



KONICA MINOLTA

Giving Shape to Ideas

# AccurioPress

## C6100/C6085

# Daily Maintenance Guide

- For Operator -



# Aim of this manual

This manual describes the daily care, both sides adjustment and image quality adjustment procedures. These daily adjustments are important for stable printings.

This manual will be useful to enable the full capabilities of this machine to realize stable printings.

## Notations and symbols used in this manual

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### 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.*

### Tips

- This symbol indicates information that complements the topic or optional devices required to use a certain function.

### Reference

*This symbol indicates a function or functions that are related to the topic.*

The meaning of other notations and symbols are as follows.

Notation/Symbol	Description
[ ]	These brackets indicate the name of a key on the <b>touch panel</b> or of a button on a computer screen.
Bold	Words in bold type indicate the name of a key on the <b>control panel</b> , of a part, of an option, or of User's Guide.

This guide describes product names and system configurations as follows.

Product name	Conventions used in this guide
AccurioPress C6100/C6085	This machine: Indicates the entire system including options and functions. The main body: Indicates a main unit that covers printing functions. The machine: Indicates a mechanical part related to the structure or mechanism.
Microsoft Windows	Windows

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## Intended use of this machine

### Intended use

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This machine is designed to be used as a digital printing system for the following purposes:

- Print, copy and scan documents.
- Use available finishing functions such as duplexing, stapling, hole-punching, multi-folding and booklet creation if appropriate options are installed.
- Store documents to reprint on the HDD of this machine.

The intended use also requires that:

- The system is used within the limits of device specifications and specifications of optional components,
- All safety instructions in the related user's guides are observed,
- Legal restrictions on copying or printing (refer to instruction booklet "Safety Information") are observed,
- Inspection and maintenance instructions are adhered to,
- General, national and company safety provisions are observed.

### Impermissible operating conditions

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The system may not be operated if:

- Errors or damage have been discovered,
- Maintenance intervals have been exceeded,
- Mechanical or electrical functions do not work as they should.

### Exclusion of liability

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The manufacturer of the system assumes no liability for damages if the system was operated under impermissible conditions.

### Target groups

The Daily Maintenance Guide are intended for the following users of this machine:

- Operator: Person who has been trained by Konica Minolta or authorized partner to operate the system for its intended use as well as manage consumables, and perform the maintenance and troubleshooting described in user's guides.

Everyone who uses this system must have read and understood the related user's guides.



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**1** **Daily Care**

# 1 Daily Care

## 1.1 About Daily Care

### Care Timing

To help ensure stable output on the machine, clean the machine before outputting a job.

Every day, check the cleaning locations before turning the main body on. If any stains are found, wipe them off.

Cleaning locations	Reference
<b>Duplex part</b>	page 1-3
Centering sensor cleaning ( <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b> )	page 1-8
Humidifier roller cleaning ( <b>Relay Unit RU-511</b> )	page 1-10

### Care requirements

- Isopropyl alcohol
- Cleaning pad (Clean cloth)
- HYDROWIPE (Non-woven cloth with no pilling)

#### Tips

- If you have a toner-dedicated vacuum cleaner, you can use it to clean the **duplex part**.

## 1.2 Cleaning the Duplex Part

If the **duplex part** is dirty, follow the steps below to clean it.

Check the cleaning locations before turning the main body on every day.

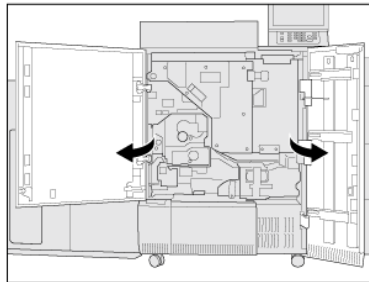
### ⚠ CAUTION

- Always check the cleaning locations before turning the main body on.
- If the power is turned on while the main body doors are closed, the fusing unit may become hot and you may be burned when cleaning around the fusing unit.

### NOTICE

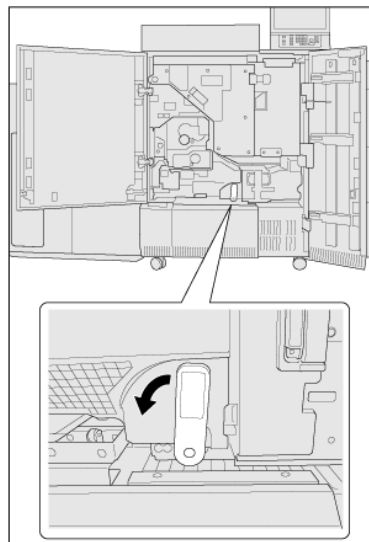
*When cleaning, exercise care to prevent any dirt from falling into the paper feed route.*

- 1 Open the **right side door** and **left side door** of the main body.



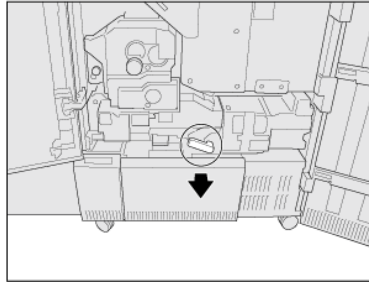
- 2 Turn ON the **main power switch**, and turn ON the **sub power switch**.

- 3 Lower the **lever [M1]** counterclockwise.

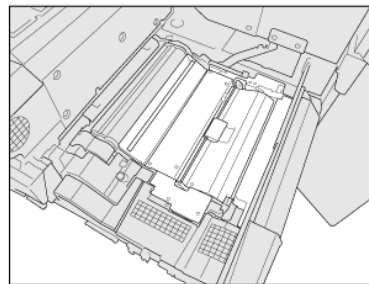




- 4** Hold the **lever [M1]**, and pull out the **conveyance fixing unit**.



- 5** Turn OFF the **sub power switch**, then turn OFF the **main power switch**.
- 6** Wipe off stains on the top of the **duplex part** using HYDROWIPE (non-woven cloth with no pile).

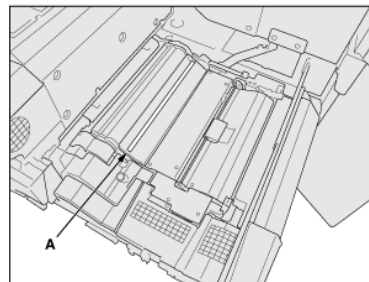


**NOTICE**

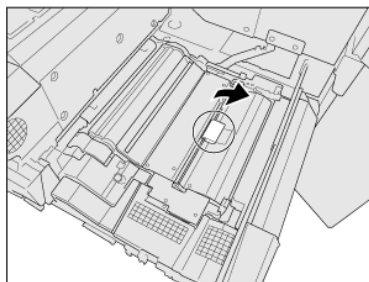
*Never use alcohol when cleaning.*

*Be sure to clean in the axis direction. Cleaning in the paper feed direction causes toner from dropping in the paper feed route.*

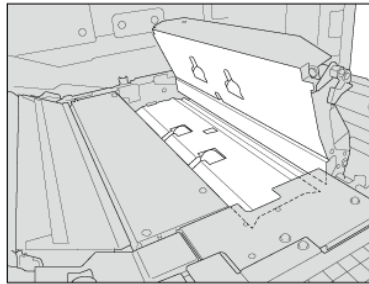
*When cleaning, exercise care not to deform the sheet (A) on the top of the **duplex part**.*



- 7** Open the **cover [M3]**.

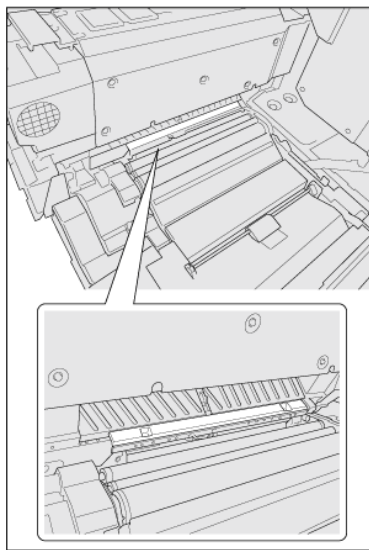


- 8** Wipe off stains in the paper feed route of the **registration unit** using HYDROWIPE (non-woven cloth with no pile).



- 9** Close the **cover [M3]**.

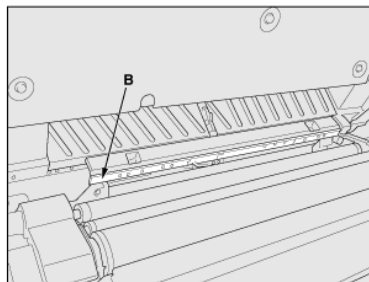
- 10** Wipe off stains on the **pre-fusing guide** using HYDROWIPE (non-woven cloth with no pile).



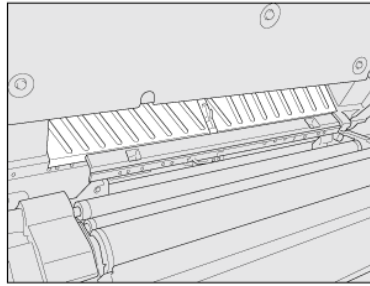
**NOTICE**

*Never use alcohol when cleaning.*

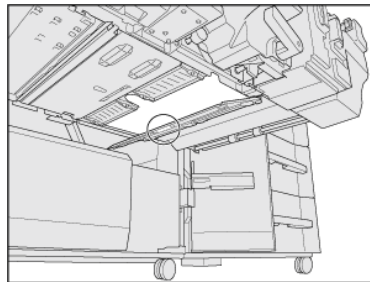
*When cleaning, exercise care not to deform the sheet (B) on the inlet of the **fusing unit**.*



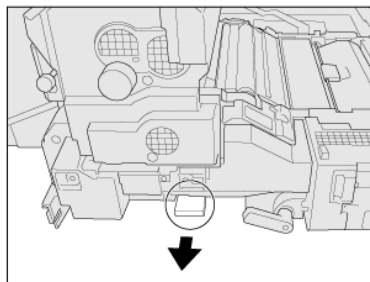
- 11** Moisten the HYDROWIPE (non-woven cloth with no pile) with isopropyl alcohol, then wipe off stains on the **fusing entrance guide**.



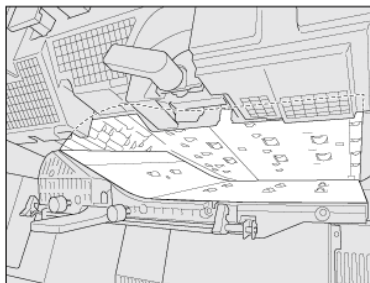
- 12** Open the **lever [M13]**, and wipe off stains at the bottom of the **duplex part** using the HYDROWIPE (non-woven cloth with no pile) moistened with isopropyl alcohol.



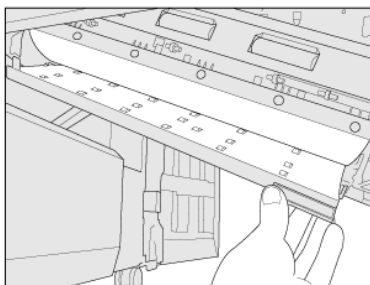
- 13** Hold the **lever [M8]**, and open the paper feed route of the **duplex unit**.



- 14** Wipe off stains in the paper feed route of the **duplex unit** using the HYDROWIPE (non-woven cloth with no pile) moistened with isopropyl alcohol.



- 15** Hold the **lever [M9]**, and open the **jam processing guide**. Then, wipe off stains on the paper feed route in the guide using the HYDROWIPE (non-woven cloth with no pile) moistened with isopropyl alcohol.

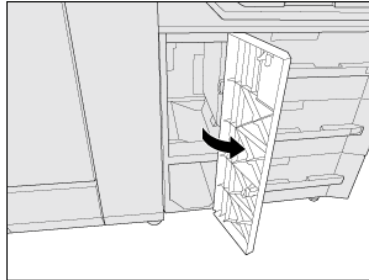


- 16** Close the **jam processing guide**, and return the **duplex unit** to its original position.
- 17** Push the **conveyance fixing unit** in the main body, then return the **lever [M1]** to the original position.
- 18** Close the **left side door** and **right side door** of the main body.

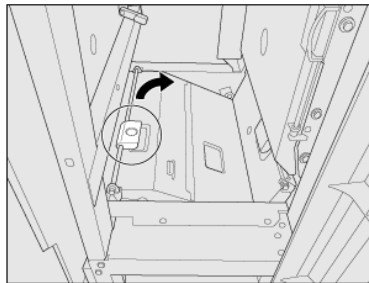
## 1.3 Cleaning the Paper Feed Unit PF-707m or Paper Feed Unit PF-711

If the **centering sensor** of Paper Feed Unit PF-707m or Paper Feed Unit PF-711 is dirty, follow the steps below to clean it.

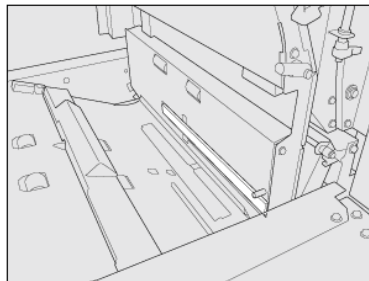
- 1 Open the **tray left side door** of Paper Feed Unit PF-707m or Paper Feed Unit PF-711.



- 2 Open the **lever [PF4]**.



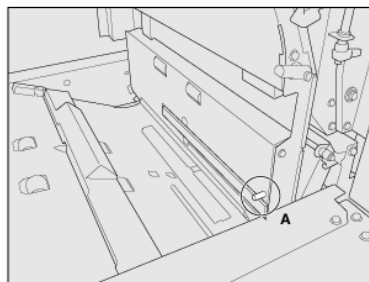
- 3 Clean the **centering sensor** using a cleaning pad.



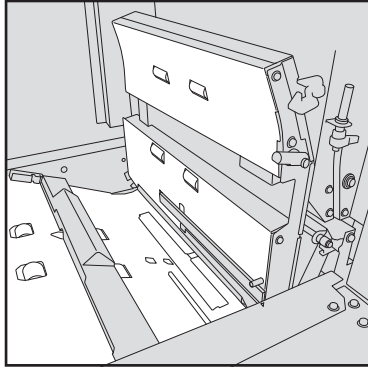
### **NOTICE**

*Never use alcohol for cleaning. Fog-like marks occur on the surface of the sensor.*

*Grease is attached to the **positioning pin (A)**, so do not touch it using a cleaning pad.*

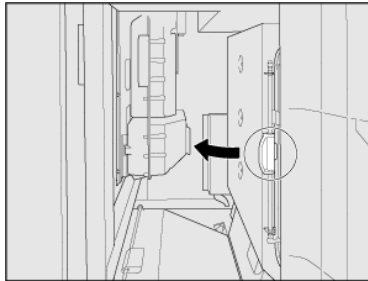


- 4** Clean the **horizontal conveyance guide** using a cleaning pad.

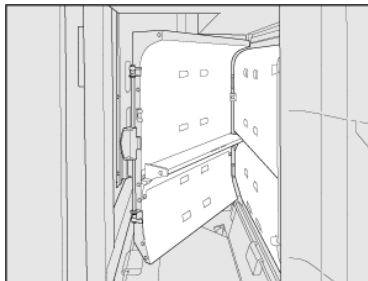


- 5** Close the **lever [PF4]**.

- 6** Open the **lever [PF1]**.



- 7** Clean the **vertical conveyance guide** using a cleaning pad.



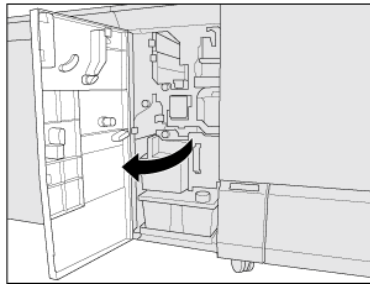
- 8** Close the **lever [PF1]**.

- 9** Close the **tray left side door** of Paper Feed Unit PF-707m or Paper Feed Unit PF-711.

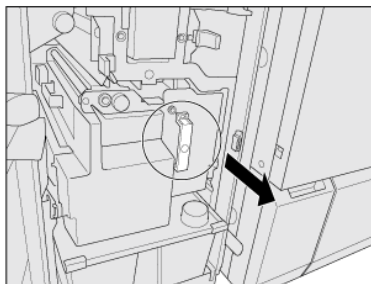
## 1.4 Cleaning the Relay Unit RU-511

If the **humidification roller** of **Relay Unit RU-511** is dirty, follow the steps below to clean it.

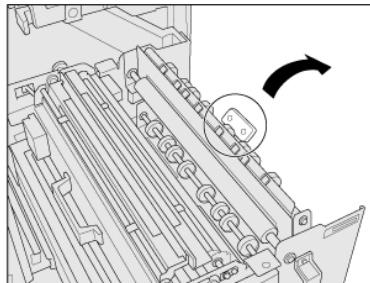
- 1 Open the **relay unit front door** of **Relay Unit RU-511**.



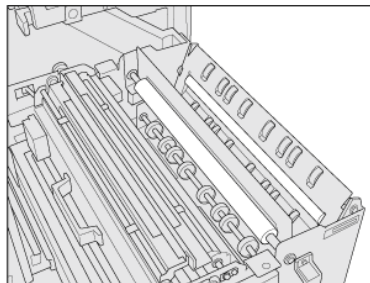
- 2 Hold the **handle [HM1]**, and pull the **Humidifier HM-101** out.



- 3 Hold the **lever [HM2]**, and open the **paper feed rout**.



- 4 Moisten the cleaning pad with isopropyl alcohol, then clean the **humidification roller**.



- 5 Hold the **handle [HM1]**, and return the **humidification kit HM-101** to its original position.
- 6 Close the **relay unit front door** of **Relay Unit RU-511**.

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**2** Both Sides Adjust



## 2 Both Sides Adjust

### 2.1 What is Both Sides Adjust?

When performing 2-sided printing, you need to correct the misalignment between the Front and Back sides in order to align the printing positions of both sides. This operation is referred to as "both-sides adjustment".

The periodical both-side adjustment is required to help ensure stable both-side accuracy against a change in machine conditions or a change in both-side accuracy that is caused depending on paper.

Understand the both-side adjustment flow (which timing, which both-side adjustment, in what order), and then make adjustment as needed.

This machine provides the following three types of both-side adjustment flows:

Type of adjustment flow	Adjustment timing
Adjustment flow to use paper of a new brand, weight, or size	When you use paper of a new brand, weight, or size
Regular adjustment flow	When you have changed paper (brand, weight, or size) in a tray
Adjustment flow for each job	<ul style="list-style-type: none"> <li>• Just before a job with important both-side accuracy is output</li> <li>• Just before a job with a wide printing area is output</li> <li>• When both-side accuracy is not desirable (you want to increase both-side accuracy)</li> </ul>

## 2.2 Adjustment flow to use paper of a new brand, weight, or size

### 2.2.1 Adjustment Timing

When you use paper of a new brand, weight, or size

### 2.2.2 Adjustment Order

- With scanner (**Original Glass**) mounted

Ad-just-ment order	Adjustment item	Reference
1	Load paper into <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b>	page 2-7
2	[Front] Adjustment	page 2-10
3	[Scan Meas.] Adjustment	page 2-19
4	Registering Paper Profile	page 2-35

- Without scanner (**Original Glass**) mounted

Ad-just-ment order	Adjustment item	Reference
1	Load paper into <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b>	page 2-7
2	[Front] Adjustment	page 2-10
3-a	[Rotate/Skew] Adjustment: Prioritizes the accuracy of the image position.	page 2-27
3-b	[Gap] Adjustment (Back side adjustment): Reduces adjustment items required to make simple adjustments.	page 2-15
4	Registering Paper Profile	page 2-35

- With **Intelligent Quality Optimizer IQ-501** mounted

Ad-just-ment order	Adjustment item	Reference
1	Load paper into <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b>	page 2-7
2	[AutoMeasure] Adjustment	page 2-33
3	Registering Paper Profile	page 2-35

## 2.3 Regular adjustment flow

### 2.3.1 Adjustment Timing

When you have changed paper (brand, weight, or size) in a tray



- If you do not change paper in a tray for one or more days, make adjustments before outputting a job (before the adjustment flow for each job).

### 2.3.2 Adjustment Order

- With scanner (**Original Glass**) mounted

Ad-just-ment order	Adjustment item	Reference
1	Load paper into <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b>	page 2-7
2	[Front] Adjustment	page 2-10
3	[Scan Meas.] Adjustment	page 2-19

- Without scanner (**Original Glass**) mounted

Ad-just-ment order	Adjustment item	Reference
1	Load paper into <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b>	page 2-7
2	[Front] Adjustment	page 2-10
3-a	[Rotate/Skew] Adjustment: Prioritizes the accuracy of the image position.	page 2-27
3-b	[Gap] Adjustment (Back side adjustment): Reduces adjustment items required to make simple adjustments.	page 2-15

- With **Intelligent Quality Optimizer IQ-501** mounted

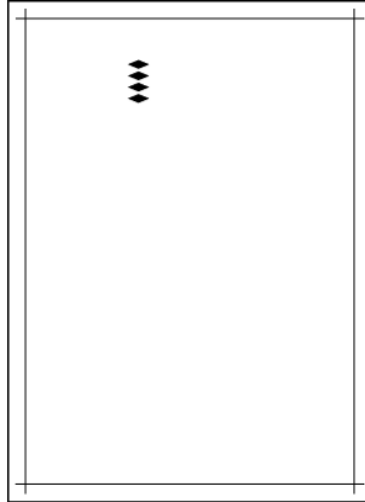
Ad-just-ment order	Adjustment item	Reference
1	Load paper into <b>Paper Feed Unit PF-707m</b> or <b>Paper Feed Unit PF-711</b>	page 2-7
2	[AutoMeasure] Adjustment	page 2-33

### 2.3.3 Periodical Both Sides Adjustment Function

**Intelligent Quality Optimizer IQ-501** provides the [Periodical Both Sides Adjustment] function that automatically performs the periodical both-sides adjustment.

The [Periodical Both Sides Adjustment] function makes the both-sides adjustment each time the specified number of sheets of data are printed.

The following chart is output, and it is read by **Intelligent Quality Optimizer IQ-501** to correct an image misalignment.



When adjustment is completed, the job is restarted automatically, so you do not need to manually perform job operations. The chart used for adjustment is output to a different tray from that used for a job.


The adjustment result is applied after data has been output onto a few to a dozen sheets following the chart.

If necessary, you can change the adjustment interval value or misalignment value depending on the machine environment or other conditions.

For details, refer to page 2-42.

#### Tips

- When using [Periodical Both Sides Adjustment], manually make the image quality adjustment.

The  mark is printed on the chart to enable you to know from which paper tray the target job is printed.

## 2.4 Adjustment flow for each job

### 2.4.1 Adjustment Timing

- Just before a job with important both-side accuracy is output
- Just before a job with a wide printing area is output
- When both-side accuracy is not desirable (you want to increase both-side accuracy)

### 2.4.2 Adjustment Order

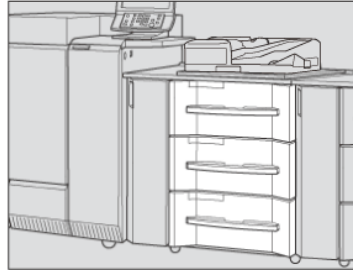
Ad-just-ment order	Adjustment item	Reference
1	Back Side Fine Adjustment	page 2-37

## 2.5 How to Operate the Both Sides Adj. Item

### 2.5.1 Load paper into Paper Feed Unit PF-707m or Paper Feed Unit PF-711.

To use paper other than loaded in a tray, change the setting of that tray in [Paper Setting] from the [MACHINE] screen or [COPY] screen.

- 1 Withdraw the tray to load paper in.



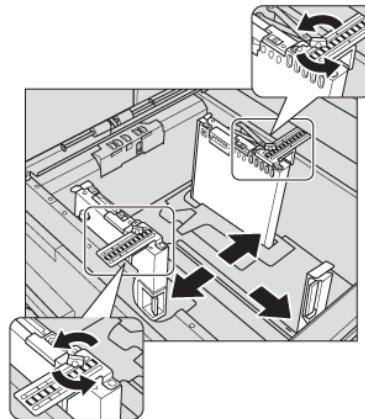
#### **NOTICE**

Trays cannot be withdrawn when the machine is not powered. Be sure to turn the **sub power switch ON**.

Only one tray can be withdrawn at a time.

To load a different size of paper, proceed to step 2. To load the same size as loaded before, proceed to step 5.

- 2 Fully widen the **side guide plates** and **rear guide plate**.

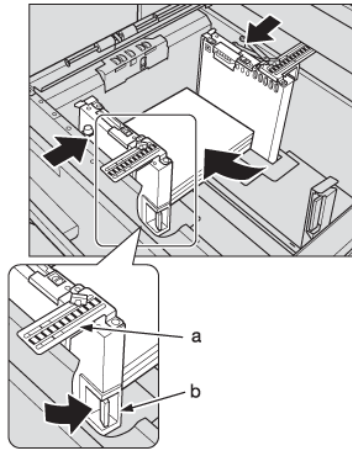


- Turn the two **side guide fixing knobs** of the **side guide plates** counterclockwise to loosen them.
- Fully widen the **side guide plates** and **rear guide plate** while pressing the **lock release lever** of each guide plate.

#### **NOTICE**

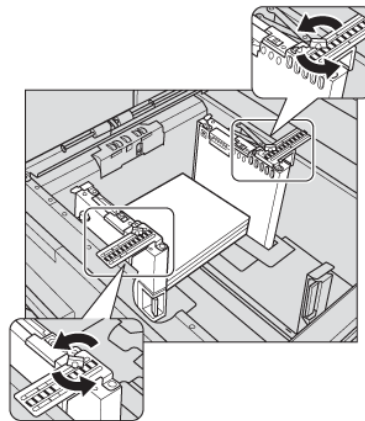
When moving the **side guide plates**, be sure to hold the **lock release lever** of the front one and the handle of the rear one. If moved only with the front **side guide plate**, the **side guide plates** may not be fixed in position.

- 3** Align the **side guide plates** to the loaded paper.
- Place about 100 sheets of paper with the print side up. While pushing the **lock release lever** of the front **side guide plate**, align both **side guide plates** to the paper and position them according to the paper size indicator provided on the guide holding plate.

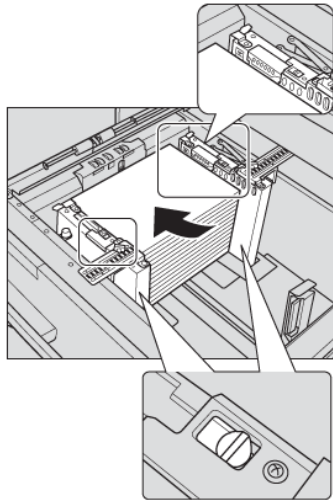


- a: Paper size indicator  
b: **Lock release lever**

- 4** Turn the two **guide fixing knobs** of the **side guide plates** clockwise to fix the guides.



- 5** Load paper with the print side up.



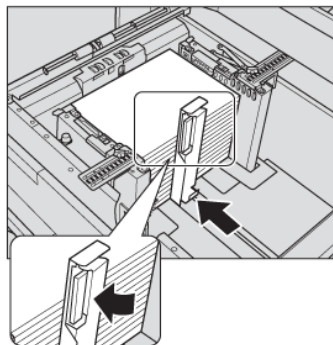
→ Align the stack of paper to the left side of the tray.

**NOTICE**

Do not load above the limit level indicated on the **side guide plate** of the tray.

The two **side guide plates** are provided with **small size guides**. Be sure to open them only when loading paper of the width less than 139.7 mm / 5.5".

- 6** Align the **rear guide plate** to the paper.



→ Press the **lock release lever** of the **rear guide plate** to move it to the edge of the paper.

**NOTICE**

Be sure that the **rear guide plate** is securely aligned to the paper. If any gap is left between the **rear guide plate** and paper, the machine cannot detect the correct paper size, and machine trouble may be caused.

- 7** Push in the tray until it locks into place.

The Amount indicator of the tray will change from "■" to "▬" on the [MACHINE] screen and [COPY] screen.

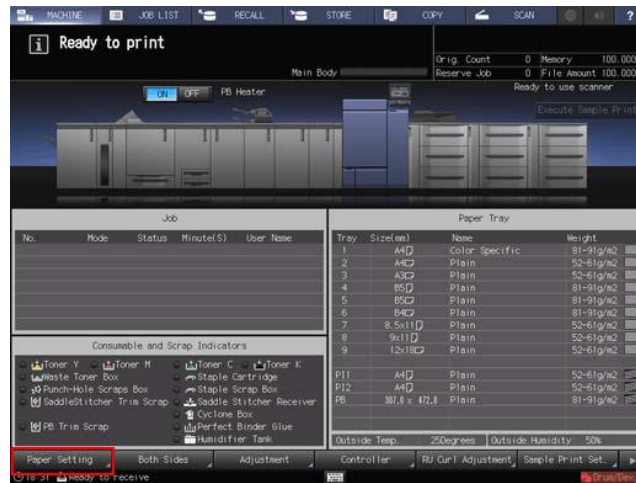
**NOTICE**

Do not push the tray into the machine forcibly. Otherwise, machine trouble may be caused due to unexpected shock.

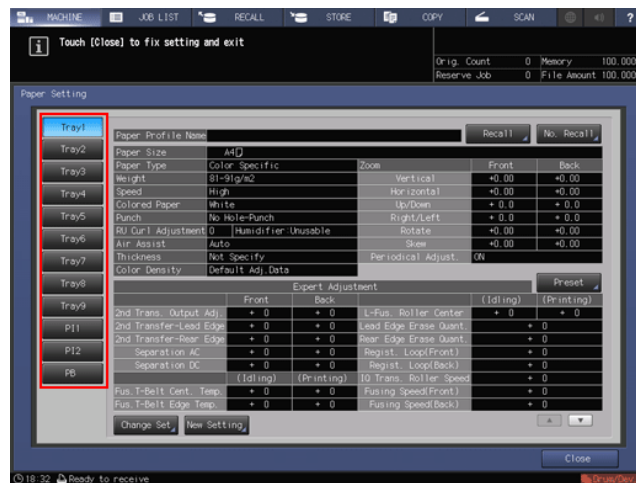


## 2.5.2 [Front] Adjustment

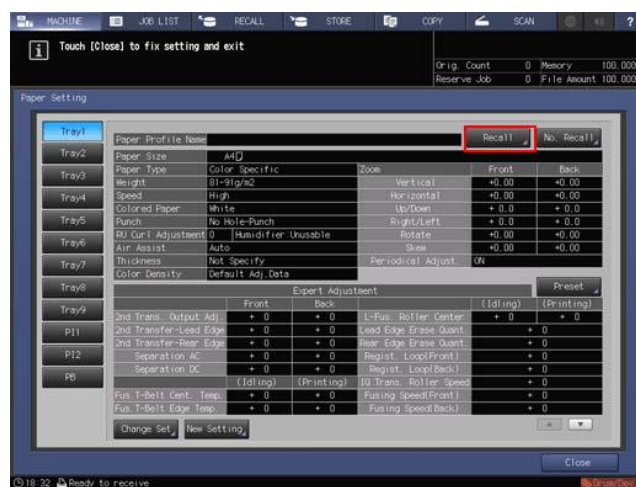
- 1 Press [Paper Setting] on the [MACHINE] screen.



- 2 Press the tray in which the paper to be adjusted has been loaded.

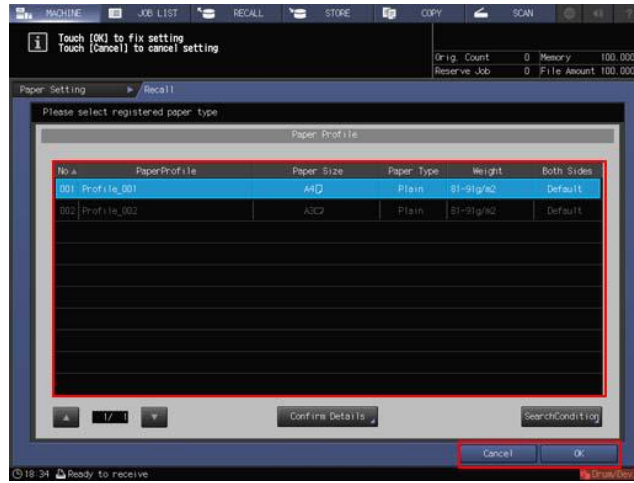


- 3 Press [Recall].



- Select a paper profile of the paper brand (paper profile name), "Paper Size", "Paper Type", and "Weight", which are the same as for the paper to be adjusted, then press [OK].

If the desired paper profile is not found, press [Cancel].

