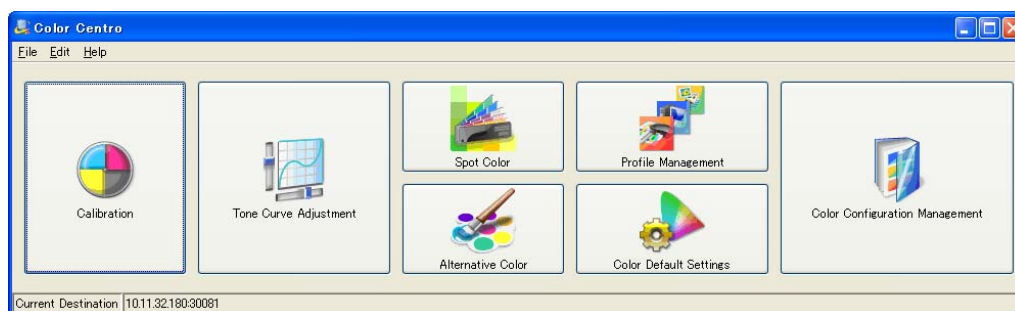
[Login] screen and [Launcher] screen appears.



→ [Launcher] screen is not available until login is completed.

- 2 Enter the IP address and the port number (30081 - 30090) of the image controller to which you want to connect Color Centro into [Destination] of [Login] screen, and click [OK].

Color Centro launches, and [Launcher] becomes available.



→ If the IP address is 192.168.0.1 and the port number is 30081, separate the IP address and the port number with a colon, and enter "192.168.0.1:30081".

- You can select the IP address and the port number which were used before, from [Current Destination]. The input number is kept even after exiting Color Centro.
- When you have connected to the image controller already, the IP address and the port number of the image controller you connected are displayed on [Current Destination].
- When you click [Cancel], the login process is canceled and you cannot start Color Centro.
- When you click [Help], the [Help] screen appears.

**Reference**

For how to operate to switch the image controller, refer to page 14-2.

5.2 Screens of Color Centro

This section describes the screens of Color Centro.

5.2.1 [Launcher] screen

This section describes [Launcher] screen which appears after launching Color Centro.

[Launcher] screen is the top screen which displays the screen to use the functions of Color Centro.



Item	Description
[Calibration]	When you click, [Calibration] screen to execute the calibration appears. For how to operate it, refer to page 7-2.
[Tone Curve Adjustment]	When you click, [Tone Curve Adjustment] screen to adjust the tone curve appears. For how to operate it, refer to page 8-2.
[Spot Color]	When you click, [Spot Color] screen to adjust the spot color appears. For how to operate it, refer to page 9-2.
[Alternative Color]	When you click, [Alternative Color Management] screen to adjust the alternative color appears. For how to operate it, refer to page 10-2.
[Profile Management]	When you click, [Profile Management] screen to manage the profiles appears. For how to operate it, refer to page 11-2.
[Color Default Settings]	When you click, [Color Default Settings] screen to set the color default settings appears. For how to operate it, refer to page 12-2.
[Color Configuration Management]	When you click, [Color Configuration Management] screen to manage the Color Configuration appears. For how to operate it, refer to page 13-2.
Status bar	Displays the IP address and the port number of the image controller connected currently.

Menu of [Launcher] screen

The menu items of the [Launcher] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	Displays [Login] screen. You can connect to the image controller which is different from the image controller currently connected.
	[Print Set Up Information]	You can print the settings of the image controller currently connected. For how to operate it, refer to page 14-4.
	[Exit]	Close Color Centro. For how to operate it, refer to page 5-10.

Menu	Menu Items	Description
[Edit]	[Calibration]	Displays [Calibration] screen to execute the calibration. For how to operate it, refer to page 7-2.
	[Tone Curve Adjustment]	Displays [Tone Curve Adjustment] screen to adjust the tone curve. For how to operate it, refer to page 8-2.
	[Spot Color]	Displays [Spot Color] screen to adjust the spot color. For how to operate it, refer to page 9-2.
	[Alternative Color]	Displays [Alternative Color] screen to adjust the alternative color. For how to operate it, refer to page 10-2.
	[Color Default Settings]	Displays [Color Default Settings] screen to set the color default settings. For how to operate it, refer to page 12-2.
	[Color Configuration Management]	Displays [Color Configuration Management] screen to manage the Color Configuration. For how to operate it, refer to page 13-2.
	[Profile Management]	Displays [Profile Management] screen to manage the profiles. For how to operate it, refer to page 11-2.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

5.2.2 Function Screens

This section describes the following 7 screens displayed from [Launcher] screen.

- [Calibration] screen
- [Tone Curve Adjustment] screen
- [Spot Color] screen
- [Alternative Color] screen
- [Profile Management] screen
- [Color Default Settings] screen
- [Color Configuration Management] screen

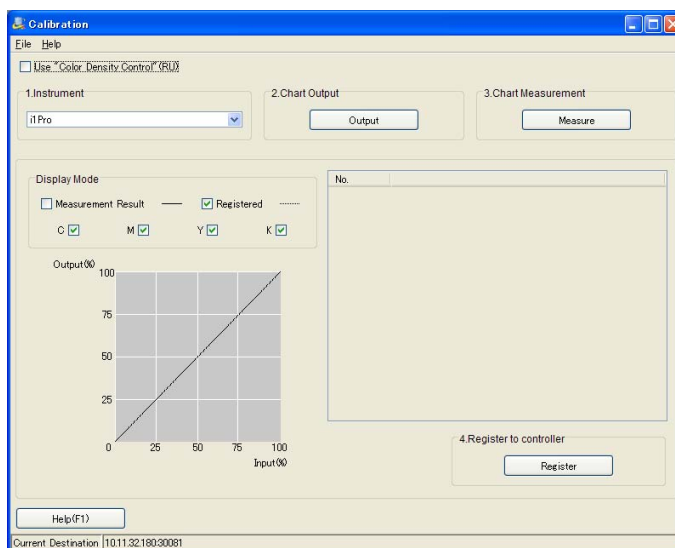
These screens can be displayed at the same time, but the multiple screens of the same function cannot be displayed at the same time.

The [Launcher] screen is displayed while these screens are displayed.

Every function screen is launched from [Launcher] screen. When you want to close these screens, select [File] menu - [Close], respectively.

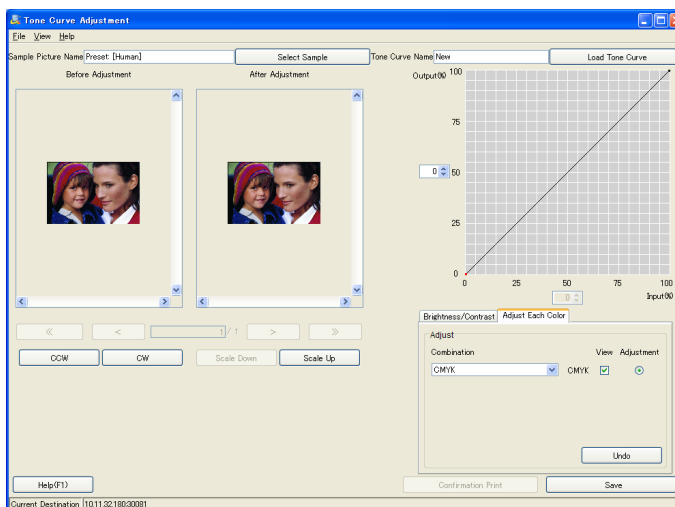
[Calibration] screen

Using this screen, you can execute the calibration of the image controller. For how to operate it, refer to page 7-2.



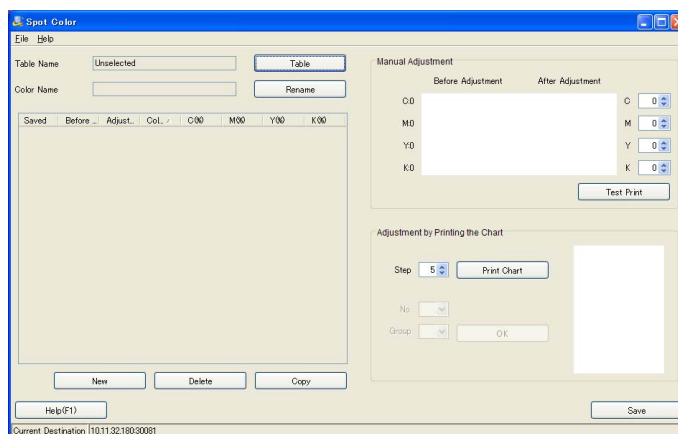
[Tone Curve Adjustment] screen

Using this screen, you can adjust the tone curve processing of the image controller. For how to operate it, refer to page 8-2.



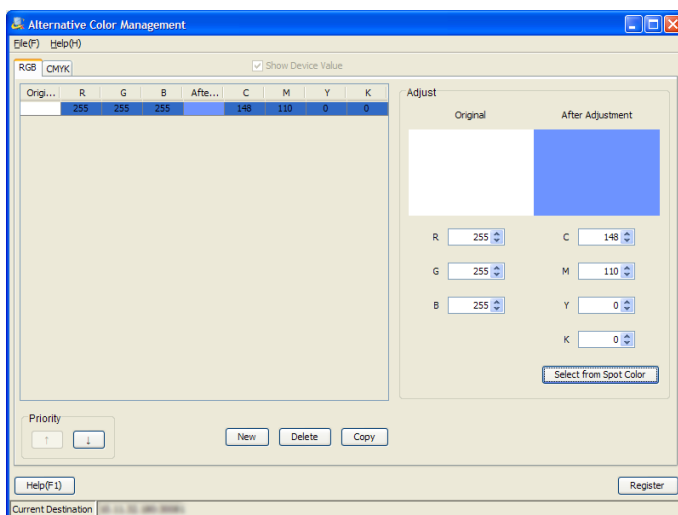
[Spot Color] screen

Using this screen, you can adjust the spot color table and spot color of the image controller. For how to operate it, refer to page 9-2.



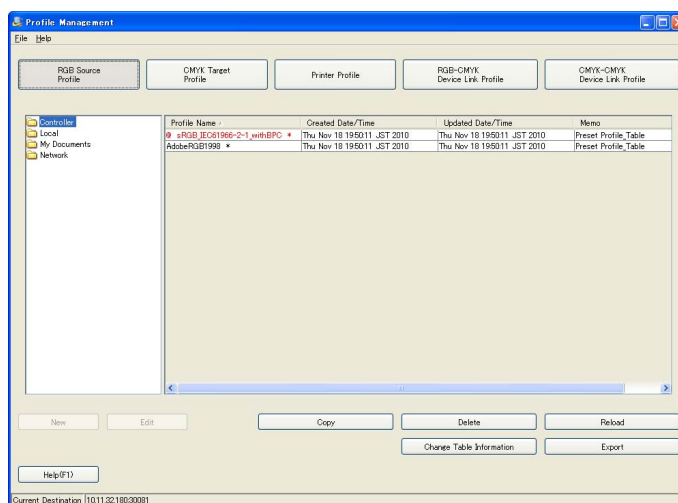
[Alternative Color Management] screen

Using this screen, you can adjust the alternative color table of the image controller. For how to operate it, refer to page 10-2.



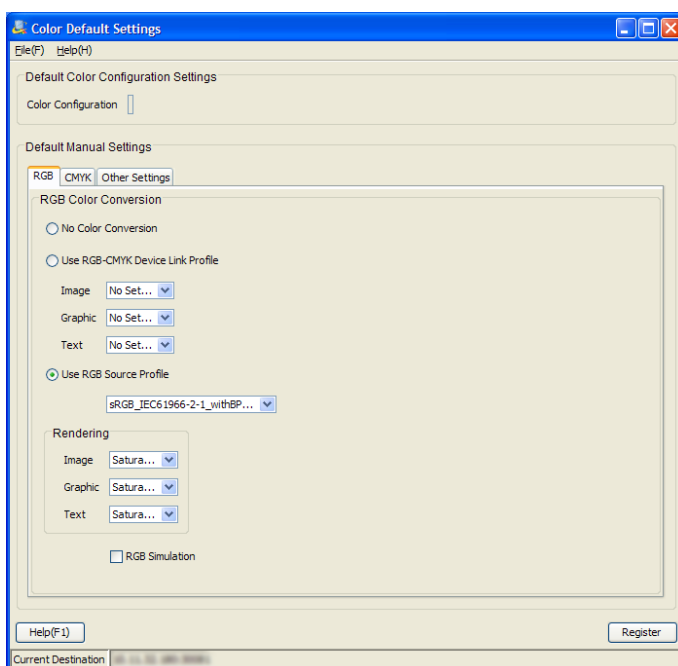
[Profile Management] screen

Using this screen, you can manage the color profiles. For how to operate it, refer to page 11-2.



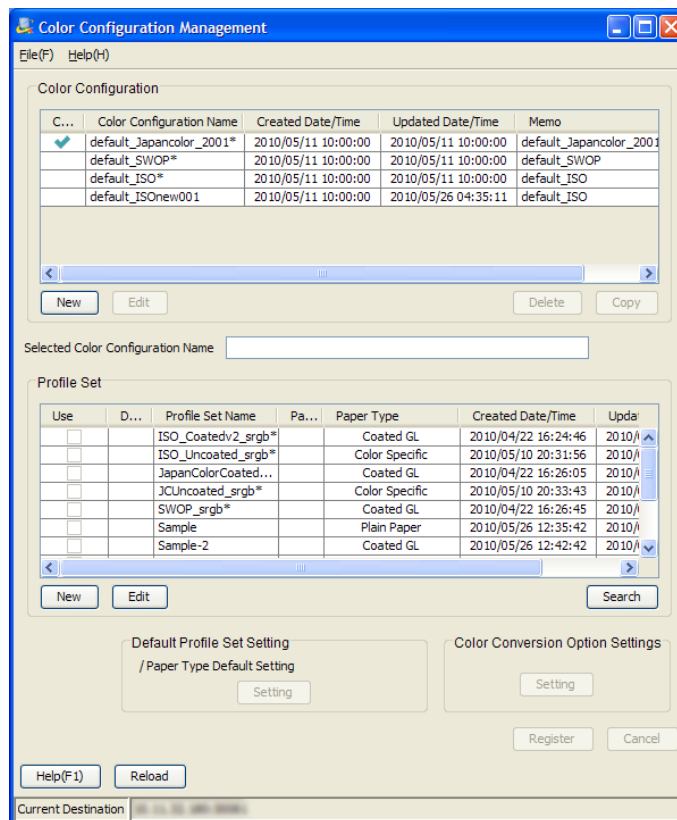
[Color Default Settings] screen

Using this screen, you can set the color default settings used by the image controller. For how to operate it, refer to page 12-2.



[Color Configuration Management] screen

Using this screen, you can manage the combination of profiles of several types as the Profile Set used by the image controller, and you can manage the color settings used by the image controller as the Color Configuration. For how to operate it, refer to page 13-2.



5.3 Exit from Color Centro

This section describes how to exit from Color Centro.

The procedures to exit from Color Centro are as follows;

- ➔ On [Launcher] screen, select [File] menu - [Exit].
Color Centro is terminated.
 - ➔ Similar operation can be done when you click [x] of the [Launcher] screen.
 - ➔ The connection of the image controller currently connected is terminated.
 - ➔ If function screens launched from [Launcher] screen are under use, the confirmation message appears. In this case, click [OK] if you want to close all the screens.



How to Use Color Centro

6 How to Use Color Centro

6.1 Color Setting of the Main Body

For proper use of Color Centro, this section describes the color settings of the main body.

The color printing of the main body is processed according to the adjustment which is executed by both of the printer engine and the image controller.

The adjustment on the printer engine mainly functions as the outputting adjustment for the paper, but the adjustment on the image controller functions, not only as the adjustment related to the data translation process, but also as the color settings related to the entire system.

Color Centro is an application which enables you to execute the color settings for the image controller which functions as mentioned above.

6.1.1 Color Settings

Color Centro connects to the image controller and allows you to execute the color settings for the image controller.

By using Color Centro, you can execute the color settings on the following 7 screens:

- [Calibration] screen
- [Tone Curve Adjustment] screen
- [Spot Color] screen
- [Alternative Color] screen
- [Profile Management] screen
- [Color Default Settings] screen
- [Color Configuration Management] screen

In those, the Calibration is the base of various color settings. This is because it measures the output condition of the main body to set the data this becomes the reference value of the entire system for the color printings. It also readjusts the main body, comparing with the reference value.

In the following cases, the color settings by use of Color Centro are indispensable;

- when the main body is installed
- when the paper is changed
- when the color management policy is changed (e.g. from sRGB to AdobeRGB etc)

To consistently maintain proper color output, daily management is necessary. And, when the special hue is used, the adjustment for individual hue is necessary.

For detailed information on daily management, refer to page 6-3.

For detailed information on the adjustment for individual hue, refer to page 6-4.

6.2 Daily Management

Daily color management is necessary to consistently maintain proper color output.

In the following cases, you should execute the color settings using Color Centro.

- 30 minutes after turning on the power of the main body in the morning.
- Every time 1000 sheets are output.
- The screen settings or paper type have changed.
- When it is worried that the change of environment conditions has a bad influence on hue.
- Before output whose hue is very important.

Especially, you should execute a calibration process at least once a day.

We recommend executing any of workflows described on page 6-5 or combination of those for daily management of color settings.

6.2.1 Calibration on Color Centro

The calibration is a function to specify the data which become the reference values for the entire system about color printing and also to adjust the reference value. Therefore, calibration is one of the main operations of daily maintenance.

There are two methods for calibration of the main body. One is the automatic calibration by the internal sensor of the RU option of the main body. The other is the manual calibration using Color Centro and the instrument.

When you print the job in which the color accuracy is important, or you change the paper type, set the reference value of the entire system by calibration. When the RU option is not installed to the main body, execute the calibration by Color Centro. When it is installed, select the calibration method. In addition, fine adjustment of the reference value is necessary along with the time passage. Determining the necessity of the fine adjustment of the reference value from the view point of the actual printed color, execute the calibration.



Reference

For detailed information on how to operate the function, refer to page 7-2.

6.3 Adjustment for individual Hues

Color Centro can execute not only the color settings for the entire system, but also adjustment for individual hues.

Color Centro allows you to execute the following adjustments;

- The Tone Curve Adjustment: You can adjust the input/output density curve per each color of CMYK.
- Spot Color: You can adjust the conversion of special color.
- Alternative Color: You can adjust the conversion of alternative color.

6.3.1 Tone Curve Adjustment

The Tone Curve Adjustment is adjustment for output density curve of each color of CMYK.

This function of Color Centro enables to adjust the brightness and the contrast for the entire image.

Operation of adjustment can be done with dragging the slider or the point of curve. You can operate viewing the preview of the adjustment result.



Reference

For detailed information on how to operate the function, refer to page 8-2.

6.3.2 Spot Color

In the image controller, some spot color tables, "DIC", "CF", and "HKS" are registered at factory shipping.

Use of the Spot Color Adjustment function of Color Centro enables to create the new spot color table, duplicate the registered spot color table, and edit it.

By this function, to replace the spot color which is specified by the application with CMYK values which Color Centro defines is enabled and the outputting is executed.



Reference

For detailed information on how to operate the function, refer to page 9-2.

6.3.3 Alternative Color

One alternative color table per color (RGB color/CMYK color) is stored in the image controller. The alternative color table replaces the specific RGB color/CMYK color within job with CMYK color (alternative color).

Use of the Color Centro enables to set and adjust the alternative color table in the image controller.

Color Centro also enables to select the alternative color from the spot color. By this function, you can adopt the spot color to the alternative color as the processing of the image controller when the spot color cannot be specified by the application.



Reference

For detailed information on how to operate the function, refer to page 10-2.

6.4 Color Setting Workflows by Color Centro

This section describes color setting workflows by Color Centro.

To consistently maintain proper color output, we recommend to execute any of the following workflows or combination of those for daily management of color settings.

Workflow	Description
Color Settings by using Default Profile	This is the simplest workflow. If you don't have much knowledge about profile, we recommend to use this workflow. For detailed information, refer to page 6-5.
Color Settings by using the Color Configuration Management Function	This is a recommended workflow which makes use of functions of Color Centro efficiently. You can execute the proper color settings with an easy procedure. For detailed information, refer to page 6-6.
Color Settings by using Functions of both Profile Management and Color Default Settings	This is a workflow which is to examine proper setting as setting the individual profile using functions of Color Centro. When you get proper result of the examination, we recommend that you shift to a workflow described in page 6-6 to execute the color settings more efficiently. For detailed information, refer to page 6-6.

6.4.1 Color Settings by using Default Profile

The procedure of the simplest workflow is below:

In this workflow, color setting is executed by using the default profile registered into the image controller at factory shipping.

- 1 Set the default profile.
 - Use the profile registered into the image controller at factory shipping. If you create a new profile, the measurement instrument is necessary.
 - The default profile is set by using Color Default Settings function or Color Configuration Management function.
 - For detailed information of Color Default Setting function, refer to page 12-2.
 - For detailed information of Color Configuration Management function, refer to page 13-2.
- 2 Execute the calibration.
 - When the main body has a scanner part, you can execute the calibration using its scanner part. Unless, prepare the measurement instrument and use it.
 - For detailed information of Calibration function, refer to page 7-2.
- 3 Execute the fine adjustment using Tone Curve Adjustment function, Spot Color Adjustment function, Alternative Adjustment function, etc.
 - For detailed information of Tone Curve Adjustment function, refer to page 8-2.
 - For detailed information of Spot Color Adjustment function, refer to page 9-2.
 - For detailed information of Alternative Adjustment function, refer to page 10-2.
- 4 Repeat above steps as needed.

The default color settings which are set on this function are applied to the job without settings by the printer driver and to the direct printing job.

6.4.2 Color Settings by using the Color Configuration Management Function

The procedure of a recommended workflow, which makes use of functions of Color Centro efficiently, is below:

This workflow needs the measurement instrument.

- 1** Execute the calibration with the measurement instrument, and register the calibration data into the image controller.
 - For detailed information of Calibration function, refer to page 7-2.
 - Here, execute the calibration as the preparation of creation of the profile. When the fine adjustment is necessary along with the time passage, execute the calibration each time.
- 2** Adjust the color setting of the image controller using a profile set in Color Configuration Management function.
 - You can create or edit profile, Profile Set and Color Configuration as required.
 - For detailed information on how to confirm the name of Default Color Configuration, refer to page 13-2.

By Using Color Configuration Management function, it is useful that you can create a Profile Set that collects profiles which correspond to each paper type, and Color Configuration which consolidates several Profile Sets. "Select Nearest Profile Set", one of the Color Configuration Management functions, allows to select the Profile Set easily.

6.4.3 Color Settings by using Functions of both Profile Management and Color Default Settings

The procedure of a workflow, which is to examine proper setting as setting an individual profile using functions of Color Centro, is below:

This workflow needs the measurement instrument.

- 1** Execute the calibration with the measurement instrument, and register the calibration data into the image controller.
 - For detailed information of Calibration function, refer to page 7-2.
 - Here, execute the calibration as the preparation of creation of the profile. When the fine adjustment is necessary along with the time passage, execute the calibration each time.
- 2** Create necessary profile using Profile Management function.
 - For detailed information of Profile Management function, refer to page 11-2.
- 3** Set the default of the color settings of the image controller by selecting created profile in Color Default Setting function.
 - For detailed information of Color Default Setting function, refer to page 12-2.
- 4** Repeat above steps as needed.

When you repeat the process of both profile creation and default color setting and get proper color settings, you can execute the color settings efficiently by setting the Color Configuration and Profile Set using Color Configuration Management function. We recommend that you shift to a workflow described in page 6-6 to execute the color settings more efficiently.



Calibration

7 Calibration

7.1 Outline of Calibration

Use of the Calibration function of Color Centro enables to print the measuring chart, measure the chart by measuring instrument, create the calibration data, and register the calibration data to the image controller.

The image controller can save one calibration data. To maintain consistent color printing, it is necessary to register the adequate calibration data according to the environment and the condition of the main body.

Executing adequate calibration increases the stability of color printing of the main body on print job.

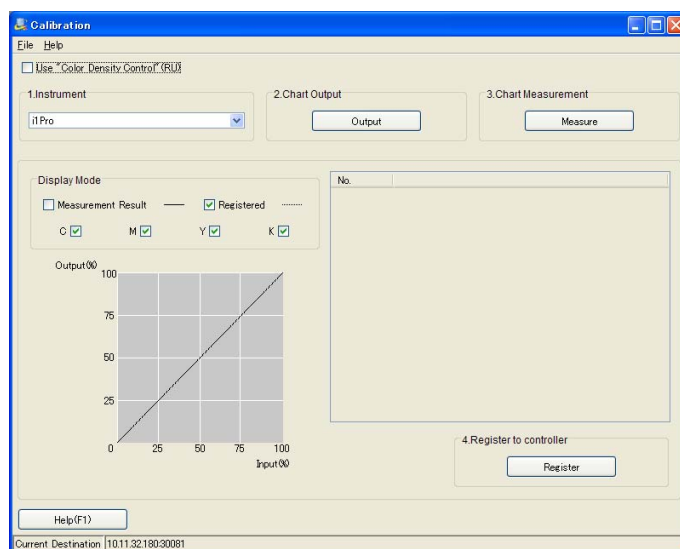
The calibration is a function to specify the data which become the reference values for the entire system about color printing and also to adjust the reference value. Therefore, calibration is one of the main operations of daily maintenance.

7.1.1 [Calibration] screen

The calibration function of Color Centro uses [Calibration] screen.

[Calibration] screen appears by clicking [Calibration] button on the [Launcher] screen. To close this screen, select [Close] from [File] menu.

The [Calibration] screen is composed as follows;



Item	Description
[Use "Color Density Control" (RU)]	When it is checked, it gives priority to the use of the internal sensor of the RU option of the main body for calibration. When you check this, make settings on the main body beforehand. For manual calibration, remove the check mark.
[1. Instrument]	Select [Scan Calibration], [i1Pro], [i1iSis No Filter], [i1iSis (UV Filter)], or [Spectrolino].
[2. Chart Output] - [Output]	Executes chart printing.
[3. Chart Measurement] - [Measure]	Executes a chart measurement.
[Display Mode] - [Measurement Result]	When [Measurement Result] is checked, the result curve of a measurement is displayed on the curve view area. When both of [Measurement Result] and [Registered] are checked, both curves appear. When there is no check mark on both, no curve appears.

Item	Description
[Display Mode] - [Registered]	When [Registered] is checked, the registered curve in the image controller is displayed on curve view area. When both of [Measurement Result] and [Registered] are checked, both curves appear. When there is no check mark on both, no curve appears.
[Display Mode] - [C], [M], [Y], [K]	You can select a curve to display. <ul style="list-style-type: none"> Check to display the curve. Uncheck to hide the curve.
(curve view area)	According to settings of [Display Mode], the result curve and/or the registered curve is/are displayed on curve view area.
(measurement result list)	Displays the measurement result list.
[Register]	Registers the measurement result in the image controller.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

List Items

The list items of the measurement result list on the [Calibration] screen are as follows;

Item	Description
[No.]	Displays the number of the measurement result list.
(measurement date/time)	Displays the measurement date/time.

List Operations

The list of the [Calibration] screen can be sorted by list item. For how to operate it, refer to page 14-3.

7.1.2 Menu of [Calibration] screen

The menu items of the [Calibration] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Initialize]	Resets the calibration data in the image controller to the settings of factory shipping. Discards the current measurement result and settings displayed on this screen, and resets the screen.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

7.1.3 Basic operation of [Calibration] screen

This section describes basic operation of [Calibration] screen.

- 1** Select the calibration method.
→ For detailed information on how to select the calibration method, refer to page 7-5.
- 2** Select the instrument.
→ For detailed information on how to select the instrument, refer to page 7-6.
- 3** Print the measurement chart.
→ For detailed information on how to print the measurement chart, refer to page 7-7.
- 4** Execute a chart measurement. If necessary, execute a remeasurement of the chart.
→ For detailed information on how to execute the chart measurement, refer to page 7-8.
→ For detailed information on how to execute the remeasurement of chart, refer to page 7-9.
- 5** Confirm the measurement result.
→ For detailed information on how to confirm the measurement result, refer to page 7-10.
- 6** Register the calibration data.
→ For detailed information on how to save, refer to page 7-12.
- 7** If necessary, reset the [Calibration] screen.
→ For detailed information on how to reset, refer to page 7-13.

7.2 Select the Calibration Method

There are two methods for calibration of the main body. One is the automatic calibration by the internal sensor of the RU option of the main body. The other is the manual calibration using Color Centro and the instrument.

When you print the job in which the color accuracy is important, or you change the paper type, set the reference value of the entire system by calibration. When the RU option is not installed to the main body, execute the calibration by Color Centro. When it is installed, select the calibration method. In addition, fine adjustment of the reference value is necessary along with the time passage. Determining the necessity of the fine adjustment of the reference value from the view point of the actual printed color, execute the calibration.

This section describes how to calibrate using the instrument on Color Centro.

Calibration on Color Centro

When you use the internal sensor of the RU option of the main body, you cannot execute calibration with the instrument because the internal sensor generates calibration data automatically. When you set both of the internal sensor of the RU option of the main body and instrument at the same time, outputting might be different with those you expected. Therefore, set as follows;

- 1 Set the main body function of the color density control to OFF, and remove the check from [Use "Color Density Control" (RU)] on [Calibration] screen.
 - [1. Instrument] becomes available, and you can execute the calibration with instrument.
 - At the first display of [Calibration] screen, [Use "Color Density Control" (RU)] is not checked.
 - The last status of this check mark is succeeded to the next launch of this screen.
 - Go to the step described on page 7-6.

7.3 Select the Instrument

This section describes how to select the instrument for measurement.

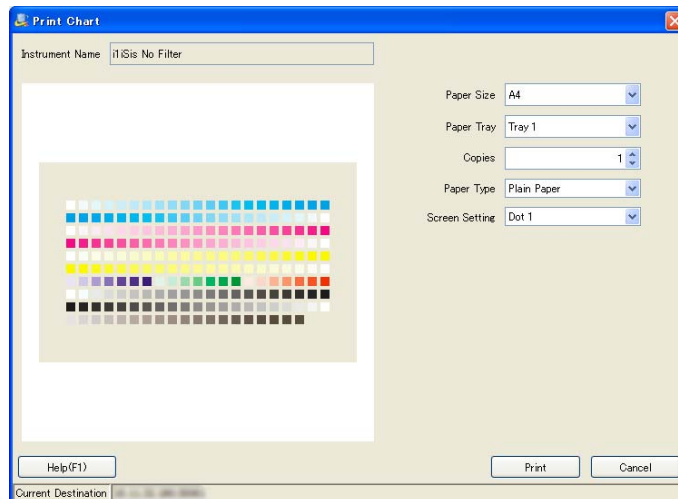
- ✓ To use the instrument, you need to install the device driver of the instrument to your computer.
- 1 From [Calibration] screen - [1. Instrument], select [Scan Calibration], [i1Pro], [i1iSis No Filter], [i1iSis (UV Filter)], or [Spectrolino].
 - When you select [Scan Calibration], you can execute the calibration with the scanner of the main body. In this case, [Output], [Measure], and [Register to controller] are not available. In addition, [Display Mode] becomes [Registered] and you cannot change it. Refer to page 16-2 for more information about operation.
 - When you have connected to the main body on which the scanner part is not installed, [Scan Calibration] is not available.
 - When you use Spectroscan or i1iO, remove the measurement head from its stage. Then, you can use it as [Spectrolino] or [i1Pro].
 - Go to the step described on page 7-7.

7.4 Print the Chart

To execute calibration with the instrument, the chart (a measurement patch chart) corresponding to the selected instrument is necessary.

This section describes how to print the chart.

- 1 Click [2. Chart Output] - [Output].
[Print Chart] screen appears.



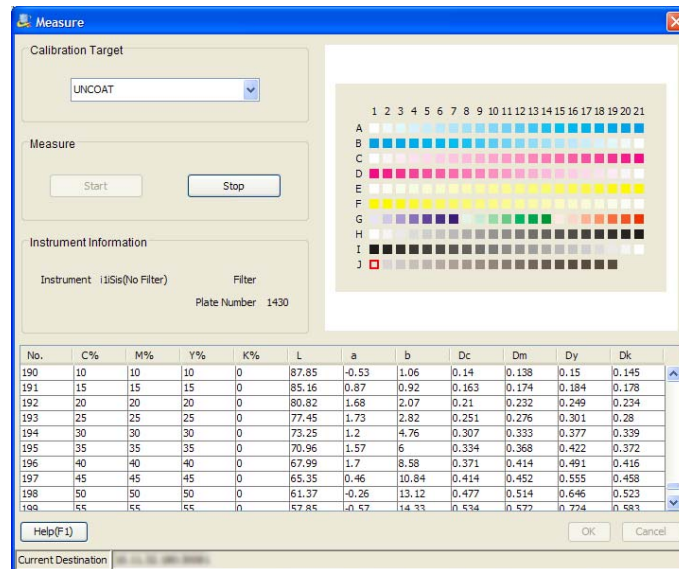
- 2 Specify [Paper Tray], [Paper Size], and [Copies].
→ Specify the number (from [1] to [5]) in [Copies].
- 3 Select [Paper Type] and [Screen Setting].
→ For [Paper Type], you can select [Plain Paper], [Fine], [Color Specific], [Coated GL], [Coated ML], [Coated GO], or [Coated MO].
→ From [Screen Setting], you can select [Dot1], [Dot2], [Line1], [Line2], or [Stochastic].
- 4 Click [Print].
Chart printing is executed.
→ On the chart, Print Date, Output Number of Sets, and No. are printed.
→ Go to the step described on page 7-8.

7.5 Chart Measurement

This section describes how to measure the printed chart with the selected instrument.

- ✓ According to the selected instrument, measurement operations differ. For detailed information on how to operate, refer to user's guide of each instrument.
- ✓ You cannot change the instrument while measuring.

- 1 Connect the instrument to your computer.
- 2 Click [3. Chart Measurement] - [Measure].
[Measure] screen appears.



- 3 From [Calibration Target], select the paper type.
- 4 Click [Start].

A measurement starts.

After finishing the measurement, the result of the measurement is displayed in the list, and patches are colored in the preview area.

- According to the selected instrument, the operation screen appears. Follow the instructions on the pages that follow.
- If you measure a wrong line, a warning message appears. You can select either to try again with the correct line or to proceed to the next line.
- To stop the measurement, click [Stop].
- After the acquirement of measurement data, [OK] becomes available.
- Before measurement, patches are displayed in gray, but after the measurement, patches are displayed in color.
- The value of each patch appears in the measurement result list.
- When you click a color patch of the preview area, the corresponding line is selected in the measurement result list. On the other hand, when you select the line in the measurement result list, the corresponding color patch is selected in the preview area.

- 5 Click [OK].

[Measure] screen closes, and [Calibration] screen appears.

The measurement result appears in the list of [Calibration] screen.

- When you click [Cancel], the measurement result is discarded and [Measure] screen is closed to return to [Calibration] screen.
- The list of [Calibration] screen displays all measurement results, until the time when [Calibration] screen is closed or reset.
- When you execute a remeasurement, go to the step described on page 7-9.
- When you view the measurement result, go to the step described on page 7-10.

7.6 Remeasurement

This section describes how to obtain the multiple measurement results with succeeding a measurement.

- ✓ According to the selected instrument, measurement operations differ. For detailed information on how to operate, refer to user's guide of each instrument.
- ✓ You cannot change the instrument while measuring.

1 Click [3. Chart Measurement] - [Measure].
[Measure] screen appears.

2 From [Calibration Target], select the paper type.

3 Click [Start].

A measurement starts.

- According to the selected instrument, the operation screen appears. Then, follow the instruction of the screen.
- To stop the measurement, click [Stop].
- After acquirement of measurement data, [OK] becomes available.
- When you click a color patch of the preview area, the corresponding line is selected in the measurement result list. On the other hand, when you select the line in the measurement result list, the corresponding color patch is selected in the preview area.

4 Click [OK].

[Measure] screen closes, and [Calibration] screen appears.

The measurement result selected on [Measure] screen appears in the list of [Calibration] screen.

- The measurement result is added to the list of [Calibration] screen at each remeasurement.
- The measurement results can be recorded up to 10 in the list of [Calibration] screen.
- At the 11th measurement, the first measurement result is discarded.
- When you click [Cancel], the measurement result is discarded and [Measure] screen is closed to return to [Calibration] screen.
- The list of [Calibration] screen displays all measurement results, until the time when [Calibration] screen is closed or reset.

5 After the measurement, click the line of a measurement result to adopt from the list.

- Go to the step described on page 7-10.

7.7 Confirm Measurement Result

All measurement results appear in the list of [Calibration] screen.

The list displays all measurement results, until the time when [Calibration] screen is closed or reset.

This section describes how to confirm the measurement result.

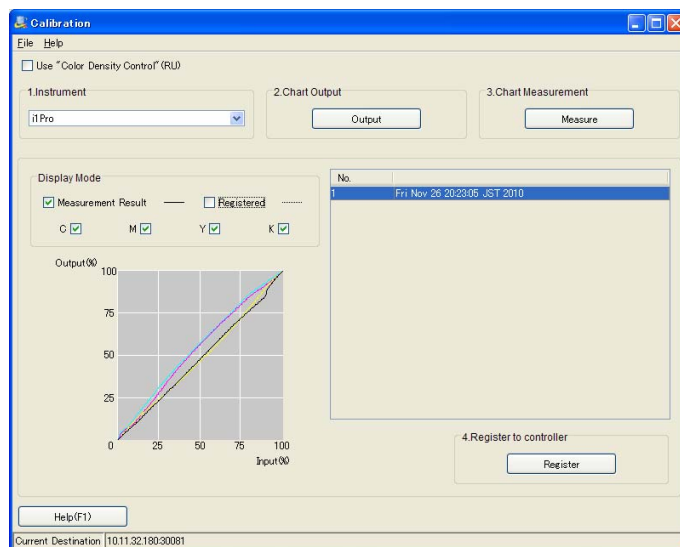


Reference

For detailed information on how to reset [Calibration] screen, refer to page 7-13.

To Confirm the Measurement Result Curve

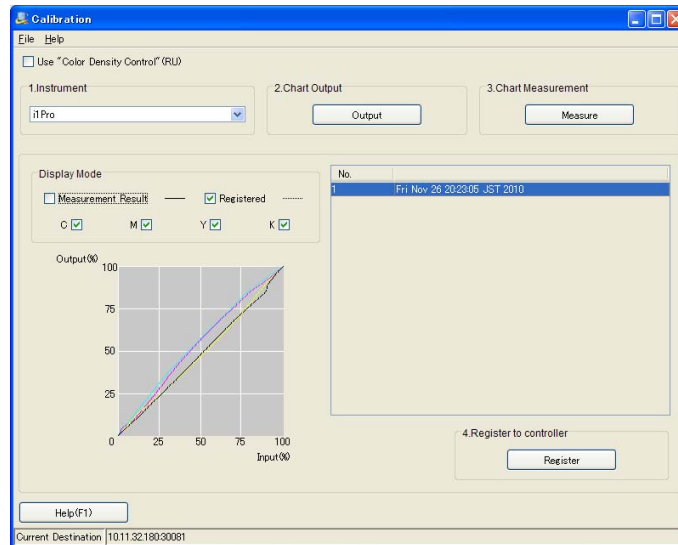
- 1 Check [Display Mode] - [Measurement Result].
- 2 From the list, select the measurement result of which you want to display curve.
The selected measurement result is displayed on the curve view area.



→ Go to the step described on page 7-12.

To Confirm Registered Curve

- Check [Display Mode] - [Registered] when you want to view the registered curve in the image controller.
The registered curve in the image controller is displayed on the curve view area.



- When both of [Measurement Result] and [Registered] are checked, both curves appear.
→ When there is no check mark on both of [Measurement Result] and [Registered], no curve appears.
→ Go to the step described on page 7-12.

7.8 Register the Calibration Data

The image controller can save one calibration data. The calibration data acquired by measurement can be adopted to the output by registration in the image controller.

This section describes how to register the calibration data.

- 1** From the list of [Calibration] screen, select the measurement result to register.
 - ➔ Measurement results other than the selected one on the [Calibration] screen are discarded when the [Calibration] screen closes.
- 2** Click [Registration].

Registration in image controller is executed.
After completing registration, [Complete] screen appears.

 - ➔ Similar operation can be done when you select [Register] from the right click menu on the selected line.
- 3** Click [OK].

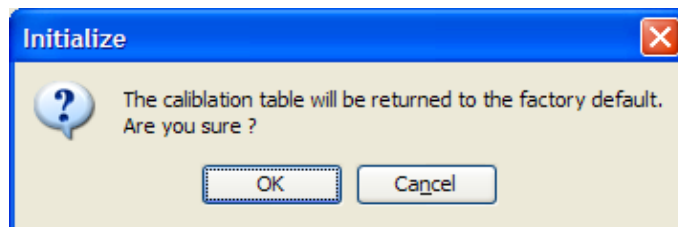
7.9 Reset the Calibration Data

The list displayed on the [Calibration] screen remains, until the time when [Calibration] screen is closed or reset.

This section describes how to reset [Calibration] screen and clear the list of measurement result.

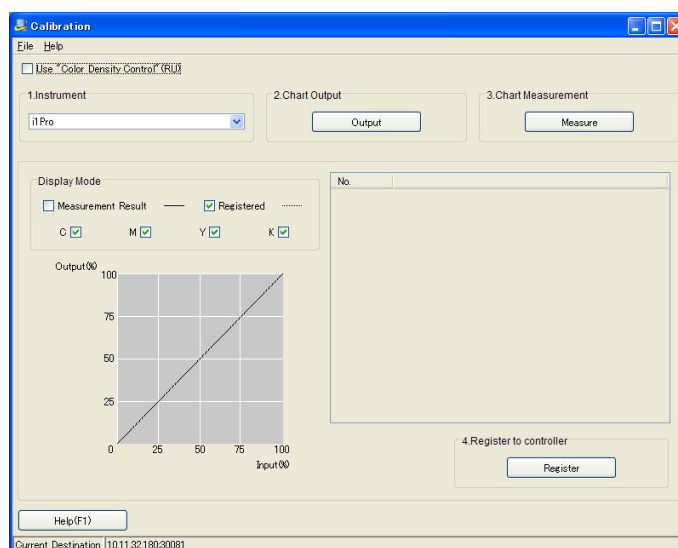
- 1 From the [File] menu, select [Initialize].

The confirmation message appears.



- 2 Click [OK].

The measurement results are cleared, and the calibration data which was set at factory shipping appears.





Tone Curve Adjustment

8 Tone Curve Adjustment

8.1 Outline of Tone Curve Adjustment

The Tone Curve Adjustment is adjustment for output density curve of each color of CMYK.

This function of Color Centro enables to adjust the brightness and the contrast for the entire image.

Operation of adjustment can be done with dragging the slider or the point of curve. You can operate viewing the preview of the adjustment result.

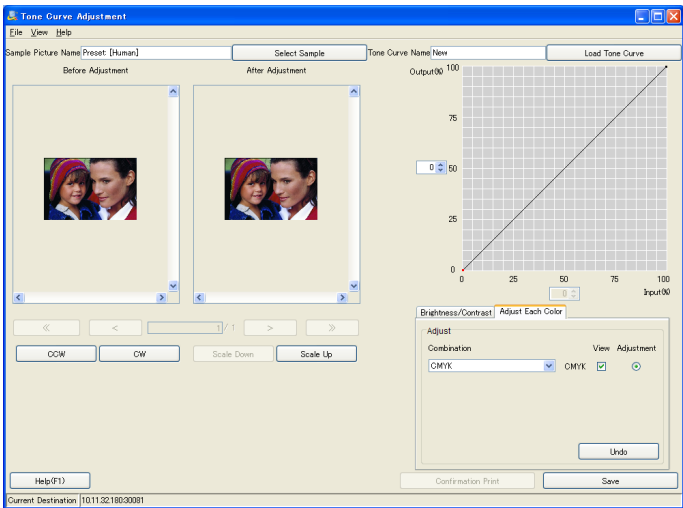
The tone curve can be registered/saved to both of the image controller and computer. The tone curve registered to the image controller can be adopted to the output. You can specify the tone curve to use as default from among registered tone curves when you use "Color Default Settings" function or "Color Configuration Management" function. You can also specify the tone curve to use from the printer driver for each job.

8.1.1 [Tone Curve Adjustment] screen

The tone curve adjustment function of Color Centro uses [Tone Curve Adjustment] screen.

[Tone Curve Adjustment] screen appears by clicking [Tone Curve Adjustment] button on the [Launcher] screen. To close this screen, select [Close] from [File] menu.

[Tone Curve Adjustment] screen is composed as follows;



Item	Description
[Sample Picture Name]	The name of sample image selected using [Select Sample] appears at the left box of the [Select Sample]. From subsequent launching, the name of sample image selected before appears.
[Select Sample]	Displays [Sample Picture] screen, and select sample image.
[Tone Curve Name]	The name of tone curve loaded using [Load Tone Curve] appears at the left box of the [Load Tone Curve].
[Load Tone Curve]	Displays [Tone Curve Management] screen, and select the tone curve to load. You can operate to manage the tone curve on [Tone Curve Management] screen.
[Before Adjustment]	Displays the image before adjustment.
[After Adjustment]	Displays the image after adjustment. Every adjustment is reflected on the screen immediately.

Item	Description
[<<], [<], [>] and [>>]	When multiple images are included in the Hold job of the image controller selected on [Sample Picture] screen, click the button to display the first image, the previous image, the next image, and the last image. When you select [Hold(Cont..)] on [Sample Picture], these are available. (This function is not available as of April 2011.)
[CCW]	Rotates the image by 90 degrees to left.
[CW]	Rotates the image by 90 degrees to right.
[Scale Down]	Displays the image shrunk. You can scale down the image size until the whole image appears.
[Scale Up]	Displays the image enlarged. You can scale up the image size selecting the magnification from among 4 levels which are 2, 4, 8, and 16 times.
(curve view area)	Reflects the setting of [Brightness/Contrast] tab and [Adjust Each Color] tab. You can adjust the tone curve by adding the point on the curve and moving the added point.
(vertical axis box)	Displays the output density (%) of the selected point on the curve view area. You can specify the value to move the selected point.
(horizontal axis box)	Displays the input density (%) of the selected point on the curve view area. You can specify the value to move the selected point.
[Brightness/Contrast] tab	Displays the sheet to adjust brightness and contrast. For detailed information, refer to page 8-13.
[Brightness/Contrast] tab [Undo]	Discards the current settings of [Brightness/Contrast] tab, and returns to the last saved settings.
[Adjust Each Color] tab	Displays the sheet to adjust each color. For detailed information, refer to page 8-15.
[Adjust Each Color] tab [Undo]	Discards the current settings of [Adjust Each Color] tab, and returns to the last saved settings.
[Confirmation Print]	Adopts the setting and execute printing to confirm the result of adjustment. This function is available only when [Hold(Cont..)] is selected on the [Sample Picture] screen in [Select Sample]. (This function is not available as of April 2011.)
[Save]	Saves the result of adjustment.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

8.1.2 Menu of [Tone Curve Adjustment] screen

The menu items of the [Tone Curve Adjustment] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[New Tone Curve]	Creates the new tone curve.
	[Tone Curve Management]	Displays [Tone Curve Management] screen to select the tone curve which you want to load. You can operate to manage the tone curve on [Tone Curve Management] screen.
	[Select Sample]	Displays [Sample Picture] screen to select sample image.
	[Confirmation Print]	Adopts the setting and execute printing to confirm the result of adjustment. This function is available only when [Hold(Cont..)] is selected on the [Sample Picture] screen in [Select Sample]. (This function is not available as of April 2011.)
	[Close]	Close this screen and exits this function.
[View]	[Previous Page]	It is available when multiple images are included in the job of the image controller selected on [Sample Picture] screen. Displays the image of the previous page. (This function is not available as of April 2011.)
	[Next Page]	It is available when multiple images are included in the job of the image controller selected on [Sample Picture] screen. Displays the image of the next page. (This function is not available as of April 2011.)
	[First Page]	It is available when multiple images are included in the job of the image controller selected on [Sample Picture] screen. Displays the image of the first page. (This function is not available as of April 2011.)
	[Last Page]	It is available when multiple images are included in the job of the image controller selected on [Sample Picture] screen. Displays the image of the last page. (This function is not available as of April 2011.)
	[Rotation (Clockwise)]	Rotates the image by 90 degrees to right.
	[Rotation (Counter clockwise)]	Rotates the image by 90 degrees to left.
	[Scale Up]	Displays the image enlarged. You can scale up the image size selecting the magnification from among 4 levels which are 2, 4, 8, and 16 times.
	[Scale Down]	Displays the image shrunked. You can scale down the image size until the whole image appears.
	[Display only before adjustment]	Displays only the image of [Before Adjustment] on the screen.
	[Display only after adjustment]	Displays only the image of [After Adjustment] on the screen.
	[Display before and after the adjustment]	Displays both of [Before Adjustment] and [After Adjustment] on the screen.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

8.1.3 Basic operation of [Tone Curve Adjustment] screen

This section describes basic operation of [Tone Curve Adjustment] screen.

- 1** Select the sample image to confirm the conditions where the tone curve is adopted.
→ For detailed information on how to select the sample image, refer to page 8-6.
- 2** Confirm the sample image displayed at [Before Adjustment] and [After Adjustment].
→ For detailed information on how to confirm the sample image, refer to page 8-8.
- 3** Load the tone curve to make adjustment. Or, create the new tone curve.
→ For detailed information on how to load the tone curve, refer to page 8-9.
→ For detailed information on how to create the tone curve, refer to page 8-12.
- 4** If necessary, adjust the brightness and the contrast, or set each color adjustment. Or, click on the curve to add the point and drag the added point to adjust the curve.
→ For detailed information on how to adjust the brightness and the contrast, refer to page 8-13.
→ For detailed information on how to set each color adjustment, refer to page 8-15.
→ For detailed information on how to operate the point, refer to page 8-16.
- 5** Save the adjusted tone curve.
→ For detailed information on how to save, refer to page 8-19.
- 6** If necessary, execute some management operations for the tone curve.
→ For detailed information on how to manage, refer to page 8-20.
- 7** If necessary, reset the tone curve.
→ For detailed information on how to reset, refer to page 8-23.

8.2 Select Sample Image

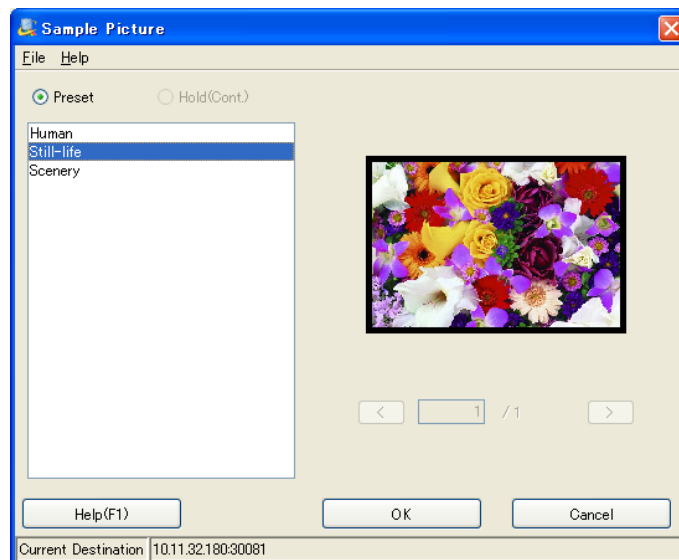
When you adopt the tone curve to the sample image, you can confirm the conditions of [Before Adjustment] and [After Adjustment]. You can select the image which was set at factory shipping, as the sample image.

This section describes how to select the sample image.

The sample image is selected on [Sample Picture] screen.

8.2.1 [Sample Picture] screen

The [Sample Picture] screen is composed as follows;



Item	Description
[Preset]	Allows you to use the image which was set at factory shipping, as a sample image.
[Hold (Cont...)]	Allows you to use a hold job in the image controller which is connected currently, as the sample. (This function is not available as of April 2011.)
(list)	According to the selection of [Preset] / [Hold (Cont...)], displays either of the list of images which were set at factory shipping or the list of hold jobs of the image controller which is connected currently. (This function is available only when [Preset] is selected as of April 2011.)
(image preview area)	Displays the image selected from the list.
[<], (input box), [>]	When multiple images are included in the Hold job of the image controller, click the button to display the previous image or the next image. Or, displays the image on the preview area when the number of it is entered into the input box. When you select [Hold] on Sample Picture, these are available. (This function is not available as of April 2011.)
[OK]	Uses the selected image as the sample image. [Sample Picture] screen is closed to return to [Tone Curve Adjustment] screen. Displays the selected image in [Before Adjustment] and [After Adjustment].
[Cancel]	Discards the current settings and closes [Sample Picture] screen to return to [Tone Curve Adjustment] screen.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

8.2.2 Menu of [Sample Picture] screen

The menu items of the [Sample Picture] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Reload]	Reloads the information of the image controller connected currently.
	[Cancel]	Discards the current settings, and closes the screen.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

8.2.3 Select Sample Image

This section describes how to select the sample image.

- 1 Click [Select Sample] on the [Tone Curve Adjustment] screen.
[Sample Picture] screen appears
→ Similar operation can be done when you select [File] menu - [Select Sample].
- 2 From the list, select the image for use as the sample image.
According to the selection, the preview appears.
- 3 Confirm the image and click [OK].
[Sample Picture] screen is closed to return to [Tone Curve Adjustment] screen.
The name of the sample image appears on [Tone Curve Adjustment] screen and the specified image is displayed on [Before Adjustment] and [After Adjustment].
→ When you click [Cancel], the current settings are discarded and [Sample Picture] screen is closed to return to [Tone Curve Adjustment] screen.
→ When you confirm the image, go to the step described on page 8-8.

8.3 Confirm Sample Image

The sample image specified on [Sample Picture] is displayed on [Before Adjustment] and [After Adjustment] of [Tone Curve Adjustment].

The sample images are enlarged/shrunked automatically to display the whole image in the area of [Before Adjustment] and [After Adjustment]. At this time, the proportion of height and width is not changed.

This section describes how to confirm the sample image displayed on [Before Adjustment] and [After Adjustment].

To confirm the image by moving within the preview area

- ➔ Drag the mouse within the area of [Before Adjustment] and [After Adjustment].

The preview moves to the direction of dragging within the area of [Before Adjustment] and [After Adjustment].

- ➔ Both preview of [Before Adjustment] and [After Adjustment] move at the same time.

To confirm the image by rotating the preview

- ➔ Click [CCW] or [CW].

Both preview of [Before Adjustment] and [After Adjustment] rotate to the specified direction.

- ➔ When you click additionally, those rotate to the specified direction according to additional click times. At this time, the image is not enlarged/shrunked.
- ➔ Similar operation can be done when you select [View] menu - [CCW] or [CW].

To confirm the image by enlarging/shrinking the preview

- ➔ Click [Scale Up] or [Scale Down].

Both preview of [Before Adjustment] and [After Adjustment] are enlarged/shrunked.

- ➔ In [Scale Up], you can scale up the image size selecting the magnification from among 4 levels which are 2, 4, 8, and 16 times.
- ➔ In [Scale Down], you can scale down the image size until the whole image appears.
- ➔ The same operations can be done when you select [View] menu - [Scale Up] or [Scale Down].

To display/hide images of [Before Adjustment] and [After Adjustment]

- ➔ Select [View] menu - [Display only before adjustment], [Display only after adjustment], or [Display Both]. According to the selection, [Before Adjustment] and/or [After Adjustment] appear(s).

After confirming, when you load the tone curve, go to the step described on page 8-9. When you create the new tone curve, go to the step described on page 8-12.

8.4 Load the Tone Curve

In the image controller, there is the tone curve registered at factory shipping. You can also register the tone curve which you adjusted on [Tone Curve Adjustment] screen. Color Centro can load these tone curves and also make adjustment.

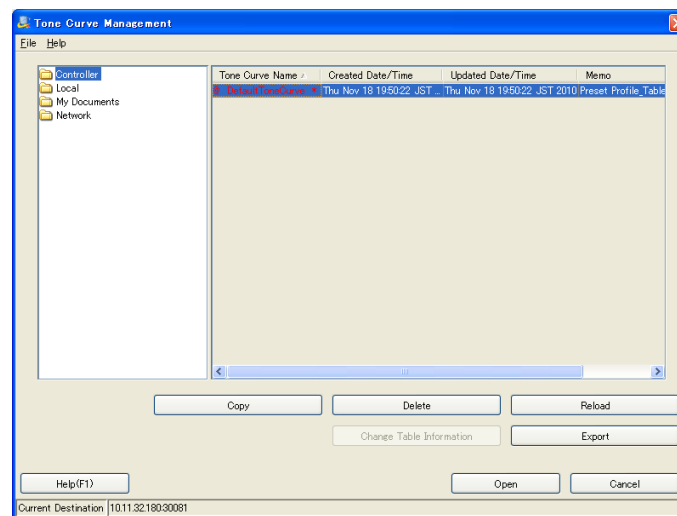
The tone curve registered at factory shipping in the image controller cannot be adjusted and overwritten. When you want to adjust the tone curve registered at factory shipping, load the duplication of it which was made beforehand and adjust the duplication. For detailed information on how to duplicate, refer to page 8-20.

This section describes how to load the tone curve.

You can select the tone curve to load on [Tone Curve Management] screen.

8.4.1 [Tone Curve Management] screen

[Tone Curve Management] screen is composed as follows;



Item	Description
(tree view)	Displays the places where the tone curve are saved ([Controller], [Local], [My Documents] and [Network]) in the tree format.
(list)	According to the selection of the tree view, displays the saved tone curves.
[Copy]	Makes a duplication of the selected tone curve from the list within [Controller], when [Controller] is selected on the tree view.
[Delete]	Deletes the tone curve selected from the list.
[Reload]	Updates the information of the list.
[Change Table Information]	Changes the table information (Saved Name, Memo) of the tone curve which is selected from the list.
[Export]/[Register]	Exports the selected tone curve on the list to [Local]/[My Documents]/[Network], when [Controller] is selected on the tree view. Registers the tone curve selected on the list to [Controller], when a folder other than [Controller] is selected on the tree view.
[Open]	Loads the selected tone curve on the list to [Tone Curve Adjustment] screen.
[Cancel]	Close this screen and exits this function.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

List Items

The list items of the measurement result list on the [Tone Curve Management] screen are as follows;

Item	Description
[File Name]	Displays the saved file name of the tone curve when [Local], [My Documents] or [Network] is selected on the tree view.
[Tone Curve Name]	Displays the tone curve name.
[Created Date/Time]	Displays the date/time when the new tone curve was created.
[Update Date/Time]	Displays the date/time when the tone curve was updated.
[Memo]	Displays the memo which was set to the tone curve.

When [Controller] is selected on the tree view, "*" mark is added after the name of the tone curve which was registered at factory shipping. In addition, a red "@" mark is added before the name of the tone curve which was registered at factory shipping.

List Operations

The list of the [Tone Curve Management] screen can be sorted by list item. For how to operate it, refer to page 14-3.

When you display [Tone Curve Management] screen first after launching Color Centro, the list is displayed in ascending order of [Tone Curve Name] (in case of [Controller]), or [File Name] (in case of [Local], [My Documents] or [Network]).

8.4.2 Menu of [Tone Curve Management] screen

The menu items of the [Tone Curve Management] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Reload]	Updates the information of the list.
	[Sort]	Sorts the content of the list by the selected list item. For how to operate it, refer to page 14-3.
	[Change Table Information]	Changes the table information (Saved Name, Memo) of the tone curve which is selected from the list.
	[Delete]	Deletes the tone curve selected from the list.
	[Copy]	Makes a duplication of the selected tone curve from the list within [Controller], when [Controller] is selected on the tree view.
	[Export]	Exports the selected tone curve on the list to [Local]/[My Documents]/[Network], when [Controller] is selected on the tree view.
	[Register]	Registers the tone curve selected on the list to [Controller], when a folder other than [Controller] is selected on the tree view.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

8.4.3 Load the Tone Curve

This section describes how to load the tone curve.

The tone curve registered at factory shipping in the image controller cannot be adjusted and overwritten. When you want to adjust the tone curve registered at factory shipping, load the duplication of it which was made beforehand and adjust the duplication. For detailed information on how to duplicate, refer to page 8-20.

- 1** Click [Load Tone Curve] on the [Tone Curve Adjustment] screen.
[Tone Curve Management] screen appears.
→ Similar operation can be done when you select [File] menu - [Tone Curve Management].
- 2** From the tree view, select the place to save the tone curve.
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3** From the list, select the tone curve to load.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4** Click [Open].
[Tone Curve Management] screen is closed to return to [Tone Curve Adjustment] screen.
Selected tone curve is loaded and the settings appear to [Tone Curve Adjustment] screen.
→ When you click [Cancel], [Tone Curve Management] screen is closed to return to [Tone Curve Adjustment] screen.
→ When you adjust the tone curve, go to the step described on page 8-13.

8.5 Create the New Tone Curve

This section describes how to create the new tone curve.

- 1 Select [File] menu - [New Tone Curve] on [Tone Curve Adjustment] screen.
On the left of [Load Tone Curve], "New" appears.
 - The name of the new tone curve is set at saving.
 - Go to the step described on page 8-13.

