



Mimaki Target Color Emulator

Mimaki

Reference Guide

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About this guide

This document explains how to operate Mimaki Target Color Emulator.

This document explains the procedures for creating an emulation profile by using an example for use of the i1 Pro color measurement device with MTCE of the "Basic Mode" selected.

Unless otherwise indicated, the same procedures are applicable for use of the i1 iO color measurement device or selection of MTCE of the mode except the "Basic Mode".

Notations used in this document

Items appearing on the menu are expressed with " " for example "creation".

Buttons appearing on the dialogs are expressed with for example .

Tabs appearing on the dialogs are expressed with [] for example [Gray balance].


Ink colors

In this document, the ink colors are expressed with abbreviations as follows:

C= Cyan, M= Magenta, Y= Yellow, K= Black,

Lc= Light cyan, Lm= Light magenta, Lk=Light black, Or=Orange, G=Green

Symbols

 This symbol indicates points requiring attention in operating this product.



This symbol indicates what is convenient if you know it.



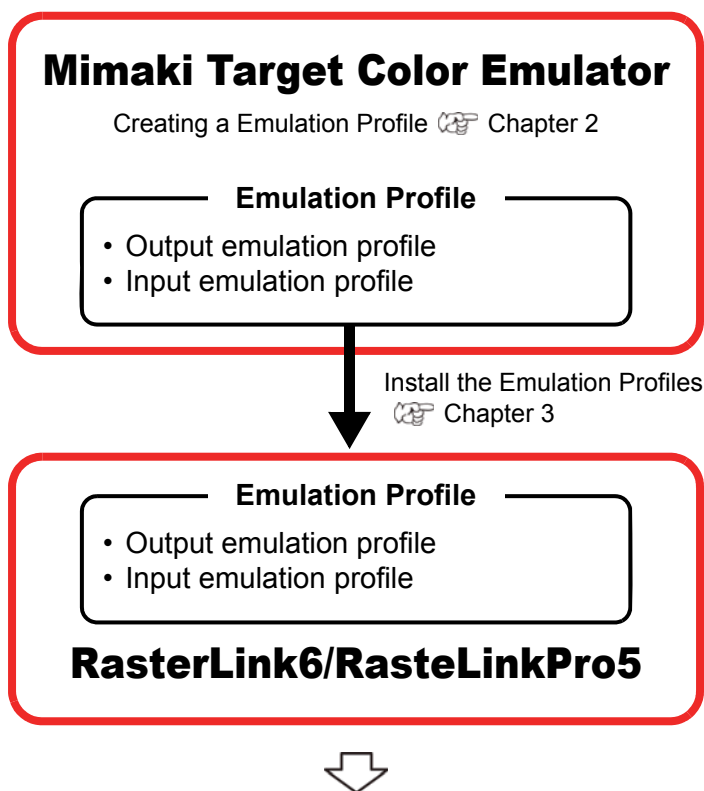
This symbol indicates reference pages of the related contents.

About Mimaki Target Color Emulator

Mimaki Target Color Emulator (hereinafter, “MTCE”) is an application that recreates the colors of a product printed using the target printer (another company’s printer or another Mimaki printer) on a Mimaki printer (a process called color emulation).

Color emulation can be achieved by creating a color emulation input profile (hereinafter, “input emulation profile”) and a color emulation device profile (hereinafter, “output emulation profile”), and by installing RasterLink6 (hereinafter, “RL6”)/ RasterLinkPro5 (hereinafter, “RLP5”).

By installing the input emulation profile and output emulation profile (hereinafter, “emulation profiles”) you created in MTCE into RL6/RLP5, you can perform output which applies the created emulation profiles.



Output is done using colors close to those printed on the target printer.

Flow of the process

Chapter 1. Before creating Emulation Profiles

Perform preparation for creating emulation profiles.

- ◆ Prepare the media for printing.
- ◆ Set up the target printing system.
- ◆ Set up the Mimaki printing system.
- ◆ Starting MTCE.
- ◆ Selecting a measurement device.
- ◆ Setting the Options.
- ◆ Select the Mode.

Chapter 2. Creating a Emulation Profile

Procedures for creating a emulation profile are explained.

- ◆ Printing of target printer
- ◆ Creation of Input Emulation Profile
- ◆ Creation of Output Emulation Profile
- ◆ Saving the Emulation Profile

Chapter 3. Install the Emulation Profiles

Install the created input/output emulation profiles into RL6/ RLP5.

Chapter 4. Use the Emulation Profiles to print

Use the installed input/output emulation profiles to print.

Chapter 1

Before creating Emulation Profiles

Perform preparation for creating emulation profiles.

- Prepare the media for printing1-2**
- Set up the target printing system1-2**
- Set up the Mimaki printing system1-3**
- Starting MTCE1-3**
- Selecting a measurement device1-4**
- Setting the Options1-5**
- Select the Mode1-6**

Prepare the media for printing

1 Prepare the media you will use for emulation.

NOTE!

◆ Please use the same type of media for the target printing system and Mimaki printing system. If the media is different, the color of the media itself will affect printing and emulation accuracy may be decreased.

Set up the target printing system

1 Set up the printer that will be the emulation target.


- Perfect printer setup, such as media installation and maintenance, so that the chart can be printed.

NOTE!


◆ The minimum size (*1) of the chart for creating an emulation profiles depends on the combination of the mode (*2) to create profiles and the measurement device (*3).

If you can not print the size of the following in the printing system of the emulation target, emulation profiles can not be created.

	Measurement device	
	i1Pro/ Pro2	i1iO/ iO2
Basic Mode	300.0 x 210.0 mm	287.4 x 184.0 mm
Multicolor Mode	292.5 x 215.9 mm	319.0 x 226.0 mm
High Quality Mode	292.5 x 252.1 mm	293.9 x 204.8 mm

*1 Split chart is the minimum of the chart. For the split chart, refer to "Printing of target printer" ( P.2-3).

*2 For Mode, refer to "Select the Mode" ( P.1-6).

*3 For the measurement device, refer to "Selecting a measurement device" ( P.1-4).

2 Determine the print conditions for the emulation target.

- The following are the print conditions that should be determined.

No.	Print condition
1	Model
2	Ink
3	Ink set composition (CMYK, CMYKLcLm, etc)
4	Media
5	Resolution
6	Target's RIP unique color adjustment settings, etc


Set up the Mimaki printing system

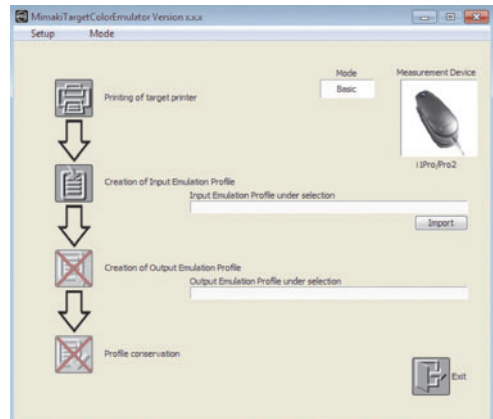
- 1 **Set up the Mimaki printer.**
 - Perfect printer setup, such as media installation and maintenance, so that the chart can be printed.
- 2 **Prepare the device profile that will be the base for emulation.**
 - Selection is required when creating the output emulation profile.

NOTE!

- ◆ For the device profile that will be the base for emulation, select a profile with conditions close to those decided for P.1-2 “Set up the target printing system” (ink set composition, media, resolution, etc).
If the print conditions are significantly different, emulation accuracy may be decreased.
- ◆ The profiles other than V3 profile (extension "icc") can not be selected.

Starting MTCE

- 1 **Double-click  , then MTCE starts.**
 - When starting MTCE, the screen on the right is displayed.



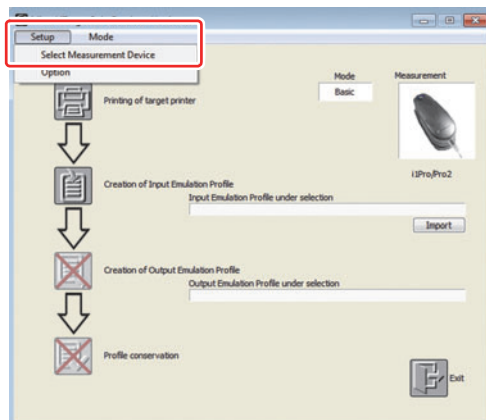
Selecting a measurement device

Select a measurement device to be used for measuring the color chart.

NOTE!

- ◆ Please confirm that the measurement device is connected to the computer and that the power is turned on.
- ◆ The driver must be installed if you are using the USB port to connect the measurement device. Refer to the included operation manual for the measurement device, install the driver, and then connect the measurement device to the computer.
- ◆ If a measurement device is used on Windows7, installation of the driver may fail when connecting the device to the computer. Please refer to Appendix "When a measurement device is used on Windows7" and update the driver.

1 Select [Setup] menu and then [Select Measurement Device].



2 Selecting a measurement device



3 Click **Finish**.

- Main window is displayed.

Setting the Options

You can set the following in the Option settings.

Unit setting : Select the unit of the length in mm/inch.

Label : Select the items to be printed when printing the images in the device profile creation/editing.

Image file name

Print the printed image file name.

Information of profile data

Print the Feed correction value/Ink limit value/Variable dots and Light ink value/Imported file name, if these are set.

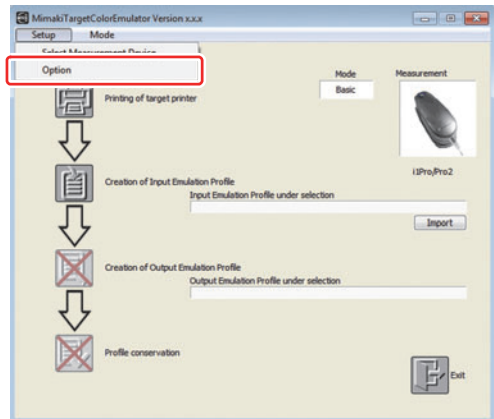
Default output condition

Print the number of Pass/Overprint/Print Direction/High speed print setting/Half tone setting.

Actual output condition

Print the items set individually when test printing.

1 Select [Setup] menu and then [Option].



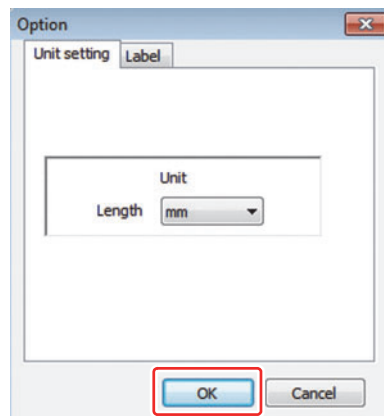
2 Select the tab.

- Select the tab from which you wish to set [Unit setting], and [Label].

3 Set the tab.

Unit setting : Select the unit to display.

Label : Check the items to print.



4 Click **OK**.

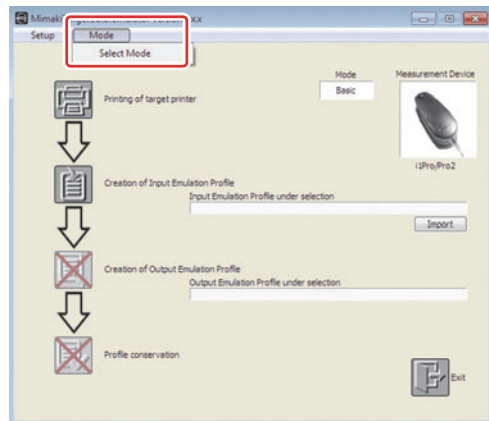
Select the Mode

Select the mode for creating an emulation profile.

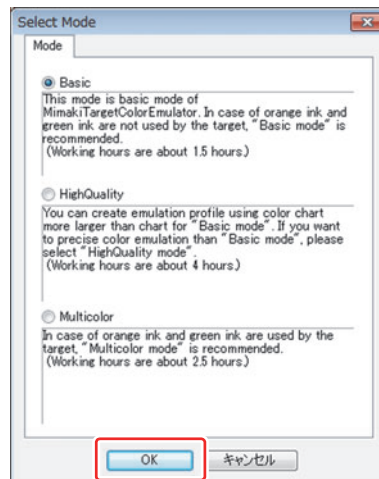
NOTE!