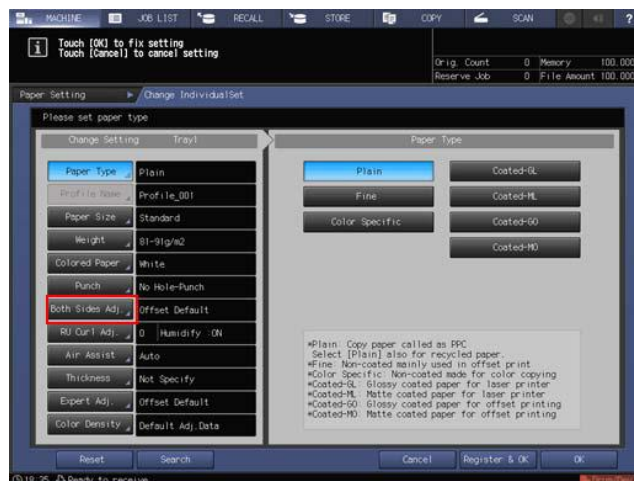


A paper profile, which has "Paper Size" or "Direction" different from that of the paper loaded in the tray, is grayed out, so you cannot select it.

- Press [Change Set].



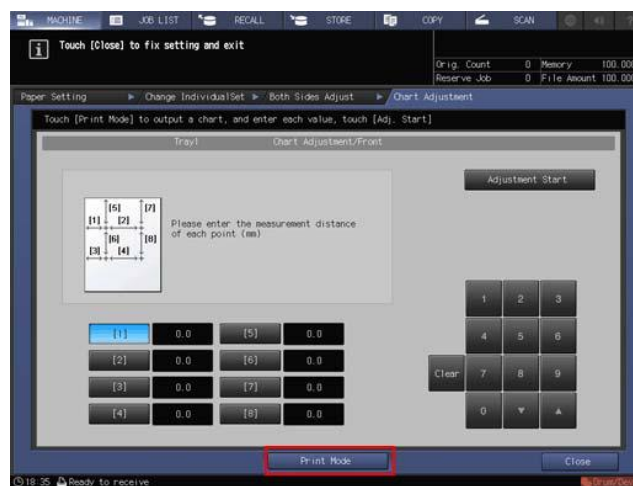
- Press [Both Sides Adj.].



- 7 Make sure that [Front] is selected, then press [Chart Adjustment].

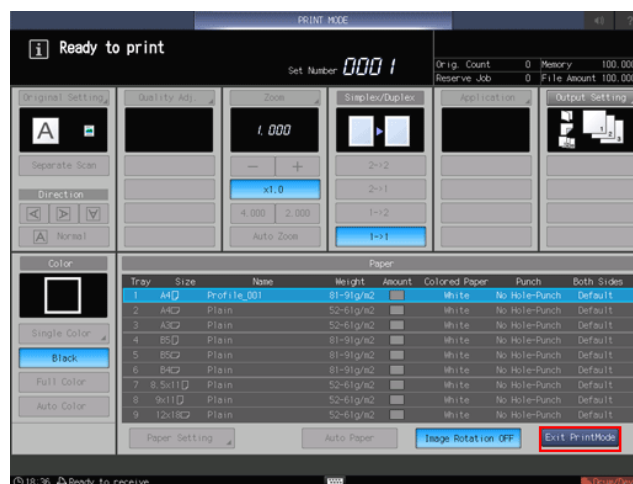


- 8 Press [Print Mode].



- 9 When the [PRINT MODE] screen is displayed, press **Start** on the control panel.  
A test chart is printed. Print approximately three sheets for a test chart.

- 10 Press [Exit PrintMode].



**11** Check the lengths at points [2], [4], [6], and [8] on the second and third output charts.

Be sure to make note of the measurement lengths.

When the lengths at points [2], [4], [6], and [8] are within the respective ranges shown below, press [Close], then press [OK] to finish the adjustment.

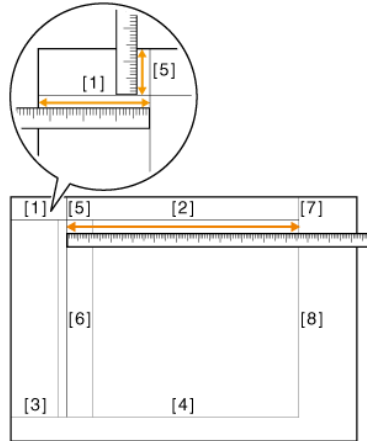
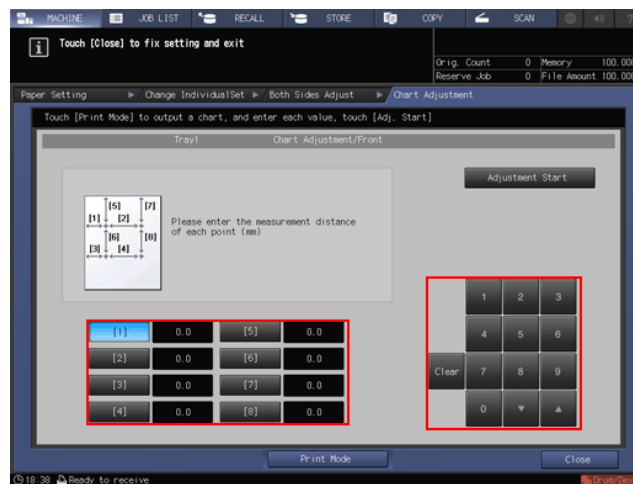
When the lengths at points [2], [4], [6], and [8] are outside the respective ranges shown below, also measure the lengths at points [1], [3], [5], and [7], then proceed to step 12.

[2]: 200 mm  $\pm$  0.3 mm

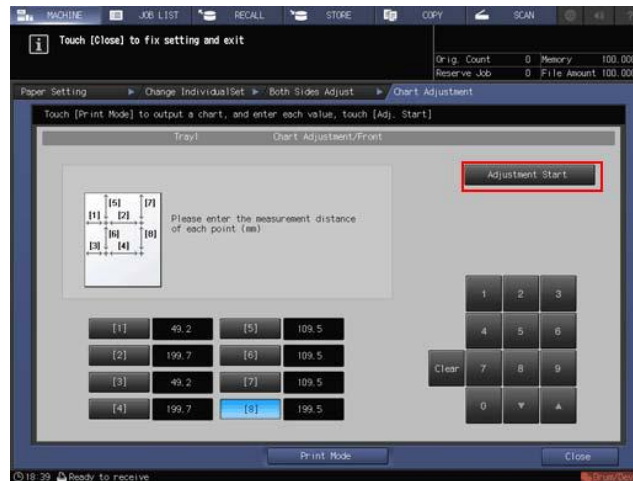
[4]: 200 mm  $\pm$  0.3 mm

[6]: 200 mm  $\pm$  0.3 mm

[8]: 200 mm  $\pm$  0.3 mm

**12** Press the number of each point, and use the touch panel keypad to enter the measured length. Press [Clear] to reset the value.

- 13** When the entry is completed, press [Adjustment Start].



- 14** Output the front side adjustment chart again, then check the lengths at points [2], [4], [6], and [8] on the second and third output charts.

Repeat steps 11 to 14 until the lengths at points [2], [4], [6], and [8] are included in the respective ranges shown below.

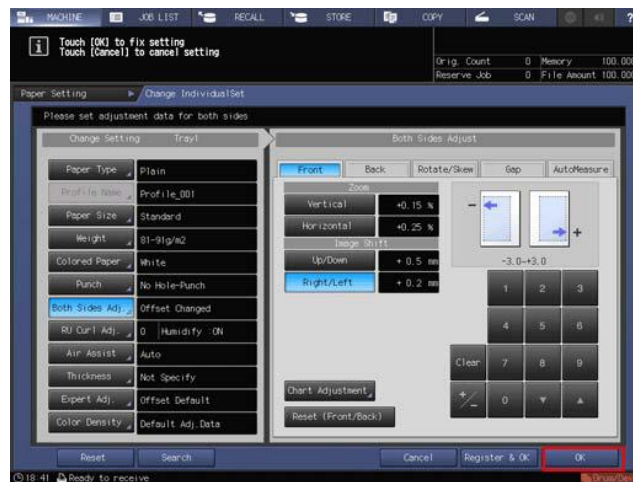
[2]: 200 mm  $\pm$  0.3 mm

[4]: 200 mm  $\pm$  0.3 mm

[6]: 200 mm  $\pm$  0.3 mm

[8]: 200 mm  $\pm$  0.3 mm

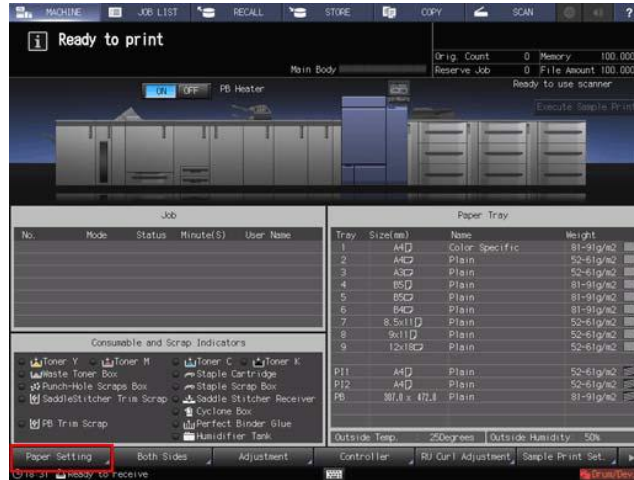
- 15** Press [OK] to finish the adjustment.



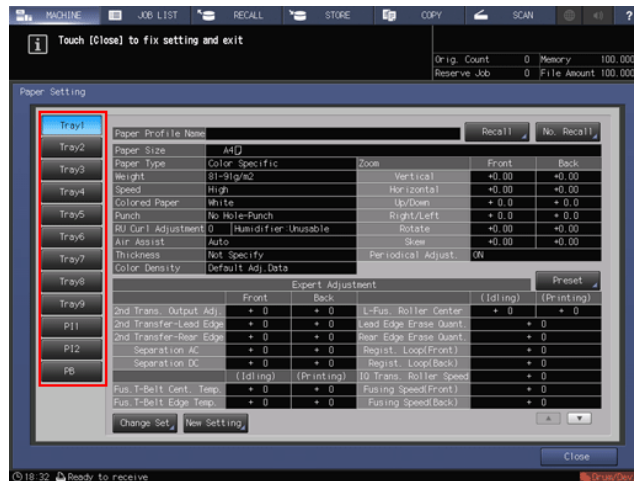
When the front side adjustment is performed for paper of a new brand, weight, or size, press [Register & OK], then proceed to the next step.

### 2.5.3 [Gap] Adjustment (Back side adjustment)

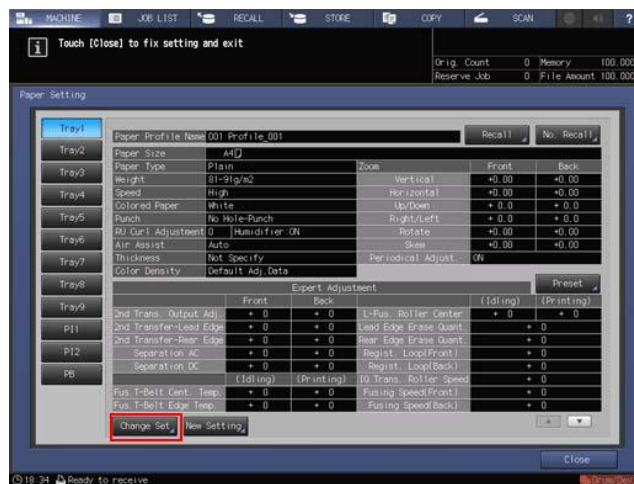
1 Press [Paper Setting] on the [MACHINE] screen.



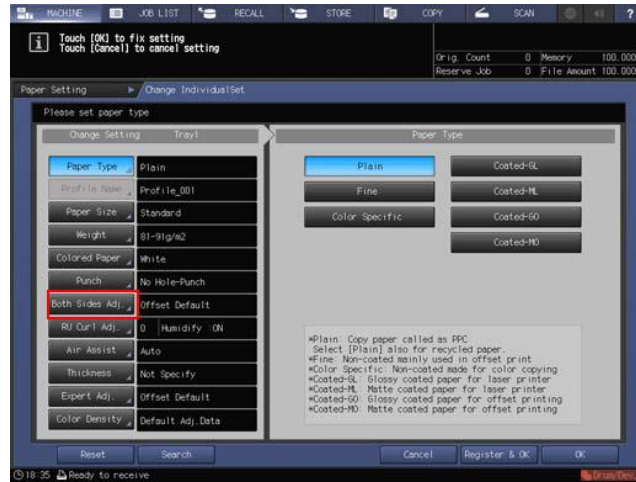
2 Press the tray you performed [Front] side adjustment for.



3 Press [Change Set].



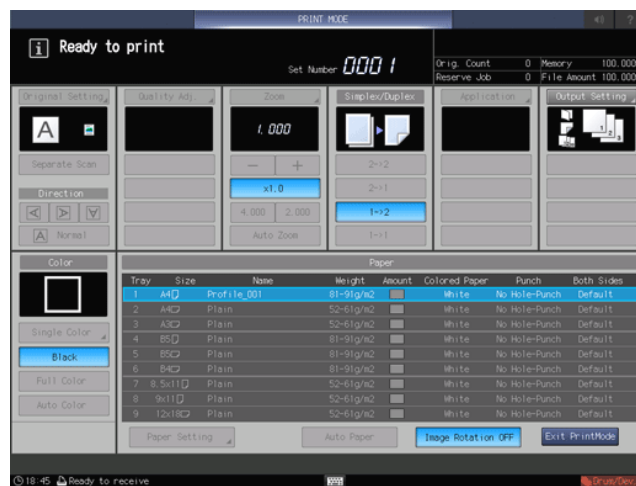
- 4 Press [Both Sides Adj.].



- 5 Press [Gap], then press [Print Mode].

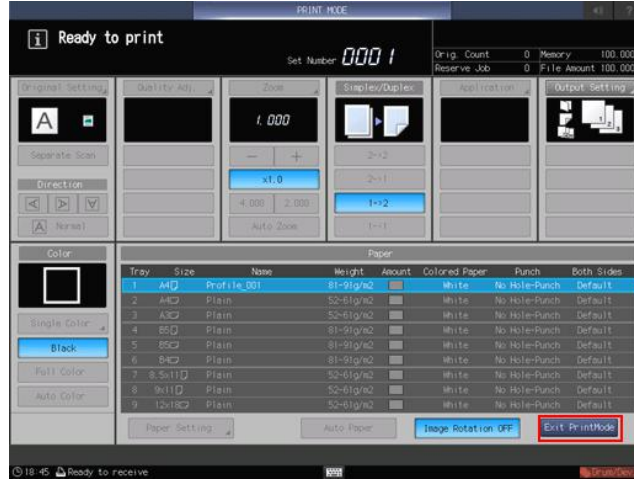


- 6 When the [PRINT MODE] screen is displayed, press **Start** on the control panel.



A test chart is printed. Print approximately three sheets for a test chart.

7 Press [Exit PrintMode].



8 Measure the gap between the front and back sides at each point of [a] to [d] on the [back] side (Back) on the second and third output charts.

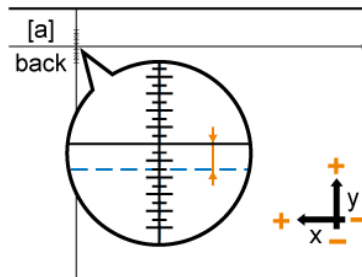
The scale resolution is 0.5mm.

The black line in the figure indicates the back side and the blue dash line indicates the opposite (front) side.

You can enter a value in 0.1mm increments.

For example, when the black line on the back side is misaligned to the plus side by 1.5 mm from the blue dash line on the front side as shown in the figure, type "-1.5" for correction to move the black line on the back side to the minus side by 1.5 mm.

Be sure to make note of the measurement values.



9 Press [a] to [d] of each point, and use the touch panel keypad or [▼] / [▲] to enter the measured value.





- 10** When the entry is completed, press [Adjustment Start].



The adjustment values you entered are applied to [Zoom] and [Image Shift] on the [Back] screen.

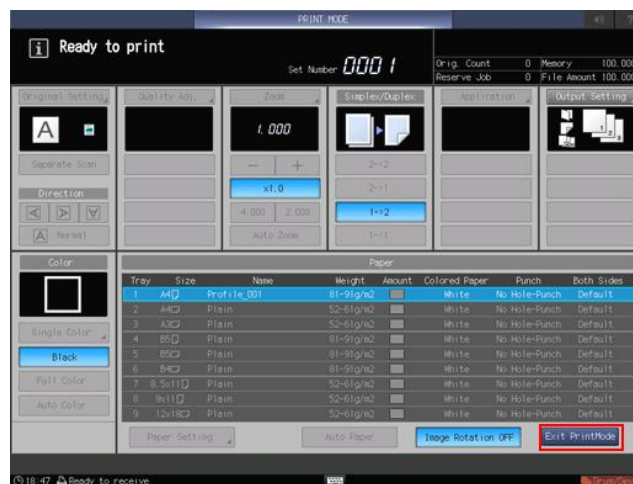
- 11** Press **Start** on the **control panel**.

A test chart is printed. Print approximately three sheets for a test chart.

- 12** Check the misalignment of print position using the second and third output charts.

Repeat Step 10 to 13 until the front and back are aligned.

- 13** Press [Exit PrintMode].



## 14 Press [OK] to finish the adjustment.



When the gap adjustment is performed for paper of a new brand, weight, or size, press [Register & OK], then proceed to the next step.

### 2.5.4 [Scan Meas.] Adjustment

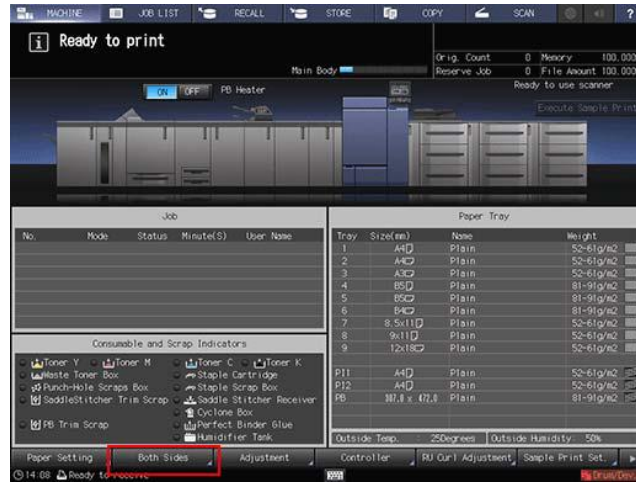
Adjust the magnification ratio and print position of the back side with reference to the print position of the front side. The magnification ratio and print position of the back side are automatically adjusted by using the scanner function of this machine to measure the gap amount in printing position of the back side to the front side. You do not need to measure the gap using a scale. This adjustment is available for all sizes of paper applicable to this machine.

Print out 1 to 20 sheets of the adjustment chart having both front and back sides printed, and scan them 4 times per sheet. The average value of gap amounts in printing position of the back side to the front side, which can be obtained by scanning up to 20 sheets of the adjustment chart, will be calculated in order to adjust the magnification ratio and printing position of the back side.

#### Tips

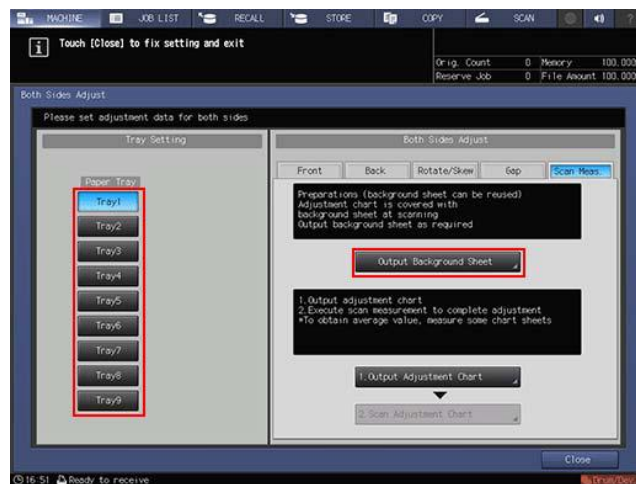
- A scanner is not mounted on a machine that is not equipped with **Paper Feed Unit PF-711**; therefore, the [Scan Meas.] adjustment is not available to scan adjustment charts.
- The [Scan Meas.] adjustment provides the coordination based on the average value of gap amounts, taking into account the gap in printing position between the first and last sheets which can be produced when multiple sheets are output.
- Performing the [Scan Meas.] adjustment may require the readjustment of [Zoom]/[Image Shift] adjustment registered in a paper profile.

- 1 Press [Both Sides] on the [MACHINE] screen.

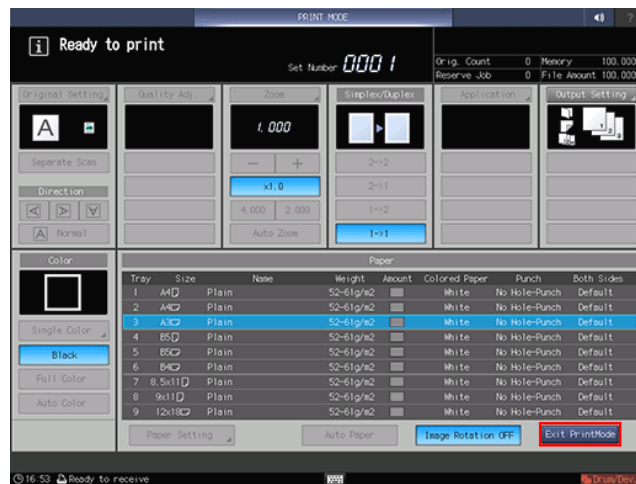


The [Scan Meas.] screen is displayed. If the [Scan Meas.] screen is not displayed, press the [Scan Meas.] tab on the screen.

- 2 Select a tray to output a background sheet, and then press [Output Background Sheet].



- 3 Display the [PRINT MODE] screen for the background sheet, then press **Start** on the **control panel**. Check that the output is completed, then press [Exit PrintMode].

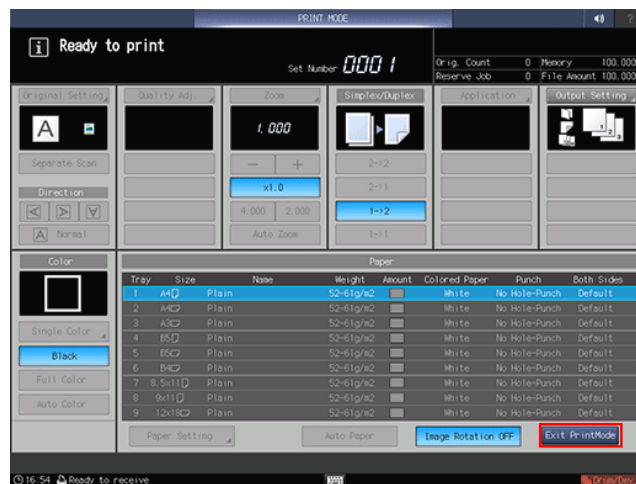


- It is not necessary to output the background sheet if you already have one for use. Proceed to step 4.
- Use paper of A3 or larger, or 11 × 17 or larger to output the background sheet. When you press [Output Background Sheet] to display the [PRINT MODE] screen for the background sheet, the tray selected in step 2 is automatically selected on the screen, but it can be changed as desired. Select a tray loaded with A3 or larger, or 11 × 17 or larger paper. You can also change the print count, but only one sheet is needed. If the background sheet size is smaller than A3 or 11 × 17, the scan measurement may not be performed.

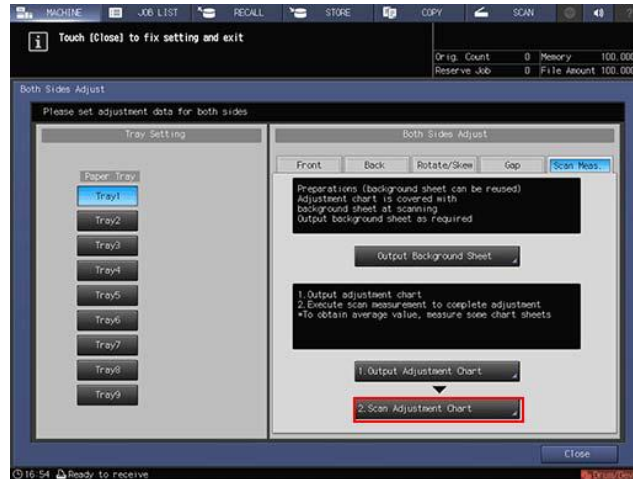
- 4 Output the necessary number of adjustment charts.

Press [1. Output Adjustment Chart] to display the [PRINT MODE] screen for the adjustment chart. Enter the necessary number of adjustment charts, then press **Start** on the **control panel**. The adjustment charts are 2-sided printed on paper in the tray you selected in step 2. Check that the output is completed, then press [Exit PrintMode].

- You can output 20 or more of the adjustment charts but cannot scan more than 20 sheets for measurement.



## 5 Press [2. Scan Adjustment Chart].

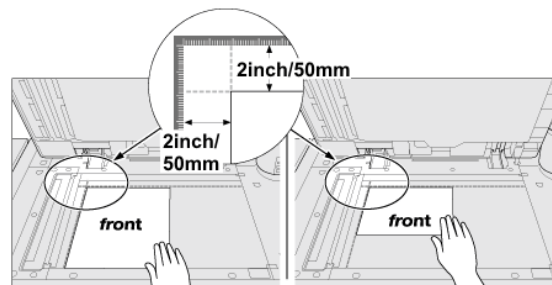


The [Scan Adjustment Chart] screen is displayed.

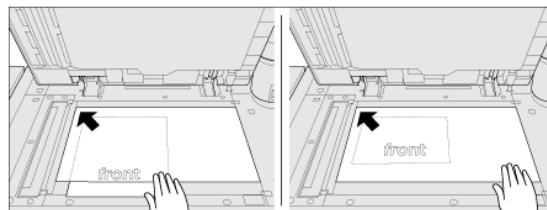
## 6 Set the adjustment chart and background sheet on the original glass.

→ Open the **ADF**.

→ Set the front side of the adjustment chart face up (turned away from the **original glass**), with its top edge positioned at the back side. Place the top-left corner of the adjustment chart at a distance of about 5 cm (2 inches) each from the **vertical size guide** and **horizontal size guide**, and align the left and top edges parallel to the **vertical size guide** and **horizontal size guide** on the **original glass**.

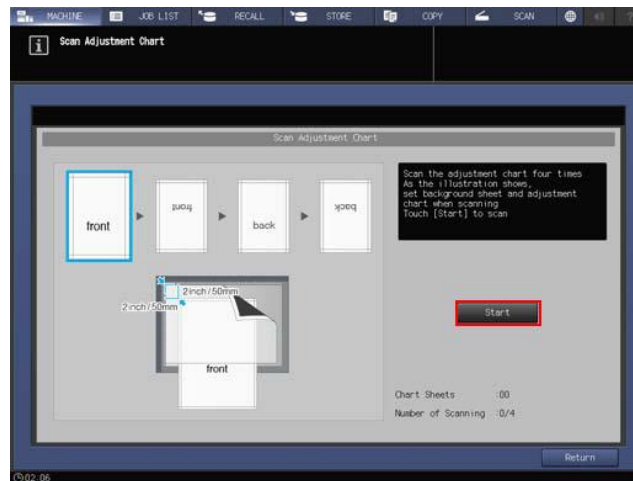


→ Set the black side of the background sheet face down (facing the **original glass**), and fit it to the **vertical size guide** and **horizontal size guide** as shown below. In doing so, be careful not to shift the position of the adjustment chart that has previously been set.

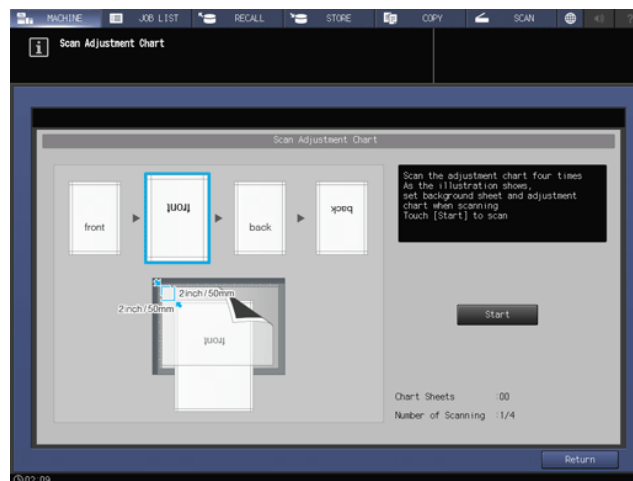


→ Close the **ADF**.

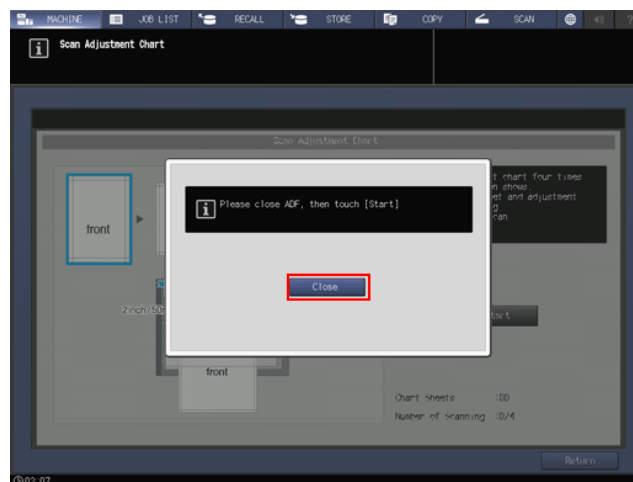
- 7 Scan the adjustment chart.  
Press [Start] on the [Scan Adjustment Chart] screen.



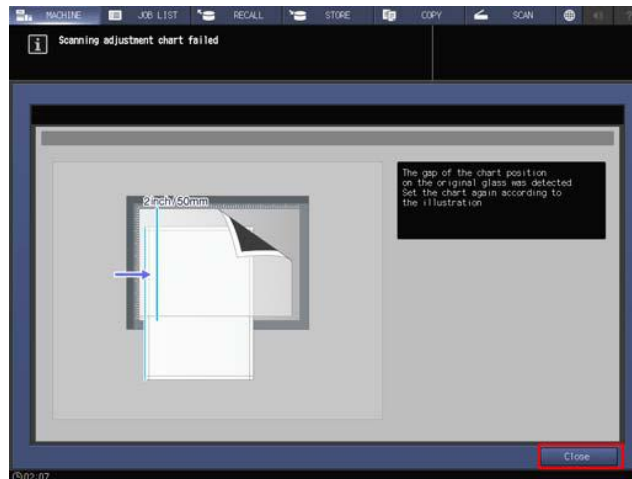
When scanning is properly completed, the counter of [Number of Scanning] on the [Scan Adjustment Chart] screen is added by one, and the blue frame displayed in the illustration on the screen shifts to the next one on the right side. If you move the adjustment chart before the blue frame shifts to the next, the measurement may not be performed properly.



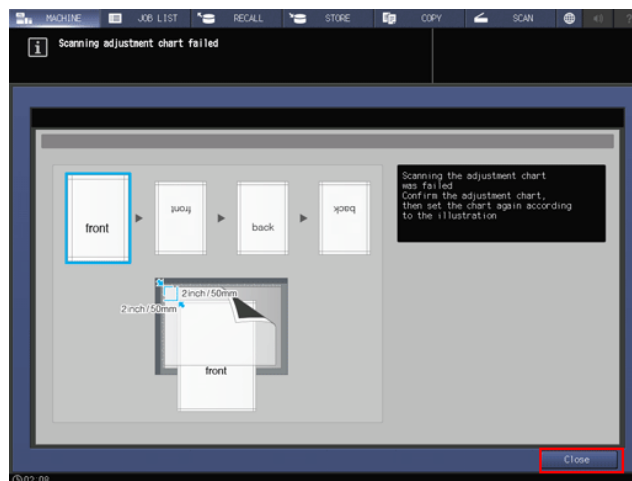
- If the **ADF** is open, the following dialog is displayed and you cannot start scanning. Close the **ADF**, and then press [Close] on the dialog.



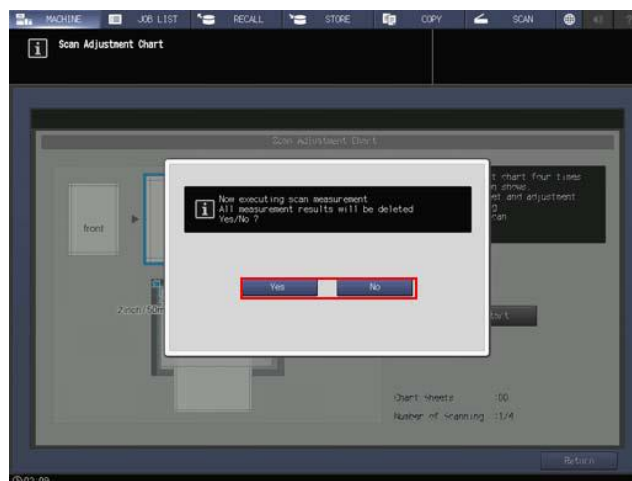
- You may see the message [Scanning adjustment chart failed]. Follow the instruction on the screen to correctly set the adjustment chart and background sheet, and then press [Close].