8.6 Adjust the Brightness/Contrast

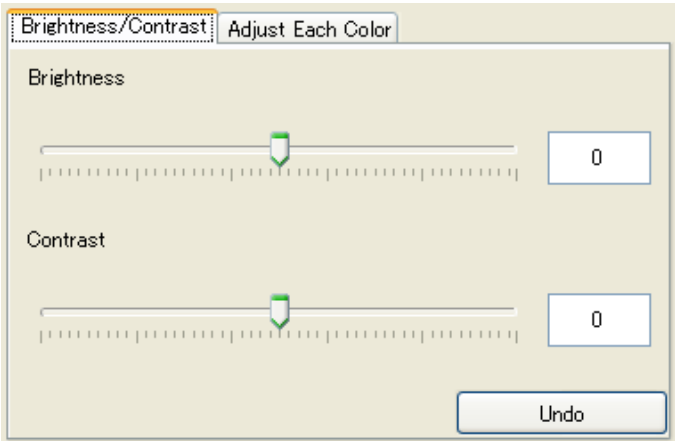
You can adjust the tone curve using brightness/contrast adjustment, each color adjustment, and curve view on [Tone Curve Adjustment] screen. The result of adjustment is reflected to the preview area immediately.

This section describes how to adjust the brightness/contrast of the tone curve.

8.6.1 [Brightness/Contrast] tab

The brightness/contrast adjustment uses [Brightness/Contrast] tab of [Tone Curve Adjustment] screen.

The [Brightness/Contrast] tab is composed as follows;



Item	Description
[Brightness] slider	Adjusts the brightness by moving the slider to left/right.
[Brightness] box	Specifies the value to apply as the brightness.
[Contrast] slider	Adjusts the contrast by moving the slider to left/right.
[Contrast] box	Specifies the value to apply as the contrast.
[Undo]	Sets [Brightness] box and [Contrast] box set to "0", and resets the settings of [Brightness/Contrast] tab.

The result of adjustment of [Brightness/Contrast] can be adjusted additionally by operations to points on the curve in the curve view area of [Tone Curve Adjustment]. For detailed information on how to operate the point, refer to page 8-16.

8.6.2 Brightness/Contrast Adjustment

This section describes how to adjust with [Brightness/Contrast] tab.

The brightness adjustment function is to adjust the tone curve by changing the middle point value of the brightness of the entire image. The brightness adjustment is the adjustment of the output value at base point where the input value (horizontal axis) in curve view area is 50%. When the slider is moved to the right (when the input value to the input box is large) the images is made brighter, and when the slider is moved to the left (when the input value to the input box is small) the image is made darker.

The contrast adjustment function is to adjust the gradation for the bright part and the dark part of the entire image. The contrast adjustment is the adjustment of the output value at base point where the input values (horizontal axis) in curve view area are 25% and 75%. When the slider is moved to the right (when the input value to the input box is large) the contrast is made stronger, and when the slider is moved to the left (when the input value to the input box is small) the contrast is made weaker.

The adjustment using [Brightness/Contrast] tab adjusts each color of CMYK collectively. For detailed information on how to set each color adjustment, refer to page 8-15.

- 1** Click [Brightness/Contrast] tab on the [Tone Curve Adjustment] screen.
[Brightness/Contrast] tab appears.
- 2** Drag the [Brightness] slider to left/right. You can also specify by entering the value (from "-25" to "25") into [Brightness] box.
The value of the adjustment is reflected to curve view area and to preview of [After Adjustment].
- 3** Drag and move the [Contrast] slider to left/right. You can also specify by entering the value (from "-25" into "25") to [Contrast] box.
The value of the adjustment is reflected to curve view area and to preview of [After Adjustment].
- 4** Confirm the preview of [After Adjustment], and repeat Step 2 and Step 3 as required.
 - When you adjust each color, go to the step described on page 8-15.
 - When you execute confirmation print to confirm the result of tone curve adjustment, go to the step described on page 8-18.

8.7 Adjust the Each Color

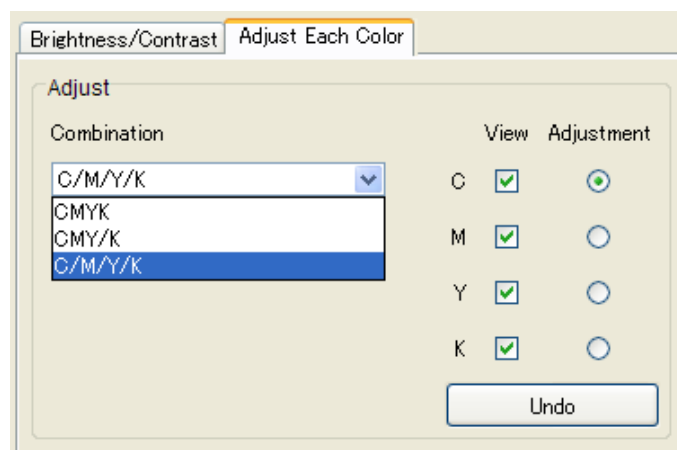
You can adjust the tone curve using brightness/contrast adjustment, each color adjustment, and curve view on [Tone Curve Adjustment] screen. The result of adjustment is reflected to the preview area immediately.

This section describes how to adjust each color.

8.7.1 [Adjust Each Color] tab

The each color adjustment uses [Adjust Each Color] tab of [Tone Curve Adjustment] screen.

The [Adjust Each Color] tab is composed as follows;



Item	Description
[Combination]	Lets you select [CMYK], [CMY/K], or [C/M/Y/K]. When you select [CMYK], you can adjust the consolidated tone curve of CMYK. When you select [CMY/K], you can adjust the consolidated tone curve of CMY and the tone curve of K. When you select [C/M/Y/K], you can adjust the tone curves of each color of CMYK.
[View]	Displays a check box to display/hide the tone curve per item of the combination selected from [Combination]. According to the selection from [Combination], the number and target (color) of the check box differ.
[Adjustment]	Displays a radio button to select whether you execute the tone curve adjustment or not per item of the combination selected from [Combination]. According to the selection of [Combination], the number and target (color) of the radio button differ.
[Undo]	Discards the current settings of [Adjust Each Color] tab, and returns to the last saved settings.

8.7.2 Basic operation of [Adjust Each Color] tab

This section describes how to adjust with [Adjust Each Color] tab.

Select the Combination

The selected combination, the view settings and the settings of adjustment target on [Adjust Each Color] tab define the range of the adjustment by operation of points in the curve view area.

Specify on each color whether you want to display the tone curve or hide and whether you execute adjustment or not, using [View] check box and [Adjustment] radio button which displayed per item of the combination selected from [Combination].

When [View] is checked, the tone curve of the color checked is displayed on curve view area.

When [Adjustment] is selected, the tone curve of the color selected can be adjusted by operation of points in the curve view area.

When check mark of [View] for one color was not selected and you select [Adjustment] for the same color, [View] is checked automatically.

Basic operation

- 1 Click [Adjust Each Color] tab on the [Tone Curve Adjustment] screen.
[Adjust Each Color] tab appears.
- 2 Select [CMYK], [CMY/K], or [C/M/Y/K] from [Combination].
According to the selection from [Combination], [View] check box per each color and [Adjustment] radio button per each color appear.
- 3 When you want to display the tone curve of one color, check the check box of that color.
- 4 When you want to adjust the tone curve of one color, select the radio button of that color.
- 5 Adjust the tone curve by operation of points in the curve view area.
 - For detailed information on how to operate the point, refer to page 8-16.
 - When you execute confirmation print to confirm the result of tone curve adjustment, go to the step described on page 8-18.

Adjust with Point/Reference Point

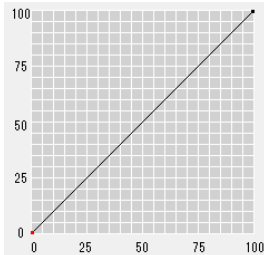
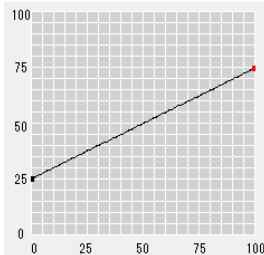
When you select [Adjust Each Color] tab, you can use the point/reference points to adjust.

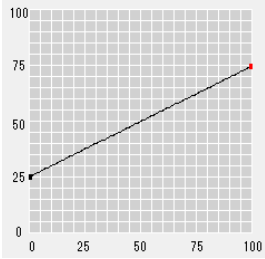
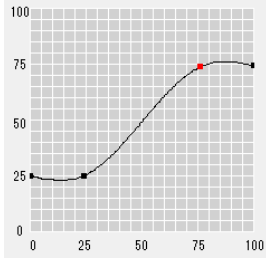
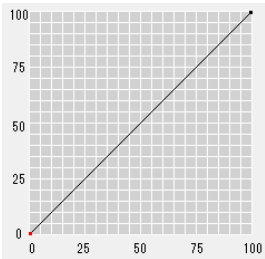
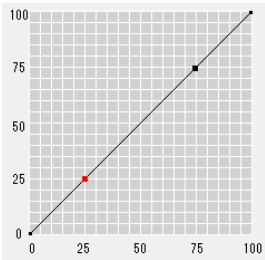
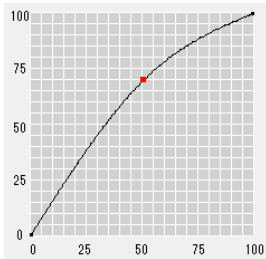
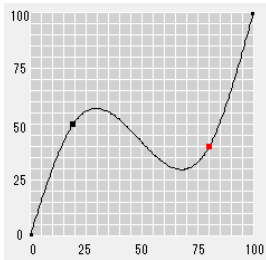
The point (small, black square) appears at both ends of the curve view area. You can adjust the tone curve by dragging and moving this point.

You can also add the point by clicking on the curve. You can adjust the tone curve by dragging and moving this added point (small, red square).

In addition, the position of 25%, 50%, and 75% may be added automatically on the curve as reference points according to the settings of [Brightness/Contrast] tab. You can also adjust the tone curve by dragging and moving the reference point.

Those points and reference points can be used for adjustment of the tone curve as follows;

How to drag	Description	Before Adjustment	After Adjustment
Drag the points (at both ends) upward or downward	You can change the entire inclination. Then, you can adjust the whole range of the output values.		

How to drag	Description	Before Adjustment	After Adjustment
Drag the added points which are adjacent to the both end points, to the left or to the right.	The 0 point (beginning point) and 100 point (ending point) cannot be moved to the left or the right, but the adjacent point can be moved to 1% or 99%. When you drag the added point which is adjacent to the end point, you can set the adjacent section from the both ends near the same height (output value).		
Drag the added/reference point upward/downward/left/right	Dragging the added/reference points upward/downward/left/right, you can set the circular arc or an S-shaped curve that is centering on this point. When the whole curve is made to circular arc, the brightness goes up. When the S-shaped curve is enlarged, the contrast becomes strong. You can drag to left or right, within the range from the next of the previous point (value of the position is 1% greater) to before the next point (value of the position is 1% less).	 	 

You can set the complex tone curve by moving/adding the point mentioned above.

- You can add the point up to 13.
- You cannot select the multiple points at the same time.
- Similar operation can be done when you press up/down key on the keyboard in stead of dragging.
- When you select the added point and you press [Delete] key on the keyboard, you can delete the selected point. However, you cannot delete the beginning point and the ending point.
- The input boxes of vertical/horizontal axes display the value of the selected point. When you select the point and you enter the value into the input boxes respectively, you can move the selected point to specified position.

8.8 Confirmation Print

This section describes how to execute confirmation print to confirm the result of tone curve adjustment.

This function is available only when [Hold(Cont..)] is selected on the [Sample Picture] screen in [Select Sample]. (This function is not available as of April 2011.)

- 1** Click [Confirmation Print] on the [Tone Curve Adjustment] screen.
[Confirmation Print] screen appears.
→ Similar operation can be done when you select [File] menu - [Confirmation Print].
- 2** Specify [Paper Tray], and confirm [Paper Size] and [Original Orientation].
- 3** When you select the job in which multiple images are included, specify the page number in [Print Page] to execute confirmation print.
→ When you select a job which has only 1 single image, [Page No.] is "1" and you cannot change it.
→ The confirmation print outputs only 1 page.
- 4** Check [Print before and after the adjustment], when you want to print the image before adjustment.
- 5** Click [OK].
Confirmation printing is executed.
→ When you save the adjusted tone curve, go to the step described on page 8-19.

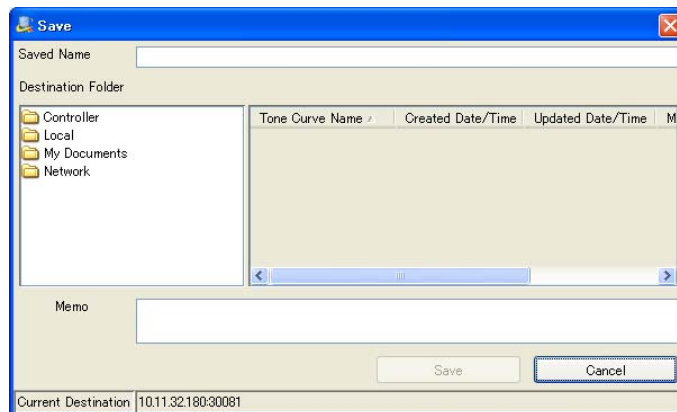
8.9 Save the Tone Curve

This section describes how to save the adjusted tone curve.

When you register the settings to the image controller, the adjusted tone curve can be adopted to the output.

When the tone curve is saved in [Local], [My Documents] or [Network], the tone curve is saved as the tone curve profile (Extension: ".xml").

- 1 Click [Save] on the [Tone Curve Adjustment] screen.
[Save] screen appears.



- 2 Specify the name of the tone curve to [Saved Name] within 31 one-byte alpha-numerical characters.
- 3 From the tree view of [Destination Folder], select the place to save the tone curve.
The list appears according to the selection.
 - When Controller is selected on the tree view, "*" mark is added after the name of the tone curve which was registered at factory shipping. In addition, a red @ mark is added before the name of the tone curve which was registered at factory shipping.
- 4 If necessary, enter the description to [Memo].
- 5 Click [Save].
When you select [Controller] as the destination folder, the tone curve is saved in the image controller. When you select [Local], [My Documents] or [Network] as the destination folder, the tone curve is saved as the tone curve profile (Extension: ".xml").
 - When there is a tone curve with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - You can specify the tone curve to use as default from among registered tone curves in the image controller when you use "Color Default Settings" function or "Color Configuration Management" function.

8.10 Tone Curve Management

This section describes how to manage the saved tone curve.

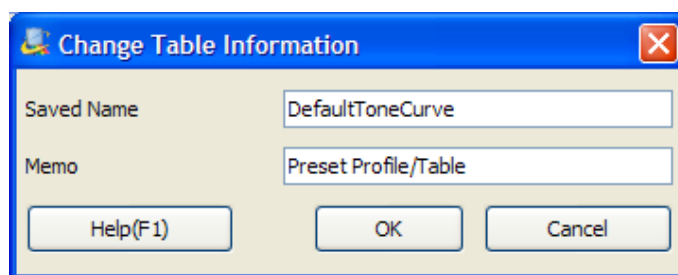
The management of the tone curve uses [Tone Curve Management] screen. For detailed information of [Tone Curve Management], refer to page 8-9.

Copy the Tone Curve

You can make a duplication of the tone curve in the image controller, to the image controller.

The tone curve registered at factory shipping in the image controller cannot be adjusted and overwritten. When you want to adjust the tone curve registered at factory shipping, load the duplication of it which was made beforehand and adjust the duplication.

- 1 From the tree view of [Tone Curve Management] screen, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 2 From the list, select the tone curve to copy.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Copy].
[Change Table Information] screen appears.



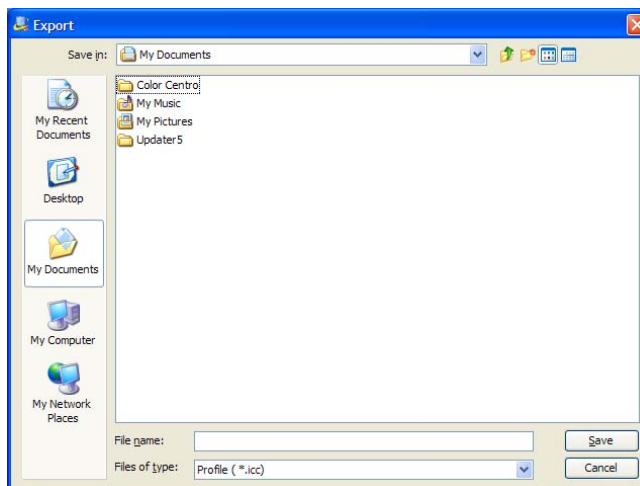
- When you select the multiple tone curves, [Copy] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Copy].
- 4 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
→ You cannot specify the same name with those registered in the image controller.
 - 5 Click [OK].
The duplication of the tone curve is generated in the image controller.

Export the Tone Curve

You can export the tone curve of the image controller to [Local], [My Documents] or [Network] as the tone curve profile (Extension: ".xml").

- 1 From the tree view of [Tone Curve Management] screen, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 2 From the list, select the tone curve to export.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Export].

[Export] screen appears.



- When you select the multiple tone curves, [Export] is not available.
- When a folder other than [Controller] is selected on the tree view, [Export] is not available.
- Similar operation can be done when you select [File] menu - [Export].

4 Specify the saving place and file name for the tone curve to export, and click [Save].

Exporting to the specified place as profile is executed.

[Export] screen is closed to return to [Tone Curve Management] screen.

Register the Tone Curve to the Image Controller

You can register the tone curve of [Local], [My Documents] or [Network] in [Controller]. When you register the tone curve to the image controller, the adjusted tone curve can be adopted to the output.

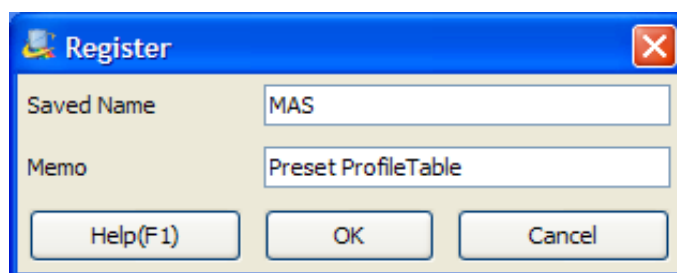
1 From tree view of [Tone Curve Management], select [Local], [My Documents] or [Network] where the tone curve profile (Extension: ".xml") is saved.

The list appears according to the selection.

2 From the list, select the tone curve to register.

3 Click [Registration].

[Register] screen appears.



- When you select the multiple tone curves, [Register] is not available.
- When a folder other than [Controller] is selected on the tree view, [Register] is not available.
- Similar operation can be done when you select [File] menu - [Register].

4 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).

- You cannot specify the same name with those registered in the image controller.

5 Click [OK].

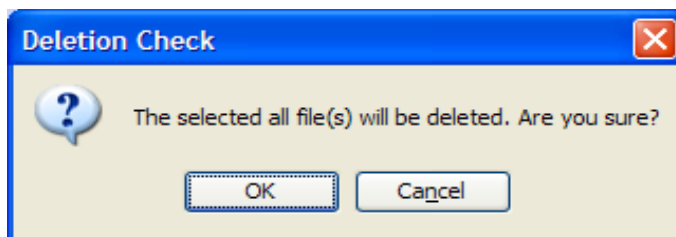
The tone curve is registered to [Controller].

[Register] screen is closed to return to [Tone Curve Management] screen.

Delete the Tone Curve

You can delete the tone curve.

- 1 From the tree view and the list of [Tone Curve Management] screen, select the tone curve to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
 - You can delete the multiple tone curves.
- 2 Click [Delete].
Confirmation screen appears.

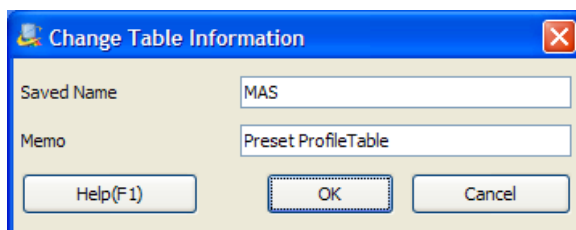


- Similar operation can be done when you select [File] menu - [Delete].
- 3 To delete, click [OK].
The selected tone curve is deleted.
 - When you select the multiple tone curves, all of those are deleted at a time.
 - You cannot restore the tone curve you have deleted.

Change the Tone Curve Information

You can change the tone curve information (Saved Name, Memo).

- 1 From the tree view and the list of [Tone Curve Management] screen, select the tone curve to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 2 Click [Change Table Information].
[Change Table Information] screen appears.



- When you select the multiple tone curves, [Change Table Information] is not available.
 - Similar operation can be done when you select [File] menu - [Change Table Information].
- 3 Edit [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - When you change the saved name of the tone curve in the image controller, you cannot specify the same name with those registered in the image controller.
 - 4 Click [OK].
The tone curve information is changed.

8.11 Reset the Tone Curve

This section describes how to reset the adjustment result of [Tone Curve Adjustment] screen.

✓ Reset is executed immediately.

1 Click [Undo] of [Brightness/Contrast] tab or [Adjust Each Color] tab on [Tone Curve Adjustment] screen.
The current settings are discarded immediately and, the last saved tone curve appears.



Spot Color

9 Spot Color

9.1 Outline of Spot Color

The spot color is called a special color, meaning the color with a specific name. In general, the name of the ink provided by the ink manufacturer becomes a name of the spot color.

In the image controller, some spot color tables, "DIC", "CF", and "HKS" are registered at factory shipping.

Within the spot color table, each spot color and the definition values of it are stored. The definition values are used to output after converting the spot color specified by the application to CMYK.

Use of the Spot Color Adjustment function of Color Centro enables to create the new spot color table, duplicate the registered spot color table, and edit it.

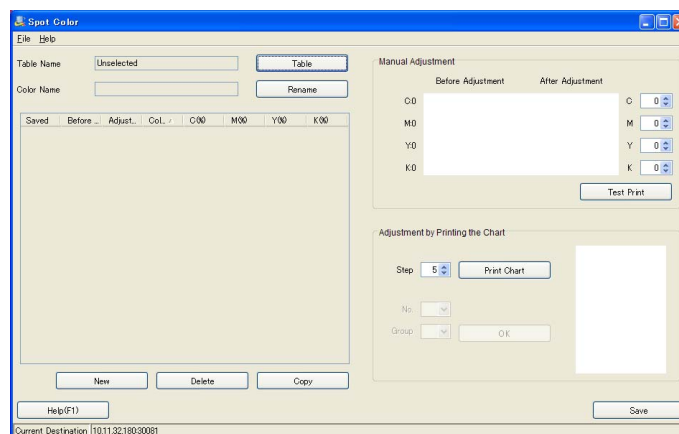
By this function, to replace the spot color which is specified by the application with CMYK values which Color Centro defines is enabled and the outputting is executed.

9.1.1 [Spot Color] screen

The spot color adjustment function of Color Centro uses [Spot Color] screen.

[Spot Color] screen appears by clicking [Spot Color] button on [Launcher] screen. To close this screen, select [Close] from [File] menu.

The [Spot Color] screen is composed as follows;



Item	Description
[Table Name]	The name of spot color table loaded using [Table] appears in the left box of the [Table]. On launching this screen, "Unselected" appears there.
[Table]	Displays [Spot Color Table Management] screen to allow you to select the spot color table to load. You can operate to manage the spot color table on [Spot Color Table Management] screen.
[Color Name]	The name of spot color selected from the list appears in the left box of the [Rename].
[Rename]	Changes the spot color name currently selected from the list.
(spot color list)	Displays the content of the selected spot color table as a list.
[New]	Creates the new spot color.
[Delete]	Deletes the spot color selected from the spot color list.
[Copy]	Duplicates the spot color selected from the spot color list with the changed name.
[Manual Adjustment] - [C], [M], [Y], [K]	Allows you to adjust manually the selected spot color using [C], [M], [Y], and [K].

Item	Description
[Before Adjustment]	Displays the conditions of spot color before adjustment.
[After Adjustment]	Displays the conditions of spot color after adjustment.
[Test Print]	Prints the spot color selected currently; both of the color before adjustment and the color after adjustment.
[Adjustment by Printing the Chart] - [Step]	Specifies the degree of color patch variation on the chart for adjustment. After specifying a color patch to apply, the chart of color patch variation at the specified degrees is displayed on the preview area.
[Print Chart]	Executes chart printing.
(chart view area)	Displays the preview of the chart according to the setting of [Step]. Displays the preview again after chart printing according to the settings of [No.] and [Group].
[No.]	Specifies the color number on the printed chart.
[Group]	Specifies the color group on the printed chart.
[OK]	Updates the chart preview after confirming the input values of [No.] and [Group].
[Save]	Saves the spot color with the set content.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

List Items

The list items of the list on the [Spot Color] screen are as follows;

Item	Description
[Saved]	Displays marks when the adjustment result of spot color is not saved.
[Before Adjustment]	Displays the color before adjustment.
[After Adjustment]	Displays the color after adjustment.
[Color Name]	Display the table name and the spot color name.
[C(%)], [M(%)], [Y(%)], [K(%)]	Displays the CMYK values of the spot color.

The list is displayed in order of [Color Name].

9.1.2 Menu of [Spot Color] screen

The menu items of the [Spot Color] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[New Table]	Creates the new spot color table.
	[Table]	Displays [Spot Color Table Management] screen to select the spot color table to load. You can operate to manage the spot color table on [Spot Color Table Management] screen.
	[Initialize]	Discards the current measurement result and settings displayed on this screen, and resets the screen.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

9.1.3 Basic Operation of [Spot Color] screen

This section describes basic operation of [Spot Color] screen.

- 1** Load the spot color table to make adjustment. Or, create the spot color table.
 - For detailed information on how to load the spot color table, refer to page 9-5.
 - For detailed information on how to create the spot color table, refer to page 9-8.
- 2** Select the spot color to make adjustment. Or, create the spot color.
 - For detailed information on how to add the spot color, refer to page 9-9.
- 3** Execute adjustment manually.
 - For detailed information on how to adjust the spot color manually, refer to page 9-10.
- 4** Execute adjustment using the chart printed with spot color.
 - For detailed information on how to adjust the chart, refer to page 9-11.
- 5** Save the adjusted spot color table.
 - For detailed information on how to save, refer to page 9-13.
- 6** If necessary, change the priority.
 - For detailed information on how to change the priority, refer to page 9-14.
- 7** If necessary, execute some management operations for the spot color table and spot color.
 - For detailed information on how to manage, refer to page 9-15 and page 9-19.
- 8** If necessary, initialize the [Spot Color] screen.
 - For detailed information on how to initialize, refer to page 9-21.

9.2 Load the Spot Color Table

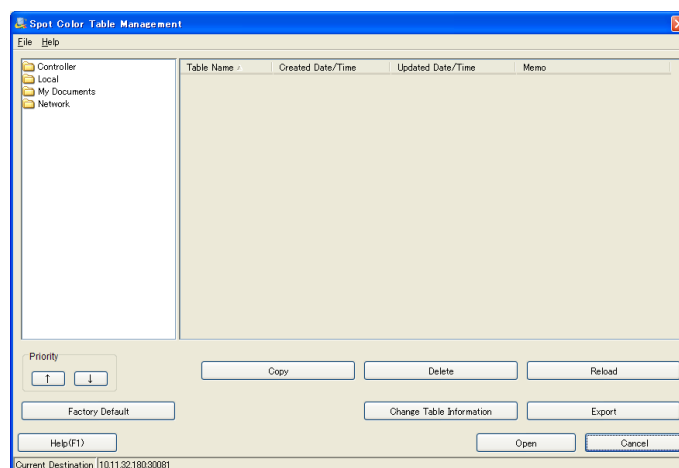
In the image controller, there is the spot color table registered at factory shipping. You can also register the spot color table which you adjusted on [Spot Color] screen. Use of the Spot Color Adjustment function of Color Centro enables to load the spot color table and adjust the spot color in the loaded spot color table.

This section describes how to load the spot color table.

You can select the spot color table to load on [Spot Color Table Management] screen.

9.2.1 [Spot Color Table Management] screen

[Spot Color Table Management] screen is composed as follows;



Item	Description
(tree view)	Displays the places where the spot color table are saved ([Controller], [Local], [My Documents] and [Network]) in the tree format.
(list)	According to the selection of the tree view, displays the saved spot color tables.
[Priority]	Using and , specifies the priority within the multiple spot color tables with same table name registered in the image controller.
[Factory Default]	Resets the priority to the factory default.
[Copy]	Makes a duplication of the selected spot color table from the list within [Controller], when [Controller] is selected on the tree view.
[Delete]	Deletes the spot color table selected from the list.
[Reload]	Updates the information of the list.
[Change Table Information]	Changes the table information (Table Name, Memo) of the spot color table which is selected from the list.
[Export]/[Register]	Exports the selected spot color table on the list to [Local]/[My Documents]/[Network], when [Controller] is selected on the tree view. Registers the spot color table selected on the list to [Controller], when a folder other than [Controller] is selected on the tree view.
[Open]	Loads the selected spot color table on the list to [Spot Color] screen.
[Cancel]	Discards the current settings, and closes the screen.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

List Items

The list items of the list on the [Spot Color Table Management] screen are as follows;

Item	Description
[Table Name]	Displays the spot color table name.
[Created Date/Time]	Displays the date/time when the new spot color table was created.
[Update Date/Time]	Displays the date/time when the spot color table was updated.
[Memo]	Displays the memo which was set to the spot color table.

When [Controller] is selected on the tree view, the list is displayed per group of [Table Name] in which the spot color tables have the same name. Within the group, displays in order of priority. You can change the order of priority. For detailed information on how to change the order of priority, refer to page 9-14.

When [Controller] is selected on the tree view, "" mark is added after the name of the spot color table which was registered at factory shipping. In addition, a red @ mark is added before the name of the spot color table which was registered at factory shipping.

List Operations

The list of [Spot Color Table Management] screen can be sorted by [Table Name]. For how to operate it, refer to page 14-3.

When you display [Spot Color Table Management] screen first after launching Color Centro, the list is displayed in ascending order of [Table Name].

9.2.2 Menu of [Spot Color Table Management] screen

The menu items of the [Spot Color Table Management] screen are as follows;

Menu	Menu	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Reload]	Updates the information of the list.
	[Sort]	Sorts the content of the list by the selected list item. For how to operate it, refer to page 14-3.
	[Change Table Information]	Changes the table information (Table Name, Memo) of the spot color table which is selected from the list.
	[Delete]	Deletes the spot color table selected from the list.
	[Copy]	Makes a duplication of the selected spot color table from the list within [Controller], when [Controller] is selected on the tree view.
	[Export]	Exports the selected spot color table on the list to [Local]/[My Documents]/[Network], when [Controller] is selected on the tree view.
	[Register]	Registers the spot color table selected on the list to [Controller], when a folder other than [Controller] is selected on the tree view.
	[Close]	Discards the current settings and closes the screen.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

9.2.3 Load the Spot Color Table

This section describes how to load the spot color table.

The spot color table registered at factory shipping in the image controller cannot be adjusted and overwritten. When you want to adjust the spot color table registered at factory shipping, load the duplication of it which was made beforehand and adjust the duplication. For detailed information on how to duplicate, refer to page 9-19.

- 1** Click [Table] on [Spot Color] screen.
[Spot Color Table Management] screen appears.
→ Similar operation can be done when you select [File] menu - [Table].
- 2** From the tree view, select the place to save the spot color table.
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3** From the list, select the spot color table to load.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4** Click [Open].
[Spot Color Table Management] screen is closed to return to [Spot Color] screen.
Selected spot color table is loaded and the spot color appears to [Spot Color] screen.
→ When you click [Cancel], [Spot Color Table Management] screen is closed to return to [Spot Color] screen.

9.3 Create the New Spot Color Table

You can create the new spot color table and add the new spot color.

This section describes how to create the new spot color table.

To create the new spot color table, use [Spot Color] screen.

- 1** Select [File] menu - [Create New Table] on [Spot Color] screen.
On the left of [Table], "New" appears.
- 2** Add the new spot color.
→ For detailed information on how to add the spot color, refer to page 9-9.

9.4 Select the Spot Color / Add the New Spot Color

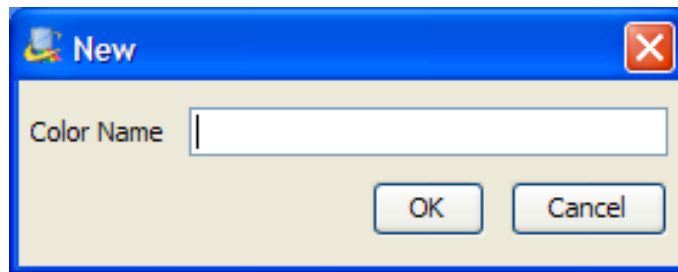
This section describes how to select the spot color and how to add the new spot color.

Select the Spot Color

- Select the spot color to adjust from the list of [Spot Color].
On the left of [Rename], the name of the selected spot color appears.
- The current setting can be stored for the selected spot color. When you want to create the new spot color on base of the selected spot color, make the duplication of it and adjust the duplication. For detailed information on how to duplicate/delete/rename the spot color in the spot color table, refer to page 9-19.
- For detailed information on how to adjust the spot color, refer to page 9-10 and page 9-11.

Add the New Spot Color

- 1 Click [New] on [Spot Color] screen.
[New] screen appears.



- 2 Specify the name of the new spot color to [Color Name] and click [OK].
On the left of [Rename], the name specified appears.
- You can include symbols for the color name.
- The CMYK values of the new color are all "0". Then, [C(%)], [M(%)], [Y(%)] and [K(%)] of the list display "0".
- For detailed information on how to adjust the spot color, refer to page 9-10 and page 9-11.

9.5 Adjust the Spot Color Manually

You can adjust the CMYK values of the spot color on [Spot Color] screen. The result of adjustment is reflected to the preview area immediately. You can also print to confirm the colors of [Before Adjustment] and [After Adjustment].

This section describes how to adjust the spot color manually.

To adjust the spot color manually, use [Spot Color] screen.

- 1 Specify the CMYK values to [Manual Adjustment] - [C], [M], [Y] and [K] for the spot color selected from the list on [Spot Color] screen.

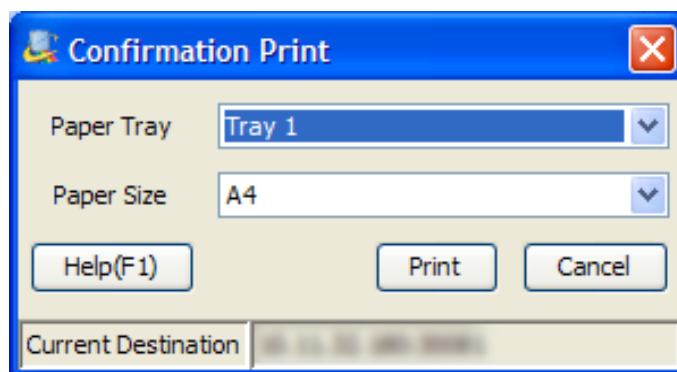
According to the settings, the preview area of [Manual Adjustment] - [Before Adjustment] and [After Adjustment] are updated.

- For each color, specify the value (from "0" to "100").
- When you input below the decimal point, the value rounded down is displayed.
- Similar operation can be done when you change the value of [C(%)], [M(%)], [Y(%)] and [K(%)] of the list on [Spot Color] screen.

- 2 Confirm the preview of [After Adjustment], and repeat Step 1 as required.

- 3 Click [Test Print].

[Confirmation Print] screen appears.



- 4 Specify [Paper Tray] and [Paper Size].

- 5 Click [Print].

Test printing is executed.

- 6 Confirm the test printing and repeat Step 1 to Step 5 as required.

- When you execute fine adjustment, go to the step described on page 9-11.
- When you save the adjusted spot color, go to the step described on page 9-13.

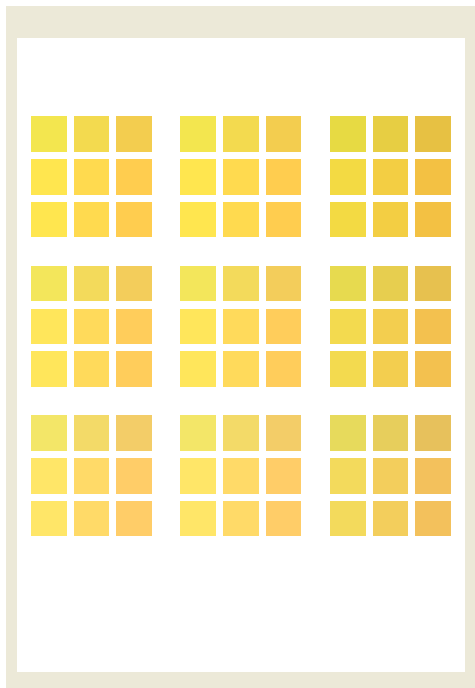
9.6 Adjustment of Spot Color with the Printed Chart

You can execute fine adjustment of the spot color after CMYK adjustment using the printed chart.

This section describes how to adjust with the printed chart.

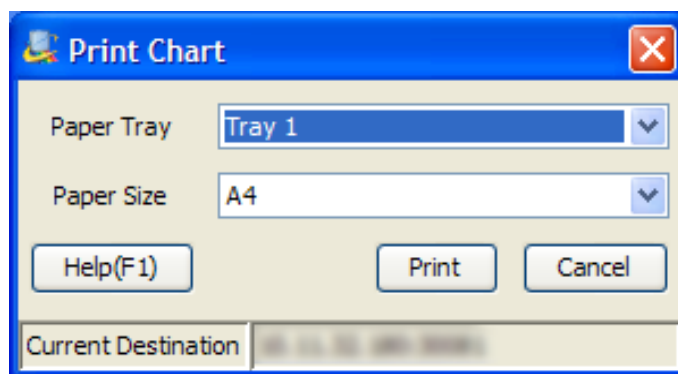
To print the chart, use [Spot Color] screen.

On [Adjustment by Printing Chart], you can print the chart on which the value of the selected spot color is regarded as the center value. You can print the color chart where the color is varied with 8 steps based on the center value of CMYK values specified by the degree of variation (%), per 9 groups where the conversion method of CMYK differs.



From the printed chart, specify the No. of the color patch and Group to adopt those to the spot color and fix the CMYK values.

- 1 Click [Print Chart] in [Adjustment by Printing the Chart].
[Print Chart] screen appears.



- 2 Specify [Paper Tray], [Paper Size].
- 3 Click [Print].
Chart printing is executed.
→ When you click [Print Chart], [No.] and [Group] become available.
- 4 Confirm the printed chart.
- 5 Specify the step number to [Step] (from "1" to "10").

- 6 Specify the number of the color patch and group which you adopt the spot color to [No.] and [Group], and click [OK].
The preview chart changes its look with changed CMYK values with the specified variation step, and the specified color is displayed on [After Adjustment].
- 7 Confirm the preview of [After Adjustment], and repeat Step 5 and Step 6 as required.
→ When you save the adjusted spot color, go to the step described on page 9-13.

9.7 Save the Spot Color Table

This section describes how to save the adjusted spot color table.

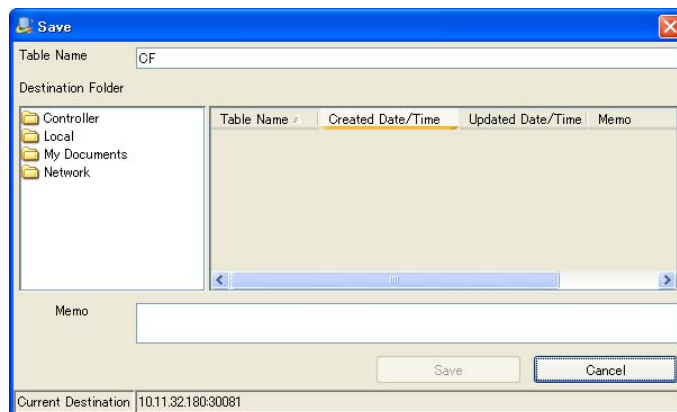
To save the spot color table, use [Spot Color] screen.

When you save the spot color table to the image controller, the spot color table is registered into the image controller. When you register the spot color table, the adjusted spot color table can be adopted to the output according to the priority of the spot color table.

When the spot color table is saved in [Local], [My Documents] or [Network], the spot color table is saved as the spot color table profile (Extension: ".spo").

- 1 Click [Save] on [Spot Color] screen.

[Save] screen appears.



- 2 Specify the name of the spot color table to [Table Name] within 31 one-byte alpha-numerical characters.

→ You can save the spot color table of the same name with those registered in the image controller. When you add the new spot color, it is added on the same table. When you adjust the existed color, it is updated. When you delete the existed color, it is deleted from the table.

- 3 From the tree view of [Destination Folder], select the place to save the spot color table.

The list appears according to the selection.

→ When [Controller] is selected on the tree view, "***" mark is added after the name of the spot color table which was registered at factory shipping. In addition, a red @ mark is added before the name of the spot color table which was registered at factory shipping.

- 4 If necessary, enter the description to [Memo].

- 5 Click [Save].

When you select [Controller] as the destination folder, the spot color table is saved in the image controller.

When you select [Local], [My Documents] or [Network] as the destination folder, the spot color table is saved as the spot color table profile (Extension: ".spo").

→ The priority of the newly saved spot color table becomes the top among the spot color tables of the same name (group). When you change the priority of the spot color table in the image controller, go to the step described on page 9-14.

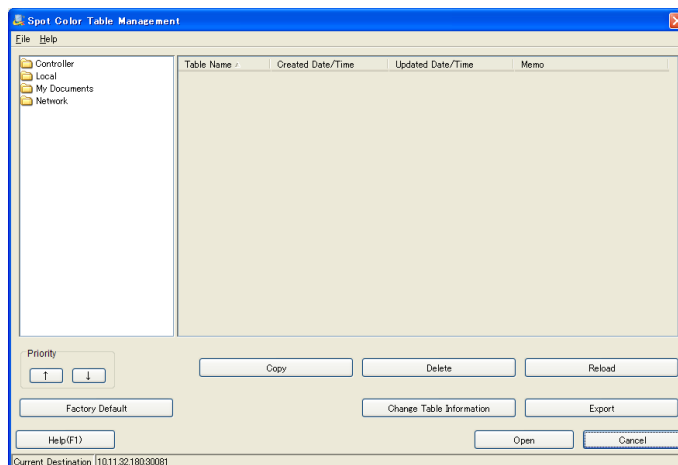
9.8 Change the Priority of the Spot Color Table

This section describes how to change the priority of the spot color table among the multiple spot color tables of the same name (group) which are registered in the image controller.

To change the priority, use [Spot Color Table Management] screen.

The priority defines which spot color table is adopted to the spot color specified by the application.

- 1 Click [Table] on [Spot Color] screen.
[Spot Color Table Management] screen appears.



→ Similar operation can be done when you select [File] menu - [Table].

- 2 From the tree view, select [Controller].

The list appears according to the selection.

→ For detailed information on how to connect another controller, refer to page 14-2.

- 3 From the list, select the spot color table to change the priority.

→ The list is displayed per group of the same [Table Name]. Within the group, tables are displayed in order of priority.

→ "*" mark is added after the name of the spot color table which was registered at factory shipping. In addition, a red @ mark is added before the name of the spot color table which was registered at factory shipping.

→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].

- 4 Click [↑] or [↓] to change the position of the selected spot color table.

The position of the selected spot color table moves within the group of [Table Name].

→ Click [Factory Default] when you want to reset the priority settings of the spot color table which was registered at factory shipping. In this case, the priority of the spot color table created by user is not changed.

- 5 Close [Spot Color Table Management] screen after changing the priority.

9.9 Spot Color Table Management

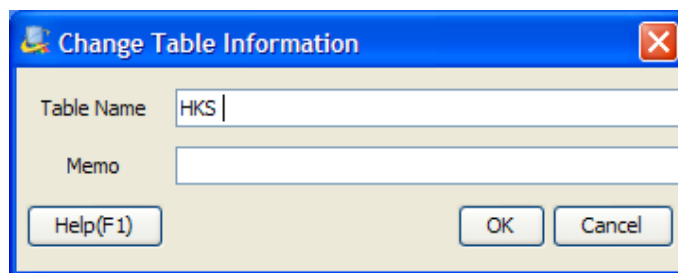
This section describes how to manage the saved spot color table.

The management of the spot color table uses [Spot Color Table Management] screen. For detailed information of [Spot Color Table Management], refer to page 9-2.

Copy the Spot Color Table

The spot color table registered at factory shipping in the image controller cannot be adjusted and overwritten. When you want to adjust the spot color table registered at factory shipping, load the duplication of it which was made beforehand and adjust the duplication.

- 1 From the tree view of [Spot Color Table Management] screen, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 2 From the list, select the spot color table to copy.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Copy].
[Change Table Information] screen appears.



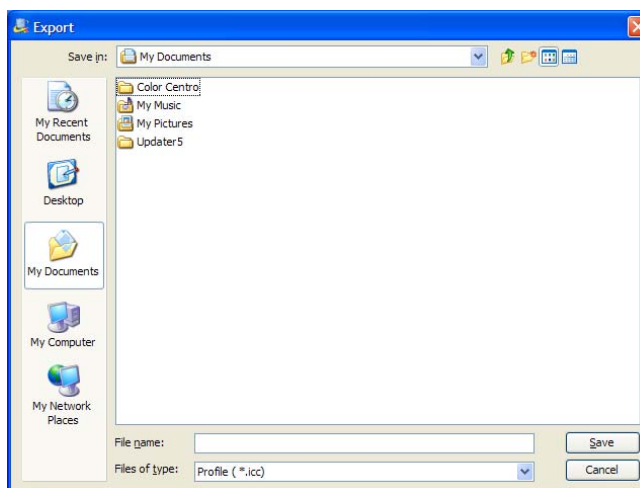
- When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
- Similar operation can be done when you select [File] menu - [Copy].
- 4 Specify [Table Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
→ You can save the spot color table of the same name with those in the image controller.
- 5 Click [OK].
The duplication of the spot color table is generated in the image controller.
→ The priority of the duplicated spot color table becomes the top among the spot color tables of the same name (group). When you change the priority of the spot color table in the image controller, refer to page 9-14.

Export the Spot Color Table as Profile

You can export the spot color table of the image controller to [Local], [My Documents] or [Network] as the spot color table profile (Extension: ".spo").

- 1 From the tree view of [Spot Color Table Management] screen, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 2 From the list, select the spot color table to export.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
→ You can export the spot color table which was registered at factory shipping.
- 3 Click [Export].

[Export] screen appears.



- When you select the multiple spot color tables, [Export] is not available.
- When a folder other than [Controller] is selected on the tree view, [Export] is not available.
- Similar operation can be done when you select [File] menu - [Export].

4 Specify the saving place and file name for the spot color table to export, and click [Save].

Exporting to the specified place as profile is executed.

[Export] screen is closed to return to [Spot Color Table Management] screen.

Register the Spot Color Table to the Image Controller

You can register the spot color table (Extension: ".spo") of [Local], [My Documents], or "Network" in [Controller]. When you register the spot color table profile as the spot color table, the adjusted spot color table can be adopted to the output according to the priority of the spot color table.

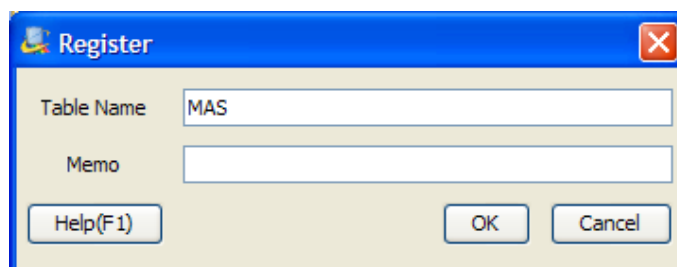
1 From tree view of [Spot Color Table Management], select [Local], [My Documents] or [Network] where the spot color table profile is saved.

The list appears according to the selection.

2 From the list, select the spot color table profile to register.

3 Click [Registration].

[Register] screen appears.



- When you select the multiple spot color tables, [Register] is not available.
- When a folder other than [Controller] is selected on the tree view, [Register] is not available.
- Similar operation can be done when you select [File] menu - [Register].

4 Specify [Table Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).

→ You can save the spot color table of the same name with those registered in the image controller.

5 Click [OK].

The spot color table is registered to [Controller].

[Register] screen is closed to return to [Spot Color Table Management] screen.

- The priority of the registered spot color table become top among the spot color tables of the same name (group). When you change the priority of the spot color table in the image controller, refer to page 9-14.
- When the profile is created by exporting the spot color table registered at factory shipping and you register it, the registered spot color table becomes available for adjustment.

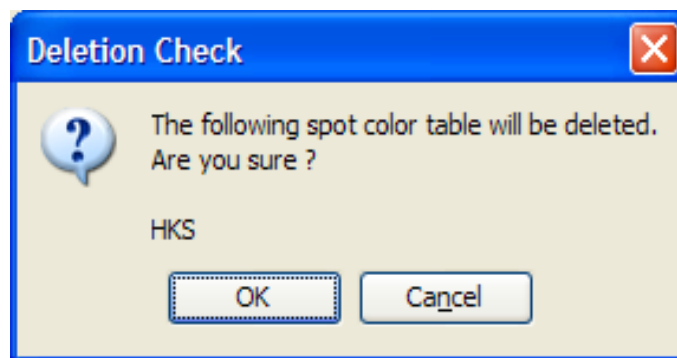
Delete the Spot Color Table

You can delete the spot color table.

- 1 From the tree view and the list of [Spot Color Table Management] screen, select the spot color table to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].

- 2 Click [Delete].

Confirmation screen appears.



- Similar operation can be done when you select [File] menu - [Delete].
- When you select the spot color table which was registered at factory shipping, [Delete] is not available.

- 3 To delete, click [OK].

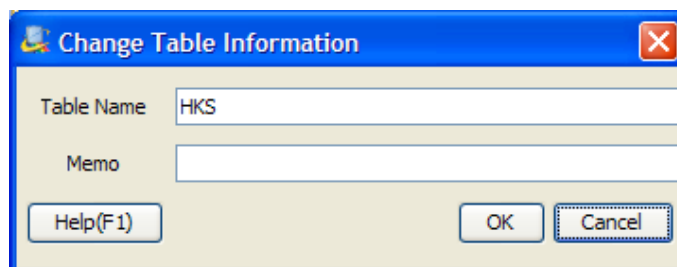
The selected spot color table is deleted.

- When you select the multiple spot color tables, all of those are deleted at a time.
- You cannot restore the spot color table you have deleted.

Change the Spot Color Table Information

You can change the spot color table information.

- 1 From the tree view and the list of [Spot Color Table Management] screen, select the spot color table to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 2 Click [Change Table Information].
[Change Table Information] screen appears.

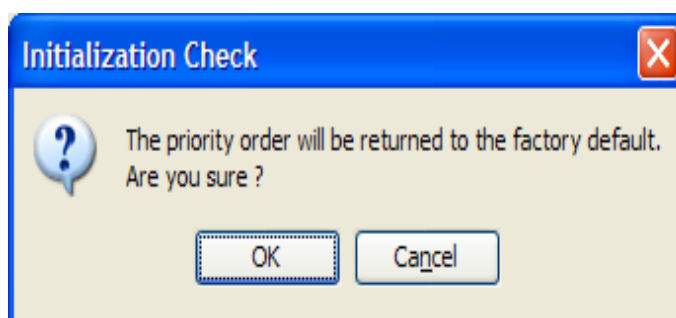


- When you select the multiple spot color tables, [Change Table Information] is not available.
 - Similar operation can be done when you select [File] menu - [Change Table Information].
- 3 Edit [Table Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - But, you cannot change the table name of the spot color table which was registered at factory shipping.
 - 4 Click [OK].
The spot color table information is changed.
 - The priority of the spot color table of which information was changed becomes the top among the spot color tables of the same name (group). When you change the priority of the spot color table in the image controller, refer to page 9-14.

Change the Priority of the Spot Color Table

You can reset the priority settings of the spot color table which was registered at factory shipping.

- 1 Click [Spot Color Table Management] - [Factory Default].
Confirmation screen appears.



- For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 2 Click [OK] when you want to reset the priority settings of the spot color table which was registered at factory shipping.
The priority is reset to the factory default. In this case, the priority of the spot color table created by user is not changed.

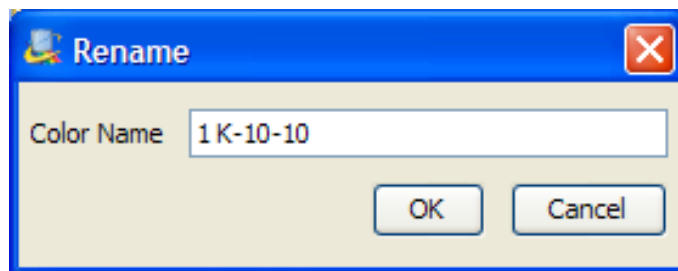
9.10 Spot Color Table Management

This section describes how to manage the spot color stored in the spot color table.

The management of the spot color uses [Spot Color] screen. For detailed information of [Spot Color] screen, refer to page 9-2.

Rename the Spot Color

- 1 Select the spot color to rename from the list of [Spot Color]
On the left of [Rename], the name of the selected spot color appears.
- 2 Click [Rename] on [Spot Color] screen.
[Rename] screen appears.

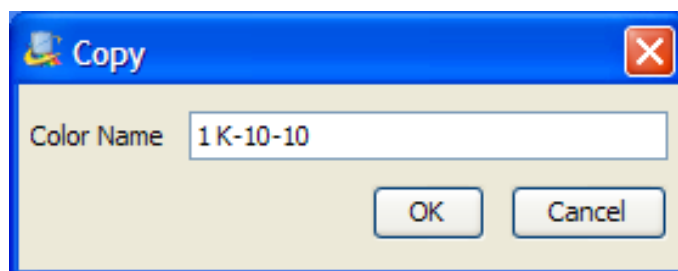


- 3 Specify the changed name to [Color Name], and click [OK].
On the left of [Rename], the name specified appears.
 - You cannot store the spot color of the same name with other spot color in the spot color table.
 - To save the changed name, save the spot color table. For detailed information on how to save the spot color table, refer to page 9-13.

Copy the Spot Color

You can duplicate the spot color within the same spot color table. When you adjust the spot color, original settings of the spot color is overwritten. When you want to save the current settings, make the duplication of it.

- 1 Select the spot color to duplicate from the list of [Spot Color].
On the left of [Rename], the name of the selected spot color appears.
- 2 Click [Copy].
[Copy] screen appears.

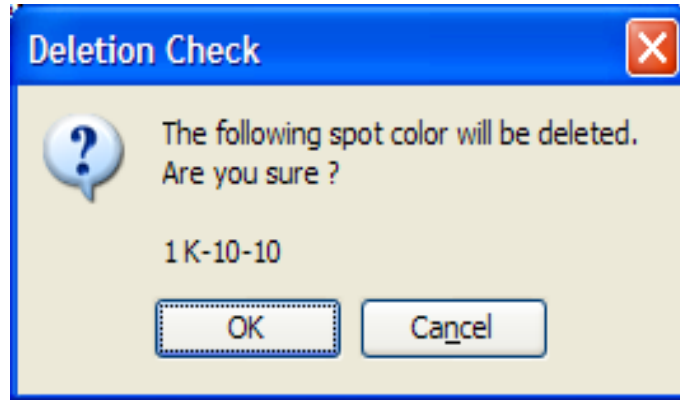


- When you select the multiple spot colors, [Copy] is not available.
- 3 Specify the name to [Saved Name] within 31 one-byte alpha-numerical characters.
 - You cannot save the spot color of the same name with the spot color in the spot color table.
 - 4 Click [OK].
The duplication of the spot color is generated in the spot color table.
 - To save the copied spot color, save the spot color table. For detailed information on how to save the spot color table, refer to page 9-13.

Delete the Spot Color

You can delete the spot color within the spot color table.

- 1 Select the spot color to delete from the list of [Spot Color].
On the left of [Rename], the name of the selected spot color appears.
- 2 Click [Delete].
Confirmation screen appears.



- 3 To delete, click [OK].
The selected spot color is deleted.
 - When you select the multiple spot colors, all of those are deleted at a time.
 - You cannot restore the spot color you have deleted.
 - To fix the deleting of the spot color, save the spot color table. For detailed information on how to save the spot color table, refer to page 9-13.

9.11 Initialize the Spot Color Screen

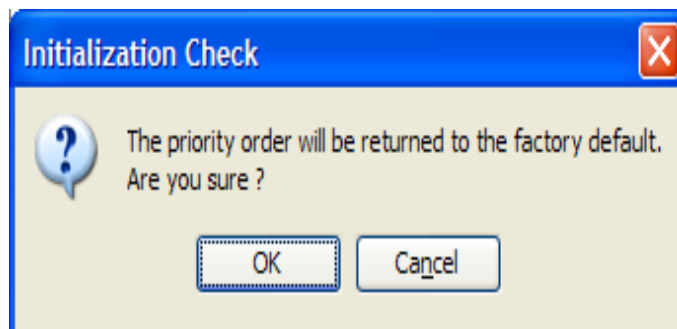
The loaded spot color table and the result of spot color adjustment displayed on the [Spot Color] screen remain, until the time when screen is closed or reset.

This section describes how to initialize [Spot Color] screen and how to erase the loaded information and the result of adjustment, without saving.

1 Select the spot color to initialize from the list of [Spot Color].

2 From the [File] menu, select [Initialize].

The confirmation message appears.



3 Click [OK].

The result of adjustment is erased from the screen.

10

Alternative Color

10 Alternative Color

10.1 Outline of Alternative Color

One alternative color table per color (RGB color/CMYK color) is stored in the image controller. The alternative color table replaces the specific RGB color/CMYK color within job with CMYK color (alternative color).

You can set the alternative colors (64 for RGB and 64 for CMYK) to the alternative color table which is in the controller. (total 128)

Use of the Color Centro enables to set and adjust the alternative color table in the image controller.

Color Centro also enables to select the alternative color from the spot color. By this function, you can adopt the spot color to the alternative color as the processing of the image controller when the spot color cannot be specified by the application. When you use the spot color as the alternative color, adjust the spot color to use beforehand. For detailed information on how to adjust the spot color, refer to page 9-2.

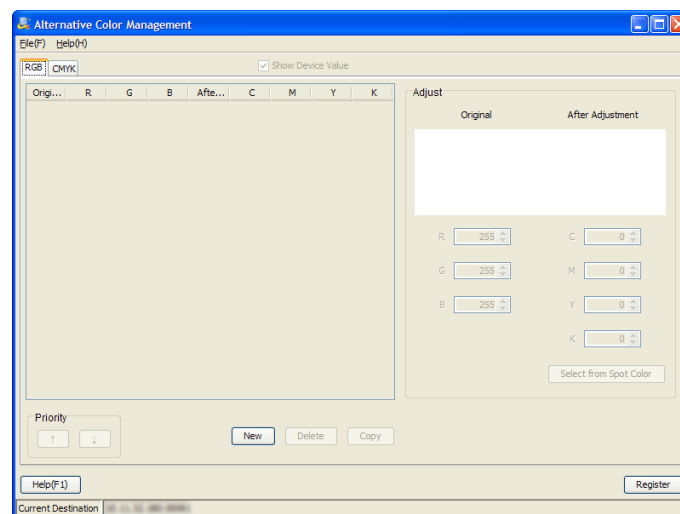
10.1.1 [Alternative Color Management] screen

The alternative color management function of Color Centro uses [Alternative Color Management] screen.

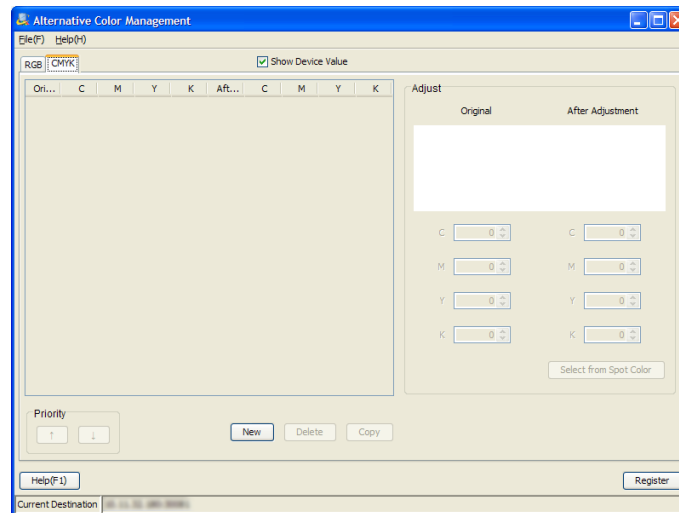
[Alternative Color Management] screen appears by clicking [Alternative Color] button on the [Launcher] screen. To close this screen, select [Close] from [File] menu.

The composition of [Alternative Color Management] screen differs per tab.

When [RGB] tab is selected, [Alternative Color Management] screen is composed as follows;



When [CMYK] tab is selected, [Alternative Color Management] screen is composed as follows;



Item	Description
[RGB]	Displays the screen to set the alternative color for specific RGB color within the job.
[CMYK]	Displays the screen to set the alternative color for specific CMYK color within the job.
(list)	Displays the content of the alternative color table that is in the connecting image controllers for RGB or CMYK (it depends on [RGB] / [CMYK] tab selection).
[Show Device Value]	Allows you to set when you select [CMYK] tab. When you check, you can specify the color with the device value (from 0 to 255; 256 steps). When you remove the check, you can specify the color with % (from 0 to 100).
[Original]	Displays the original color to which the alternative color can be set.
[After Adjustment]	Displays the color of the alternative color. Every adjustment is reflected on the screen immediately.
[R], [G], [B]	Displays the RGB values of the original color.
[C], [M], [Y], [K]	Displays the CMYK values of the alternative color.
[Select from Spot Color]	Click to set the alternative color from the spot color.
[Priority]	Allows you to set the priority when there are multiple alternative colors for one original color using and .
[New]	Adds the new alternative color setting.
[Delete]	Deletes the alternative color setting you selected from the alternative color table.
[Copy]	Duplicate the alternative color setting.
[Register]	Registers the adjustment result in the image controller.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

List Items

The composition of the list on [Alternative Color Management] screen differs per tab.