- ◆ Select Multicolor Mode if using Or (orange) or G (green) ink in the target printer. Changing the mode before saving the emulation profile will result in the created emulation mode being deleted.

1 Select [Mode] menu and then [Select Mode].



2 Select “Mode” and Click **OK** .



Chapter 2

Creating a Emulation Profile

Procedures for creating a emulation profile are explained.

Emulation profile creation flow	2-2
Printing of target printer	2-3
Creation of Input Emulation Profile	2-4
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Emulation profile creation flow

◆ **Printing of target printer**  **P.2-3**

Print the emulation chart on the target printing system.



◆ **Creation of Input Emulation Profile**  **P.2-4**

Measure the color of the chart printed on the target printing system and create an input emulation profile.



◆ **Creation of Output Emulation Profile**  **P.2-16**

Print the emulation chart of the Mimaki printer, measure the color, and create an output emulation profile.

Also, check and feeds back the color difference if necessary.

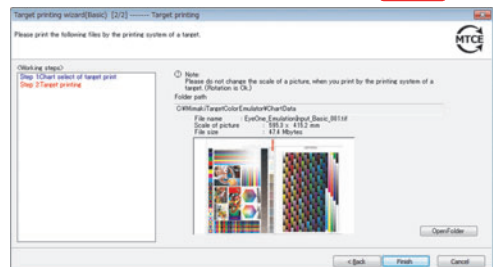
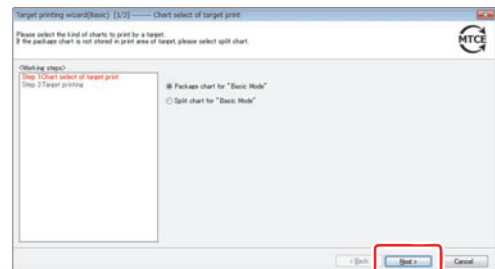
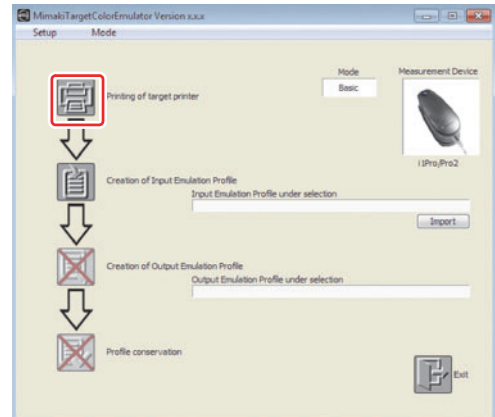


◆ **Saving the Emulation Profile**  **P.2-27**

Save the created input/ output emulation profile.

Printing of target printer

- 1 Click “Printing of target printer”**
 - Target printing wizard [1/1] is displayed.
- 2 Select the chart to print on the target, and click **Next** .**
 - If the package chart can not be printed in the printing system of the target, please select the split chart.
- 3 Check the chart to be printed.**
 - The screen displays the file name, image scale, and file size of the chart to be printed.
 - Click **Open Folder** to display the folder where the chart is saved.
- 4 Input the chart checked you checked in Step 3 to the target printing system.**
- 5 Print the chart using the print conditions determined for P.1-2 “Set up the target printing system”.**
 - Store the printed chart because it is used for P.2-4“Creation of Input Emulation Profile”.
- 6 Click **Finish** .**
 - Main window is displayed.



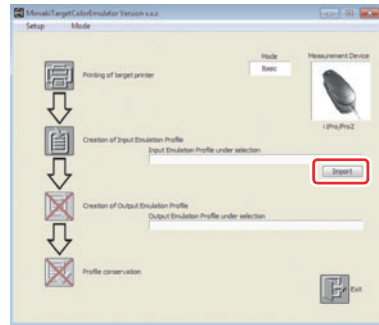
Creation of Input Emulation Profile

The color measurement procedures differ depending on the color measurement device that is used.

For i1 Pro



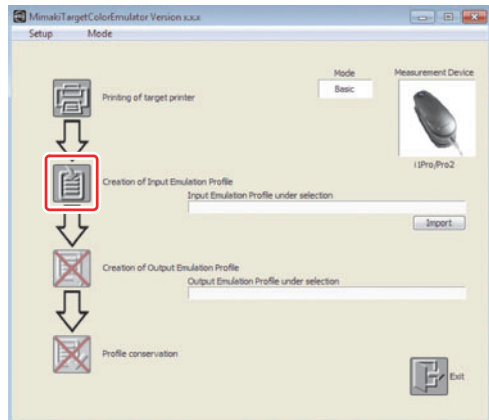
- ◆ Click **Import** when use an existing Input Emulation Profile, select the Input Emulation Profile (extension 'icm').
- ◆ You can only import an Input emulation profile import that has been created by using the same mode.
- ◆ Proceed to “Creation of Output Emulation Profile” (P.2-16) if you are importing an emulation profile that has already been input.



1

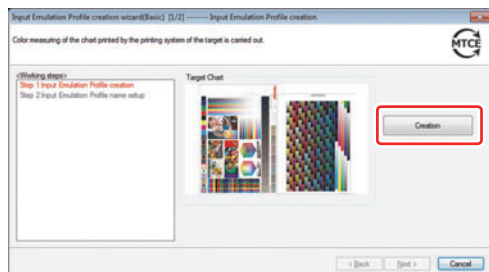
Click “Creation of Input Emulation Profile”.

- Input Emulation Profile creation wizard [1/2] is displayed.

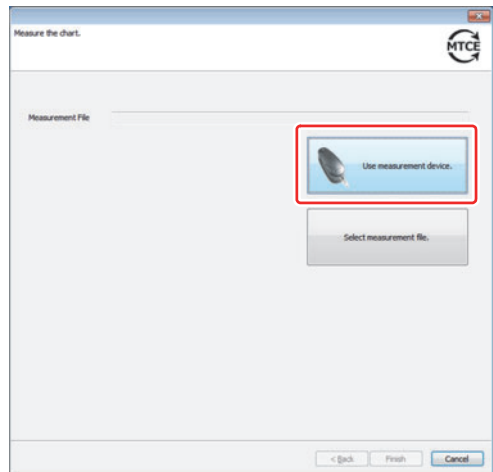


2

Click **Creation**.



3 Click **Use measurement device.**

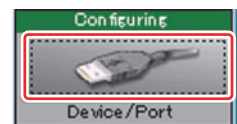


4 The MeasureTool 5.0 is activated.



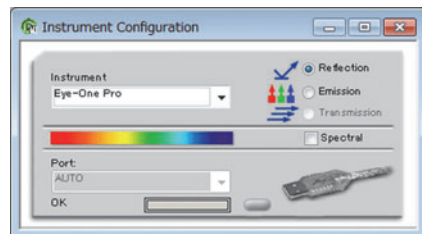
NOTE! ♦ Set the chart on a flat surface where the colors can be easily measured.
 ♦ Do not change the “Language” settings of MeasureTool5.0.

5 Click “Device/Port” of the tool bar.



6 “Instrument Configuration” is activated. Check the following items:

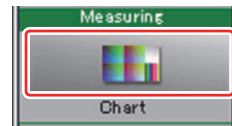
- In the [Instrument], the “Eye-One Pro” is displayed.
- [Reflection] is selected.
- [Spectral] is not checked.
- “OK” is displayed below the [Port].



NOTE! ♦ Do not change the color measurement device already set.

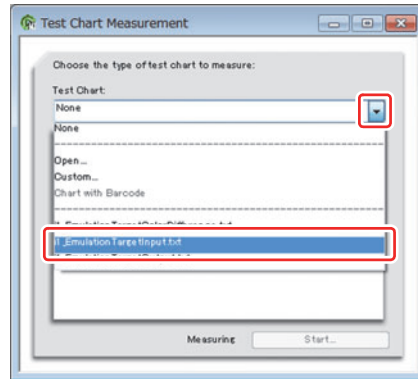
7 Close “Instrument Configuration”.

8 Click “Chart” of the tool bar.



9 Click [▼] of “Test Chart”.

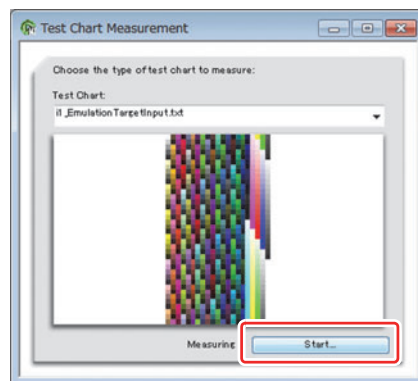
- Select the chart having the name of element for color measurement.



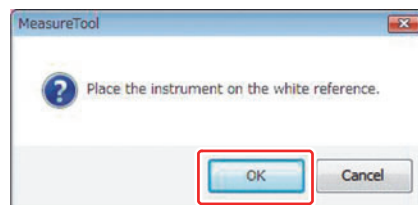
- ◆ Select the following chart name, if creating an input emulation profile.
If creating by using Basic Mode : Select “i1_EmulationInput_Basic.txt”.
If creating by using Multicolor Mode : Select “i1_EmulationInput_Advanced.txt”.
If creating by using High Quality Mode : Select “i1_EmulationInput_Plus.txt”.
- ◆ Measure the color of the chart (P.2-3) printed using the target printing system.
- ◆ The name of the selected chart is printed at the top of the printed chart.



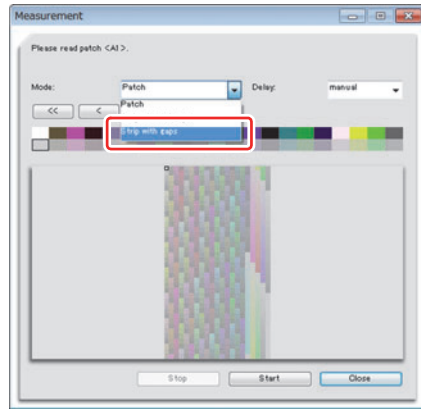
10 Click **Start** .



11 After the following dialog is displayed, put the main body of the measurement device on the white colored standard tile and then click **OK** .



12 Set the “mode” to [strip with gaps].



13 In the first line of the chart (No.1), put the measurement ruler, which is provided with the measurement device.

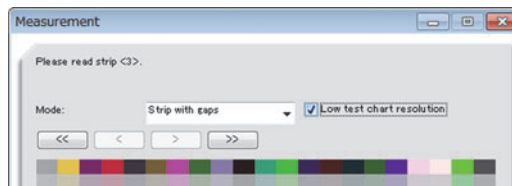
14 Align the measurement device with the measurement ruler and measure the colors.



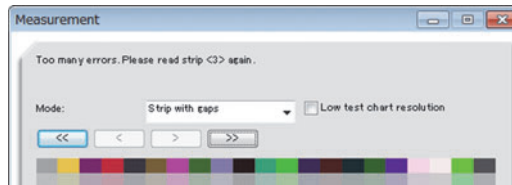
◆ Pressing the measurement button, measure the colors by sliding the Measurement device slowly at a constant speed from left to right.



◆ For details, see the User's Guide attached to the measurement device.
 ◆ If measuring a low-resolution chart, put a check next to “Low test chart resolution”.



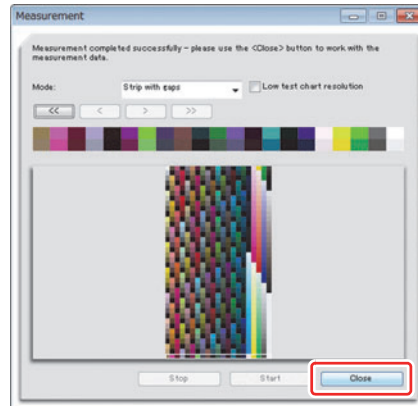
◆ When the color measurement is completed properly, the color of the line to which the color measurement is completed changes and the display will instruct the color measurement of the next line.
 ◆ If the color could not be measured normally, the message indicating that the measuring color has been failed is displayed. Measure the color again.