- When the screen below is displayed, press [Close] again.

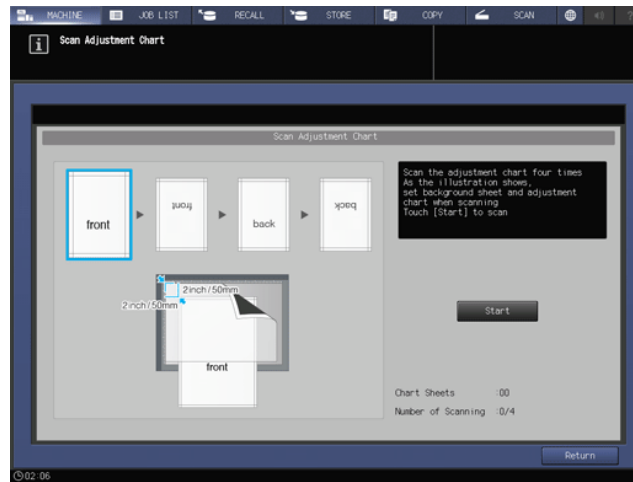


- If you press [Return] on the [Scan Adjustment Chart] screen while the scan measurement is in process, the following dialog is displayed. To stop the scan measurement and discard the measurement results obtained so far, press [Yes]. Restart the scan measurement from the first scanning procedure. To continue the scan measurement, press [No].

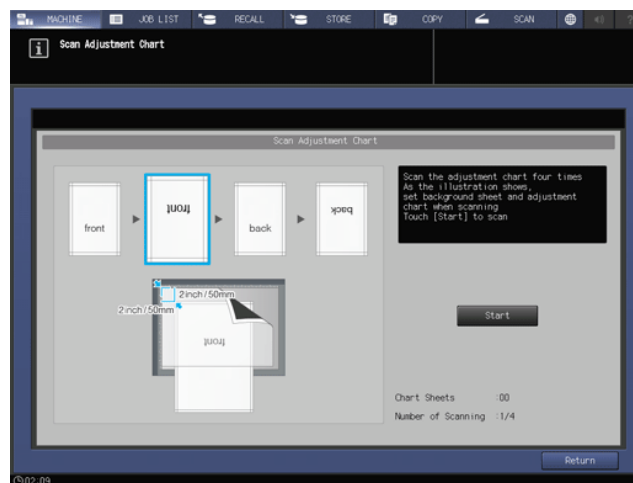


## 8 Repeat the scanning steps 6 and 7 four times for every adjustment chart.

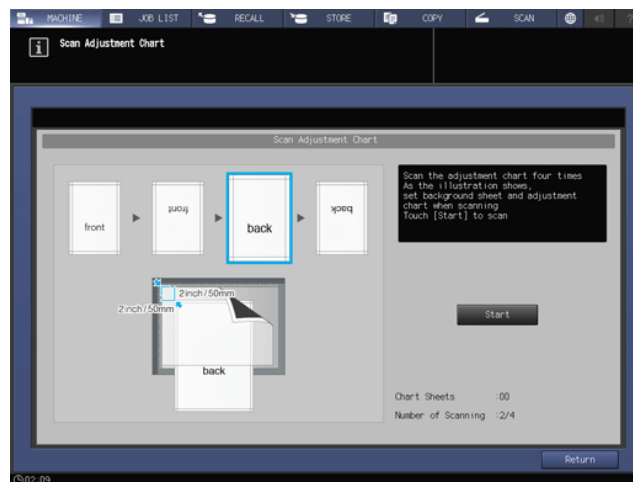
First time: Set the front side of the adjustment chart face up (turned away from the **original glass**), with its top edge positioned to the back side.



Second time: Set the front side of the adjustment chart face up (turned away from the **original glass**), with its bottom edge positioned to the back side.

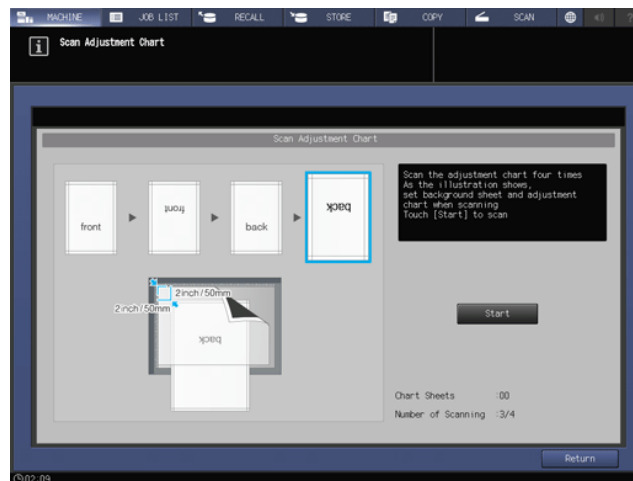


Third time: Set the back side of the adjustment chart face up (turned away from the **original glass**), with its top edge positioned to the back side.





Fourth time: Set the back side of the adjustment chart face up (turned away from the **original glass**), with its bottom edge positioned to the back side.

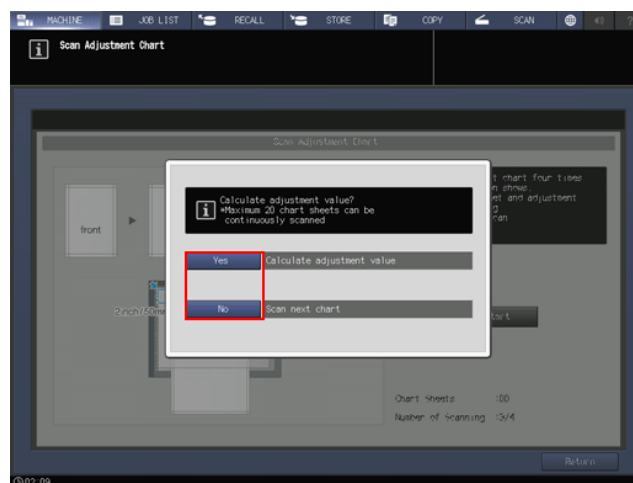


→ When four times of scanning are completed, a dialog is displayed to calculate the adjustment value.

- 9 Select whether to continue the scan measurement or to finish the scan measurement and calculate the adjustment value.

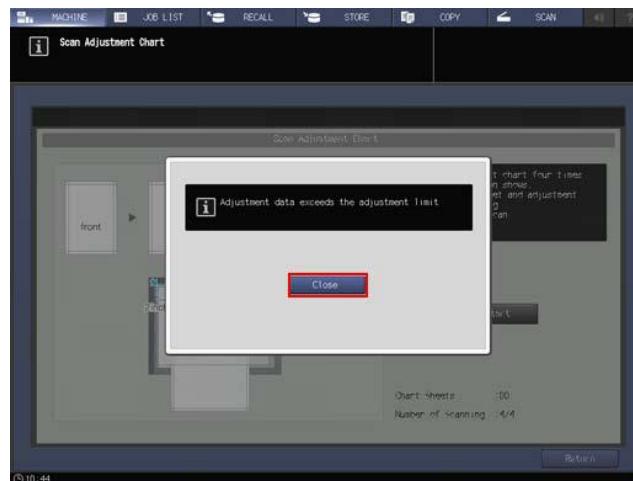
To continue the scan measurement, press [No].

To finish the scan measurement and calculate the adjustment value, press [Yes].

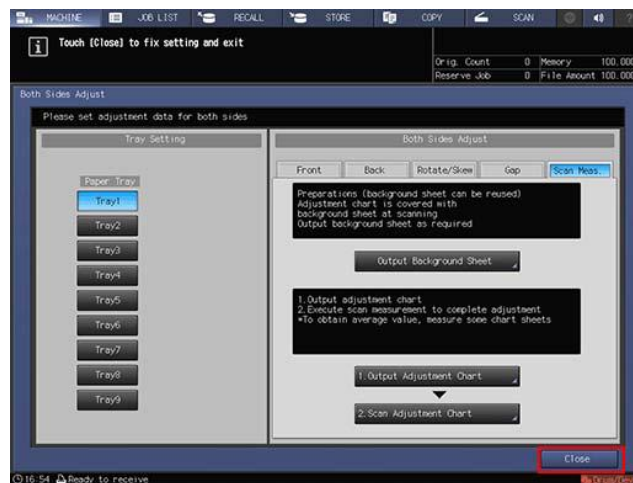


- Pressing [No] returns to the [Scan Adjustment Chart] screen on which the counter of [Chart Sheets] is added by one. Repeat steps 6 to 8 for the number of adjustment charts. The measurement results will be added up. This operation can be repeated up to 20 times.
- Pressing [Yes] automatically calculates the adjustment value from the added measurement results and reflects it on [Zoom], [Image Shift], and [Rotate/Skew] to be specified for [Back]. [Rotate/Skew] may also be applied to both [Front] and [Back]. After pressing [Yes], output a sheet of the adjustment chart to confirm the result. If readjustment is needed, repeat steps 4 to 9.
- If the adjustment value calculated by pressing [Yes] exceeds the adjustment range, the following dialog is displayed. Press [Close] to discard the measurement results, and restart the scan measurement from the beginning. Possible causes to exceed the adjustment range may include that the chart used in the scan measurement is incorrect (a different chart has been used), the printing position of the front side has been poorly adjusted, or the adjustments of the reference positions are not completed. Confirm these

points before restarting the scan measurement. If [Back Side Magnification Adjustment] is set to [OFF], the magnification in the feeding direction is not adjusted.



10 Press [Close].



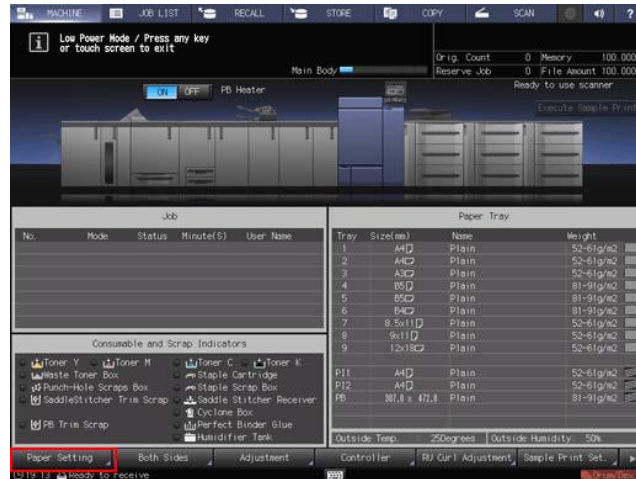
Now, the [Scan Meas.] adjustment is completed.

### 2.5.5 [Rotate/Skew] Adjustment

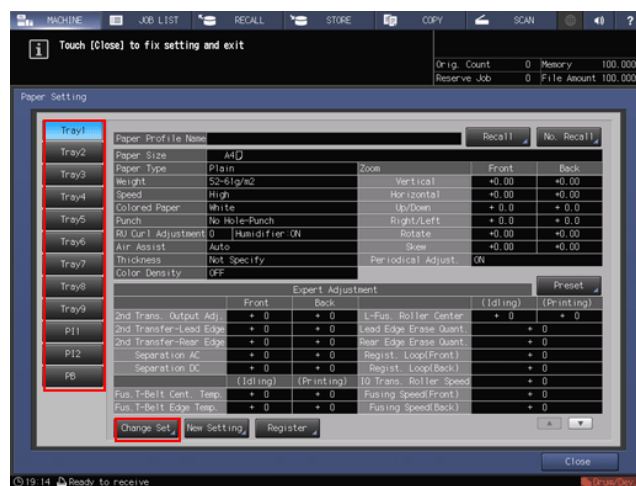
#### Tips

- If [UTILITY] - [User Setting] - [Common Setting] - [Both Sides Rotate/Skew] (or [UTILITY] - [Administrator Setting] - [Common Setting] - [Both Sides Rotate/Skew]) is set to [Disable], the [Rotate/Skew] adjustment does not function. To make the [Rotate/Skew] adjustment, set [Both Sides Rotate/Skew] to [Enable].

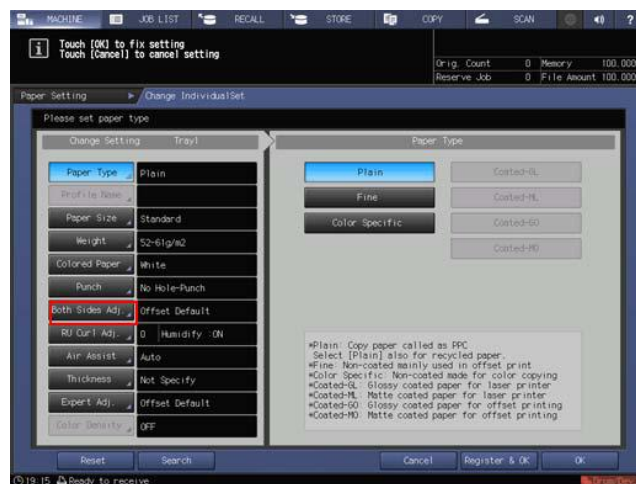
- 1 Press [Paper Setting] on the [MACHINE] screen.



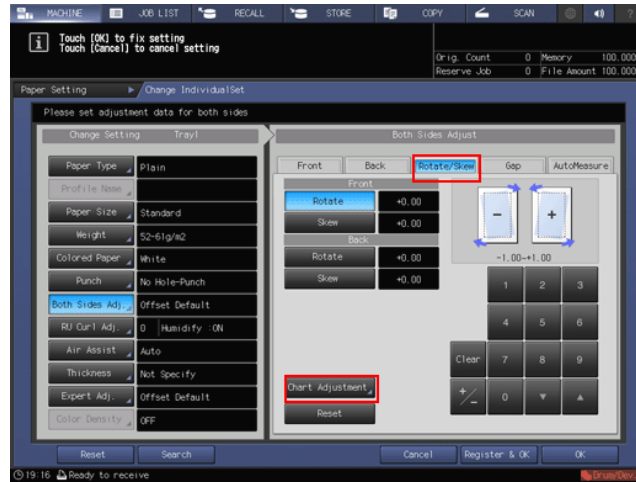
- 2 Select the tray with the target paper loaded, then press [Change Set].



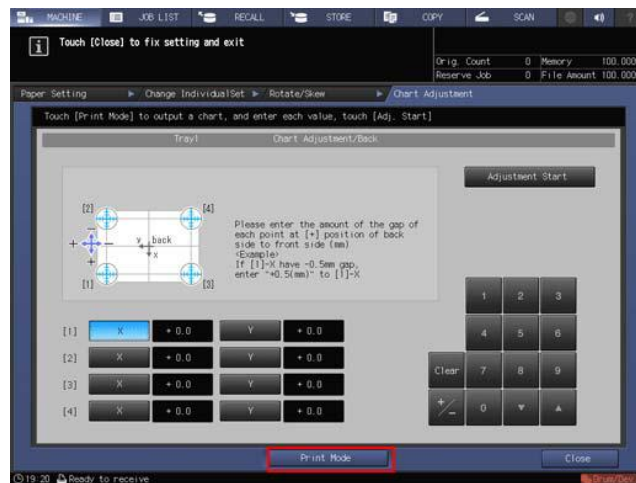
- 3 Press [Both Sides Adj.].



- 4 Select [Rotate/Skew], and press [Chart Adjustment].

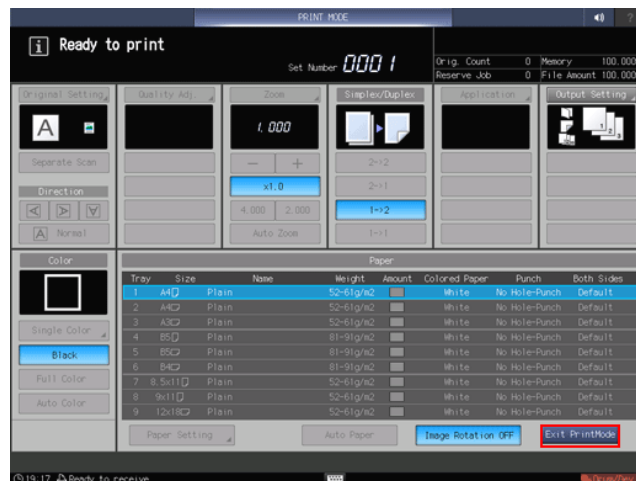


- 5 Press [Print Mode].



- 6 When the [PRINT MODE] screen is displayed, press **Start** on the control panel.  
A test chart is printed. Output about 3 sheets.

- 7 Press [Exit PrintMode].



- 8** Measure the misalignment between + of [1] to [4] on the [back] side (Back Side) and + on the [front] side (Front Side) of the printed chart.

The scale resolution is 0.5 mm.

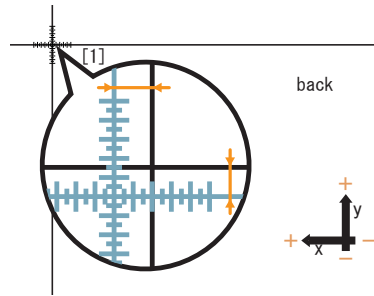
The black + in the figure indicates the front side, and the blue + indicates the back side.

Measure the X and Y directions to check the misalignment of print position.

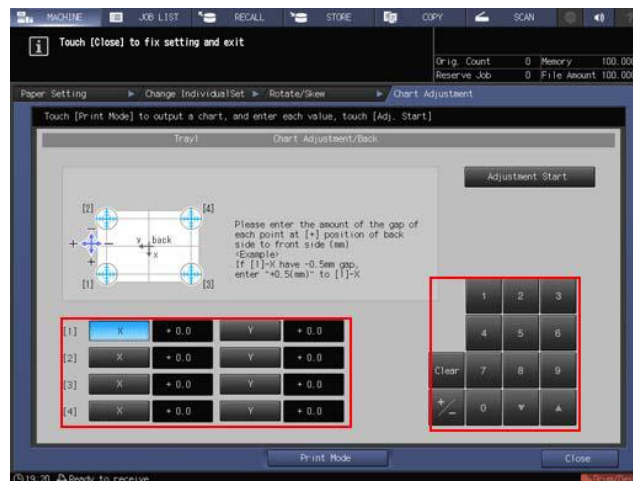
The measurement value can be entered in units of up to 0.1 mm.

For example, when + of [1] is misaligned leftward (plus side of X direction) by 2.0 mm and downward (minus side of Y direction) by 1.5 mm from the [1] on the front side as shown in the figure, press in order of [2][0][+/-] and enter -2.0 to correct and move rightward (minus side of X direction) the blue line on the back side by 2.0 mm in the X direction. And also press in order of [1][5] and enter +1.5 to correct and move upward (plus side of Y direction) by 1.5 mm in the Y direction.

Write down the measured values so that you do not forget them.



- 9** Press [X] or [Y] of each point, and use the touch panel keypad or [▼] / [▲] to enter the measured value.



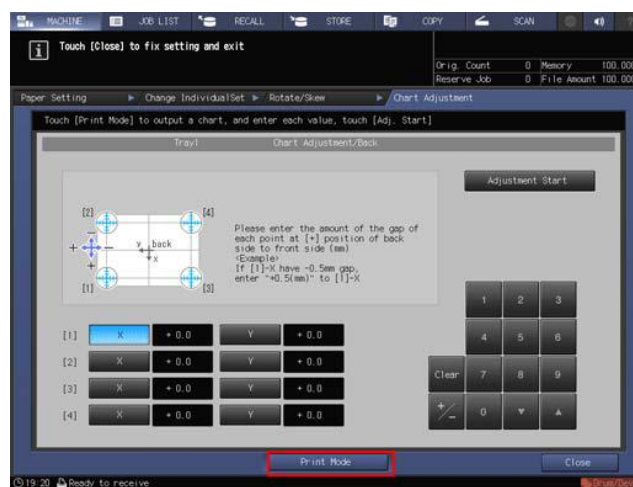
- 10** When entry processing is completed, press [Adjustment Start].  
The input value is reflected to "Front" and "Back" on the [Rotate/Skew] screen.



- 11** Press [Chart Adjustment].

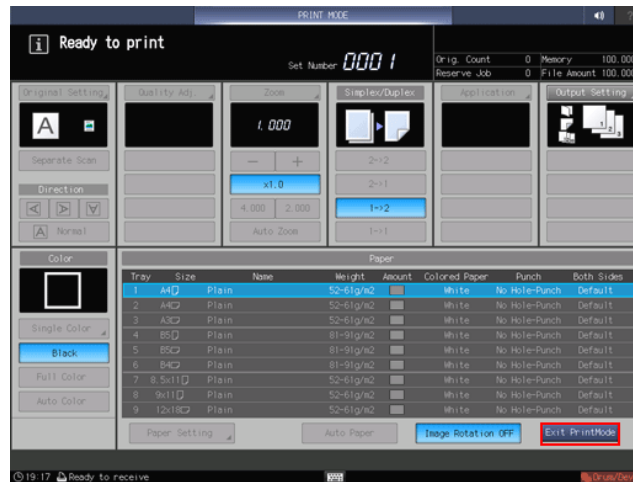


- 12** Press [Print Mode].

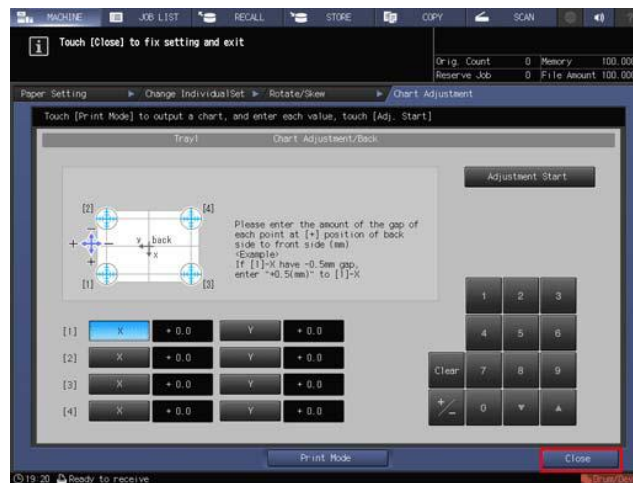


- 13** When the [PRINT MODE] screen is displayed, press **Start** on the **control panel**.  
A test chart is printed. Output about 3 sheets.

- 14** Check the gap of print position referring to the charts that are output as the second and third sheet.  
Repeat Step 8 to 13 until all gaps between the front and back sides are cleared.
- 15** Press [Exit PrintMode].



- 16** Press [Close].



- 17** Press [OK] to exit the adjustment.

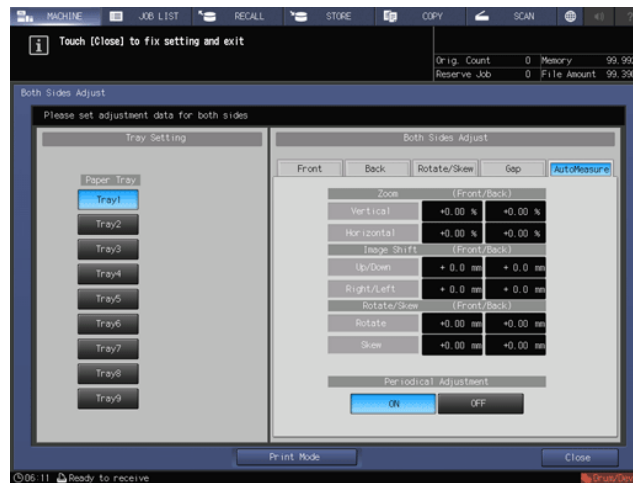


## 2.5.6 [AutoMeasure] Adjustment

This function scans both sides of adjustment charts printed out in [Print Mode] using **Intelligent Quality Optimizer IQ-501**, and automatically makes the both-side adjustment. After adjustment, each adjustment value ([Zoom], [Image Shift], and [Rotate/Skew]) on this screen is updated.

The magnification and print position of the adjustment chart printed on both sides are scanned using **Intelligent Quality Optimizer IQ-501**, and adjustment values are obtained automatically. When multiple adjustment charts are printed, adjustment values are obtained from the average, thereby, enabling highly accurate adjustment to be carried out. Up to 20 adjustment charts can be printed out collectively.

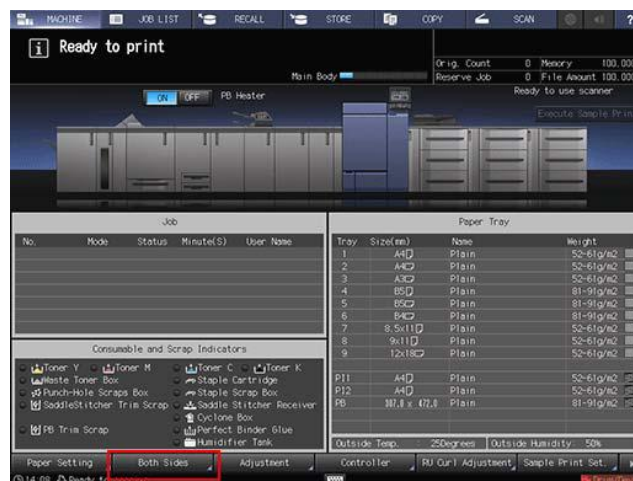
The [AutoMeasure] adjustment is not available on a machine that is not equipped with **Intelligent Quality Optimizer IQ-501**.



### Tips

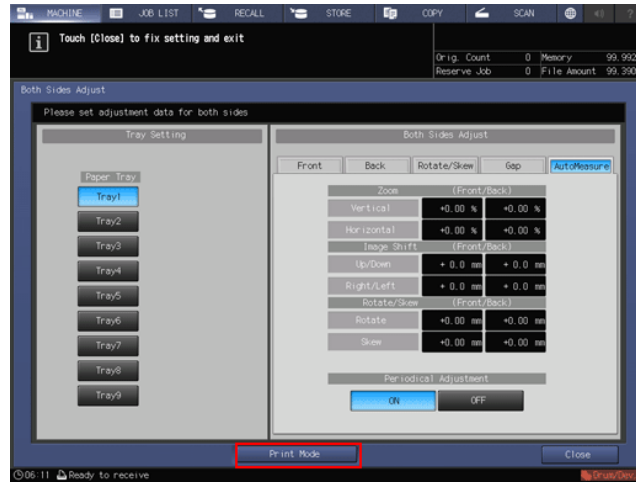
- If you press [Adjustment] - [Quality Adjustment] - [Periodical Both Sides Adj.] on the [MACHINE] screen and set [Period. Both Sides Auto Adj.] to [ON], you can set [Periodical Adjustment] to [ON] or [OFF] for each tray. [Periodical Adjustment] is available for the tray for which [ON] is set. For details, refer to page 2-42.

- 1 Press [Both Sides] on the [MACHINE] screen.

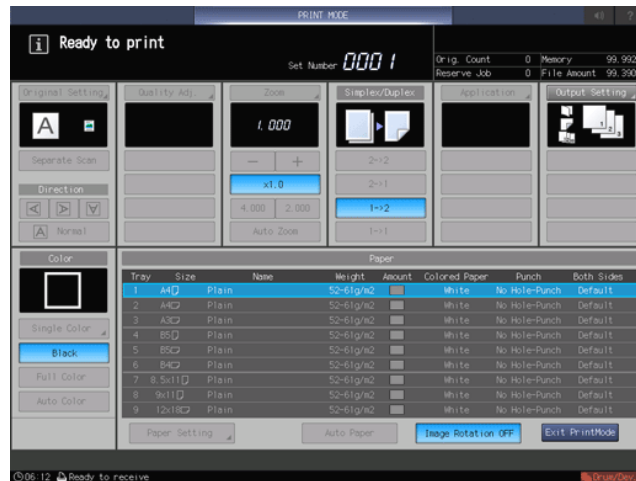




- 2 Press [AutoMeasure], then press [Print Mode], after selecting the tray loaded with paper for adjustment.

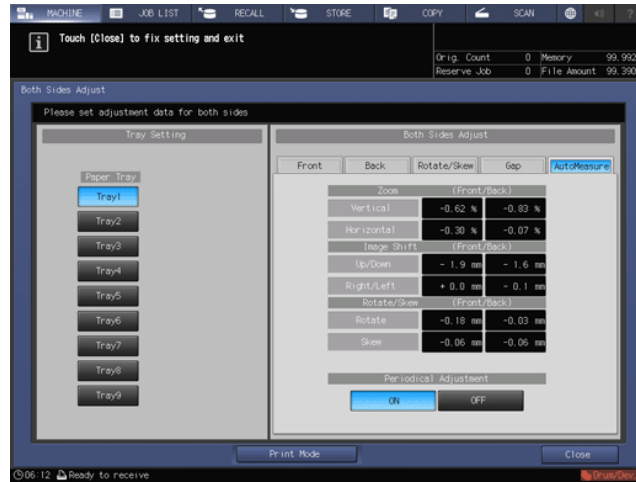


- 3 Enter the necessary number of adjustment charts, then press **Start** on the **control panel**.  
 → Up to 20 adjustment charts can be printed out. As the number of charts increases, the accuracy of adjustment values rises.



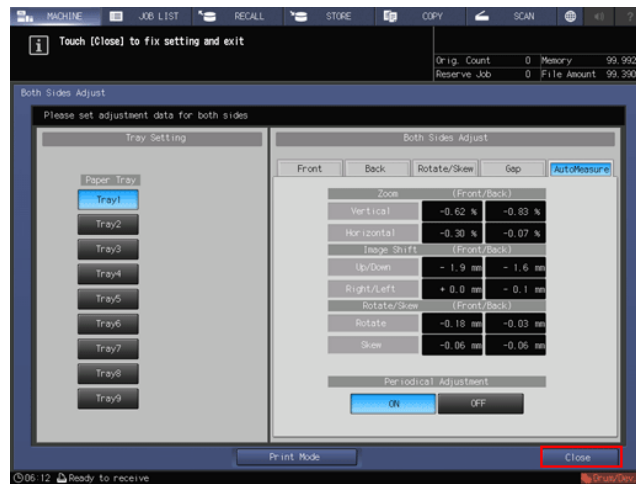
- 4 After adjustment charts have been printed out, press [Exit PrintMode].

- 5 The [AutoMeasure] screen is displayed, and each adjustment value on this screen is updated.



→ Print out one adjustment chart, and check it.

- 6 Press [Close].

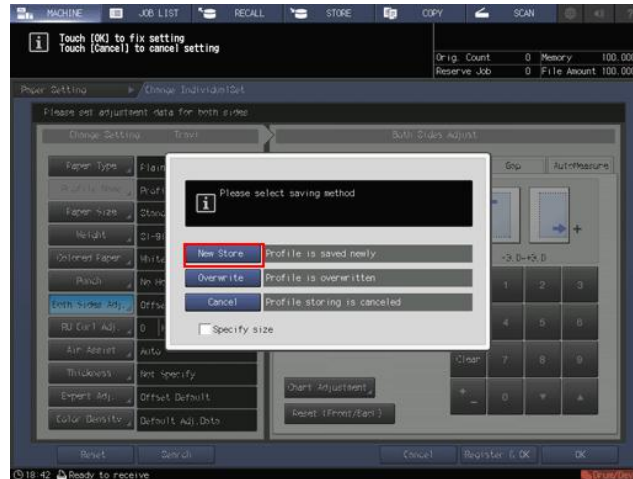


Now, the [AutoMeasure] adjustment is completed.

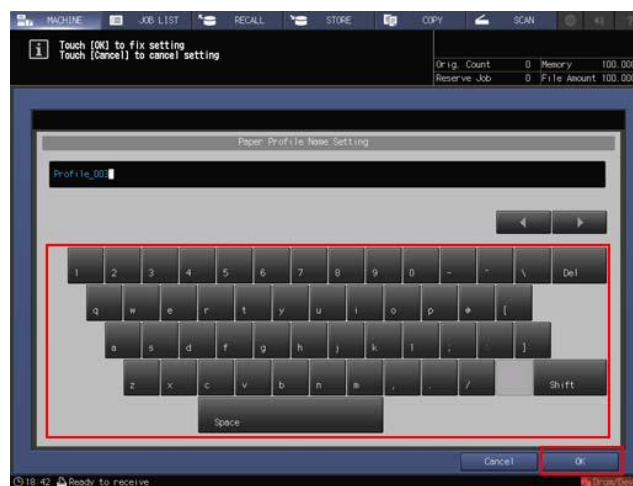
## 2.5.7 Registering Paper Profile

If an adjustment is made for paper of a new brand, weight, or size, its contents will be newly registered as a paper profile.

- 1 Select [Paper Setting] - [Change Set] - [Register & OK], then press [New Store].