When [RGB] tab is selected, the list on [Alternative Color Management] screen is composed as follows;

Item	Description
[Original]	Displays the original color to which the alternative color can be set.
[R], [G], [B]	Displays the RGB values of the original color.
[After Adjustment]	Displays the color of the alternative color. Every adjustment is reflected on the screen immediately.
[C], [M], [Y], [K]	Displays the CMYK values of the alternative color.

When [CMYK] tab is selected, the list on [Alternative Color Management] screen is composed as follows;

Item	Description
[Original]	Displays the original color to which the alternative color can be set.
[C], [M], [Y], [K]	Displays the CMYK values of the original color.
[After Adjustment]	Displays the color of the alternative color. Every adjustment is reflected on the screen immediately.
[C], [M], [Y], [K]	Displays the CMYK values of the alternative color.

Displays the alternative color for the same original color in order of priority. You can change the order of priority. For detailed information on how to change the order of priority, refer to page 10-11.

10.1.2 Menu of [Alternative Color Management] screen

The menu items of the [Alternative Color Management] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Reload]	Reload the information of the image controller connected currently.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

10.1.3 Basic Operation of [Alternative Color Management] screen

This section describes basic operation of [Alternative Color Management] screen.

- 1** Select the input color of the alternative color setting. Or, create the new input color of the alternative color setting.
→ For detailed information on how to select the input color, refer to page 10-6.
- 2** Set the input color of the alternative color setting.
→ For detailed information on how to set the input color, refer to page 10-8.
- 3** Specify the output color of the alternative color setting.
→ For detailed information on how to specify the output color, refer to page 10-9.
- 4** If necessary, change the priority.
→ For detailed information on how to change the priority, refer to page 10-11.
- 5** Register the alternative color setting.
→ On how to register it, refer to page 10-12.
- 6** If necessary, execute some management operations for the alternative color setting.
→ For detailed information on how to manage, refer to page 10-13.

10.2 Select the Alternative Color / Add the New Alternative Color

When you adjust the existed alternative color setting, select the original color (input color) to which the alternative color can be set.

When you add the new alternative color setting to the existed alternative color table, add the new input color.

This section describes how to select the input color and how to add the new input color.

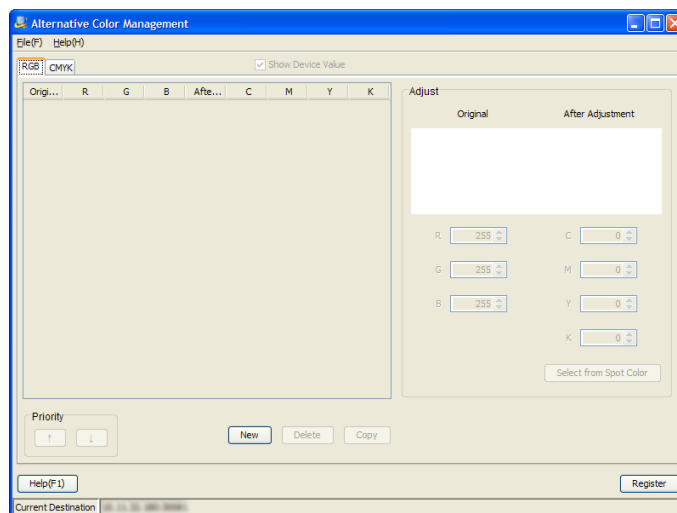
Select the Input Color

This section describes how to select the original color (input color) to which the alternative color can be set.

- 1 Click [RGB] tab or [CMYK] tab on [Alternative Color Management] screen.
The list of each tab is displayed.
 - When you select the RGB input color, click [RGB] tab.
 - When you select the CMYK input color, click [CMYK] tab.
- 2 From the list, click the line of the alternative color (input color) which you adjust.
The color which is displayed in [Original] of the selected line, is selected as the input color.
 - When you adjust the selected input color, go to the step described on page 10-8.
 - When you adjust the alternative color without adjustment of the input color, go to the step described on page 10-9.
 - The list displays the content of the alternative color table that is in the connecting image controllers for RGB or CMYK (it depends on [RGB] / [CMYK] tab selection).
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted alternative color settings when the adjustment result has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 10-12.
 - The current setting can be stored for the selected alternative color. When you want to create the new setting on base of the selected setting, make the duplication of it and adjust the duplication. For details on how to copy the alternative color and how to delete it, refer to page 10-13.

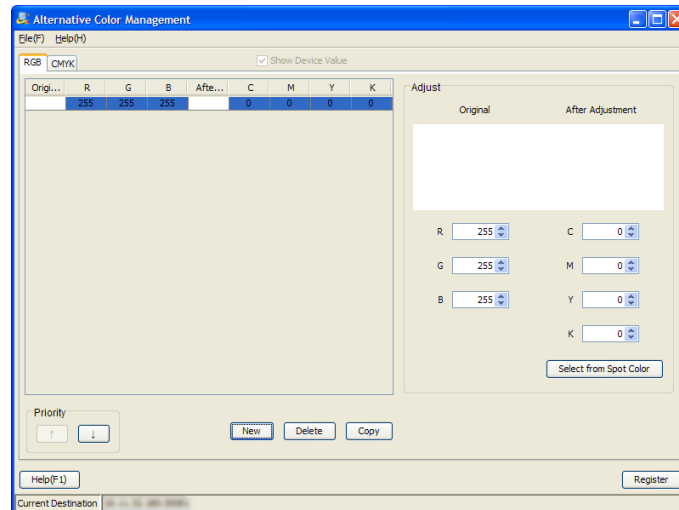
Add the New Alternative Color

- 1 Click [RGB] tab or [CMYK] tab on [Alternative Color Management] screen.
The list of each tab is displayed.



- When you add the RGB input color, click [RGB] tab.
 - When you add the CMYK input color, click [CMYK] tab.
- 2 Click [New] on [Alternative Color Management] screen.

One line is added on the list. At the added line of the list, the RGB values displayed are all "255" and the CMYK values displayed are all "0".



- When you adjust the added input color, go to the step described on page 10-8.
- When you adjust the alternative color without adjustment of the input color, go to the step described on page 10-9.

10.3 Adjust the Input Color

This section describes how to adjust the selected original color (input color) and how to adjust the added input color.

When you don't need to adjust the selected input color or added input color, go to the step described on page 10-9.

The current setting can be stored for the selected input color. When you want to create the new setting on base of the selected setting, make the duplication of it and adjust the duplication. For details on how to copy the alternative color setting and how to delete it, refer to page 10-13.

- 1** When you select [CMYK] tab and select the input color, check [Show Device Value].
 - When you check, you can specify the input color with the device value (from "0 " to "255"; 256 steps).
 - When you remove the check, you can specify the color with %.
- 2** Specify the RGB/CMYK values which are set in the input color to the input boxes under [Adjust] - [Original].

According to the settings, the preview area of [Adjust] - [Original] and [Original] on the list are updated.

 - When you select [RGB] tab, specify the value from "0" to "255" for each color.
 - When you select [CMYK] tab and check [Show Device Value], specify the value from "0" to "255" for each color.
 - When you select [CMYK] tab and remove the check of [Show Device Value], specify the value from "0" to "100" for each color.
 - When you input below the decimal point, the value rounded down is displayed.
 - Similar operation can be done when you change the RGB/CMYK values on the right of [Original] of the list.
- 3** Confirm the preview of [Original], and repeat from Step 1 to Step 2 as required.
 - When you adjust the output color to alternate, go to the step described on page 10-9.

10.4 Adjust the Output Color

This section describes how to adjust the output color.

To adjust the output color, there are two methods. One is a method of specifying the value and the other is a method of selecting from the spot color.

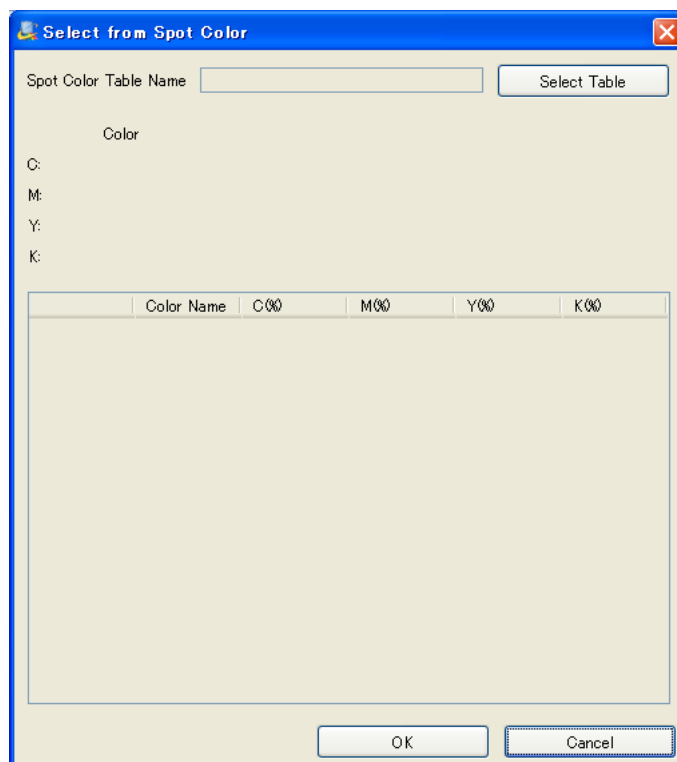
Specify the Value

- 1 Specify the CMYK values which are set to the output color to the input boxes under [Adjust] - [After Adjustment].
According to the settings, the preview area of [Adjust] - [After Adjustment] and [After Adjustment] on the list are updated.
 → When you select [CMYK] tab and remove the check of [Show Device Value], specify the value from "0" to "100" for each color.
 → When you input below the decimal point, the value rounded down is displayed.
 → Similar operation can be done when you change the CMYK values on the right of [After Adjustment] of the list.
- 2 Confirm the preview of [After Adjustment], and repeat Step 1 as required.
 → When you register the adjustment result, go to the step described on page 10-12.

Select from Spot Color

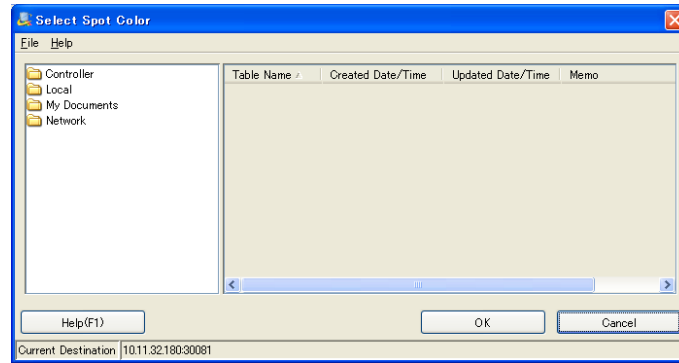
You can adopt the spot color to the alternative color as the processing of the image controller when the spot color cannot be specified by the application. When you use the spot color as the alternative color, adjust the spot color to use beforehand. For detailed information on how to adjust the spot color, refer to page 9-2.

- 1 Click [Select from Spot Color].
[Select from Spot Color] screen appears.



- 2 Click [Select Table].

[Select Spot Color] screen appears.



- 3 From the tree view, select the place to save the spot color table.

The list appears according to the selection.

- 4 From the list, select the spot color table to select the spot color.

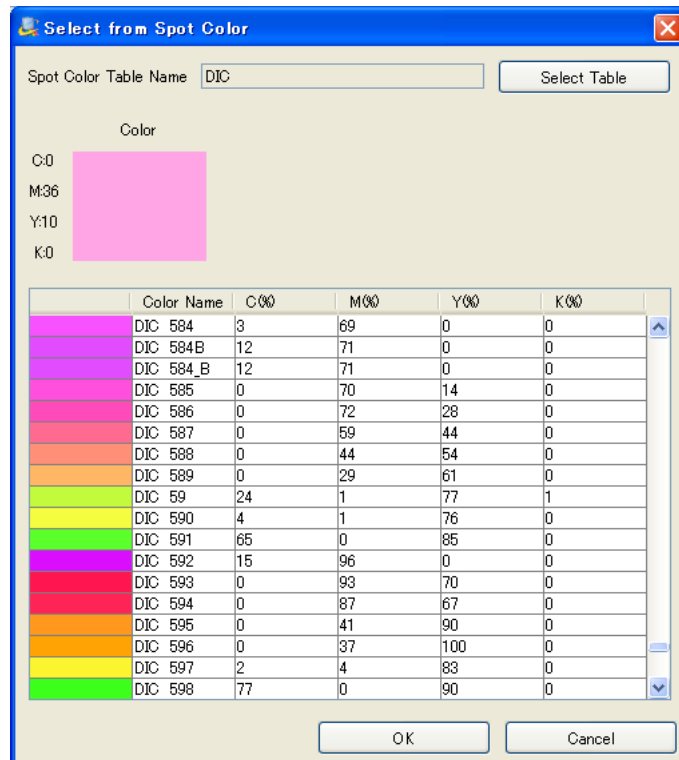
- 5 Click [OK].

[Select Spot Color] screen is closed to return to [Select from Spot Color] screen.

A selected spot color table is loaded, and the spot color appears on [Select from Spot Color] screen.

- 6 From the list, select the spot color to specify as the output color.

The selected spot color is displayed to [Color].



- 7 Click [OK].

[Select from Spot Color] screen is closed to returns to [Alternative Color Management] screen.

→ When you click [Cancel], [Select from Spot Color] screen is closed to return to [Alternative Color Management] screen.

- 8 Confirm the preview of [After Adjustment], and repeat from Step 1 to Step 7 as required.

→ When you change the priority of the alternative color settings, go to the step described on page 10-11.



→ When you register the adjustment result, go to the step described on page 10-12.

10.5 Change the Priority of the Alternative Color

This section describes how to change the priority of the alternative color settings in the alternative color table.

The priority defines which alternative color setting is adopted to output when there are multiple alternative color settings for one input color.

When only one alternative color settings is for one input color, the priority setting isn't necessary.

- 1 From the list of [Alternative Color Management] screen, select the alternative color setting to change the priority.
 - Displays the alternative color for the same input color in order of priority.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted alternative color settings when the adjustment result has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 10-12.
- 2 Click  or  to change the position of the selected alternative color setting.

The position of the selected alternative color moves.

 - When you register the adjustment result, go to the step described on page 10-12.

10.6 Register the Alternative Color

This section describes how to register the alternative color settings displayed on [Alternative Color Management] to the alternative color table which is used by the image controller.

When you register the settings to the image controller, the adjusted alternative color can be adopted to the output.

- 1 Click [Register] on [Alternative Color Management] screen.

The alternative color settings are registered to the alternative color table which is in the controller.

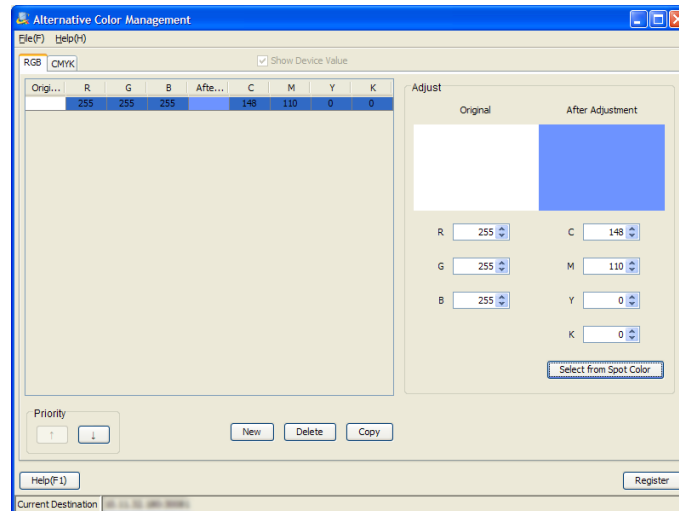
10.7 Alternative Color Management

This section describes how to manage the alternative color.

Copy the Alternative Color

You can duplicate the alternative color settings displayed on [Alternative Color Management] within the same alternative color table. When you adjust the alternative color using the existed alternative color setting, original settings of the alternative color is overwritten. When you want to save the current settings, make the duplication of it.

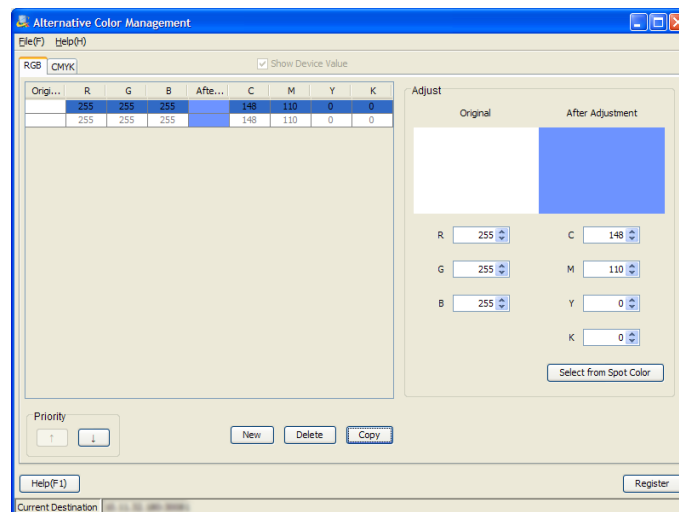
- 1 Select the alternative color setting to duplicate from the list of [Alternative Color Management].



- When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted alternative color settings when the adjustment result has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 10-12.

- 2 Click [Copy].

The duplication of the alternative color setting is generated in the alternative color table.



- When you select the multiple alternative color settings, [Copy] is not available.

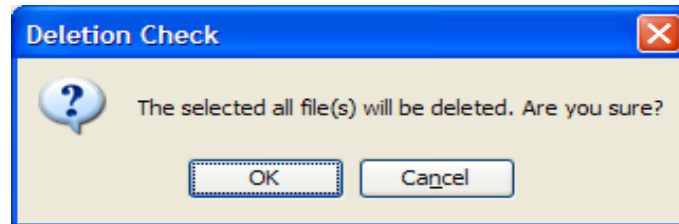
Delete the Alternative Color Setting

You can delete the alternative color setting.

- 1 Select the alternative color setting to delete from the list of [Alternative Color Management].
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted alternative color settings when the adjustment result has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 10-12.

- 2 Click [Delete].

Confirmation screen appears.



- 3 To delete, click [OK].

The selected alternative color setting is deleted.

 - When you select the multiple alternative color settings, all of those are deleted at a time.
 - You cannot restore the alternative color setting you have deleted.



Profile Management

11 Profile Management

11.1 Outline of Profile Management

Use of the Color Centro enables to manage several profiles which are saved to the Local computer, Network computer, and the image controller, and are necessary for the color printing.

The types of profile which Color Centro manages are as follows;

- RGB Source Profile
- CMYK Target Profile
- Printer Profile
- RGB-CMYK Device Link Profile
- CMYK-CMYK Device Link Profile

In addition, Color Centro can register 50 profiles at the maximum to the image controller when the size of each profile is 10 MB or less.

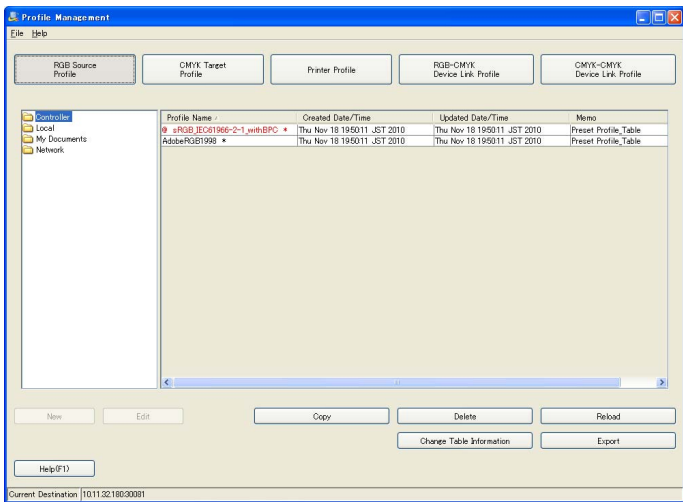
Color Centro manages profiles, and also it creates and edits those by starting the "Color Centro Profiler" utility.

11.1.1 [Profile Management] screen

The profile management function of Color Centro uses [Profile Management] screen.

[Profile Management] screen appears by clicking [Profile Management] button on the [Launcher] screen. To close this screen, select [Close] from [File] menu.

[Profile Management] screen is composed as follows;



Item	Description
[RGB Source Profile]	According to the selection of the tree view, displays the saved RGB source profile.
[CMYK Target Profile]	According to the selection of the tree view, displays the saved CMYK target profile.
[Printer Profile]	According to the selection of the tree view, displays the saved printer profile.
[RGB-CMYK Device Link Profile]	According to the selection of the tree view, displays the saved RGB-CMYK device link profile.
[CMYK-CMYK Device Link Profile]	According to the selection of the tree view, displays the saved CMYK-CMYK target profile.

Item	Description
(tree view)	Displays the places where the various profiles are saved ([Controller], [Local], [My Documents] and [Network]) in the tree format.
(list)	According to the selection of the buttons and the tree view on the screen, displays the saved profiles.
[New]	Starts "Color Centro Profiler" utility and creates the new profile.
[Edit]	Starts "Color Centro Profiler" utility and edits the selected profile from the list.
[Copy]	Makes a duplication of the selected profile from the list within [Controller], when [Controller] is selected on the tree view.
[Delete]	Deletes the profile selected from the list.
[Reload]	Updates the information of the list.
[Change Table Information]	Changes the table information (Saved Name, Memo) of the profile which is selected from the list.
[Export]/[Register]	Exports the selected profile on the list to [Local]/[My Documents]/[Network], when [Controller] is selected on the tree view. Registers the profile selected on the list to [Controller], when a folder other than [Controller] is selected on the tree view.
[Help]	Displays the Help of this screen.
Status bar	Displays the IP address and the port number of the image controller connected currently.

List Items

According to the selection of the tree view and profile type, the list items displayed on [Profile Management] screen are changed.

The list items of the measurement result list on the [Profile Management] screen are as follows;

Item	Description
[Profile Name] (In case of [Controller])	Displays the profile name.
[File Name] (In case of [Local]/[My Documents] or [Network])	Displays the file name of the profile.
[Created Date/Time] (in case of [Controller])	Displays the created date/time of the profile.
[Update Date/Time]	Displays the date/time when the profile was updated.
[Paper Type] (in case of [Printer Profile])	Displays the paper type which the printer profile corresponds.
[Memo]	Displays the description of the profile.

When [Controller] is selected on the tree view, "*" mark is added after the name of the profile which was registered at factory shipping (default registered color profile). In addition, a red "@" mark is added before the name of the profile which is set as default on the current color setting.

List Operations

The list of the [Profile Management] screen can be sorted by list item. For how to operate it, refer to page 14-3.

When you display [Profile Management] screen first after launching Color Centro, the list is displayed in ascending order of [Profile Name] (in case of [Controller]), or [File Name] (in case of [Local], [My Documents] or [Network]).

11.1.2 Menu of [Profile Management] screen

The menu items of the [Profile Management] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Profile Type]	From the displayed sub menu, allows you to select the profile type to display on the list.
	[Reload]	Updates the information of the list.
	[Sort]	Sorts the content of the list by the selected list item. For how to operate it, refer to page 14-3.
	[Change Table Information]	Changes the table information (Saved Name, Memo) of the profile which is selected from the list.
	[Delete]	Deletes the profile selected from the list.
	[Copy]	Makes a duplication of the selected profile from the list within [Controller], when [Controller] is selected on the tree view.
	[New]	Starts "Color Centro Profiler" utility and creates the new profile.
	[Edit]	Starts "Color Centro Profiler" utility and edits the selected profile from the list.
	[Export]	Exports the selected tone curve on the list to [Local]/[My Documents]/[Network], when [Controller] is selected on the tree view.
	[Import]	Imports the profile selected on the list to [Controller], when [Local], [My Documents] or [Network] is selected on the tree view.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

11.2 RGB Source Profile Management

This section describes how to copy, delete, reload, change table information, export, and import the RGB source profile.

11.2.1 Copy from the Image Controller

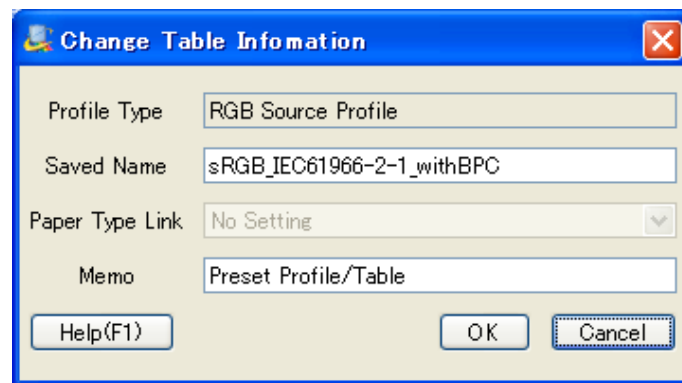
You can make a duplication of the RGB source profile in the image controller, to the image controller.

- 1 Click [RGB Source Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB Source Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].

The list appears according to the selection.

 - For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the RGB source profile to copy.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Copy].

[Change Table Information] screen appears.



- When you select the multiple RGB source profiles, [Copy] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Copy].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
 - You cannot save the RGB source profile of the same name with those in the image controller.
 - 6 Click [OK].

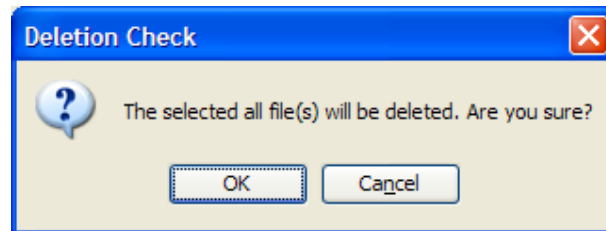
The duplication of the RGB source profile is generated in the image controller.

11.2.2 Delete

You can delete the saved RGB source profile.

- 1 Click [RGB Source Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB Source Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the RGB source profile to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
 - You can delete the multiple RGB source profiles.
- 3 Click [Delete].

Confirmation screen appears.



- Similar operation can be done when you select [File] menu - [Delete].
 - When you select the RGB source profile which was registered at factory shipping, [Delete] is not available.
- 4 To delete, click [OK].

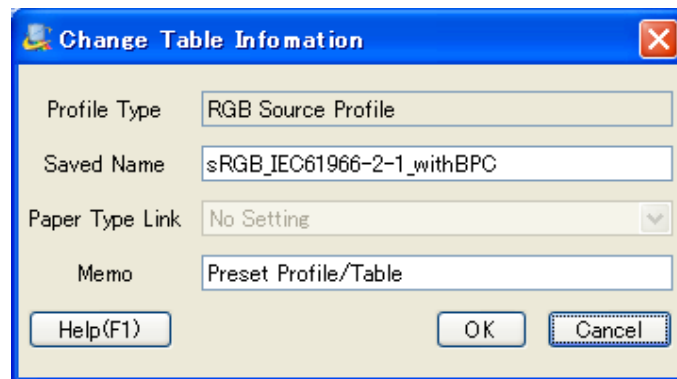
The selected RGB source profile is deleted.

 - When you select the multiple RGB source profiles, all of those are deleted at a time.
 - You cannot restore the RGB source profile you have deleted.

11.2.3 Change the Information

You can change the information of the saved RGB source profile.

- 1 Click [RGB Source Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB Source Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the RGB source profile to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Change Table Information].
[Change Table Information] screen appears.



- When you select the multiple RGB source profiles, [Change Table Information] is not available.
 - Similar operation can be done when you select [File] menu - [Change Table Information].
- 4 Edit [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - But, you cannot change the table name of the RGB source profile which was registered at factory shipping.
 - 5 Click [OK].
The RGB source profile information is changed.

11.2.4 Export from the Image Controller

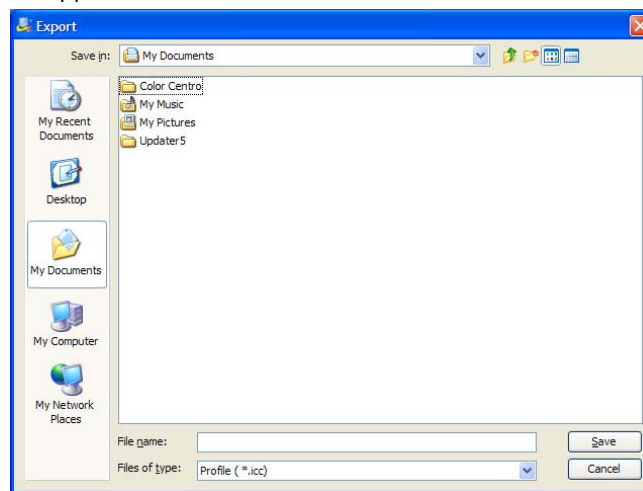
You can export the RGB source profile of the image controller to [Local], [My Documents] or [Network].

- 1 Click [RGB Source Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB Source Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].

The list appears according to the selection.

 - For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the RGB source profile to register.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Export].

[Export] screen appears.



- When you select the multiple RGB source profiles, [Export] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Export] is not available.
 - Similar operation can be done when you select [File] menu - [Export].
- 5 Specify the saving place and file name for the RGB source profile to export, and click [Save].

Exporting to the specified place is executed.

[Export] screen is closed to return to [Profile Management] screen.

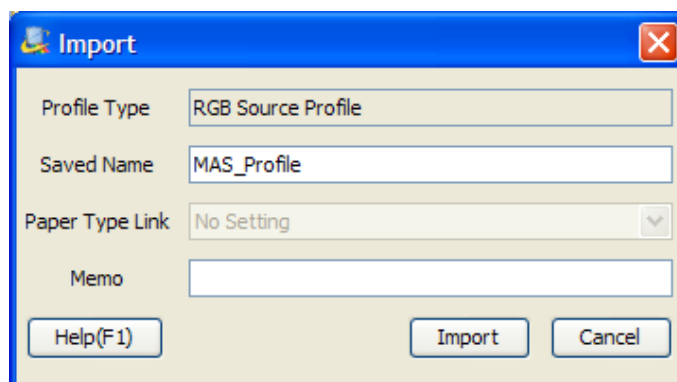
11.2.5 Import (Register) to the Image Controller

You can import (register) the RGB source profile of [Local], [My Documents] or [Network] in [Controller].

- 1 Click [RGB Source Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB Source Profile] from the displayed sub menu.
- 2 Select the places from [Local], [My Documents] or [Network] of the tree format, where the RGB source profiles are saved.

The list appears according to the selection.
- 3 From the list, select the RGB source profile to import.
- 4 Click [Import].

[Import] screen appears.



- When you select the multiple RGB source profiles, [Import] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Import] is not available.
 - Similar operation can be done when you select [File] menu - [Import].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
 - You cannot save the RGB source profile of the same name with those in the image controller.
 - 6 Click [OK].

The RGB source profile is registered to [Controller].
[Import] screen is closed to return to [Profile Management] screen.

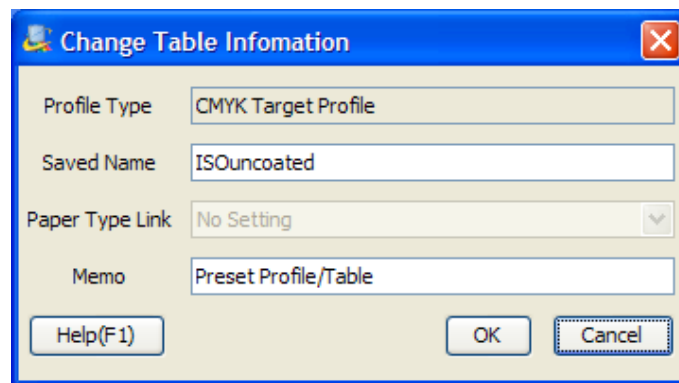
11.3 CMYK Target Profile Management

This section describes how to copy, delete, reload, change table information, export, and import the CMYK target profile.

11.3.1 Copy from the Image Controller

You can make a duplication of the CMYK target profile in the image controller, to the image controller.

- 1 Click [CMYK Target Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK Target Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the CMYK target profile to copy.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Copy].
[Change Table Information] screen appears.



- When you select the multiple CMYK target profiles, [Copy] is not available.
- When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
- Similar operation can be done when you select [File] menu - [Copy].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
→ You cannot save the CMYK target profile of the same name with those in the image controller.
- 6 Click [OK].
The duplication of the CMYK target profile is generated in the image controller.

11.3.2 Delete

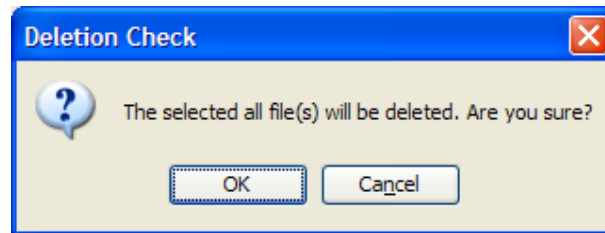
You can delete the saved CMYK target profile.

- 1 Click [CMYK Target Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK Target Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the CMYK target profile to delete.
→ For detailed information on how to connect another controller, refer to page 14-2.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].

→ You can delete the multiple CMYK target profiles.

3 Click [Delete].

Confirmation screen appears.



→ Similar operation can be done when you select [File] menu - [Delete].

→ When you select the CMYK target profile which was registered at factory shipping, [Delete] is not available.

4 To delete, click [OK].

The selected CMYK target profile is deleted.

→ When you select the multiple CMYK target profiles, all of those are deleted at a time.

→ You cannot restore the CMYK target profile you have deleted.

11.3.3 Change the Information

You can change the information of the saved CMYK target profile.

1 Click [CMYK Target Profile] on [Profile Management] screen.

→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK Target Profile] from the displayed sub menu.

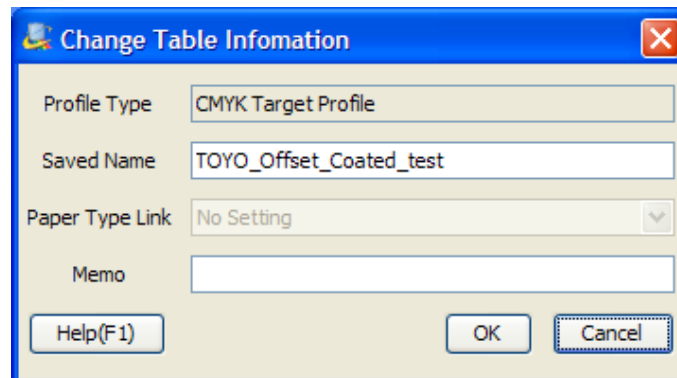
2 From the tree view and the list, select the CMYK target profile to change the information.

→ For detailed information on how to connect another controller, refer to page 14-2.

→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].

3 Click [Change Table Information].

[Change Table Information] screen appears.



→ When you select the multiple CMYK target profiles, [Change Table Information] is not available.

→ Similar operation can be done when you select [File] menu - [Change Table Information].

4 Edit [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters) as required.

→ But, you cannot change the table name of the CMYK target profile which was registered at factory shipping.

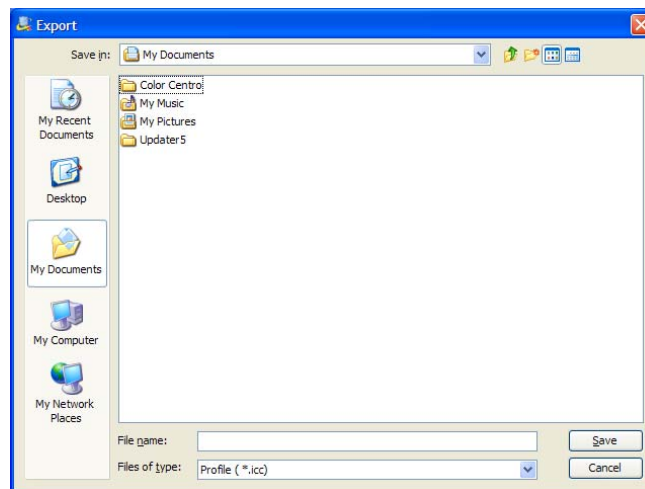
5 Click [OK].

The CMYK target profile information is changed.

11.3.4 Export from the Image Controller

You can export the CMYK target profile of the image controller to [Local], [My Documents] or [Network].

- 1 Click [CMYK Target Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK Target Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the CMYK target profile to register.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Export].
[Export] screen appears.



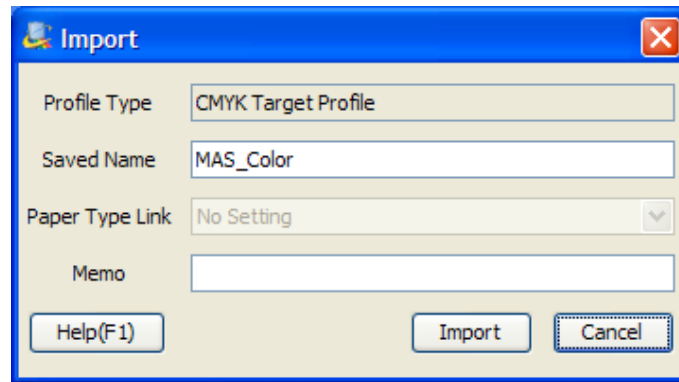
- When you select the multiple CMYK target profiles, [Export] is not available.
- When a folder other than [Controller] is selected on the tree view, [Export] is not available.
- Similar operation can be done when you select [File] menu - [Export].
- 5 Specify the saving place and file name for the CMYK target profile to export, and click [Save].
Exporting to the specified place is executed.
[Export] screen is closed to return to [Profile Management] screen.

11.3.5 Import (Register) to the Image Controller

You can import (register) the CMYK target profile of [Local], [My Documents] or [Network] in [Controller].

- 1 Click [CMYK Target Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK Target Profile] from the displayed sub menu.
- 2 Select the places from [Local], [My Documents] or [Network] of the tree format, where the CMYK target profiles are saved.
The list appears according to the selection.
- 3 From the list, select the CMYK target profile to import.
- 4 Click [Import].

[Import] screen appears.



- When you select the multiple CMYK target profiles, [Import] is not available.
- When a folder other than [Controller] is selected on the tree view, [Import] is not available.
- Similar operation can be done when you select [File] menu - [Import].

5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).

- You cannot save the CMYK target profile of the same name with those in the image controller.

6 Click [OK].

The CMYK target profile is registered to [Controller].

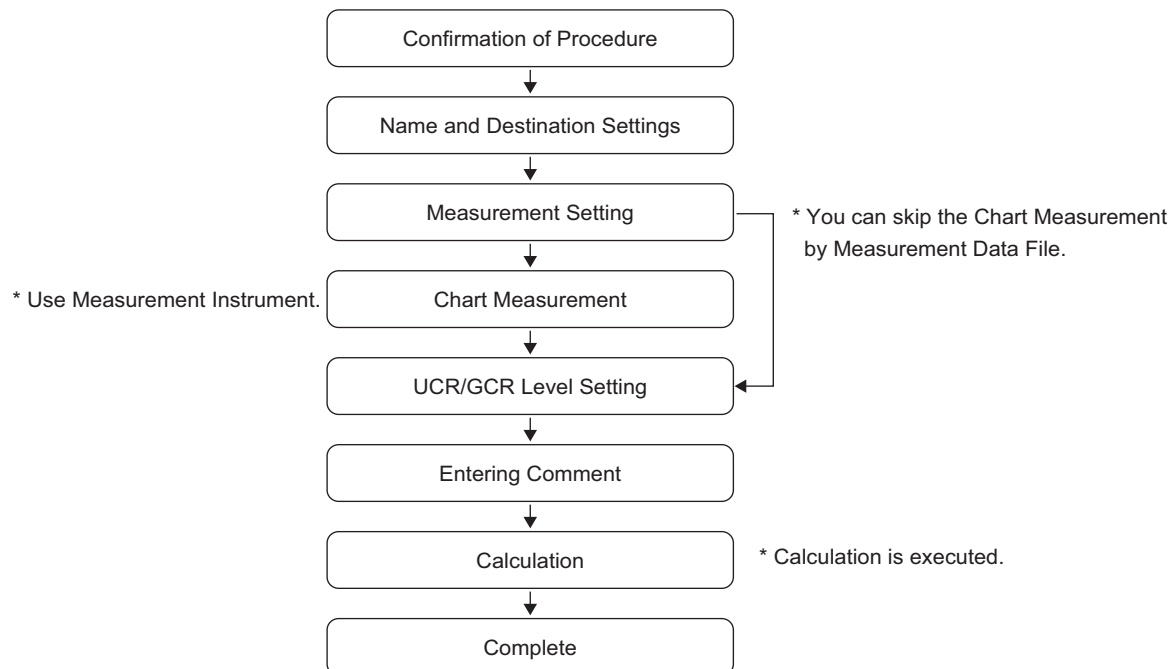
[Import] screen is closed to return to [Profile Management] screen.

11.4 Create the CMYK Target Profile

This section describes how to create the new CMYK target profile by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can create the CMYK target profile.

The flow of the wizard is as follows;



The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

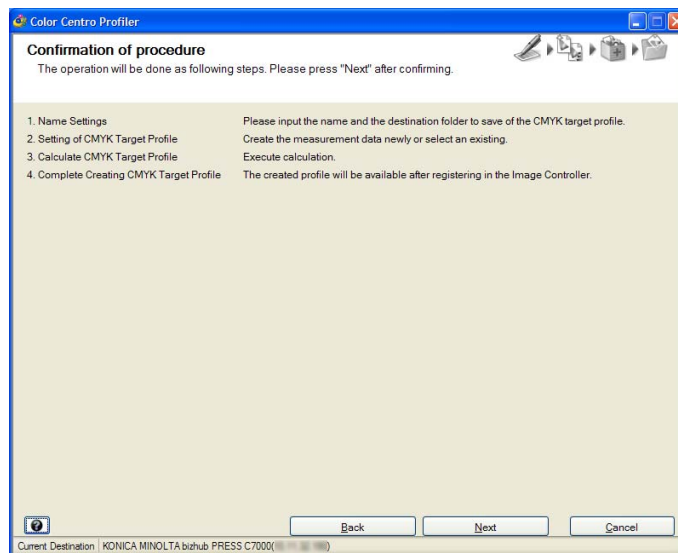
11.4.1 Launch Color Centro Profiler

You can create the CMYK target profile by using Color Centro Profiler.

- 1 Click [CMYK Target Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK Target Profile] from the displayed sub menu.

- 2 Click [New].

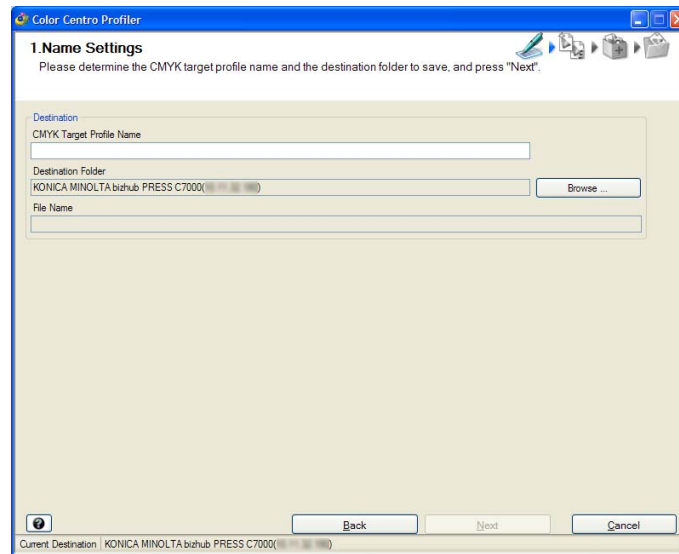
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 11-16.

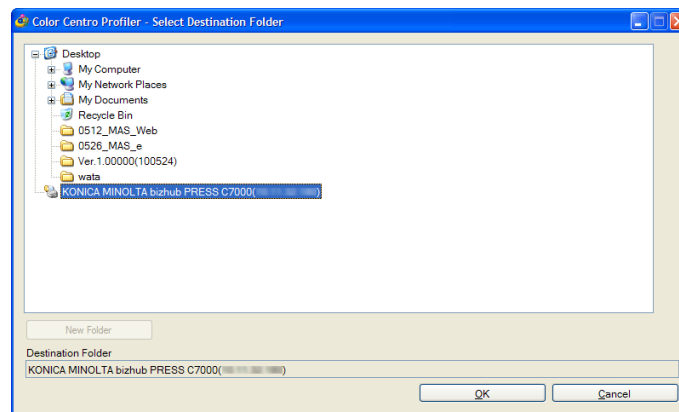
11.4.2 Set the Profile Name and the Destination

- 1 Specify the name of CMYK target profile you create to [CMYK Target Profile Name] of [Name Settings] screen.



- There is no need to enter the extension because of being added automatically.
- You cannot save the profile of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the profile name when you save the profile to the image controller.

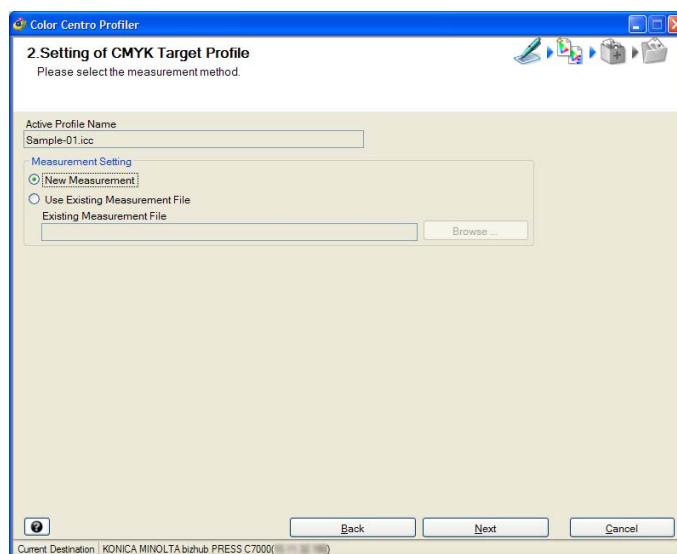
- 2 Click [Browse].
[Select Destination Folder] screen appears.



- 3 Select the destination folder for saving the CMYK target profile you create and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Select Measurement Method screen appears.
 - When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 11-17.

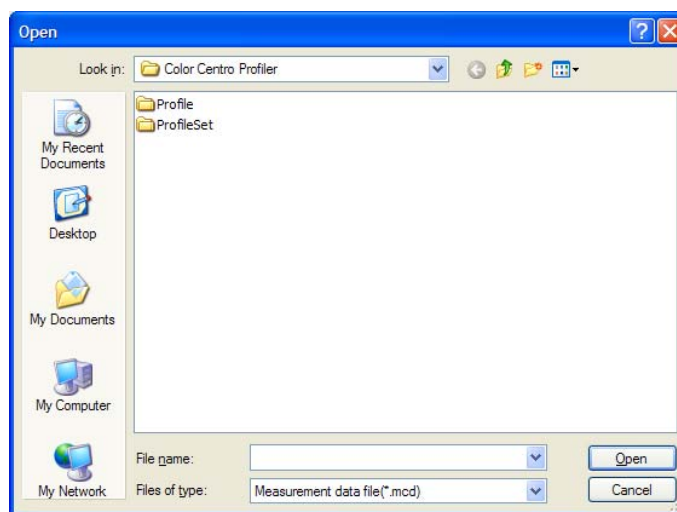
11.4.3 Select the Measurement Method

- 1 Select [New Measurement] or [Use Existing Measurement File].



- When you select [New Measurement], go to Step 4.
- When you select [Use Existing Measurement File], go to Step 2.

- 2 Click [Browse].
[Open] screen appears.



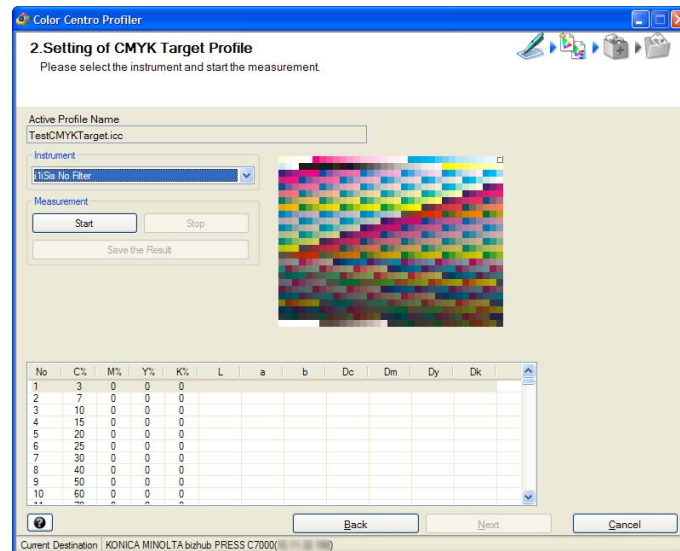
- 3 Select the measurement data file (.mcd) and click [Open].
The name of measurement data file appears in [Existing Measurement File].
- 4 Click [Next].
 - When you select [New Measurement], Chart Measurement screen appears. In this case, go to the step described on page 11-18.
 - When you select [Use Existing Measurement File], the UCR/GCR Setting screen appears. In this case, go to the step described on page 11-19.

11.4.4 Chart Measurement

On the Chart Measurement screen, select the instrument and start the measurement.

- ✓ To use the instrument, you need to install the device driver of the instrument to your computer.
- ✓ The chart pattern and available paper size differ according to the selected instrument.
- ✓ According to the selected instrument, measurement operations differ. For detailed information on how to operate, refer to user's guide of instrument respectively.

- 1 From [Instrument], select the instrument to use for the measurement.



According to the selection, the chart image appears on the upper-right of the screen.

→ [11Sis (UV Filter)] returns the measurement result with the UV cut filter.

- 2 Click [Start] to start the measurement.

- According to the selected instrument, the operation screen appears. Follow the instructions on the pages that follow.
- For details of how to use instruments (colorimeters), refer to their instruction manuals.
- The current position of the measurement appears on the chart image of the upper-right of the screen.
- If you measure a wrong line, a warning message appears. You can select either to try again with the correct line or to proceed to the next line.
- To stop the measurement, click [Stop].
- After the acquirement of measurement data, [Save the Result] becomes available.
- The value of each patch appears in the measurement result list.

- 3 Click [Save the Result] after completing the measurement.

[Save As] screen appears.

- 4 Specify the saving place and file name, and click [Save].

Returns to the Chart Measurement screen after saving the measurement result file.

- 5 Click [Next].

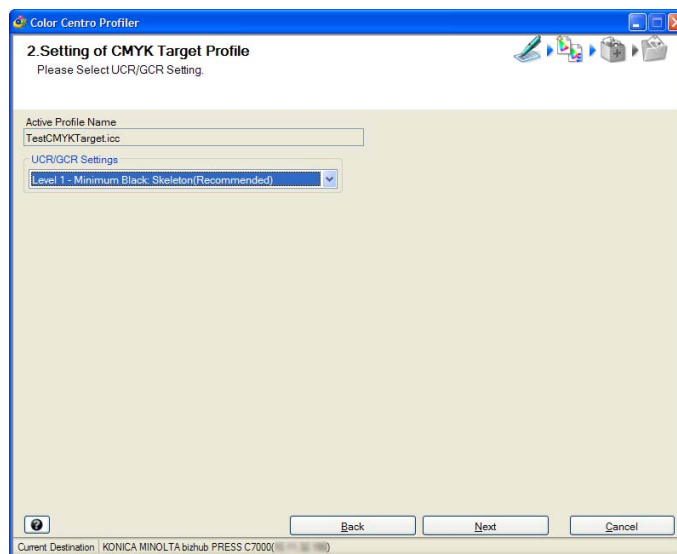
the UCR/GCR Setting screen appears.

→ Go to the step described on page 11-19.

11.4.5 Select UCR/GCR Setting

On the UCR/GCR Setting screen, select the UCR/GCR level concerning the generation of the Black separation on CMYK separation process.

- 1 Select the UCR/GCR level from [UCR/GCR Setting] of the UCR/GCR Setting screen.



- You can set the amount of CMY to be replaced with Black.
- [Level 1 - Minimum Black Skeleton (Recommended)] decreases the amount of the generation of the Black separation most.
- [Level 5 - Max Black: Full Black] increases the amount of the generation of the Black separation most.

- 2 Click [Next].

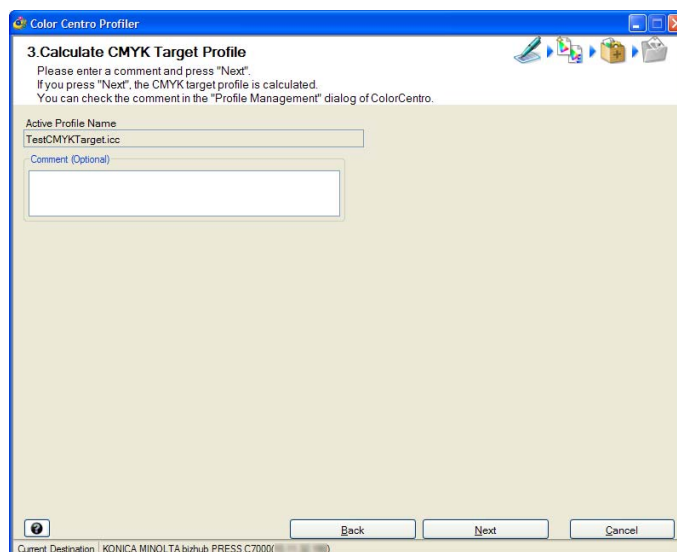
The Comment screen appears.

- Go to the step described on page 11-19.

11.4.6 Enter the Comment

On the Comment screen, enter the comment to embed to the profile you create, as required. You can confirm the comment when you select the profile on Color Centro Profiler.

- 1 Enter the comment to [Comment (Optional)].



- 2 Click [Next].

A calculation is executed, and a profile is generated.

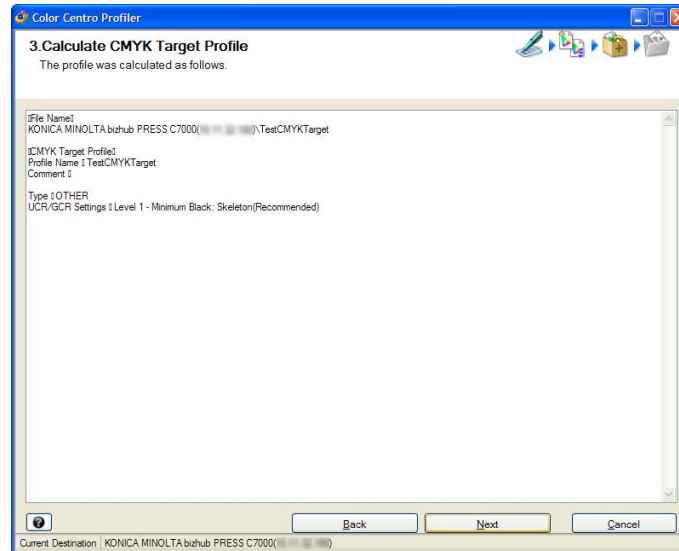
After completing the calculation, the Calculation Result screen appears.

→ Go to the step described on page 11-20.

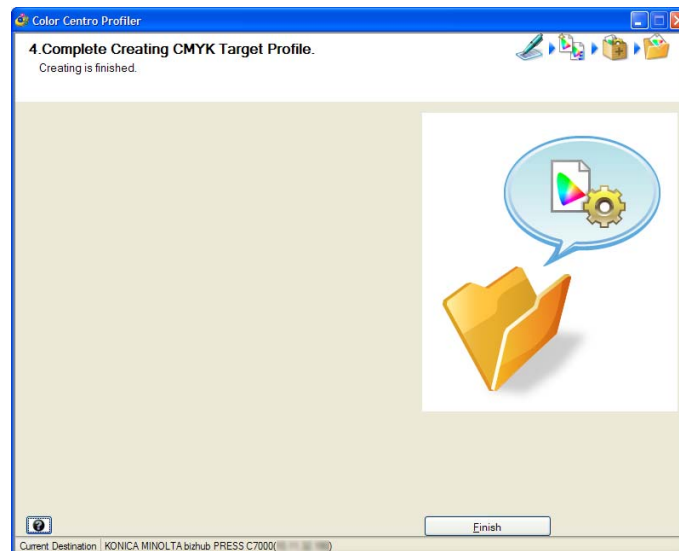
11.4.7 Confirm and Complete the Profile

The Calculation Result screen displays the list of the setting of the generated CMYK-CMYK target profile.

- 1 Confirm the setting which is displayed on the Calculation Result screen.



- 2 Click [Next].
The Complete Profile Set screen appears.
- 3 Click [Finish].



The wizard is completed.

- If you launched Color Centro Profiler by clicking [CMYK Target Profile] of [Profile Management], the Color Centro Profiler is closed to return to [Profile Management] screen.
- If you have created a CMYK-CMYK device link profile with Color Centro Profiler, the Profile Determination screen appears.
- If you have created or have edited a profile set with Color Centro Profiler, the wizard screen (the Profile Determination screen) appears, respectively.

11.5 Printer Profile Management

This section describes how to copy, delete, reload, change table information, export and import the printer profile.

11.5.1 Copy from the Image Controller

You can make a duplication of the printer profile in the image controller, to the image controller.

- 1 Click [Printer Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [Printer Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the printer profile to copy.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Copy].
[Change Table Information] screen appears.

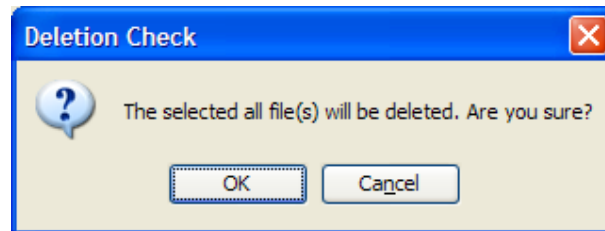
- When you select the multiple printer profiles, [Copy] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Copy].
- 5 Specify the name to [Saved Name] within 31 one-byte alpha-numerical characters.
→ You cannot save the printer profile of the same name with those in the image controller.
 - 6 Select [Paper Type Link].
 - 7 Edit [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - 8 Click [OK].
The duplication of the printer profile is generated in the image controller.

11.5.2 Delete

You can delete the saved printer profile.

- 1 Click [Printer Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [Printer Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the printer profile to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
 - You can delete the multiple printer profiles.
- 3 Click [Delete].

Confirmation screen appears.



- Similar operation can be done when you select [File] menu - [Delete].
 - When you select the printer profile which was registered at factory shipping, [Delete] is not available.
- 4 To delete, click [OK].

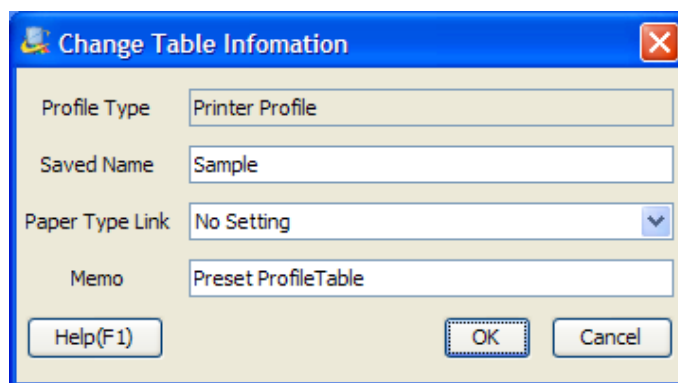
The selected printer profile is deleted.

 - When you select the multiple printer profiles, all of those are deleted at a time.
 - You cannot restore the printer profile you have deleted.

11.5.3 Change the Information

You can change the information of the saved printer profile.

- 1 Click [Printer Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [Printer Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the printer profile to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Change Table Information].
[Change Table Information] screen appears.



- When you select the multiple printer profiles, [Change Table Information] is not available.
 - Similar operation can be done when you select [File] menu - [Change Table Information].
- 4 Specify the name to [Saved Name] within 31 one-byte alpha-numerical characters as required.
 - You cannot save the printer profile of the same name with those in the image controller.
 - But, you cannot change the table name of the printer profile which was registered at factory shipping.
 - 5 Select [Paper Type Link], as required.
 - 6 Edit [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - 7 Click [OK].
The printer profile information is changed.

11.5.4 Export from the Image Controller

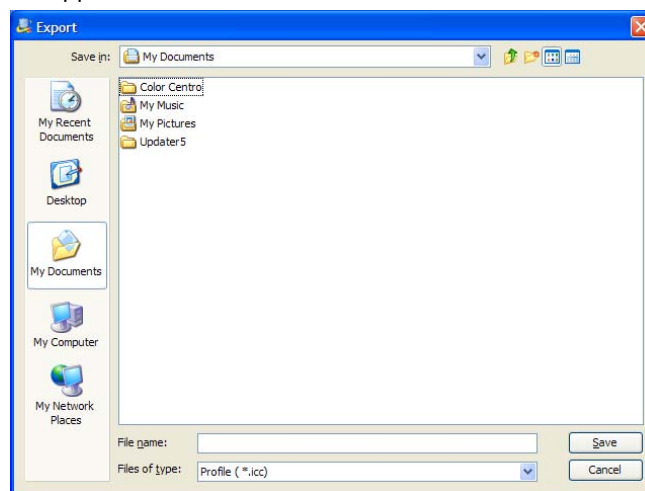
You can export the Printer Profile of the image controller to [Local], [My Documents] or [Network].

- 1 Click [Printer Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [Printer Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].

The list appears according to the selection.

 - For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the printer profile to register.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Export].

[Export] screen appears.



- When you select the multiple printer profiles, [Export] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Export] is not available.
 - Similar operation can be done when you select [File] menu - [Export].
- 5 Specify the saving place and file name for the printer profile to export, and click [Save].

Exporting to the specified place is executed.