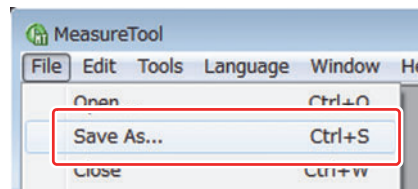
◆ There may be some cases where the colorimetry can not be successful even if the message is not displayed. Please refer to the appendix for details.

15 Similarly, measure the colors sequentially for the remaining lines.

16 When the measurement is completed, click **Close** .



17 From the Menu bar, select **[File] → [Save As...]** to save the color measurement results.

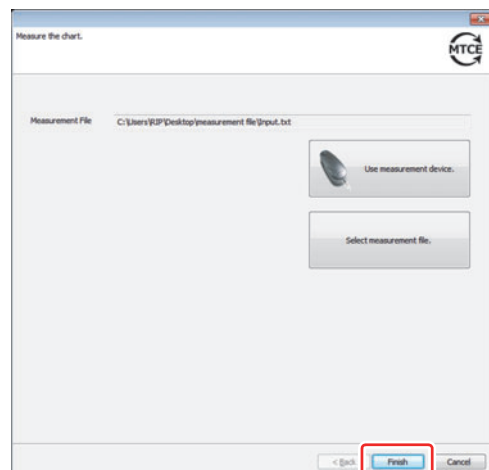


- When saving the color measurement results, make sure to designate the “Files of type” as [Text Files (*.txt *.text)] for saving.

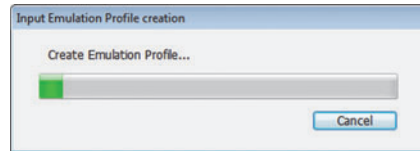
18 Shut down MeasureTool 5.0.

- Make sure that the file name stored at Step 17 is displayed in “Measurement File”.

19 Click **Finish** .

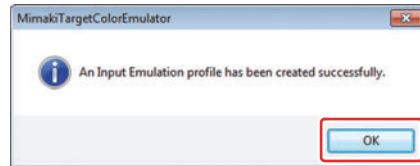


20 Begin creation of the input emulation profile.



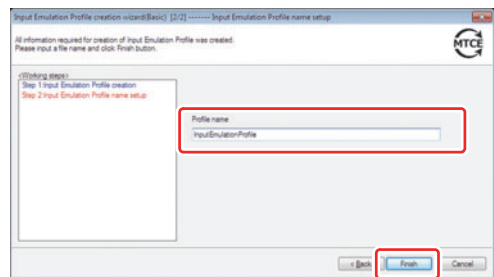
21 Click **OK**.

- You will return to the Input Emulation Profile creation wizard.



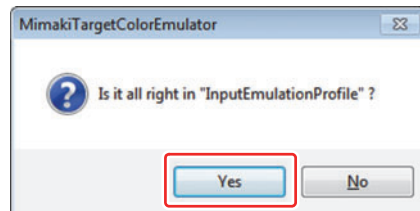
22 Enter the file name.

23 Click **Finish**.




24 Click **Yes**.

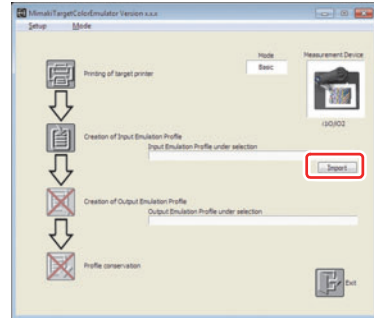
- Main window is displayed.
- The file name set in "Input Emulation Profile under selection" on the main window is displayed.



For i1 iO



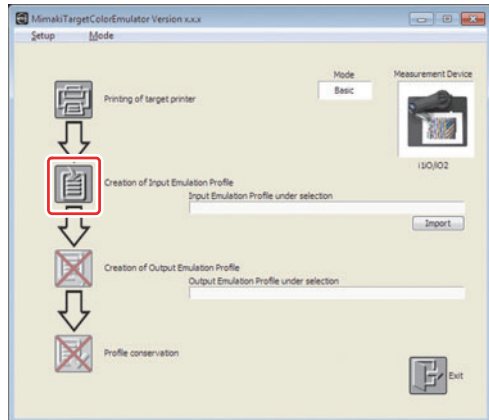
- ◆ Click **Import** when use an existing Input Emulation Profile, select the Input Emulation Profile (extension 'icm').
- ◆ You can only import an Input emulation profile import that has been created by using the same mode.
- ◆ Proceed to “Creation of Output Emulation Profile” ( P.2-16) if you are importing an emulation profile that has already been input.



1

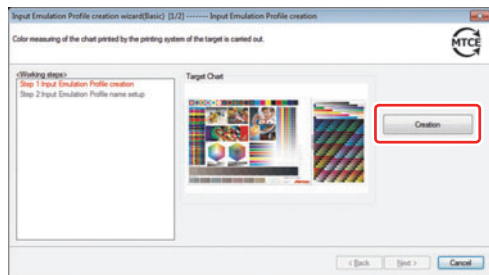
Click “Creation of Input Emulation Profile”.

- Input Emulation Profile creation wizard [1/2] is displayed.

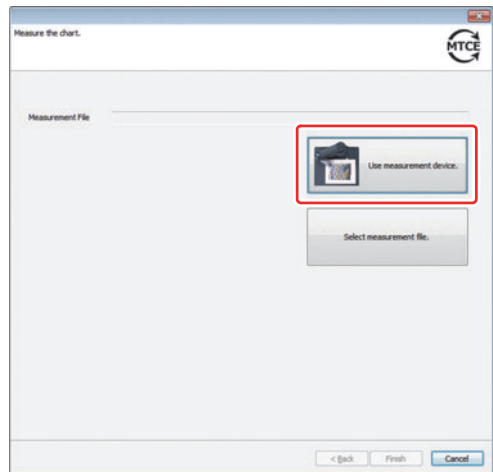


2

Click **Creation** .



3 Click **Use measurement device.**



4 The MeasureTool 5.0 is activated.



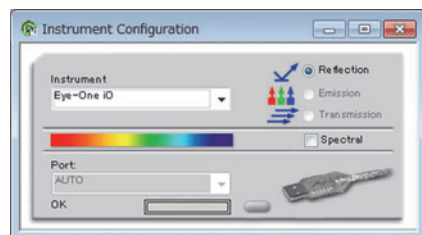
NOTE! ♦ If measuring the colors of a media that bends at the edges, apply tape or similar material to secure it so that edges do not lift up.
 ♦ Do not change the “Language” settings of MeasureTool5.0.

5 Click “Device/Port” of the tool bar.



6 “Instrument Configuration” is activated. Check the following items:

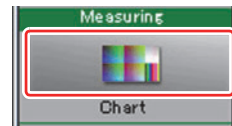
- In the [Instrument], the “Eye-One iO” is displayed.
- [Reflection] is selected.
- [Spectral] is not checked.
- “OK” is displayed below the [Port].



NOTE! ♦ Do not change the color measurement device already set.

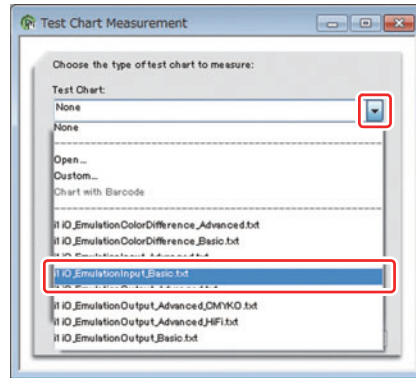
7 Close “Instrument Configuration”.

8 Click “Chart” of the tool bar.



9 Click [▼] of “Test Chart”.

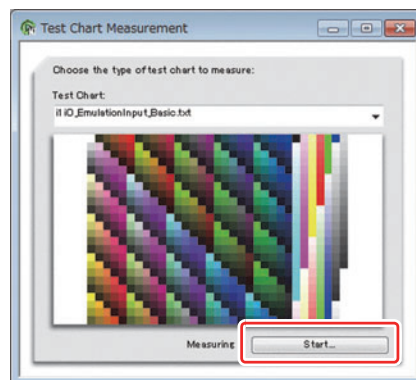
- Select the chart having the name of element for color measurement.



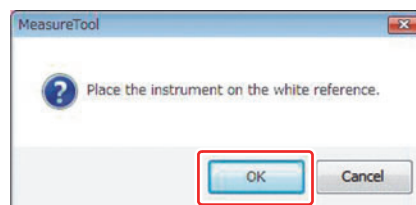
- ◆ Select the following chart name, if creating an input emulation profile.
 - If creating by using Basic Mode : Select “i1 iO_EmulationInput_Basic.txt”.
 - If creating by using Multicolor Mode : Select “i1 iO_EmulationInput_Advanced.txt”.
 - If creating by using High Quality Mode : Select “i1 iO_EmulationInput_Plus.txt”.
- ◆ Measure the color of the chart (P.2-3) printed using the target printing system.
- ◆ The name of the selected chart is printed at the top of the printed chart.



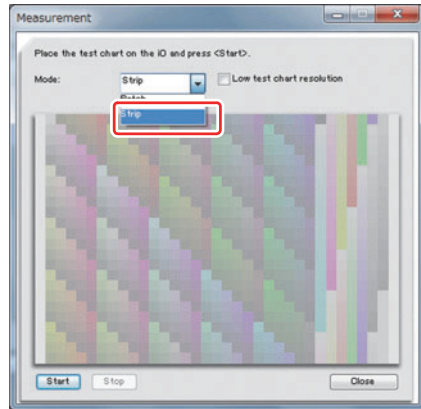
10 Click **Start** .



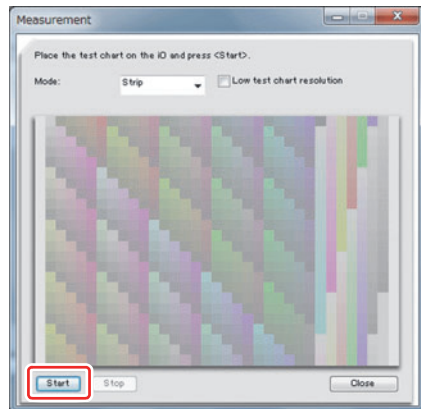
11 After the following dialog is displayed, put the main body of the measurement device on the white colored standard tile and then click **OK** .



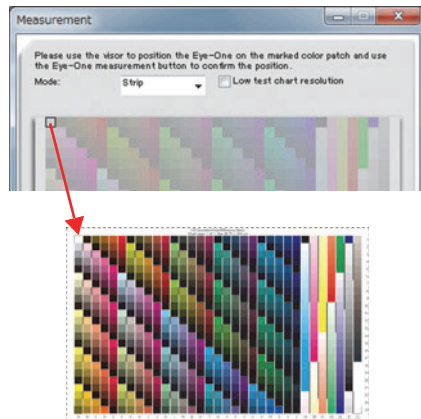
12 Set the “mode” to [strip with gaps].



13 Click **Start**.



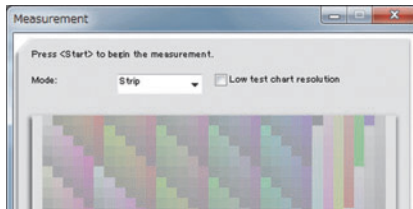
14 Move the arm of Eye-One iO and set the graticule on the marked patch (the upper left).



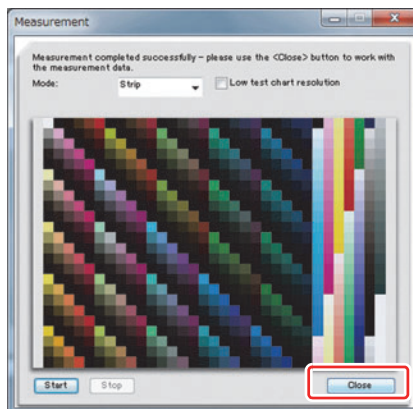
15 Press the button on the side of the Eye-One iO.