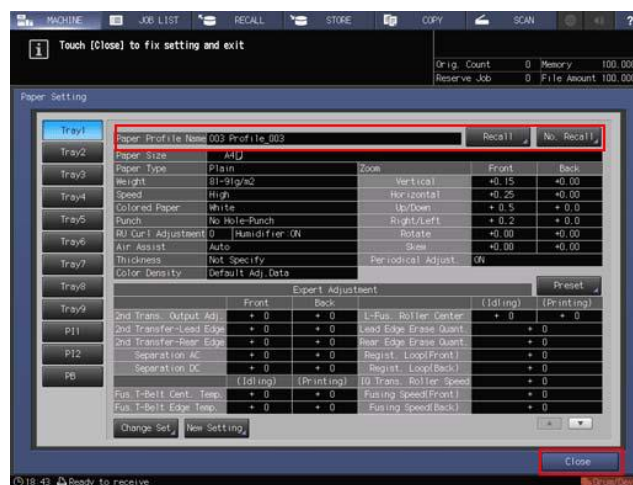


- 2 Enter the paper profile name and press [OK].



Enter the paper brand for the paper profile name.

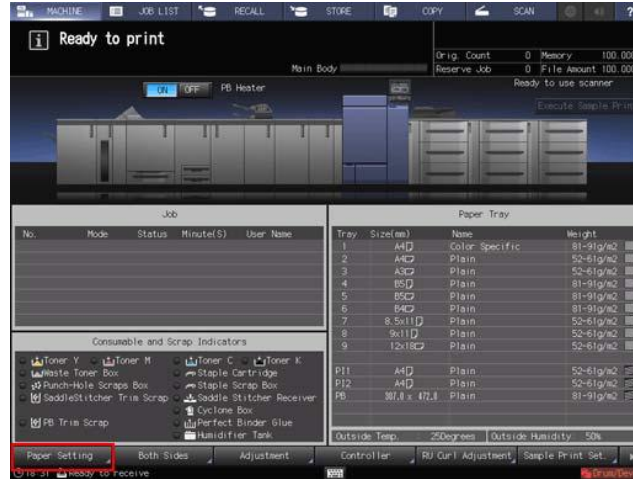
- 3 Check that the paper profile name you entered is displayed, then press [Close] to end the registration task.



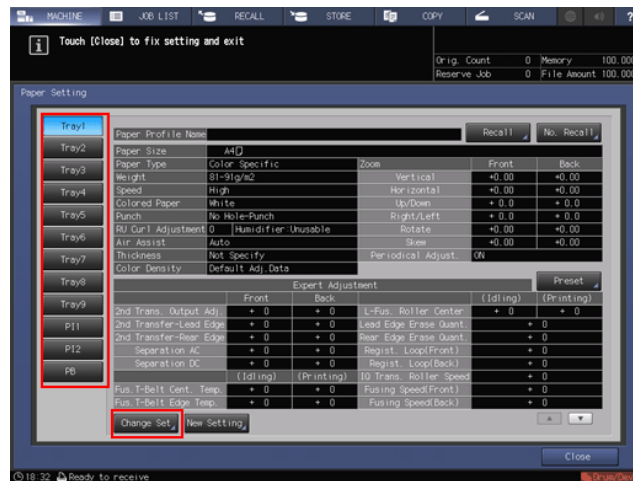
## 2.5.8 Back Side Fine Adjustment

This adjustment is useful when you want to adjust the magnification and position of the image on the back side based on the output result of the job data that is actually going to be used.

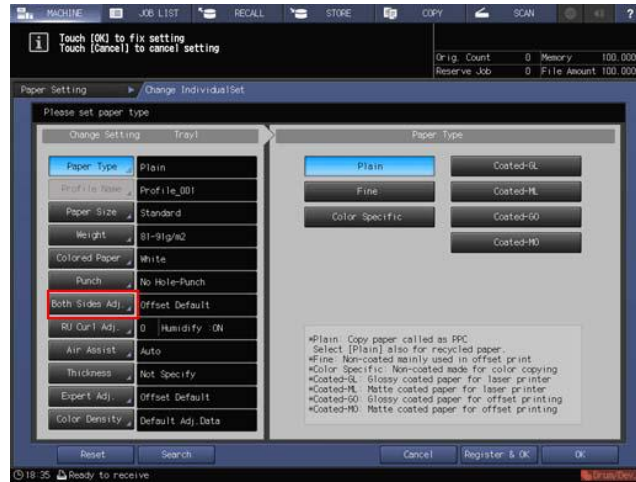
- 1 Output approximately three sheets of the job data that is actually going to be used from the tray to which "Both Sides Adj." is applied.
- 2 Press [Paper Setting] on the [MACHINE] screen.



- 3 Select the tray to which the job data is output, and press [Change Set].



## 4 Press [Both Sides Adj.].

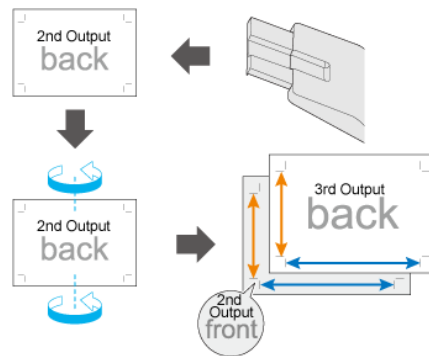


## 5 Press [Back].

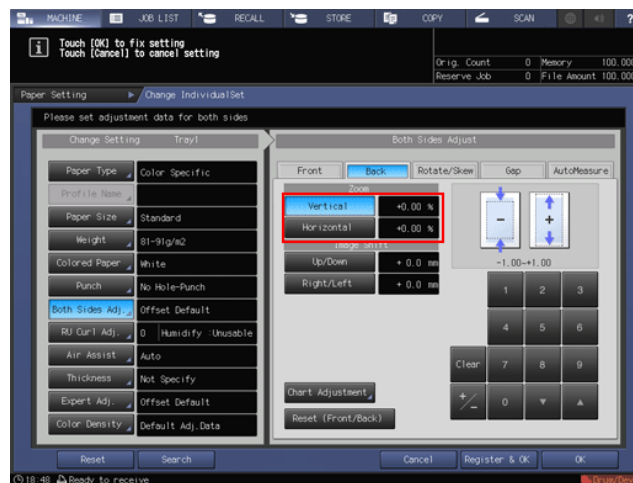


- 6 Check the magnification deviation on the back side from the image on the back side of each of the second and third output charts in the job output in step 1.

Put the third output chart (with the back side facing upward) on the second one (with the front side facing upward), then compare the interval of the image on the front side with that of the image on the back side. When you want to invert paper, set the rotation axis in the crosswise direction.



If the interval of the image on the front side is different from that of the image on the back side, enter the adjustment value in [Vertical] (crosswise direction) and [Horizontal] (feed direction) on the [Back] screen.



The adjustment value is updated in 0.01% steps.

Adjustment range: [Vertical] -1.00 to +1.00, [Horizontal] -0.80 to +0.20

When [User Setting] - [Common Setting] - [Back Side Magnification Adjustment] is set to [OFF], you cannot adjust the value of [Horizontal].

Image magnification adjustment example:

When the interval of the image on the front side is set to 400 mm and that of the image on the back side to 401 mm, enter [-0.25%] as the adjustment value.

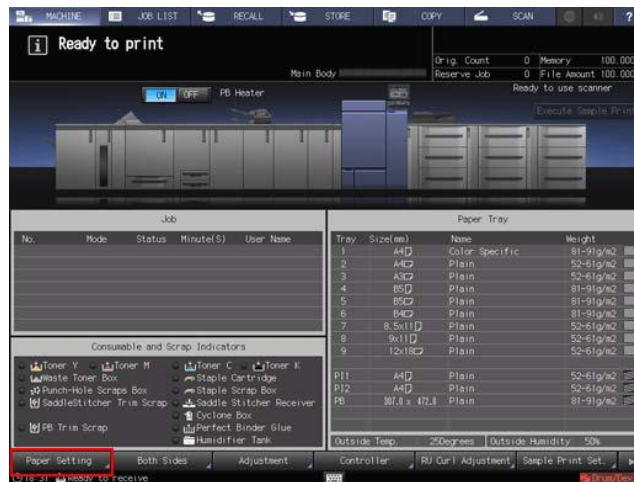
7 When the adjustment is completed, press [OK].



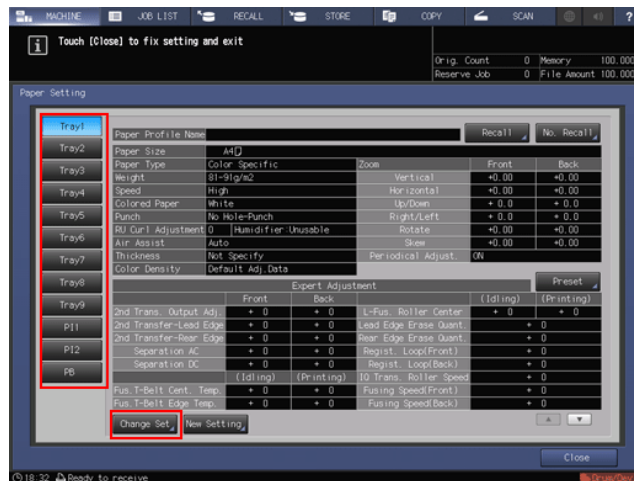
8 Output approximately three sheets of the same job data as that output in step 1 from the same tray.

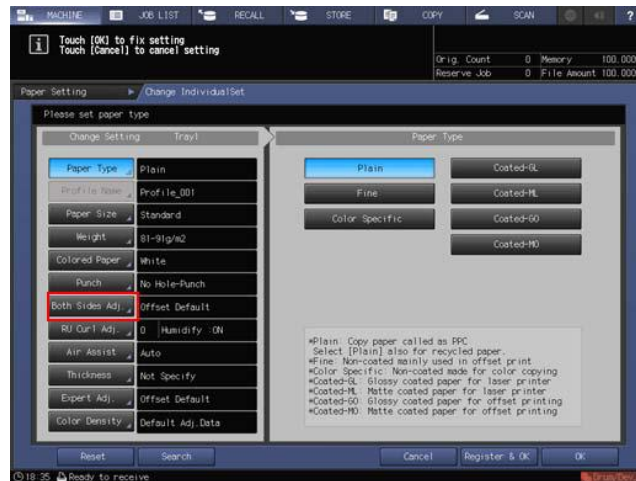
9 Check the magnification deviation using the second and third output charts.  
Repeat Step 6 to 8 until the image magnification deviation is cleared.

10 Press [Paper Setting] on the [MACHINE] screen.



11 Select the tray in which the paper to be adjusted has been loaded, then press [Change Set].



**12** Press [Both Sides Adj.].**13** Check the position error on the back side from the image on the back side of each of the second and third output charts in the job output after the magnification adjustment has been completed.

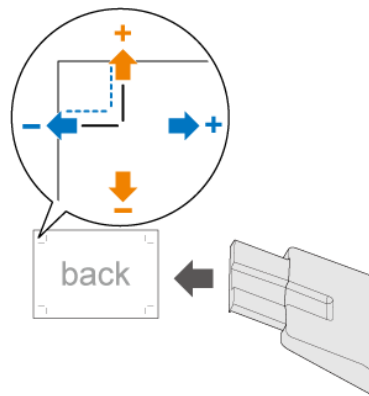
The black line in the figure indicates the back side and the blue dash line indicates the opposite (front) side.

If the position of the image on the front side is different from that of the image on the back side, enter the adjustment value in [Up/Down] (crosswise direction) and [Right/Left] (feed direction).

To move the image upward or rightward, enter a positive value, and to move downward or leftward, enter a negative value.

Image position adjustment example:

When the image on the back side is misaligned downward by 0.5 mm and rightward by 0.3 mm against that of the front side, enter [+0.5 mm] in [Up/Down] and [-0.3 mm] in [Right/Left].

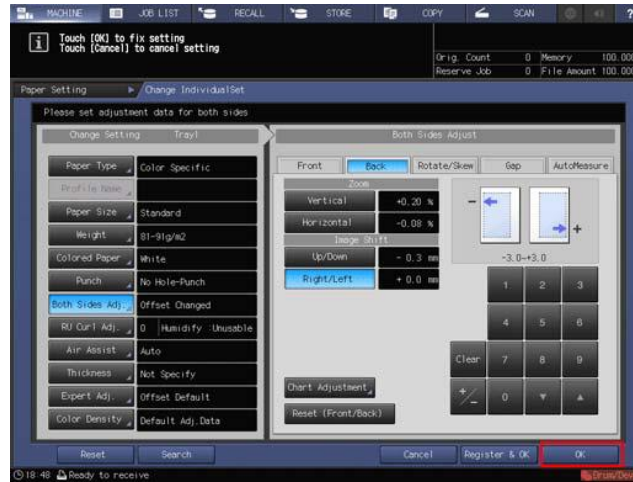


The adjustment value is updated in 0.1mm steps.

Adjustment range: [Up/Down] -10.0 to +10.0; [Right/Left] -3.0 to +3.0



- 14 When the adjustment is completed, press [OK].



- 15 Output approximately three sheets of the same job data as that output in step 1 from the same tray.

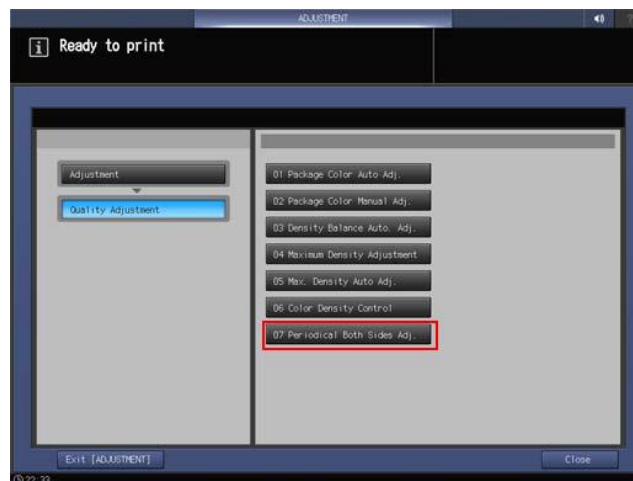
- 16 Check the misalignment of the image on the back side using the second and third output charts.

Repeat steps 13 to 15 until the image misalignment is cleared.  
When the image misalignment is cleared, finish the adjustment.

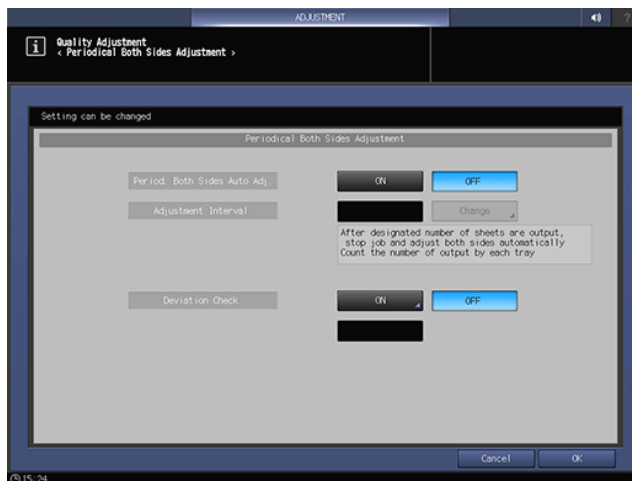
### 2.5.9 [Periodical Both Sides Adj.]

Configure settings for the periodical both-side adjustment. This menu item is to be displayed on the machine mounted with **Intelligent Quality Optimizer IQ-501**.

- 1 Press [Adjustment] on the [MACHINE] screen to display the [Adjustment Menu] screen.
- 2 Press [Quality Adjustment] and [Periodical Both Sides Adj.] in sequence.



3 Change any setting as needed.



Menu item	Description	Setting value
[Period. Both Sides Auto Adj.]	Allows you to select whether to periodically output charts and make the both-side adjustment when printing of the number of sheets specified in [Adjustment Interval] is completed If you select [ON], you can set [Periodical Adjustment] to [ON] or [OFF] for each tray in the [AutoMeasure] tab of the [Both Sides Adjust] screen	ON, OFF (Default)
[Adjustment Interval]	Specify the interval to automatically make the both-side adjustment.	If you select [ON] in [Period. Both Sides Auto Adj.], you can press [Change] to specify 100 to 9,999 sheets. (Default: 500 sheets)
[Deviation Check]	Select whether to check a deviation.	ON, OFF (Default) If you select [ON], you can specify the defined value (deviation level) used to judge that a deviation occurs. The defined value between 0.5 mm and 10.0 mm can be specified. (Default: 2.0 mm)

4 Press [OK].  
The screen returns to the [Quality Adjustment Menu] screen.



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**3**

**Quality Adj.**

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## 3 Quality Adj.

### 3.1 Quality Adjustment for Image Controller IC-604

To reproduce stable colors, in addition to regular calibration for the controller, use other image quality adjustments as necessary, such as when changing screens or papers or when hue is important.

This machine provides the following four types of quality adjustment flows:

Type of adjustment flow	Adjustment timing
Regular adjustment flow: Normal	<ul style="list-style-type: none"> <li>• When 1,000 to 2,000 sheets were printed out</li> <li>• Just before printing out a job with the hue focused</li> <li>• When you feel the hue is not correct</li> </ul>
Regular adjustment flow: High Precision	<ul style="list-style-type: none"> <li>• Just before printing out a job with the hue focused</li> <li>• When color stabilization is not desirable (you want to enhance color reproduction accuracy)</li> <li>• When paper is different</li> </ul>
Adjustment flow to use a new type of paper	When you use paper of a new brand, weight, or size
Adjustment flow when changing the screen	When the screen is changed



#### Reference

*To not continuously perform the series of adjustment of the image quality adjustment flow, perform page 3-9, and then resume from the next adjustment.*

## 3.2 Regular adjustment flow (Standard)

### 3.2.1 Adjustment timing

- When between 1,000 and 2,000 sheets of paper have been output
- Immediately before the job for which hue is important is output
- Others, such as when you cannot get the desired hue

This machine automatically performs calibration at optimal times.

### 3.2.2 Adjustment sequence

Ad-just-ment order	Adjustment item	Reference
1	Color Density Control setting check	page 3-49

## 3.3 Regular adjustment flow (High accuracy)

### 3.3.1 Adjustment Timing

- Immediately before the job for which hue is important is output
- When the color stability is not desirable (you want to increase the accuracy of reproducibility)
- When the paper type is different

### 3.3.2 Adjustment Order

Ad-just-ment order	Adjustment item	Reference
1	Color Density Control setting check	page 3-49
2	[Gamma Automatic Adjustment]	page 3-9
3-a	[Max. Density Auto Adj.]	page 3-47
3-b	[Maximum Density Adjustment]	page 3-46
4	[Color density manual control]	page 3-52

#### Tips

- If you use [Package Color Auto Adj.], this machine automatically makes the adjustments in step 2 below and after. To use [Package Color Auto Adj.], mount **Intelligent Quality Optimizer IQ-501** on the machine. For details, refer to page 3-70.
- For "Color Density Control setting check", check that [Default] or [Registered Adj. Data] is also selected for the tray in [Paper Setting] - [Color Density Control].
- To use general paper, select [Default Adj. Data]. To use special paper or increase the accuracy of the automatic adjustment, [Each Paper Type Color Adj.] is recommended.

## 3.4 Adjustment flow to use a new type of paper

### 3.4.1 Adjustment timing

- When you use a new type of paper
- When this machine cannot reproduce colors, although you perform the daily maintenance flow (high accuracy)

### 3.4.2 Adjustment sequence

Ad-just-ment order	Adjustment item	Reference
1	[Gamma Automatic Adjustment]	page 3-9
2-a	[Density Balance Auto. Adj.]	page 3-39
2-b	[Density Balance Adjustment] (For i1Pro, i1Pro2, or i1iSisXL)	page 3-11
2-c	[Density Balance Adjustment] (For FD-5BT)	page 3-22
3	[Color density manual control]	page 3-52
4-a	[Exact Color]	page 3-55
4-b	[G7 Calibration]	page 3-63

#### Tips

- If you use [Package Color Auto Adj.], this machine automatically performs these adjustments. To use [Package Color Auto Adj.], mount **Intelligent Quality Optimizer IQ-501** on the machine. For details, refer to page 3-70.
- If you suspend the flow, perform Gamma Automatic Adjustment and then restart the flow.
- Adjustment 4 is set to Exact Color by default. To switch this adjustment to G7 calibration, contact your service representative.



## 3.5 Adjustment Flow when changing the screen

### 3.5.1 Adjustment timing

When the screen is changed

#### Tips

- This adjustment is the same as the adjustment when the machine was introduced (setup).

### 3.5.2 Adjustment sequence

Ad-just-ment order	Adjustment item	Reference
1	Custom Screen Setting	page 3-7
2	[Gamma Automatic Adjustment]	page 3-9
3-a	[Density Balance Auto. Adj.]	page 3-39
3-b	[Density Balance Adjustment] (For i1Pro, i1Pro2, or i1iSisXL)	page 3-11
3-c	[Density Balance Adjustment] (For FD-5BT)	page 3-22
4	[Color density manual control]	page 3-52
5-a	[Exact Color]	page 3-55
5-b	[G7 Calibration]	page 3-63

#### Tips

- If you use [Package Color Auto Adj.], this machine automatically executes step 2 and after. To use [Package Color Auto Adj.], mount **Intelligent Quality Optimizer IQ-501** on the machine. For details, refer to page 3-70.
- Adjustment 5 is set to Exact Color by default. To switch this adjustment to G7 calibration, contact your service representative.
- For "Color Density Control setting check", we recommend that you select [Each Paper Type Color Adj.] to use special paper or increase the accuracy of the automatic adjustment.

## 3.6 Details of quality adjustment items

### 3.6.1 Setting of the Custom Screen

Using the **touch panel** on the machine, assign screens from the [Administrator Setting] menu.

- Image quality adjustment flow and the position of this adjustment
- In the pre-output image quality adjustment flow, this adjustment is positioned shown below.

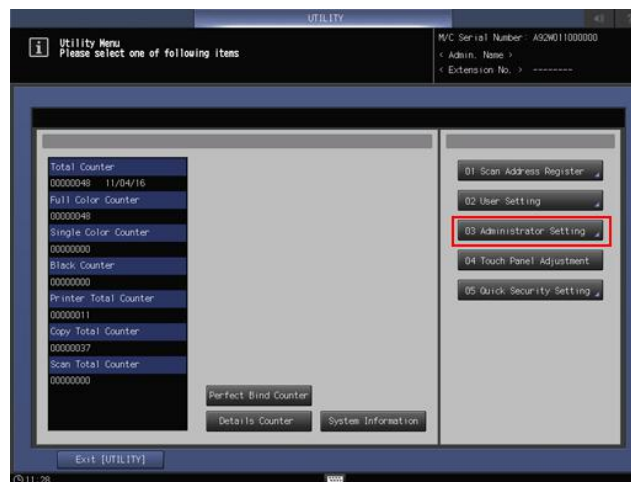
Image quality adjustment flow	Position of this adjustment		
	Previous adjustment	This adjustment	Next adjustment
Adjustment flow when changing the screen	- (None)	This adjustment	(Gamma Automatic Adjustment)
Regular adjustment flow (Standard)	- (None)		
Regular adjustment flow (High Precision)	- (None)		

- 1 Press **Utility/Counter** on the machine's **control panel**.

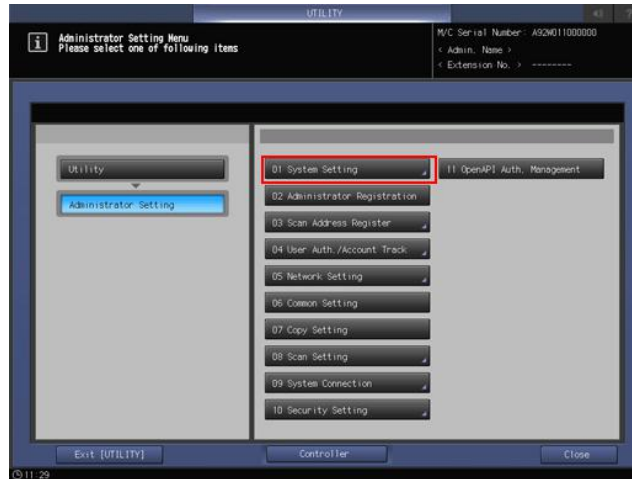


The [UTILITY] screen is displayed.

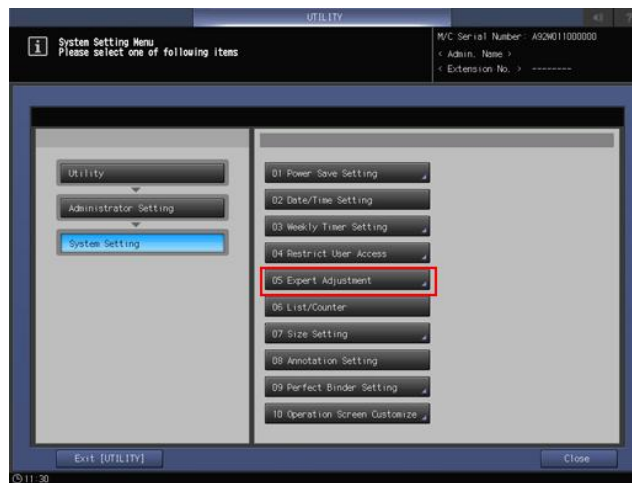
- 2 Press [Administrator Setting].



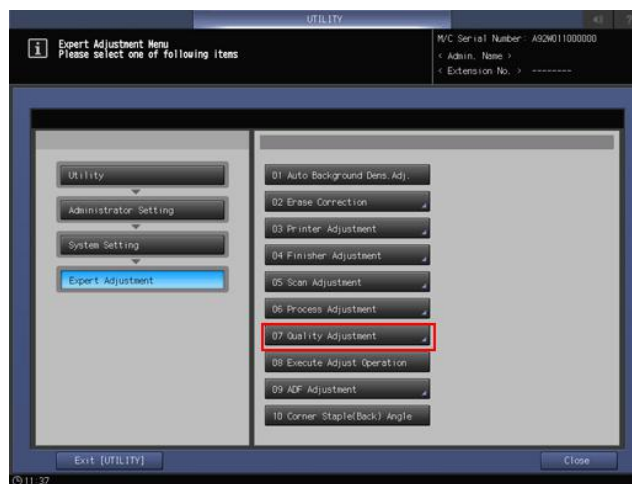
## 3 Press [System Setting].



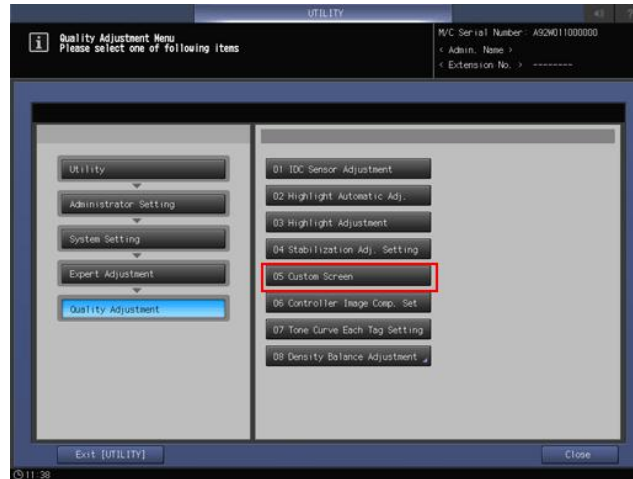
## 4 Press [Expert Adjustment].



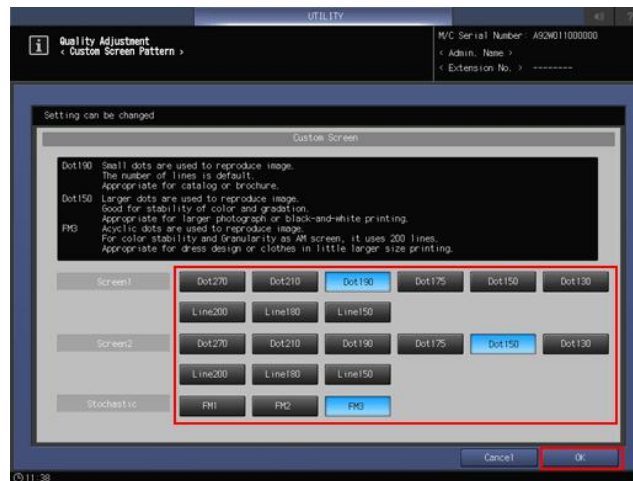
## 5 Press [Quality Adjustment].



## 6 Press [Custom Screen].



## 7 Press the screen to be assigned to each screen type: [Screen1], [Screen2], and [Stochastic]. After setting, press [OK].



### 3.6.2 [Gamma Automatic Adjustment]

#### Performing [Gamma Automatic Adj.]

This automatically adjusts the color reproducibility of the whole paper to be output.

- Image quality adjustment flow and the position of this adjustment
  - In the pre-output image quality adjustment flow, this adjustment is positioned shown below.
  - Perform the previous adjustment before proceeding with this adjustment.
  - When **Intelligent Quality Optimizer IQ-501** is mounted on the machine, this adjustment is positioned in the same way as the above.



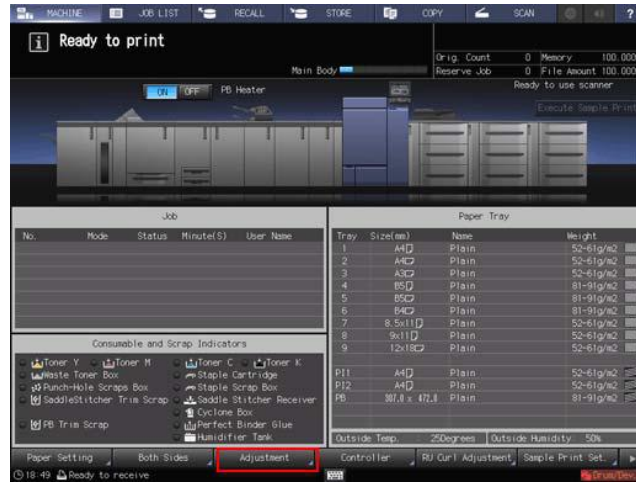
#### Reference

To not continuously perform the series of adjustment of the image quality adjustment flow, perform the gamma automatic adjustment, and then resume from the next adjustment.

Image quality adjustment flow	Position of this adjustment		
	Previous adjustment	This adjustment	Next adjustment
Adjustment flow when changing the screen	Screen selection	This adjustment	Density Balance Adjustment

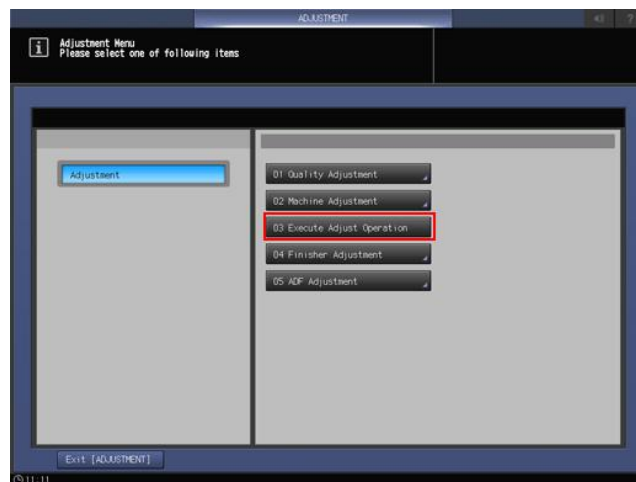
Regular adjustment flow: Normal	- (None)		
Regular adjustment flow: High Precision	- (None)	This adjustment	Maximum Density Adjustment

- 1 On the **touch panel** of the main body, press [Adjustment] on the [MACHINE] screen.

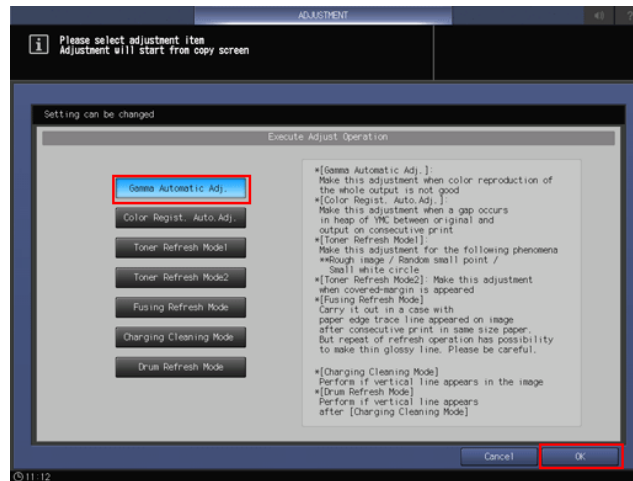


The [Adjustment Menu] is displayed.