[Export] screen is closed to return to [Profile Management] screen.

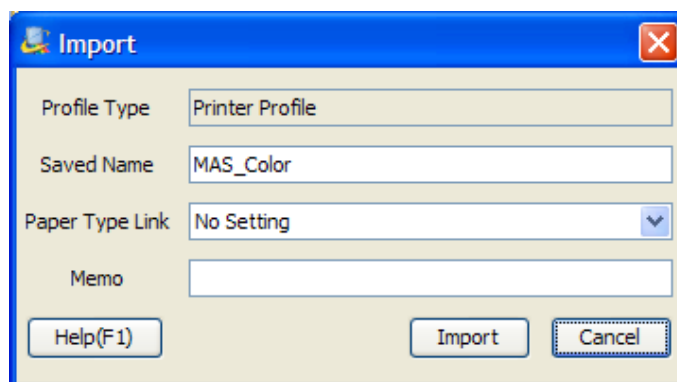
11.5.5 Import (Register) to the Image Controller

You can import (register) the Printer Profile of [Local], [My Documents] or [Network] in [Controller].

- 1 Click [Printer Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [Printer Profile] from the displayed sub menu.
- 2 Select the places from [Local], [My Documents] or [Network] of the tree format, where the Printer Profile are saved.

The list appears according to the selection.
- 3 From the list, select the printer profile to import.
- 4 Click [Import].

[Import] screen appears.



- When you select the multiple printer profiles, [Import] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Import] is not available.
 - Similar operation can be done when you select [File] menu - [Import].
- 5 Specify the name to [Saved Name] within 31 one-byte alpha-numerical characters.
 - You cannot save the printer profile of the same name with those in the image controller.
 - 6 Select [Paper Type Link].
 - 7 Edit [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - 8 Click [OK].

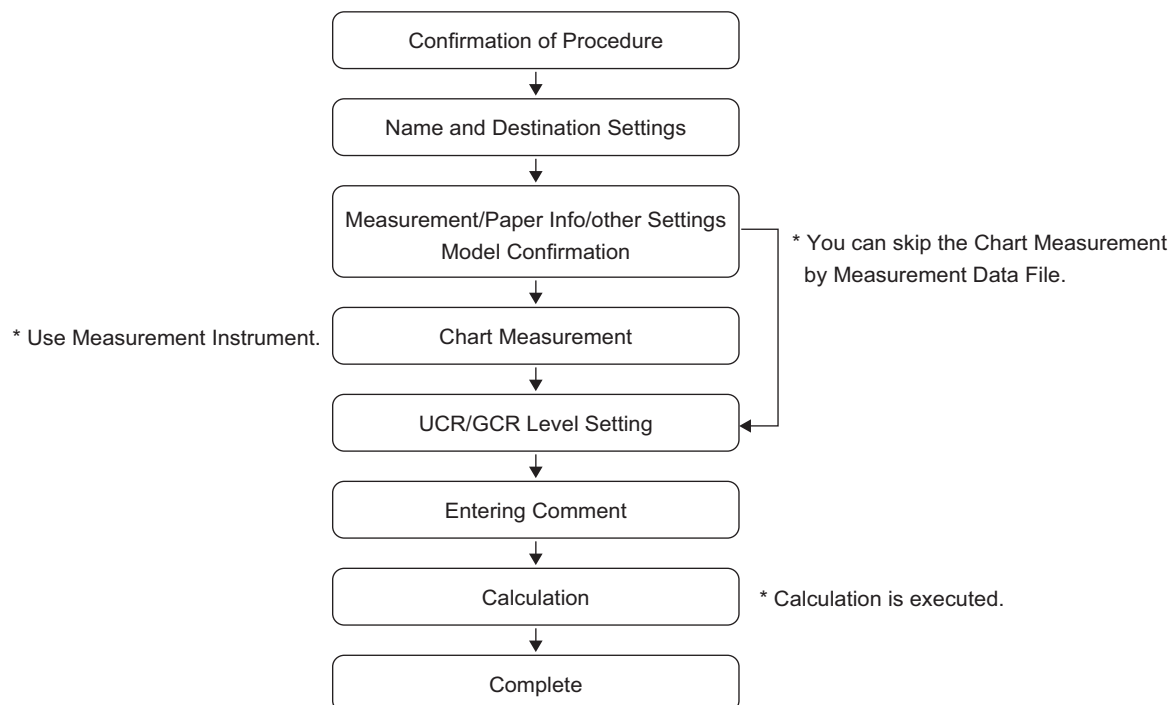
The printer profile is registered to [Controller].
[Import] screen is closed to return to [Profile Management] screen.

11.6 Create the Printer Profile

This section describes how to create the new printer profile by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can create the printer profile.

The flow of the wizard is as follows;



The following buttons appear on the wizard screen. Use those as required.

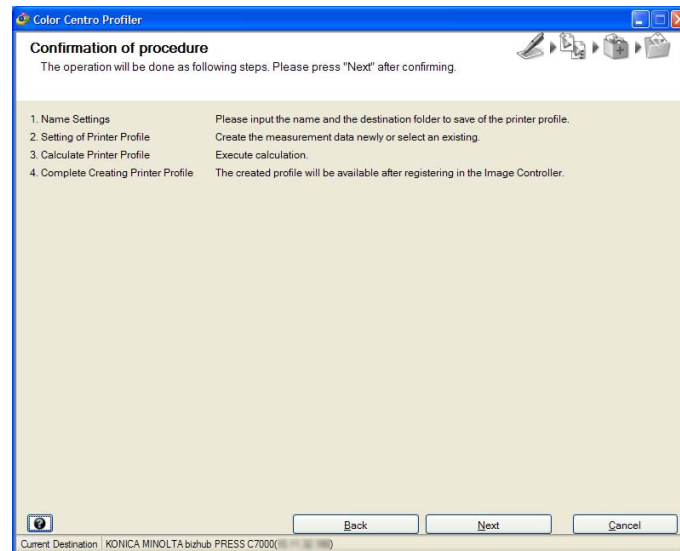
- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

11.6.1 Launch Color Centro Profiler

You can create the printer profile by using Color Centro Profiler.

- 1 Click [Printer Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [Printer Profile] from the displayed sub menu.
- 2 Click [New].

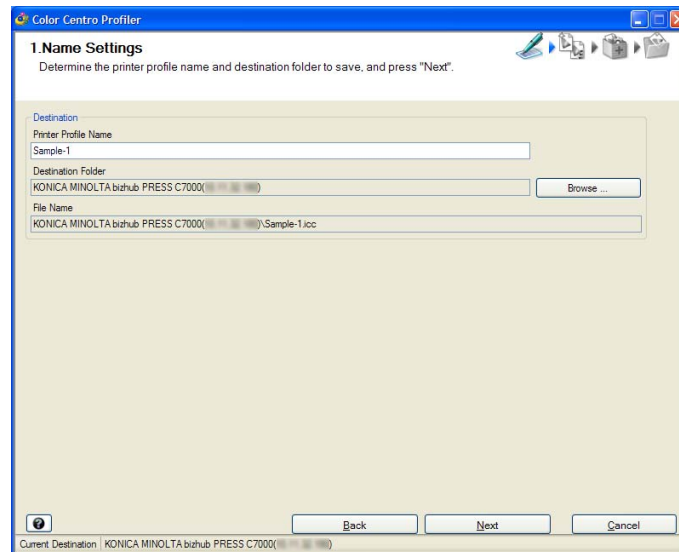
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 11-28.

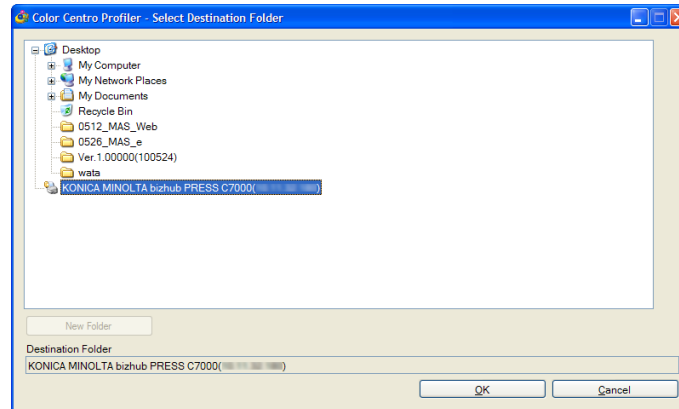
11.6.2 Set the Profile Name and the Destination

- 1 Specify the name of printer profile you create to [Printer Profile Name] of [Name Settings] screen.



- There is no need to enter the extension because of being added automatically.
- You cannot save the profile of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the profile name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.

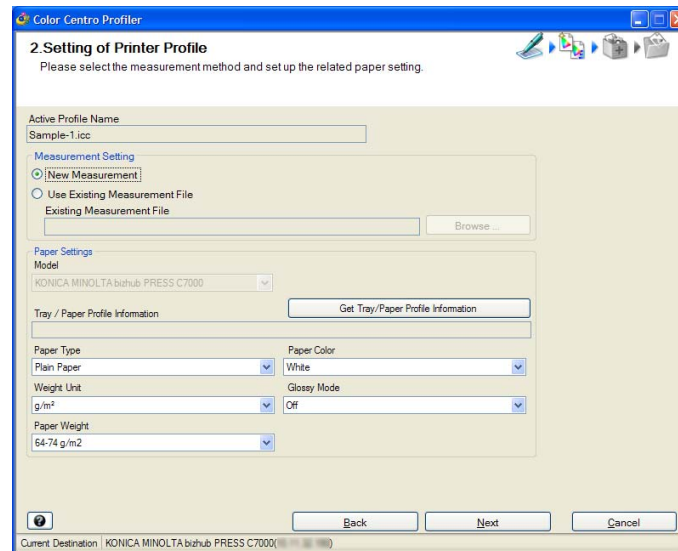


- 3 Select the destination folder for saving the printer profile you create and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Select Measurement Method / Paper Setting screen appears.
 - When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 11-29.

11.6.3 Select Measurement Method / Paper Setting

On the Select Measurement Method / Paper Setting screen, you can select the measurement method and set the related paper setting.

- 1 From [Measurement Setting], select [New Measurement] or [Use Existing Measurement File].

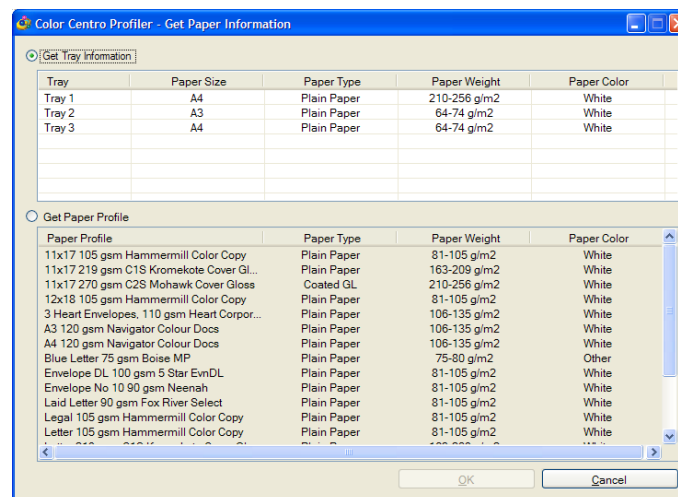


- When you select [New Measurement], go to Step 5.
- When you select [Use Existing Measurement File], go to Step 2.

- 2 Click [Browse].
[Open] screen appears.

- 3 Select the measurement data file (.mcd) and click [Open].
The name of the measurement data file appears in [Existing Measurement File].

- 4 When you set [Paper Type], [Paper Color], [Glossy Mode], and [Paper Weight] using the tray information and paper profile of the main body, you can display [Get paper Information] screen by clicking [Get Tray/Paper Profile information].



- When you connect to the image controller which is for the selected printer, [Get Tray/Paper Profile information] is available.
- When you use [Get Tray/Paper Profile information], go to Step 6.
- When you set [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode] manually, go to Step 7.

- 5 On [Get paper Information] screen, select [Get Tray Information] or [Get Paper Profile] and select the tray information or paper profile which you use then click [OK].

The information you get is displayed to [Tray / Paper Profile Information]. [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode] are set automatically.

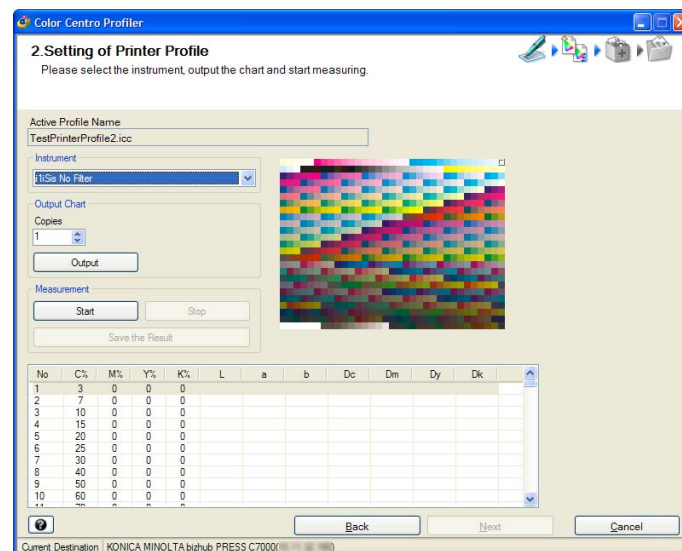
- 6 Select paper type, paper color, paper weight and glossy mode which you use from [Paper Type], [Paper Color], [Weight Unit], [Glossy Mode] and [Paper Weight].
 - When you use [Get Tray/Paper Profile information], you cannot set manually [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode].
- 7 Click [Next].
 - When you select [New Measurement] from [Measurement Setting], the Chart Measurement screen appears. In this case, go to the step described on page 11-30.
 - When you select [Use Existing Measurement File] from [Measurement Setting], the UCR/GCR Setting screen appears. In this case, go to the step described on page 11-31.

11.6.4 Chart Measurement

On the Chart Measurement screen, select the instrument and start the measurement.

- ✓ To use the instrument, you need to install the device driver of the instrument to your computer.
- ✓ The chart pattern and available paper size differ according to the selected instrument.
- ✓ According to the selected instrument, measurement operations differ. For detailed information on how to operate, refer to user's guide of instrument respectively.

- 1 From [Instrument], select the instrument to use for the measurement.



According to the selection, the chart image appears on the upper-right of the screen.

- [11Sis (UV Filter)] returns the measurement result with the UV cut filter.

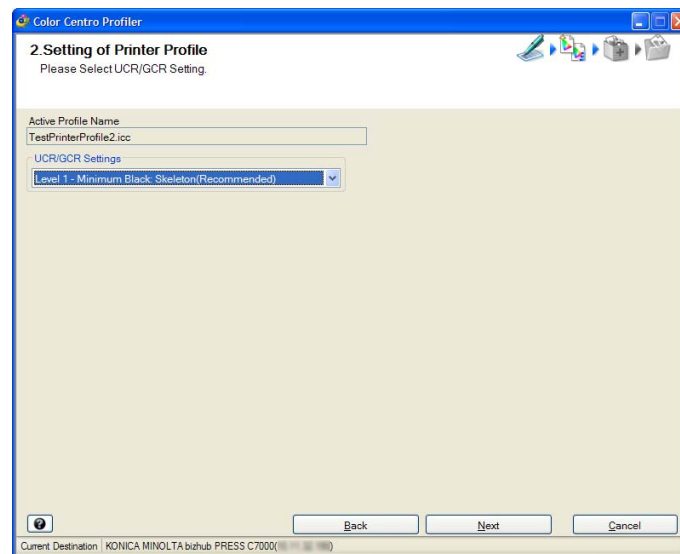
- 2 Specify the copy number of the chart outputting to [Copies].
- 3 Click [Output] to print the chart.
- 4 Click [Start] to start the measurement.
 - According to the selected instrument, the operation screen appears. Follow the instructions on the pages that follow.
 - For details of how to use instruments (colorimeters), refer to their instruction manuals.
 - The current position of measurement appears on the chart image of the upper-right of the screen.
 - If you measure a wrong line, a warning message appears. You can select either to try again with the correct line or to proceed to the next line.
 - To stop the measurement, click [Stop].
 - After the acquirement of measurement data, [Save the Result] becomes available.
 - The value of each patch appears in the measurement result list.

- 5 Click [Save the Result] after completing the measurement.
[Save As] screen appears.
- 6 Specify the saving place and file name, and click [Save].
Returns to the Chart Measurement screen after saving the measurement result file.
- 7 Click [Next].
the UCR/GCR Setting screen appears.
→ Go to the step described on page 11-31.

11.6.5 Select UCR/GCR Setting

On the UCR/GCR Setting screen, select the UCR/GCR level concerning the generation of the Black separation on CMYK separation process.

- 1 Select the UCR/GCR level from [UCR/GCR Setting] of the UCR/GCR Setting screen.



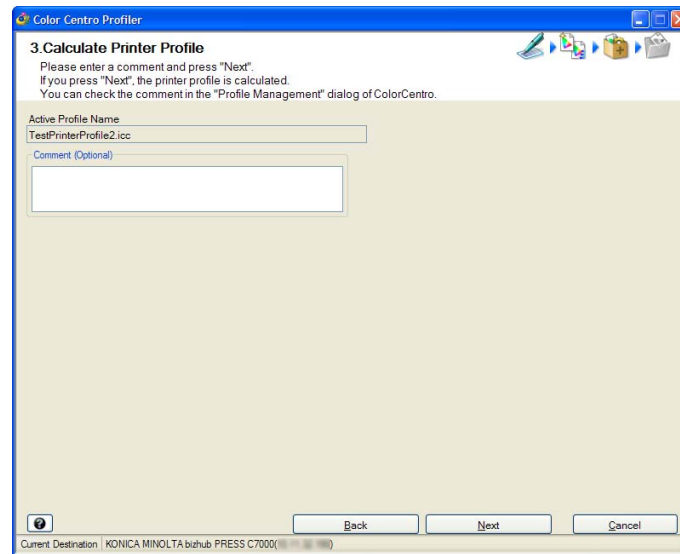
- You can set the amount of CMY to be replaced with Black.
- [Level 1 - Minimum Black Skeleton (Recommended)] decreases the amount of the generation of the Black separation most.
- [Level 5 - Max Black: Full Black] increases the amount of the generation of the Black separation most.

- 2 Click [Next].
The Comment screen appears.
→ Go to the step described on page 11-32.

11.6.6 Enter the Comment

On the Comment screen, enter the comment to embed to the profile you create, as required. You can confirm the comment when you select the profile on Color Centro Profiler.

- 1 Enter the comment to [Comment (Optional)].

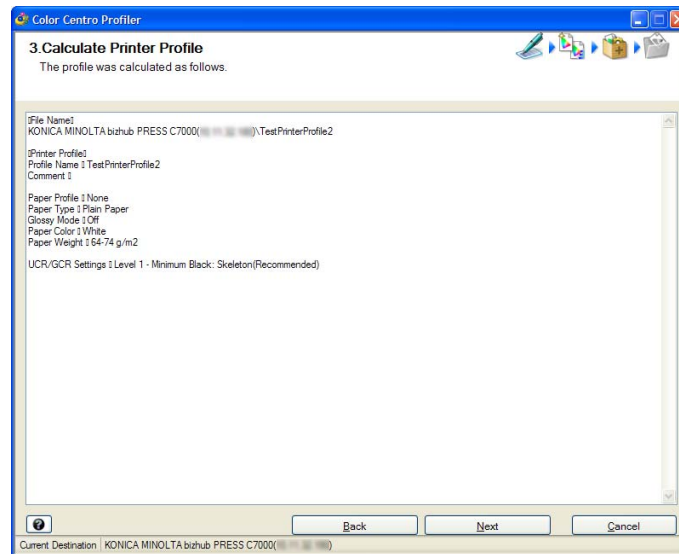


- 2 Click [Next].
Profile is calculated and generated.
After completing calculation, the Calculation Result screen appears.
→ Go to the step described on page 11-33.

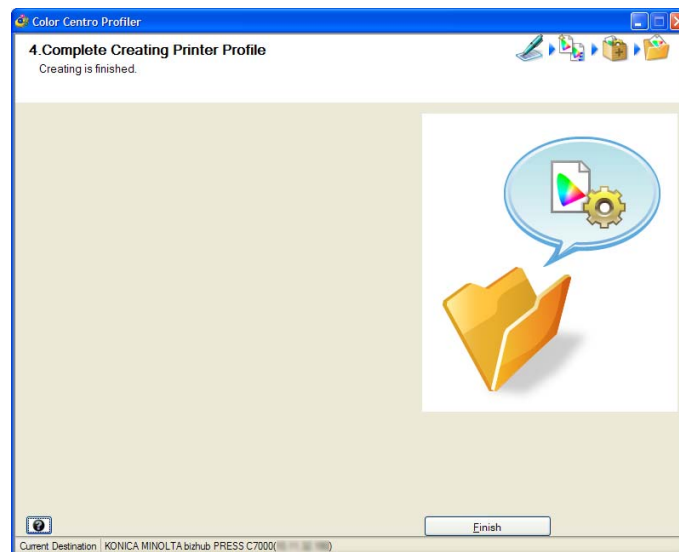
11.6.7 Confirm and Complete the Profile

On the Calculation Result screen, displays the list of the setting of the generated printer profile.

- 1 Confirm the setting which is displayed on the Calculation Result screen.



- 2 Click [Next].
The Complete Profile Set screen appears.
- 3 Click [Finish].



The wizard is completed.

- If you launched Color Centro Profiler by clicking [CMYK Target Profile] of [Profile Management], the Color Centro Profiler is closed to return to [Profile Management] screen.
- If you have created a RGB-CMYK device link profile with Color Centro Profiler, the Profile Determination screen appears.
- If you have created a CMYK-CMYK device link profile with Color Centro Profiler, the Profile Determination screen appears.
- If you have created or have edited a profile set with Color Centro Profiler, the wizard screen (the Profile Determination screen) appears, respectively.

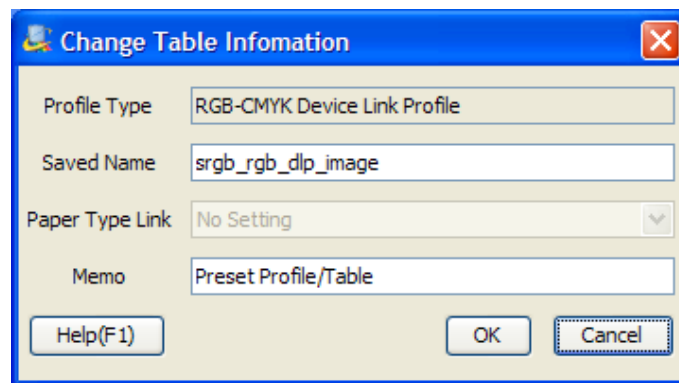
11.7 RGB-CMYK Device Link Profile Management

This section describes how to copy, delete, reload, change table information, export and import the RGB-CMYK device link profile.

11.7.1 Copy from the Image Controller

You can make a duplication of the RGB-CMYK device link profile in the image controller, to the image controller.

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the RGB-CMYK device link profile to copy.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Copy].
[Change Table Information] screen appears.



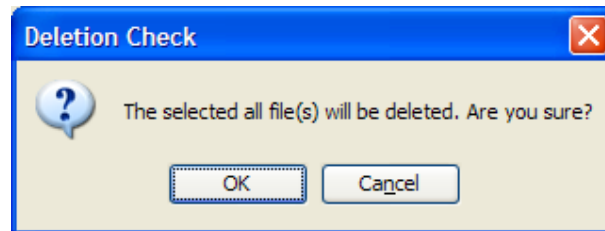
- When you select the multiple RGB-CMYK device link profiles, [Copy] is not available.
- When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
- Similar operation can be done when you select [File] menu - [Copy].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
→ You cannot save the RGB-CMYK device link profile of the same name with those in the image controller.
- 6 Click [OK].
The duplication of the RGB-CMYK device link profile is generated in the image controller.

11.7.2 Delete

You can delete the saved RGB-CMYK device link profile.

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the RGB-CMYK device link profile to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
 - You can delete the multiple RGB-CMYK device link profiles.
- 3 Click [Delete].

Confirmation screen appears.



- Similar operation can be done when you select [File] menu - [Delete].
 - When you select the RGB-CMYK device link profile which was registered at factory shipping, [Delete] is not available.
- 4 To delete, click [OK].

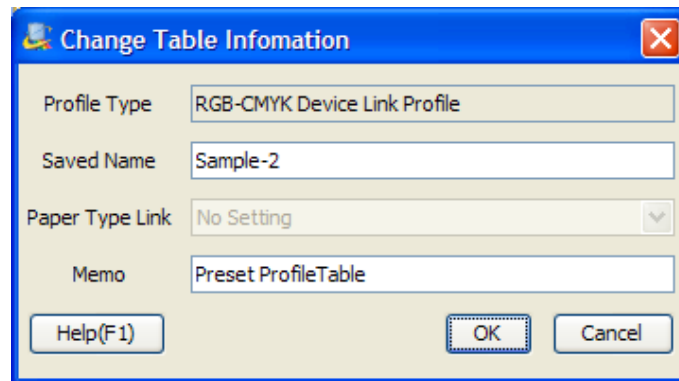
The selected RGB-CMYK device link profile is deleted.

 - When you select the multiple RGB-CMYK device link profiles, all of those are deleted at a time.
 - You cannot restore the RGB-CMYK device link profile you have deleted.

11.7.3 Change the Information

You can change the information of the saved RGB-CMYK device link profile.

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the RGB-CMYK device link profile to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Change Table Information].
[Change Table Information] screen appears.



- When you select the multiple RGB-CMYK device link profiles, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Change Table Information].
- 4 Edit [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - But, you cannot change the table name of the RGB-CMYK device link profile which was registered at factory shipping.
 - 5 Click [OK].
The RGB-CMYK device link profile information is changed.

11.7.4 Export from the Image Controller

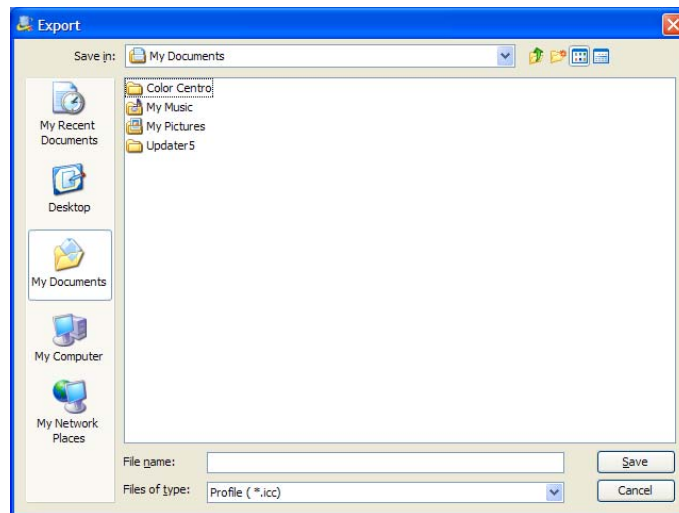
You can export the RGB-CMYK Device Link Profile of the image controller to [Local], [My Documents] or [Network].

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].

The list appears according to the selection.

 - For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the RGB-CMYK device link profile to export.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Export].

[Export] screen appears.



- When you select the multiple RGB-CMYK device link profiles, [Export] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Export] is not available.
 - Similar operation can be done when you select [File] menu - [Export].
- 5 Specify the saving place and file name for the RGB-CMYK device link profile to export, and click [Save].

Exporting to the specified place is executed.

[Export] screen is closed to return to [Profile Management] screen.

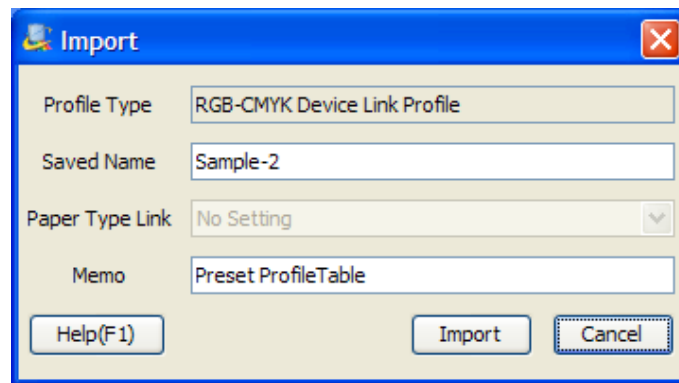
11.7.5 Import (Register) to the Image Controller

You can import (register) the RGB-CMYK Device Link Profile of [Local], [My Documents] or [Network] in [Controller].

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.
- 2 Select the places from [Local], [My Documents] or [Network] of the tree format, where the RGB-CMYK Device Link Profile are saved.

The list appears according to the selection.
- 3 From the list, select the RGB-CMYK device link profile to import.
- 4 Click [Import].

[Import] screen appears.



- When you select the multiple RGB-CMYK device link profiles, [Import] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Import] is not available.
 - Similar operation can be done when you select [File] menu - [Import].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
 - You cannot save the RGB-CMYK device link profile of the same name with those in the image controller.
 - 6 Click [Import].

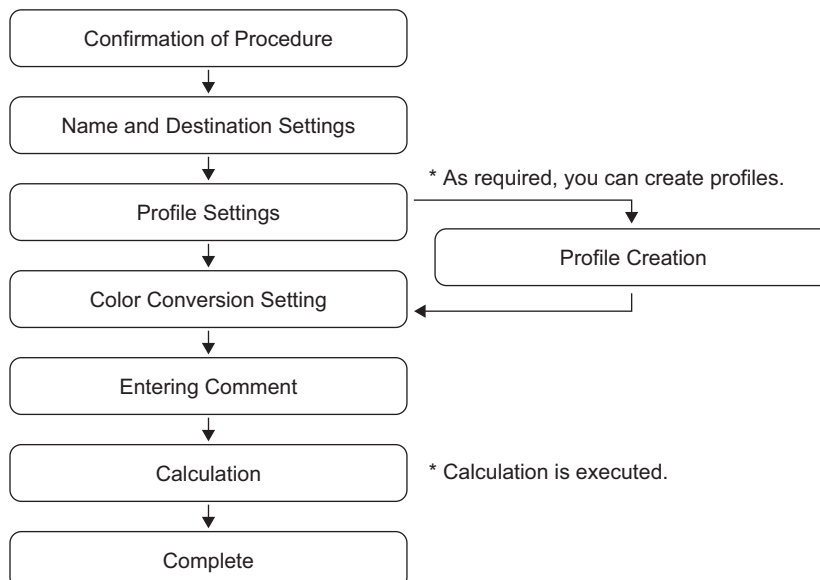
The RGB-CMYK device link profiles are registered to [Controller].
[Import] screen is closed to return to [Profile Management] screen.

11.8 Create the RGB-CMYK Device Link Profile

This section describes how to create the new RGB-CMYK device link profile by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can create the RGB-CMYK device link profile.

The flow of the wizard is as follows;



The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

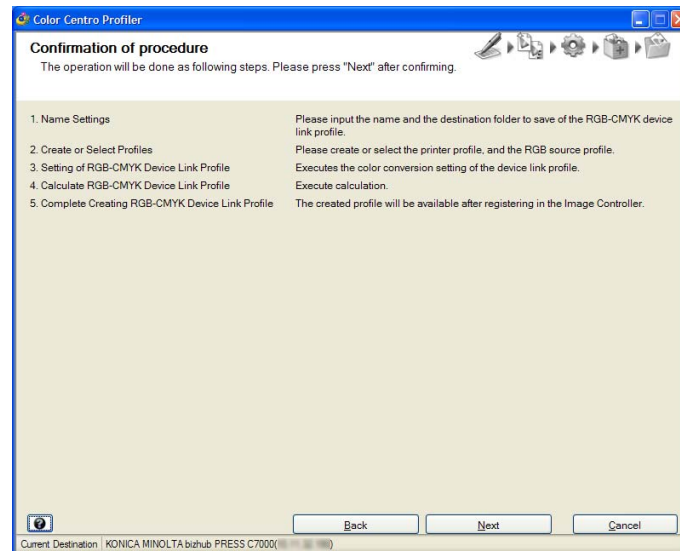
11.8.1 Launch Color Centro Profiler

You can create the RGB-CMYK device link profile by using Color Centro Profiler.

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.

- 2 Click [New].

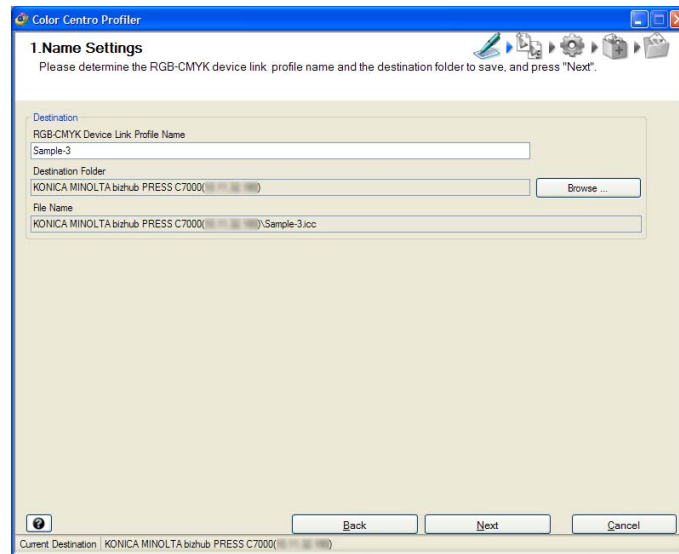
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 11-41.

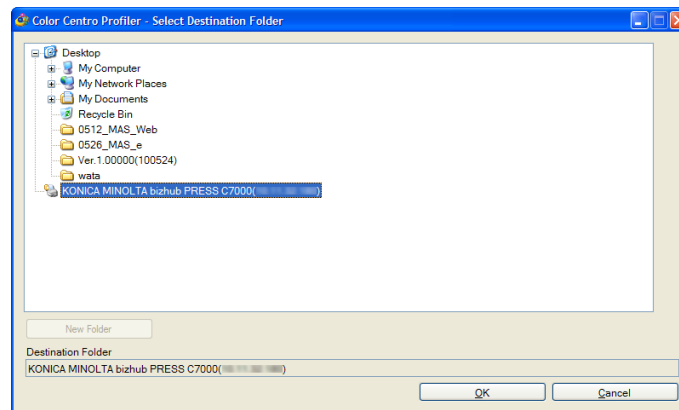
11.8.2 Set the Profile Name and the Destination

- 1 Specify the name of RGB-CMYK device link profile you create to [RGB-CMYK Device Link Profile Name] of [Name Settings] screen.



- There is no need to enter the extension because of being added automatically.
- You cannot save the profile of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the profile name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.

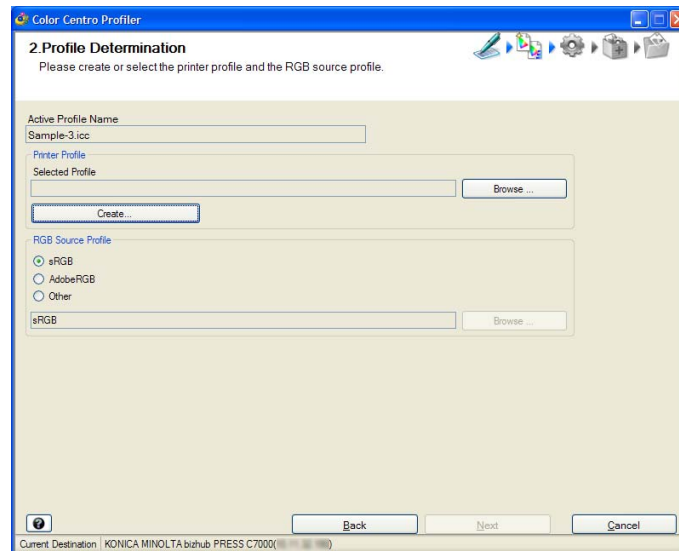


- 3 Select the destination folder for saving the RGB-CMYK device link profile you create and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Profile Determination screen appears.
 - When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 11-42.

11.8.3 Determine the Profiles

On the Profile Determination screen, specify the printer profile and the RGB source profile which are used by RGB-CMYK device link profile. In addition, you can create the printer profile as required.

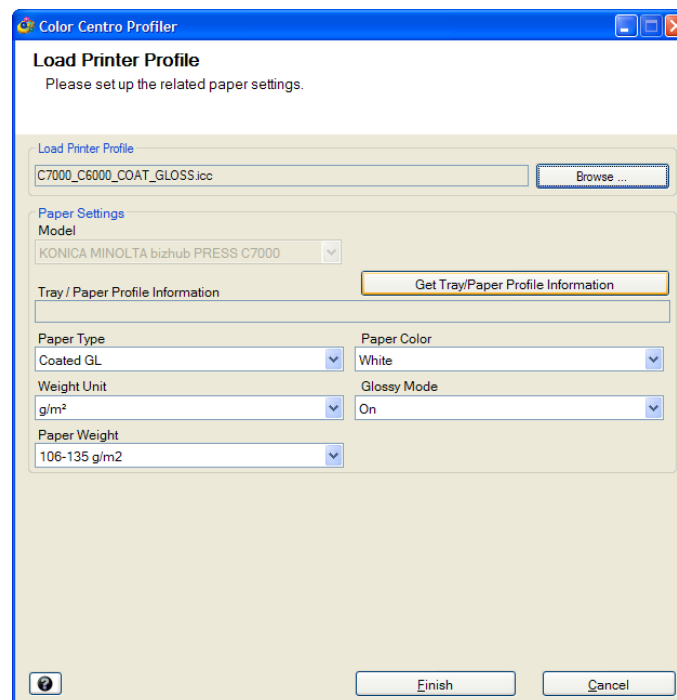
- 1 Specify the name of printer profile which is used by RGB-CMYK device link profile. When you use the existed printer profile, click [Browse]. When you create the new printer profile, click [Create].



- When you click [Browse], [Load Printer Profile] screen appears. In this case, go to Step 2.
- When you click [Create], go to the steps described from page 11-28 to page 11-33.

- 2 On the screen displayed by clicking [Browse] of [Load Printer Profile], select a printer profile to use and click [Open].

The selected printer profile appears on [Load Printer Profile]. As required, set [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode]. Then, click [Finish] to return to the Profile Determination screen.



- 3 Specify the RGB source profile which is used by RGB-CMYK device link profile. When you use [sRGB] or [Adobe RGB] which are preset to the image controller, select [sRGB] or [Adobe RGB]. When you specify the other RGB source profile, select [Other] and click [Browse].

- When you click [Browse], go to Step 4.
- When you select [sRGB] or [AdobeRGB], go to Step 5.

- 4 On the screen displayed by clicking [RGB Source Profile] - [Browse], select the RGB source profile used and click [Open].

The selected RGB source profile is displayed below [Other] of [RGB Source Profile].

- 5 Click [Next].

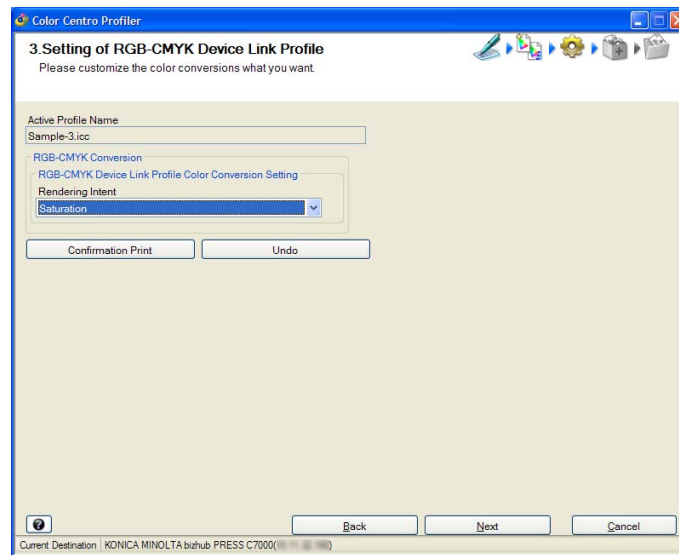
The Customize Color Conversions screen appears.

- Go to the step described on page 11-43.

11.8.4 Customize the Color Conversions

On the Customize Color Conversions screen, you can set the rendering intent.

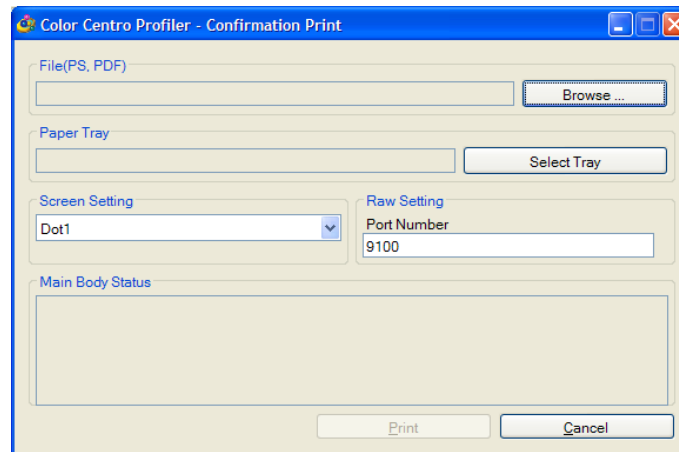
- 1 From [RGB-CMYK Conversion] - [Rendering Intent], select the rendering intent.



- [Perceptual] is the setting to represent the color near to the color which is before conversion.
- [Saturation] is the setting to represent the color which maintains as much as possible the brightness of the color which is before conversion.
- When you make all contents of the setting on the screen the same content as recommended setting, click [Undo].

- 2 Click [Confirmation Print] for the test printing.

[Confirmation Print] screen appears.



- 3 Specify the setting of confirmation printing and click [Print].

- Click [Browse] to display the screen to select the image for printing.
- Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
- From [Screen Setting], select the screen setting used by confirmation printing.
- Specify the port number used by confirmation printing to [Port Number].
- When you click [Cancel], [Confirmation Print] screen is closed to return to the Customize Color Conversions screen.

4 Confirm the result of test printing.

5 Click [Next].

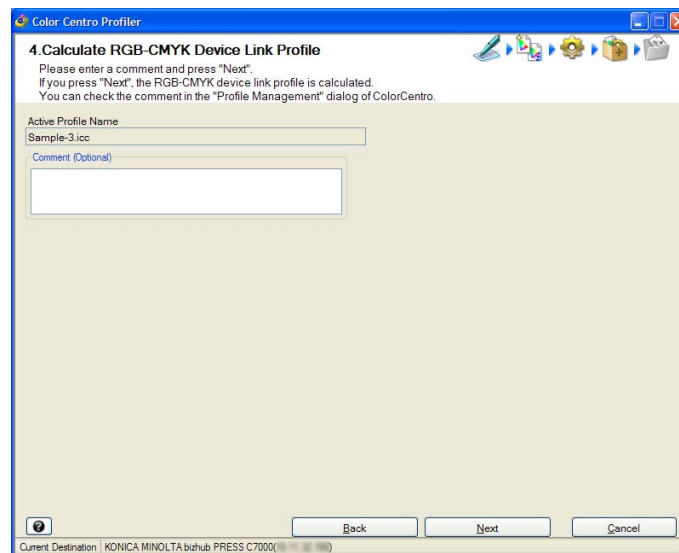
The Comment screen appears.

- Go to the step described on page 11-44.

11.8.5 Enter the Comment

On the Comment screen, enter the comment to embed to the profile you create, as required. You can confirm the comment when you select the profile on Color Centro Profiler.

1 Enter the comment to [Comment (Optional)].



2 Click [Next].

Profile is calculated and generated.

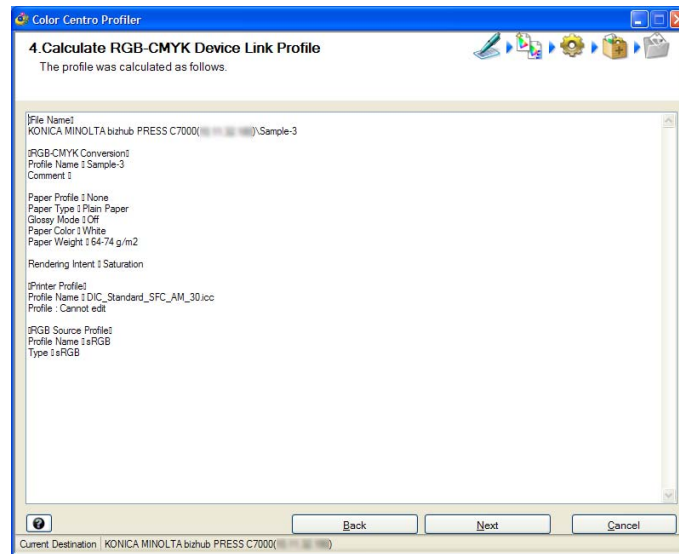
After completing calculation, the Calculation Result screen appears.

- Go to the step described on page 11-45.

11.8.6 Confirm and Complete the Profile

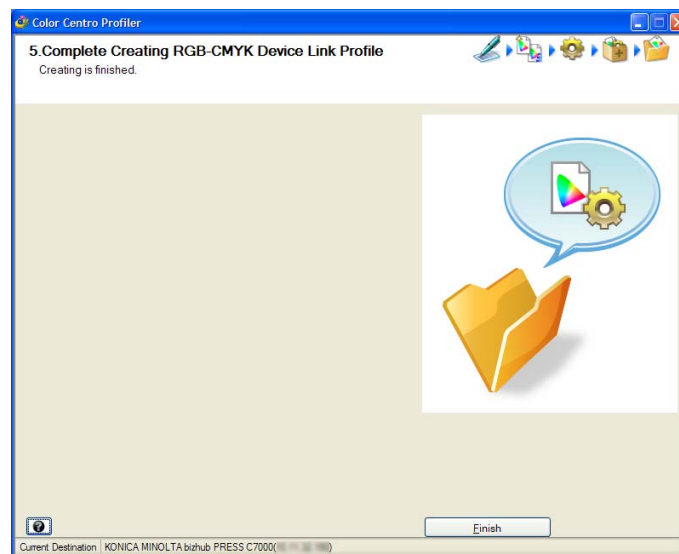
On the Calculation Result screen, displays the list of the setting of the generated RGB-CMYK device link profile.

- 1 Confirm the setting which is displayed on the Calculation Result screen.



- 2 Click [Next].
The Complete Profile Set screen appears.

- 3 Click [Finish].



The wizard is completed.
Color Centro Profiler is closed to return to [Profile Management] screen.

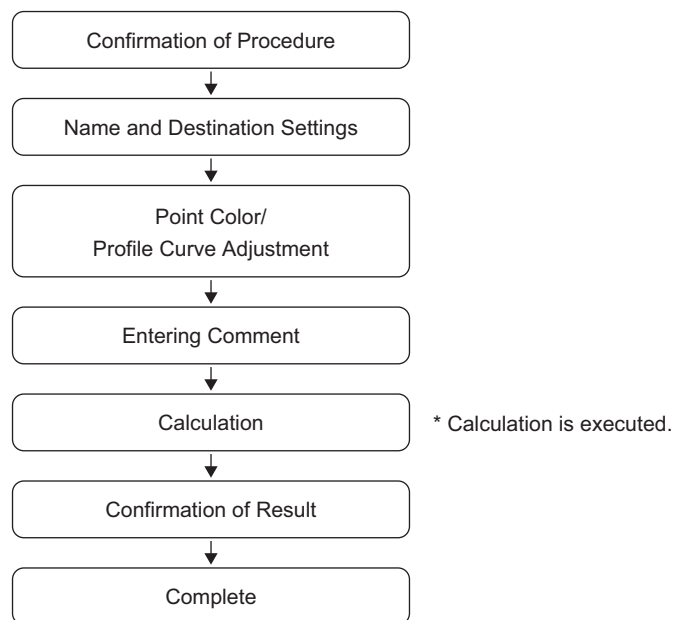
11.9 Edit the RGB-CMYK Device Link Profile

This section describes how to edit the RGB-CMYK device link profile by launching Color Centro Profiler.

Color Centro Profiler enables the adjustment of the point color per object and the adjustment of the profile curve.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can edit the RGB-CMYK device link profile.

The flow of the wizard is as follows;



The following buttons appear on the wizard screen. Use those as required.

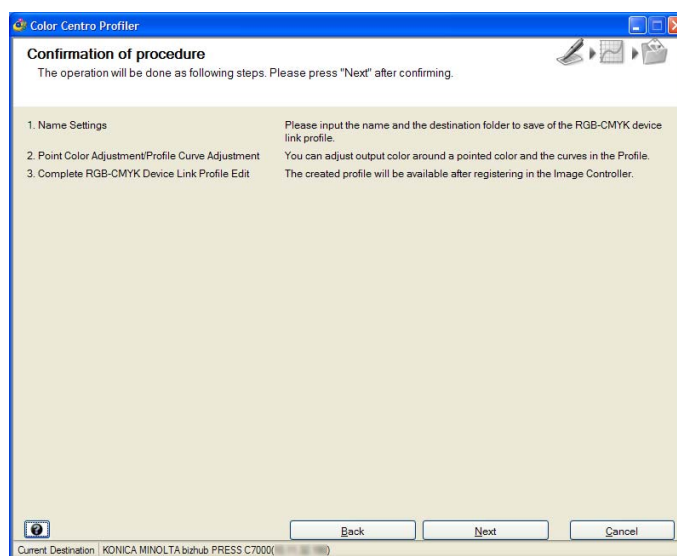
- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

11.9.1 Launch Color Centro Profiler

You can edit the RGB-CMYK device link profile by using Color Centro Profiler.

- 1 Click [RGB-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [RGB-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the RGB-CMYK device link profile to edit.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Edit].

Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



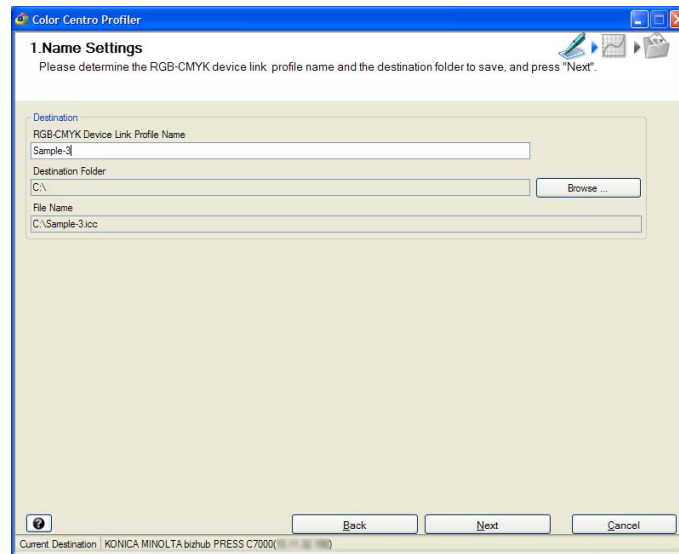
- 4 Confirm the contents, click [Next].

[Name Settings] screen appears.

 - Go to the step described on page 11-48.

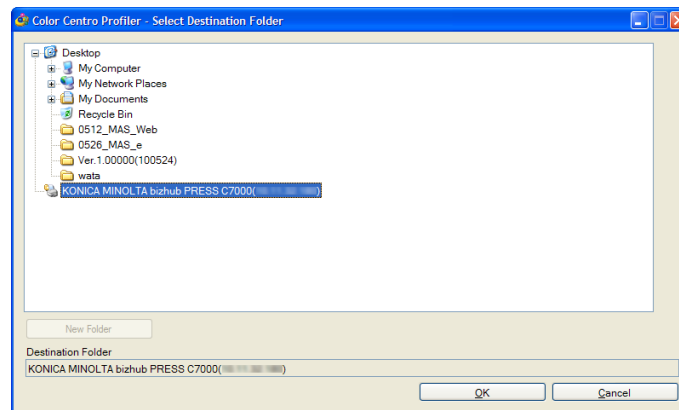
11.9.2 Set the Profile Name and the Destination

- 1 Specify the name of RGB-CMYK device link profile you edit to [RGB-CMYK Device Link Profile Name] of [Name Settings] screen.



- When you save the RGB-CMYK device link profile with another name or to another place, enter the profile name and go to Step 2.
- When you overwrite the RGB-CMYK device link profile in which some settings are edited, go to Step 4.
- You cannot save the profile of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the profile name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.

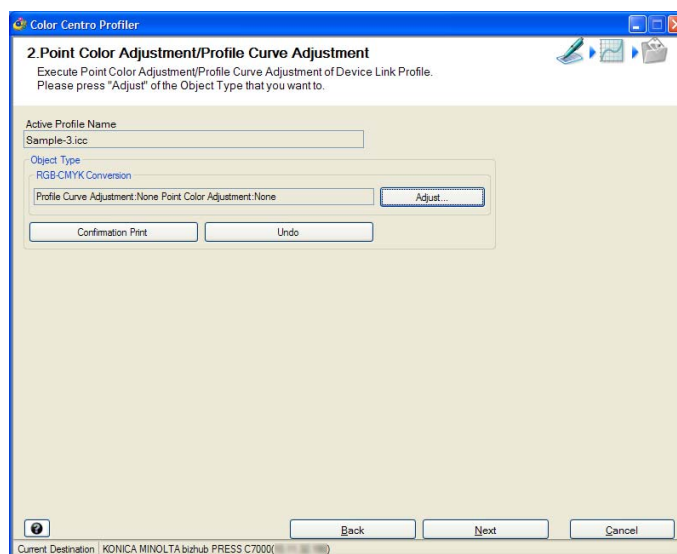


- 3 Select the destination folder for saving the RGB-CMYK device link profile you edit and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Point Color Adjustment/Profile Curve Adjustment screen appears.
 - When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 11-49.

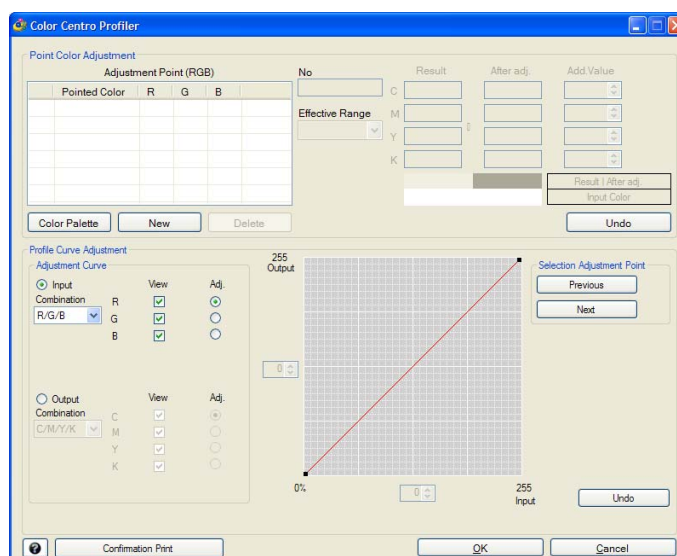
11.9.3 Adjust the Point Color / Profile Curve

On the Point Color Adjustment/Profile Curve Adjustment screen, you can execute the adjustment of the specified color outputting and profile curve.

- 1 When you execute the adjustment of the point color and the adjustment of the profile curve, click [Adjust].

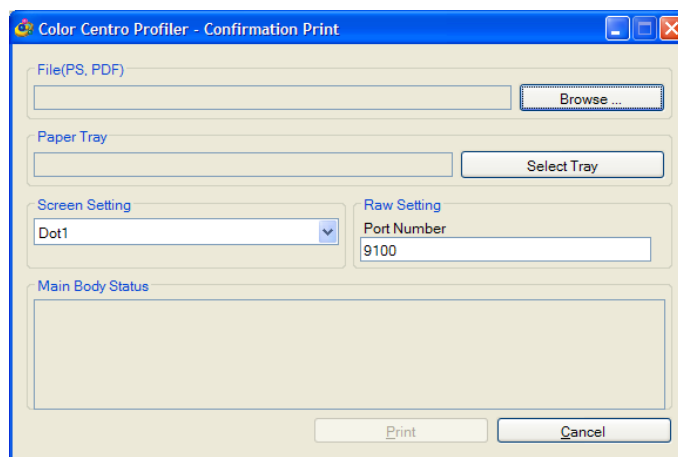


The Adjustment screen appears.



- 2 If necessary, adjust the point color as follows;
 - When you add the new point color, execute the operation described on page 11-51.
 - When you edit the existing point color, execute the operation described on page 11-52.
 - When you delete the existing point color, execute the operation described on page 11-52.
- 3 If necessary, execute the adjustment of the profile curve.
 - For detailed information on how to adjust the profile curve, refer to page 11-52.
- 4 Click [Confirmation Print] for the test printing.

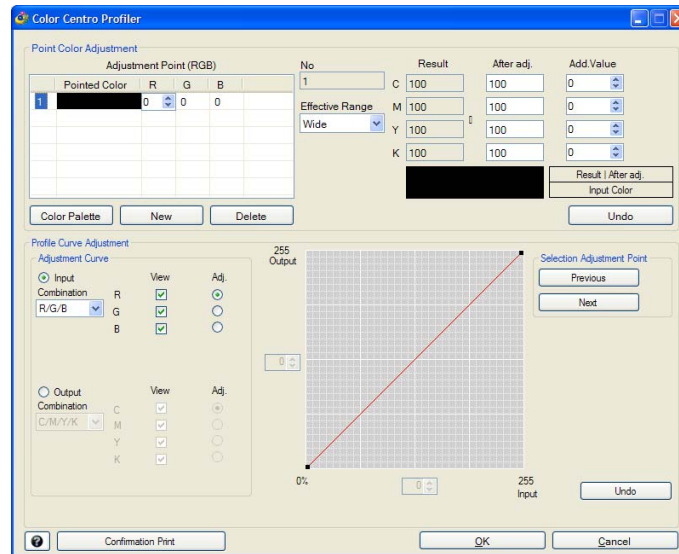
[Confirmation Print] screen appears.



- 5 Specify the setting of confirmation printing and click [Print].
 - Click [Browse] to display the screen to select the image for printing.
 - Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
 - From [Screen Setting], select the screen setting used by confirmation printing.
 - Specify the port number used by confirmation printing to [Port Number].
 - When you click [Cancel], [Confirmation Print] screen is closed to return to the Adjustment screen.
- 6 Confirm the result of test printing and click [OK].
The Adjustment is closed to return to the Point Color Adjustment/Profile Curve Adjustment screen.
- 7 Click [Next].
Profile is calculated and generated.
After completing calculation, the Complete Profile screen appears.
 - Go to the step described on page 11-53.

Add the New Spot Color

- 1 Click [New].
A numbered line is added on [Adjustment Point].



- 2 Specify the value (0 to 255) of the added point color of the added line to [R], [G] and [B]. Or, select the color from [Color Setting] screen displayed by clicking [Color Palette]. And click [OK].
The new input color is displayed on [Pointed Color].
- 3 From [Effective Range], select the effective range.
The color conversion result of the adjusted point is displayed on [Result] and [After adj.]. In addition, the color of [Result] is displayed on the upper-left of the Sample Color (below the [Result]) and the color of [After adj.] is displayed on the upper-right.
 - When you select [Narrow], the result of adjustment has influence on the color range which includes only the near colors to the input color.
 - When you select [Wide], the result of adjustment has influence on the color range which includes the colors which are away from the input color.
 - When you select [Normal], it has influence on the middle range between [Narrow] and [Wide].
 - You can specify [Effective Range] per adjustment point.
 - The values displayed on [Result] and [After adj.] are the value to which Input curve and color conversion table are applied. (Output curve is not applied to the curve yet.)
- 4 Enter the value into [Add. Value] to make the value of [After adj.] the target value.
 - When you discard the setting of [Add. Value], click [Undo] of [Point Color Adjustment].

Edit the Existing Point Color

- 1 From [Adjustment Point], select the adjustment point (input color) to edit.
The input color is displayed on the lower of the Sample Color (below [Result]).
- 2 From [Effective Range], select the effective range.
The color conversion result of the adjusted point is displayed on [Result] and [After adj.]. In addition, the color of [Result] is displayed on the upper-left of the Sample Color and the color of [After adj.] is displayed on the upper-right.
 - When you select [Narrow], the result of adjustment has influence on the color range which includes only the near colors to the input color.
 - When you select [Wide], the result of adjustment has influence on the color range which includes the colors which are away from the input color.
 - When you select [Normal], it has influence on the middle range between [Narrow] and [Wide].
 - You can specify [Effective Range] per adjustment point.
 - The values displayed on [Result] and [After adj.] are the value to which Input curve and color conversion table are applied. (Output curve is not applied to the curve yet.)
- 3 Enter the value into [Add. Value] to make the value of [After adj.] the target value.
 - When you discard the setting of [Add. Value], click [Undo] of [Point Color Adjustment].

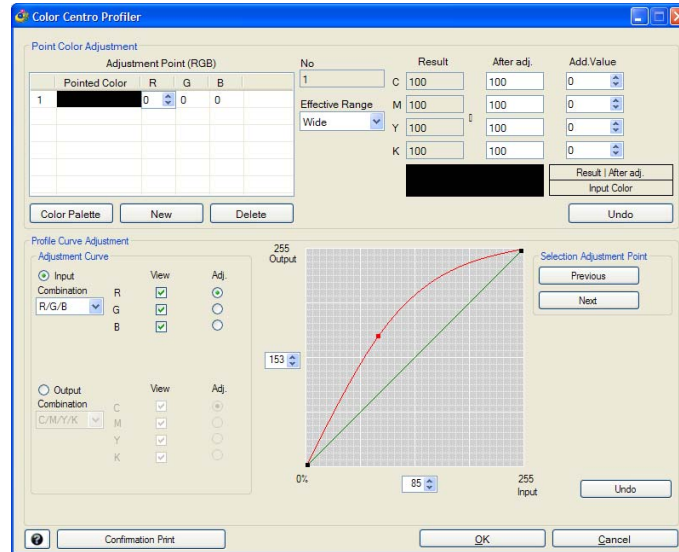
Delete the Existing Point Color

- 1 From [Adjustment Point], select the adjustment point (input color) to delete.
- 2 Click [Delete].
The selected adjustment point is deleted.