16 The same as step 14, set the graticule in the lower left and lower right.

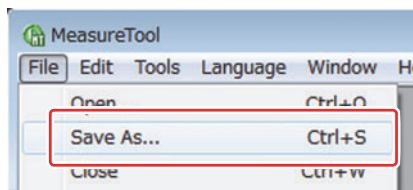
- The following dialog appears after setting the bottom right patch.
- When it is ready, click **Start** .
The measurement is automatically started.



17 When the measurement is completed, click **Close** .



18 From the Menu bar, select [File] → [Save As...] to save the color measurement results.

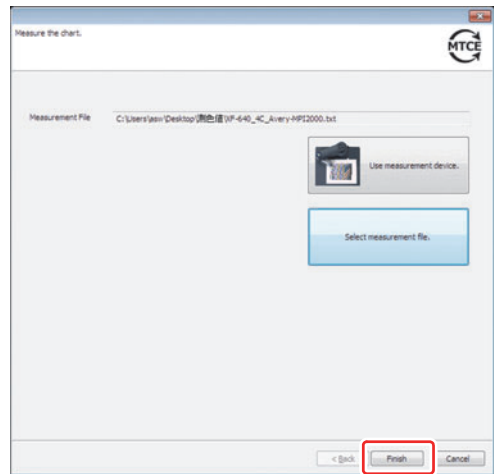


- When saving the color measurement results, make sure to designate the “Files of type” as [Text Files (*.txt *.text)] for saving.

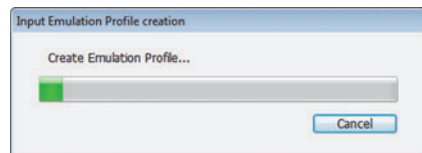
19 Shut down MeasureTool 5.0.

- Make sure that the file name stored at Step 17 is displayed in “Measurement File”.

20 Click **Finish**.

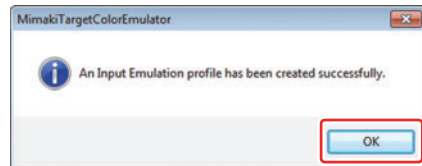


21 Begin creation of the input emulation profile.

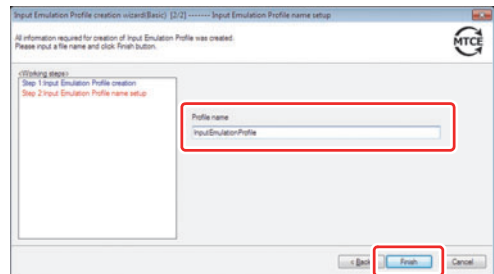


22 Click **OK**.

- You will return to the Input Emulation Profile creation wizard.



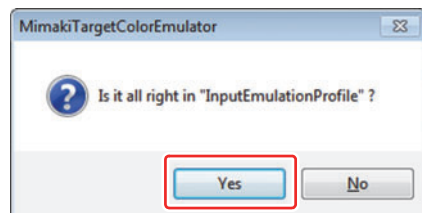
23 Enter the file name.



24 Click **Finish**.

25 Click **Yes**.

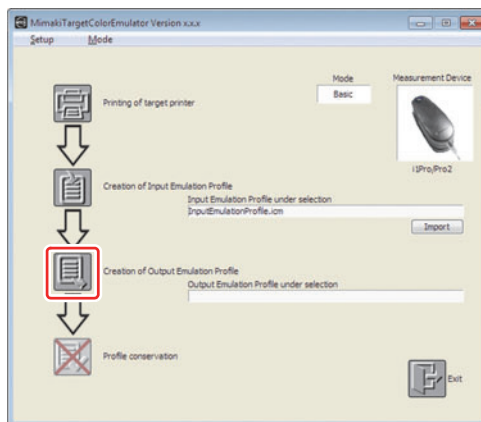
- Main window is displayed.
- The file name set in "Input Emulation Profile under selection" on the main window is displayed.



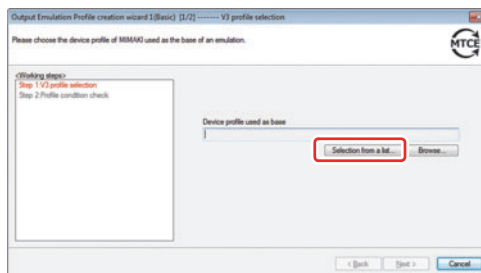
Creation of Output Emulation Profile

1 Click “Creation of Output Emulation Profile”.

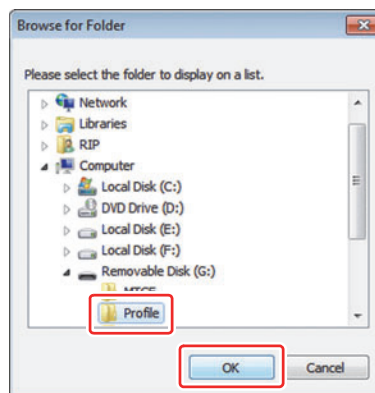
- “Output Emulation Profile creation wizard 1” is displayed.



2 Click **Selection from a list...**



3 Designate the folder where the device profile that will be the base for emulation is saved.

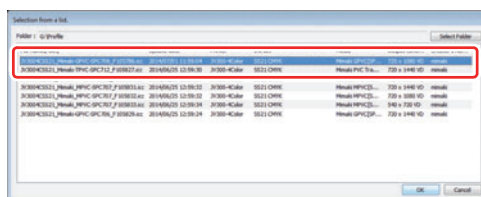


4 Click **OK**.

5 Select the device profile that will be the base for emulation.



- ◆ Select the device profile prepared in P.1-3 “Set up the Mimaki printing system”.

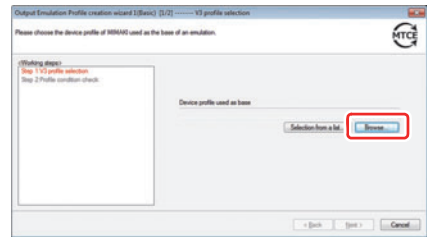


6 Click **OK**.

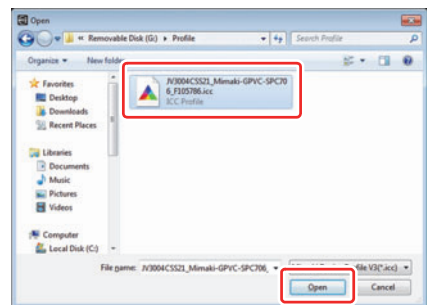


◆ Click **Browse** in Step 2 to directly designate the device profile.

(1) Click **Browse**.

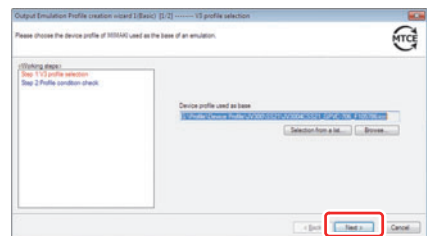


(2) Select the device profile that will be the base for emulation.

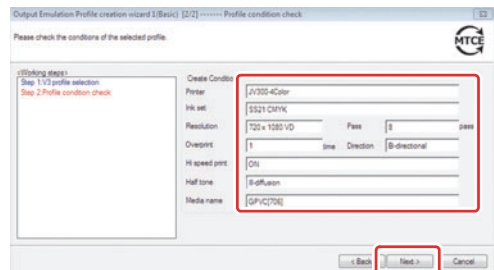


(3) Click **Open**.

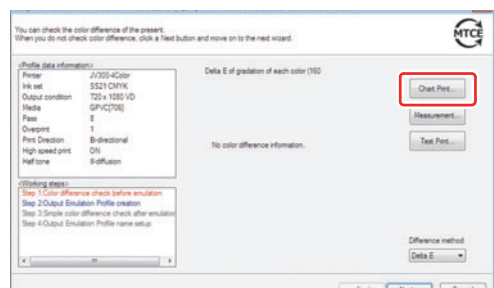
(4) Click **Next**.



7 Check the “Create Condition”, and click **Next**.



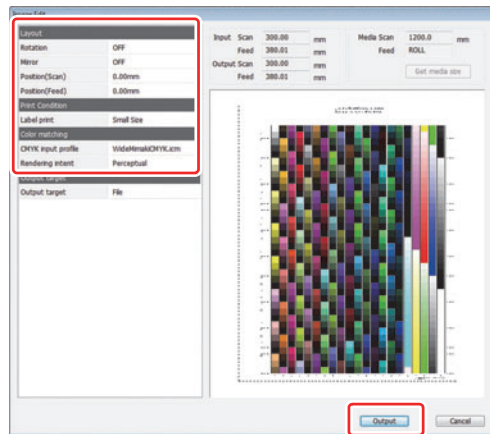
8 Click **Chart Print...**.



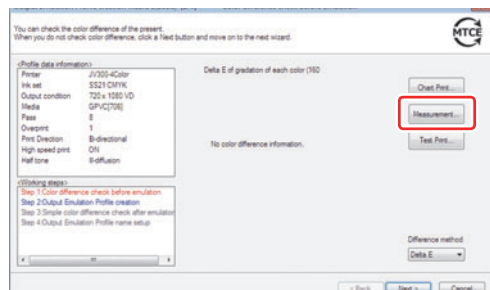
9 Set the “Layout” and “Print Condition”.

10 Click **Output** .

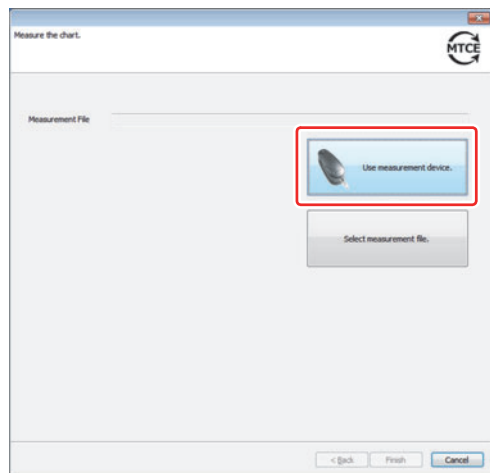
- Print the chart by the printer.



11 Click **Measurement...** .



12 Click **Use measurement device.** .



13 The MeasureTool 5.0 is activated.



14 Measure the colors.



◆ Measure the colors of the chart printed in Step 10.

If using the i1 Pro color measurement device:

◆ Refer to Steps 5 to 18 of “Creation of Input Emulation Profile” (☞ P.2-5).

◆ Select the following chart name.

If creating by using Basic Mode : Select “i1_EmulationColorDifference_Basic.txt”.

If creating by using Multicolor Mode : Select “i1_EmulationColorDifference_Advanced.txt”.

If creating by using High Quality Mode : Select “i1_EmulationColorDifference_Plus.txt”.

If using the i1 iO color measurement device:

◆ Refer to Steps 5 to 10 of “Creation of Input Emulation Profile” (☞ P.2-11).

◆ Select the following chart name.

If creating by using Basic Mode : Select “i1 iO_EmulationColorDifference_Basic.txt”.

If creating by using Multicolor Mode : Select “i1 iO_EmulationColorDifference_Advanced.txt”.

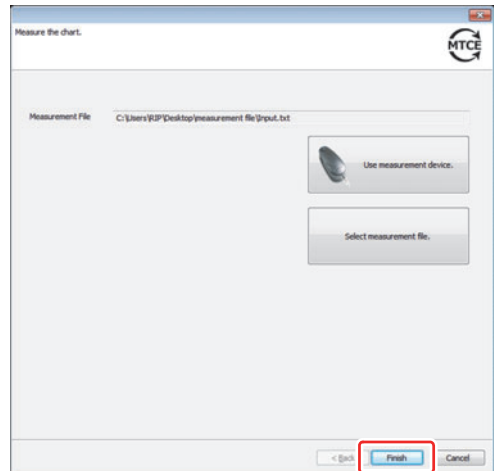
If creating by using High Quality Mode : Select “i1 iO_EmulationColorDifference_Plus.txt”.