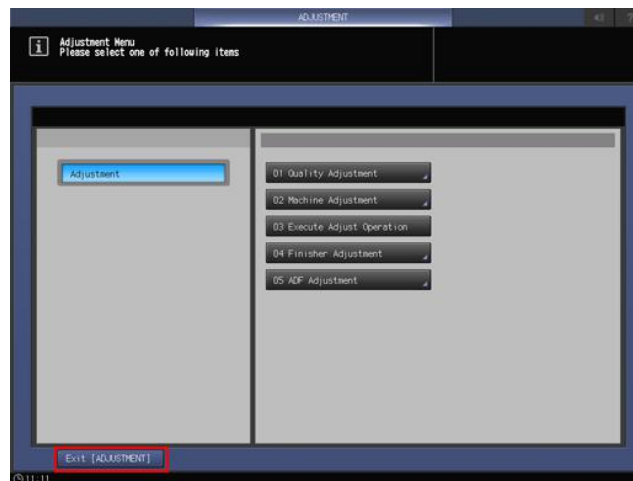
- 2 Press [Execute Adjust Operation] on the [Adjustment Menu] screen.



- 3 Press [Gamma Automatic Adj.] and press [OK].



- 4 Press [Exit [ADJUSTMENT]].



Wait until the message [Now adjusting] disappears.

### 3.6.3 [Density Balance Adjustment] (For i1Pro, i1Pro2, or i1iSisXL)

To not continuously perform the series of adjustment of the image quality adjustment flow, perform page 3-9, and then resume from the next adjustment.

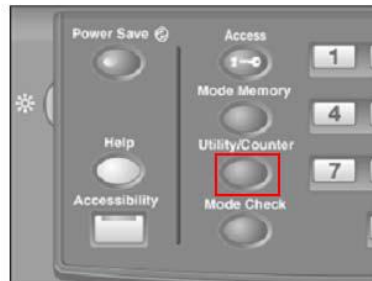
Image quality adjustment flow	Position of this adjustment		
	Previous adjustment	This adjustment	Next adjustment
Adjustment flow when changing the screen	Gamma Automatic Adjustment	This adjustment	Color density control
Regular adjustment flow: Normal	- (None)		
Regular adjustment flow: High Precision	- (None)		

#### Reference

You can register measurement data (density balance adjustment value) on the machine after the color density control has been completed. For details, refer to page 3-32.

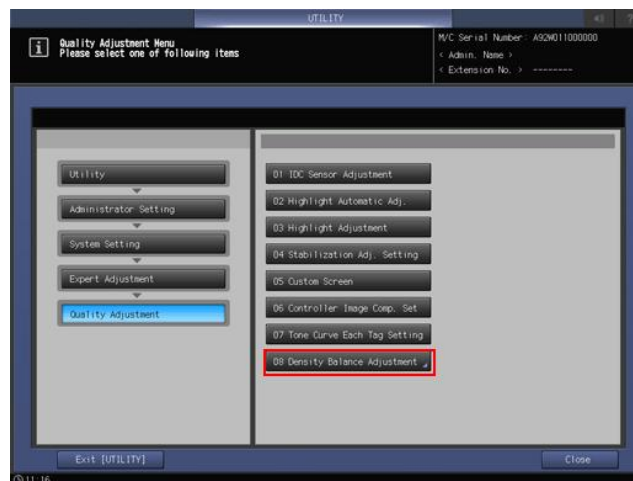
A dedicated application is required to measure test charts. The application varies depending on your spectrophotometer. For **i1-Pro**, **i1-Pro2**, or **i1iSisXL**, use **X-rite Measure Tool**. Install the tool in advance.

- ✓ You can download **X-rite Measure Tool** free of charge at the following Web site. After installing the tool, restart the computer.  
ProfileMaker 5 v5.0.10: [https://xritephoto.com/ph\\_product\\_overview.aspx?ID=757&Action=Support&SoftwareID=931](https://xritephoto.com/ph_product_overview.aspx?ID=757&Action=Support&SoftwareID=931)
  - ✓ To use the spectrophotometer, **i1iSisXL**, perform Step 10 (select [Measure] from the menu) followed by the procedure of "○ For the spectrophotometer, i1iSisXL".
- 1** On the **control panel** of the main body, press **Utility/Counter**.

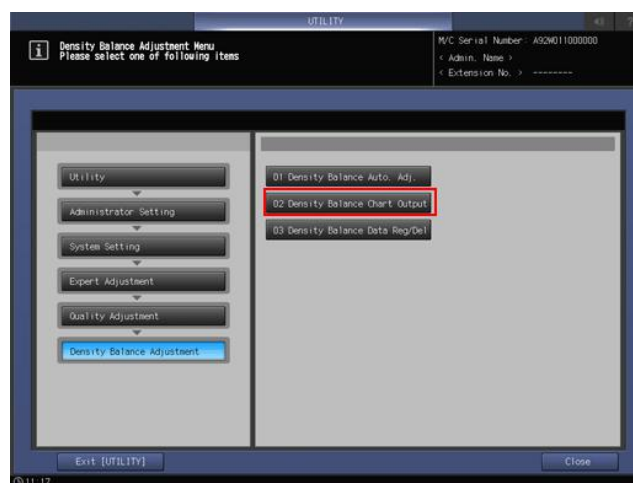


The [UTILITY] screen is displayed.

- 2** Press [Administrator Setting] - [System Setting] - [Expert Adjustment] - [Quality Adjustment] - [Density Balance Adjustment] in sequence.



- 3** Press [Density Balance Chart Output].



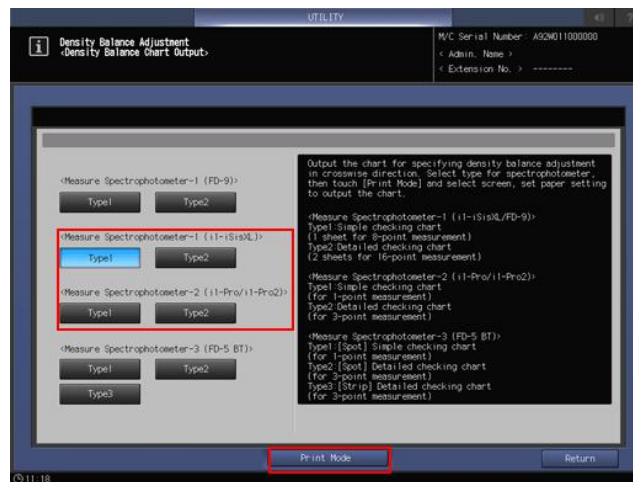
- 4 Select the chart to be output according to the spectrophotometer to be used.

After the selection, press [Print Mode].

The recommended charts are as follows.

- [Type 1] of [<Measure Spectrophotometer-1 (i1iSisXL)>]
- [Type 2] of [<Measure Spectrophotometer-2 (i1Pro/i1Pro2)>]

Item		Description
[<Measure Spectrophotometer-1 (i1iSisXL)>]	[Type 1]	Simple checking chart for 8-step gradation (Recommended)
	[Type 2]	Detailed checking chart for 16-step gradation
[<Measure Spectrophotometer-2 (i1Pro/i1Pro2)>]	[Type 1]	Simple checking chart for 1-step gradation
	[Type 2]	Detailed checking chart for 3-step gradation (Recommended)



- 5 Set the paper on the [PRINT MODE] screen and press **Start** on the **control panel**.

The color chart is output for measurement using the spectrophotometer.



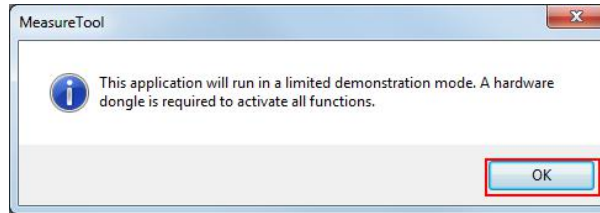
- 6 On the computer where the **X-rite Measure tool** has been installed, select [Start] - [All Programs] - [X-Rite] - [ProfileMaker Pro 5.0.10] - [MeasureTool].

**X-rite Measure tool** starts.

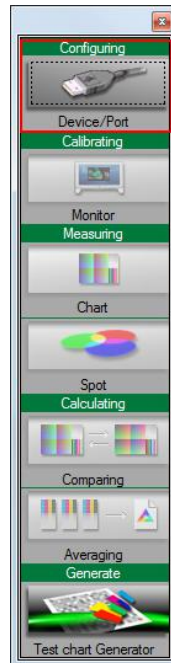
- The following example provides an explanation using screenshots in the English version. To display menus or messages in English, select [Language] - [English] on the toolbar of Measure Tool, and restart **X-rite Measure tool**.



- 7 When the following message is displayed, click [OK].

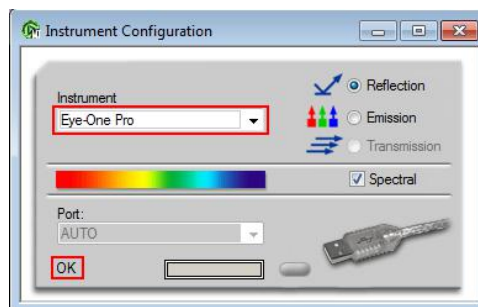


- 8 Connect the instrument to the computer. From the menu, click [Configuring].

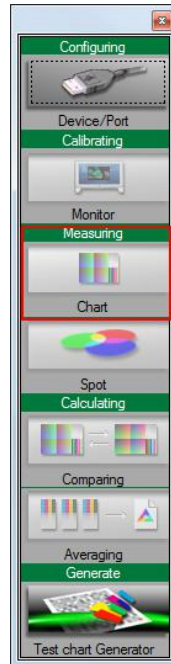


The [Instrument Configuration] screen is displayed.

- 9 In [Instrument], select the spectrophotometer to use. When [OK] is displayed, close the screen.  
Example: This example selects [Eye-One Pro] (i1Pro).

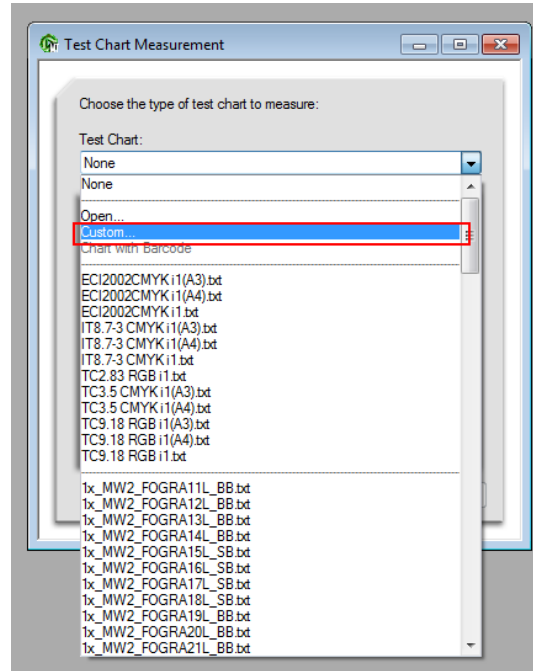


**10** From the menu, click [Measuring].



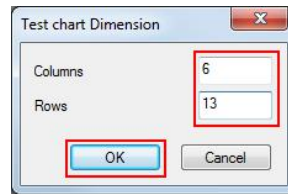
→ The subsequent operations are described for the case where the spectrophotometer i1Pro is used. For measurement using the spectrophotometer i1SisXL, refer to "○ For the spectrophotometer i1SisXL".

**11** From [Test Chart], select [Custom].

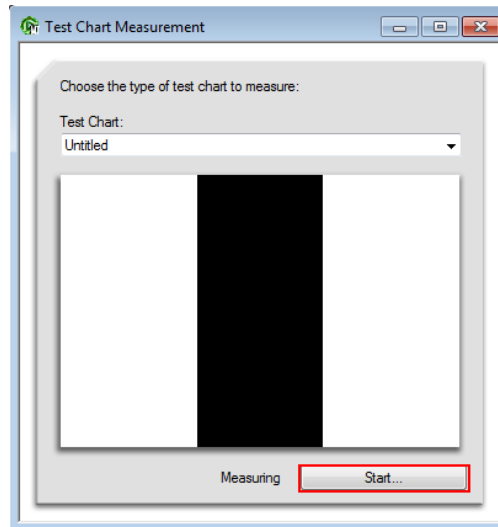


**12** Specify [Columns] and [Rows], and click [OK].

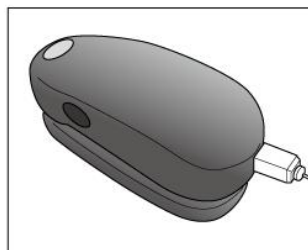
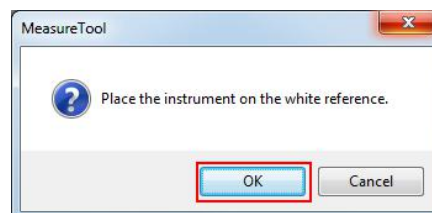
- When the spectrophotometer is "Type 1" of i1Pro: [Columns] = 6, [Rows] = 5
- When the spectrophotometer is "Type 2" of i1Pro: [Columns] = 6, [Rows] = 13



**13** Click [Start].



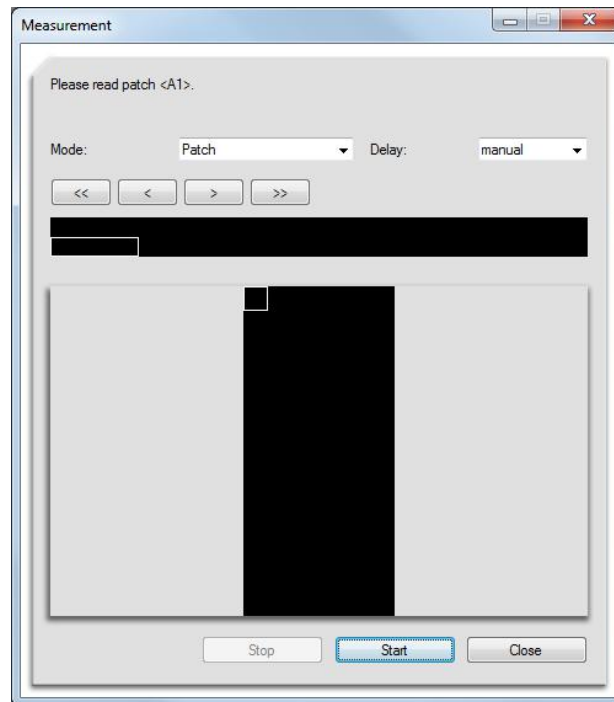
**14** When the following message is displayed, horizontally place the spectrophotometer on the calibration dock and click [OK].



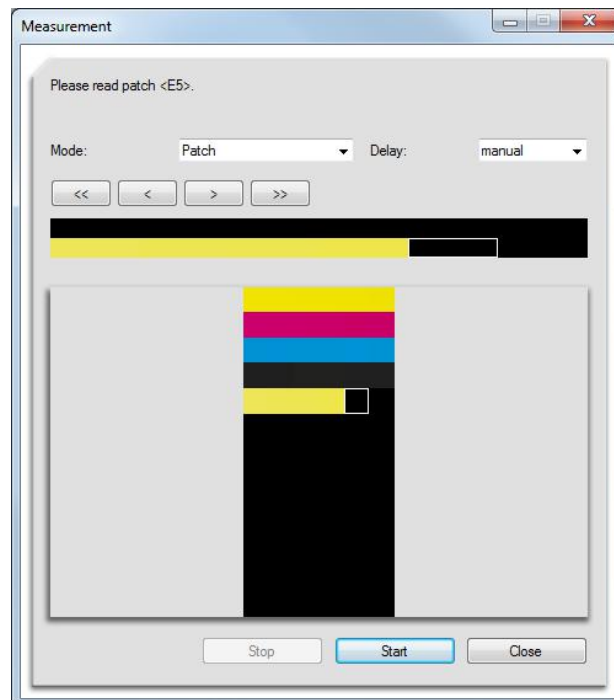
**15** Stack 10 sheets of blank paper whose type is the same as that of the paper where chart has been printed, and place the printed chart on top of it.

- To eliminate the influence of the color of the table, place 10 sheets of paper of the same type as the chart underneath the chart to be measured.

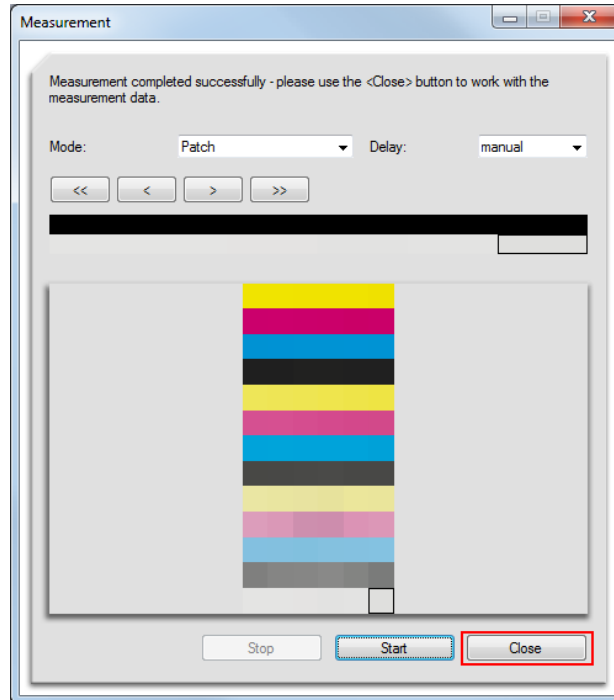
- 16** When the following screen is displayed, place the spectrophotometer on the patch at the top in the upper left, and press the button for the spectrophotometer. When beep sounds, check that the read patch is displayed on the screen.



- 17** Continuously, place the spectrophotometer on the next right patch, and press the button for the spectrophotometer. Measure all the patches in the same operation.
- If you place the spectrophotometer on the wrong place (patch), click the  button to go back to the previous patch position.
  - The white portion where it is displayed that nothing is printed is also part of the patch. Do not forget to measure it. If not measured, an error will occur.



**18** When you are finished with the chart measurement, click [Close].

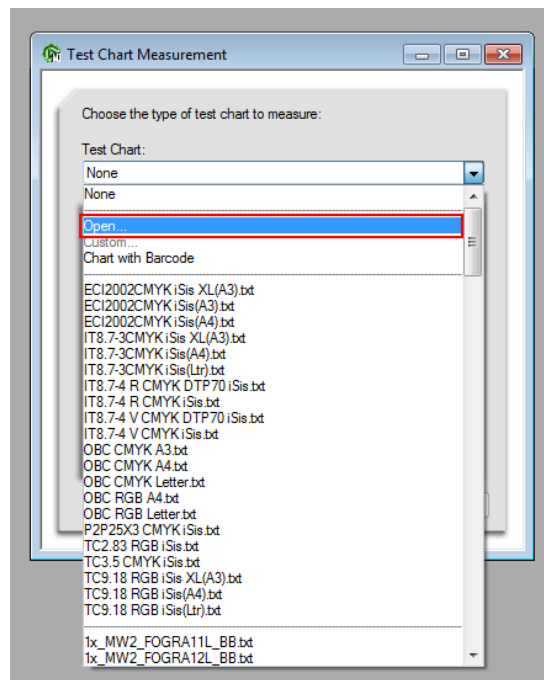


→ Continuously, go to "Saving the measurement data of the density balance" (page 3-20), and save the measurement data.

○ For the spectrophotometer i1iSisXL

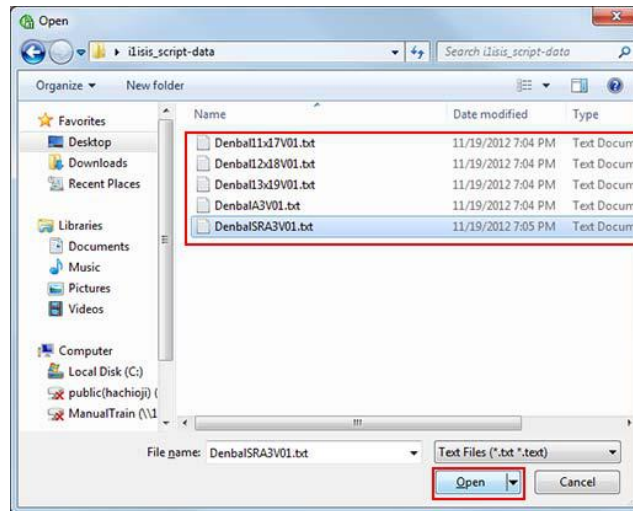
To use the spectrophotometer i1iSisXL, perform Step 10 (from the menu, select [Measure]) followed by the procedure below.

**1** From [Test Chart], select [Open].

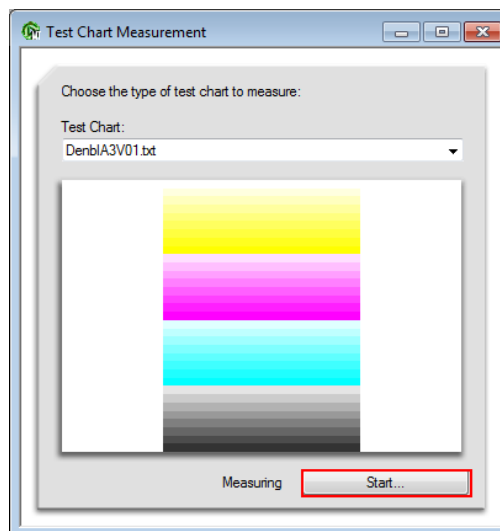


- 2 Select the script data for measurement according to the paper size, and click [Open].

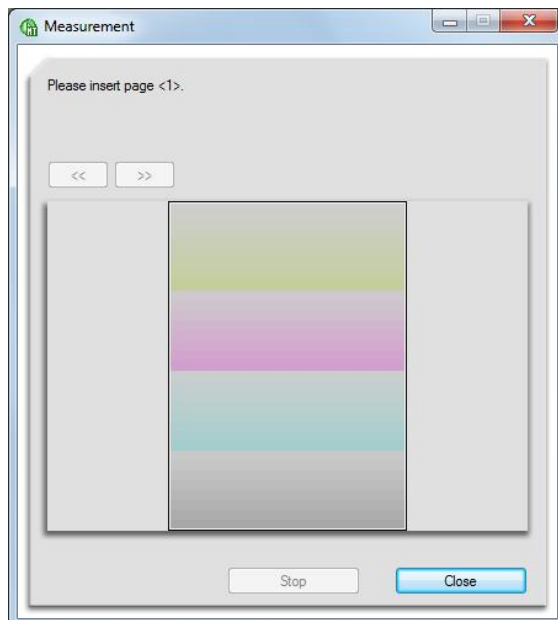
There are some script data items particular for each chart size or type. For details, contact your service representative.



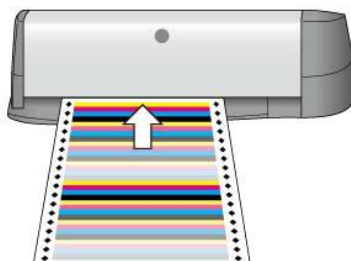
- 3 On the following screen, click [Start].



- 4 When the following message is displayed, insert the chart into i1iSisXL.
- Cut off the left side of the chart using scissors or such other tools so that the length between the left end of the chart and the black diamond symbol becomes about 10 mm.
  - Align the left end of the paper to the left end of the insert opening of i1iSisXL, and automatically feed the paper one by one. When correctly inserted, the chart is pulled in a few centimeters and comes back a little, and then after a little while, reading starts.



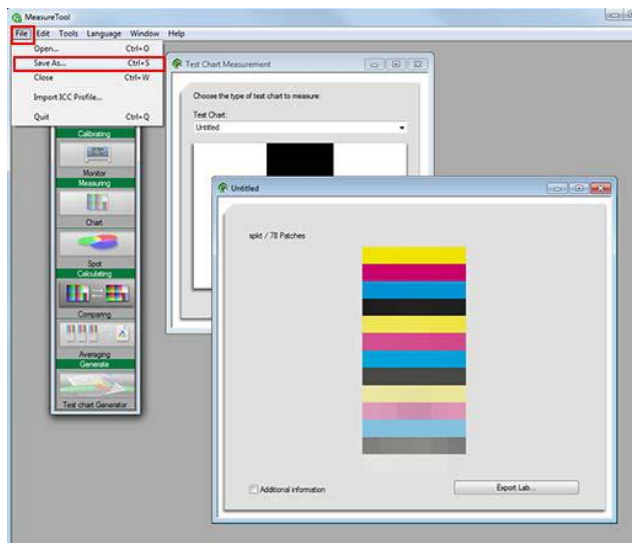
Measurement automatically starts.



### Saving the measured data of the density balance

You can save the data of the density balance measured with the spectrophotometer to a USB device such as a USB memory stick or to the computer on the network used by the machine.

- 1 From the [File] menu, select [Save As].



**NOTICE**

If you use "Export Lab", an error occurs when registering the color adjustment data. When saving the data, always use "Save As".

- 2 Specify the destination to save.  
Specify USB memory or the computer connected to the machine via the network.

Stored	Description
USB Memory	Connect the USB memory to the computer. Create a folder, "\C6100\ADJUST_DATA", in the root (immediately below) of the USB memory, and specify the place as the destination to save.
Computer on the network	Open the computer connected to the network used by the machine, and specify a desired folder.

- 3 Enter the file name to save the measured data and click [Save].  
→ Specify the "14-character identification number printed on the chart" + "\_" (underscore) + "character string of up to 21 characters".  
Example: 202115011C4CC\_i1pro\_2012-10-15.txt



The measured data of the density balance is saved.



- When registering measurement data (density balance adjustment value) on the machine, proceed to page 3-32.

### 3.6.4 [Density Balance Adjustment] (For FD-5BT)

To not continuously perform the series of adjustment of the image quality adjustment flow, perform page 3-9, and then resume from the next adjustment.

Image quality adjustment flow	Position of this adjustment		
	Previous adjustment	This adjustment	Next adjustment
Adjustment flow when changing the screen	Gamma Automatic Adjustment	This adjustment	Color density control
Regular adjustment flow: Normal	- (None)		
Regular adjustment flow: High Precision	- (None)		



#### Reference

You can register measurement data (density balance adjustment value) on the machine after the color density control has been completed. For details, refer to page 3-32.

A dedicated application is required to measure test charts. For **FD-5 BT** and **FD-9**, use **FD-S2w**. Install the tool in advance.

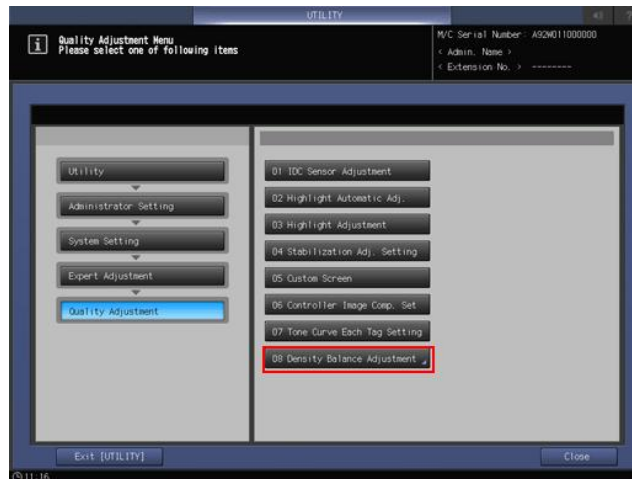
- ✓ For details on operations, refer to the user's guide supplied with **FD-S2w**.  
When **FD-9** is used as the spectrophotometer, test charts with QR code are printed out. Measuring test charts with QR code allows you to select a definition chart on **FD-S2w** and automatically input chart numbers and printer information to the machine, thereby, helping ensure efficient input work.

- 1** On the **control panel** of the main body, press **Utility/Counter**.

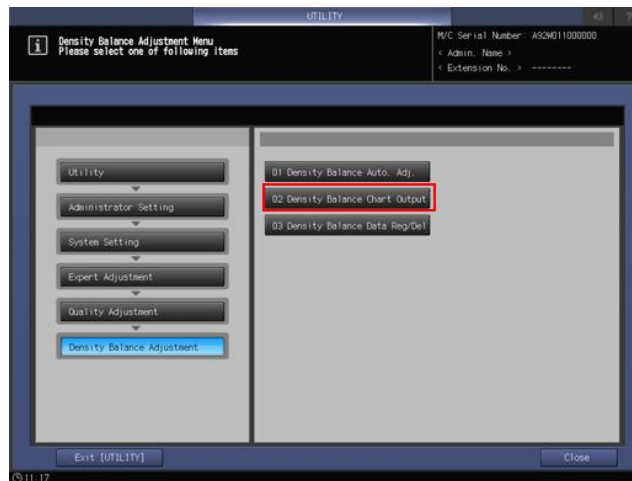


The [UTILITY] screen is displayed.

- 2 Press [Administrator Setting] - [System Setting] - [Expert Adjustment] - [Quality Adjustment] - [Density Balance Adjustment] in sequence.



- 3 Press [Density Balance Chart Output].



- 4 Select the chart to be output according to the spectrophotometer to be used.

After the selection, press [Print Mode].

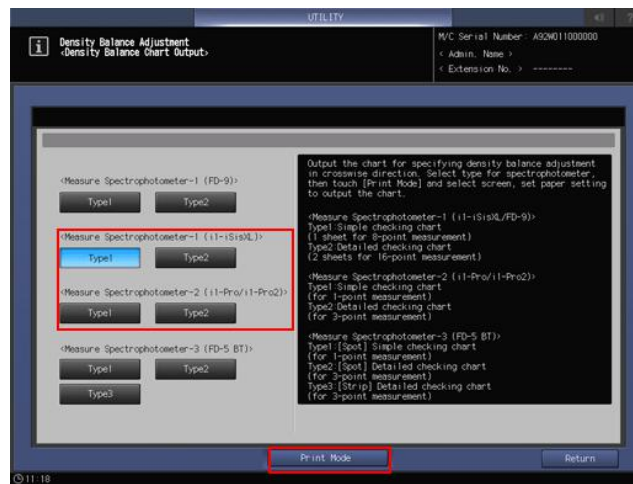
The recommended charts are as follows.

- [Type 1] of [<Measure Spectrophotometer-1 (FD-9)>]
- [Type 3] of [<Measure Spectrophotometer-3 (FD-5 BT)>]

Item		Description
[<Measure Spectrophotometer-1 (FD-9)>]	[Type 1]	Simple checking chart for 8-step gradation (Recommended)
	[Type 2]	Detailed checking chart for 16-step gradation
[<Measure Spectrophotometer-3 (FD-5 BT)>]	[Type 1]	Simple checking chart for 1-step gradation (Spot measurement)
	[Type 2]	Detailed checking chart for 3-step gradation (Spot measurement)
	[Type 3]	Detailed checking chart for 3-step gradation (Strip measurement)

- When spectrophotometer-1 (FD-9) is used for measurement, test charts with QR code can be printed out for both [Type 1] and [Type 2].

Measuring test charts with QR code allows you to automatically input information such as chart numbers to the machine.



- 5 Set the paper on the [PRINT MODE] screen and press **Start** on the **control panel**.  
The color chart is output for measurement using the spectrophotometer.



- 6 Connect **FD-5BT** to the computer, and activate the power of **FD-5BT**.



- 7** Check that the message "Calibration recommended." is displayed on the screen of **FD-5BT**.
- Message appears: Proceed to the next step to perform the white calibration.
  - No message appears: Proceed to step 11.



- 8** While [OK] is selected, press the **OPTION** button.



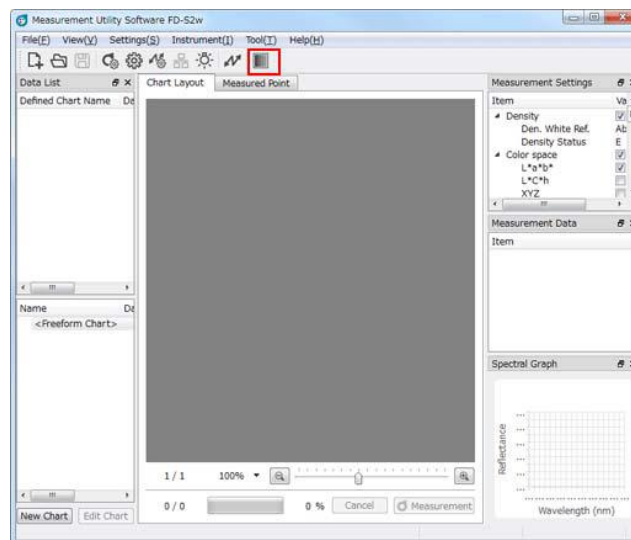
- 9** Press **FD-5BT** on the **white calibration plate**, and perform the white calibration.



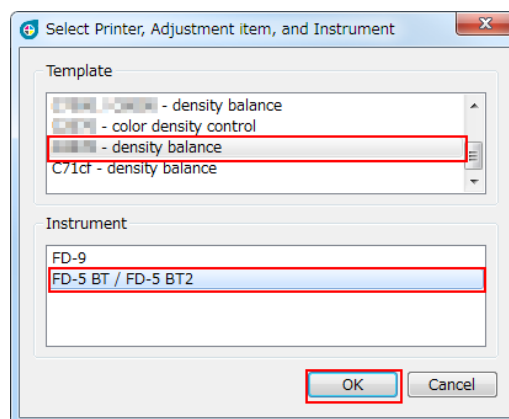
- 10** When "Calibrating..." is no longer displayed, take the **FD-5BT** away from the plate.