Adjust the Profile Curve

- 1 From [Adjustment Curve], select [Input] or [Output].
 - When you execute the adjustment of input curve, select [Input].
 - When you execute the adjustment of output curve, select [Output].
- 2 Select the combination of colors from [Combination].
According to the selection from [Combination], [View] check box per each color and [Adjustment] radio button per each color appear.
 - When you select [Input], select [R/G/B] or [RGB].
 - When you select [Output], select [C/M/Y/K], [CMY/K] or [CMYK].
 - When you select [R/G/B] or [C/M/Y/K], you can adjust the profile curves of each color.
 - When you select [RGB] or [CMYK], you can adjust the consolidated profile curves of RGB or CMYK.
 - When you select [CMY/K], you can adjust the consolidated profile curve of CMY and the profile curve of K.
- 3 When you want to display the profile curve of one color, check [View] of that color.
 - When you want to hide the profile curve of one color, remove the check mark from [View] of that color.
- 4 When you want to adjust the profile curve of one color, select [Adj.] of that color.
 - When check mark of [View] for one color was not selected and you select [Adj.] for the same color, [View] is checked automatically.

- 5 To execute the adjustment of the profile curve, you can drag and move the beginning point/ending point (at both ends of the profile curve) and adjustment points (added by the clicking on the profile curve).

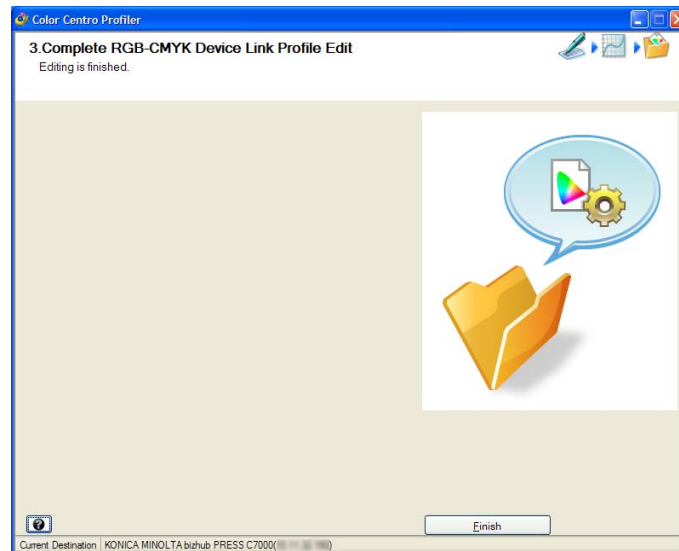


- The selected adjustment point appears as a small red square.
- By clicking [Previous] or [Next], you can switch the point selection to the previous or the next.
- You can move the selected point by entering the coordinate values into the input boxes which are on the center of vertical/horizontal axes.
- When you want to delete the added point, drag it to the adjacent point or drop it outside of the profile curve area.
- When you want to reset the adjusted setting, click [Undo] of [Profile Curve Adjustment].

11.9.4 Complete the Profile

After completing calculation, the Complete Profile screen appears.

- 1 Click [Finish].



The wizard is completed.

Color Centro Profiler is closed to return to [Profile Management] screen.

11.10 CMYK-CMYK Device Link Profile Management

This section describes how to copy, delete, reload, change table information, export, and import the CMYK-CMYK device link profile.

11.10.1 Copy from the Image Controller

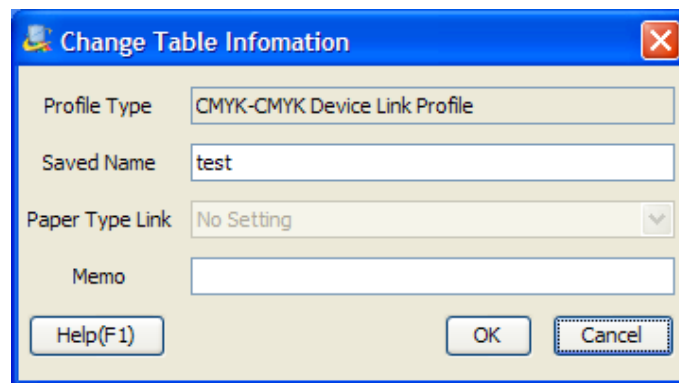
You can make a duplication of the CMYK-CMYK device link profile in the image controller, to the image controller.

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].

The list appears according to the selection.

 - For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the CMYK-CMYK device link profile to copy.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Copy].

[Change Table Information] screen appears.



- When you select the multiple CMYK-CMYK device link profiles, [Copy] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Copy].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
 - You cannot save the CMYK-CMYK device link profile of the same name with those in the image controller.
 - 6 Click [OK].

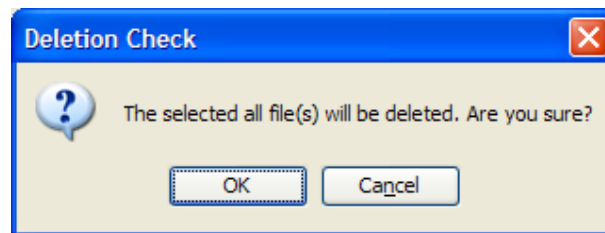
The duplication of the CMYK-CMYK device link profile is generated in the image controller.

11.10.2 Delete

You can delete the saved CMYK-CMYK device link profile.

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the CMYK-CMYK device link profile to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
 - You can delete the multiple CMYK-CMYK device link profiles.
- 3 Click [Delete].

Confirmation screen appears.



- Similar operation can be done when you select [File] menu - [Delete].
 - When you select the CMYK-CMYK device link profile which was registered at factory shipping, [Delete] is not available.
- 4 To delete, click [OK].

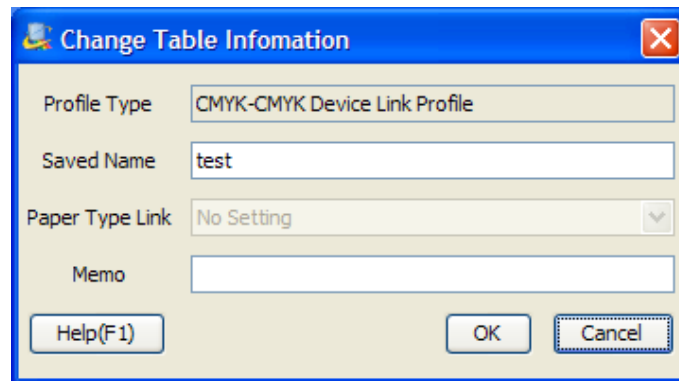
The selected CMYK-CMYK device link profile is deleted.

 - When you select the multiple CMYK-CMYK device link profiles, all of those are deleted at a time.
 - You cannot restore the CMYK-CMYK device link profile you have deleted.

11.10.3 Change the Information

You can change the information of the saved CMYK-CMYK device link profile.

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the CMYK-CMYK device link profile to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Change Table Information].
[Change Table Information] screen appears.

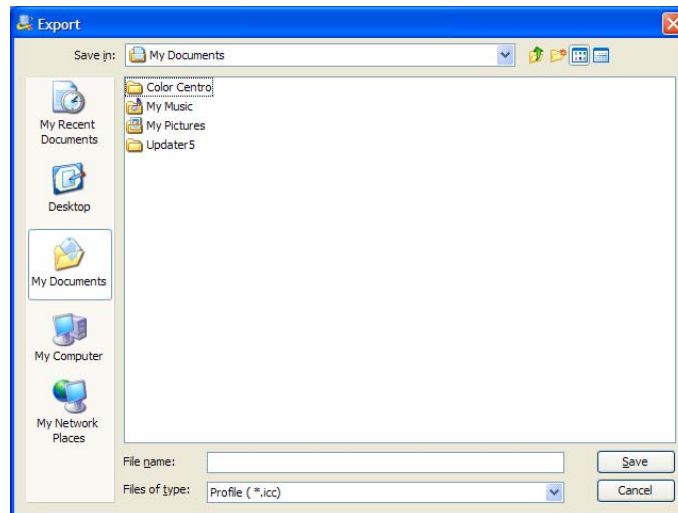


- When you select the multiple CMYK-CMYK device link profiles, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Change Table Information].
- 4 Edit [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters) as required.
 - But, you cannot change the table name of the CMYK-CMYK device link profile which was registered at factory shipping.
 - 5 Click [OK].
The CMYK-CMYK device link profile information is changed.

11.10.4 Export from the Image Controller

You can export the CMYK-CMYK Device Link Profile of the image controller to [Local], [My Documents] or [Network].

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view, select [Controller].
The list appears according to the selection.
→ For detailed information on how to connect another controller, refer to page 14-2.
- 3 From the list, select the CMYK-CMYK device link profile to export.
→ When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 4 Click [Export].
[Export] screen appears.



- When you select the multiple CMYK-CMYK device link profiles, [Export] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Export] is not available.
 - Similar operation can be done when you select [File] menu - [Export].
- 5 Specify the saving place and file name for the CMYK-CMYK device link profile to export, and click [Save].
Exporting to the specified place is executed.
[Export] screen is closed to return to [Profile Management] screen.

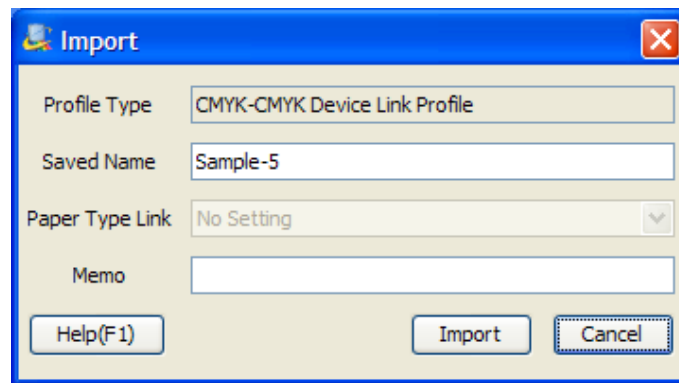
11.10.5 Import (Register) to the Image Controller

You can import (register) the CMYK-CMYK Device Link Profile of [Local], [My Documents] or [Network] in [Controller].

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.
- 2 Select the places from [Local], [My Documents] or [Network] of the tree format, where the CMYK-CMYK Device Link Profile are saved.

The list appears according to the selection.
- 3 From the list, select the CMYK-CMYK device link profile to import.
- 4 Click [Import].

[Import] screen appears.



- When you select the multiple CMYK-CMYK device link profiles, [Import] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Import] is not available.
 - Similar operation can be done when you select [File] menu - [Import].
- 5 Specify [Saved Name] (within 31 one-byte alpha-numerical characters) and [Memo] (within 128 one-byte alpha-numerical characters).
 - You cannot save the CMYK-CMYK device link profile of the same name with those in the image controller.
 - 6 Click [OK].

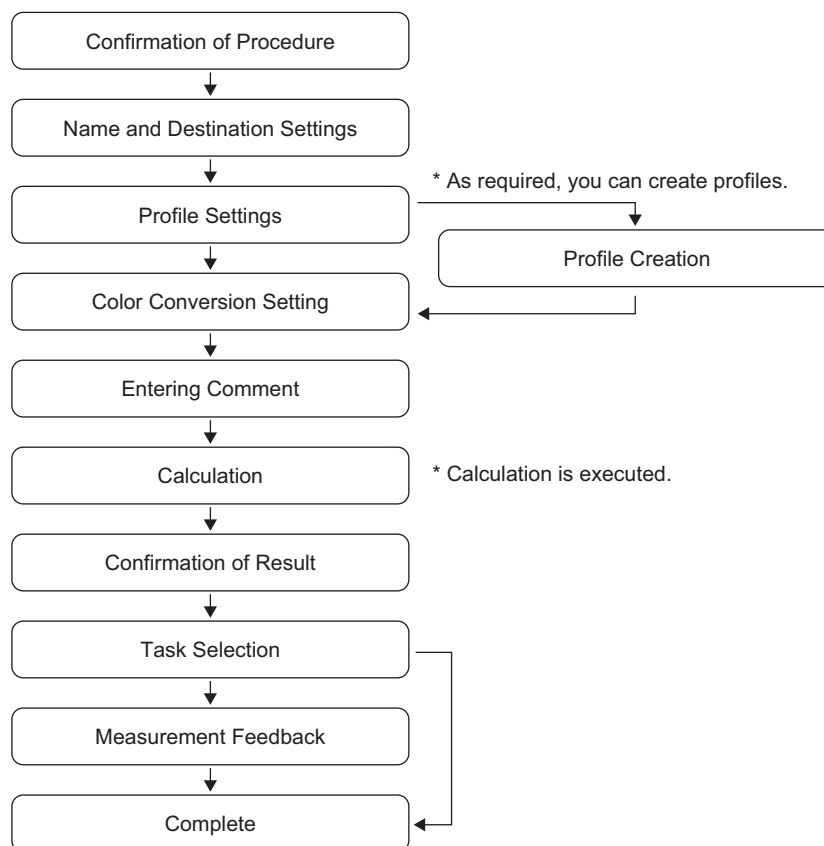
The CMYK-CMYK device link profiles registered to [Controller].
[Import] screen is closed to return to [Profile Management] screen.

11.11 Create the CMYK-CMYK Device Link Profile

This section describes how to create the new CMYK-CMYK device link profile by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can create the CMYK-CMYK device link profile.

The flow of the wizard is as follows;



The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

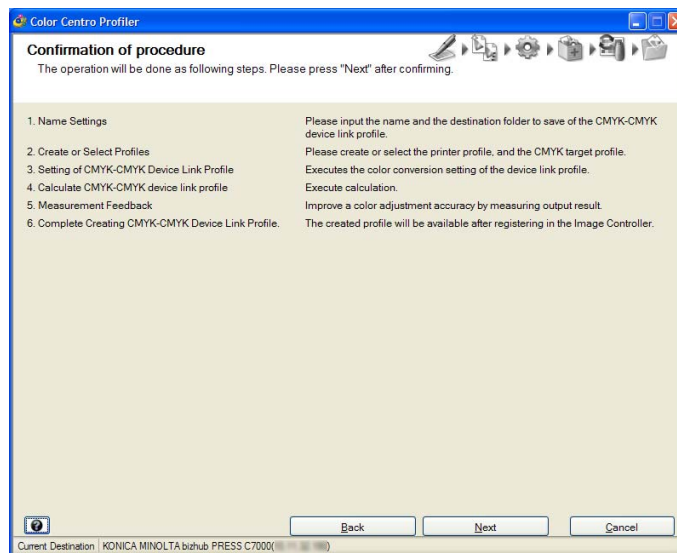
11.11.1 Launch Color Centro Profiler

You can create the CMYK-CMYK device link profile by using Color Centro Profiler.

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
→ Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.

- 2 Click [New].

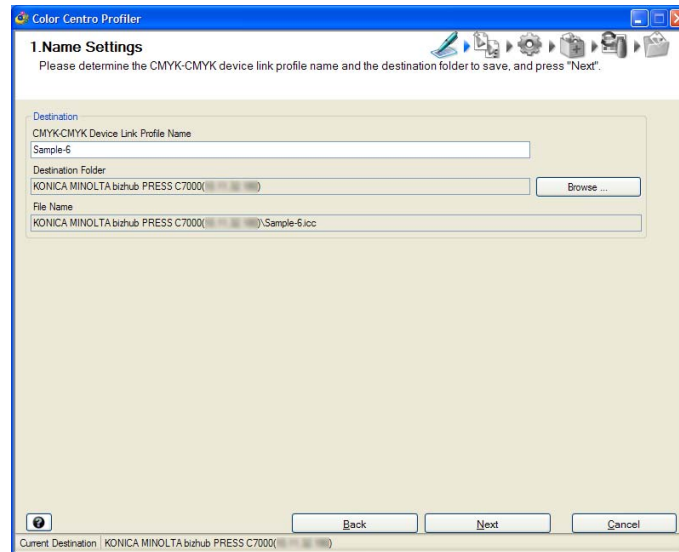
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 11-61.

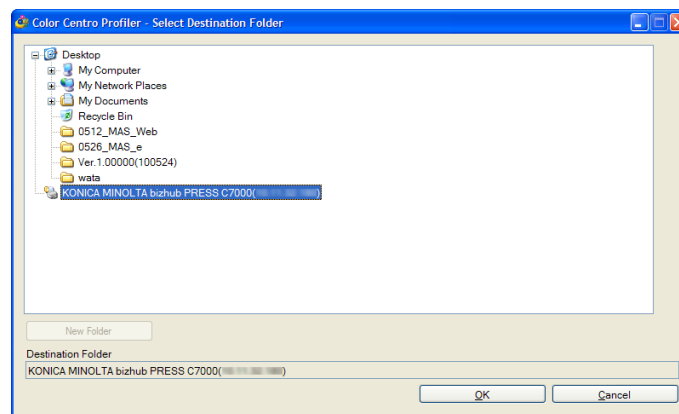
11.11.2 Set the Profile Name and the Destination

- 1 Specify the name of CMYK-CMYK device link profile you create to [CMYK-CMYK Device Link Profile Name] of [Name Settings] screen.



- There is no need to enter the extension because of being added automatically.
- You cannot save the profile of the same name with those registered at factory shipping in the image controller.
- You can't use "DEVICE" (not only the capital letter but also the small letter) for the profile name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.

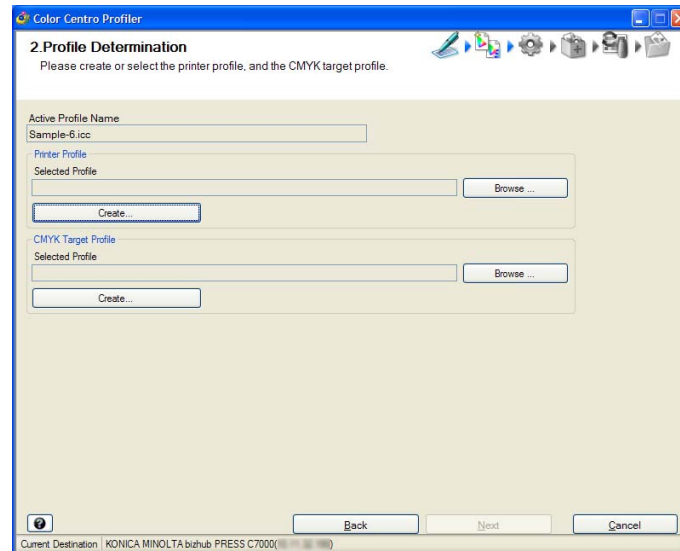


- 3 Select the destination folder for saving the CMYK-CMYK device link profile you create and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Profile Determination screen appears.
 - When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 11-62.

11.11.3 Determine the Profiles

On the Profile Determination screen, specify the printer profile and the CMYK target profile which are used by CMYK-CMYK device link profile. In addition, you can create the printer profile and the CMYK target profile as required.

- 1 Specify the name of printer profile which is used by CMYK-CMYK device link profile. When you use the existed printer profile, click [Browse]. When you create the new printer profile, click [Create].

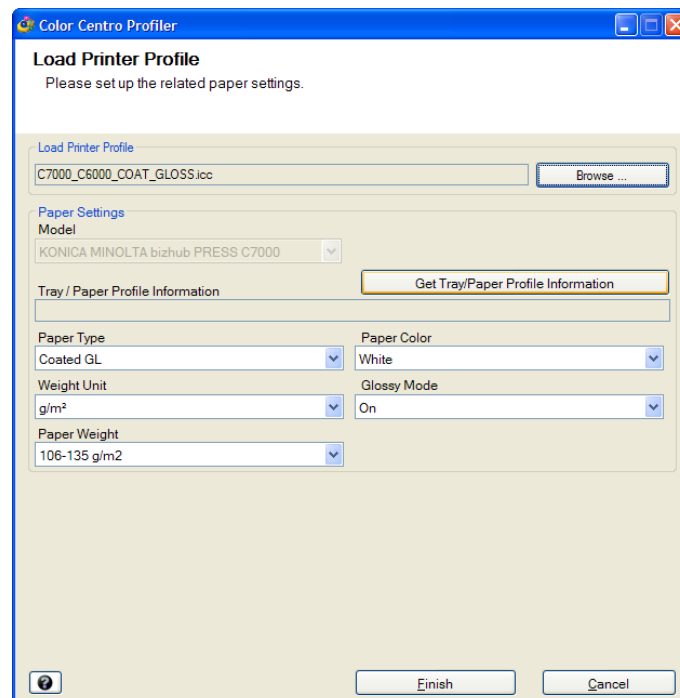


→ When you click [Browse], [Load Printer Profile] screen appears. In this case, go to Step 2.

→ When you click [Create], go to the steps described from page 11-28 to page 11-33.

- 2 On the screen displayed by clicking [Browse] of [Load Printer Profile], select a printer profile to use and click [Open].

The selected printer profile appears on [Load Printer Profile]. As required, set [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode]. Then, click [Finish] to return to the Profile Determination screen.



- 3 Specify the CMYK target profile which is used by CMYK-CMYK device link profile. When you use the existed CMYK target profile, click [Browse]. When you create the new CMYK target profile, click [Create].

- When you click [Browse], go to Step 4.
- When you click [Create], go to the steps described from page 11-16 to page 11-20.

- 4 On the screen displayed by clicking [CMYK Target Profile] - [Browse], select the CMYK target profile used and click [Open].

The selected CMYK target profile is displayed to [Selected Profile] of [CMYK Target Profile].

- 5 Click [Next].

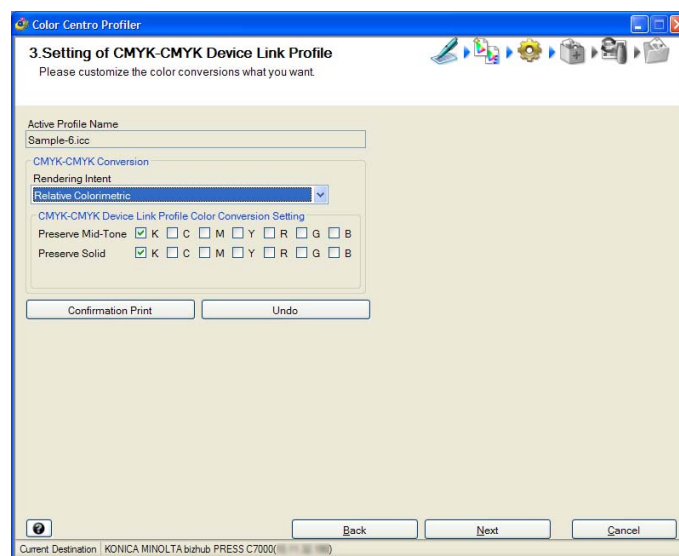
The Customize Color Conversions screen appears.

- Go to the step described on page 11-63.

11.11.4 Customize the Color Conversions

On the Customize Color Conversions screen, you can set the rendering intent, the preserve mid-tone and preserve solid.

- 1 From [CMYK-CMYK Conversion] - [Rendering Intent], select the rendering intent.



- [Relative Colorimetric] is the setting to execute color conversion regarding the paper color as completely white. The paper color parts are represented as colorlessness after color conversion.
- [Absolute Colorimetric] is the setting to execute color conversion maintaining the measurement value of the paper color. The paper color parts are represented with the color near the actual paper color after color conversion. When you select [Absolute Colorimetric], [Preserve Mid-Tone] and [Preserve Solid] are not available.
- When you make all contents of the setting on the screen the same content as recommended setting, click [Undo].

- 2 When you set the preserve mid-tone for one color, check [Preserve Mid-Tone] of that color.

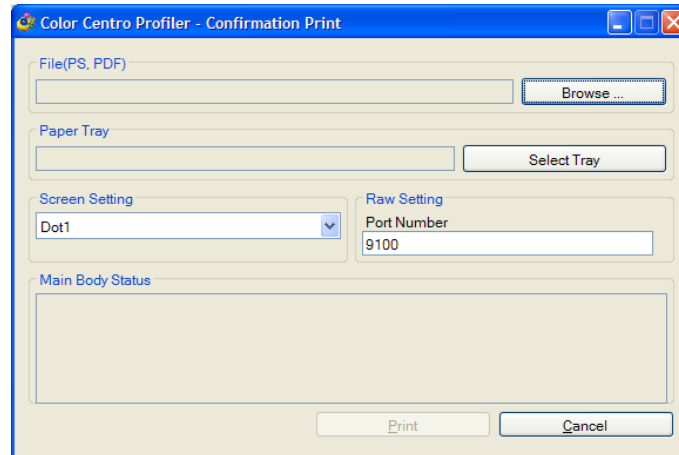
- [Preserve Mid-Tone] is a setting to recompose the color after the color conversion as the same one color which has composed the color before the color conversion.
- The setting of [C], [M], [Y] and [K] is the setting for the color composed of C/M/Y/K only.
- The setting of [R] is the setting for the color composed of [M] and [Y].
- The setting of [G] is the setting for the color composed of [C] and [Y].
- The setting of [B] is the setting for the color composed of [C] and [M].
- In some cases, you can't set [Preserve Mid-Tone] and [Preserve Solid] at the same time.

- 3 When you set the preserve solid for one color, check [Preserve Solid] of that color.

- [Preserve Solid] is a setting to represent the solid part after the color conversion with the same color which is used for the solid part before the color conversion.
- The setting of [C], [M], [Y], and [K] is the setting about the color composed of C/M/Y/K only,
- The setting of [R] is the setting for the color composed of [M] and [Y].

- The setting of [G] is the setting for the color composed of [C] and [Y].
- The setting of [B] is the setting for the color composed of [C] and [M].
- In some cases, you can't set [Preserve Mid-Tone] and [Preserve Solid] at the same time.

- 4 Click [Confirmation Print] for the test printing.
[Confirmation Print] screen appears.

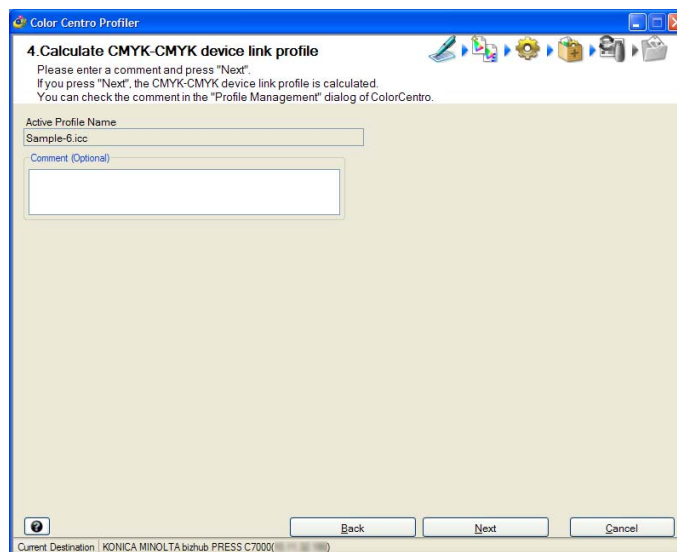


- 5 Specify the setting of confirmation printing and click [Print].
- Click [Browse] to display the screen to select the image for printing.
 - Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
 - From [Screen Setting], select the screen setting used by confirmation printing.
 - Specify the port number used by confirmation printing to [Port Number].
 - When you click [Cancel], [Confirmation Print] screen is closed to return to the Customize Color Conversions screen.
- 6 Confirm the result of test printing.
- 7 Click [Next].
- The Comment screen appears.
- Go to the step described on page 11-65.

11.11.5 Enter the Comment

On the Comment screen, enter the comment to embed to the profile you create, as required. You can confirm the comment when you select the profile on Color Centro Profiler.

- 1 Enter the comment to [Comment (Optional)].

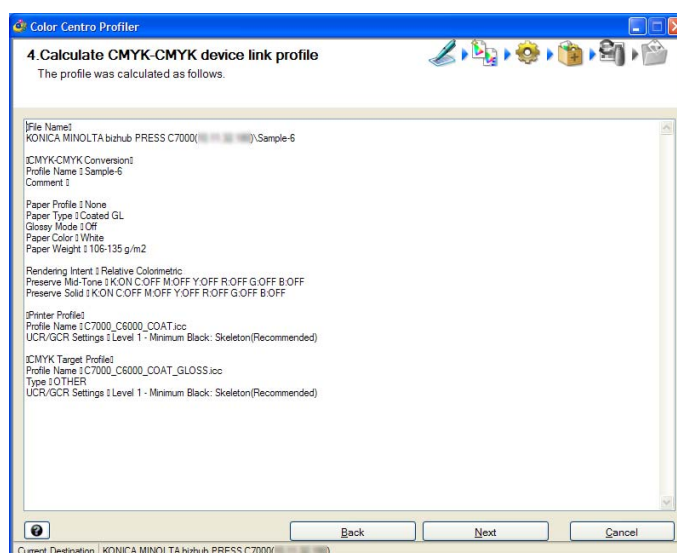


- 2 Click [Next].
Profile is calculated and generated.
After completing calculation, the Calculation Result screen appears.
→ Go to the step described on page 11-65.

11.11.6 Confirm the Calculation Result

Calculation Result screen displays the list of the setting of the generated CMYK-CMYK device link profile.

- 1 Confirm the setting which is displayed on the Calculation Result screen.

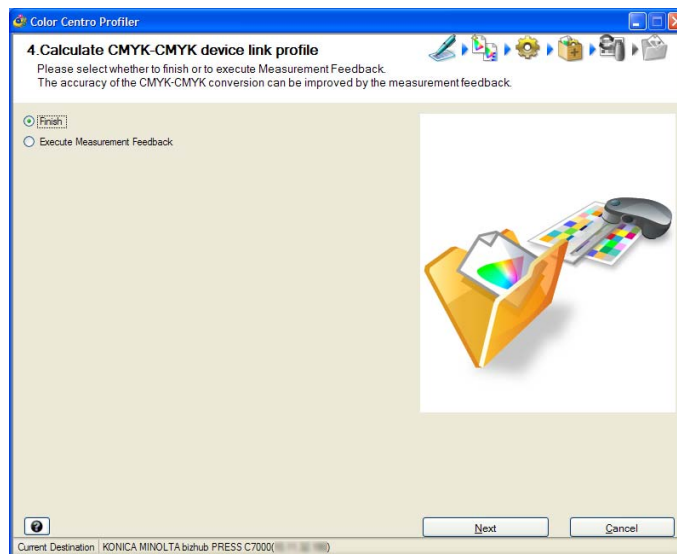


- 2 Click [Next].
The Select Task screen appears.
→ Go to the step described on page 11-66.

11.11.7 Select the Task

On the Select Task screen, you can select whether to finish or to execute Measurement Feedback.

- 1 Select [Finish] or [Execute Measurement Feedback].



→ The measurement feedback is the operation to improve the accuracy of the CMYK-CMYK conversion.

- 2 Click [Next].

→ When you select [Finish], the Complete screen appears. Go to the step described on page 11-70.
→ When you select [Execute Measurement Feedback], the Measurement Feedback screen appears. Go to the step described on page 11-67.

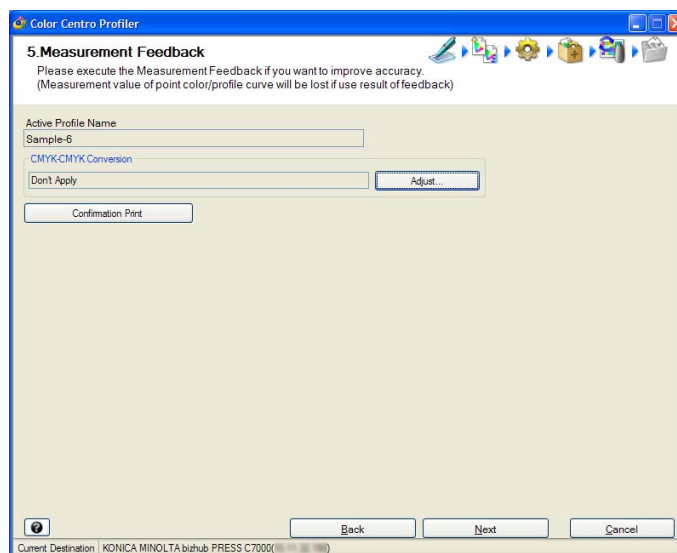
11.11.8 Execute the Measurement Feedback

On the Measurement Feedback screen, you can execute the operation to improve the accuracy of the CMYK-CMYK conversion.

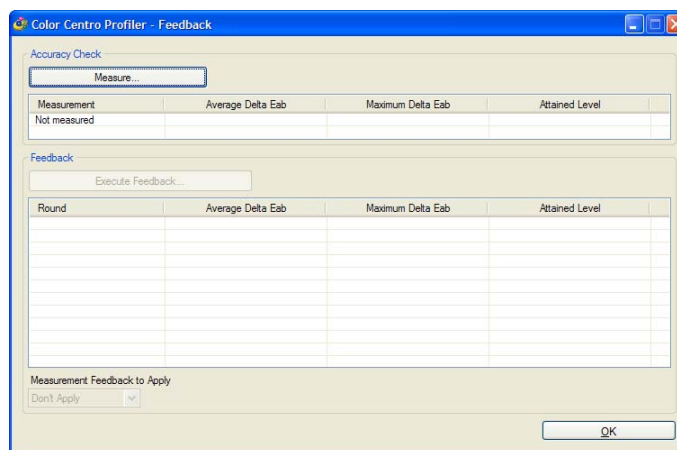
By repeating the measurement with the instrument, you can acquire the best measurement data to apply to the profile.

- ✓ To use the instrument, you need to install the device driver of the instrument to your computer.
- ✓ The chart pattern and available paper size differ according to the selected instrument.
- ✓ According to the selected instrument, measurement operations differ. For detailed information on how to operate, refer to user's guide of instrument respectively.

- 1 To start the measurement feedback, click [Adjust].

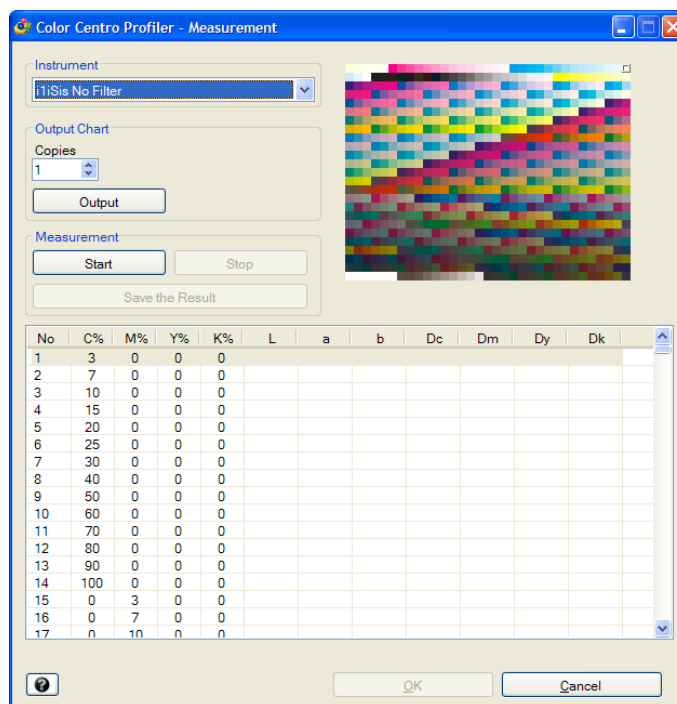


[Feedback] screen appears.



- 2 Click [Measure].

[Measurement] screen appears.



- 3 From [Instrument], select the instrument to use for the measurement.
According to the selection, the chart image appears on the upper-right of the screen.
→ [i1Sis (UV Filter)] returns the measurement result with the UV cut filter.
- 4 Specify the copy number of the chart outputting to [Copies].
- 5 Click [Output] to print the chart.
- 6 Click [Start] to start the measurement.
 - According to the selected instrument, the operation screen appears. Follow the instructions on the pages that follow.
 - The current position of measurement appears on the chart image of the upper-right of the screen.
 - If you measure a wrong line, a warning message appears. You can select either to try again with the correct line or to proceed to the next line.
 - For detailed information on how to operate, refer to user's guide of each instrument.
 - To stop the measurement, click [Stop].
 - After the acquirement of measurement data, [Save the Result] becomes available.
 - The value of each patch appears in the measurement result list.
- 7 Click [Save the Result] after completing the measurement.
[Save As] screen appears.
- 8 Specify the saving place and file name, and click [Save].
[Measurement] screen returns after saving the measurement result file.
- 9 Click [OK].
[Feedback] screen returns.
On [Feedback] screen, the measurement data is displayed.
- 10 Click [Execute Feedback].
Profile is calculated.
After completing calculation, [Measurement] screen appears.
- 11 Repeat from Step 4 to Step 9.

On [Feedback] screen, the new measurement data is added.

The attained level which indicates the improvement of the accuracy is displayed on [Attained Level]

→ The attained level is indicated in 3 levels. The maximum level of the attained level is indicated as "★★★★".

- 12** Confirm [Attained Level] and repeat the operation from Step 10 to Step 11 up to the target level.

On [Feedback] screen, the new measurement data is added.

→ You can repeat these operations 8 times at the maximum.

→ When you reach the maximum level and click [Execute Feedback], the warning screen is displayed. When you execute the feedback, click [OK]. When you finish the feedback, click [Cancel].

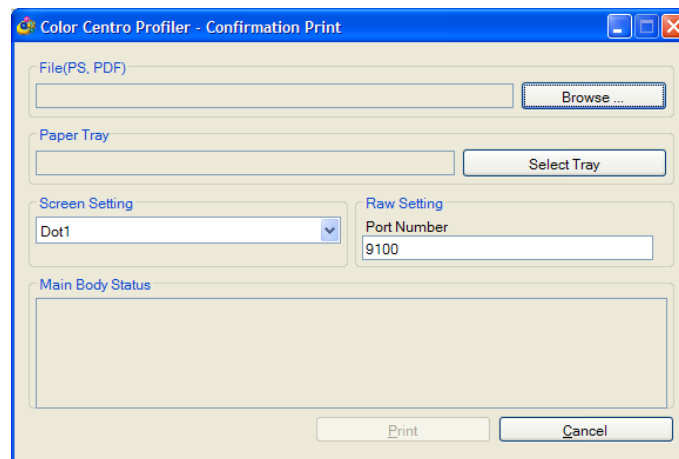
- 13** Confirm [Attained Level] is reached to the target level, and select the number of the feedback (n times) which acquires the value to adopt for profile from [Measurement Feedback to Apply].

- 14** Click [OK].

[Feedback] screen is closed to return to the Measurement Feedback screen.

- 15** Click [Confirmation Print] for the test printing.

[Confirmation Print] screen appears.



- 16** Specify the setting of confirmation printing and click [Print].

→ Click [Browse] to display the screen to select the image for printing.

→ Click [Select Tray] to display the screen to specify the tray used by confirmation printing.

→ From [Screen Setting], select the screen setting used by confirmation printing.

→ Specify the port number used by confirmation printing to [Port Number].

→ When you click [Cancel], [Confirmation Print] screen is closed to return to the Measurement Feedback screen.

- 17** Confirm the result of test printing and click [Next].

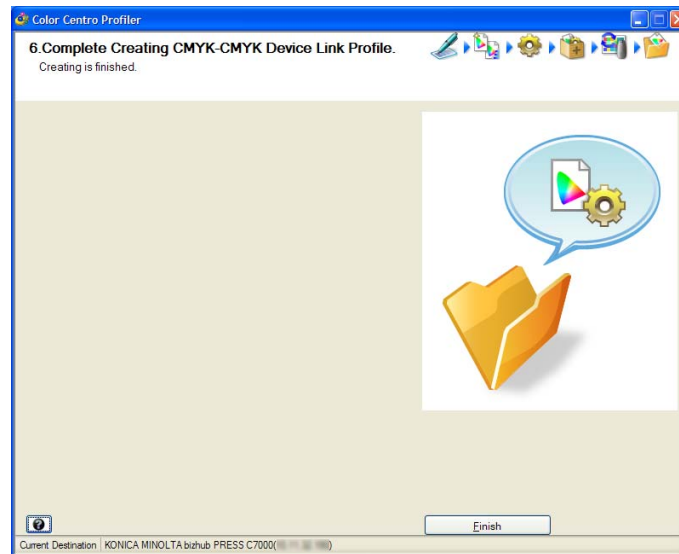
The Complete Profile Set screen appears.

→ Go to the step described on page 11-70.

11.11.9 Complete the Profile

On the Complete the Profile screen, finish the task.

- 1 Click [Finish].



The wizard is completed.

Color Centro Profiler is closed to return to [Profile Management] screen.

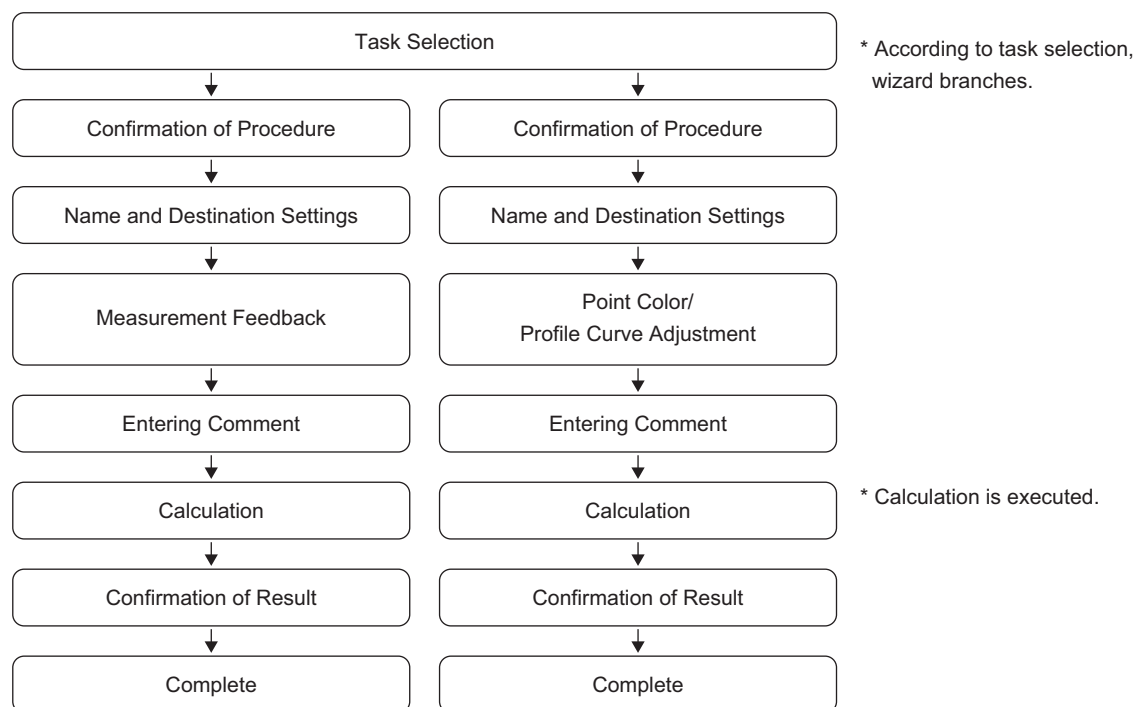
11.12 Edit the CMYK -CMYK Device Link Profile

This section describes how to edit the CMYK-CMYK device link profile by launching Color Centro Profiler.

Color Centro Profiler enables the measurement feedback, the adjustment of the point color per object and the adjustment of the profile curve.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can edit the CMYK-CMYK device link profile.

The flow of the wizard is as follows;



The following buttons appear on the wizard screen. Use those as required.

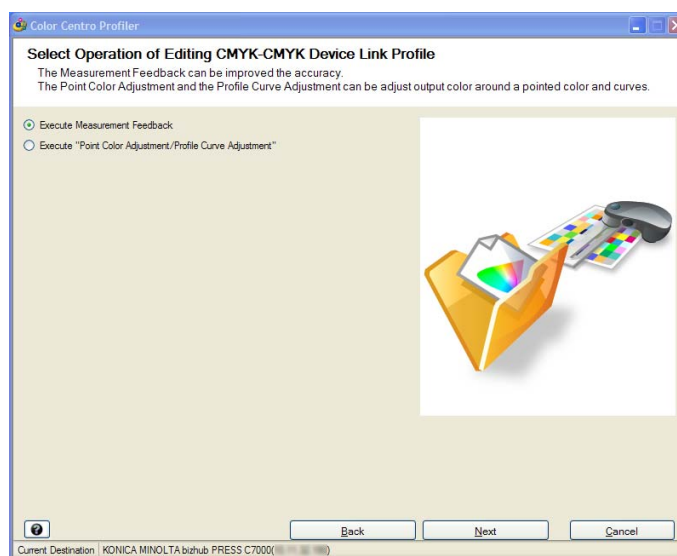
- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

11.12.1 Launch Color Centro Profiler and Select the Task

You can edit the CMYK-CMYK device link profile by using Color Centro Profiler.

- 1 Click [CMYK-CMYK Device Link Profile] on [Profile Management] screen.
 - Similar operation can be done when you select [File] menu - [Profile Type] and select [CMYK-CMYK Device Link Profile] from the displayed sub menu.
- 2 From the tree view and the list, select the CMYK-CMYK device link profile to edit.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload].
- 3 Click [Edit].

Color Centro Profiler is launched as wizard and then Select Task screen appears.



- 4 Select [Execute Measurement Feedback] or [Execute "Point Color Adjustment/Profile Curve Adjustment"] and click [Next].

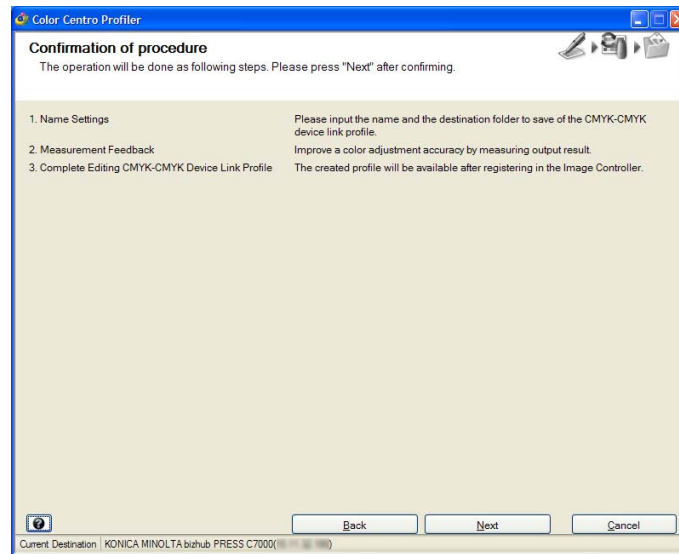
The Confirmation of procedure screen appears.

→ Go to the step described on page 11-73.

11.12.2 Confirm the Procedure

According to the selection of the task, the content of the Confirmation of procedure differ. This section describes the example on which you select [Execute the Measurement Feedback].

- 1 Confirm the content of the Confirmation of procedure screen, and click [Next].



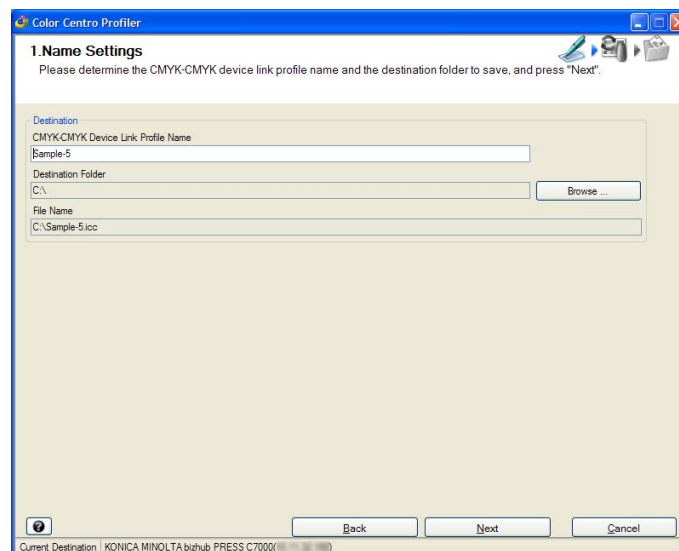
[Name Settings] screen appears.

→ Go to the step described on page 11-73.

11.12.3 Set the Profile Name and the Destination

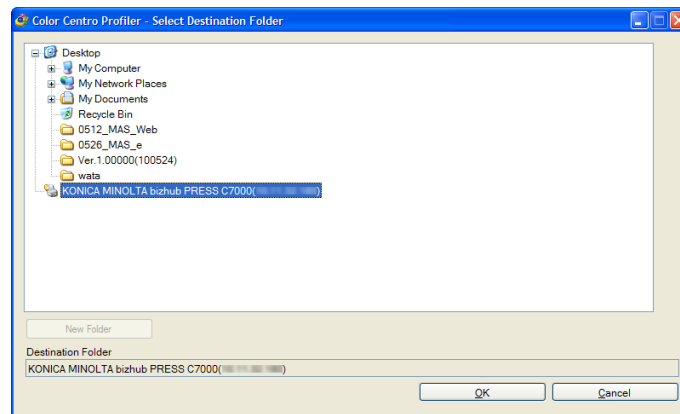
The content of [Name Settings] do not differ even if you select either on the Select Task screen.

- 1 Specify the name of CMYK-CMYK device link profile on [CMYK-CMYK device link Name] of [Name Settings] screen to edit.



- When you save the CMYK -CMYK device link profile with another name or to another place, enter the profile name and go to Step 2.
- When you overwrite the CMYK -CMYK device link profile in which some settings are edited, go to Step 4.
- You cannot save the profile of the same name with those registered at factory shipping in the image controller.
- You can't use "DEVICE" (not only the capital letter but also the small letter) for the profile name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.



- 3 Select the destination folder for saving the CMYK -CMYK device link profile you edit and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
According to the selection on the Select Task screen, the Measurement Feedback screen or the Point Color Adjustment/Profile Curve Adjustment screen appears.
- When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - When you select [Execute Measurement Feedback] on the Select Task screen, the Measurement Feedback screen appears. Go to the step described on page 11-74.
 - When you select [Execute "Point Color Adjustment/Profile Curve Adjustment"] on the Select Task screen, the Point Color Adjustment/Profile Curve Adjustment screen appears. Go to the step described on page 11-75.

11.12.4 Execute the Measurement Feedback

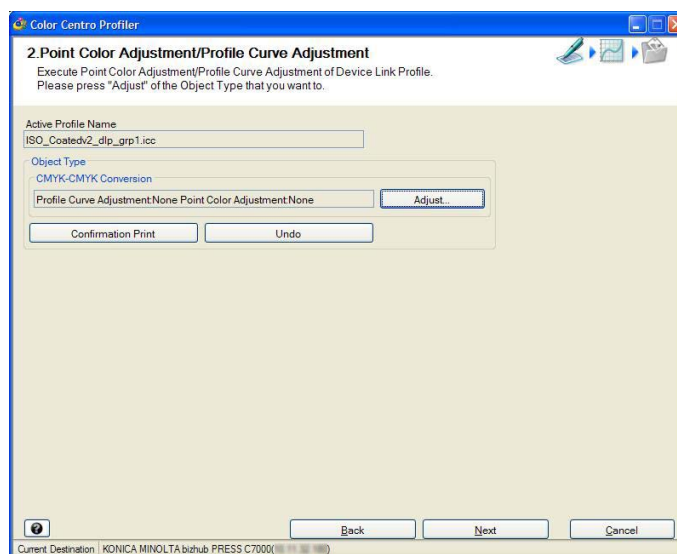
On the Measurement Feedback screen, you can execute the measurement with the instrument.
The operation of the Measurement Feedback screen is the same with page 11-67.

- Execute the step described on page 11-67.
The Complete Profile screen appears.
- Go to the step described on page 11-79.

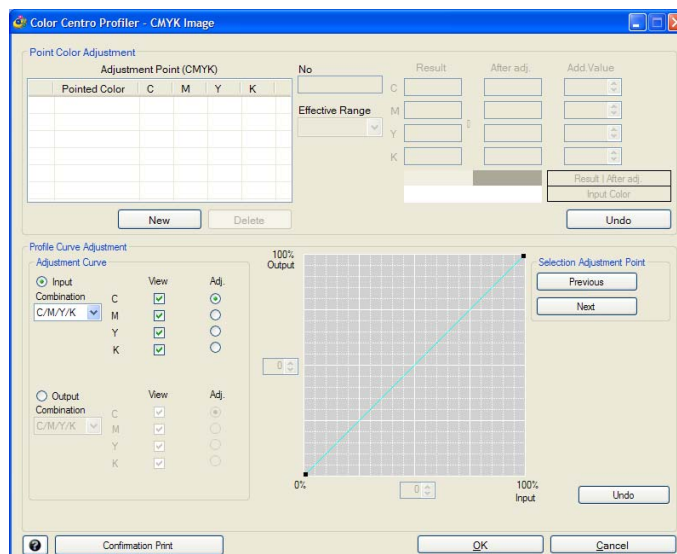
11.12.5 Adjust the Point Color / Profile Curve

On the Point Color Adjustment/Profile Curve Adjustment screen, you can execute the adjustment of the specified color outputting and profile curve.

- 1 When you execute the adjustment of the point color and the adjustment of the profile curve, click [Adjust].

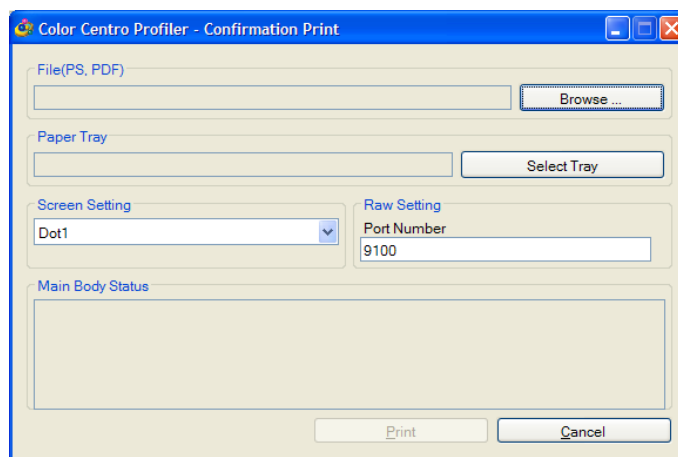


The Adjustment screen appears.



- 2 If necessary, adjust the point color as follows;
 - When you add the new point color, execute the operation described on page 11-76.
 - When you edit the existing point color, execute the operation described on page 11-77.
 - When you delete the existing point color, execute the operation described on page 11-77.
- 3 If necessary, execute the adjustment of the profile curve.
 - For detailed information on how to adjust the profile curve, refer to page 11-78.
- 4 Click [Confirmation Print] for the test printing.

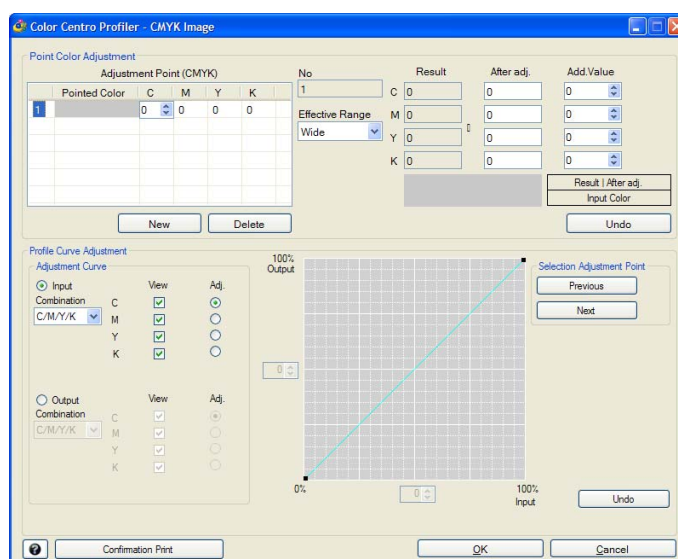
[Confirmation Print] screen appears.



- 5 Specify the setting of confirmation printing and click [Print].
 - Click [Browse] to display the screen to select the image for printing.
 - Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
 - From [Screen Setting], select the screen setting used by confirmation printing.
 - Specify the port number used by confirmation printing to [Port Number].
 - When you click [Cancel], [Confirmation Print] screen is closed to return to the Adjustment screen.
- 6 Confirm the result of test printing and click [OK].
The Adjustment is closed to return to the Point Color Adjustment/Profile Curve Adjustment screen.
- 7 Click [Next].
Profile is calculated and generated.
After completing calculation, the Complete Profile screen appears.
→ Go to the step described on page 11-79.

Add the New Spot Color

- 1 Click [New].
A numbered line is added on [Adjustment Point].



- 2 Specify the value (0 to 100) of the added point color of the added line to [C], [M], [Y] and [K].
The new input color is displayed on [Pointed Color].

3 From [Effective Range], select the effective range.

The color conversion result of the adjusted point is displayed on [Result] and [After adj.]. In addition, the color of [Result] is displayed on the upper-left of the Sample Color (below the [Result]) and the color of [After adj.] is displayed on the upper-right.

- When you select [Narrow], the result of adjustment has influence on the color range which includes only the near colors to the input color.
- When you select [Wide], the result of adjustment has influence on the color range which includes the colors which are away from the input color.
- When you select [Normal], it has influence on the middle range between [Narrow] and [Wide].
- You can specify [Effective Range] per adjustment point.
- The values displayed on [Result] and [After adj.] are the value to which Input curve and color conversion table are applied. (Output curve is not applied to the curve yet.)

4 Enter the value into [Add. Value] to make the value of [After adj.] the target value.

- When you discard the setting of [Add. Value], click [Undo] of [Point Color Adjustment].

Edit the Existing Point Color**1** From [Adjustment Point], select the adjustment point (input color) to edit.

The input color is displayed on the lower of the Sample Color (below [Result]).

2 From [Effective Range], select the effective range.

The color conversion result of the adjusted point is displayed on [Result] and [After adj.]. In addition, the color of [Result] is displayed on the upper-left of the Sample Color and the color of [After adj.] is displayed on the upper-right.

- When you select [Narrow], the result of adjustment has influence on the color range which includes only the near colors to the input color.
- When you select [Wide], the result of adjustment has influence on the color range which includes the colors which are away from the input color.
- When you select [Normal], it has influence on the middle range between [Narrow] and [Wide].
- You can specify [Effective Range] per adjustment point.
- The values displayed on [Result] and [After adj.] are the value to which Input curve and color conversion table are applied. (Output curve is not applied to the curve yet.)

3 Enter the value into [Add. Value] to make the value of [After adj.] the target value.

- When you discard the setting of [Add. Value], click [Undo] of [Point Color Adjustment].

Delete the Existing Point Color**1** From [Adjustment Point], select the adjustment point (input color) to delete.**2** Click [Delete].

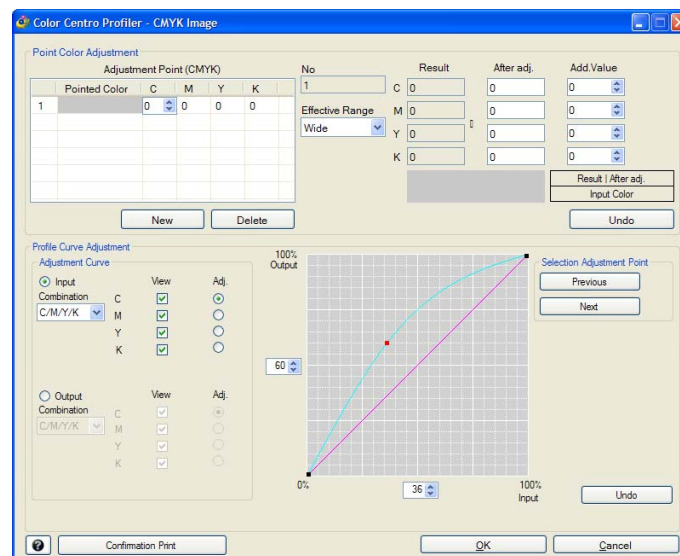
The selected adjustment point is deleted.

Adjust the Profile Curve

- 1 From [Adjustment Curve], select [Input] or [Output].
 - When you execute the adjustment of input curve, select [Input].
 - When you execute the adjustment of output curve, select [Output].
- 2 Select the combination of colors from [Combination].

According to the selection from [Combination], [View] check box of each color and [Adj.] radio button of each color appear.

 - When you select [Input] or [Output], in both cases, select [C/M/Y/K], [CMY/K] or [CMYK].
 - When you select [C/M/Y/K], you can adjust the profile curves of each color of CMYK.
 - When you select [CMYK], you can adjust the consolidated tone profile of CMYK.
 - When you select [CMY/K], you can adjust the consolidated profile curve of CMY and the profile curve of K.
- 3 When you want to display the profile curve of one color, check [View] of that color.
 - When you want to hide the profile curve of one color, remove the check mark from [View] of that color.
- 4 When you want to adjust the profile curve of one color, select [Adj.] of that color.
 - When check mark of [View] for one color was not selected and you select [Adj.] for the same color, [View] is checked automatically.
- 5 To execute the adjustment of the profile curve, you can drag and move the beginning point/ending point (at both ends of the profile curve) and adjustment points (added by the clicking on the profile curve).