◆ The name of the selected chart is printed at the top of the printed chart.

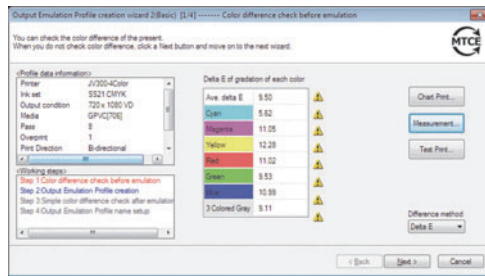


15 When the measurement is completed, click **Finish**.

- Make sure that the file name stored at MeasureTool5.0 is displayed in “Measurement File”.



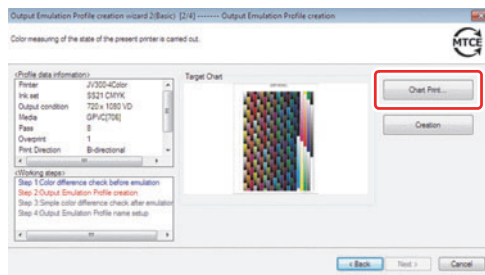
16 The color differences for each of the current colors are displayed.



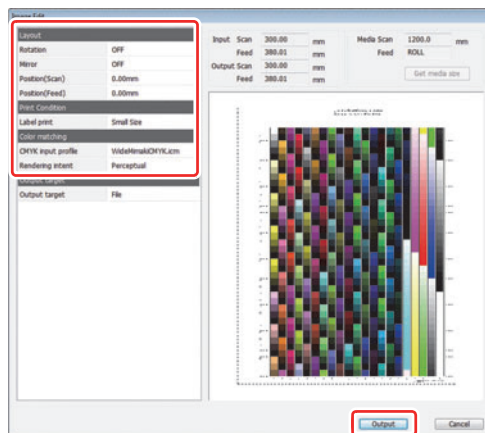
- ◆ When the color difference is 3.01 or above, mark is displayed on the right.
- ◆ You can select Delta E, Delta E94, or Delta E2000 for the method of displaying the color differences.
- ◆ If you would like to actually print and check it visually, click option **Test Print...** and select any TIFF file to print.
- ◆ Click **Test Print...** and print the displayed “TestPrint_Emulation.tif” to visually check the sample printed on the target printing system (P.2-3).

17 Click **Next** .

18 Click **Chart Print...** .



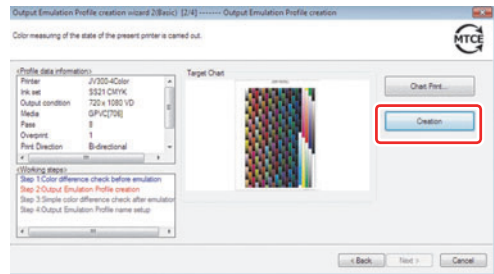
19 Set the “Layout” and “Print Condition”.



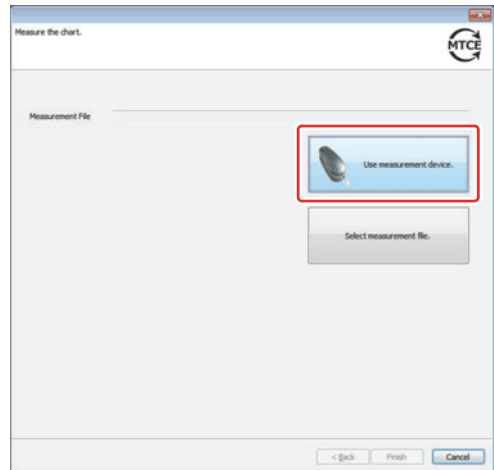
20 Click **Output** .

- Print the chart by the printer.

21 Click **Creation**.



22 Click **Use measurement device**.



23 The MeasureTool 5.0 is activated.



24

Measure the colors.



- ◆ Measure the colors of the chart printed in Step 20.

If using the i1 Pro color measurement device:

- ◆ Refer to Steps 5 to 18 of “Creation of Input Emulation Profile“ (P.2-5).
- ◆ Select “i1_EmulationOutput_Basic.txt” for the chart name if using Basic Mode.
- ◆ Select following chart name if using Multicolor Mode.
 - CMYKOrG ink set : i1_EmulationOutput_Advanced_HiFi.txt
 - CMYKLkOr / CMYKLcLmLkOr ink set : i1_EmulationOutput_Advanced_CMYKO.txt
 - Others ink set : i1_EmulationOutput_Advanced.txt
- ◆ Select “i1_EmulationOutput_Plus.txt” for the chart name if using High Quality Mode.

If using the i1 iO color measurement device:

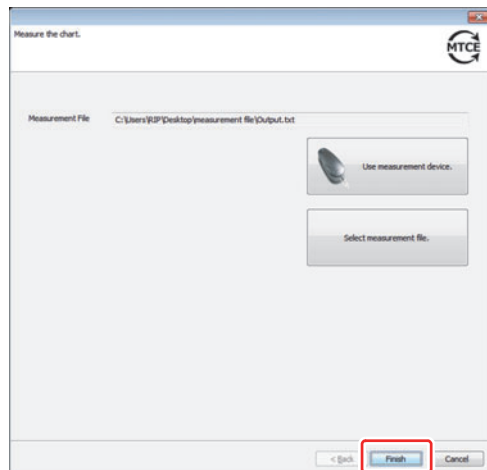
- ◆ Refer to Steps 5 to 10 of “Creation of Input Emulation Profile“ (P.2-11).
- ◆ Select “i1 iO_EmulationOutput_Basic.txt” for the chart name if using Basic Mode.
- ◆ Select following chart name if using Multicolor Mode.
 - CMYKOrG ink set : i1 iO_EmulationOutput_Advanced_HiFi.txt
 - CMYKLkOr / CMYKLcLmLkOr ink set : i1 iO_EmulationOutput_Advanced_CMYKO.txt
 - Others ink set : i1 iO_EmulationOutput_Advanced.txt
- ◆ Select “i1 iO_EmulationOutput_Plus.txt” for the chart name if using High Quality Mode.
- ◆ The name of the selected chart is printed at the top of the printed chart.



25

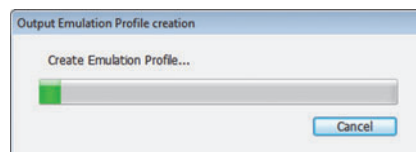
When the measurement is completed, click **Finish**.

- Make sure that the file name stored at MeasureTool5.0 is displayed in “Measurement File”.



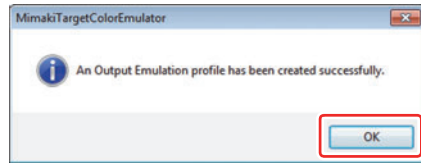
26

Output emulation profile creation begins.

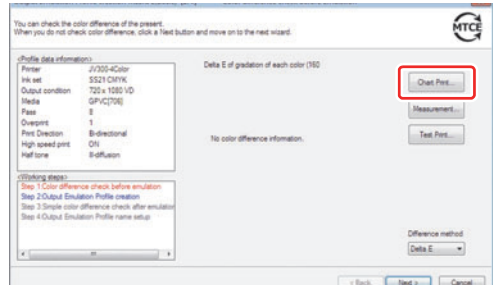


27 Click **OK** .

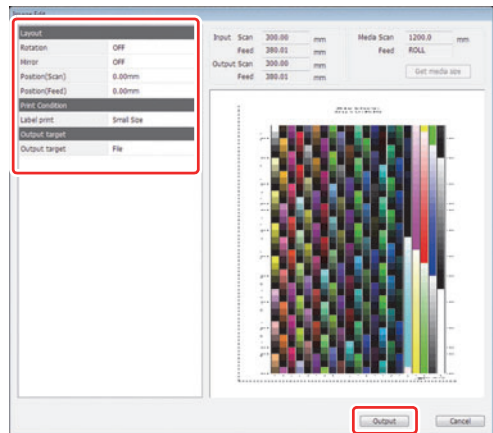
- You will return to the Output Emulation Profile creation wizard.



28 Click **Chart Print...** .



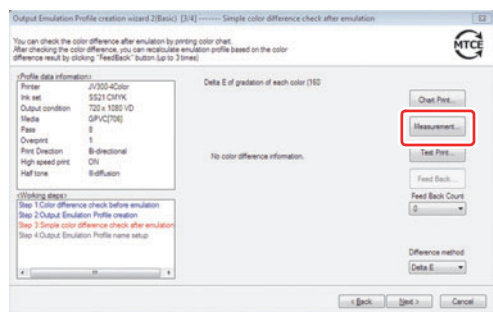
29 Set the “Layout” and “Print Condition”.



30 Click **Output** .

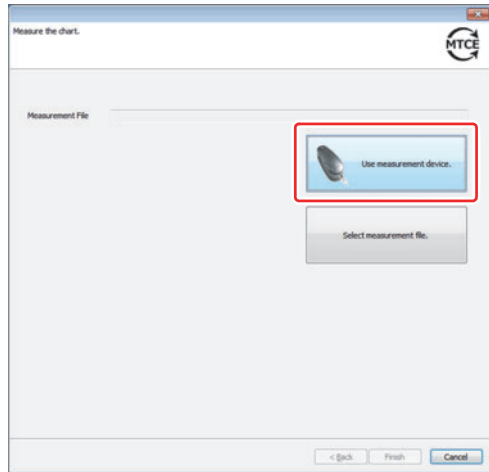
- Print the chart by the printer.

31 Click **Measurement...** .



32

Click **Use measurement device.**



33

The MeasureTool 5.0 is activated.



34

Measure the colors.



◆ Measure the colors of the chart printed in Step 30.

If using the i1 Pro color measurement device:

◆ Refer to Steps 5 to 18 of "Creation of Input Emulation Profile" (☞ P.2-5).

◆ Select the following chart name.

If creating by using Basic Mode : Select "i1_EmulationColorDifference_Basic.txt".

If creating by using Multicolor Mode : Select "i1_EmulationColorDifference_Advanced.txt".

If creating by using High Quality Mode : Select "i1_EmulationColorDifference_Plus.txt".

If using the i1 iO color measurement device:

◆ Refer to Steps 5 to 10 of "Creation of Input Emulation Profile" (☞ P.2-11).

◆ Select the following chart name.

If creating by using Basic Mode : Select "i1 iO_EmulationColorDifference_Basic.txt".

If creating by using Multicolor Mode : Select "i1 iO_EmulationColorDifference_Advanced.txt".

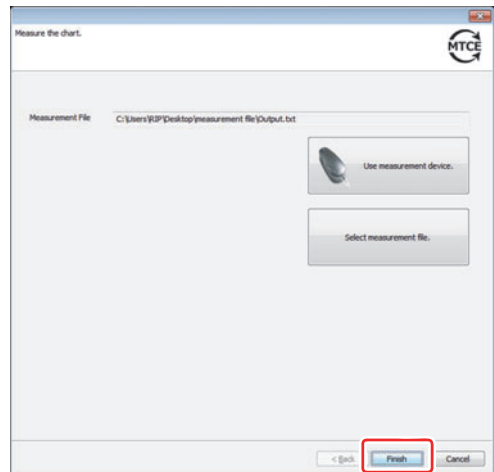
If creating by using High Quality Mode : Select "i1 iO_EmulationColorDifference_Plus.txt".

◆ The name of the selected chart is printed at the top of the printed chart.