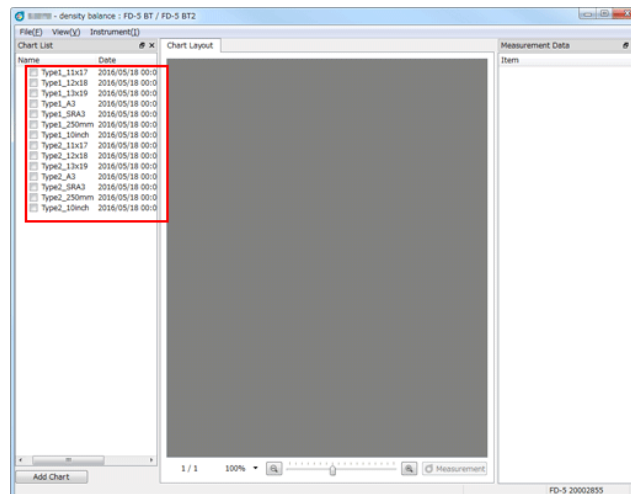
- 11** On the computer where **FD-S2w** has been installed, select [Start] - [All Programs]- [KONICA MINOLTA] - [FD-S2w] - [FD-S2w] in sequence.
- 12** Click the [Density balance / Color density control] icon.



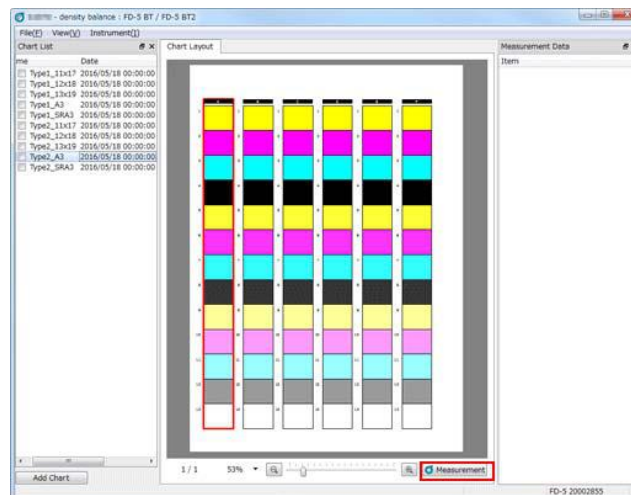
- 13** Click [machine name - density balance] and [FD-5 BT / FD-5 BT2], and then click [OK].



- 14** Select the chart list according to the type and paper size of the output chart.  
 → Select [Type2] even when you output the Type3 chart.



- 15** Click [Measurement].

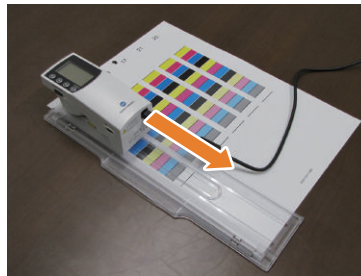
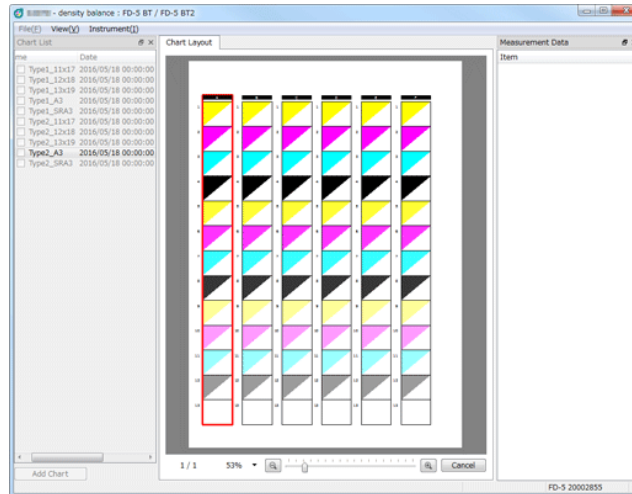


- 16** Stack 10 sheets of blank paper whose type is the same as that of the paper where chart has been printed, and place the printed chart on top of it.  
 → Make sure that the arrow of the chart points up when you place the charts.



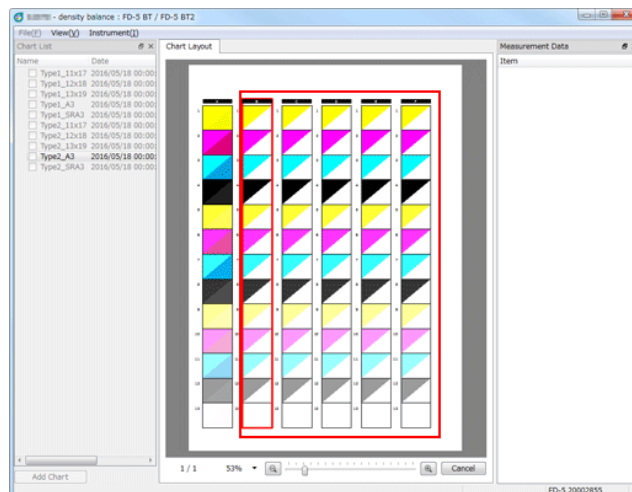
### 17 Measure charts from the left row (the row which has smaller numbers).

- Hold down the side button of **FD-5BT**. When a "bleep" sounds, slide FD-5BT while holding down the side button. Slide FD-5BT to the bottom side, then release the side button.
- For details about how to use **FD-5BT**, refer to the manual supplied with the spectrophotometer.

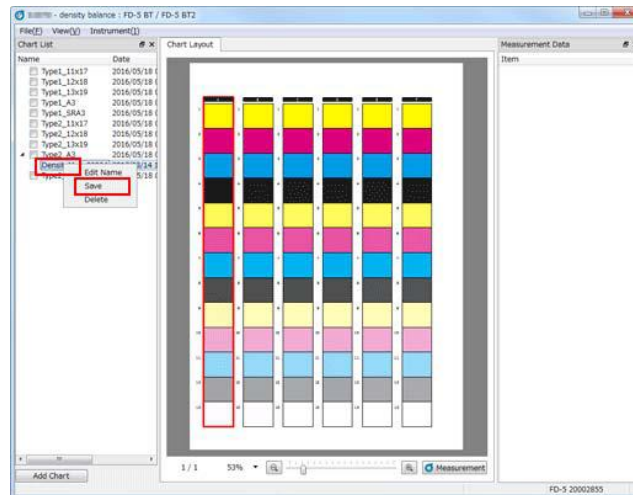


### 18 Likewise, measure the rest of the rows.

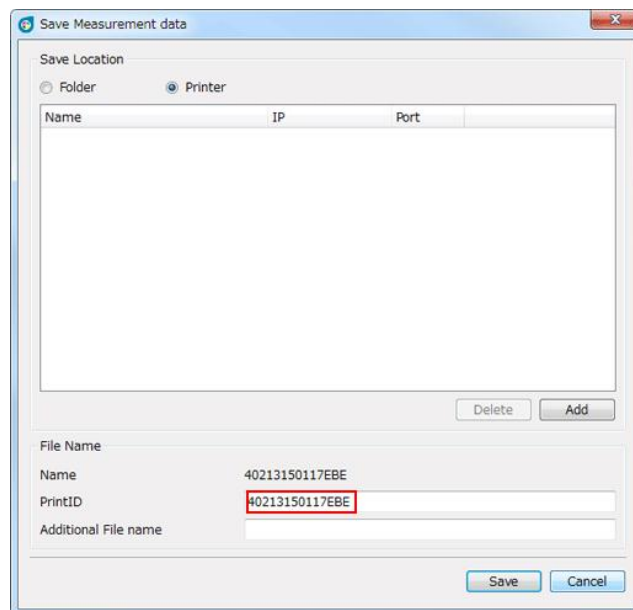
- Click the alphabet of the row that you measure again when you mistake the row (patch) that you measure.



- 19** After the measurement, the measurement data is created under the chart list that you used. Right click the measured data, and press [Save].

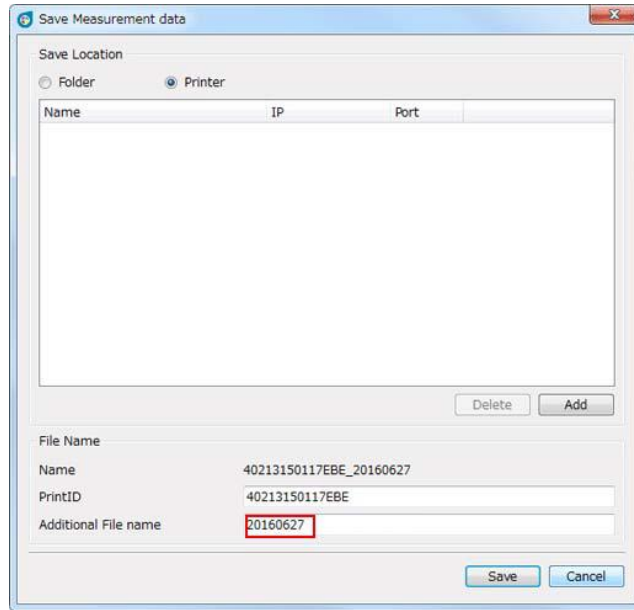


- 20** Enter the 14-digit identification number that is printed to the chart in [PrintID].  
Example: 40213150117EBE



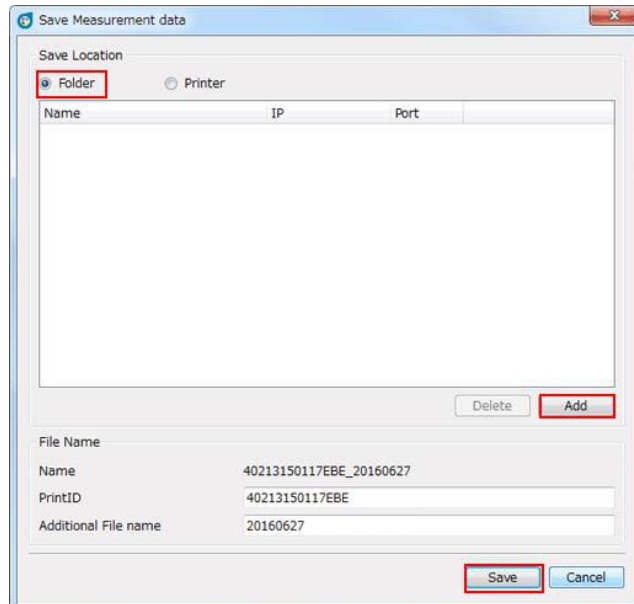


**21** Enter a filename in [Additional File name].



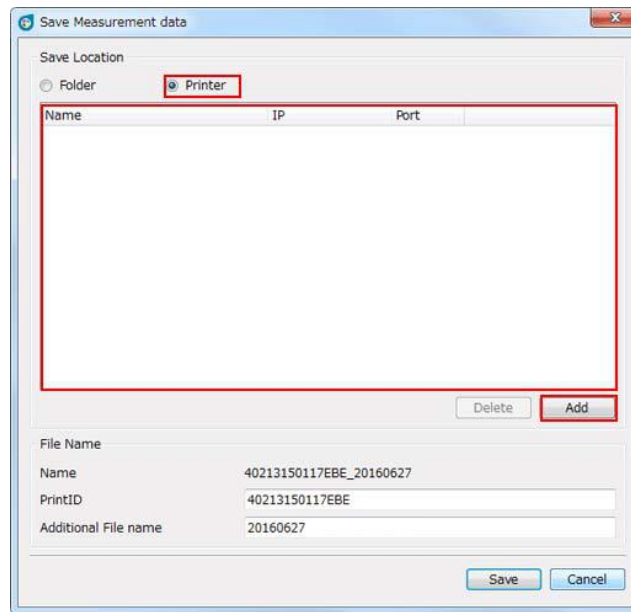
**22** Save the measurement data in the USB memory or this machine.

Save to	Description
USB Memory	Connect the USB memory to the computer, and click [Folder] and [Add]. Create a folder, "\machine name\ADJUST_DATA", in the root (immediately below) of the USB memory, and specify the place as the destination to save. Finally, click [Save].
Machine	Connect the computer to the same network as the machine, and move on to the next step.

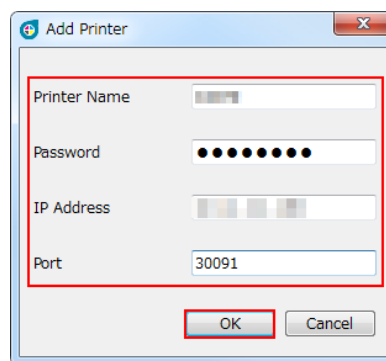


**23** Click [Printer], and click [Add].

→ If you have added the machine as the destination to save, select the machine from [Printer].

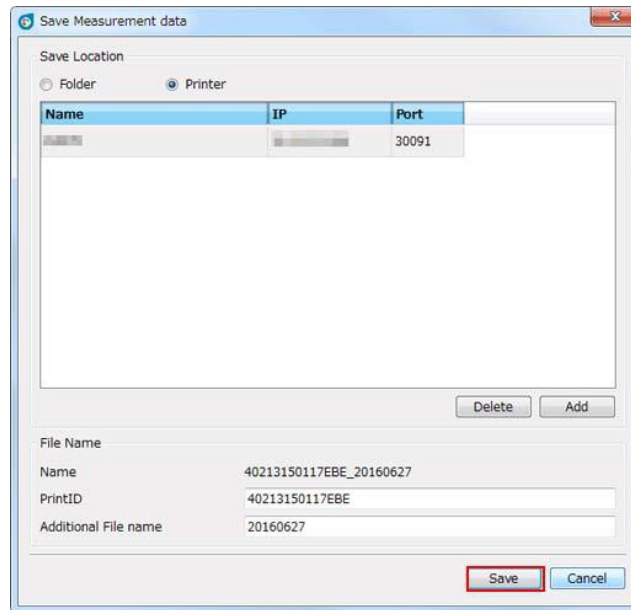


**24** Enter the information of the machine, and click [OK].



- [Printer Name]: Any name
- [Password]: Administrator password
- [IP Address]: The IP address of the machine
- [Port]: 30091

**25** Click [Save].



→ When registering measurement data (density balance adjustment value) on the machine, proceed to page 3-32.

### 3.6.5 Registering the adjusted value of the density balance in the machine

You can register the measured data (adjusted value of the density balance) saved in the USB memory or the computer on the network in the machine.

Place to save measured data	Operation
Measured data saved in the USB memory	Connect the USB memory device and register the data using the control panel of the main body. Refer to "○ Registering the measured data saved in the USB memory".
Measured data saved in the computer on the network	Send (upload) the measured data using Web Utilities from the Web browser and then register the data. Refer to "○ Registering the measured data saved in the computer on the network".

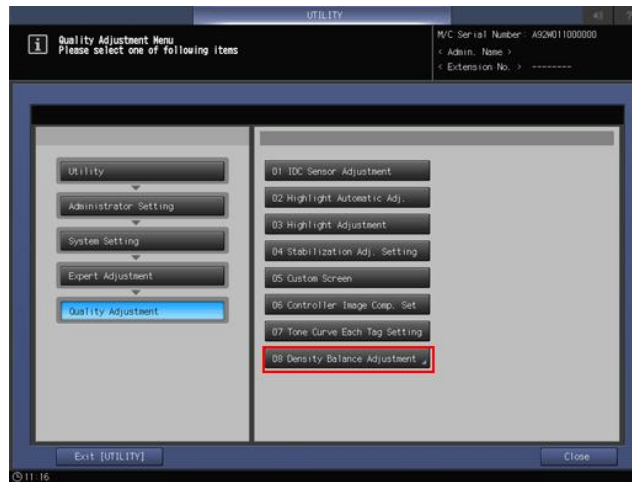
○ Registering the measured data saved in the USB memory

**1** On the **control panel** of the main body, press **Utility/Counter**.

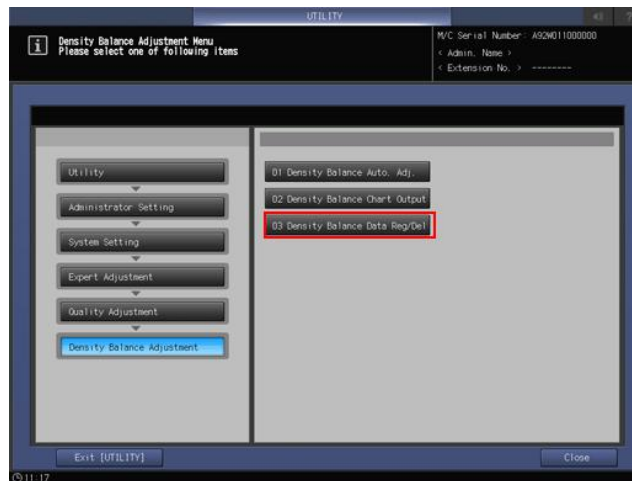


The [UTILITY] screen is displayed.

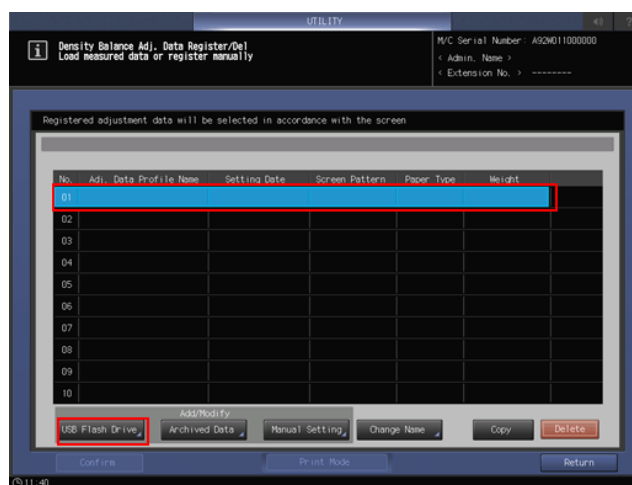
- 2 Press [Administrator Setting] - [System Setting] - [Expert Adjustment] - [Quality Adjustment] - [Density Balance Adjustment] in sequence.



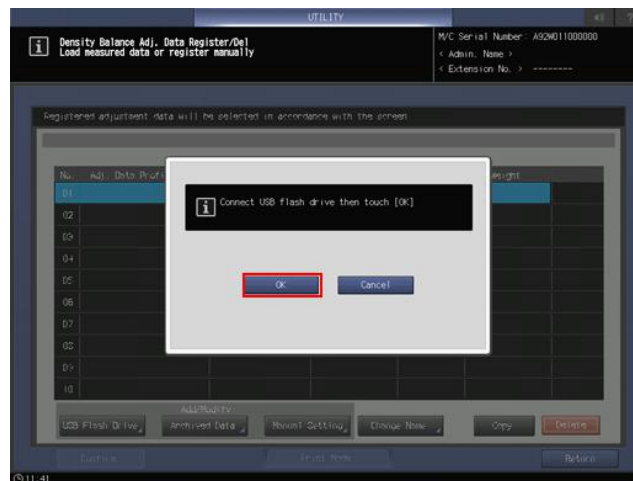
- 3 Press [Density Balance Data Reg/Del].



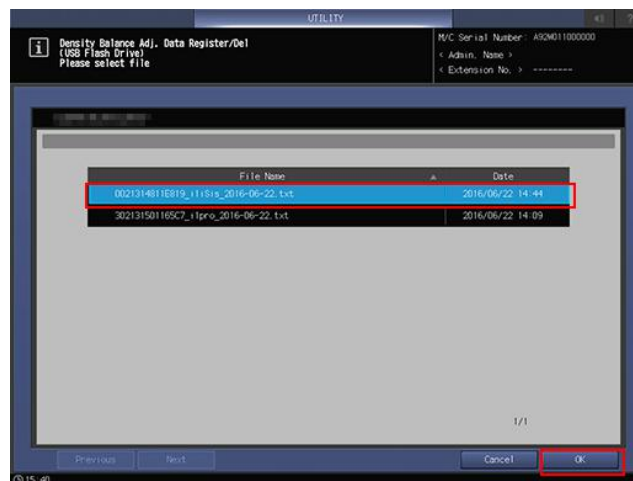
- 4 Select the number where the adjusted value is to be registered and press [USB Flash Drive].  
 → If you select the registered number, the adjusted value is overwritten.



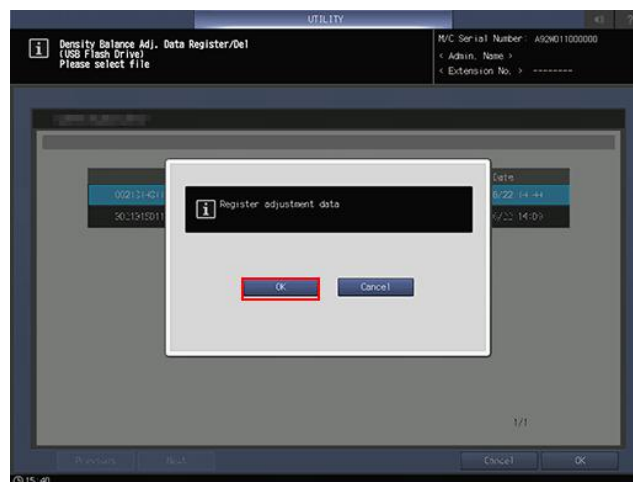
- 5 The following screen is displayed. Connect the USB memory where the measured data has been saved to the main body, and press [OK].



- 6 Select the file name of the measured data to be registered and press [OK].



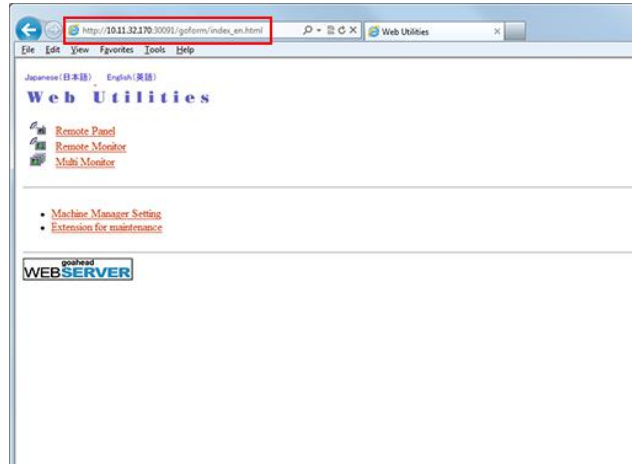
- 7 When the following screen is displayed, press [OK].



The adjusted value of the density balance is registered.

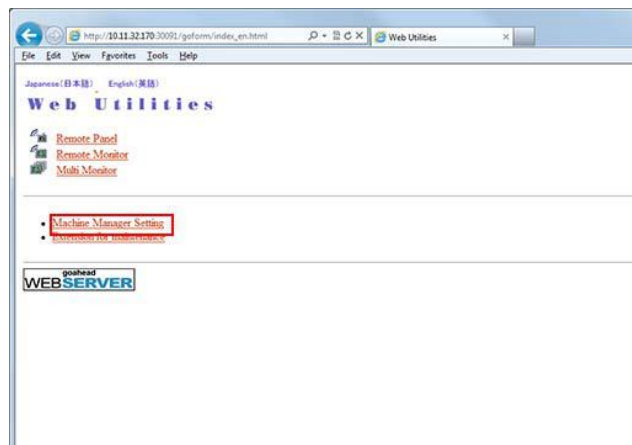
- Registering the measured data saved in the computer on the network

- 1 On the computer on the network where the measured data has been saved, open a Web browser.
  - It is recommended that you log in to Web Utilities from the computer where the measured data has been saved.
- 2 In the URL field, enter "http://IP address of the machine (or the host name):30091" and press the Enter key.
  - If the controller of EFI is implemented, ":30091" at the end of the IP address is unnecessary.

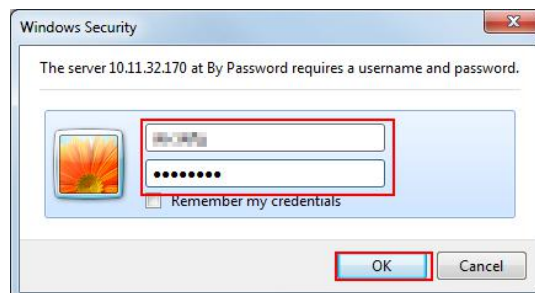


The main page of the Web Utilities is displayed.

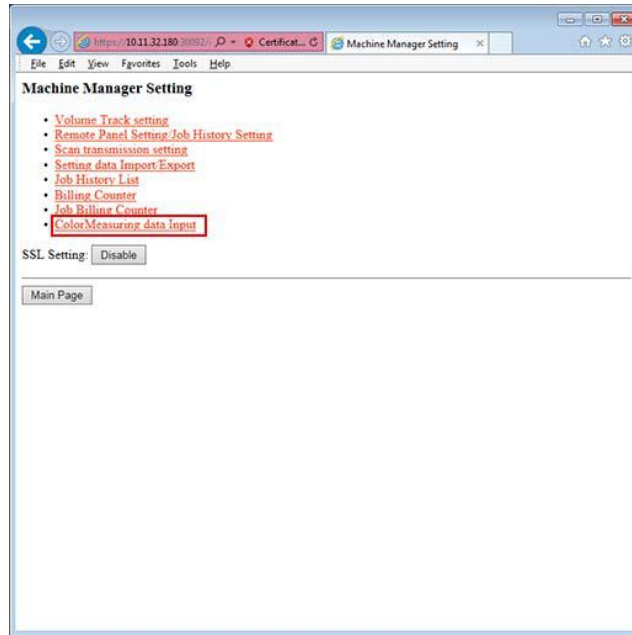
- 3 Click on [Machine Manager Setting].



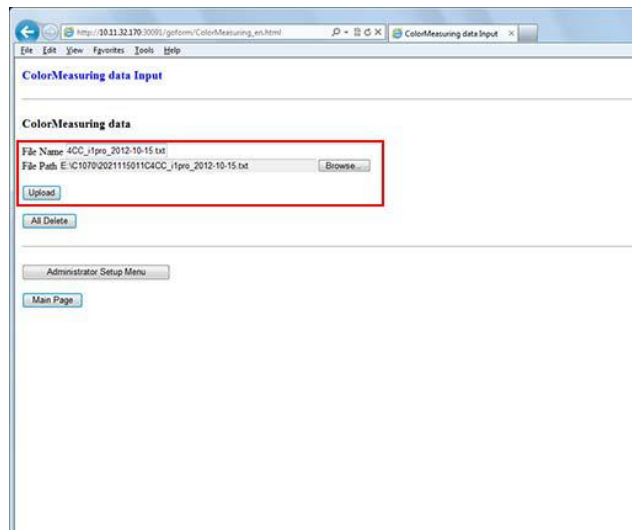
- 4 Enter the [User Name] and [Password] and click [OK].



- 5 Click on [Color Measuring data Input].



- 6 Specify the [File Name] and [File Path] and click [Upload].
- Enter the file name (Example: 2021115011C4CC\_i1pro\_2012-10-15.txt).
  - Click [Browse] of the [File Path] and select the measured data saved in the computer.

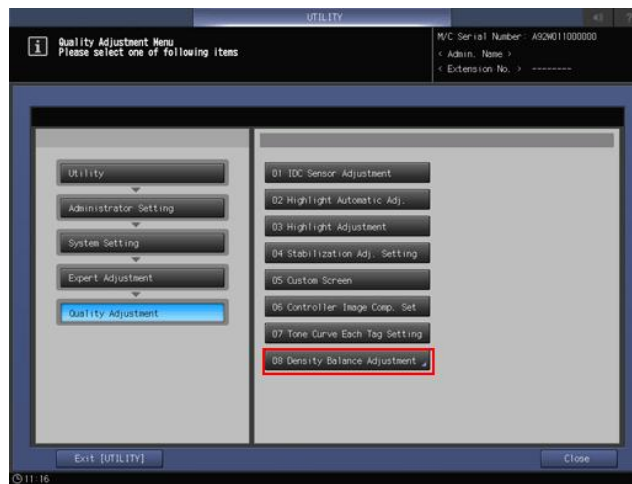


- 7 On the **control panel** of the main body, press **Utility/Counter**.

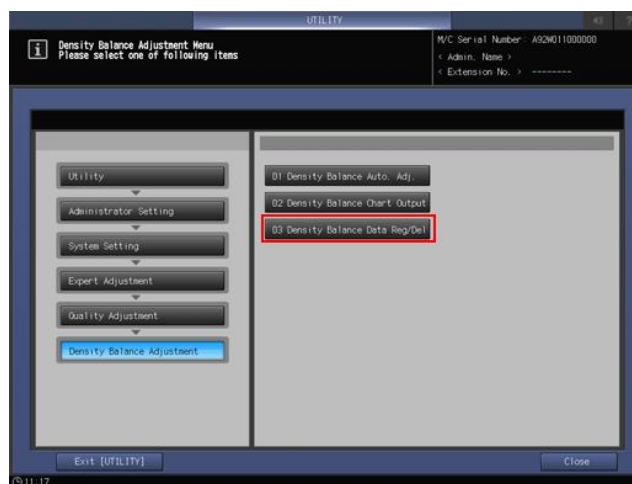


The [UTILITY] screen is displayed.

- 8 Press [Administrator Setting] - [System Setting] - [Expert Adjustment] - [Quality Adjustment] - [Density Balance Adjustment] in sequence.

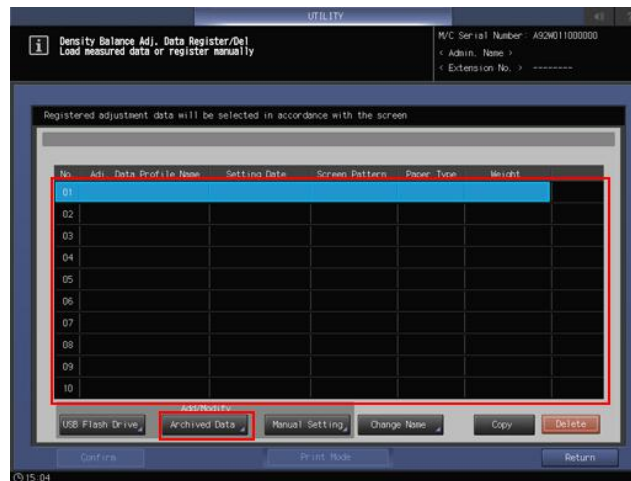


- 9 Press [Density Balance Data Reg/Del].

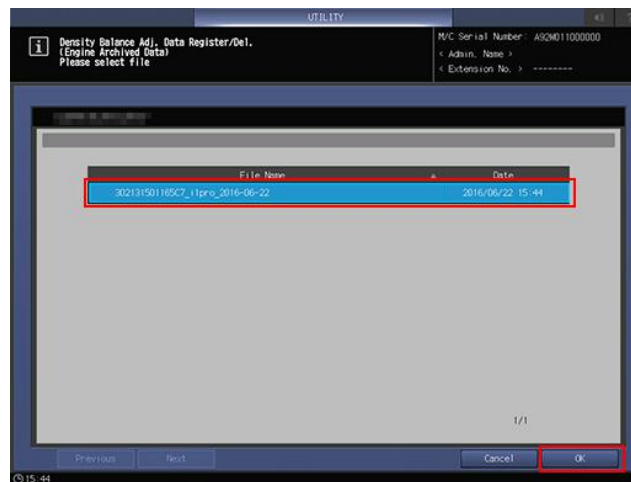




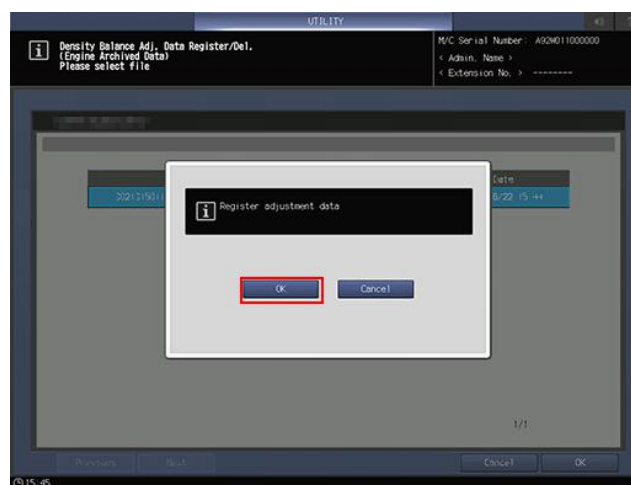
- 10** Select the number where the adjusted value is to be registered and press [Archived Data].  
 → If you select the registered number, the adjusted value is overwritten.



- 11** Select the file name of the measured data to be registered and press [OK].



- 12** When the following screen is displayed, press [OK].



The adjusted value of the density balance is registered.