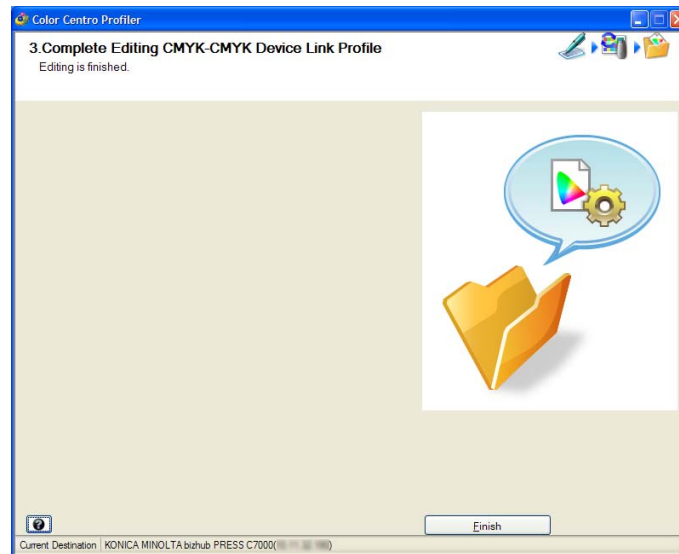


- The selected adjustment point appears as a small red square.
- By clicking [Previous] or [Next], you can switch the point selection to the previous or the next.
- You can move the selected point by entering the coordinate values into the input boxes which are on the center of vertical/horizontal axes.
- When you want to delete the added point, drag it to the adjacent point or drop it outside of the profile curve area.
- When you want to reset the adjusted setting, click [Undo] of [Profile Curve Adjustment].

11.12.6 Complete the Profile

On the Complete the Profile screen, finish the task.

- 1 Click [Finish].



The wizard is completed.

Color Centro Profiler is closed to return to [Profile Management] screen.

12

Color Default Settings

12 Color Default Settings

12.1 Outline of Color Default Settings

Use of the Color Centro enables to adjust the default color settings of the image controller.

The default color settings which are set on this function are applied to the job without settings by the printer driver, to the direct printing job and to the job in which the default settings of the image controller is used.

By using Color Centro, you can create and edit profile sets. You can also manage, create and edit the Color Configuration. For detailed information, refer to page 13-2. This chapter describes how to change the default settings of the color profile by using Color Centro.

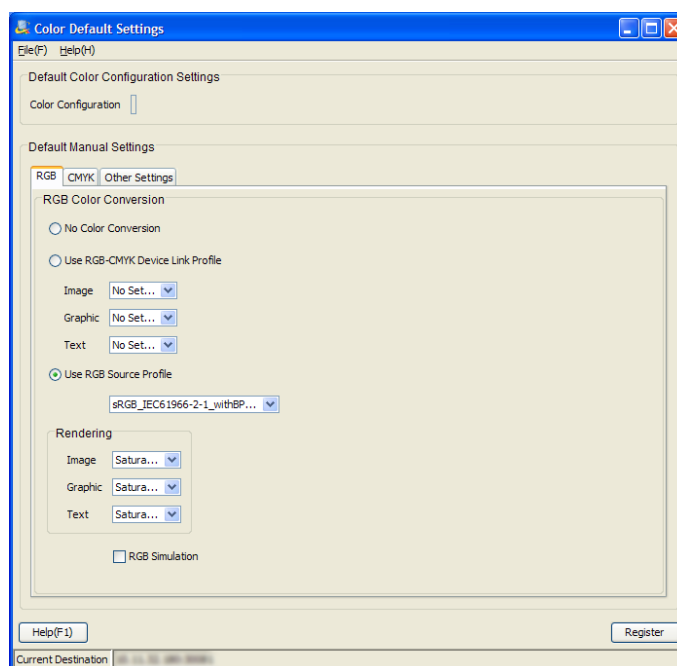
12.1.1 [Color Default Settings] screen

The color default setting function of Color Centro uses [Color Default Settings] screen.

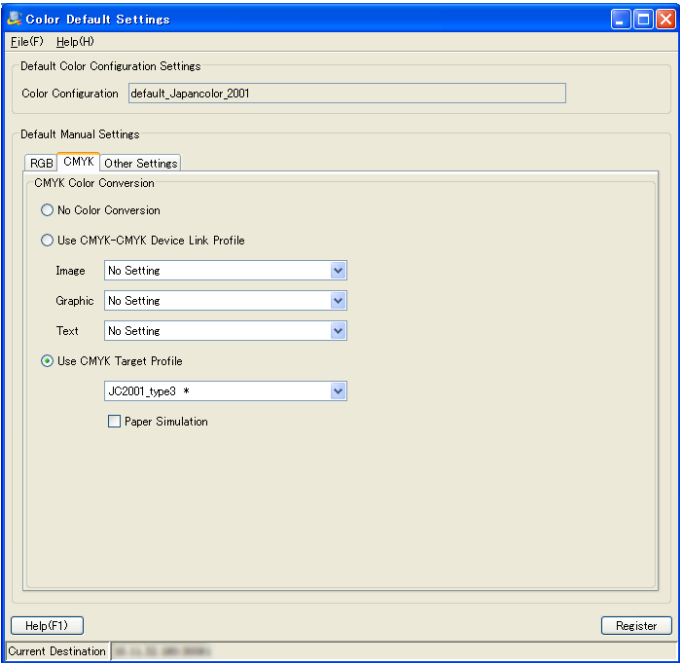
[Color Default Settings] screen appears by clicking [Color Default Settings] button on the [Launcher] screen. To close this screen, select [Close] from [File] menu.

The composition of [Color Default Settings] screen differs per tab.

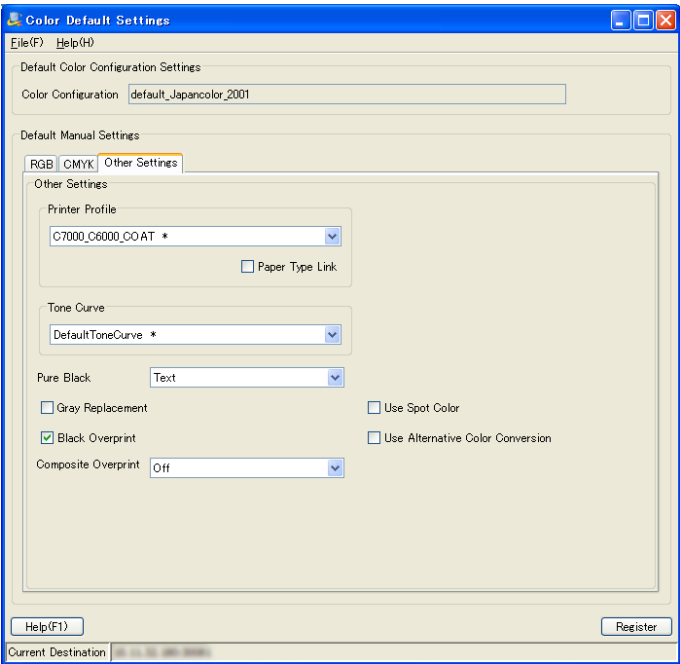
When [RGB] tab is selected, [Color Default Settings] screen is composed as follows;



When [CMYK] tab is selected, [Color Default Settings] screen is composed as follows;



When [Other Settings] tab is selected, [Color Default Settings] screen is composed as follows;



Item	Description
[Default Color Configuration Settings]	Displays the Default Color Configuration of the image controller. The Default Color Configuration is set on the Color Configuration Management function. For detailed information, refer to page 13-2.
[RGB]	Displays the screen for the RGB data processing.
[CMYK]	Displays the screen for the CMYK data processing.
[Other Settings]	Displays the screen for the common processing of RGB/CMYK.

Item		Description
[RGB]	[No Color Conversion]	Appears when [RGB] tab is clicked. Select this when the image controller doesn't execute the color conversion for the RGB data or uses the embedded RGB profile as default.
	[Use RGB-CMYK Device Link Profile]	Appears when [RGB] tab is clicked. Select this when you use the RGB-CMYK device link profile as default. When you check, select the RGB-CMYK device link profile for Image, Graphic, and Text respectively.
	[Use RGB Source Profile]	Appears when [RGB] tab is clicked. Select this when you use the RGB source profile as default. When you check, select the RGB source profile.
	[Rendering]	Appears when [RGB] tab is clicked. Select the default rendering setting for Image, Graphic, and Text respectively.
	[RGB Simulation]	Appears when [RGB] tab is clicked. Check when you use the RGB simulation as default.
[CMYK]	[No Color Conversion]	Appears when [CMYK] tab is clicked. Select this to use the embedded CMYK target profile as default.
	[Use CMYK-CMYK Device Link Profile]	Appears when [CMYK] tab is clicked. Select this when you use the CMYK-CMYK device link profile as default.
	[Use CMYK Target Profile]	Appears when [CMYK] tab is clicked. Select this when you use the CMYK target profile as default.
	[Paper Simulation]	Appears when [CMYK] tab is clicked. Check when you execute the Paper Simulation as default.
[Other Settings]	[Printer Profile]	Appears when [Other Settings] tab is clicked. Specifies the default printer profile.
	[Paper Type Link]	Appears when [Other Settings] tab is clicked. Check when you enable the paper type link as default.
	[Tone Curve]	Appears when [Other Settings] tab is clicked. Specifies the default tone curve.
	[Pure Black]	Appears when [Other Settings] tab is clicked. Specifies whether to use the pure black or not. Specifies the pure black setting.
	[Gray Replacement]	Appears when [Other Settings] tab is clicked. Check when you use the gray replacement as default.
	[Black Overprint]	Appears when [Other Settings] tab is clicked. Check when you execute the black overprint as default.
	[Composite Overprint]	Appears when [Other Settings] tab is clicked. Check when you execute the composite overprint as default.
	[Use Spot Color]	Appears when [Other Settings] tab is clicked. Check when you use the spot color as default.
	[Use Alternative Color Conversion]	Appears when [Other Settings] tab is clicked. Check when you execute the alternative color conversion as default.
[Register]		Registers the adjustment result in the image controller.
[Help]		Displays the Help of this screen.
Status bar		Displays the IP address and the port number of the image controller connected currently.

12.1.2 Menu of [Color Default Settings] screen

The menu items of the [Color Default Settings] screen are as follows;

Menu	Menu Items	Description
[File]	[Login]	When you connect another image controller, the [Login] screen appears. For how to operate it, refer to page 14-2.
	[Return to Factory Default]	Resets the color default setting to the factory default.
	[Refresh]	Reloads the information of the image controller connected currently.
	[Color Verification]	Allows you to set the color bar and the color setting information which is printed on the job outputting.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

12.1.3 Basic operation of [Color Default Settings] screen

This section describes basic operation of [Color Default Settings] screen.

- 1 Confirm the name of Default Color Configuration.
→ For detailed information on how to confirm the name of Default Color Configuration, refer to page 10-6.
- 2 Set the default settings of the RGB-CMYK conversion manually.
→ For detailed information on how to set the RGB-CMYK conversion, refer to page 12-7.
- 3 Set the default settings of the CMYK-CMYK conversion manually.
→ For detailed information on how to set the CMYK-CMYK conversion, refer to page 12-7
- 4 Set the default settings of other settings manually.
→ For detailed information on how to set the other settings, refer to page 12-8
- 5 Set the color bar and the color setting information which is printed on the job outputting.
→ For detailed information on how to set the color bar and the color setting information, refer to page 12-9
- 6 If necessary, reset the color default setting to the factory default.
→ For how to operate it, refer to page 12-10.
- 7 Register the settings in the image controller.
→ On how to register it, refer to page 12-11.

12.2 Confirm the name of Default Color Configuration

This section describes how to confirm the name of Default Color Configuration.

- 1 Confirm [Default Color Configuration Settings] on [Color Default Setting] screen.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted Color Default Settings when the Color Default Settings has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 12-11.

12.3 Default Manual Settings

This section describes how to set the Color Default Settings of the image controller manually.

The Color Default Settings function is used on screens displayed par 3 tabs.

12.3.1 Set the Default Settings of the RGB-CMYK Conversion

On [RGB] tab - [Color Default Settings] screen, you can set the default settings for the conversion processing when the input data is RGB.

- 1** Click [RGB] tab.
[RGB] tab appears.
- 2** When you don't execute the color conversion, select [No Color Conversion].
- 3** When you use RGB-CMYK device link profile, check [Use RGB-CMYK Device Link Profile]. Then, select the RGB-CMYK device link profile for Image, Graphic, and Text respectively.
- 4** When you use RGB source profile, check [Use RGB Source Profile]. Then, select the RGB source profile to use.
- 5** From [Rendering] - [Image], select the rendering method for Image.
- 6** From [Rendering] - [Graphic], select the rendering method for Graphic.
- 7** From [Rendering] - [Text], select the rendering method for Text.
- 8** Check [Use RGB Simulation] when you use RGB Simulation.
→ Go to the step described on page 12-7.

12.3.2 Set the Default Settings of the CMYK-CMYK Conversion

On [CMYK] tab - [Color Default Settings] screen, you can set the default settings for the conversion processing when the input data is CMYK.

- 1** Click [CMYK] tab.
[CMYK] tab appears.
- 2** When you don't execute the color conversion, select [No Color Conversion].
- 3** When you use CMYK-CMYK device link profile, check [Use CMYK-CMYK Device Link Profile]. Then, select the CMYK-CMYK device link profile for Image, Graphic, and Text respectively.
- 4** When you use CMYK target profile, check [Use CMYK Target Profile]. Then, select the CMYK target profile to use.
- 5** Check [Use Paper Simulation] when you use RGB Simulation.
→ Go to the step described on page 12-8.

12.3.3 Set the Other Default Settings

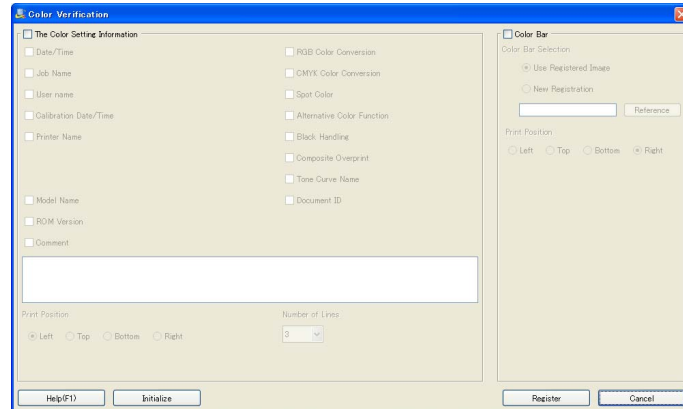
On [Other Settings] tab - [Color Default Settings] screen, you can set the default settings for the other conversion processing.

- 1** Click [Other Settings] tab.
[Other Settings] tab appears
- 2** Select the printer profile from [Printer Profile].
- 3** Check [Paper Type Link] when you enable the paper type link function.
- 4** From [Tone Curve], select the default tone curve.
- 5** Select the setting of Pure Black from [Pure Black].
- 6** Check [Gray Replacement] when you use Gray Replacement.
- 7** Check [Black Overprint] when you use Black Overprint.
- 8** Select a setting of Composite Overprint from [Composite Overprint].
- 9** Check [Use Spot Color] when you use Spot Color.
- 10** Check [Use Alternative Color Conversion] when you use Alternative Color Conversion.
→ When you register the settings to the image controller, go to the step described on page 12-11.

12.4 Set Color Verification

This section describes how to set the color bar and the color setting information.

- 1 From [File] menu, select [Color Verification].
[Color Verification] appears.



- 2 Click [The Color Setting Information] when you set the content of the color setting information for printing.
 - When you check [Date/Time], [Job Name], [User name], [Calibration Date/Time], [Printer Name], [RGB Color Conversion], [CMYK Color Conversion], [Tone Curve Name], [Spot Color], [Alternative Color Function], [Black Handling], [Composite Overprint], [Document ID], [Model Name], [ROM Version] or [Comment], you can set as the printing items on the job outputting.
 - From [Number of Lines], select the number of lines (1 to 5 lines).
 - From [Print Position], select the radio button to set the printing position.
- 3 When you set the color bar, check [Color Bar] and set the printing items.
 - Select [Use Registered Image] when you use the color patch which was registered at factory shipping.
 - Select [New Registration] when you use the eps file you specify,
 - When [Hold] is selected as the print mode in the printer driver, select either of the check boxes: [User name], [Calibration Date/Time], [Printer Name], [RGB color Conversion], [CMYK Color Conversion], [Tone Curve Name], [Spot Color], [Alternative Color Function], [Black Handling], [Composite Overprint], [Document ID], [Model Name], [ROM Version] or [Comment], then you can set as the printing items on the job outputting.
 - From [Print Position], select the radio button to set the printing position.
- 4 When you want to discard the current settings and use the registered settings at factory shipping, click [Initialize].
- 5 When you register the settings of the color information and the color bar, click [Register].
[Color Verification] is closed to return to [Color Default Settings] screen.

12.5 Return to Factory Default

This section describes how to return the Color Default Settings of the image controller to the factory default.

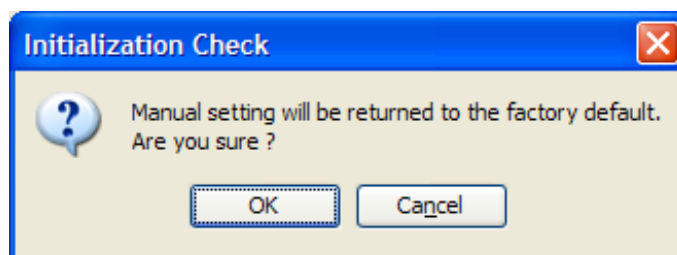
The factory default settings are as follows;

[RGB] tab	Check Job
[No Color Conversion]	OFF
[Use RGB-CMYK Device Link Profile]	OFF
[Use RGB Source Profile]	ON
[Rendering]	C8000/C7000/C6000: Saturation C70hc: Perceptual
RGB Simulation	OFF

[CMYK] tab	Check Job
[No Color Conversion]	OFF
[Use CMYK-CMYK Device Link Profile]	OFF
[Use CMYK Target Profile]	ON
[Paper Simulation]	OFF

[Other Settings] tab	Check Job
[Printer Profile]	For Coat Paper
[Paper Type Link]	OFF
[Tone Curve]	Default Tone Curve
[Pure Black]	Text/Graphic
[Gray Replacement]	OFF
[Black Overprint]	OFF
[Composite Overprint]	OFF
[Use Spot Color]	OFF
[Use Alternative Color Conversion]	OFF

- 1 From the [File] menu, select [Return to Factory Default].
The confirmation message appears.



- 2 Click [OK].
Resets the priority to the factory default.
→ When you want to register the initialized settings of Color Default, go to the step described on page 12-11.

12.6 Color Default Settings

This section describes how to register the settings of [Color Default Settings] to the image controller as the default settings.

- 1 Click [Register] on [Color Default Settings] screen.
Registration in image controller is executed.

13

Color Configuration Management

13 Color Configuration Management

13.1 Outline of Color Configuration Management

Use of the Color Centro enables to set and manage "Profile Set" which is consolidated with several device link profiles and several device profiles which are used for one paper type. In addition, you can set and manage "Color Configuration" which is consolidated with several Profile Sets (used for all paper types) and other information of color settings.

These functions of Color Centro allow you to execute the color setting adequately by only specifying the Color Configuration without executing the complex and various settings.

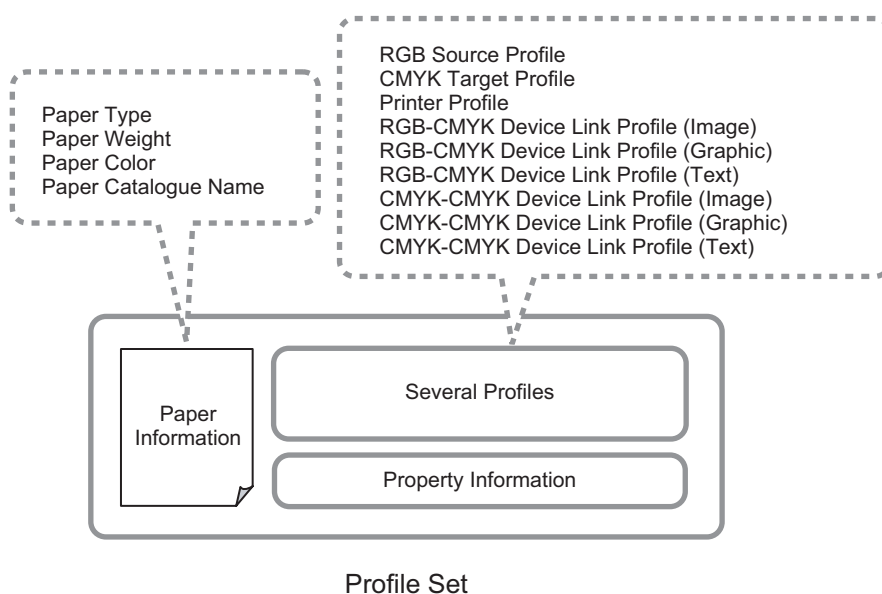
13.1.1 Outline of Profile Set

The objects which compose the job are images, graphics and texts. In addition, there are RGB objects and CMYK objects. For use of this main body, you can set the device link profiles which are appropriate for all these objects.

In addition to the profiles, on the color printing, to consider about the adequate hue corresponding to the paper type and outputting is also necessary. Therefore, the color setting needs the complex operations.

For more efficient color settings, Color Centro manages the Profile Set which is integrated with all profiles (9 types) which are used for one paper type.

The Profile Set includes the property information of the Profile Set (created date, updated date, etc.) besides the paper information and profile information. Color Centro manages the Profile Set by using the database.



13.1.2 Outline of Color Configuration

To correspond to the multiple paper types, Color Configuration is consolidated with the multiple Profile Sets. When you specify one Color Configuration, to correspond to all paper types which are used on the printing job is enabled.

The Color Configuration includes the basic color settings and the tone curve information as follows;

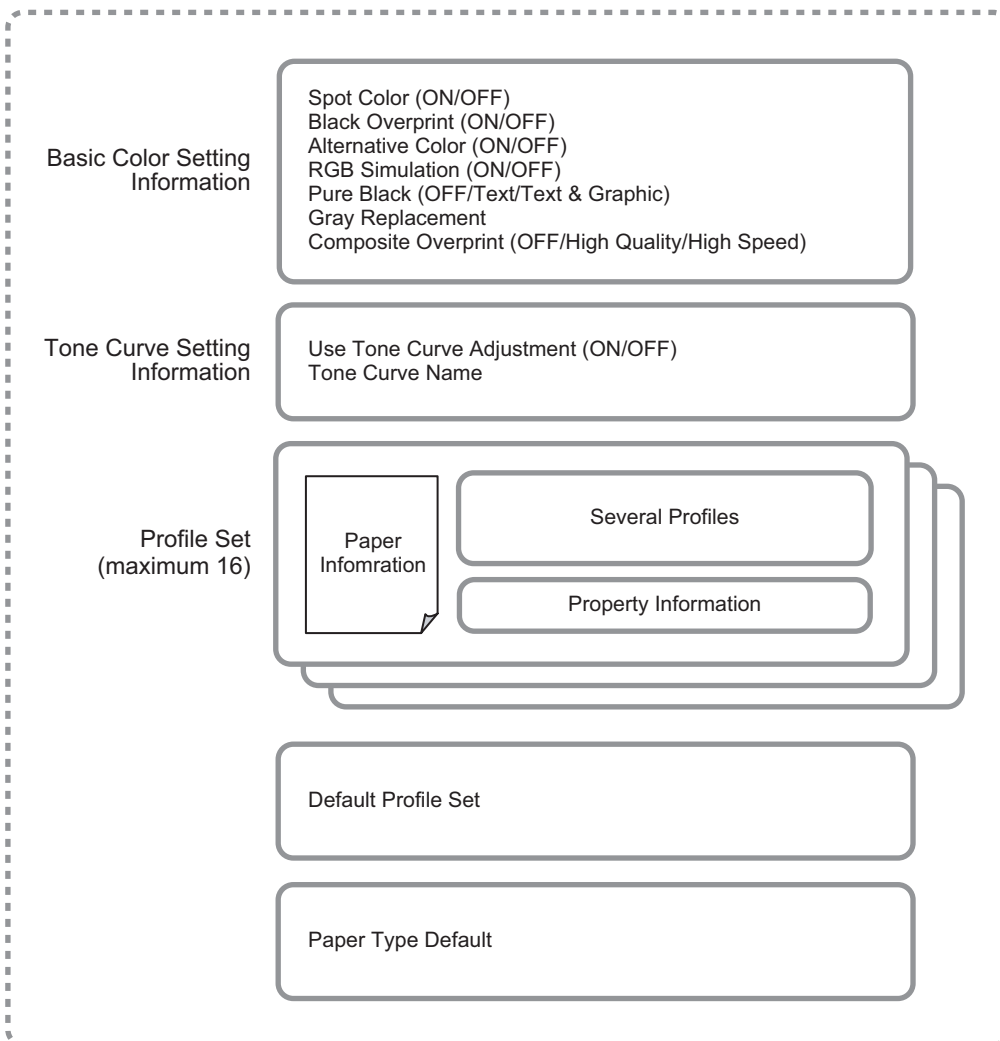
Basic Color Settings	Tone Curve Information
Spot Color	Tone Curve Adjustment (ON/OFF)
Black Overprint (ON/OFF)	Tone Curve Name to use
Alternative Color	
RGB Simulation (ON/OFF)	
Pure Black (OFF/Text/Text & Graphic)	
Grey Replacement (ON/OFF)	
Composite Overprint (OFF/Image Quality/Speed)	

The Color Configuration includes the property information of the Color Configuration (created date, updated date, etc.) besides the mentioned above. Color Centro manages the Color Configuration by using the database.

The Profile Set can be used on the multiple Color Configuration and multiple Color Configurations can be registered. "Select Nearest Profile Set", one of the Color Configuration Management functions allows to select the Profile Set easily and you can set the Color Configurations easily, too.

When you register several Color Configurations correspond to various cases, you can apply the color settings which are corresponding to the all paper types used in the job only by selecting. (The default color settings, which are set on the Color Default Settings of Color Centro, are applied to the job without settings by the printer driver and to the direct printing job.

Color Configuration

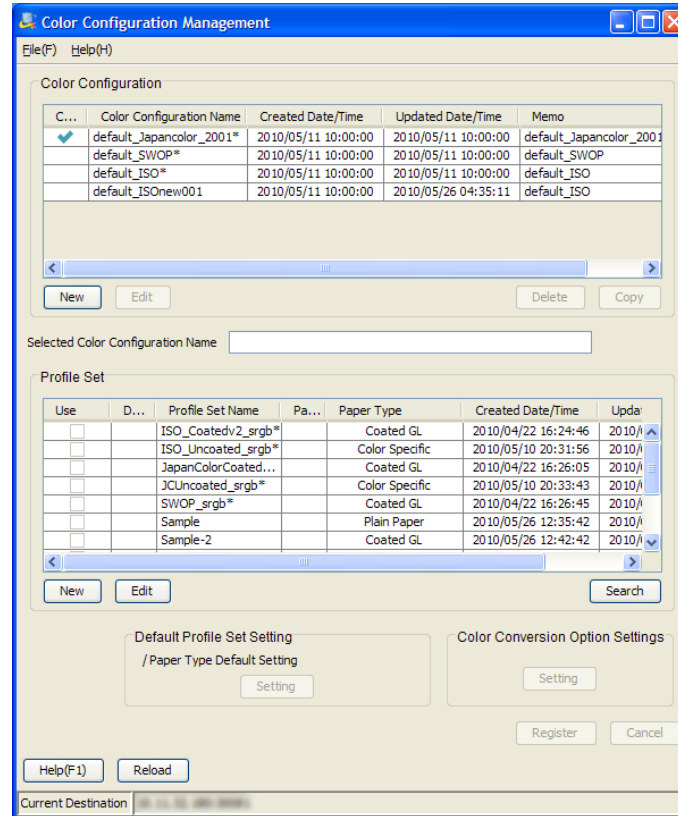


13.1.3 [Color Configuration Management] screen

The Color Configuration management function of Color Centro uses [Color Configuration Management] screen.

[Color Configuration Management] screen appears by clicking [Color Configuration Management] button on the [Launcher] screen. To close this screen, select [Close] from [File] menu.

[Color Configuration Management] screen is composed as follows;



Item	Description
(Color Configuration list)	Displays the Color Configuration of the image controller connected currently.
[Color Configuration] - [New]	Creates the new Color Configuration.
[Color Configuration] - [Edit]	Edits the Color Configuration.
[Color Configuration] - [Delete]	Deletes the selected Color Configuration from the list.
[Color Configuration] - [Copy]	Makes a duplication of the selected Color Configuration from the list within [Controller].
[Selected Color Configuration Name]	Displays the name of Color Configuration selected from the list.
(Profile Set list)	Displays the Profile Set of the image controller connected currently.
[Profile Set] - [New]	Starts "Color Centro Profiler" utility and creates the new Profile Set.
[Profile Set] - [Edit]	Starts "Color Centro Profiler" utility and edits the selected Profile Set.
[Profile Set] - [Search]	Searches the Profile Set and displays the search result to the list.
[Default Profile Set Setting / Paper Type Default Setting] - [Setting]	Allows you to set the default Profile Set of the Color Configuration.
[Color Conversion Option Settings] - [Setting]	Allows you to set the color conversion option of the Color Configuration.
[Register]	Registers the settings in the image controller.
[Cancel]	Discards the current settings.

Item	Description
[Reload]	Updates the information of the list.
[Help]	Displays the Help of this screen.

List Items

The Color Configuration list and Profile Set list are displayed on [Color Configuration Management] screen.

The list items of the Color Configuration list are as follows;

Item	Description
[Color Configuration Default]	Displays the check mark when the Color Configuration is used as default.
[Color Configuration Name]	Displays the name of Color Configuration.
[Created Date/Time]	Displays the date/time when the new Color Configuration was created.
[Update Date/Time]	Displays the date/time when the Color Configuration was updated.
[Memo]	Displays the description of the profile.

The list items of the Profile Set list are as follows;

Item	Description
[ON]	Displays the check mark when the Profile Set is used by the Color Configuration.
[Default Profile Set]	Displays the check mark when the Profile Set is used as default.
[Profile Set Name]	Displays the name of Profile Set.
[Paper Type Default]	Displays the name of paper type setting used as default.
[Paper Type]	Displays the paper type.
[Created Date/Time]	Displays the created date/time of the Profile Set.
[Update Date/Time]	Displays the date/time when the Profile Set was updated.
[Memo]	Displays the description of the profile.
[Registered Name of Paper Profile]	Displays the registered name of paper profile.
[Paper Weight]	Displays the paper weight.
[Color]	Displays the paper color.
[RGB Source Type]	Displays the RGB source type of the Profile Set.
[CMYK Target Type]	Displays the CMYK target type of the Profile Set.

On the Profile Set list, "*" mark is added after the name of the Profile Set which was registered at factory shipping (default registered Profile Set).

List Operations

The list of the [Color Configuration Management] screen can be sorted by list item. For how to operate it, refer to page 14-3.

When you display [Color Configuration Management] screen first after launching Color Centro, the list is displayed in ascending order of [Color Configuration Name] (in case of Color Configuration list), or [Profile Set Name] (in case of Profile Set list).

The list of the [Color Configuration Management] screen can be sorted by list item. For how to operate it, refer to page 14-3.

The list of the [Color Configuration Management] screen can switch the display of the list item to non-display. For how to operate it, refer to page 14-3.

13.1.4 Menu of [Color Configuration Management] screen

The menu items of the [Color Configuration Management] screen are as follows;

Menu	Menu Items	Description
[File]	[New]	Creates the new Color Configuration.
	[Edit]	Edits the selected Color Configuration from the list.
	[Delete]	Deletes the selected Color Configuration from the list.
	[Copy]	Makes a duplication of the selected Color Configuration from the list.
	[Reload]	Updates the information of the list.
	[Set to Default Color Configuration]	Sets the selected Color Configuration from the list to the Default Color Configuration.
	[Back to the Factory Default]	Resets the Default Color Configuration to the factory default.
	[Import/Export]	Imports (Registers) or Export the Color Configuration.
	[Close]	Close this screen and exits this function.
[Help]	[Help]	Displays the Help of this screen.
	[Version]	Displays the version of Color Centro.

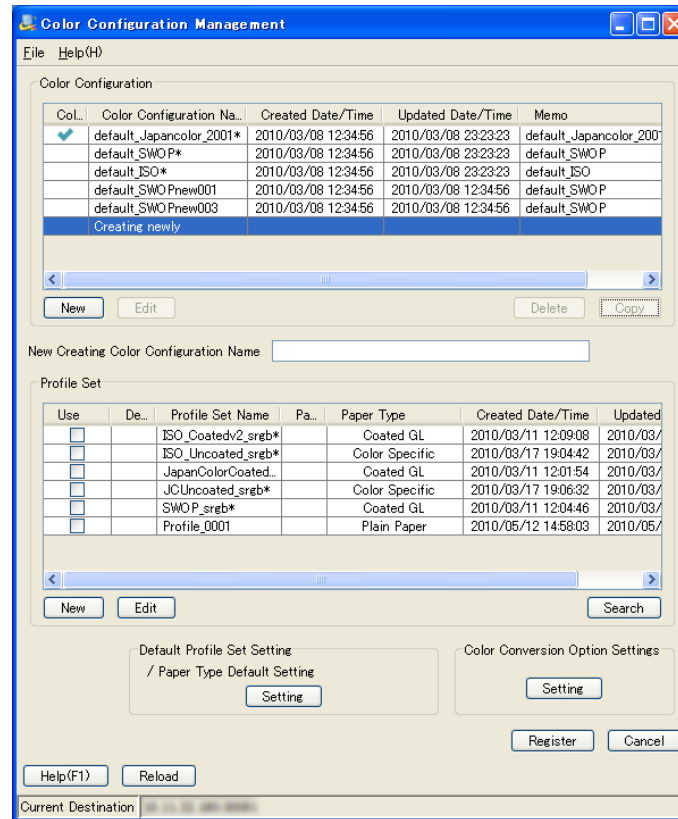
13.2 Create the new Color Configuration

This section describes how to create the new Color Configuration.

13.2.1 Set the Name of Color Configuration

- 1 Click [New] of the Color Configuration list.

The added line is displayed as "Creating newly" at the bottom of the Color Configuration list.



→ The Same operation can be done when you select [File] menu - [New].

- 2 Specify the name of the new Color Configuration to [New Creating Color Configuration Name].

→ Go to the step described on page 13-8.

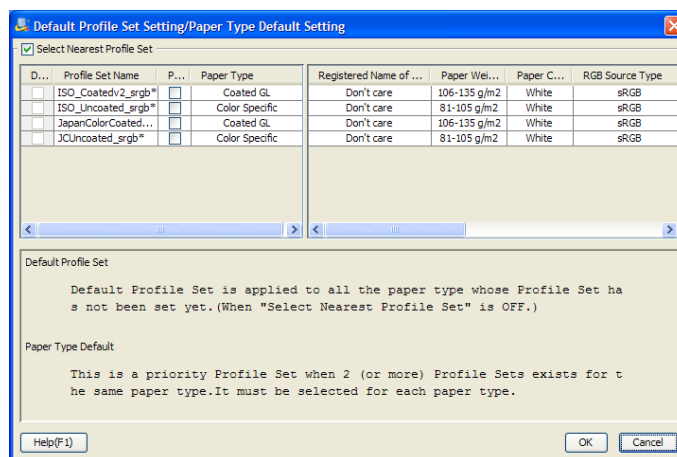
13.2.2 Select the Profile Set

- When you want to use the Profile Set, check [Use] on the Profile Set list.
 - For detailed information on how to create the new Profile Set, refer to page 13-15.
 - For detailed information on how to edit the Profile Set, refer to page 13-23page 13-32page 13-39.
 - Go to the step described on page 13-9.

13.2.3 Set the Default Profile Set Setting / Paper Type Default Setting.

Specify the name of Profile Set to use as default in the new Color Configuration you create.

- 1 Click [Default Profile Set Setting / Paper Type Default Setting] - [Setting].
[Default Profile Set Setting / Paper Type Default Setting] screen appears.

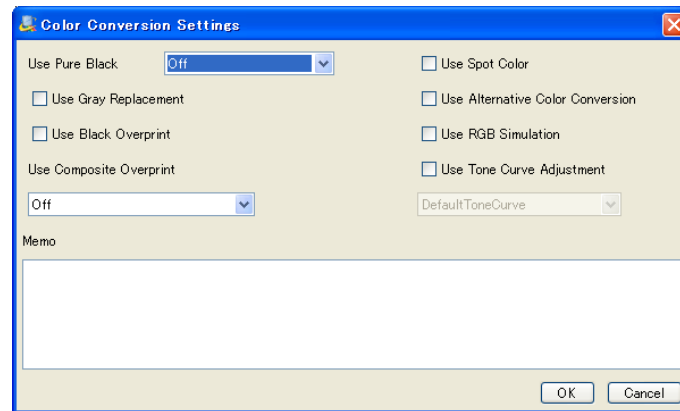


- [Default Profile Set], [Profile Set Name], [Paper Type Default] and [Paper Type] are displayed on the list on the left of the screen.
 - [Registered Name of Paper Profile], [Paper Weight], [Paper Color], [RGB Source Type], [CMYK Target Type], [Created Date/Time], [Updated Date/Time] and [Memo] are displayed on the list on the right of the screen.
 - The list on the left of the screen can be sorted by list item. For how to operate it, refer to page 14-3.
 - Both lists can switch the display of the list item to non-display. For how to operate it, refer to page 14-3.
- 2 To set the Profile Set manually, remove the check mark of [Select Nearest Profile Set]. To set the Profile Set automatically, check [Select Nearest Profile Set].
 - When you check [Select Nearest Profile Set], go to Step 4.
 - 3 When you set the Profile Set manually, check [Default Profile Set] of the name of Profile Set to set as default.
 - 4 Click [OK] and return to [Color Configuration Management] screen.
 - Go to the step described on page 13-10.

13.2.4 Set the Color Conversion Option

Specify the Color Conversion setting to use as default for the Color Configuration you create.

- 1 Click [Color Conversion Option Settings] - [Setting].
[Color Conversion Settings] appears.



- 2 Select the setting of Pure Black from [Use Pure Black].
- 3 Check [Use Gray Replacement] when you use Gray Replacement.
- 4 Check [Use Black Overprint] when you use Black Overprint.
- 5 Select the setting of Composite Overprint from [Use Composite Overprint].
- 6 Check [Use Spot Color] when you use Spot Color.
- 7 Check [Use Alternative Color Conversion] when you use Alternative Color Conversion.
- 8 Check [Use RGB Simulation] when you use RGB Simulation.
- 9 Check [Use Tone Curve Adjustment] and specify the tone curve when you use Tone Curve Adjustment.
- 10 If necessary, enter the description to [Memo].
- 11 Click [OK] and return to [Color Configuration Management] screen.
→ Go to the step described on page 13-10.

13.2.5 Register the Color Configuration

This section describes how to register the settings to the image controller.

- 1 Click [Register] on [Color Configuration Management] screen.
→ When there is the Color Configuration with the same name, it is registered as another name automatically. In this case, the confirmation message appears.

13.3 Edit the Color Configuration

This section describes how to edit the Color Configuration.

- 1** From the Color Configuration list, select the Color Configuration to edit.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted Color Configuration when the Color Configuration has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 2** Click [Color Configuration] - [Edit].

The name of the selected Color Configuration is displayed to [Editing Color Configuration Name].
- 3** When you want to use the Profile Set, check [Use] on the Profile Set list.
 - For detailed information on how to create the new Profile Set, refer to page 13-15.
 - For detailed information on how to edit the Profile Set, refer to page 13-23page 13-32page 13-39.
- 4** Click [Default Profile Set Setting / Paper Type Default Setting] - [Setting] and set Default Profile Set Setting / Paper Type Default Setting.
 - For how to operate it, refer to page 13-9.
- 5** Click [Color Conversion Option Settings] - [Setting] and specify the Color Conversion Option Settings.
 - For how to operate it, refer to page 13-10.
- 6** Registers the settings in the image controller.
 - For how to operate it, refer to page 13-10.

13.4 Color Configuration Management

This section describes how to manage the Color Configuration.

13.4.1 Change the Default Color Configuration

- 1 From the Color Configuration list, select the Color Configuration you use as default.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted Color Configuration when the Color Configuration has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 2 Click [Color Configuration] - [Edit].

The name of the selected Color Configuration is displayed to [Editing Color Configuration Name].
- 3 From [File] menu, select [Set to Default Color Configuration].

[Color Configuration Default] of the selected Color Configuration is checked.
- 4 Register the settings in the image controller.
 - For how to operate it, refer to page 13-10.

13.4.2 Copy the Color Configuration

- 1 From the Color Configuration list, select the Color Configuration to copy.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted Color Configuration when the Color Configuration has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 2 Click [Copy].
 - When you select the multiple Color Configurations, [Copy] is not available.
 - Similar operation can be done when you select [File] menu - [Copy].

The duplication of the Color Configuration is generated in the image controller.

13.4.3 Delete the Color Configuration

You can delete the Color Configuration.

- 1 From the Color Configuration list, select the Color Configuration to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [File] menu - [Reload]. Executing of reload discards the adjusted Color Configuration when the Color Configuration has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 2 Click [Delete].

Confirmation screen appears.



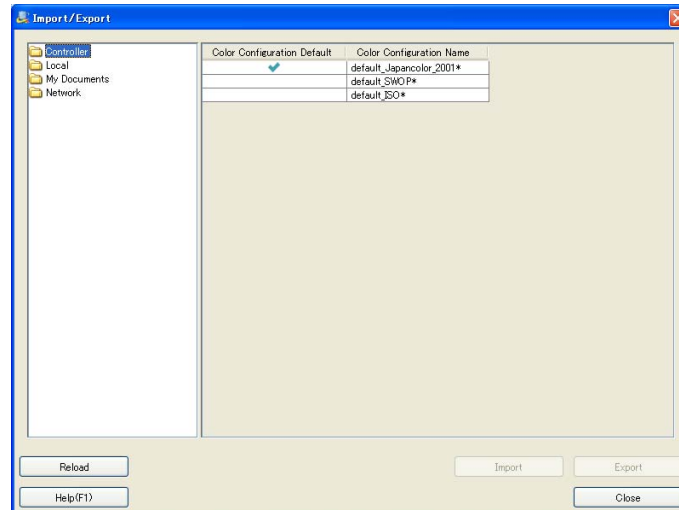
- Similar operation can be done when you select [File] menu - [Delete].

- 3 To delete, click [OK].
The selected Color Configuration is deleted.
 - When you select the multiple Color Configurations, all of those are deleted at a time.
 - You can't restore the Color Configuration you have deleted.

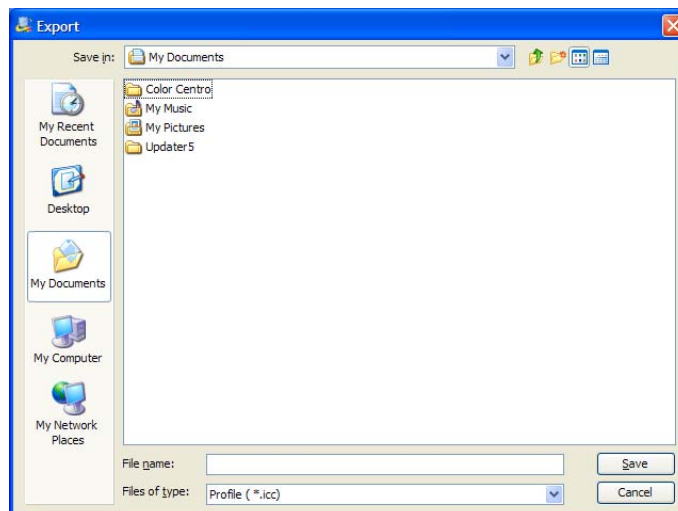
13.4.4 Import (Register) / Export the Color Configuration

Export the Color Configuration

- 1 From the [File] menu, select [Import/Export].
[Import/Export] screen appears.



- 2 From the tree view, select [Controller].
The list appears according to the selection.
- 3 From the list, select the Color Configuration to export.
 - When you reload the information of the image controller connected currently, click [Reload].
- 4 Click [Export].
[Export] screen appears.



- When you select the multiple Color Configurations, [Export] is not available.
 - When a folder other than [Controller] is selected on the tree view, [Export] is not available.
- 5 Specify the saving place and file name for the Color Configuration to export, and click [Save].

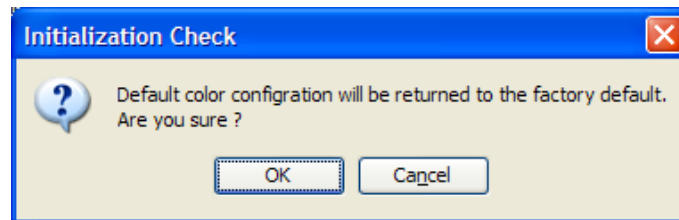
Exporting to the specified place is executed.
[Export] screen is closed to return to [Import/Export] screen.

Import (Register) the Color Configuration

- 1 From the [File] menu, select [Import/Export].
[Import/Export] screen appears.
- 2 Select the places from [Local], [My Documents] or [Network] of the tree format, where the Color Configurations are saved.
The list appears according to the selection.
- 3 From the list, select the Color Configuration to import.
- 4 Click [Import].
 - Similar operation can be done when you select [Import] from the right click menu on the selected line.
 - When you select multiple Color Configurations, those are imported in order of the displayed list.
 - When a folder other than [Controller] is selected on the tree view, [Import] is not available.The tone curve is registered to [Controller].
[Import/Export] screen is closed to return to [Color Configuration Management] screen.

13.4.5 Reset the Default Color Configuration

- 1 From [File] menu, select [Back to the Factory Default].
The confirmation message appears.



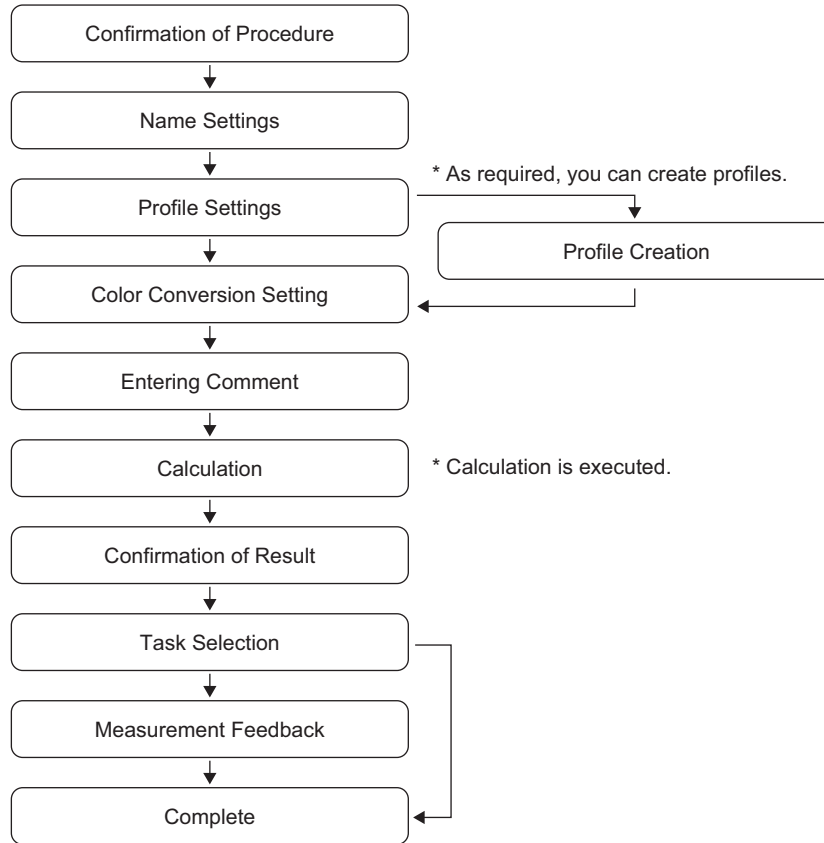
- 2 Click [OK].
The current Default Color Configuration is reset to the Default Color Configuration which was registered at factory shipping.

13.5 Create the Profile Set

This section describes how to create the new Profile Set by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can create the Profile Set. The created Profile Set is saved to the image controller.

The flow of the wizard is as follows;



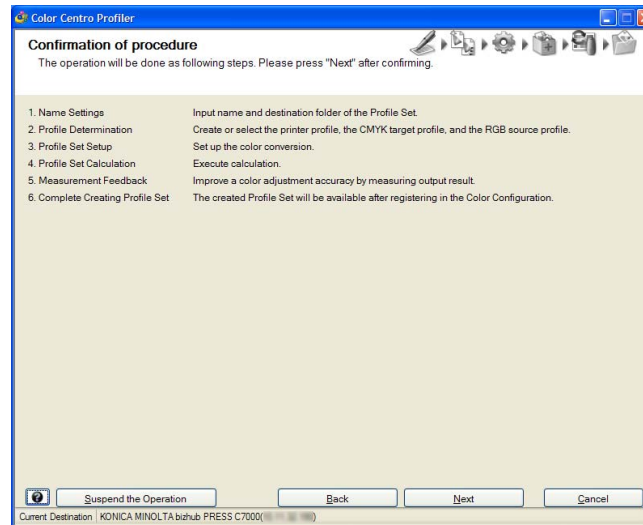
The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

13.5.1 Launch Color Centro Profiler

You can create the Profile Set by using Color Centro Profiler.

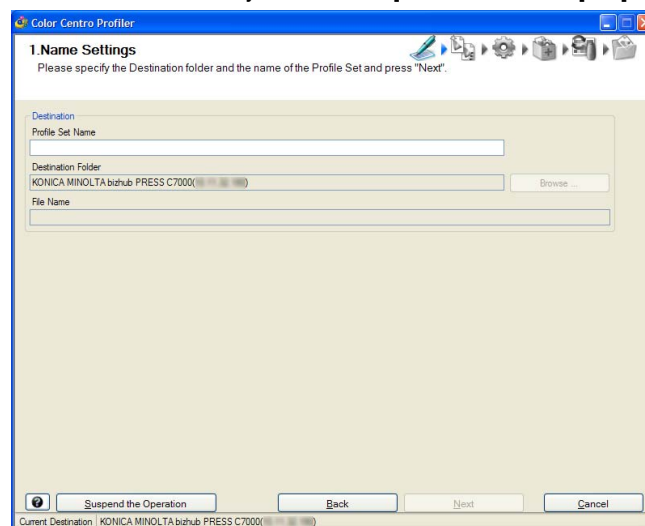
- 1 Click [Profile Set] - [New] on [Color Configuration Management] screen.
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 2 Confirm the contents, and click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 13-16.

13.5.2 Specify the Profile Set Name

- 1 Specify the name of Profile Set you create to [Profile Set Name] of [Name Settings] screen.

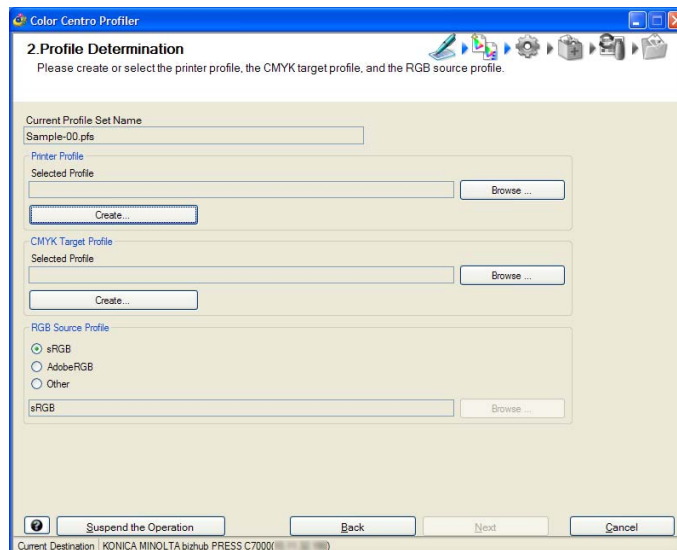


- You cannot save the Profile Set of the same name with those registered at factory shipping in the image controller.
 - You cannot use "DEVICE" (not only the capital letter but also the small letter) for the Profile Set name when you save the profile to the image controller.
- 2 Click [Next].
The Profile Determination screen appears
 - When there is a Profile Set with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 13-17.

13.5.3 Determine the Profiles

On the Profile Determination screen, specify the printer profile, the CMYK target profile and the RGB source profile which are used by Profile Set. In addition, you can create the printer profile and the CMYK target profile as required.

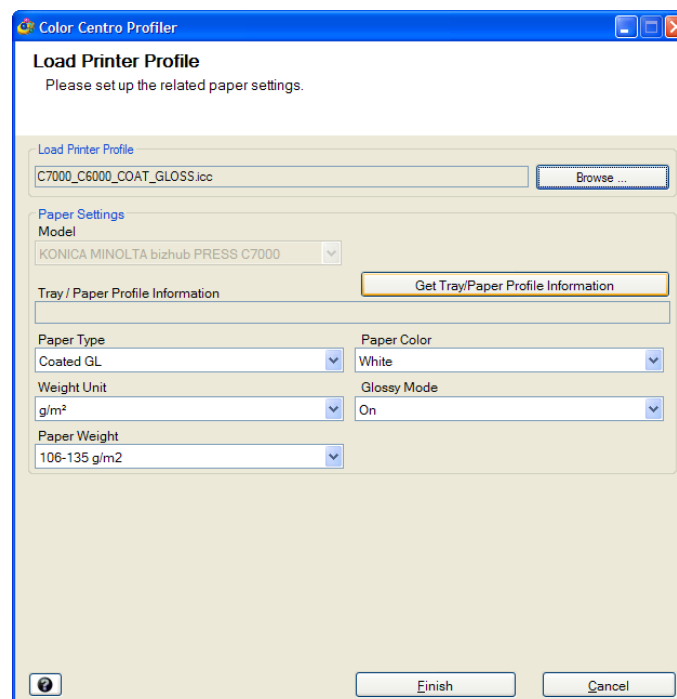
- 1 Specify the name of printer profile which is used by Profile Set. When you use the existed printer profile, click [Browse]. When you create the new printer profile, click [Create].



- When you click [Browse], [Load Printer Profile] screen appears. In this case, go to Step 2.
- When you click [Create], go to the steps described from page 11-29 to page 11-33.

- 2 On the screen displayed by clicking [Browse] of [Load Printer Profile], select a printer profile to use and click [Open].

The selected printer profile appears on [Load Printer Profile]. As required, set [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode]. Then, click [Finish] to return to the Profile Determination screen.



- 3 Specify the CMYK target profile which is used by Profile Set. When you use the existed CMYK target profile, click [Browse]. When you create the new CMYK target profile, click [Create].

- When you click [Browse], go to Step 4.
- When you click [Create], go to the steps described from page 11-16 to page 11-20.

- 4 On the screen displayed by clicking [CMYK Target Profile] - [Browse], select the CMYK target profile used and click [Open].

The selected CMYK target profile is displayed to [Selected Profile] of [CMYK Target Profile].

- 5 Specify the RGB source profile which is used by Profile Set. When you use [sRGB] or [Adobe RGB] which are preset to the image controller, select [sRGB] or [Adobe RGB]. When you specify the other RGB source profile, select [Other] and click [Browse].

- When you click [Browse], go to Step 6.
- When you select [sRGB] or [Adobe RGB], go to Step 7.

- 6 On the screen displayed by clicking [RGB Source Profile] - [Browse], select the RGB source profile used and click [Open].

The selected RGB source profile is displayed below [Other] of [RGB Source Profile].

- 7 Click [Next].

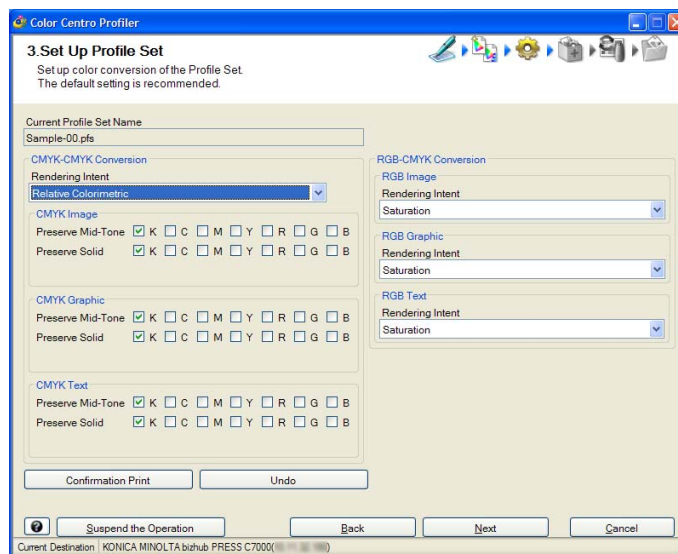
The Customize Color Conversions screen appears.

- Go to the step described on page 13-18.

13.5.4 Customize the Color Conversions

On the Customize Color Conversions screen, you can set the rendering intent of CMYK-CMYK conversion, the preserve mid-tone / preserve solid of CMYK object (CMYK image, CMYK graphic and CMYK text) and the rendering intent of RGB object (RGB image, RGB graphic and RGB text).

- 1 From [CMYK-CMYK Conversion] - [Rendering Intent], select the rendering intent.



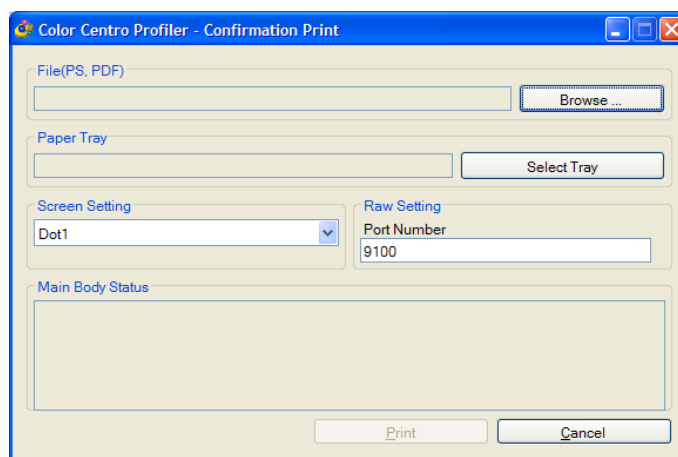
- [Relative Colorimetric] is the setting to execute color conversion regarding the paper color as completely white. The paper color parts are represented as colorlessness after color conversion.
- [Absolute Colorimetric] is the setting to execute color conversion maintaining the measurement value of the paper color. The paper color parts are represented with the color near the actual paper color after color conversion. When you select [Absolute Colorimetric], [Preserve Mid-Tone] and [Preserve Solid] are not available.
- When you make all contents of the setting on the screen the same content as recommended setting, click [Undo].

- 2 For [CMYK Image], [CMYK Graphic] and [CMYK Text], when you set the preserve mid-tone for one color, check [Preserve Mid-Tone] of that color.

- [Preserve Mid-Tone] is a setting to recompose the color after the color conversion as the same one color which has composed the color before the color conversion.

- The setting of [C], [M], [Y] and [K] is the setting for the color composed of C/M/Y/K only.
- The setting of [R] is the setting for the color composed of [M] and [Y].
- The setting of [G] is the setting for the color composed of [C] and [Y].
- The setting of [B] is the setting for the color composed of [C] and [M].
- In some cases, you cannot set [Preserve Mid-Tone] and [Preserve Solid] at the same time.

- 3** For [CMYK Image], [CMYK Graphic] and [CMYK Text], when you set the preserve solid for one color, check [Preserve Solid] of that color.
- [Preserve Solid] is a setting to represent the solid part after the color conversion with the same color which is used for the solid part before the color conversion.
 - The setting of [C], [M], [Y], and [K] is the setting about the color composed of C/M/Y/K only,
 - The setting of [R] is the setting for the color composed of [M] and [Y].
 - The setting of [G] is the setting for the color composed of [C] and [Y].
 - The setting of [B] is the setting for the color composed of [C] and [M].
 - In some cases, you cannot set [Preserve Mid-Tone] and [Preserve Solid] at the same time.
- 4** From [RGB-CMYK Conversion] of [RGB Image], [RGB Graphic] and [RGB Text] on the Customize Color Conversions screen, select the rendering intent for each object.
- [Perceptual (RGB Image)] is the recommended setting of RGB Image to represent the color near to the color which is before conversion.
 - [Saturation (RGB Graphic, Text)] is the recommended setting of RGB Graphic/Text to represent the color which maintains as much as possible the brightness of the color which is before conversion.
- 5** Click [Confirmation Print] for the test printing.
[Confirmation Print] screen appears.

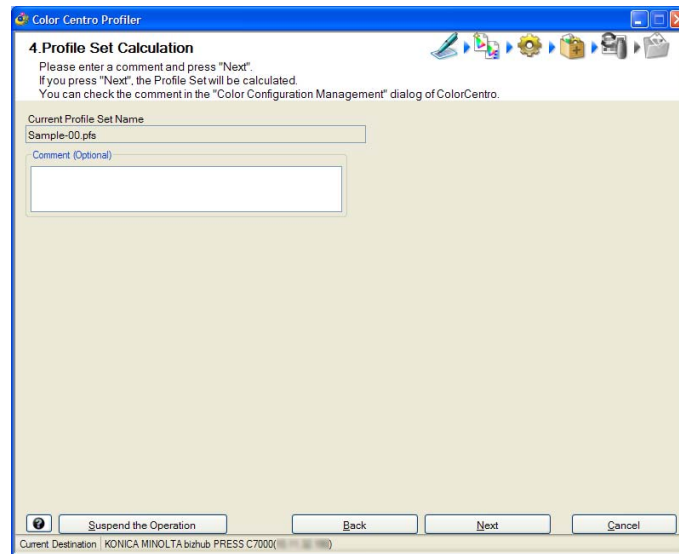


- 6** Specify the setting of confirmation printing and click [Print].
- Click [Browse] to display the screen to select the image for printing.
 - Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
 - From [Screen Setting], select the screen setting used by confirmation printing.
 - Specify the port number used by confirmation printing to [Port Number].
 - When you click [Cancel], [Confirmation Print] screen is closed to return to the Customize Color Conversions screen.
- 7** Confirm the result of test printing.
- 8** Click [Next].
The Comment screen appears.
- Go to the step described on page 13-20.