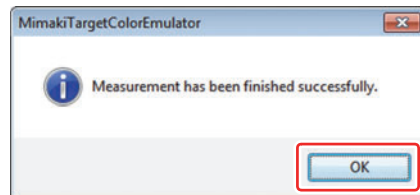


35 When the measurement is completed, click **Finish**.

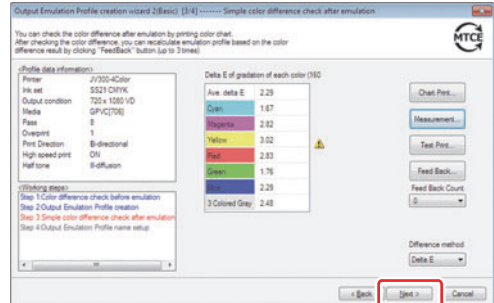
- Make sure that the file name stored at MeasureTool5.0 is displayed in “Measurement File”.





36 Click **OK**.



37 The color difference for each color is displayed.



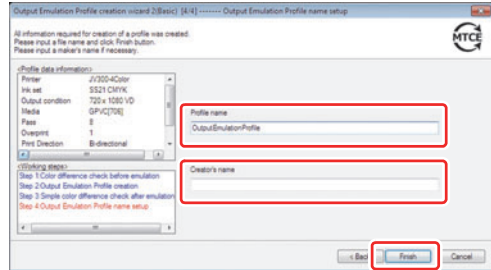
- ◆ When the color difference is 3.01 or above,  mark is displayed on the right.
- ◆ You can select Delta E, Delta E94, or Delta E2000 for the method of displaying the color differences.
- ◆ If you would like to actually print and check it visually, click option **Test Print...** and select any TIFF file to print.
- ◆ Click **Test Print...** and print the displayed “TestPrint_Emulation.tif” to visually check the sample printed on the target printing system ( P.2-3).
- ◆ Click **Feed Back** to readjust the emulation profile based on the results of the displayed color differences.
- ◆ Feedback effects might not be obtained depending on the combination of inks and media.
- ◆ Feedback can be executed up to a maximum of three times.

38 Click **Next** .



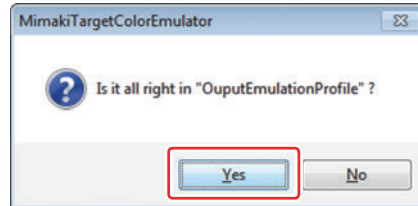
◆ If executing feedback, select the amount of times that you want to execute feedback as based on the results of the color difference values and visual confirmation, and click **Next** .

39 Enter the file name and the creator's name.



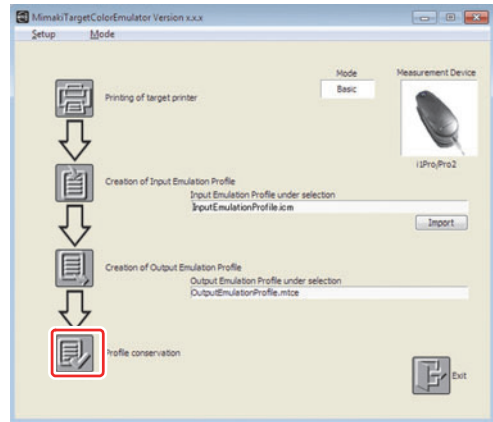
40 Click **Finish** .

41 Click **Yes** .

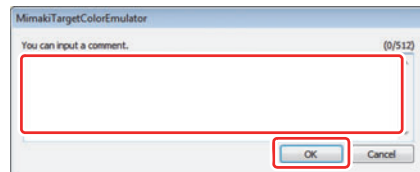


Saving the Emulation Profile

1 Click “Profile conservation”.

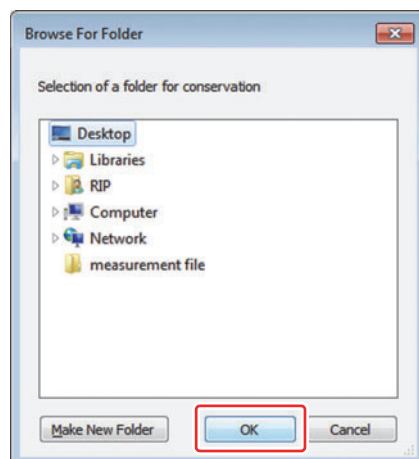


2 Input any comment and click **OK**.

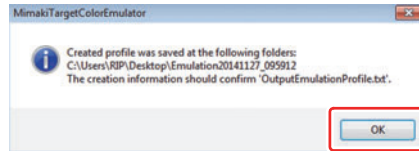


- ◆ The input comment is recorded to a text file saved in the same folder as when the emulation profile is saved.
- ◆ By inputting the target print conditions and Mimaki print conditions in advance, you can leave a record of what kind of conditions were used to create the emulation profile.

3 Specify the folder for saving the profile, and then click **OK**.

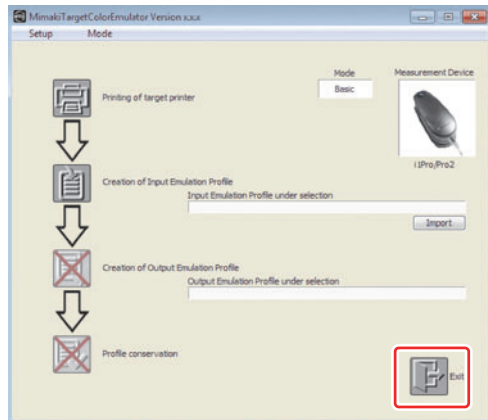


4 Click **OK**.



◆ In the designated folder, a folder titled “EmulationYYYYMMDD_HHmmSS” is automatically created, and in the created folder, a text file that lists the input/output emulation profiles and creation information is saved.
(YYYY = Year, MM = Month, DD = Day, HH = Hour, mm = Minute, SS = Second)

5 Click “Exit”.



Chapter 3

Install the Emulation Profiles

Install the created input/output emulation profiles into RL6/RLP5.

Starting Profile Manager	3-2
Installing the Input Emulation Profile	3-2
Installing the Output Emulation Profile	3-4
Exit the profile manager	3-5

Starting Profile Manager

- 1 Check that MTCE has been exited, and start RL6/RLP5's profile manager.



For RL6

- ◆ Refer to the [Profile installation] of separate document “RL6 Installation Guide” for how to start the profile manager.

For RLP5


- ◆ Refer to the [Installing Profiles] of separate document “RLP5 Reference Guide -Common features for every printer-” for how to start the profile manager.

Installing the Input Emulation Profile

- 1 Select the [Profile] menu and then [Install input profiles].



For RL6

- ◆ Or, click .

For RLP5

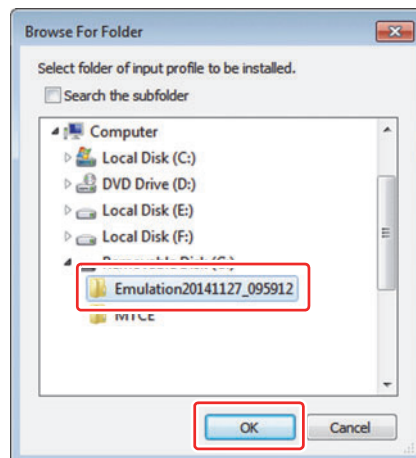
- ◆ Or, click .

- 2 Specify the profile save folder.

- 3 Click .




- ◆ If no relevant profile exists in the specified folder, an error message is displayed.

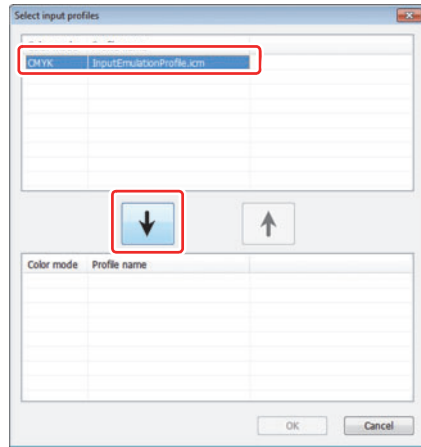


4 Select the profile to be installed.

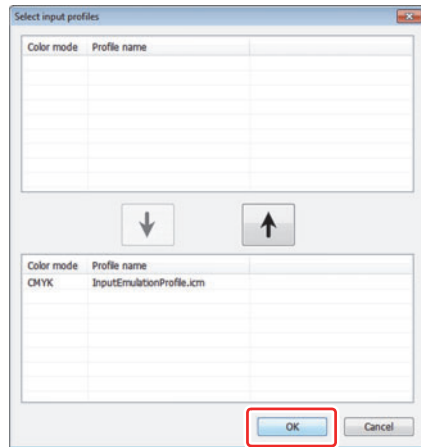
- The color of the selected profile is changed to blue.


5 Click  .

- The selected profiles disappear from the upper list, and they are displayed in the lower list.

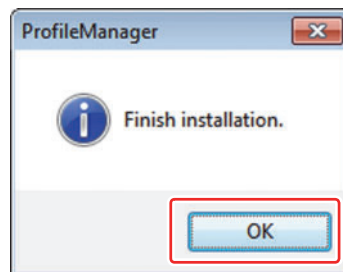


6 Click  .





7 Click  .

- The added profiles are displayed in the ProfileManager list to complete the profile installation.



Installing the Output Emulation Profile

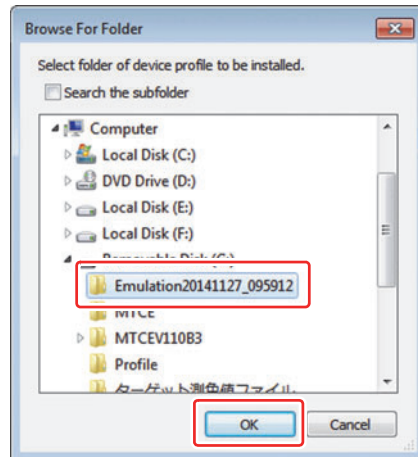
1 Select the [Profile] menu and then [Install device profiles].

- For RL6
◆ Or, click  .
- For RLP5
◆ Or, click  .

2 Specify the profile save folder.

3 Click **OK** .

- ◆ If no relevant profile exists in the specified folder, an error message is displayed.

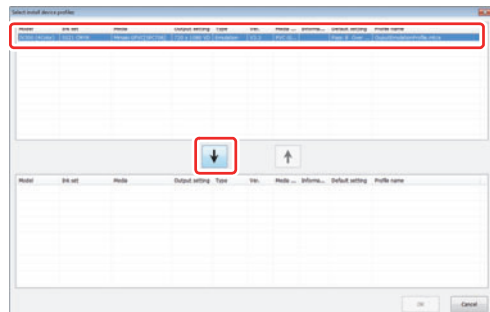


4 Select the profile to be installed.

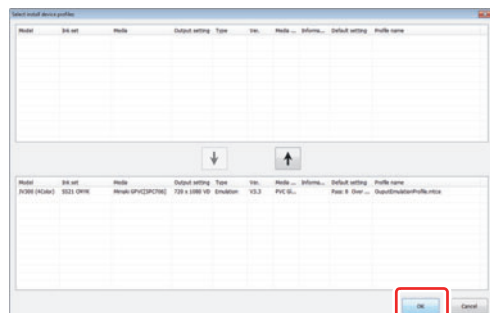
- The color of the selected profile is changed to blue.

5 Click  .

- The selected profiles disappear from the upper list, and they are displayed in the lower list.



6 Click **OK** .



7 Click **OK**.

- The added profiles are displayed in the ProfileManager list to complete the profile installation.



Exit the profile manager

- 1** Once you install the emulation profiles into RL6/ RLP5, exit the profile manager.

Chapter 4

Use the Emulation Profiles to print


Use the installed input/output emulation profiles to print.