### 3.6.6 [Density Balance Auto. Adj.]

This adjustment has the following three types depending on the system configuration.

Intelligent Quality Optimizer IQ-501	Paper Feed Unit PF-711	Device for adjustment
Mounted	Mounted	Intelligent Quality Optimizer IQ-501
	Not mounted	
Not mounted	Mounted	Scanner (Paper Feed Unit PF-711)
	Not mounted	Colorimeter

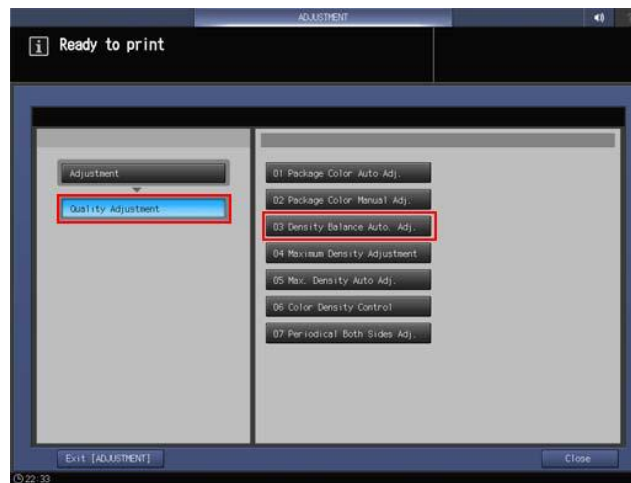
#### Tips

- When **Intelligent Quality Optimizer IQ-501** is mounted on the machine, the automatic adjustment is performed. However, to print test charts, select the appropriate screen.
- When **Intelligent Quality Optimizer IQ-501** and **Paper Feed Unit PF-711** are not mounted on the machine, measure output charts using your colorimeter and enter the measured values to make adjustments.

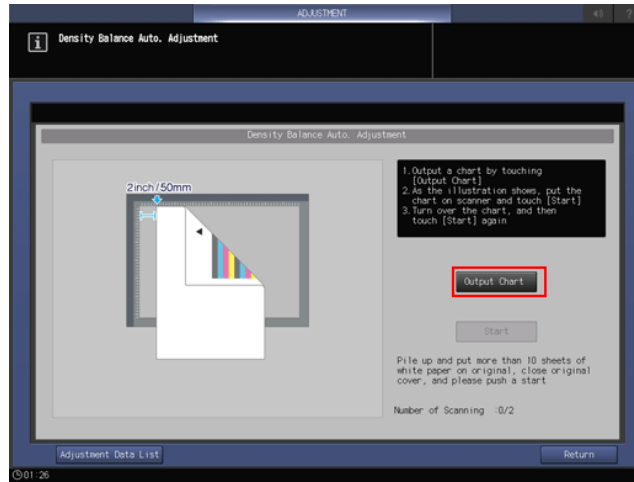
This section describes the adjustment procedure using the scanner of **Paper Feed Unit PF-711** when **Paper Feed Unit PF-711** is mounted on the machine without **Intelligent Quality Optimizer IQ-501**.

Output the density balance chart from the machine to carry out colorimetry using the scan function.

- 1 Press [Adjustment] on the [MACHINE] screen to display the [Adjustment Menu] screen.
- 2 Press [Quality Adjustment] and [Density Balance Auto Adj.] in sequence.



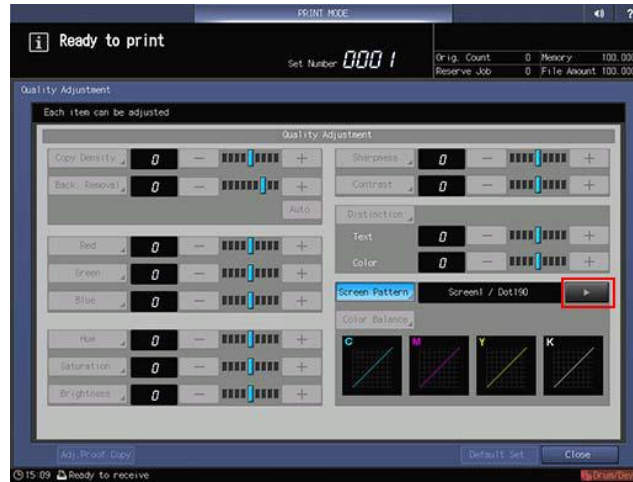
3 Press [Output Chart].



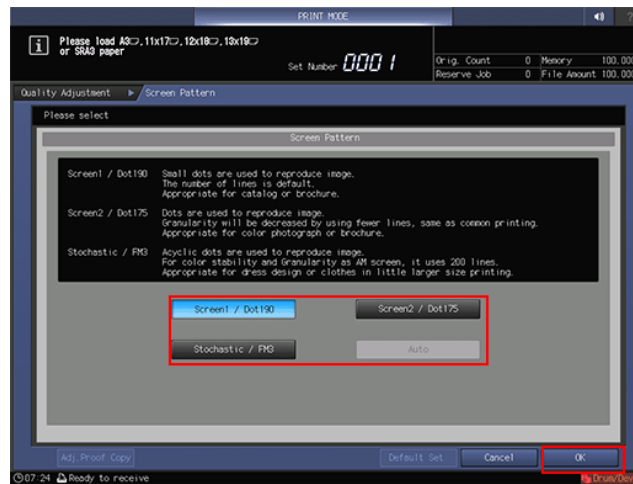
4 Press [Quality Adj.].



- 5 Press [▶] on the right side of [Screen Pattern] to display the desired screen.








- If necessary, you can press [Screen Pattern] to display the [Screen Pattern] screen and select any screen. Select a screen, and press [OK].



- Press [Close] on the [Quality Adjustment] screen.

## 6 Select a paper size for the chart.



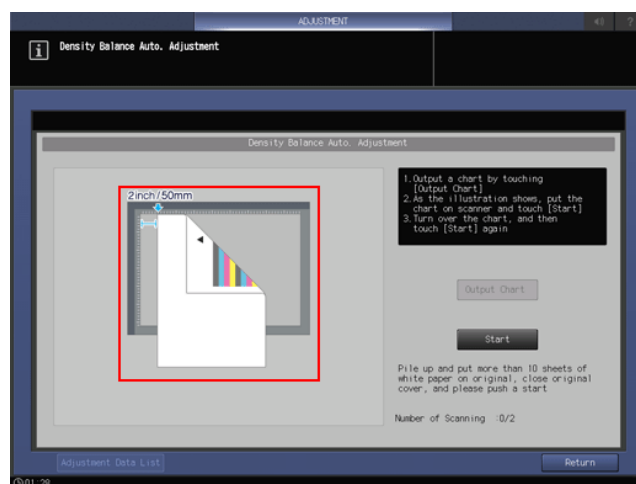
→ Load paper of A3 , 11 × 17 , 12 × 18 , 13 × 19 , or SRA3  into a tray, then select that tray button.

## 7 Press **Start** on the **control panel**.

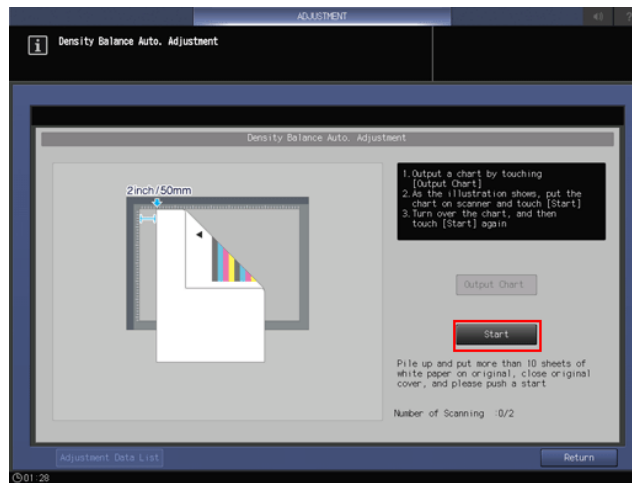
A test chart is printed, and the [Density Balance Auto. Adjustment] screen is displayed.

## 8 Load the output test chart on the **Original Glass** as shown in the example on the screen.

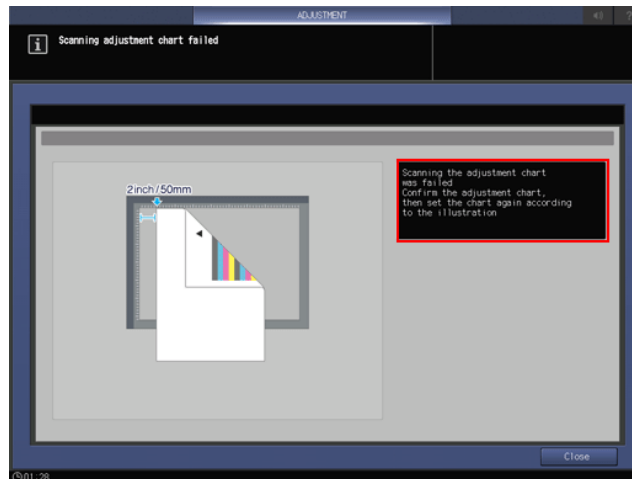
- Turn the arrow mark of the test chart to the back, then face the print side downward.
- Take the test chart away from the **vertical size guide** by 2 inches (5 cm), then push it against the **horizontal size guide** to load the test chart.
- Place about 10 sheets of blank copy paper on the test chart.
- Close the **ADF**.



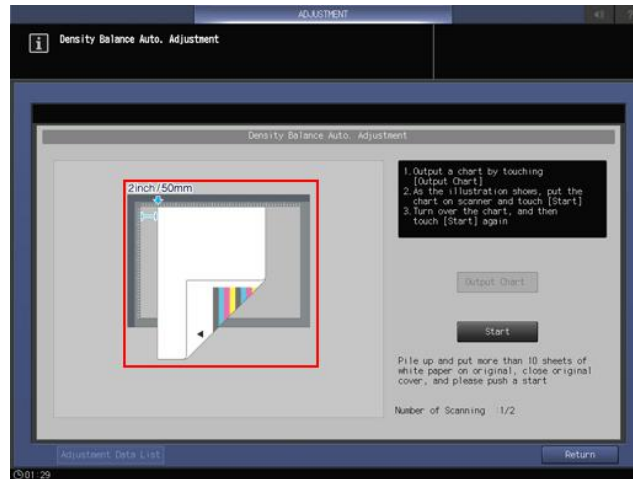
- 9 Press [Start] on the screen.  
The first scan is carried out.



- If an error is detected, the error message shown below is displayed. Referring to the displayed message, rectify the error.

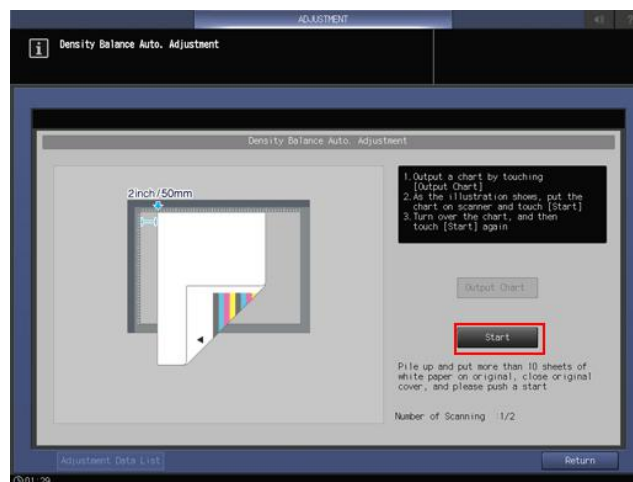


- 10** Reverse the top and bottom of the scanned test chart, then load it on the **Original Glass**.
- Turn the arrow mark of the test chart forward, then face the print side downward.
  - Take the test chart away from the **vertical size guide** by 2 inches (5 cm), then push it against the **horizontal size guide** to load the test chart.
  - Place about 10 sheets of blank copy paper on the test chart.
  - Close the **ADF**.



- 11** Press [Start] on the screen.

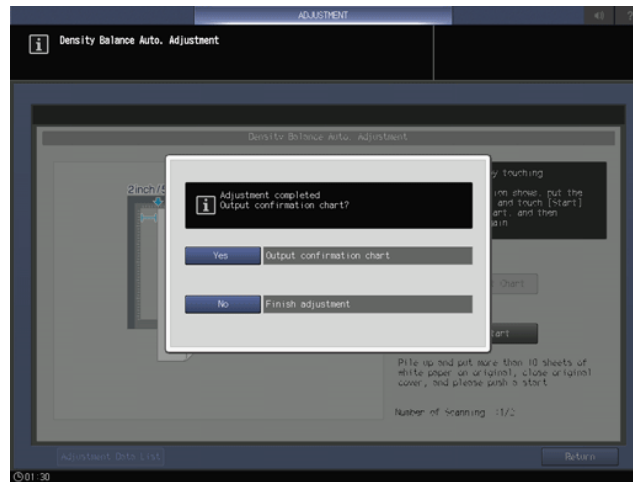
The second scan is carried out, and the density balance adjustment value is registered.



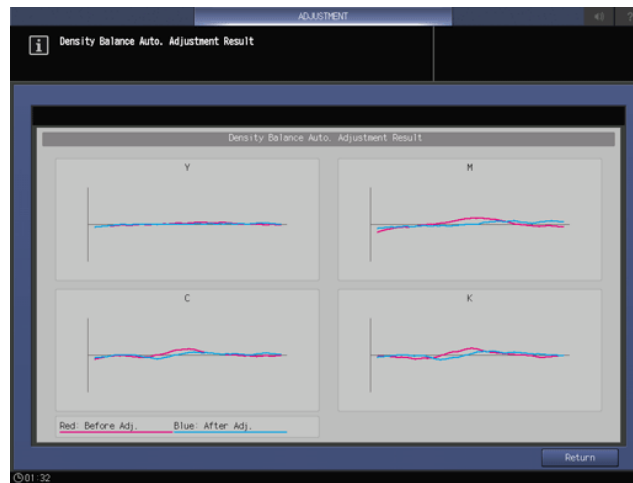
- 12** When the adjustment is completed normally, the adjustment value is automatically registered, and the screen shown below is displayed. Select whether to output the adjustment chart for confirmation purposes.

- The adjustment value is registered according to the following conditions.
  - When there is an idle registration:  
The adjustment value is registered as the lowest unused number.
  - When there is no idle registration:  
The adjustment value is overwritten to the value that matches the conditions below.
- If multiple values match the conditions, they are overwritten preferentially from the condition of a low number.
  - (1) Adjustment value of same screen, same paper type, same weight, and old date
  - (2) Adjustment value of same screen, same paper type, and old date
  - (3) Adjustment value of same screen and old date

## (4) Adjustment value of oldest date



- If [Yes] is selected, you can output a test chart.  
When the output chart is scanned according to the procedure, the [Density Balance Auto. Adjustment Result] screen is displayed while the unadjusted and adjusted values are indicated by graph.



- If [No] is selected, the adjustment value registration screen below is displayed.  
Press [Return] to return to the [Density Balance Auto. Adjustment] screen.

No.	Adj. Data Profile Name	Setting Date	Screen Pattern	Paper Type	Weight	
01	SON_12091544	2016/12/08 15:44	Dot190	Plain	351-400g/m2	Disable
02	SON_12091554	2016/12/08 15:54	Dot190	Plain	351-400g/m2	Enable
03	SON_12120130	2016/12/12 01:30	Dot190	Plain	61-91g/m2	Enable
04						
05						
06						
07						
08						
09						
10						



**13** Press [Return] to return to the [Quality Adjustment Menu] screen.

### 3.6.7 [Maximum Density Adjustment]

Adjust the maximum density for each of Y, M, C, and K colors.

Adjustment Range: -10 (Light) to +10 (Dark) for each of <Yellow>, <Magenta>, <Cyan>, and <Black>

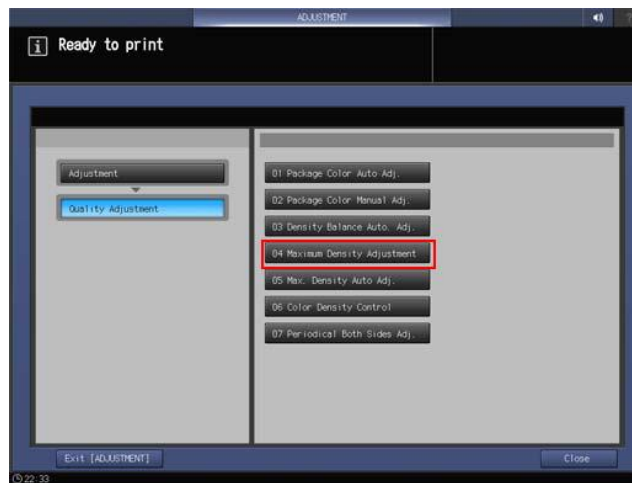
#### **NOTICE**

*The machine will carry out the Gamma Automatic Adjustment after you change the maximum density. When the Gamma Automatic Adjustment is completed, proceed to the calibration with the Image controller.*

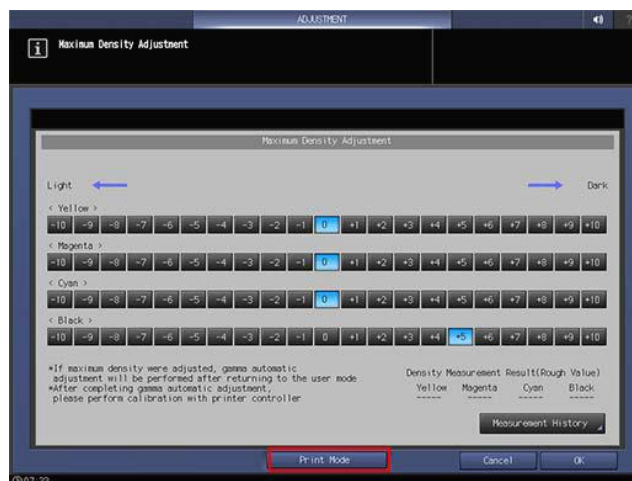
*We recommend that you to first make the maximum density auto adjustment.*

*Be sure to perform Color Density Manual Control after changing the maximum density.*

- 1** Press [Adjustment] on the [MACHINE] screen to display the [Adjustment Menu] screen.
- 2** Press [Quality Adjustment] and [Maximum Density Adjustment] in sequence.



- 3** Press [Print Mode].



- 4** Select the paper tray used for adjustment, then press **Start** on the **control panel**.

A chart applied the Screen 1 (Dot190 Recommended) is Output.

The charts are measured using the density sensor of **Relay Unit RU-511** and delivered into the output tray.

- 5** After outputting the charts, the screen returns to the Maximum Density Adjustment screen and the measurement result is displayed under "Density Measurement Result (Rough Value)" in the lower right of the screen.
- Press [Measurement History] to view the measurement history (up to 30 results).  
Press [Switch Display] on the [Maximum Density Measurement History] screen to change the items in the history list. (Display 1: Measurement Date and Measured Value for each color, Display 2: Paper Type and Set Value for each color.)
- 6** Change the adjustment value for each color to suit the measurement result.
- The measurement result is lower than the desired density.: Change the adjustment value to the positive (+) side.
  - The measurement result is higher than the desired density.: Change the adjustment value to the negative (-) side.
- 7** Repeat steps 3 to 6 until the desired result is obtained.
- 8** Press [OK] to complete the setting.
- To cancel the change, press [Cancel]. In either case, the screen returns to the [Quality Adjustment Menu] screen.

**NOTICE**

*If you press [Cancel], the maximum density measurement result is not saved.*

**3.6.8 [Max. Density Auto Adj.]**

The Maximum Density Auto Adjustment is:

- When **Intelligent Quality Optimizer IQ-501** is mounted on the machine, automatic adjustment is carried out using **Intelligent Quality Optimizer IQ-501**.
- When **Intelligent Quality Optimizer IQ-501** is not mounted on the machine, adjustments are made using **Relay Unit RU-511**.

This section describes how to make adjustments using **Relay Unit RU-511** when the **Intelligent Quality Optimizer IQ-501** is not mounted on the machine.

Automatically adjust the maximum density for each of Y, M, C, and K colors by scanning printed charts with the color sensor density mounted on **Relay Unit RU-511**.

**NOTICE**

*To activate this function, you need to ask a service engineer in advance to set up the desired maximum density value (desired density). For details, contact your service representative.*

*Be sure to use the paper for registering a desired density to perform Max. Density Auto Adj.. With an unregistered paper, the adjustment cannot be performed correctly.*

*If you want to perform automatic adjustment using paper other than a registered paper, you need to register a desired density again. For details, contact your service representative.*

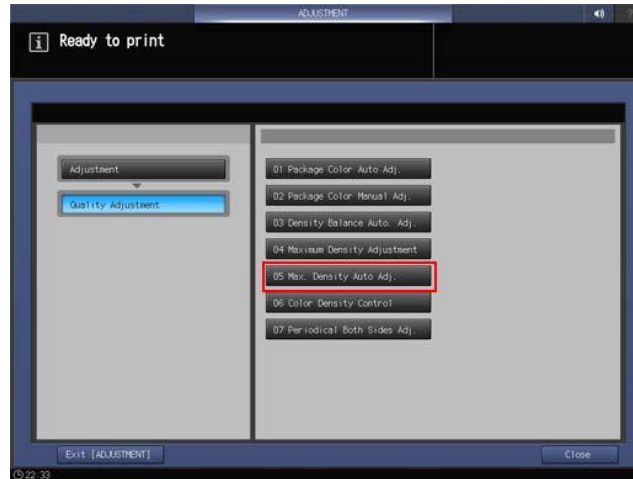
*When this adjustment is conducted, proceed to the calibration with the Image controller.*

*Be sure to perform Color Density Manual Control after changing the maximum density.*

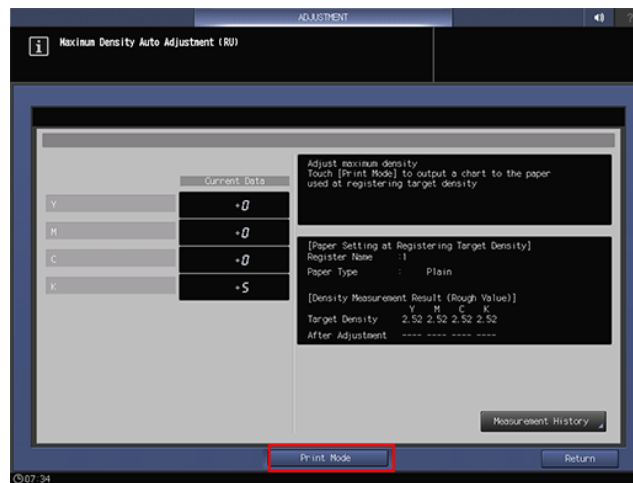
 **Tips**

- After Max. Density Auto Adj., the paper profile used for automatic adjustment changes to the one used for registering a desired density; the profile does not return to the one before adjustment. You can ask a service engineer to specify the setting so that after this adjustment the paper profile automatically returns to the one before adjustment. For details, contact your service representative.
  - [Max. Density Auto Adj. (RU)] is displayed instead when **Intelligent Quality Optimizer IQ-501** is not mounted on the machine.
- 1** Press [Adjustment] on the [MACHINE] screen to display the [Adjustment Menu] screen.

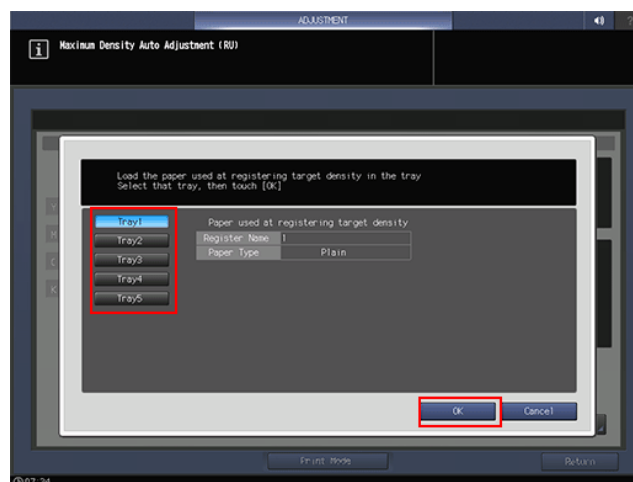
- 2 Press [Quality Adjustment] and [Max. Density Auto Adj.] in sequence.



- 3 Press [Print Mode].



- 4 Load paper used to register a desired density in a tray.  
The paper profile for the tray automatically changes to the one used for registering a desired density.
- 5 Select the tray in which you load paper, and then press [OK].



**6** Press **Start** on the **control panel**.

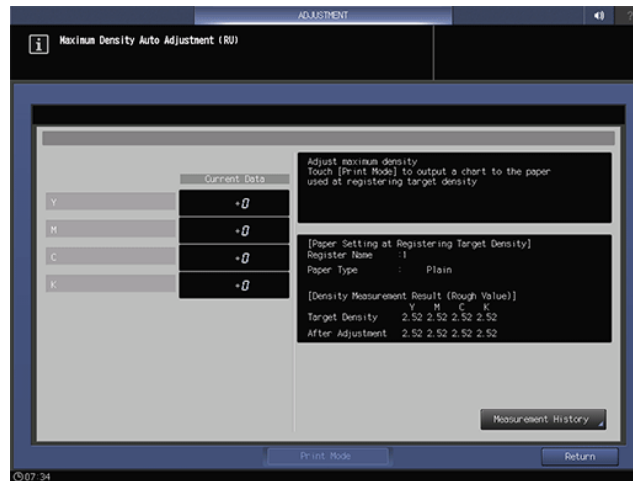
A chart applied the Screen 1 (Dot190 Recommended) is Output.

The charts are measured using the density sensor of **Relay Unit RU-511** and delivered into the output tray.

→ You cannot stop the adjustment until all charts are completely printed.

**7** After the adjustment is completed, the screen returns to the [Maximum Density Auto Adjustment (RU)] screen.

The measurement result will be displayed on [After Adjustment].



The result of automatic adjustment is displayed under [Current Data]. These values are reflected on page 3-46.

→ Press [Measurement History] to view the measurement history (up to 30 results).

→ Press [Switch Display] on the [Maximum Density Measurement History] screen to change the items in the history list. (Display 1: Measurement Date and Measured Value for each color, Display 2: Paper Type and Set Value for each color.)

**8** Press [Return] to return to the [Quality Adjustment Menu] screen.

Note that the paper profile for the tray remains in the one used for registering a desired density.

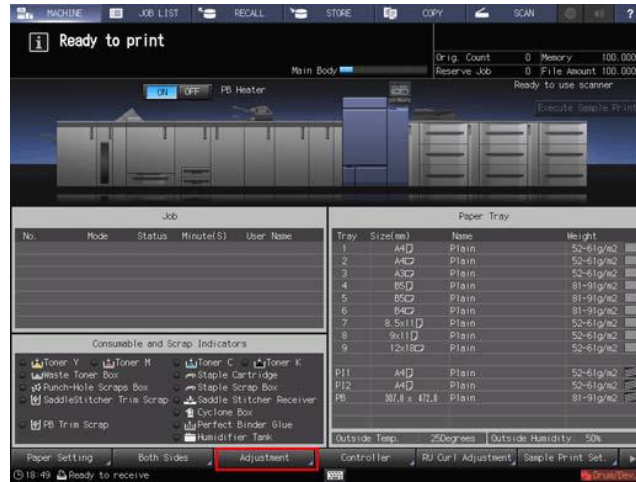
→ To perform the fine adjustment after checking the result of automatic adjustment, manually adjust each item in Maximum Density Adjustment above.

**3.6.9 Checking the Color Density Control Setting**

You can enable the color density control and set the execution timing, etc.

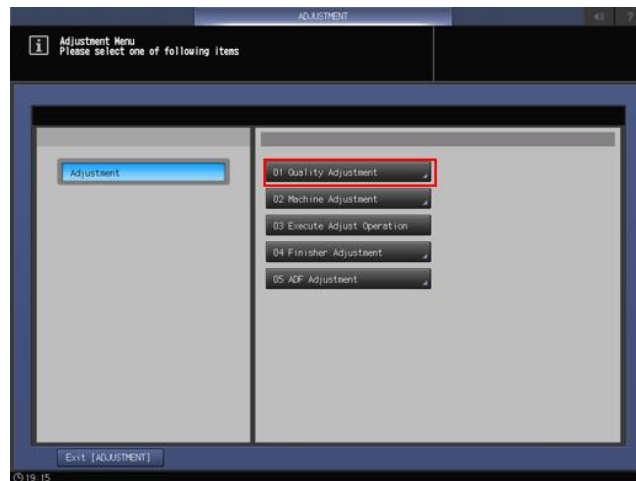
When using the color density control function (Adjustment of color sensor for each paper type / Color density manual control), always set the [Use Color Density Control] to [ON].

- 1 On the **touch panel** of the main body, press [Adjustment] on the [MACHINE] screen.

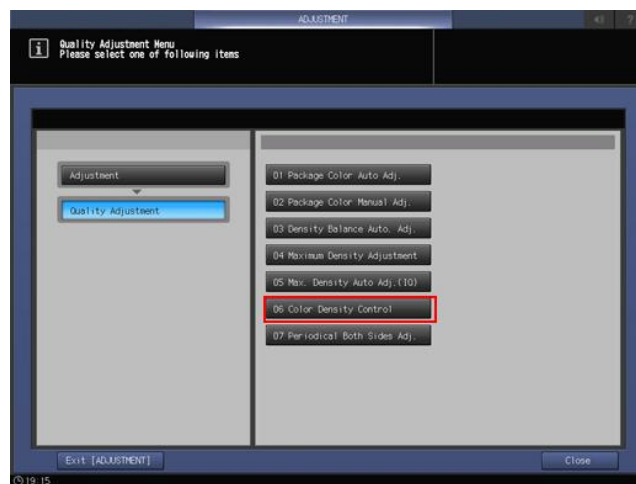


The [Adjustment Menu] is displayed.

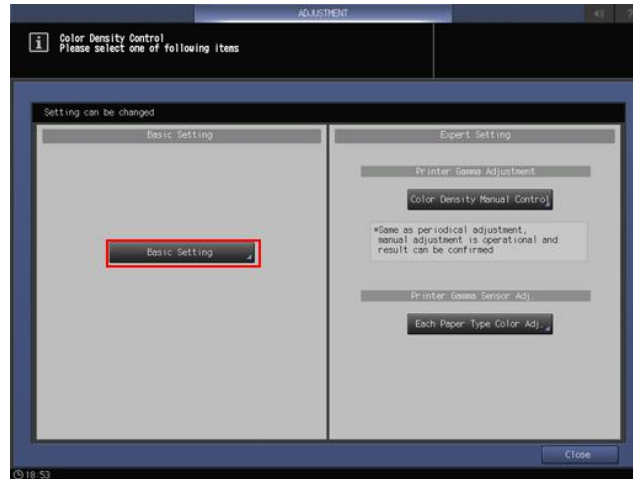
- 2 Press [Quality Adjustment] on the [Adjustment Menu].



- 3 Press [Color Density Control].



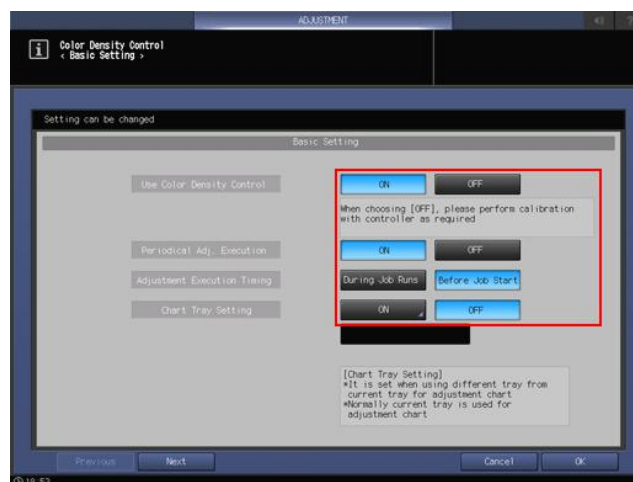
#### 4 Press [Basic Setting].



#### 5 Check that each item is set as shown below.

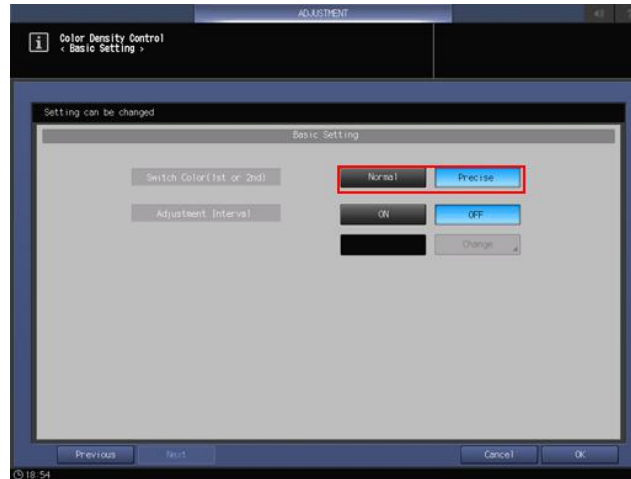
Item	Description
[Use Color Density Control]	[ON]
[Periodical Adj. Execution]	[ON]
[Adjustment Execution Timing]	[Before Job Start] (Available when you want to prioritize the hue standardization in a single job) [During Job Runs] (Available when you want to prioritize the hue standardization among multiple jobs)
[Chart Tray Setting:]	[OFF]

- To automatically perform the density control with the RU option (**Relay Unit RU-511**), set the [Periodical Adj. Execution] to [ON].  
This setting is not required when **Intelligent Quality Optimizer IQ-501** is installed on the machine.