13.5.5 Enter the Comment

On the Comment screen, enter the comment to embed in the Profile Set you create, as required. You can confirm the comment when you select the Profile Set on Color Centro Profiler.

- 1 Enter the comment to [Comment (Optional)].

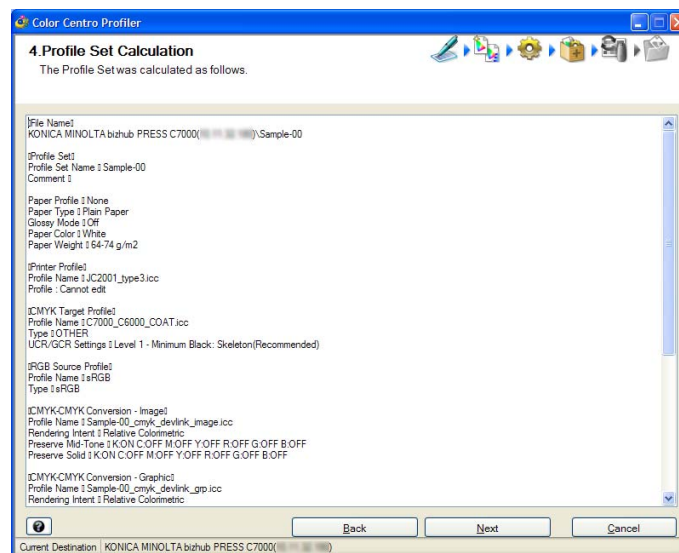


- 2 Click [Next].
Profile Set is calculated and generated.
After completing calculation, the Calculation Result screen appears.
→ Go to the step described on page 13-20.

13.5.6 Confirm the Calculation Result

Calculation Result screen displays the list of the setting of the generated Profile Set.

- 1 Confirm the setting which is displayed on the Calculation Result screen.

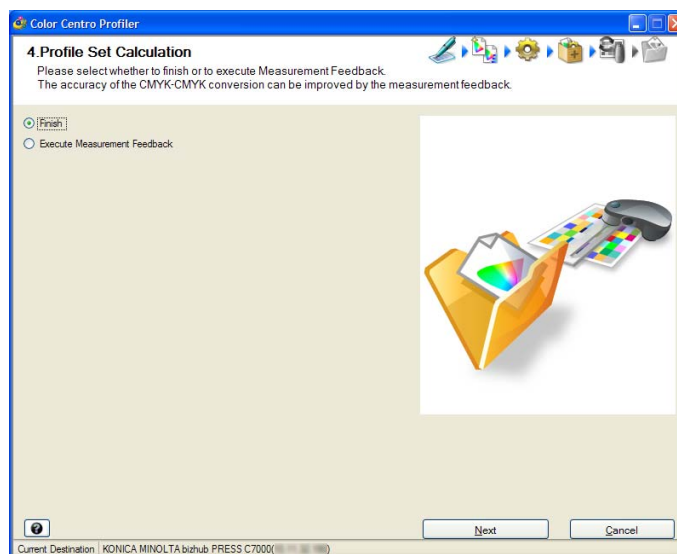


- 2 Click [Next].
The Select Task screen appears.
→ Go to the step described on page 13-21.

13.5.7 Select the Task

On the Select Task screen, you can select whether to finish or to execute Measurement Feedback.

- 1 Select [Finish] or [Execute Measurement Feedback].



→ The measurement feedback is the operation to improve the accuracy of the CMYK-CMYK conversion.

- 2 Click [Next].

→ When you select [Finish], the Complete screen appears. Go to the step described on page 13-22.
→ When you select [Execute Measurement Feedback], the Measurement Feedback screen appears. Go to the step described on page 13-21.

13.5.8 Execute the Measurement Feedback

On the Measurement Feedback screen, you can execute the measurement with the instrument.

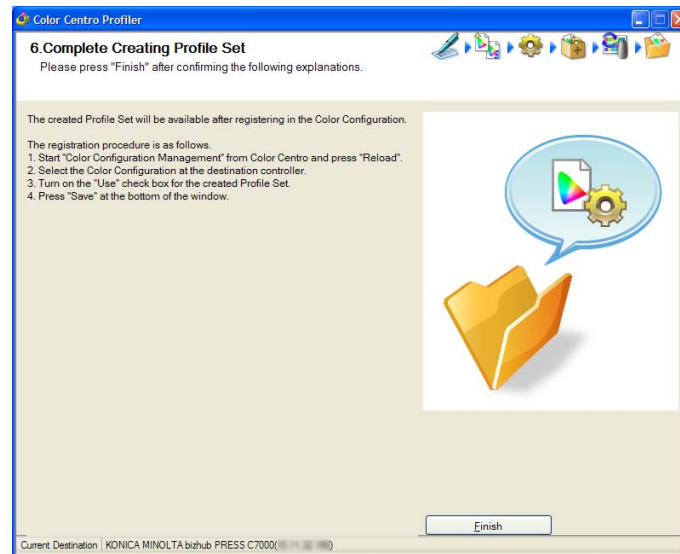
The operation of the Measurement Feedback screen is the same with page 13-35.

- On the Measurement Feedback screen, execute the step described on page 13-35.
The Complete Profile Set screen appears.
→ Go to the step described on page 13-22.

13.5.9 Complete the Profile Set

On the Complete the Profile Set screen, finish the task.

- 1 Click [Finish].



The wizard is completed.

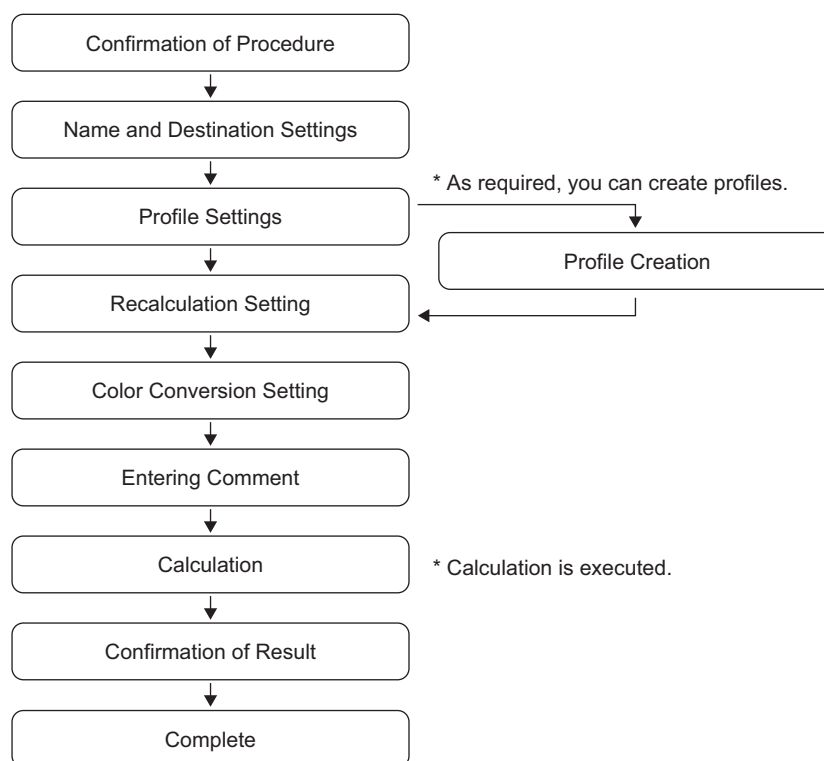
Color Centro Profiler is close to return to [Color Configuration Management] screen.

13.6 Edit the Component Profile of Profile Set

This section describes how to edit the component profile of Profile Set by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can edit the component profile of Profile Set.

The flow of the wizard is as follows;



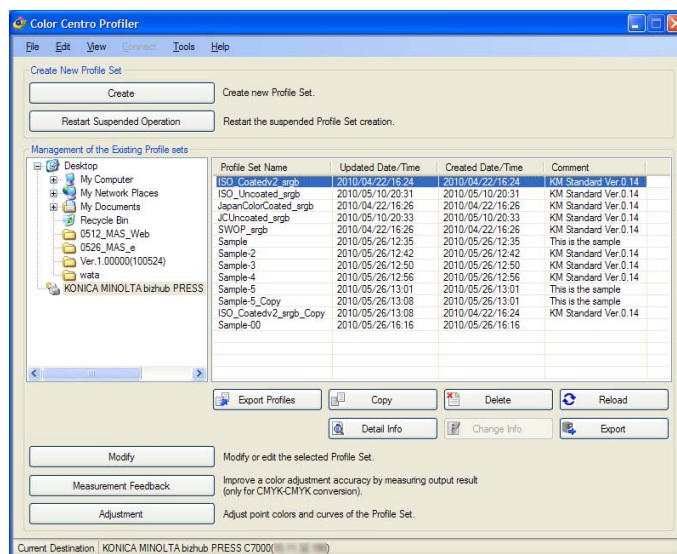
The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

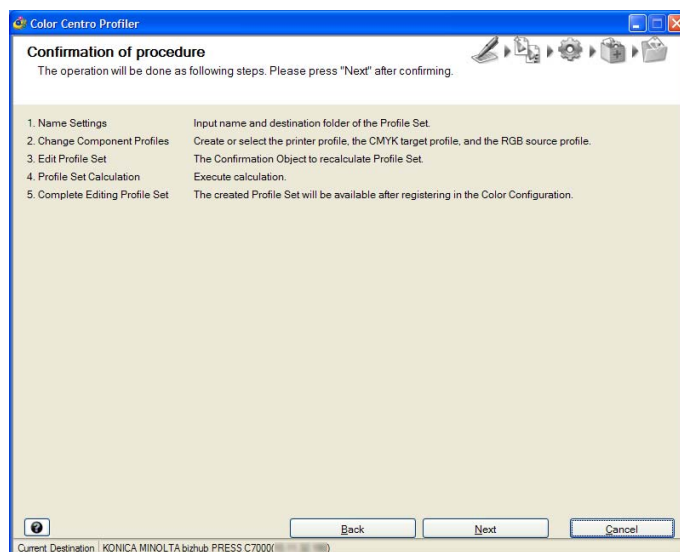
13.6.1 Launch Color Centro Profiler

You can edit the Profile Set by using Color Centro Profiler.

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.



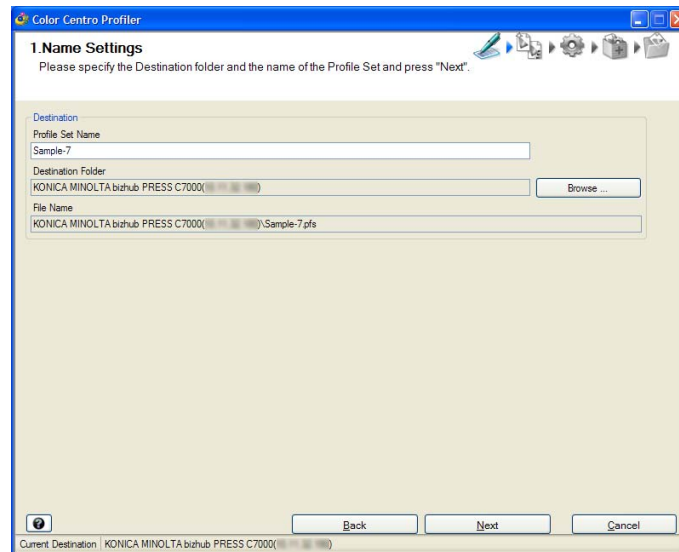
- 2 From the list, select the Profile Set to edit and click [Modify].
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, and click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 13-25.

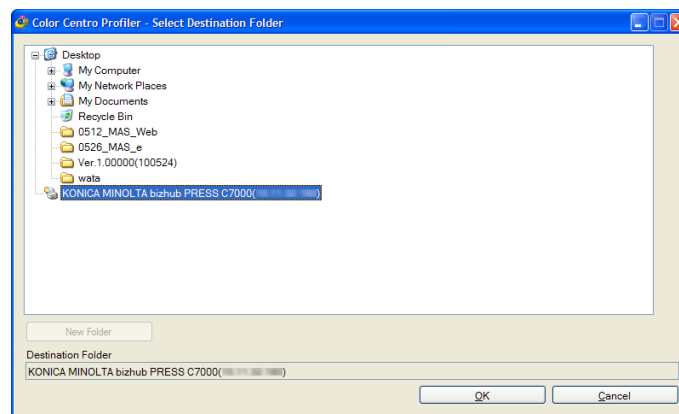
13.6.2 Set the Profile Set Name and the Destination

- 1 Specify the name of Profile Set you edit in [Profile Set Name] of [Name Settings] screen.



- When you save the Profile Set with another name or to another place, enter the profile name and go to Step 2.
- When you overwrite the Profile Set in which some settings are edited, go to Step 4.
- You cannot save the Profile Set of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the Profile Set name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.

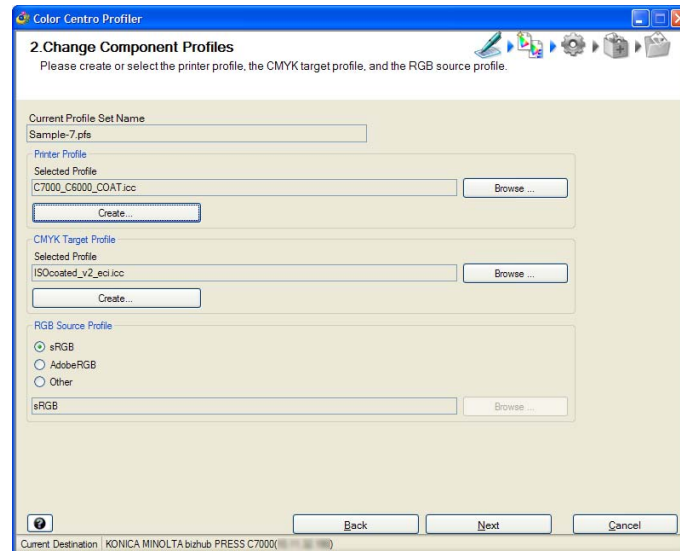


- 3 Select the destination folder for saving the Profile Set you edit and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Profile Determination screen appears.
 - When there is a profile with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 13-26.

13.6.3 Determine the Profiles

On the Profile Determination screen, as required, change the printer profile, the CMYK target profile and the RGB source profile which are used by Profile Set. In addition, you can create the printer profile and the CMYK target profile as required.

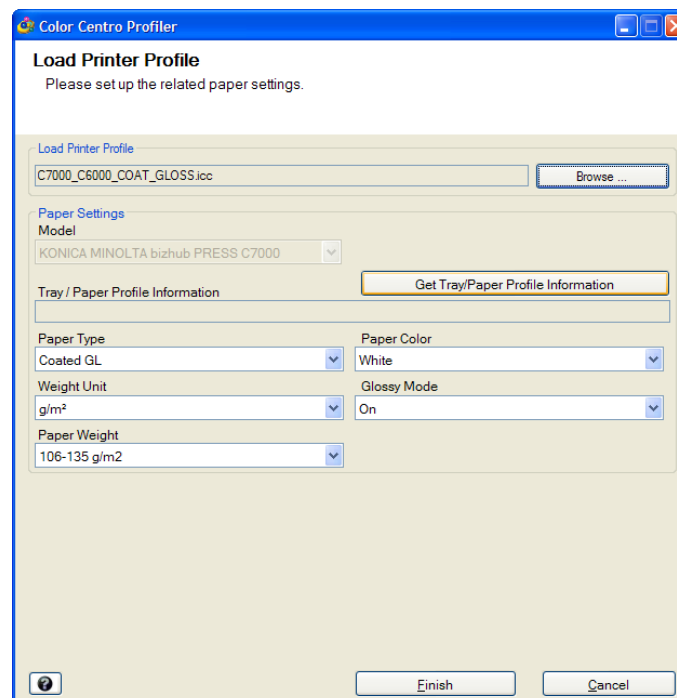
- 1 Specify the name of printer profile which is used by Profile Set. When you use the existed printer profile, click [Browse]. When you create the new printer profile, click [Create].



- When you click [Browse], [Load Printer Profile] screen appears. In this case, go to Step 2.
- When you click [Create], go to the steps described from page 11-29 to page 11-33.

- 2 On the screen displayed by clicking [Browse] of [Load Printer Profile], select a printer profile to use and click [Open].

The selected printer profile appears on [Load Printer Profile]. As required, set [Paper Type], [Paper Color], [Paper Weight] and [Glossy Mode]. Then, click [Finish] to return to the Profile Determination screen.



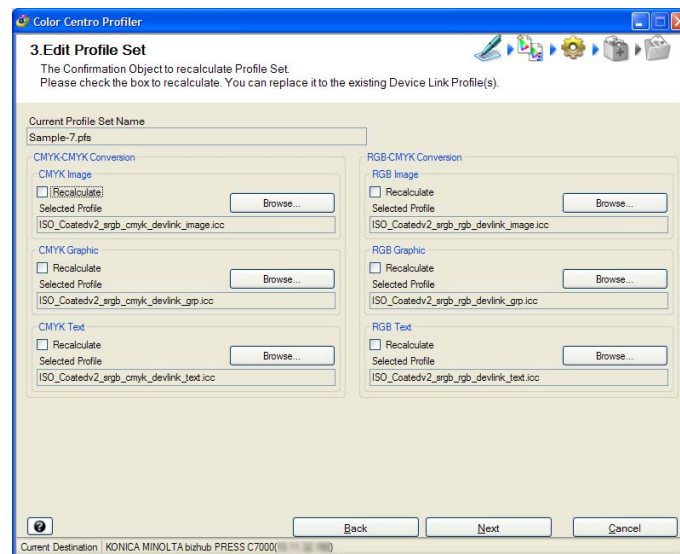
- 3 Specify the CMYK target profile which is used by Profile Set. When you use the existed CMYK target profile, click [Browse]. When you create the new CMYK target profile, click [Create].

- When you click [Browse], go to Step 4.
 - When you click [Create], go to the steps described from page 11-16 to page 11-20.
- 4 On the screen displayed by clicking [CMYK Target Profile] - [Browse], select the CMYK target profile used and click [Open].
The selected CMYK target profile is displayed to [Selected Profile] of [CMYK Target Profile].
 - 5 Specify the RGB source profile which is used by Profile Set. When you use [sRGB] or [AdobeRGB] which are preset to the image controller, select [sRGB] or [AdobeRGB]. When you specify the other RGB source profile, select [Other] and click [Browse].
 - When you click [Browse], go to Step 6.
 - When you select [sRGB] or [AdobeRGB], go to Step 7.
 - 6 On the screen displayed by clicking [RGB Source Profile] - [Browse], select the RGB source profile used and click [Open].
The selected RGB source profile is displayed below [Other] of [RGB Source Profile].
 - 7 Click [Next].
The Recalculate Profile Set screen appears.
→ Go to the step described on page 13-27.

13.6.4 Recalculate Profile Set

On the Recalculate Profile Set screen, you can set to recalculate Profile Set and replace the device link profiles.

- 1 Check [Recalculate] of the device link profile which you want to recalculate.



- If you change the printer profile or CMYK target profile, the screen is displayed with [Recalculate] being checked.
- 2 On the screen displayed by clicking [Browse] of the device link profile which you want to replace, select the device link profile to use.
→ The device link profiles can be set per object.
 - 3 Click [Next].
→ The Customize Color Conversions screen appears when you have set to recalculate or replace the device link profile which was made on Color Centro Profiler. In this case, go to the step described on page 13-28. The Comment screen appears when you have set to recalculate or replace the device link profile which was not made on Color Centro Profiler or when you have not set to recalculate and replace. In this case, go to the step described on page 13-30.

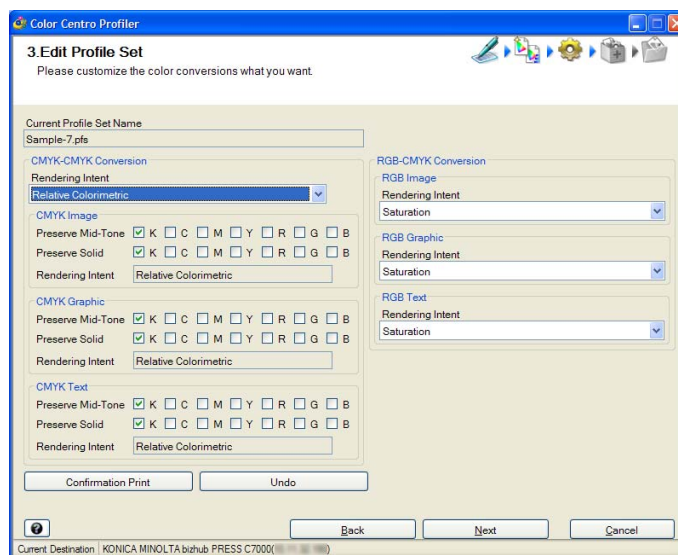
13.6.5 Customize the Color Conversions

When you have set to recalculate or replace the device link profile which was made on Color Centro Profiler, set the color conversions on the Customize Color Conversions screen.

On the Customize Color Conversions screen, according to the setting on the Recalculate Profile Set screen, you can set the rendering intent of CMYK-CMYK conversion, the preserve mid-tone / preserve solid of CMYK object (CMYK image, CMYK graphic and CMYK text) and the rendering intent of RGB object (RGB image, RGB graphic and RGB text).

- ✓ You cannot set the rendering intent when you replace all objects with the device link profile which was made / was not made on Color Centro Profiler.

- 1 From [CMYK-CMYK Conversion] - [Rendering Intent], select the rendering intent.



- [Relative Colorimetric] is the setting to execute color conversion regarding the paper color as completely white. The paper color parts are represented as colorlessness after color conversion.
- [Absolute Colorimetric] is the setting to execute color conversion maintaining the measurement value of the paper color. The paper color parts are represented with the color near the actual paper color after color conversion. When you select [Absolute Colorimetric], [Preserve Mid-Tone] and [Preserve Solid] are not available.
- When you make all contents of the setting on the screen the same content as recommended setting, click [Undo].

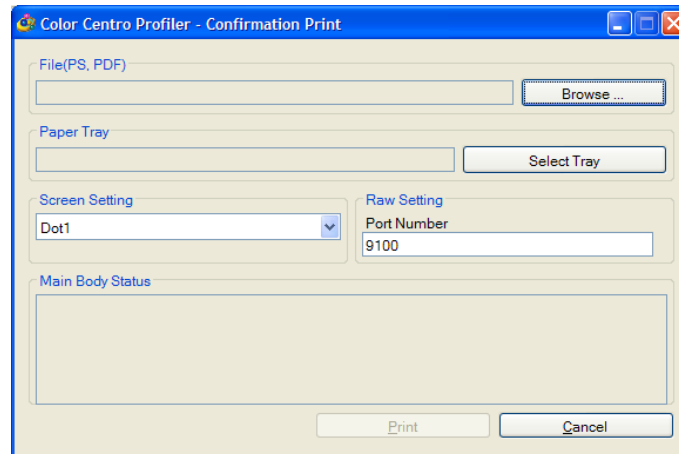
- 2 For [CMYK Image], [CMYK Graphic] and [CMYK Text], when you set the preserve mid-tone for one color, check [Preserve Mid-Tone] of that color.

- [Preserve Mid-Tone] is a setting to recompose the color after the color conversion as the same one color which has composed the color before the color conversion.
- The setting of [C], [M], [Y] and [K] is the setting for the color composed of C/M/Y/K only.
- The setting of [R] is the setting for the color composed of [M] and [Y].
- The setting of [G] is the setting for the color composed of [C] and [Y].
- The setting of [B] is the setting for the color composed of [C] and [M].
- In some cases, you cannot set [Preserve Mid-Tone] and [Preserve Solid] at the same time.

- 3 For [CMYK Image], [CMYK Graphic] and [CMYK Text], when you set the preserve solid for one color, check [Preserve Solid] of that color.

- [Preserve Solid] is a setting to represent the solid part after the color conversion with the same color which is used for the solid part before the color conversion.
- The setting of [C], [M], [Y], and [K] is the setting about the color composed of C/M/Y/K only,
- The setting of [R] is the setting for the color composed of [M] and [Y].
- The setting of [G] is the setting for the color composed of [C] and [Y].
- The setting of [B] is the setting for the color composed of [C] and [M].
- In some cases, you cannot set [Preserve Mid-Tone] and [Preserve Solid] at the same time.

- 4 From [RGB-CMYK Conversion] of [RGB Image], [RGB Graphic] and [RGB Text] on the Customize Color Conversions screen, select the rendering intent for each object.
 - [Perceptual (RGB Image)] is the recommended setting of RGB Image to represent the color near to the color which is before conversion.
 - [Saturation (RGB Graphic, Text)] is the recommended setting of RGB Graphic/Text to represent the color which maintains as much as possible the brightness of the color which is before conversion.
- 5 Click [Confirmation Print] for the test printing.
[Confirmation Print] screen appears.

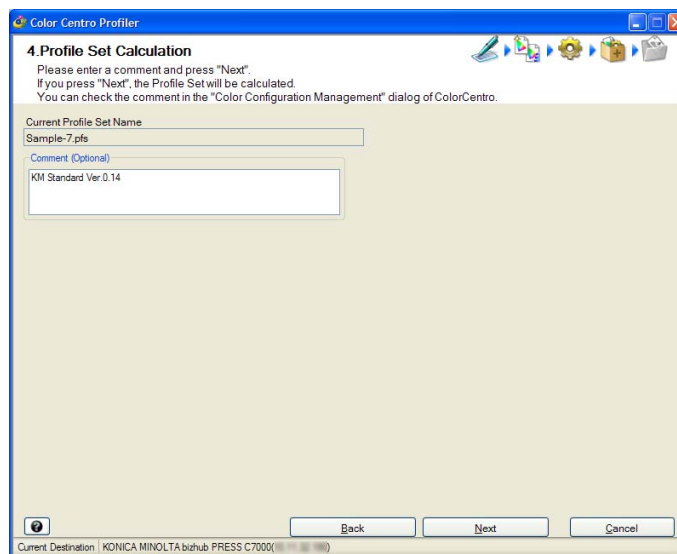


- 6 Specify the setting of confirmation printing and click [Print].
 - Click [Browse] to display the screen to select the image for printing.
 - Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
 - From [Screen Setting], select the screen setting used by confirmation printing.
 - Specify the port number used by confirmation printing to [Port Number].
 - When you click [Cancel], [Confirmation Print] screen is closed to return to the Customize Color Conversions screen.
- 7 Confirm the result of test printing.
- 8 Click [Next].
The Comment screen appears.
 - Go to the step described on page 13-30.

13.6.6 Enter the Comment

On the Comment screen, enter the comment to embed in the Profile Set you create, as required. You can confirm the comment when you select the Profile Set on Color Centro Profiler.

- 1 Enter the comment to [Comment (Optional)].



- 2 Click [Next].

Profile Set is calculated and generated.

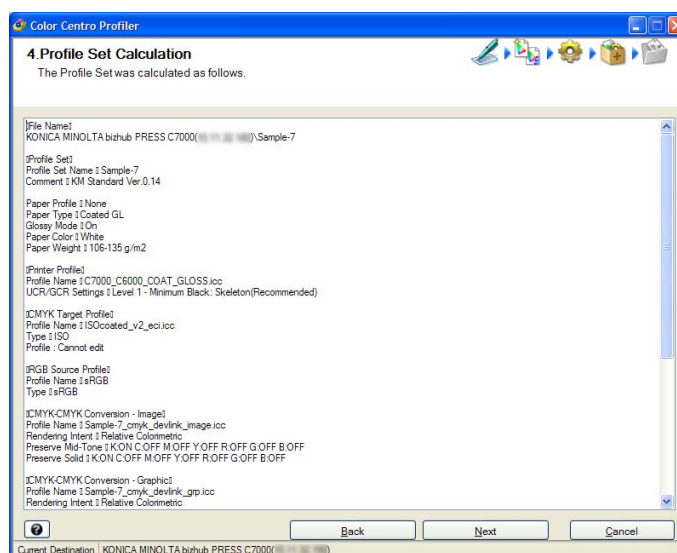
After completing calculation, the Calculation Result screen appears.

→ Go to the step described on page 11-45.

13.6.7 Confirm and Complete the Profile

Calculation Result screen displays the list of the setting of the generated Profile Set.

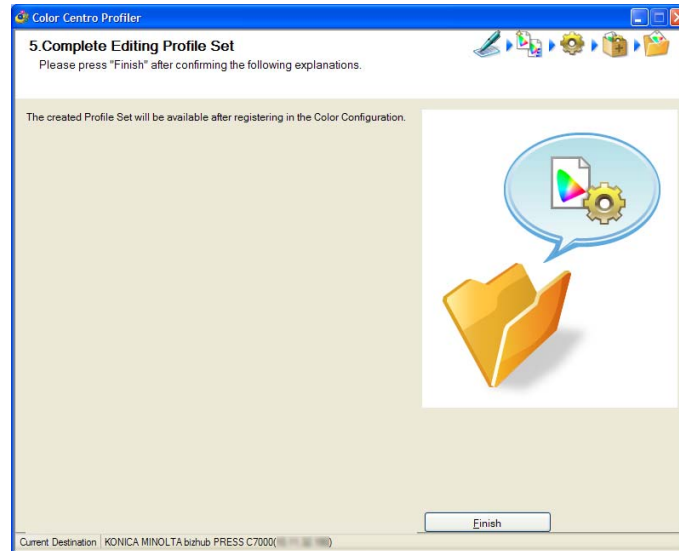
- 1 Confirm the setting which is displayed on the Calculation Result screen.



- 2 Click [Next].

The Complete Profile Set screen appears.

- 3 Click [Finish].



The wizard is completed.

Color Centro Profiler is close to return to [Color Configuration Management] screen.

13.7 Improve the Accuracy of the Profile Set

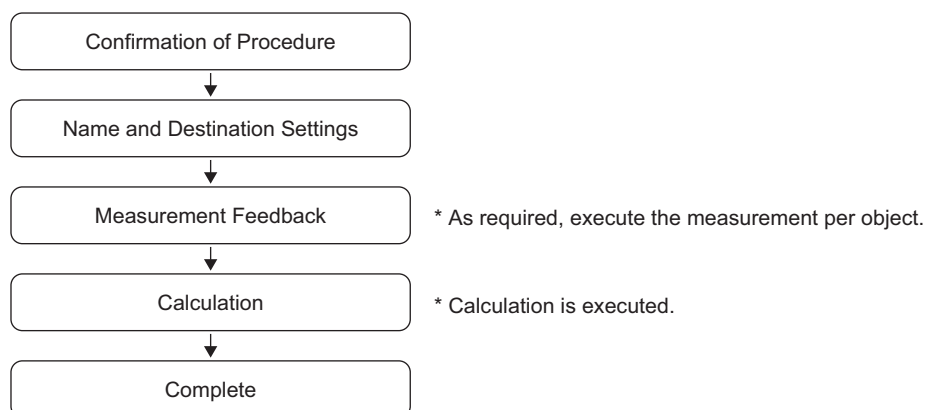
You can improve the accuracy of the Profile Set by using the Measurement Feedback screen.

On the Measurement Feedback screen, by repeating the measurement with the instrument, you can acquire the best measurement data to apply to the profile.

Although you can execute the measurement feedback when you edit the profile/Profile Set, this section describes how to execute the measurement feedback for Profile Set by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can execute the measurement feedback.

The flow of the wizard is as follows;

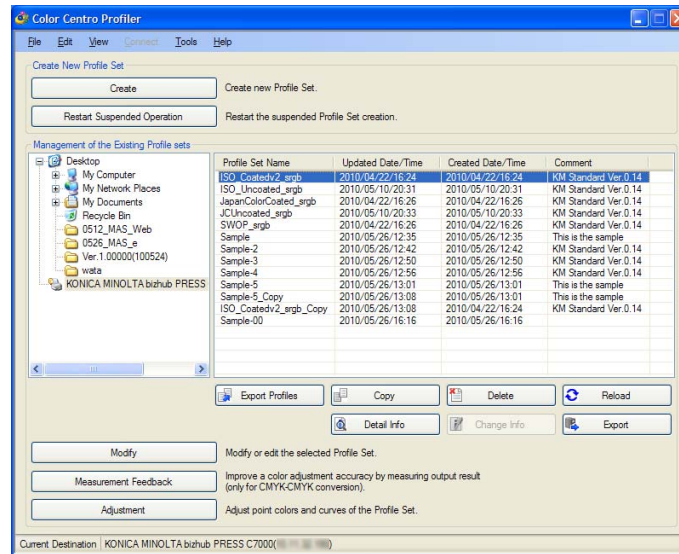


The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

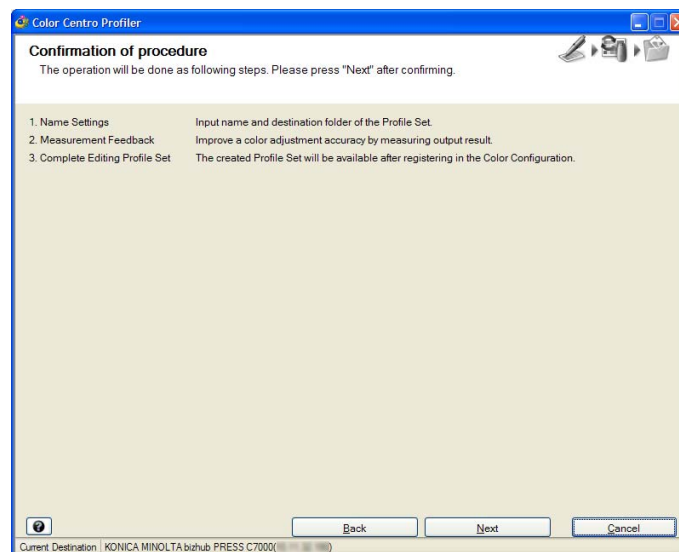
13.7.1 Launch Color Centro Profiler

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.



- 2 From the list, select the Profile Set to execute the measurement feedback and click [Measurement Feedback].

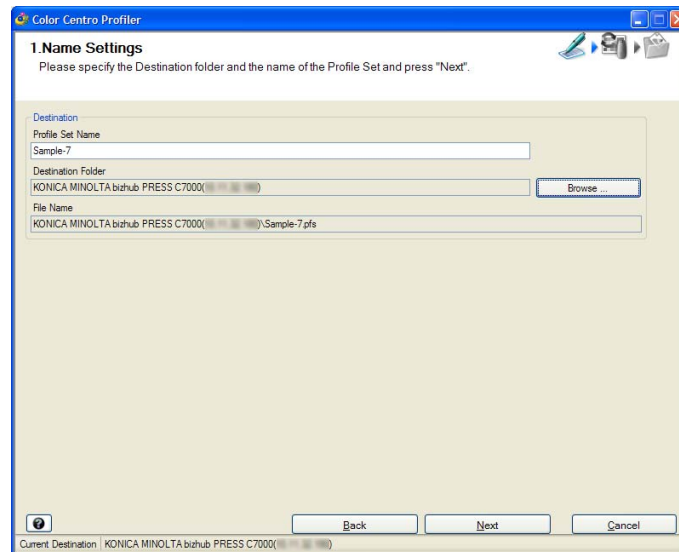
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, and click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 13-34.

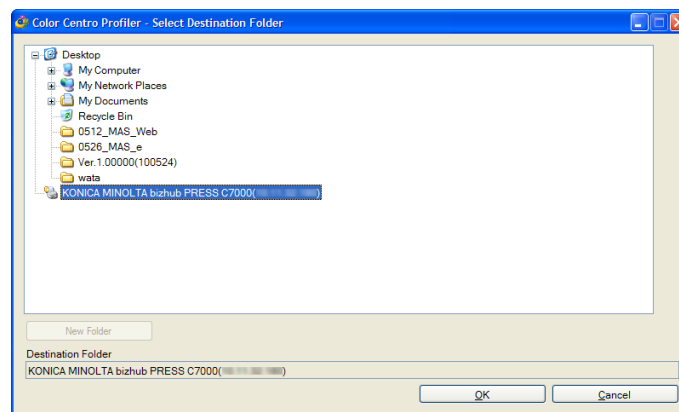
13.7.2 Set the Profile Set Name and the Destination

- 1 Specify the name of Profile Set you edit in [Profile Set Name] of [Name Settings] screen.



- When you save the Profile Set with another name or to another place, enter the profile name and go to Step 2.
- When you overwrite the Profile Set in which some settings are edited, go to Step 4.
- You cannot save the Profile Set of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the Profile Set name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.



- 3 Select the destination folder for saving the Profile Set you edit and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Measurement Feedback screen appears.
 - When there is a Profile Set with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 13-35.

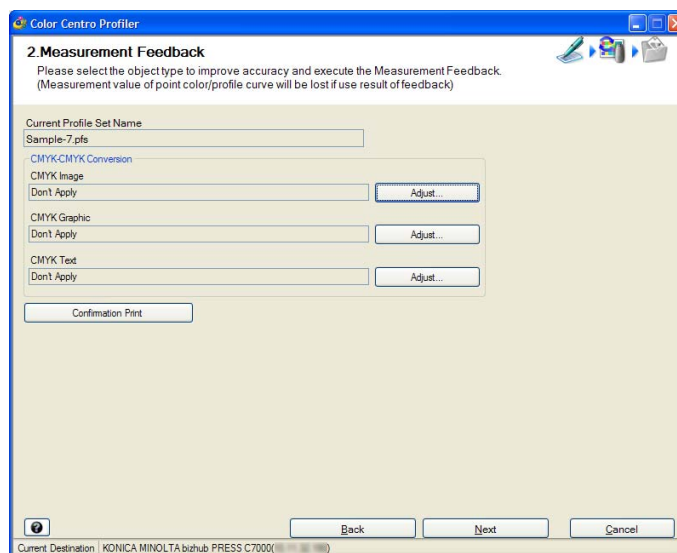
13.7.3 Execute the Measurement Feedback

You can execute the measurement feedback per CMYK object (CMYK Image, CMYK Graphic and CMYK Text).

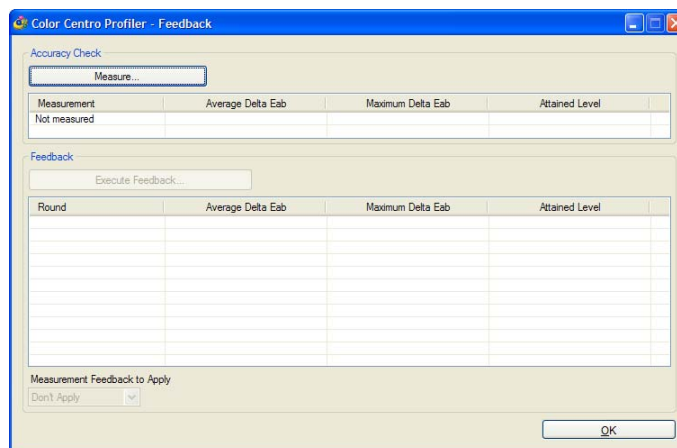
It is executed on The Measurement Feedback screen.

- ✓ To use the instrument, you need to install the device driver of the instrument to your computer.
- ✓ The chart pattern and available paper size differ according to the selected instrument.
- ✓ According to the selected instrument, measurement operations differ. For detailed information on how to operate, refer to user's guide of instrument respectively.

- 1 To start the measurement feedback, click [Adjust] of the CMYK object to execute.

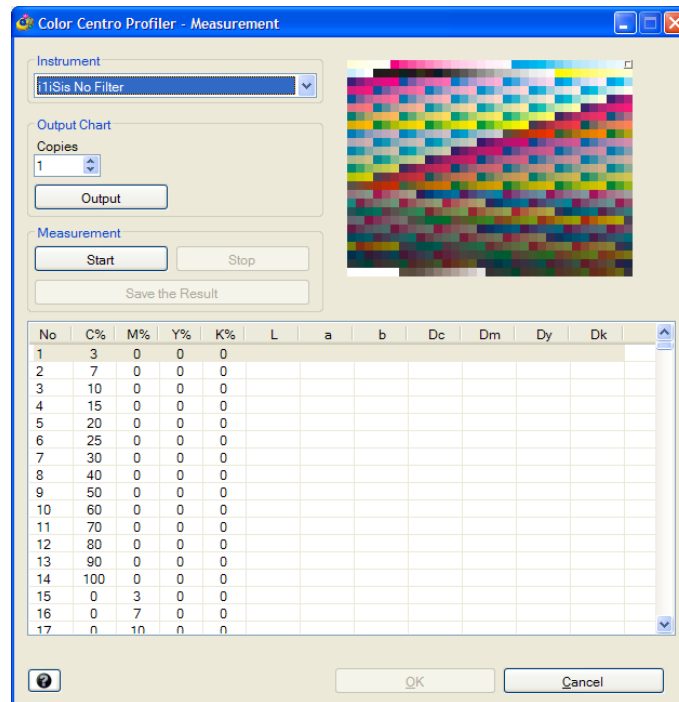


[Feedback] screen appears.



- 2 Click [Measure].

[Measurement] screen appears.



- 3 From [Instrument], select the instrument to use for the measurement.
According to the selection, the chart image appears on the upper-right of the screen.
→ [11Sis (UV Filter)] returns the measurement result with the UV cut filter.
- 4 Specify the copy number of the chart outputting to [Copies].
- 5 Click [Output] to print the chart.
- 6 Click [Start] to start the measurement.
 - According to the selected instrument, the operation screen appears. Follow the instructions on the pages that follow.
 - The current position of measurement appears on the chart image of the upper-right of the screen.
 - If you measure a wrong line, a warning message appears. You can select either to try again with the correct line or to proceed to the next line.
 - For detailed information on how to operate, refer to user's guide of each instrument.
 - To stop the measurement, click [Stop].
 - After the acquirement of measurement data, [Save the Result] becomes available.
 - The value of each patch appears in the measurement result list.
- 7 Click [Save the Result] after completing the measurement.
[Save As] screen appears.
- 8 Specify the saving place and file name, and click [Save].
[Measurement] screen returns after saving the measurement result file.
- 9 Click [OK].
[Feedback] screen returns.
On [Feedback] screen, the measurement data is displayed.
- 10 Click [Execute Feedback].
Profile is calculated.
After completing calculation, [Measurement] screen appears.
- 11 Repeat from Step 4 to Step 9.

On [Feedback] screen, the new measurement data is added.

The attained level which indicates the improvement of the accuracy is displayed on [Attained Level]

→ The attained level is indicated in 3 levels. The maximum level of the attained level is indicated as "★★★★".

- 12** Confirm [Attained Level] and repeat the operation from Step 10 to Step 11 up to the target level.

On [Feedback] screen, the new measurement data is added.

→ You can repeat these operations 8 times at the maximum.

→ When you reach the maximum level and click [Execute Feedback], the warning screen is displayed. When you execute the feedback, click [OK]. When you finish the feedback, click [Cancel].

- 13** Confirm [Attained Level] is reached to the target level, and select the number of the feedback (n times) which acquires the value to adopt for profile from [Measurement Feedback to Apply].

- 14** Click [OK].

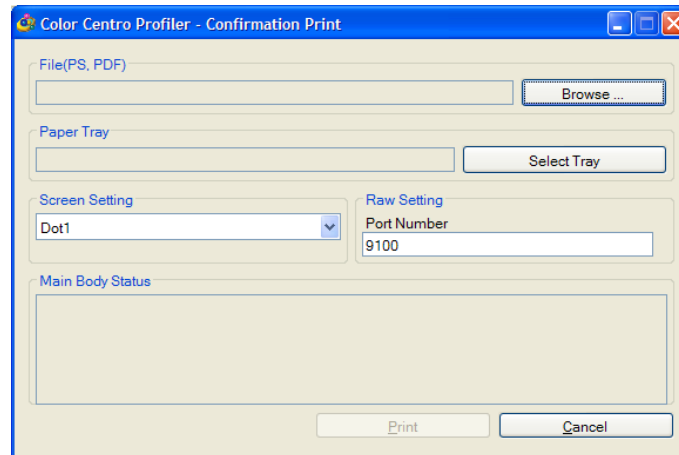
[Feedback] screen is closed to return to the Measurement Feedback screen.

- 15** Repeat from Step 1 to Step 14 for other CMYK objects.

The Measurement Feedback screen returns.

- 16** Click [Confirmation Print] for the test printing.

[Confirmation Print] screen appears.



- 17** Specify the setting of confirmation printing and click [Print].

→ Click [Browse] to display the screen to select the image for printing.

→ Click [Select Tray] to display the screen to specify the tray used by confirmation printing.

→ From [Screen Setting], select the screen setting used by confirmation printing.

→ Specify the port number used by confirmation printing to [Port Number].

→ When you click [Cancel], [Confirmation Print] screen is closed to return to the Measurement Feedback screen.

- 18** Confirm the result of test printing and click [Next].

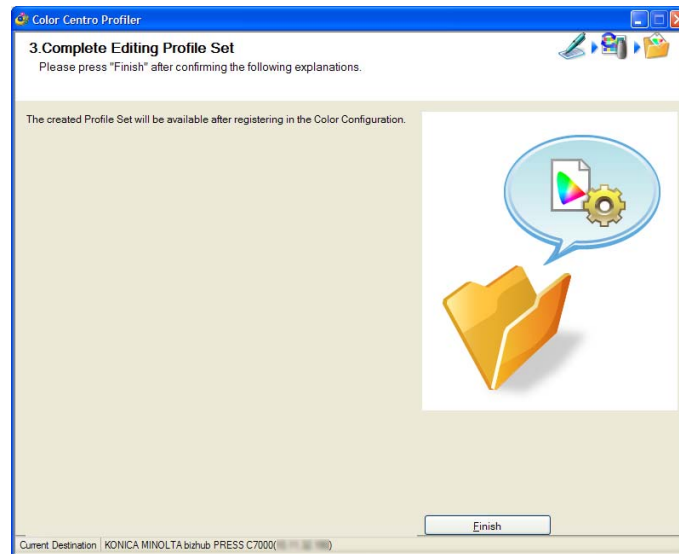
The Complete Profile Set screen appears.

→ Go to the step described on page 13-38.

13.7.4 Complete the Profile Set

On the Complete the Profile Set screen, finish the task.

- 1 Click [Finish].



The wizard is completed.
[Color Centro Profiler] screen returns.

- 2 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

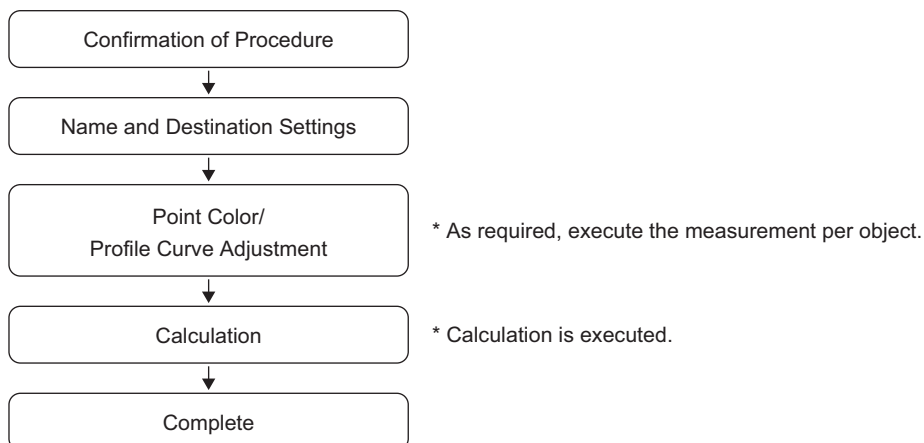
13.8 Adjust the Color Conversions of Profile Set

On the Point Color Adjustment/Profile Curve Adjustment screen, you can execute the adjustment of the color conversions of the Profile Set.

Although you can execute the point color adjustment/profile curve adjustment when you edit the profile/Profile Set, this section describes how to execute the point color adjustment/profile curve adjustment for Profile Set by launching Color Centro Profiler.

The wizard screen appears by launching Color Centro Profiler. Following the instructions of the screen, you can execute the point color adjustment/profile curve adjustment.

The flow of the wizard is as follows;

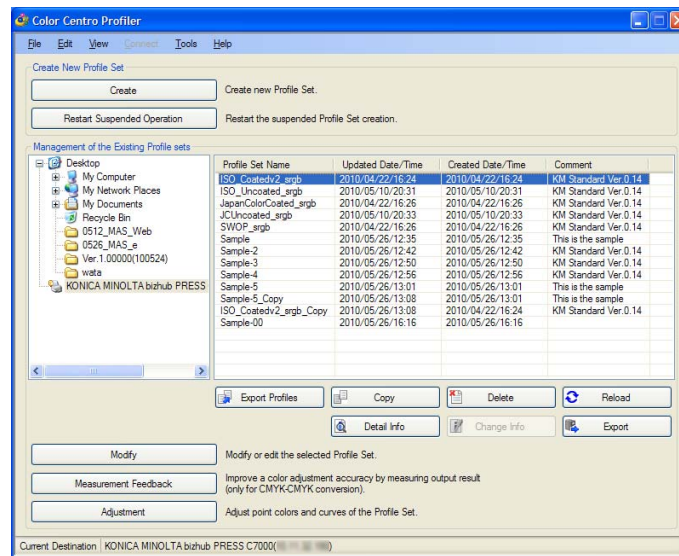


The following buttons appear on the wizard screen. Use those as required.

- [Next]: Click this button when you go to the next screen after completing the setting of the displayed current screen.
- [Back]: Click this button when you back to the previous screen.
- [Cancel]: Click this button when you cancel the operation.
- [Suspend the Operation]: This button appears when suspending and restarting of the operation are available. Click this button when you want to suspend your operation temporarily and restart thereafter. The setting you made can be saved to the file. For detailed information on how to suspend and restart your operation, refer to page 14-5.

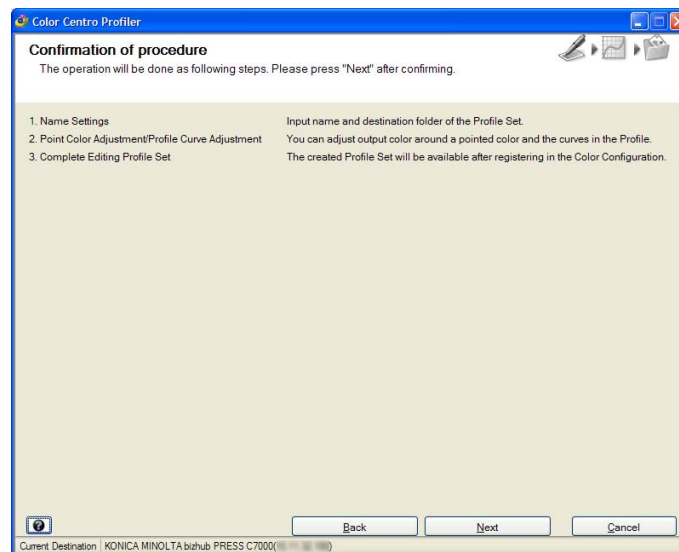
13.8.1 Launch Color Centro Profiler

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.



- 2 From the list, select the Profile Set to execute the point color adjustment/profile curve adjustment, and click [Adjustment].

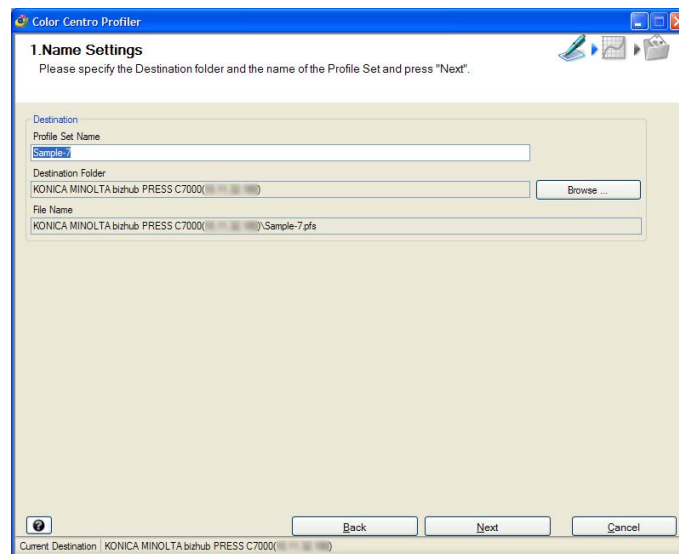
Color Centro Profiler is launched as wizard and then [Confirmation of procedure] screen appears.



- 3 Confirm the contents, and click [Next].
[Name Settings] screen appears.
→ Go to the step described on page 13-41.

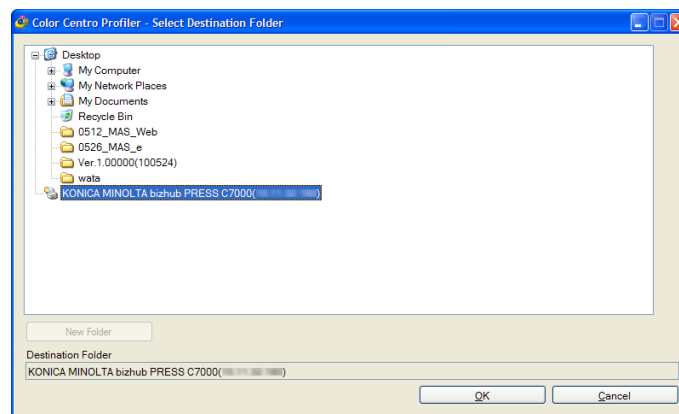
13.8.2 Set the Profile Set Name and the Destination

- 1 Specify the name of Profile Set you edit in [Profile Set Name] of [Name Settings] screen.



- When you save the Profile Set with another name or to another place, enter the profile name and go to Step 2.
- When you overwrite the Profile Set in which some settings are edited, go to Step 4.
- You cannot save the Profile Set of the same name with those registered at factory shipping in the image controller.
- You cannot use "DEVICE" (not only the capital letter but also the small letter) for the Profile Set name when you save the profile to the image controller.

- 2 Click [Browse].
[Select Destination Folder] screen appears.

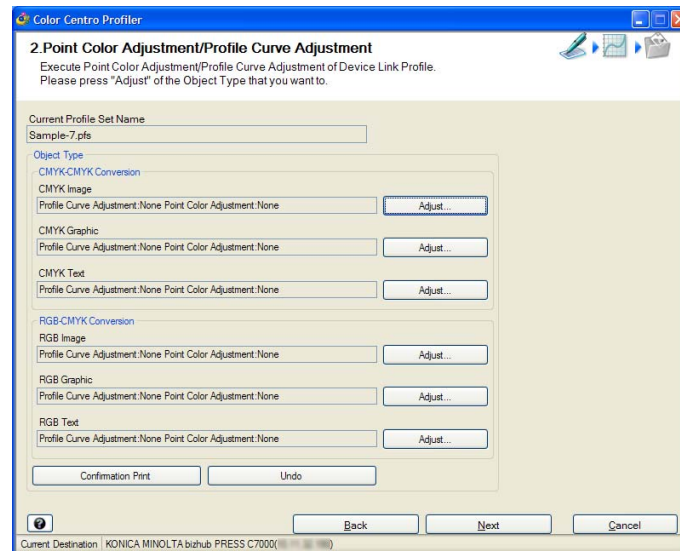


- 3 Select the destination folder for saving the Profile Set you edit and click [OK].
The destination folder and file name are displayed on [Destination Folder] and [File Name] of [Name Settings] screen.
- 4 Click [Next].
The Point Color Adjustment/Profile Curve Adjustment screen appears.
 - When there is a Profile Set with the same name, the [Confirmation : Overwrite] screen appears. To save with another name, click [Cancel]. To overwrite, click [OK].
 - Go to the step described on page 13-42.

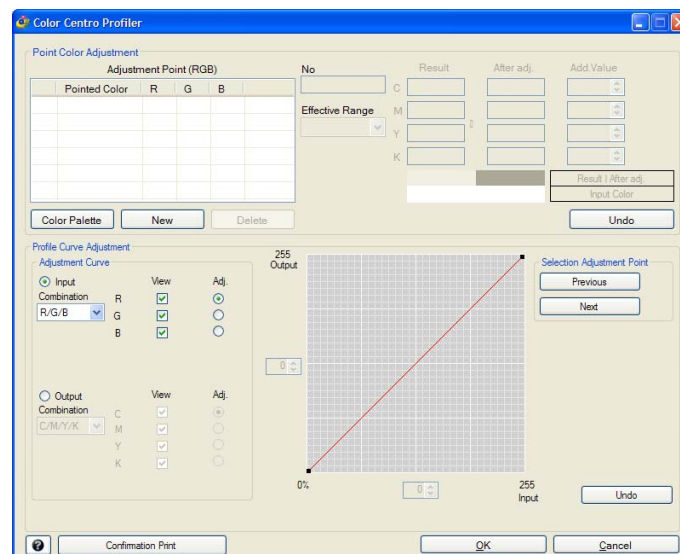
13.8.3 Adjust the Point Color / Profile Curve

You can execute the point color adjustment/profile curve adjustment per CMYK object (CMYK Image, CMYK Graphic and CMYK Text).

- 1 To execute the point color adjustment/profile curve adjustment, click [Adjust] of the CMYK object to execute.

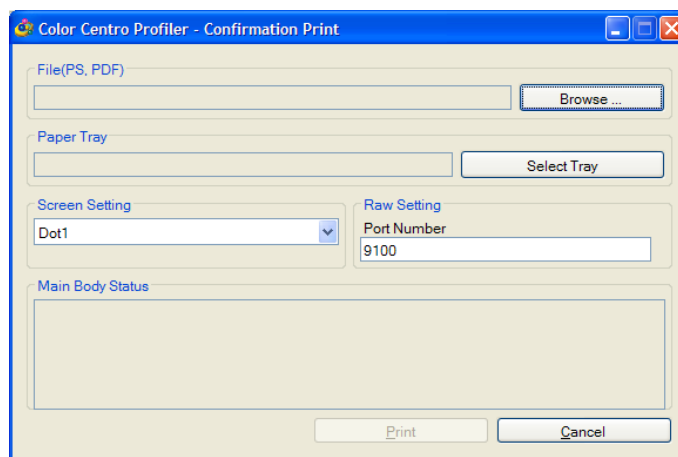


The Adjustment screen appears.



- 2 If necessary, adjust the point color as follows;
 - When you add the new point color, execute the operation described on page 13-43.
 - When you edit the existing point color, execute the operation described on page 13-44.
 - When you delete the existing point color, execute the operation described on page 13-44.
- 3 If necessary, execute the adjustment of the profile curve.
 - For detailed information on how to adjust the profile curve, refer to page 13-45.
- 4 Repeat from Step 1 to Step 3 for other CMYK object.
The Point Color Adjustment/Profile Curve Adjustment screen appears.
- 5 Click [Confirmation Print] for the test printing.

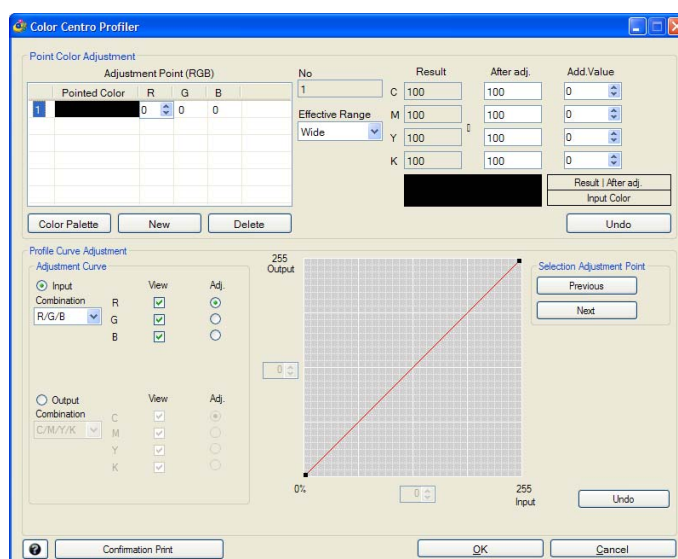
[Confirmation Print] screen appears.



- 6 Specify the setting of confirmation printing and click [Print].
 - Click [Browse] to display the screen to select the image for printing.
 - Click [Select Tray] to display the screen to specify the tray used by confirmation printing.
 - From [Screen Setting], select the screen setting used by confirmation printing.
 - Specify the port number used by confirmation printing to [Port Number].
 - When you click [Cancel], [Confirmation Print] screen is closed to return to the Adjustment screen.
- 7 Confirm the result of test printing and click [OK].
The Adjustment is closed to return to the Point Color Adjustment/Profile Curve Adjustment screen.
- 8 Click [Next].
Profile is calculated and generated.
After completing calculation, the Complete Profile screen appears.
→ Go to the step described on page 13-46.

Add the New Spot Color

- 1 Click [New].
A numbered line is added on [Adjustment Point].



- 2 Specify the value (0 to 255) of the added point color of the added line to [R], [G] and [B]. Or, select the color from [Color Setting] screen displayed by clicking [Color Palette]. And click [OK].
The new input color is displayed on [Pointed Color].

- 3 From [Effective Range], select the effective range.
The color conversion result of the adjusted point is displayed on [Result] and [After adj.]. In addition, the color of [Result] is displayed on the upper-left of the Sample Color (below the [Result]) and the color of [After adj.] is displayed on the upper-right.
 - When you select [Narrow], the result of adjustment has influence on the color range which includes only the near colors to the input color.
 - When you select [Wide], the result of adjustment has influence on the color range which includes the colors which are away from the input color.
 - When you select [Normal], it has influence on the middle range between [Narrow] and [Wide].
 - You can specify [Effective Range] per adjustment point.
 - The values displayed on [Result] and [After adj.] are the value to which Input curve and color conversion table are applied. (Output curve is not applied to the curve yet.)
- 4 Enter the value into [Add. Value] to make the value of [After adj.] the target value.
 - When you discard the setting of [Add. Value], click [Undo] of [Point Color Adjustment].