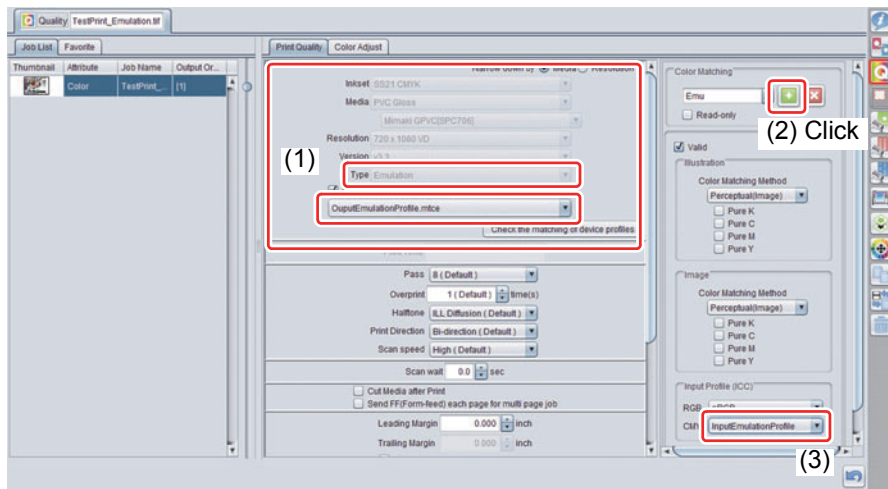
Use the Emulation Profiles in RasterLink6 to print4-2
Use the Emulation Profiles in RasterLinkPro5 to print ..4-3

Use the Emulation Profiles in RasterLink6 to print

1 Starting RL6, and click  (Quality).

2 Set the “Quality” on the print quality screen.

- (1) Select the output emulation profile you installed into RL6 in Chapter 3.
The type is “emulation”.
- (2) Input any name for the color matching preset, then click .
- (3) For “CMYK” of the input profile (ICC), select the input emulation profile you installed into RL6 in Chapter 3.



NOTE!

- ◆ Make sure to use all together the input and output emulation profile which is created.

3 Click  (Execution).

NOTE!

Emulation cannot be performed under the following conditions.

- ◆ Color matching is set to “OFF”.
- ◆ The color matching method is set to “gray balance”.
- ◆ The color matching method is set to “maintain absolute gamut”.
- ◆ The image is RGB data.

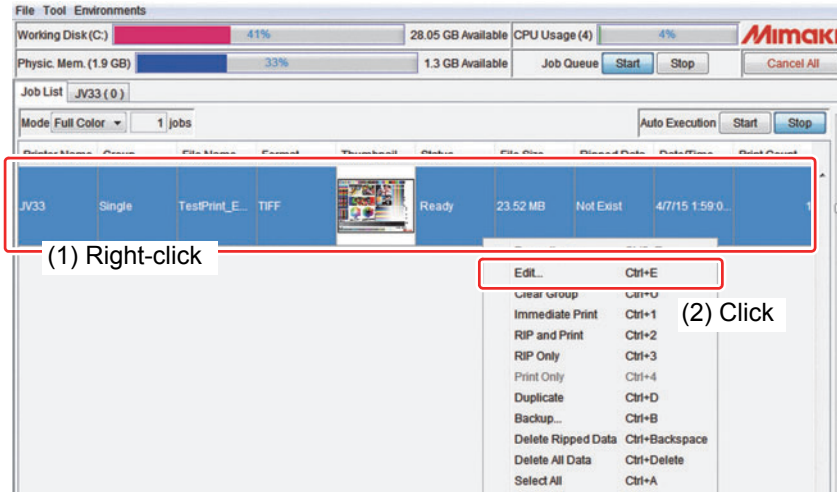
Emulation accuracy is decreased under the following conditions because the color is adjusted for the emulation result.

- ◆ Color adjustment settings are changed.
- ◆ Pure color (C, M, Y, K) are set to be maintained.
- ◆ Color substitution settings are applied.

Use the Emulation Profiles in RasterLinkPro5 to print

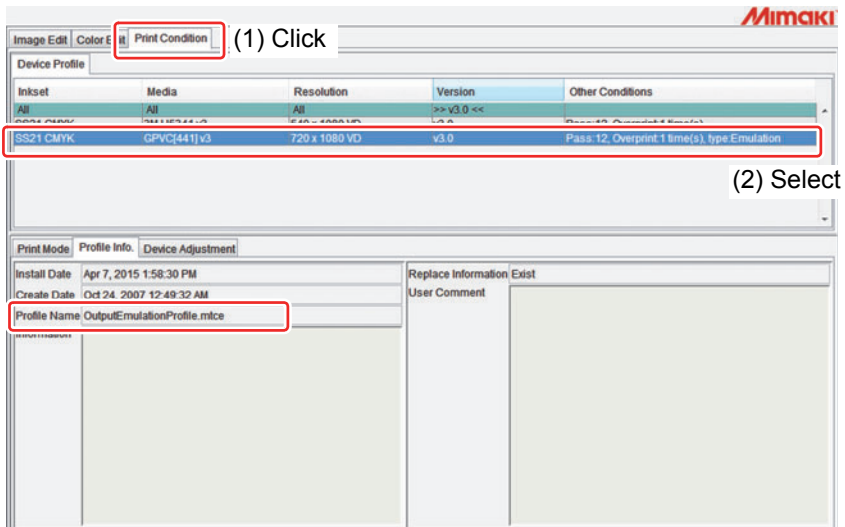
1 Start RLP5, and open the editing screen of the job for which you want to perform emulation.

- (1) Select The Job For Which You Want To Perform Emulation And Right-click.
- (2) select [Edit...] from the displayed menu.



2 Specify The output emulation profile on the [Print Condition] tab.

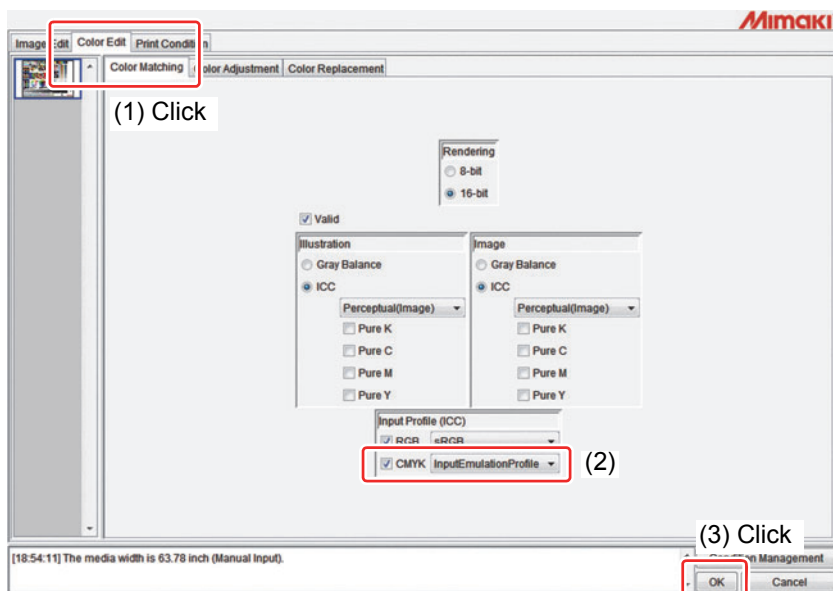
- (1) Click [Print Condition] tab.
- (2) Select the output emulation profile you installed into RLP5 in Chapter 3.



- ◆ Output emulation profile is displayed in [Other Conditions] as “Type : Emulation”.
- ◆ you Can Check the profile file name by using the [Profile Info.] tab at the bottom of the screen.

3 Specify The input Emulation Profile by using the [Color Matching] tab of the [Color Edit] tab.

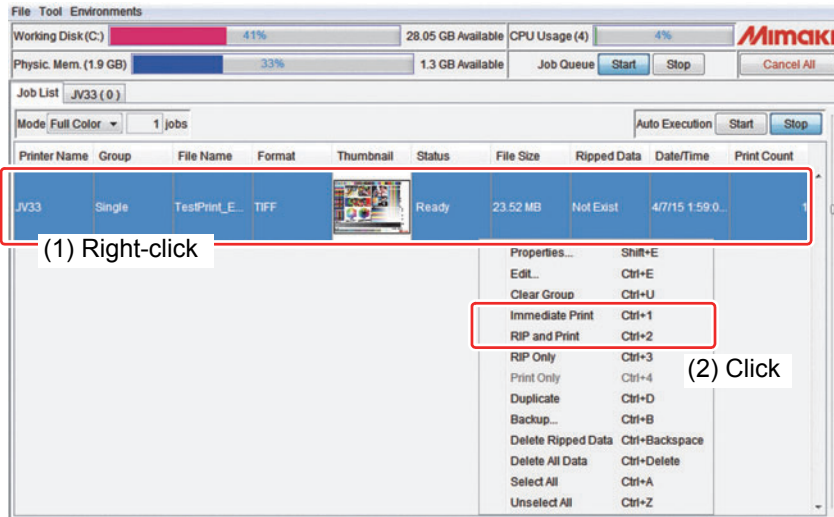
- (1) Click The [color Edit] Tab to open the [Color Matching] tab.
- (2) select the input emulation profile you installed into RLP5 in Chapter 3 for the “CMYK” of the input profile (ICC).
- (3) Click **OK** to close the editing screen.



NOTE! ♦ use the created input/output emulation profile for setting.

4 Print the job specified by the emulation profile.

- (1) Select the job specified by the emulation profile and right-click.
- (2) Select [RIP and Print] or [Immediate Print] from the displayed menu.



NOTE! Emulation cannot be performed under the following conditions.

- ◆ “Valid” of the [Color Matching] tab is not checked.
- ◆ “Gray Balance” is specified on the [Color Matching] tab.
- ◆ “Absolute” is specified on the ICC of the [Color Matching] tab.
- ◆ The color mode of the image is RGB.

The emulation accuracy is reduced under the following conditions due to colors being adjusted corresponding to the emulation results.

- ◆ The settings of the [Color Adjustment] tab are changed.
- ◆ Retention of pure colors (C,M,Y,K) is specified on the [Color Matching] tab.
- ◆ The color replacement setting is applied on the [Color Replacement] tab.

Appendix

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Error Messages and Remedies

How to make remedies when error messages are displayed will be explained below:

Error message	Indicate condition	Remedies
Failed to find a dongle. Please plug the dongle into the PC, then restart the application.	At the time of activation	<ul style="list-style-type: none"> When you activated MTCE using dongle, use the dongle to activate in the subsequent occasion, too.
Filed to initialize the application.	At the time of activation	<ul style="list-style-type: none"> A crucial error has occurred in MTCE system. Please reinstall the MTCE.
The application has stopped transactions. Any dongle has not been detected. Please plug the dongle into the PC, then restart the application.	At the time of various operations	<ul style="list-style-type: none"> Do not remove the black-colored dongle while activating MTCE.
The selected file is not an emulation profile.	Input emulation profile import	<ul style="list-style-type: none"> Check if a file other than an input emulation profile is designated.
The selected file is not a Input Emulation Profile for ○○ mode.	Input emulation profile import	<ul style="list-style-type: none"> Specify the same mode for the created Input emulation profile import as the mode selected on the MTCE (Basic/ Multicolor/ High Quality Mode).
The file is not supported.	Output Emulation Profile creation wizard	<ul style="list-style-type: none"> Make sure that you are not designating the file other than the device profile.
There is an error in the color measurement data. (20203)	At the time of reading color measuring file	<ul style="list-style-type: none"> The loaded file is not a color measurement file. Load the color measurement file again.
An error occurred while creating the ICC profile. (20719)	At the time of reading color measuring file	<ul style="list-style-type: none"> An emulation profile could not be created from the loaded color measurement. Check if it is a color measurement file for creating an emulation profile. If an error message is displayed even though the file is correct, there could have been an error in color measurement. Check that there is no inconsistency in color concentration in the printed chart, and measure the color again.
Measurement data is data of different chart. Please check measurement data. (3000)	At the time of reading color measuring file	<ul style="list-style-type: none"> Load the color measuring file of the chart for use with the mode selected on the MTCE (Basic/ Multicolor/ High Quality Mode).
Failed to load the measurement file because of an invalid format. Please choose a measurement file saved with a correct format.	At the time of reading color measuring file	<ul style="list-style-type: none"> The color measuring result has been saved in spectral reflectance. Use the file saved in Lab value.
Only CMYK tiff images can be outputted during a prolife creation. Please select a CMYK tiff file.	Test print	<ul style="list-style-type: none"> It is impossible to output RGB image by MTCE.
Cannot get media size from printer. Please check the connection to a printer.	Editing image	<ul style="list-style-type: none"> Check the cable and make sure that the connection with the printer is made. Check, on the Windows, if the printer is recognized.

If the emulated color doesn't match

If the emulated color doesn't match, please try the following way.

- (1) Please check the result of the measuring colors result file. Refer to app.-5 "Note when measuring colors (i1 Pro)"
- (2) Please change conditions (ink set composition, media, resolution, etc) of Mimaki printing system to conditions close to conditions of target printing system.
- (3) If the color of vector data doesn't match, Please use the color replacement function of RL6/ RLP5.


Errors at the time of color measuring and the remedies

Kind of color measuring device	Phenomenon	Remedies
i1 Pro	Initialization operation is not completed.	<ul style="list-style-type: none"> • Confirm that the serial ID written on the calibration plate and the serial ID written on the back of i1 Pro are in agreement. • Confirm that i1 Pro is firmly placed on the calibration plate.
	Color measuring error arises.	<ul style="list-style-type: none"> • Color measuring is performed for each line. Continue to press i1 Pro button while making the color measuring. • At the beginning of the line (white portion on the left) and the end of the line (white portion on the right) to be measured, wait for around 1 second while pressing the button. • Move i1 Pro slowly at a constant speed. • While sliding on the ruler, do not make i1 float from the chart. (It is not necessary to push it forcibly).
	Connecting error arises.	<ul style="list-style-type: none"> • Confirm if the driver is installed properly. • Change the USB port to insert. (Do not use USB hub). • Remove other USB devices.
	The light stays on.	<ul style="list-style-type: none"> • Suspend the color measuring and pull off the USB cable. Re-insert the cable again after a while.
i1 iO	Color measuring error arises.	<ul style="list-style-type: none"> • Confirm that i1 Pro is firmly inserted into the pedestal for i1 iO. Push i1 Pro into the pedestal until you feel resistance. (It is not necessary to push forcibly.) • When deciding the position of 3 markers, decide the position at slightly outside of the center of the batch with frame.
	Connecting error arises.	<ul style="list-style-type: none"> • Confirm that two drivers of i1 Pro/i1 iO are properly installed. • Confirm if i1 iO is firmly assembled. • Change the USB port to insert. (Do not use USB hub). • Remove other USB devices.

Note when measuring colors (i1 Pro)

Depending on the operation for measuring colors, the measured result may be an abnormal value in some cases. MTCE creates emulation profile. If there is an abnormality in the measured result, you cannot gain the correct result.

NOTE!	<ul style="list-style-type: none"> ◆ On the MeasureTool5.0 screen, the color of the patch that has already been measured depending on the progress of the measuring colors is displayed in dark color. ◆ Be sure to check that this is correct by comparing the color of the patch displayed in dark color and the chart actually measured in the middle of measurement. (In the right figure, the measured colors in the second line are misaligned by ones.) ◆ Set the chart on a flat surface where the colors can be easily measured.
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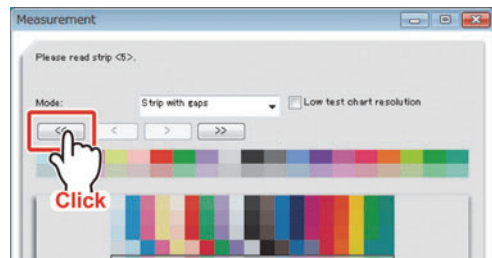
Possible phenomena when measured colors result is abnormal

Item	Adjustment with an abnormal measurement
Confirm delta E	Color difference values differ much depending on the color.

If you find an abnormality during measuring colors

You can begin to measure colors again in the middle of the operation.

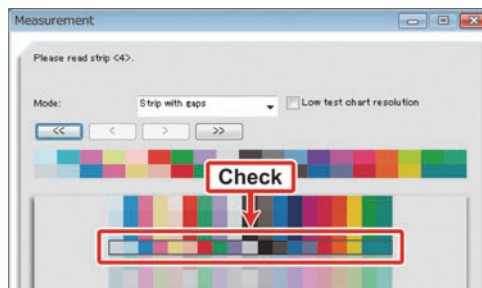
- 1 Click << on the measuring colors screen to return to the line with measuring colors abnormality.



2 Measure colors in the line with an abnormality again.

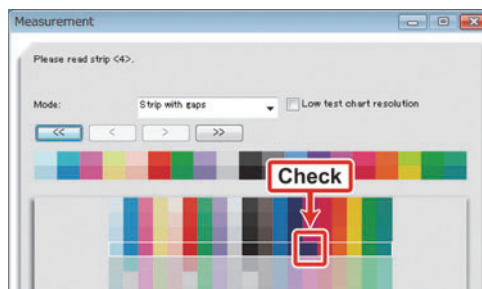
When whole line is misaligned

While pressing the i1 Pro button, stop for longer time in the non-printed part on the left end. Then, slide it.



When patch color in the middle is abnormal

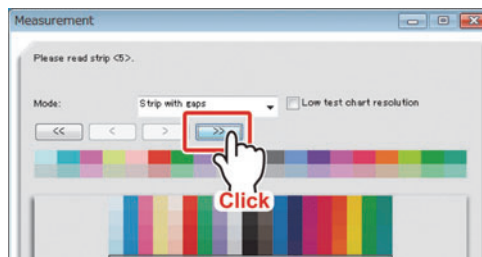
Make the speed to slide i1 Pro slower.



3 Repeat the Step 1 and 2 until the measuring colors can be performed properly.

4 Click **>>** to move to the next line to measure colors.

Then, continue the measuring colors.

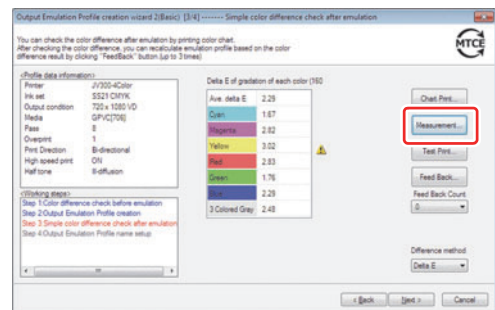


Check the result of the measuring colors result file

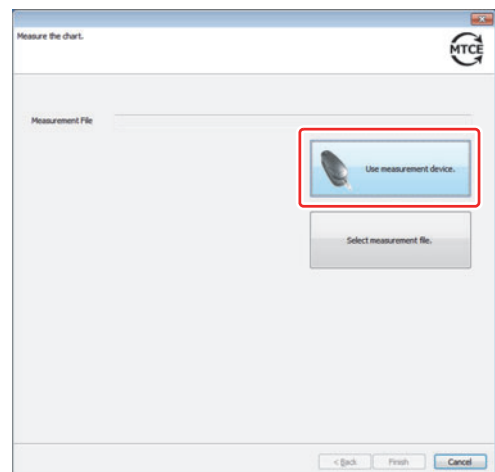
The procedures to check the result of the measuring colors result file when an abnormality has occurred in the measured result and it may be abnormal.

1 Move the screen until you can click **Measurement...** .

2 Click **Measurement...** .



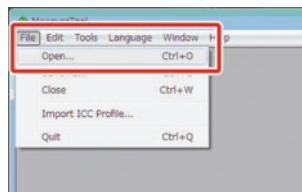
3 Click **Use measurement device.** .



4 The MeasureTool 5.0 is activated.



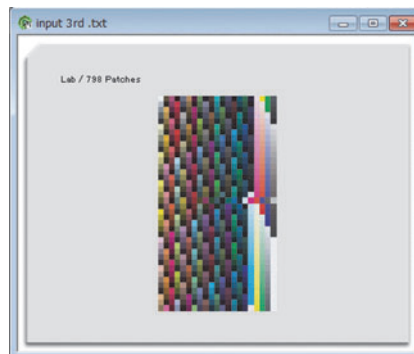
5 Select the measured colors result from [File] → [Open].



6 The preview of the measured colors result is displayed.

Comparing the measured colors chart to the preview, check that there is no abnormality in the measured colors.

If there is an abnormal result, measure colors again.



If the measurement device is not recognized

Installation of the driver may fail when a measurement device is connected to the computer. In this case, update the driver.

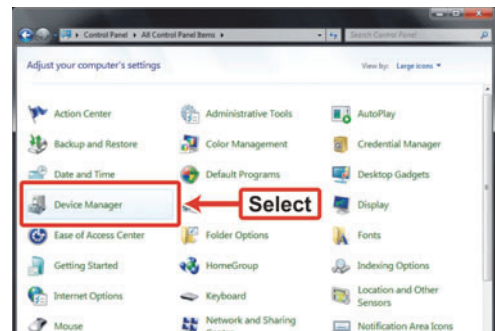
- (1) First, refer to "Check the driver of the measurement device" to check the driver is properly installed.
- (2) If update of the driver is needed, refer to "Update the driver" to update the driver.

Check the driver of the measurement device

1 Connect the target printer with PC.

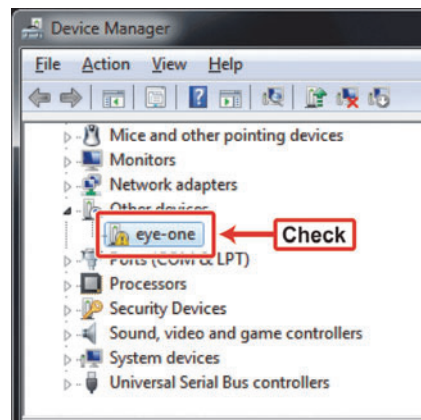
2 Select "Start" and then "Control Panel".

3 Open the device manager.



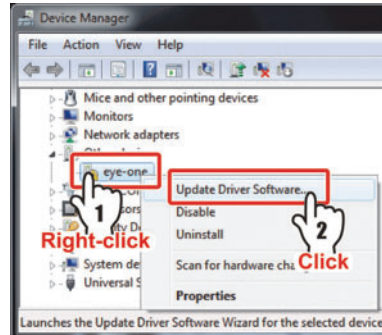
4 Check if the device requires updating.

- When "⚠" is displayed next to the name of the connected measurement device shown as the right, update it.

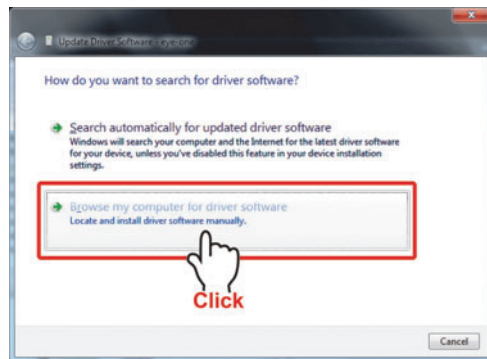


Update the driver of the measurement device

- 1 Select and right-click the measurement device to be updated, and then click "Update Driver Software" on the shortcut menu.



- 2 Click "Browse my computer for driver software".



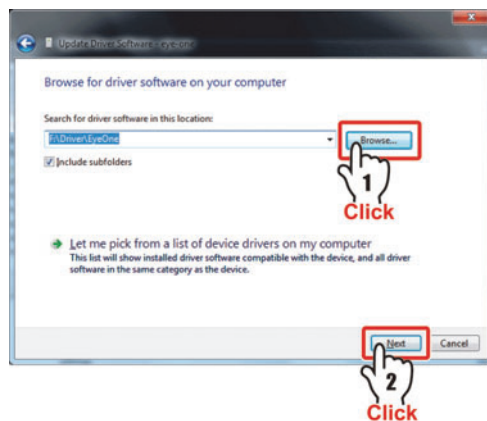
- 3 Place the installation CD of MimakiTargetColorEmulator in the CD drive.

- 4 Click **Browse** and specify the following folder.

- [CD drive]Driver\EyeOne

- 5 Click **Next**.

- The driver software is installed.



6 Click **Close** .