Edit the Existing Point Color

- 1 From [Adjustment Point], select the adjustment point (input color) to edit.
The input color is displayed on the lower of the Sample Color (below [Result]).
- 2 From [Effective Range], select the effective range.
The color conversion result of the adjusted point is displayed on [Result] and [After adj.]. In addition, the color of [Result] is displayed on the upper-left of the Sample Color and the color of [After adj.] is displayed on the upper-right.
 - When you select [Narrow], the result of adjustment has influence on the color range which includes only the near colors to the input color.
 - When you select [Wide], the result of adjustment has influence on the color range which includes the colors which are away from the input color.
 - When you select [Normal], it has influence on the middle range between [Narrow] and [Wide].
 - You can specify [Effective Range] per adjustment point.
 - The values displayed on [Result] and [After adj.] are the value to which Input curve and color conversion table are applied. (Output curve is not applied to the curve yet.)
- 3 Enter the value into [Add. Value] to make the value of [After adj.] the target value.
 - When you discard the setting of [Add. Value], click [Undo] of [Point Color Adjustment].

Delete the Existing Point Color

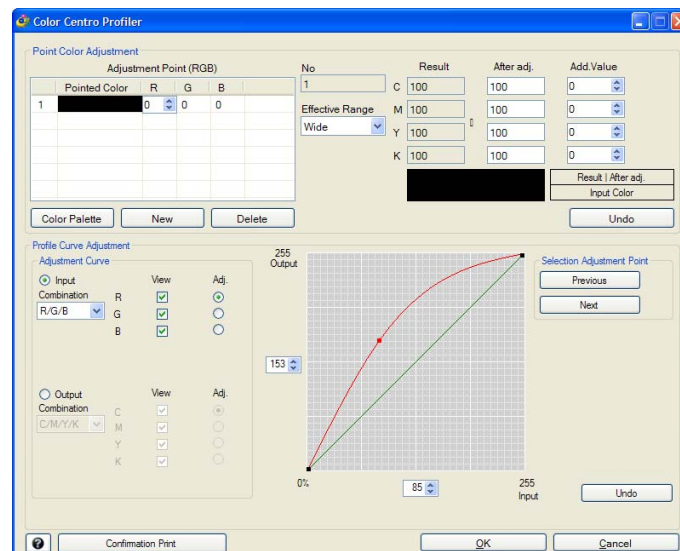
- 1 From [Adjustment Point], select the adjustment point (input color) to delete.
- 2 Click [Delete].
The selected adjustment point is deleted.

Adjust the Profile Curve

- 1 From [Adjustment Curve], select [Input] or [Output].
 - When you execute the adjustment of input curve, select [Input].
 - When you execute the adjustment of output curve, select [Output].
- 2 Select the combination of colors from [Combination].

According to the selection from [Combination], [View] check box of each color and [Adj.] radio button of each color appear.

 - When you select [Input], select [R/G/B] or [RGB].
 - When you select [Output], select [C/M/Y/K], [CMY/K] or [CMYK].
 - When you select [R/G/B] or [C/M/Y/K], you can adjust the profile curves of each color.
 - When you select [RGB] or [CMYK], you can adjust the consolidated profile curves of RGB or CMYK.
 - When you select [CMY/K], you can adjust the consolidated profile curve of CMY and the profile curve of K.
- 3 When you want to display the profile curve of one color, check [View] of that color.
 - When you want to hide the profile curve of one color, remove the check mark from [View] of that color.
- 4 When you want to adjust the profile curve of one color, select [Adj.] of that color.
 - When check mark of [View] for one color was not selected and you select [Adj.] for the same color, [View] is checked automatically.
- 5 To execute the adjustment of the profile curve, you can drag and move the beginning point/ending point (at both ends of the profile curve) and adjustment points (added by the clicking on the profile curve).

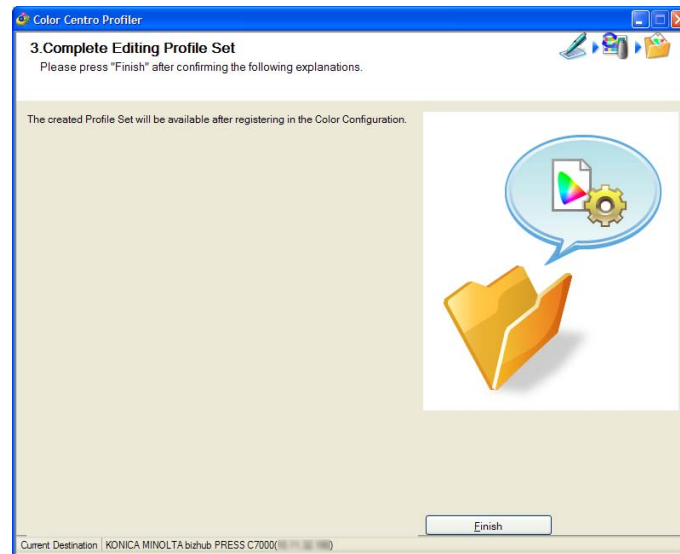


- The selected adjustment point appears as a small red square.
- By clicking [Previous] or [Next], you can switch the point selection to the previous or the next.
- You can move the selected point by entering the coordinate values into the input boxes which are on the center of vertical/horizontal axes.
- When you want to delete the added point, drag it to the adjacent point or drop it outside of the profile curve area.
- When you want to reset the adjusted setting, click [Undo] of [Profile Curve Adjustment].

13.8.4 Complete the Profile Set

On the Complete the Profile Set screen, finish the task.

- 1 Click [Finish].



The wizard is completed.
[Color Centro Profiler] screen returns.

- 2 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9 Profile Set Management

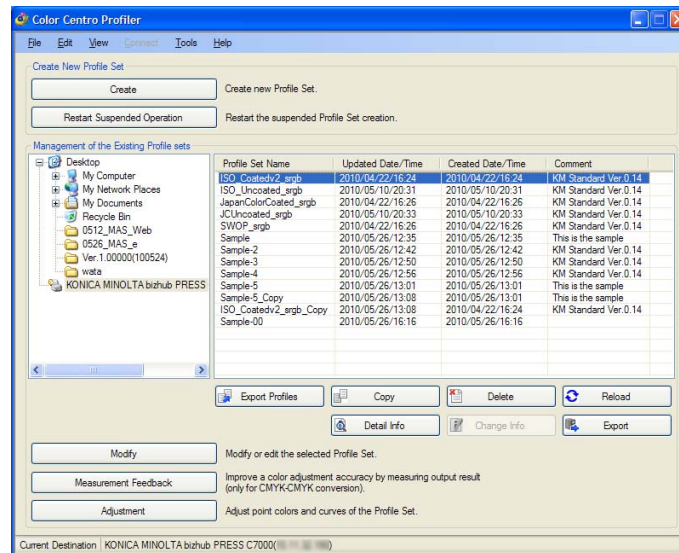
On [Color Centro Profiler] screen, you can manage Profile Set.

This section describes how to manage the new Profile Set by launching Color Centro Profiler.

13.9.1 Export Profiles

You can export profiles from the Profile Set.

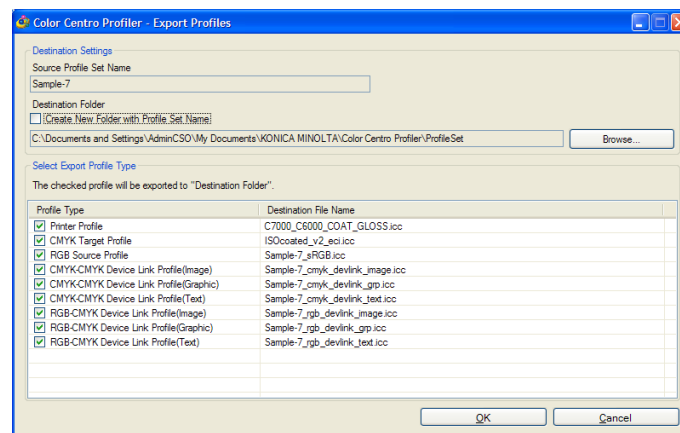
- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.



- 2 From the tree view and the list of [Management of the Existing Profile sets], select the Profile Set to export the profile.

- For detailed information on how to connect another controller, refer to page 14-2.
- When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.

- 3 Click [Export Profiles].
[Export Profiles] appears.



- 4 When you save the exported profiles to the folder with the name of the Profile Set, check [Create New Folder with Profile Set Name].
- 5 On the screen displayed by clicking [Browse], select the place to save the profiles and click [OK].

When you check [Create New Folder with Profile Set Name], the folder with the name of the Profile Set is created at the selected place.

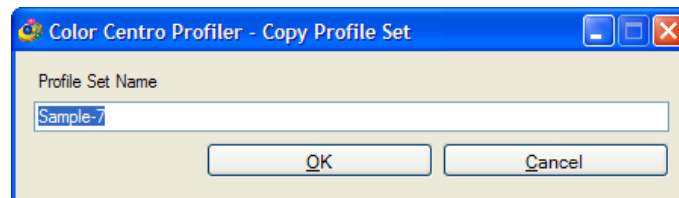
- 6 On [Select Export Profile Type], check the profile to export and click [OK].
The selected profiles are exported to the specified place.
[Export Profiles] screen is closed and the confirmation message appears.
- 7 Click [OK] on the confirmation message.
[Color Centro Profiler] screen returns.
- 8 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9.2 Copy the Profile Set

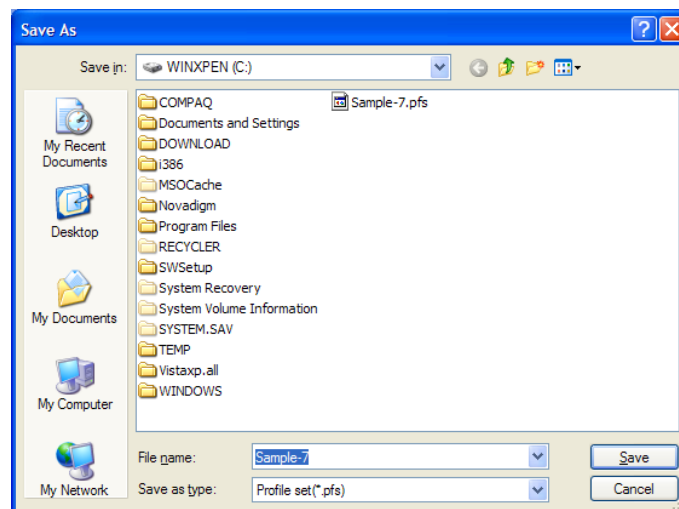
You can make a duplication of the Profile Set in the image controller, to the image controller. In addition, the Profile Set saved on the local/network computer can be saved with another name to the local/network computer.

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the tree view and the list of [Management of the Existing Profile sets], select the Profile Set to copy.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 3 Click [Copy].

When you select the Profile Set in the image controller, [Copy Profile Set] screen appears.

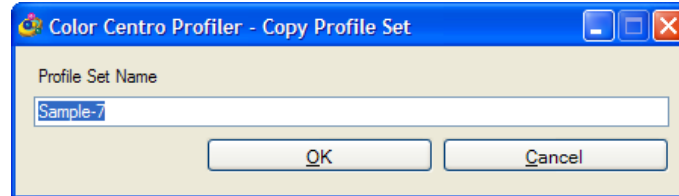


When you select the Profile Set on the local/network computer, [Save as] screen appears.



- When you select the multiple Profile Sets, [Copy] is not available.
- Similar operation can be done when you select [File] menu - [Copy].

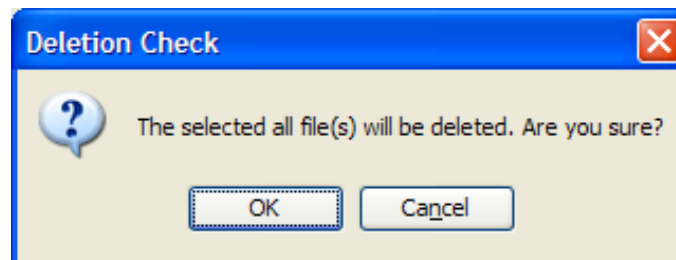
- 4 Specify [Profile Set Name] (in case of the image controller) or [File Name] (in case of local/network).
 - You cannot save the Profile Set of the same name with those in the image controller.
 - When you copy to the image controller, specify the Profile Set Name within 96 one-byte alpha-numerical characters.
- 5 Click [OK] (in case of the image controller) or [Save] (in case of local/network).
The duplication of the Profile Set is generated.
 - When there is the Profile Set with the same name, [Copy Profile Set] screen appears again. In this case, specify another Profile Set name and click [OK].



- 6 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9.3 Delete

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the tree view and the list of [Management of the Existing Profile sets], select the Profile Set to delete.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 3 Click [Delete].
The confirmation message appears.



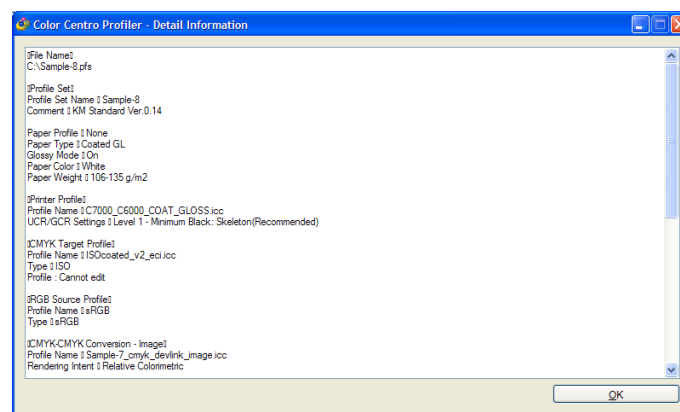
- You can delete the multiple Profile Sets.
 - Similar operation can be done when you select [File] menu - [Delete].
- 4 Click [OK] on the confirmation message.
Profile is deleted.
 - 5 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9.4 Refresh the List (Reload)

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the tree view and the list of [Management of the Existing Profile sets], select the folder to reload.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 3 Click [Reload].
The list is updated.
- 4 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9.5 Confirm the Detail Info

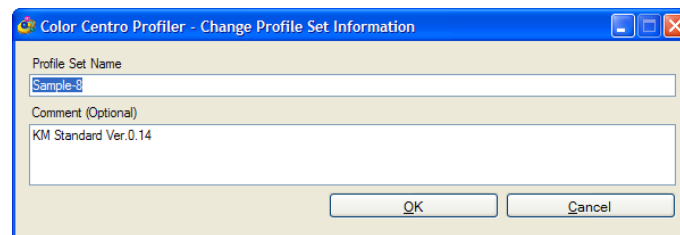
- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the tree view and the list of [Management of the Existing Profile sets], select the Profile Set to confirm the detail information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 3 Click [Detail Info].
[Detail Information] screen appears.



- When you select the multiple Profile Sets, [Detail Info] is not available.
 - Similar operation can be done when you select [View] menu - [Change Table Information].
- 4 Confirm the content and click [OK].
[Detail Information] is closed.
 - 5 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9.6 Change the Profile Set Information

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the tree view and the list of [Management of the Existing Profile sets], select the Profile Set to change the information.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 3 Click [Change Info].
[Change Profile Set Information] appears.

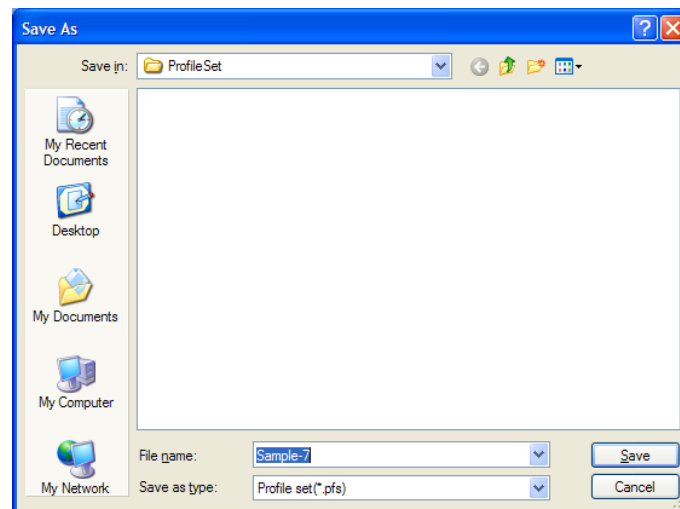


- When you select multiple Profile Sets, [Change Info] is not available.
 - Similar operation can be done when you select [File] menu - [Change Info].
- 4 Edit [Profile Set Name] (within 96 one-byte alpha-numerical characters) and [Comment (Optional)] (within 192 one-byte alpha-numerical characters) as required.
 - You cannot change to the same name of the existed Profile Set in the image controller.
 - 5 Click [OK].
The Profile Set information is changed.
 - When there is the Profile Set with the same name, [Copy Profile Set] screen appears. In this case, specify another Profile Set name and click [OK].
 - 6 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.9.7 Export the Profile Set

You can export the RGB source profile of the image controller to Local or Network.

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the tree view and the list of [Management of the Existing Profile sets], select the Profile Set to export.
 - For detailed information on how to connect another controller, refer to page 14-2.
 - When you reload the information of the image controller connected currently, select [View] menu - [Reload]. Executing of reload discards the adjusted Profile Set when the Profile Set has not been registered yet in the image controller. Register the settings before executing of reload, as required. For how to register it, refer to page 13-10.
- 3 Click [Export].
[Save As] screen appears.



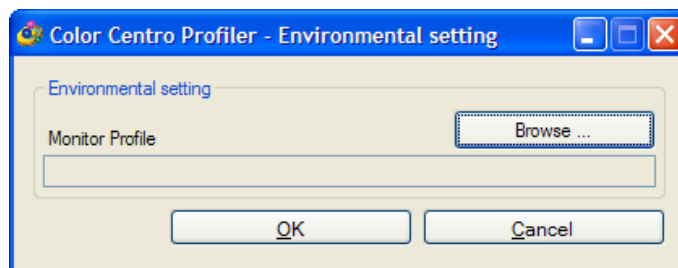
- When you select the multiple Profile Sets, [Export] is not available.
 - Similar operation can be done when you select [File] menu - [Export].
- 4 Specify the saving place and file name for the Profile Set to export, and click [Save].
Exporting to the specified place is executed.
 - 5 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

13.10 Environmental Setting

You can select the monitor profile to match the adjustment point and the adjusted color accurately on the monitor when the point color adjustment is executed.

This section describes how to set the monitor profile as the environmental setting of Color Centro Profiler.

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.
- 2 From the [Tool] menu, select [Environmental setting].
[Environmental setting] screen appears.



- 3 On the screen displayed by clicking [Browse], select the monitor profile to use and click [OK].
The selected monitor profile is applied.
- 4 On [Color Centro Profiler] screen, from the [File] menu, select [Exit].
[Color Configuration Management] screen returns.

14

Other Functions

14 Other Functions

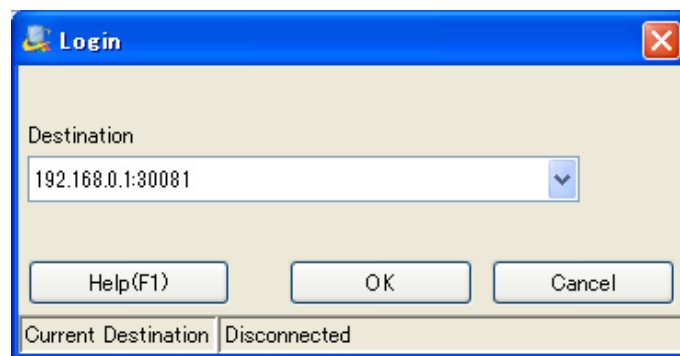
14.1 Re-login on Connection Switching

When you connect to the image controller which is different from the image controller currently connected, operate as follows;

- ✓ When there are unregistered settings for the image controller connecting currently connected, register those to the image controller or save those to the local/network computer, as required.
- ✓ To login, the IP address and the port number are necessary. When the port number is unknown, confirm the JSP settings of the image controller. (default: 30081)
- ✓ Confirm that the image controller can communicate.

- 1 Select [File] menu - [Login] on the screen you are using.

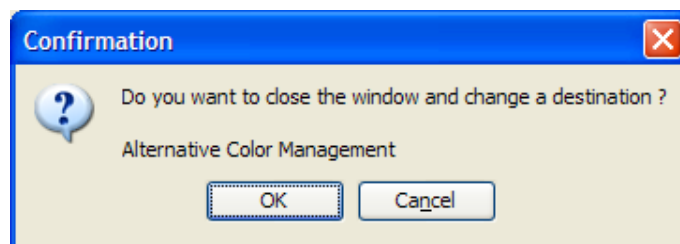
When the system can not find any unregistered/unsaved information, [Login] screen appears.



- When you use the screen on which tree view is displayed, similar operation can be done by selecting other image controller on the tree view.
- Similar operation can be done when you use [File]menu of [Launcher].
- While [Login] screen is displayed, [Launcher] screen is not available until login is completed.

- 2 Enter the IP address and the port number (30081 - 30090) of the image controller to which you want to connect Color Centro into [Destination] of [Login] screen, and click [OK].

- If the IP address is 192.168.0.1 and the port number is 30081, separate the IP address and the port number with a colon, and enter "192.168.0.1:30081".
- You can select the IP address and the port number which were used before, from [Current Destination]. The input number is kept even after exiting Color Centro.
- When you click [Cancel], the login process is canceled.
- When you click [Help], the [Help] screen appears.
- When there is unregistered/unsaved information on the current screen, or some screens are under use, the confirmation message appears. In this case, click [OK] if you want to close all the screens. When you want to register/save the unregistered/unsaved information to the image controller/computer, select [Cancel] and redo Step 1 after necessary operations for registration/saving.



14.2 List Operation

14.2.1 Sorting by List Item

You can sort the content by the list item on the following lists;

- List of [Tone Curve Adjustment] screen
- List of [Spot Color Table Management] screen
- List of [Profile Management] screen
- List of [Color Configuration Management] screen (other than [Memo])
- Left list of [Default Profile Set Setting / Paper Type Default Setting] screen
- List of [Import/Export] screen

You can sort the list by clicking the list item name which becomes the key of sorting. When you click the item name, small triangle appears to the right of the name and you can confirm the order (upward: ascending order / downward: descending order). You can switch ascending order and descending order by clicking.

Similar operation can be done when you select [File] menu - [Sort]. (Some screens don't have [Sort] menu)

14.2.2 Move of Row

You can move the row of the following list;

- List of [Color Configuration Management] screen (other than [Memo])

When you drag the item name to the right or left, you can move the position of the row.

However, you cannot move the following rows; [Color Configuration Default] and [Color Configuration Name] of the Color Configuration list, [Default Profile Set] and [Profile Set Name] of the Profile Set list.

14.2.3 Display/Non-Display List Item

You can switch the row from display to non-display or its reverse on the following list;

- List of [Color Configuration Management] screen
- List of [Default Profile Set Setting / Paper Type Default Setting] (other than [Profile Set Name] and [Paper Type]).

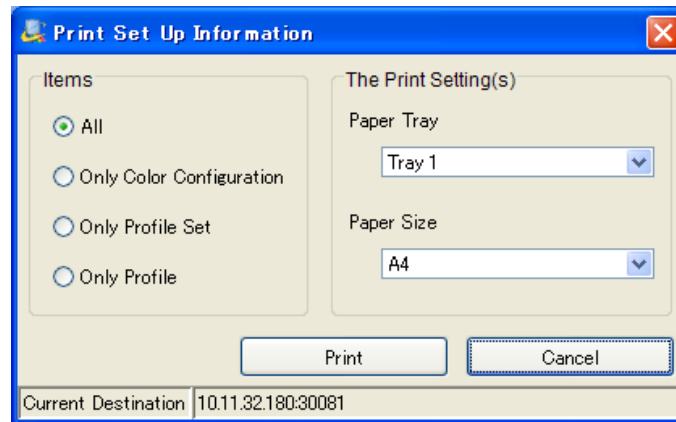
When you right click on the item name, sub menu appears. By selecting the row name from the sub menu, you can switch the row from display to non-display.

However, you cannot switch the following rows to non-display; [Color Configuration Default] and [Color Configuration Name] of the Color Configuration list, [Default Profile Set] and [Profile Set Name] of the Profile Set list.

14.3 Print Set Up Information

You can print the settings of the image controller currently connected.

- 1 On [Launcher] screen, select [File] menu - [Print Set Up Information].
[Print Set Up Information] screen appears.



- The IP address and the port number of the image controller you connected are displayed on [Current Destination].
- 2 Confirm the port number of the image controller you connected is displayed to [Current Destination].
- 3 From [Items], select the item to print.
- 4 From [The Print Setting(s)], select the paper tray and the paper size for printing of the setting list and click [Print].
The setting list is printed.
→ It supports only Japanese and English. If the display language is selected as other than Japanese in Color Centro, it will be printed in English.

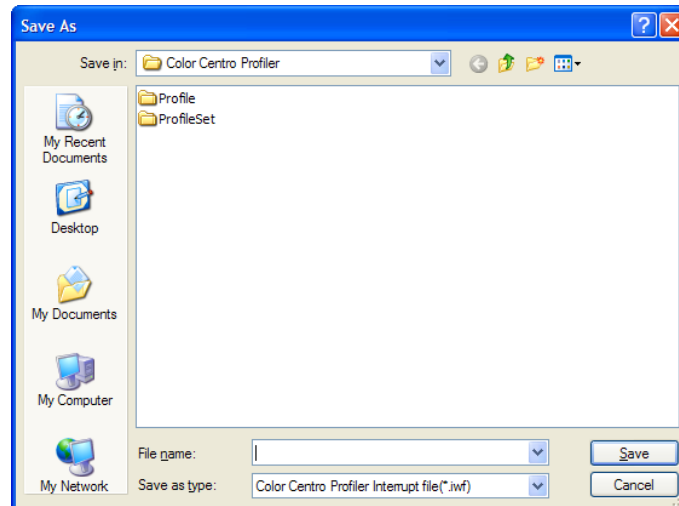
14.4 Suspend and Restart

When you click [Suspend the Operation] on the wizard screen of Color Centro Profiler, [Save As] screen appears. Using the saved file, you can restart the operation.

14.4.1 Suspend the Operation

This section describes how to save the suspended operation to the file.

- 1 Click [Suspend the Operation] on the wizard screen.
[Save As] screen appears.



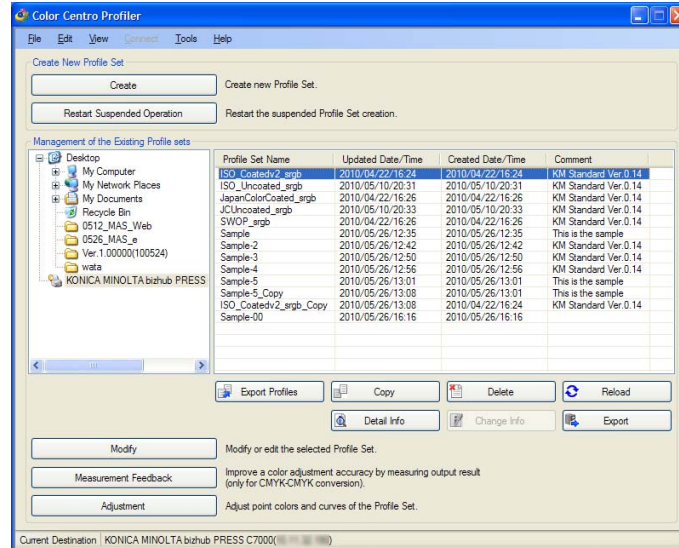
- 2 Specify the file name and the destination folder for saving the current operation and click [Save].
Current operations are saved and the wizard screen is closed.

14.4.2 Restart the Suspended Operation

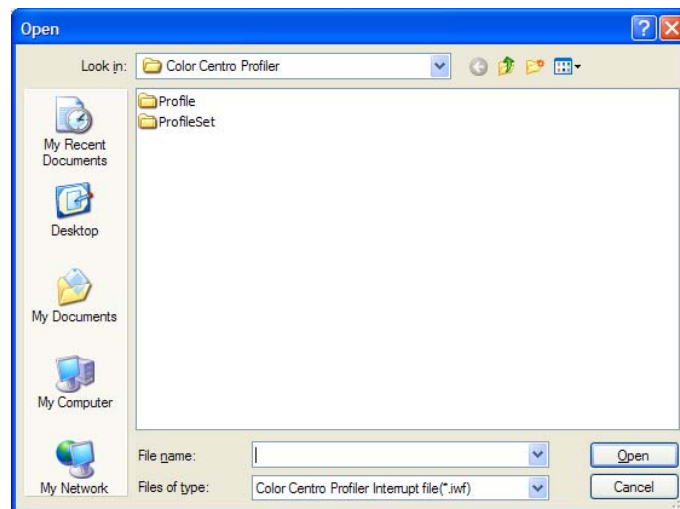
When you click [Suspend the Operation] on the wizard screen of Color Centro Profiler, [Save As] screen appears.

This section describes how to restart the operation using the saved file.

- 1 Click [Profile Set] - [Edit] on Color Configuration Management screen.
[Color Centro Profiler] screen appears.



- 2 Click [Restart Suspended Operation].
[Open] screen appears.



- 3 Specify the file with the suspended operation and click [Open].
The wizard screen when operation was suspended is displayed.

14.5 Vivid Mode for bizhub PRESS C70hc

You can use Vivid Mode to utilize the color gamut of bizhub PRESS C70hc more.

Vivid Mode reproduces colors emphasizing the chroma (the vividness).

You can improve the performance of your printings with more vivid colors utilizing the gamut characteristics of bizhub PRESS C70hc.

Also, Vivid Mode has 2 kinds of modes; RGB Vivid Mode and CMYK Vivid Mode.

14.5.1 Preparation of Vivid Mode

You need to import the color configuration of Vivid Mode.

The color configuration is in the following.

- [My Documents\KONICA MINOLTA\Color Centro\Color Configuration]
- File Name: C70hc_Vivid_Mode.ccz

<Note>

- The color configuration is installed automatically right after Color Centro Profiler is started up for the first time.

You can import by going into the [File] menu in the [Color Configuration Management] screen.

14.5.2 RGB Vivid Mode

RGB Vivid Mode is for RGB images.

You can use it by selecting the color configuration of Vivid Mode.

You can use it also by selecting the printer profile for bizhub PRESS C70hc and by selecting [Saturation] in the Rendering Intent setting.

<Note>

- The profile set from the color configuration of Vivid Mode is optimized for outputting images created in the sRGB color space.
- You can also newly create a printer profile for RGB Vivid Mode when Color Centro Profiler is connected to bizhub PRESS C70hc.

14.5.3 CMYK Vivid Mode

CMYK Vivid Mode is for CMYK images.

You can use it by selecting the color configuration of Vivid Mode.

CMYK Vivid Mode has 3 kinds of profile sets.

By selecting a profile set as the default profile set, you can select the Chroma level also.

Profile Set	Chroma Level
CMYK_VIVID_1	Medium (default)
CMYK_VIVID_2	High-medium
CMYK_VIVID_3	High

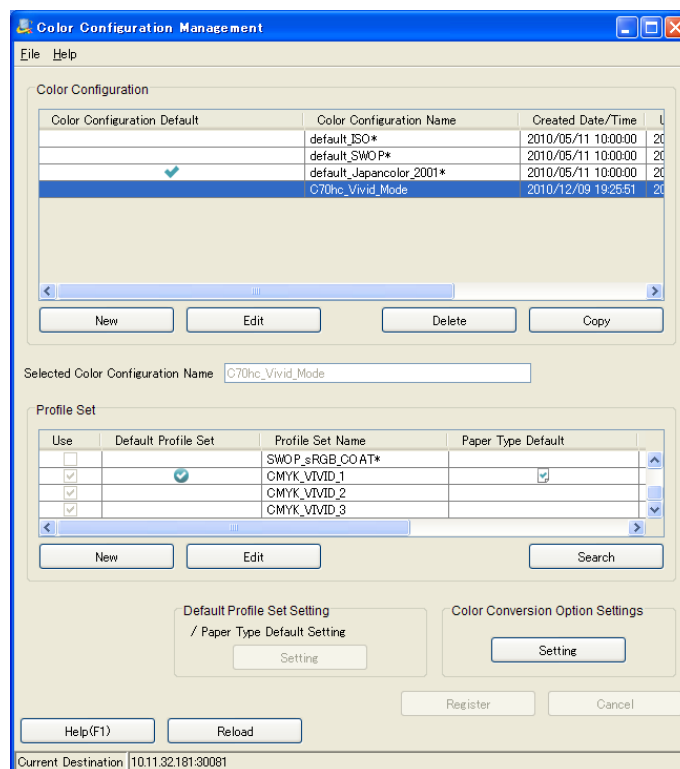
<Note>

- To use CMYK Vivid Mode, please make sure to use one of those profile sets regardless of the actual paper type.

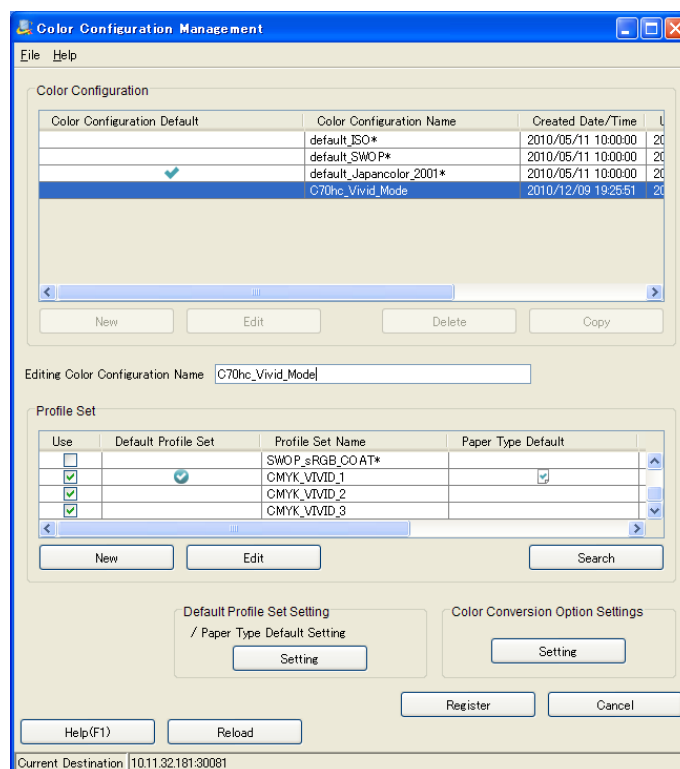
Switch the Profile Set

When you import the Color Configuration of C70hc, CMYK_VIVID_1 is selected as a default profile set by default. To switch the profile set, complete the following steps.

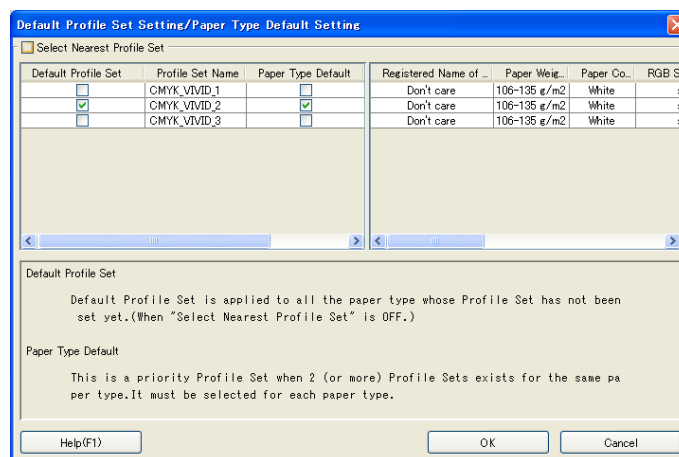
- 1 In the [Color Configuration] field, select [C70hc_Vivid_Mode] and click [Edit].



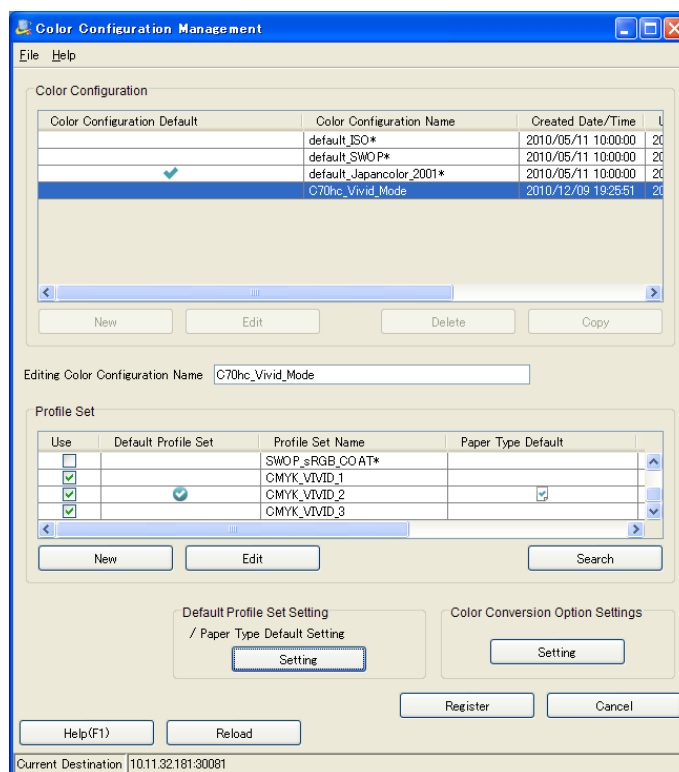
- 2 In the [Default Profile Set Setting / Paper Type Default Setting] field, click [Setting].



- 3 Check each check box of a profile set to which you want to switch in [Default Profile Set] and [Paper Type Default], and click [OK].



- 4 In the [Profile Set] field, confirm that both [Default Profile Set] and [Paper Type Default] of the profile set to which you want to switch are checked. Click [Register].



The profile set is switched.

15

Troubleshooting

15 Troubleshooting

This section describes how to solve issues and problems that you may encounter while using the printer.

15.1 Cannot start Color Centro

If you cannot start Color Centro, check the following items in order from beginning to end.

Problem	Possible Cause	Remedy
Cannot start	There is a possibility that the Microsoft .Net Framework 2.0 is not installed.	When the Microsoft .Net Framework 2.0 is not installed, install it.
[Windows Security Alert] appears.	Color Centro may be blocked by the firewall.	Allow the communication by Java application on your network.
Cannot connect to the network.	The network cable may be disconnected.	Check that the cable is correctly connected.
	An error may have occurred on this machine.	Check the control panel of this machine.
Cannot connect to the image controller.	IP address and the port number may be wrong.	Confirm the JSP settings of the image controller.
	An error may have occurred on the image controller.	Check the control panel of this machine.

When the above troubleshooting does not eliminate the problem, refer to the [User's Guide - POD Administrator's Reference].

15.2 Cannot Adjust Color

Problem	Possible Cause	Remedy
Cannot print with the adjusted color conversion	When printing from the application which has the color management function such as Adobe Reader9, the application might execute another color conversion.	Print after enabling "Color management by the printer" on each application. For detailed information on how to change the color setting in each application, refer to help and the manual etc. of each application.
Cannot measure informed with a message, "BAR or MARK is not found", at a measurement with an instrument.	There may be problem on recognizing the bar (black bold line) or the mark (diamond mark at right and left) on the chart.	Confirm the manual of the measurement instrument. A dotted line for the cutout on the chart might be a cause of the recognition error of the measurement instrument. When you cut the chart along and slightly inside the dotted line, normal recognition might be done.

16

Appendix

16 Appendix

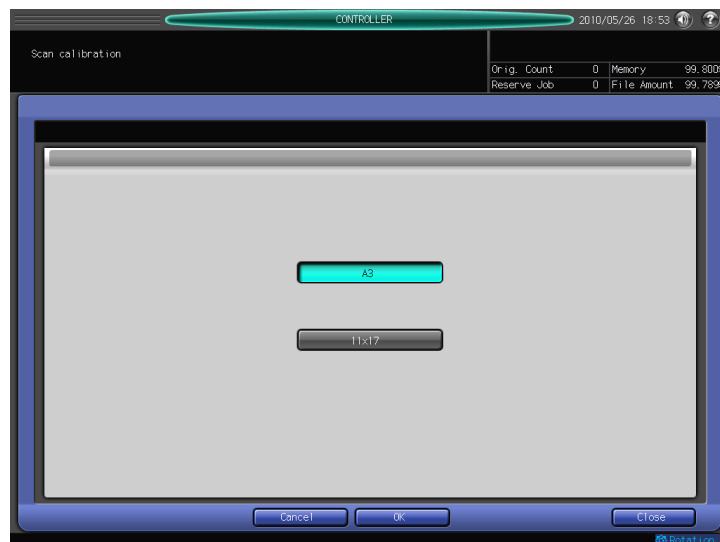
16.1 Scan Calibration

You can calibrate the scanner by pressing [MACHINE] - [Controller] - [Scan Calibration].

- 1 Press [MACHINE] - [Controller].
- 2 Press [Scan Calibration].
- 3 Press [Change] for Paper Size.

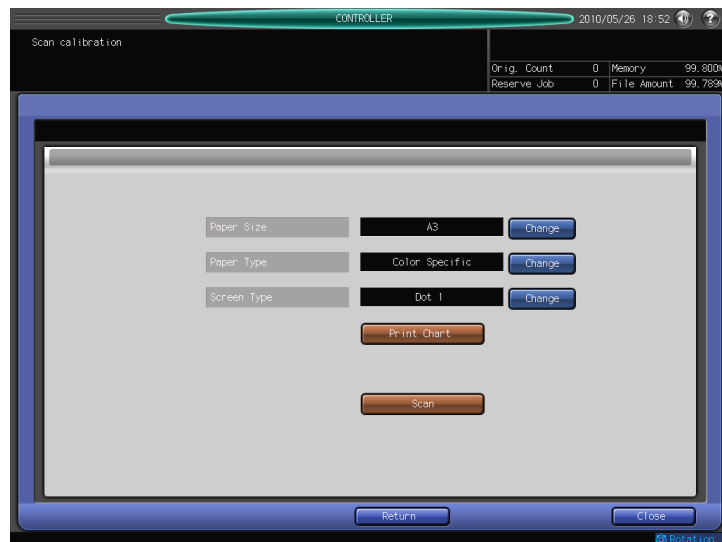


- 4 Select a paper size and press [OK].



- For [Paper Size], you can select either [A3] or [11x17].
- Select a paper size according to the setting in [Utility/Counter] - [Administrator Setting] - [System Setting] - [Size Setting] - [Orig. Glass Size Search].

- 5 Press [Change] for Paper Type.

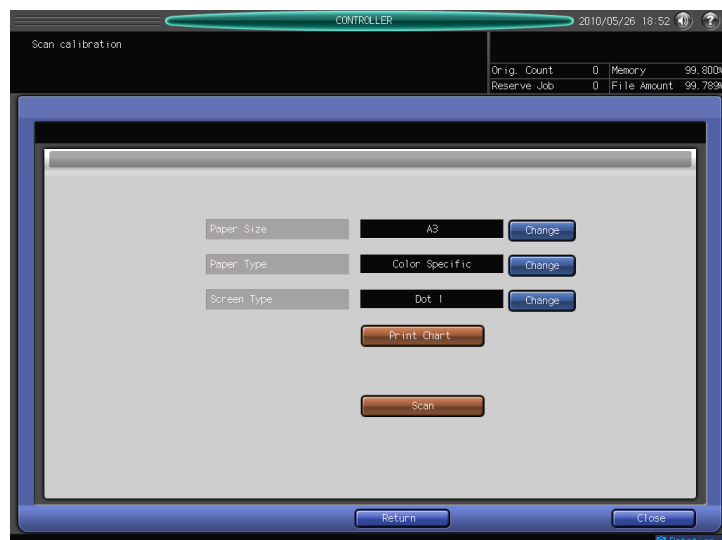


- 6 Select a paper type and press [OK].

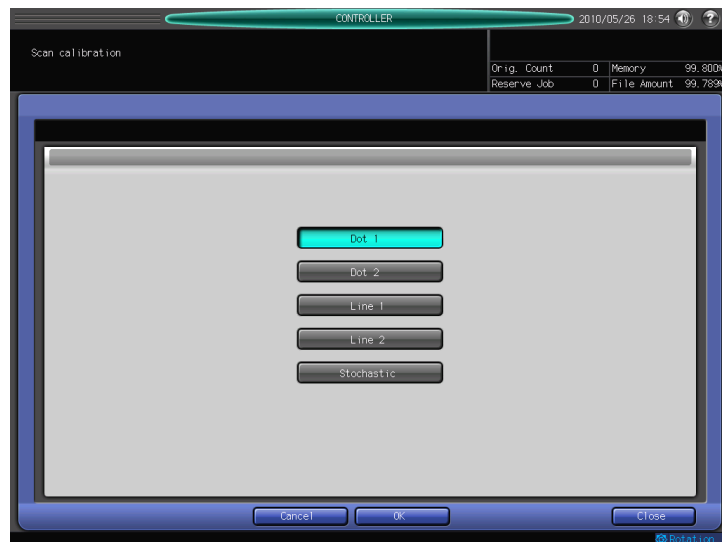


→ For [Paper Type], you can select either [Plain], [Fine], [Color Specific], [Coated GL], [Coated ML], [Coated GO], or [Coated MO].

- 7 Press [Change] for Screen Type.



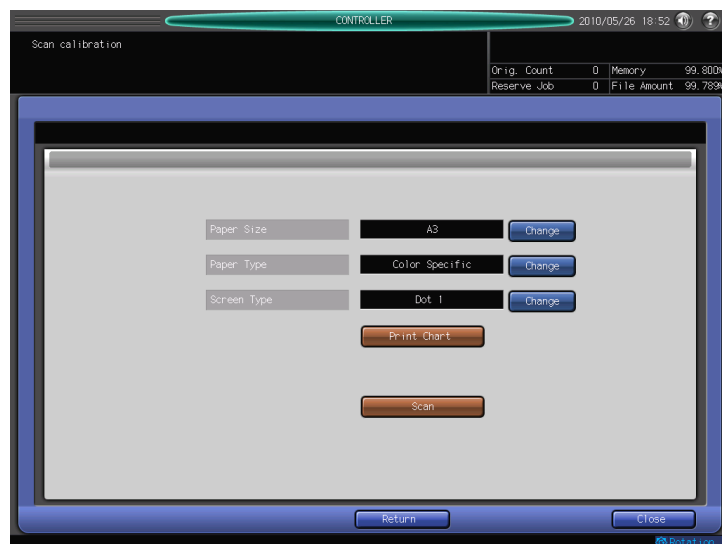
- 8 Select a screen type and press [OK].



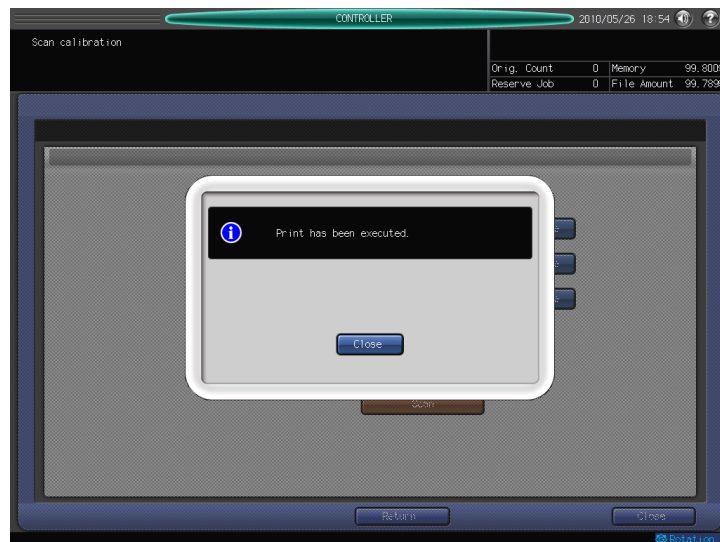
→ For [Screen Type], you can select either [Dot 1], [Dot 2], [Line 1], [Line 2], [Stochastic].

- 9 Press [Print Chart].

→ The chart print is started.



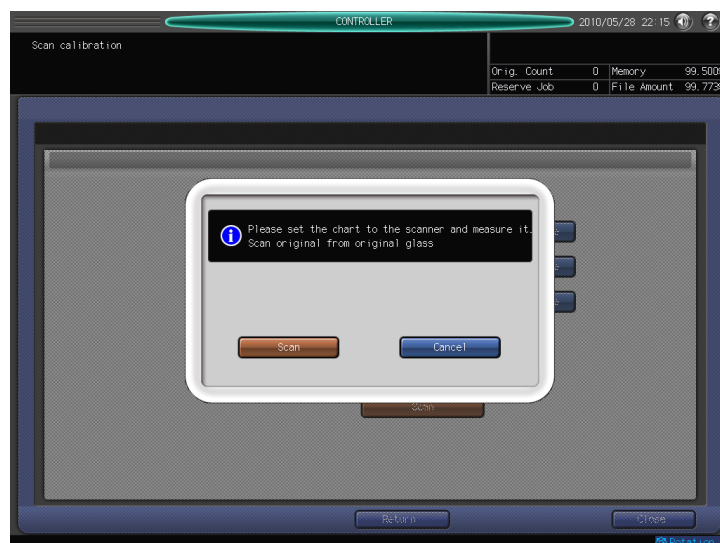
10 Press [Close].



11 Press [Scan].

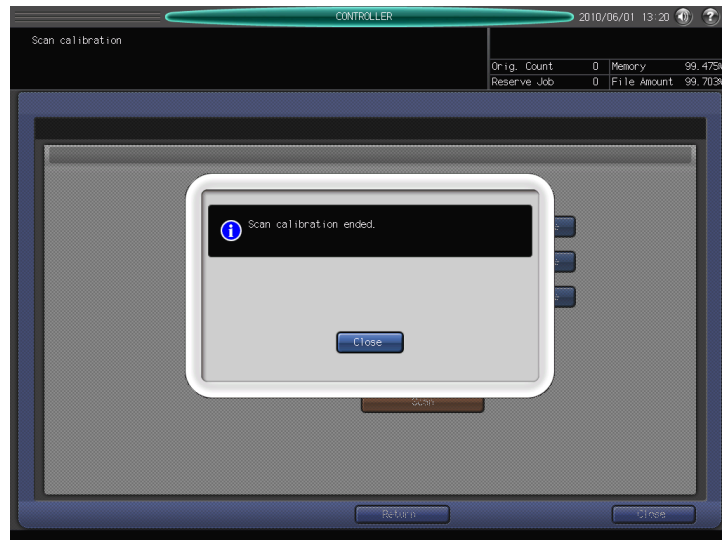


12 Set the printed chart on the original glass and press [Scan].



→ Set the chart with its [This side is FRONT!] note to the front and [This side is REAR!] note to the back on the original glass.

- 13 Click [Close] once the calibration is completed.



16.2 Glossary

Item	Description
10Base-T/ 100Base-TX/ 1000Base-T	Standard for the Ethernet and one of the specifications. Cables made of 2 stranded copper wire rods are used. Communication speed is 10Mbps with 10Base-T, 100Mbps with 100Base-TX, and 1000Mbps with 1000Base-T.
Adobe® Flash®	Software or its file format developed by Adobe Systems Inc. (formerly by Macromedia, Inc.), used to create a content by compiling vector-graphic animations and sounds. The software allows handling interactive contents using keyboard or mouse. The files can be kept relatively compact and accessed from a Web browser with dedicated plug-in software.
AppleTalk	The generic name for the protocol suite developed by Apple Computer for computer networking.
bit	The abbreviation for binary digit. The smallest unit of information (data quantity) handled by a computer or printer. A bit uses only a 0 or a 1 to indicate data.
BMP	The abbreviation for bitmap. This is a file format for saving image data. (Extension: ".bmp") Commonly used on Windows platforms. BMP covers the color depth from monochrome (2 values) to full color (16,777,216 colors). BMP images are not suitable for compressed storage.
Bonjour	A Macintosh network technology, automatically detecting a device connected to the network for automatic configuration. Previously called "Rendezvous", and has been changed to "Bonjour" since Mac OS X v10.4.
BOOTP	The abbreviation for Bootstrap Protocol. The protocol is used for a client computer on the TCP/IP network to load network configuration automatically from a server. Instead of BOOTP, DHCP, an advanced protocol based on BOOTP, is typically used today.
Brightness	Brightness of a display or other screen.
Byte	A byte indicates a unit of information (data quantity) handled by a computer or printer. A byte consists of eight bits.
client	A computer using services provided by servers via the network.
Default Gateway	A device, such as a computer or router, used as a "gateway" to access computers on different LANs.
DHCP	The acronym for Dynamic Host Configuration Protocol. The protocol is used for a client computer on the TCP/IP network to load network configuration automatically from a server. Just using a DHCP server to centrally manage IP addresses of the DHCP clients enables you to construct a network without IP address conflicts or other troubles.
DNS	Abbreviation of Domain Name Systems. DNS allows for obtaining the IP address corresponding to a host name in network environments. This system enables a user to access other computers on the network by specifying host names instead of elusive and non-intuitive IP addresses.
DPI (dpi)	Abbreviation of Dots Per Inch. Unit of resolution used with printers, scanners, etc. This indicates the number of dots used to represent an inch. The higher this value, the higher the resolution.
Driver	Software to act intermediately between the computer and peripheral devices.
Ethernet	Standard for the LAN transmission line.
Frame type	A type of communication format used in NetWare environments. For mutual communication, the same frame type is required.
FTP	Abbreviation of File Transfer Protocol. A protocol used to transfer files on the TCP/IP network such as Internet, Intranet, etc.
Gateway	Hardware or software serving as a point connecting networks. A gateway not only connects networks but also changes data formats, addresses, and protocols according to the connected networks.
Gray Scale	A form of presenting monochrome image by using the gradation information shifting from black to white.
Hard disk	Mass storage device to save data. The data is retained even after the power is turned off.
Host Name	Name of a device on the network.

Item	Description
HTTP	Abbreviation of HyperText Transfer Protocol. A protocol used to transmit or receive data between a web server and client (web browser, etc.). Files of image, voice, animation, etc. correlated with the document can be exchanged including the expression form and other information.
Install	To install hardware, operating systems, applications, printer drivers, or other software on to a computer.
IP Address	A code (address) to identify individual network devices on the Internet. IPv4 (Internet Protocol version 4), a protocol widely used today, adopts a 32-bit number for an IP address separated into four sections. An example of an IPv4 IP address is: 192.168.1.10. On the other hand, IPv6 (Internet Protocol version 6), the next generation protocol, adopts 128-bit IP addresses. An IP address is allocated to all computers and other devices connected to the Internet.
IPP	The acronym for Internet Printing Protocol. This is a protocol used to send or receive print data or control printers via the Internet or other TCP/IP network. IPP can also send and print data to printers in remote areas via the Internet.
IPX	One of the protocols used for NetWare. IPX runs in the network layer of the OSI reference model.
IPX/SPX	The abbreviation for Internetwork Packet Exchange/Sequenced Packet Exchange. This is a protocol developed by Novell, Inc., typically used in NetWare environments.
LAN	The acronym for Local Area Network. This is a network constructed by connecting computers on the same floor, in the same building, or in neighboring buildings.
Local printer	A printer connected to a parallel or USB port of a computer.
LPD	The acronym for Line Printer Daemon. This is a platform-independent printer protocol running on the TCP/IP network. The protocol was originally developed for BSD UNIX, and has become one of the printing protocols typically used among general computers.
LPR/LPD	The acronym for Line Printer Request/Line Printer Daemon. This is a printing method implemented via networks, used for Windows NT or UNIX based systems. It uses TCP/IP to output printing data from Windows or UNIX to a printer on the network.
MAC address	MAC is the acronym for Media Access Control. A MAC address is an ID number unique to each Ethernet card, enabling sending or receiving data to or from other Ethernet cards. A Mac address is a 48-bit number. The first 24 bits are controlled by IEEE and used to allocate a unique number to each manufacture, whereas the latter 24 bits are used by each manufacturer to assign a unique number to each card.
Memory	Unit to save data temporarily. Some types of memory retain data even after the power is turned off, while others not.
NDPS	The acronym for Novell Distributed Print Services. This provides a high performance printing solution in NDS environments. Using NDPS for the print server simplifies and automates complicated management activities related to printer use. For example, you can print to a desired printer or automatically download the printer driver for a newly installed printer. NDPS print servers also integrate management related to the network printers.
NDS	The acronym for Novell Directory Services. This allows the centralized management in a hierarchical structure of shared resources such as servers, printers and users information on the network, as well as the access privilege and other information related to the users.
NetBEUI	The abbreviation for NetBIOS Extended User Interface. This is a network protocol developed by IBM. NetBEUI enables you to construct a small-scale network simply by configuring computer names.
NetBIOS	Abbreviation of Network Basic Input Output System. This is a communication interface developed by IBM.
NetWare	A network operating system developed by Novell. This uses NetWare IPX/SPX for the communication protocol.
Nprinter/ Rprinter	A remote printer support module used when using a printer server in NetWare environments. Rprinter is used for NetWare 3.x, and Nprinter for NetWare 4.x.
OHP/OHT	A transparent sheet used for OHP (Overhead projector). This is used for presentations.
OS	Abbreviation of Operating System. Basic software to control the computer system. Windows, MacOS, and Unix are examples.

Item	Description
Outline font	A type of fonts represented using lines and curves to display an outline of a character. Larger-size characters can be displayed on a screen or printed with no jagged edges.
PDF	Abbreviation of Portable Document Format. One of electronic documents (Extension: ".pdf"). PDF is a PostScript based format, and can be viewed using Adobe Acrobat Reader, a free viewer software.
PDL	The acronym for Page Description Language. This is a language used to instruct a page printer about images being printed on each page.
Peer-to-peer	A type of network where the connected devices can be communicate with each other without using a dedicated server.
Plug and play	A mechanism used to immediately detect a peripheral device when it is plugged into a computer, and search for an appropriate driver automatically, so that the device becomes operable.
PostScript	A typical page-descriptive language developed by Adobe and commonly used for high quality printing.
PPD	The acronym for PostScript Printer Description. This is a file with the description of resolution, available paper sizes, and other information specific to a PostScript printer model.
Preview	A function allowing you to view a result image before being actually processed for printing or scanning.
Print job	A print request transmitted from a computer to a printing device.
Print queue	A software system used by a spooler to save generated print jobs.
Printer buffer	A memory area temporarily used for processing data of print jobs.
Printer driver	Software acting as an intermediate between the computer and printer.
Property	Attribute information. When using a printer driver, different functions can be configured by utilizing its properties. By using properties of a file, you can check the attribute information about the file.
Protocol	Rules by which a computer communicates with other computer or peripheral device.
Proxy server	A server that is installed to act as an intermediary connection between each client and different servers to effectively ensure security over the entire system for Internet connections.
PServer	A print server module available in NetWare environments. This module monitors, changes, pauses, restarts, or cancels print jobs.
Queue name	A logical printer name required for LPD/LPR printing.
Queue Name	A name assigned to each device for allowing printing to the device via network.
Resolution	Degree how correctly the details of images or prints can be reproduced.
RGB	The acronym for Red, Green, and Blue. The RGB are the primary three colors used for monitor and other devices, producing any of the full colors by changing their brightness ratio.
RIP	The acronym for Raster Image Processor. RIP extracts picture images from text data created using PostScript or other page description language. This processor is usually integrated into a printer.
Samba	UNIX server software which uses SMB (Server Message Block) to make UNIX system resources available to Windows environments.
Screen font	A type of fonts used for displaying characters and symbols on a CRT or other monitor.
Shared printer	A printer connected to a server on the network and configured to be used by multiple computers.
SLP	The acronym for Service Location Protocol. This is a protocol that provides capabilities such as finding services or automatic client configuration on the TCP/IP network.
SMB	Abbreviation of Server Message Block. A protocol used mainly to realize sharing of files or printers through the network between Windows.
SMTP	Abbreviation of Simple Mail Transfer Protocol. A protocol to transmit or transfer the electronic mails.
SNMP	The acronym for Simple Network Management Protocol. This is a management protocol in the TCP/IP network environments.

Item	Description
Spool	The acronym for Simultaneous Peripheral Operation On-Line. Data to be output to a printer is not sent directly to the printer, but is temporarily stored in another location. The stored data is then sent collectively to the printer.
Subnet mask	A value used to divide a TCP/IP network into small networks (subnetworks). This is used to identify how many higher-order bits of an IP address are used for the network address.
TCP/IP	Abbreviation of Transmission Control Protocol/Internet Protocol. It is a de facto standard protocol widely used for the Internet. An IP address is used to identify each network device.
Touch & Print	A feature that allows documents sent from the printer driver to be printed simply by placing your finger or IC card on the authentication unit connected to the printer when the user authentication is enabled. In order to use the Touch & Print feature, an authentication unit must be connected to this machine, and the vein patterns or the ID of the IC card for each user must be registered.
TrueType	A type of outline font developed by Apple and Microsoft, and currently used as a standard font type for Macintosh and Windows. This type of font can be used both for display and printing.
Uninstall	To delete software installed on a computer
USB	The acronym for Universal Serial Bus. This is a general-purpose interface defined for connecting a mouse, printer, and other devices with a computer.
Web browser	Software to access web pages. Typical Web browsers include Internet Explorer and Netscape Navigator.
WINS	The acronym for Windows Internet Naming Service. This is a service, available in Windows environments, to call the name server responsible for conversion between a computer name and an IP address.
XPS	Abbreviation of XML Paper Specification. This is one of the electronic document formats developed by Microsoft Corporation. It is first supported in Windows Vista.

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