#### 6 Press [Next].

- 7** When **Intelligent Quality Optimizer IQ-501** is not installed on the machine, check that [Switch Color(1st or 2nd)] is set as shown below if necessary.
- To prioritize the image quality: [Precise]  
Adjust both the primary colors (CMYK) and secondary colors (RGB).
  - To reduce the number of sheets to be used for the color density control: [Normal]  
Adjust only the primary colors (CMYK).



When **Intelligent Quality Optimizer IQ-501** is mounted on the machine, this option is always set to [Precise].

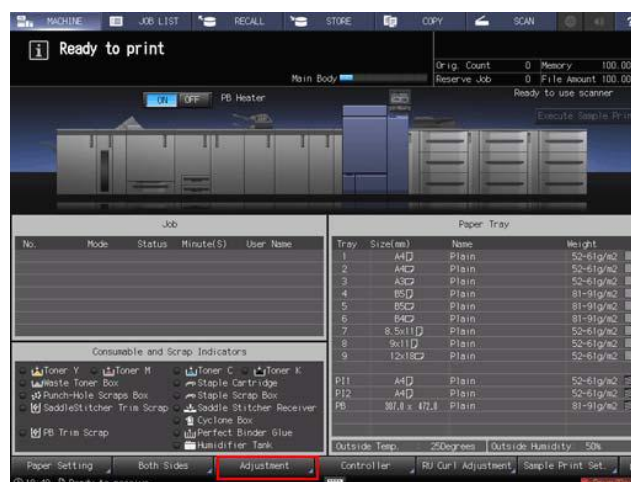
- 8** Press [OK].
- 9** Press [Close].
- 10** Press [Exit [ADJUSTMENT]].

The auto adjustment is set up. A chart is printed out periodically, and calibration is executed automatically.

### 3.6.10 [Color Density Manual Control]

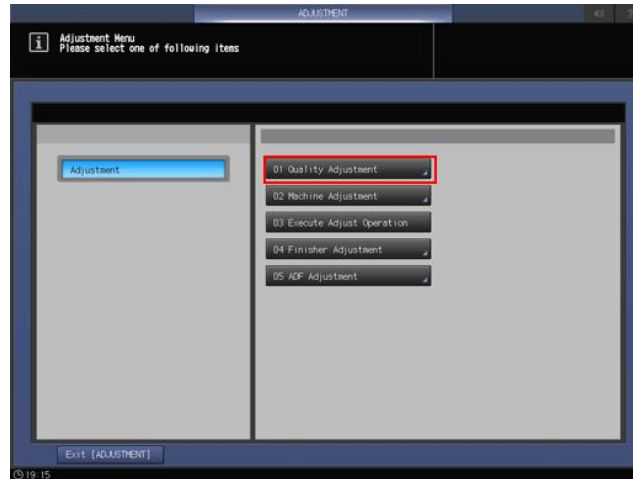
You can manually adjust the color density.

- 1** On the **touch panel** of the main body, press [Adjustment] on the [MACHINE] screen.

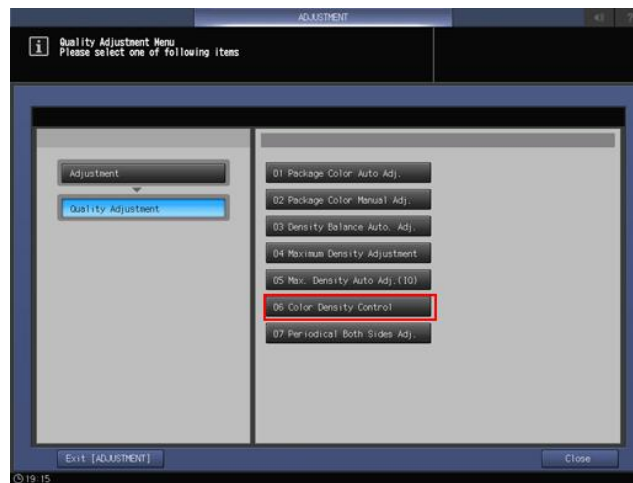


The [Adjustment Menu] is displayed.

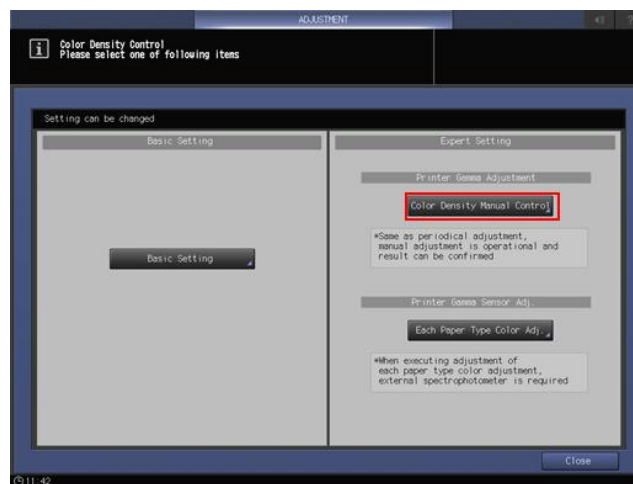
- 2 Press [Quality Adjustment] on the [Adjustment Menu].



- 3 Press [Color Density Control].

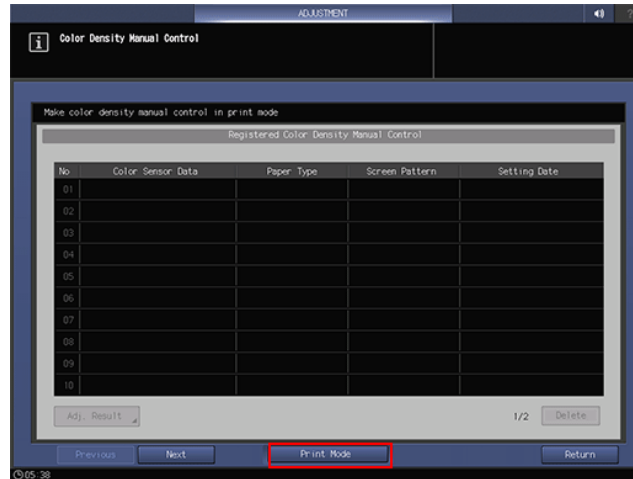


- 4 Press the [Color Density Manual Control] of [Expert Setting].

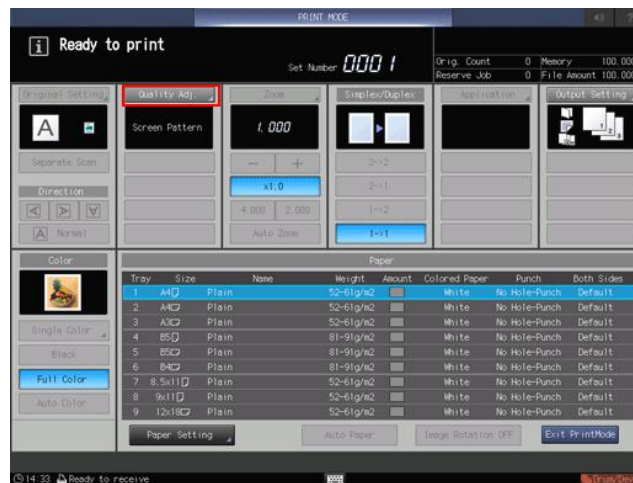





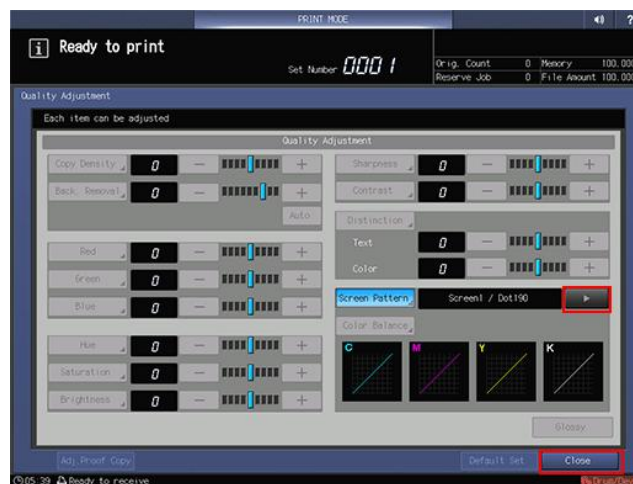
- 5 Press [Print Mode].



- 6 On the PRINT MODE screen, press [Quality Adj.].



- 7 Press  of [Screen Pattern]. After the selection, press [Close].



- 8** After selecting the tray on the PRINT MODE screen, press **Start** on the **control panel**.  
 → To set the output tray, press [Output Setting] at the upper right of the PRINT MODE screen.



- 9** When the chart is output, the manual control is completed.

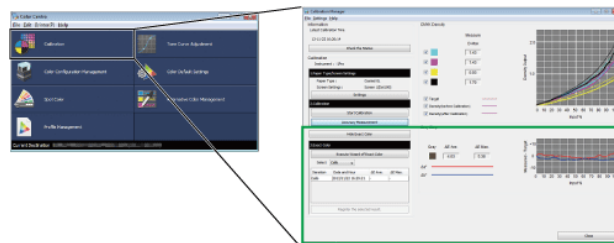
### 3.6.11 About Exact Color calibration

In addition to the regular controller calibration, measure the accuracy and check the Gray Step (gray balance) measurement result as necessary. Based on the color difference  $\Delta E$  for gray color standard state in the color space, execute the advanced controller calibration (Exact Color) wizard as necessary.

The following two methods are available to perform Exact Color.

- Manual adjustment by using Color Centro
- Automatic adjustment by using the **touch panel**
- Meaning and Purpose of Advanced Controller Calibration (Exact Color)

While the regular controller calibration adjusts the output density of gradation for each C, M, Y, and K colors, the advanced controller calibration (Exact Color) adjusts mixed colors (mixture of 2 or 3 colors and gray balance) for enhanced color reproduction accuracy.



- When to perform
  - Any time (If the accuracy measurement result presented a greater  $\Delta E$  value (color difference), etc. than the preferred value)
- Precautions
  - To reproduce stable colors, make other image quality adjustments as necessary, such as when changing screens or papers or when hue is important. For details, refer to page 3-6, page 3-4, and page 3-3.
  - If the advanced controller calibration (Exact Color), page 3-6, page 3-4, or page 3-3 does not improve color stability, creating a profile may resolve the problem.
- Intended Environment

Operating system	Windows 7
Application	Color Centro 2.1
Image Controller	<b>Image Controller IC-604</b>
Color Density Control	Off
Colorimeter	i1Pro
Paper type and thickness	Coated GL (A3), 128 g/m <sup>2</sup> / 33 lb Bond

\* The sample screen may be different from the actual display depending on your system environment and application version/revision.

○Workflow

**Loading and Registering the Paper (Coated GL)**



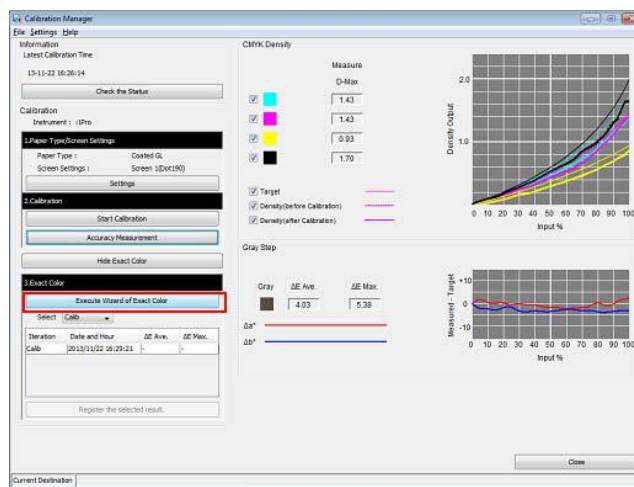
**a Performing Exact Color: Color Centro (page 3-56)**

**b Performing Exact Color: Touch panel (page 3-60)**

**Executing Exact Color: Color Centro**

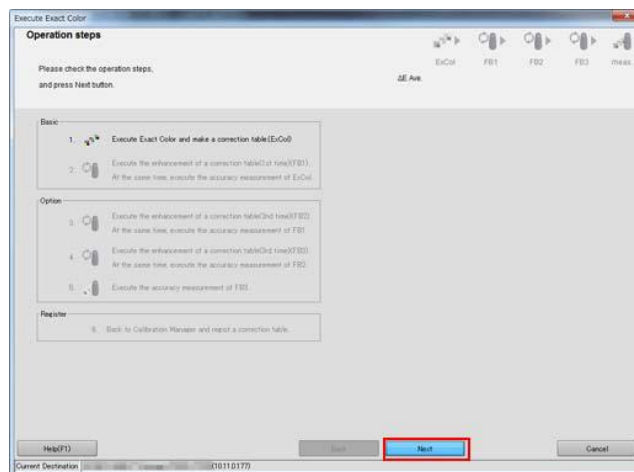
By following the wizard, you can create a correction table with the Exact Color function and apply the correction table as feedback to the controller for enhanced color reproduction accuracy.

- 1 On the [Calibration Manager] screen, click [Execute Wizard of Exact Color] under [3. Exact Color].



The wizard for executing the Exact Color function starts and displays the [Operation steps] screen.

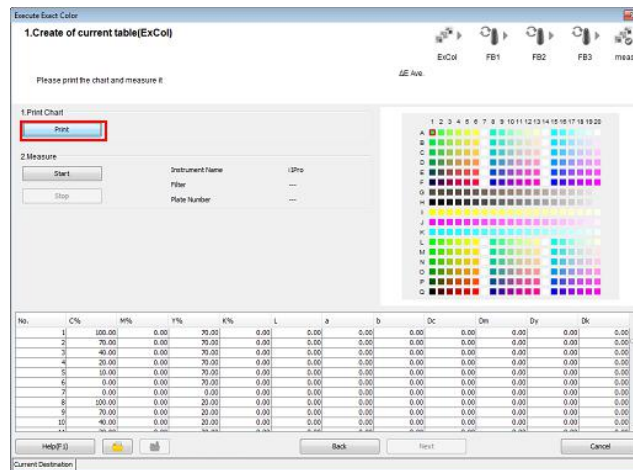
- 2 On the [Operation steps] screen, click [Next].



The [1. Create of current table(ExCol)] screen is displayed.

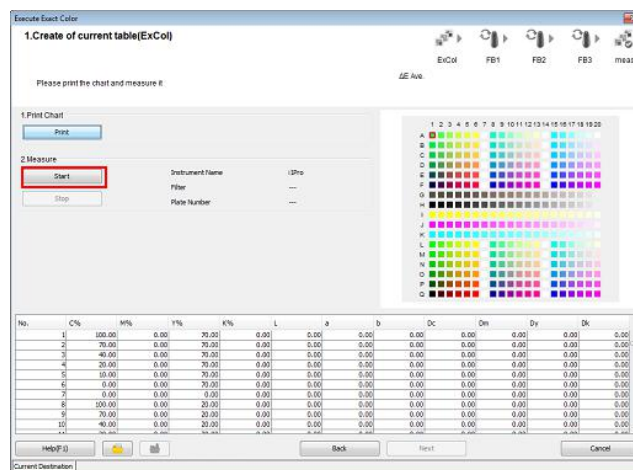
## 3 Click [Print].

Print the color chart that is to be measured using the instrument.

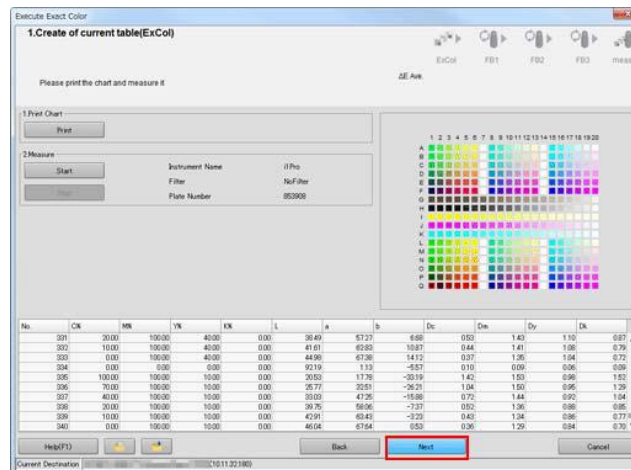


A test chart is printed.

## 4 Click [Start].

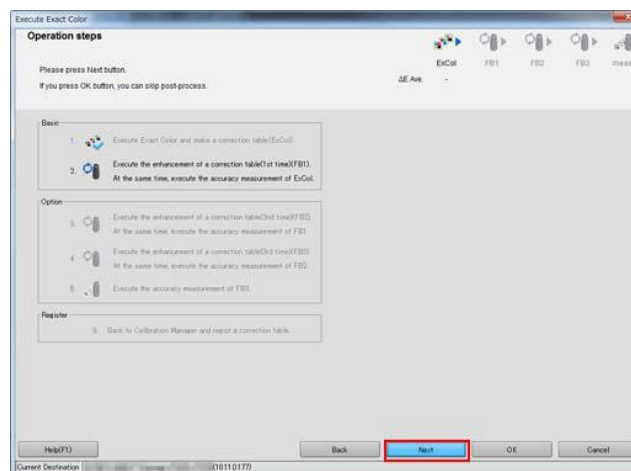


- 5 Measure the chart using the instrument. After you finish the chart measurement, click [Next].  
Example: Measurement is performed using i1Pro.



After the message, [Calculating] is displayed, the [Operation steps] screen is displayed.

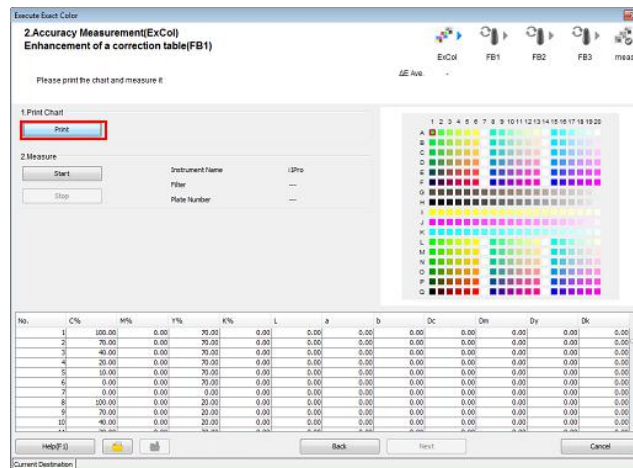
- 6 On the [Operation steps] screen, click [Next].



The [2. Accuracy Measurement(ExCol) Enhancement of a correction table(FB1)] screen is displayed.

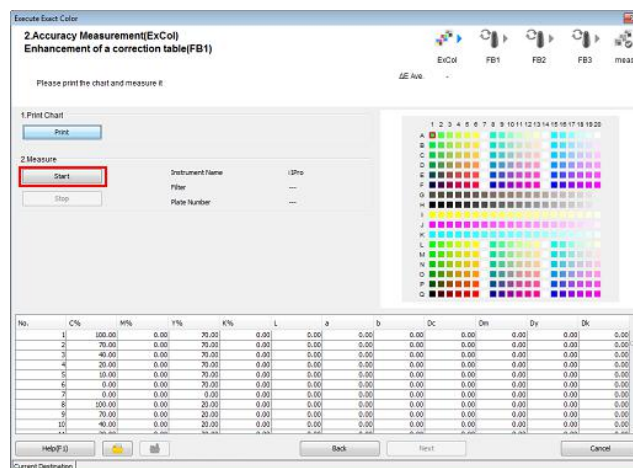
## 7 Click [Print].

Print the color chart that is to be measured using the instrument.

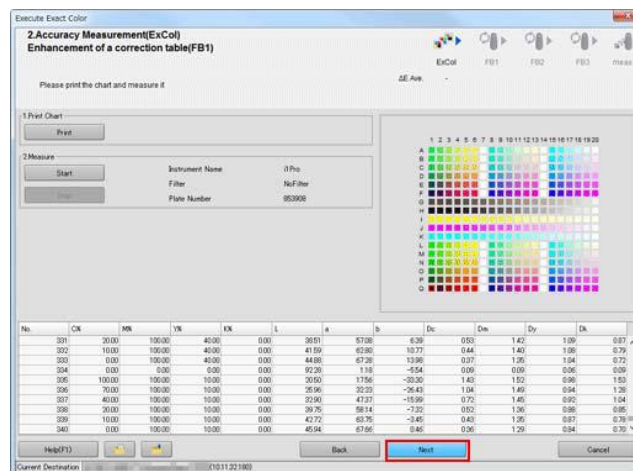


A test chart is printed.

## 8 Click [Start].

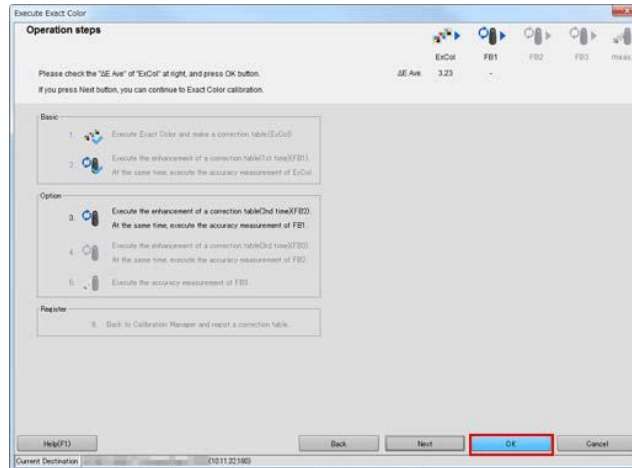


## 9 Measure the chart using the instrument. After you finish the chart measurement, click [Next].

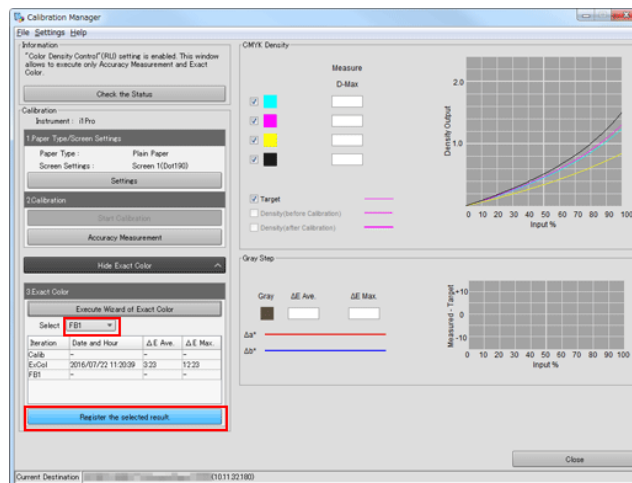


The [Operation steps] screen is displayed.

10 Click [OK].

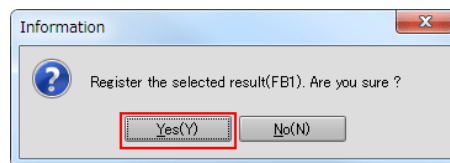


11 On the [Calibration Manager] screen, select the measurement data and check the graphs. After selecting the data to be registered, click [Register the selected result].



→ By registering the acquired calibration data in the image controller, this data can be applied when printing.

12 Click [Yes] on the [Information] screen.

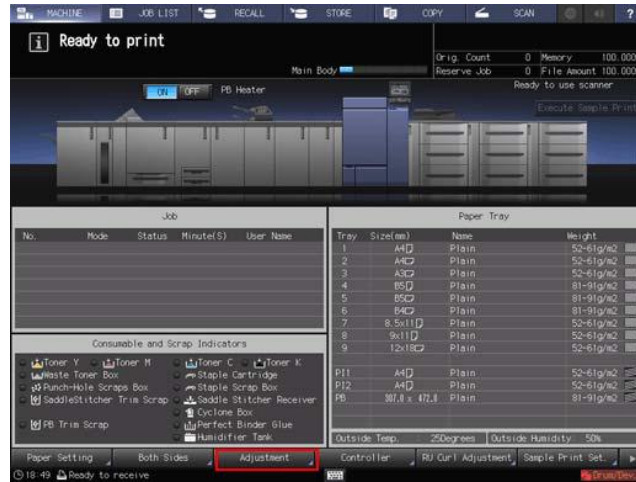


The calibration table is registered in the image controller.

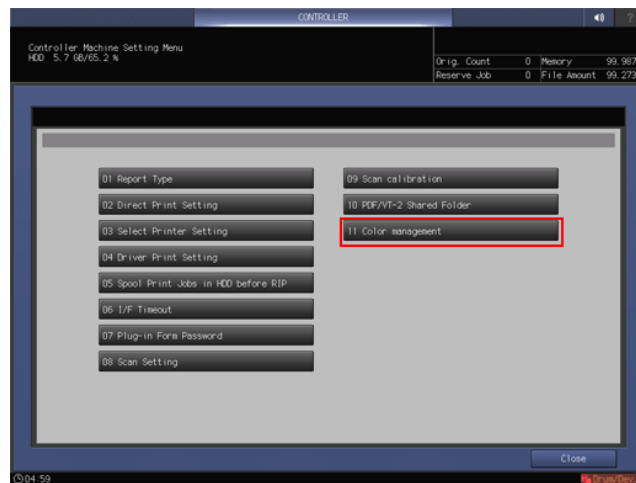
## Executing Exact Color: Touch panel

To use this function, install **Intelligent Quality Optimizer IQ-501**.

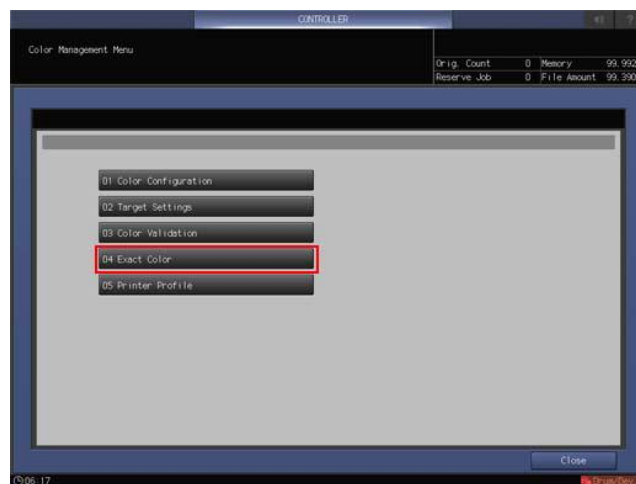
## 1 Press [Controller].



## 2 Press [Color management].

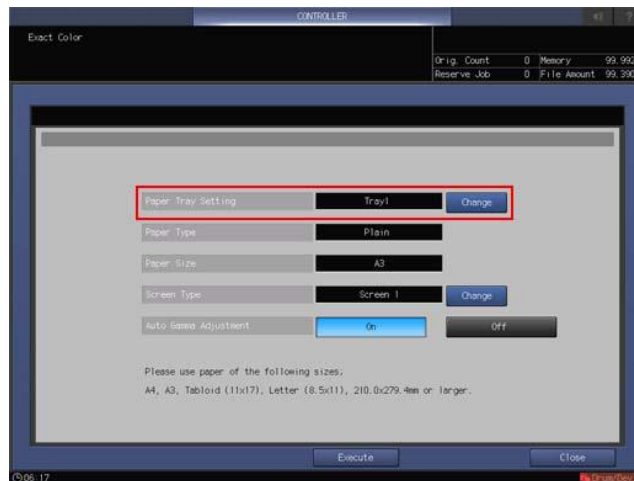


## 3 Press [Exact Color].

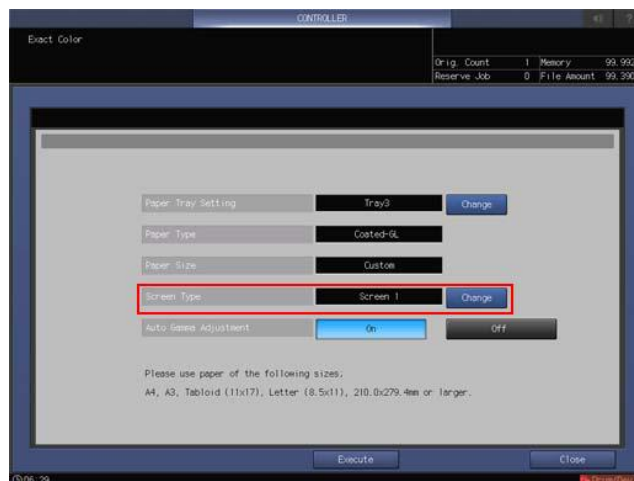




- 4** Press [Change] in [Paper Tray Setting], and then select a tray.  
To appropriately print a chart, select a tray that has the appropriate size of paper.



- 5** Press [Change] of [Screen Type], and then select a screen.  
If you select [Custom Screen], the custom screen setting is displayed.



- 6** Press [Execute].  
[Controller] flashes in red during execution.  
A chart is printed up to 5 times.  
When processing is completed, a message is displayed.
- 7** Press [Close].  
The result is displayed.
- 8** Press [OK].

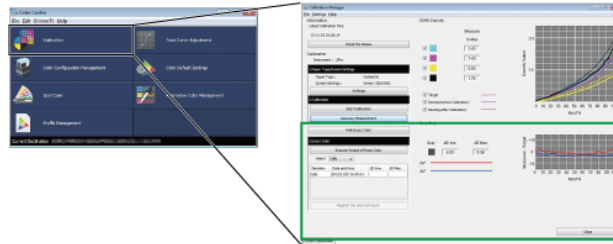
### 3.6.12 About G7 Calibration

In addition to the regular controller calibration, measure the accuracy and check the Gray Step (gray balance) measurement result as necessary. Based on the values for gray color standard state, execute the advanced controller calibration (G7) as necessary.

The following two methods are available to perform G7 Calibration.

- Manual adjustment by using Color Centro
- Automatic adjustment by using the **touch panel**
- Meaning and Purpose of Advanced Controller Calibration

While the regular controller calibration adjusts the output density of C, M, Y, and K colors, the advanced controller calibration uses primary colors (C, M, Y, and K) as a one-dimensional curve and adjusts gray balance for enhanced color reproduction accuracy.



Exact Color is the default setting in Color Centro. When Color Centro is set to Exact Color, G7 calibration cannot be added and used side-by-side. When you want to change Exact Color to G7 calibration, contact your service representative.

- When to perform
  - Any time (If the accuracy measurement result presented a greater  $\Delta Ch$  value (saturation difference), etc. than the preferred value)
- Precautions
  - To reproduce stable colors, make other image quality adjustments as necessary, such as when changing screens or papers or when hue is important. For details, refer to page 3-6, page 3-4, and page 3-3.
  - If the advanced controller calibration (G7), page 3-6, page 3-4, or page 3-3 does not improve color stability, creating a profile may resolve the problem.
- Intended Environment

Operating system	Windows 7
Application	Color Centro 2.1
Image Controller	<b>Image Controller IC-604</b>
Color Density Control	Off
Colorimeter	i1Pro
Paper type and thickness	Coated GL (A3), 128 g/m <sup>2</sup> / 33 lb Bond

\* The sample screen may be different from the actual display depending on your system environment and application version/revision.

- Workflow

#### Loading and Registering the Paper (Coated GL)

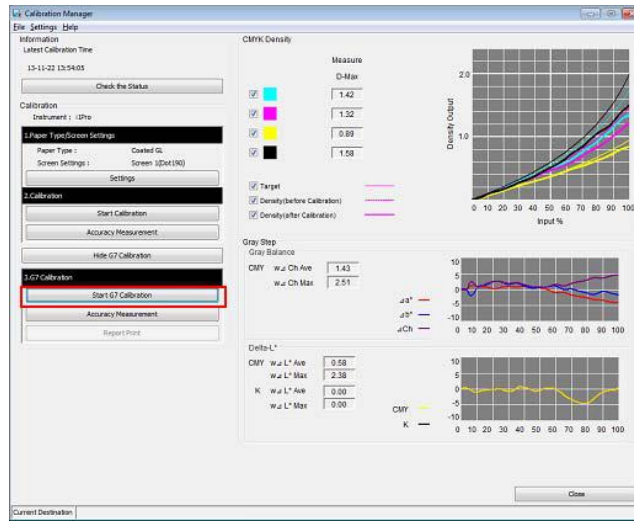


- a Performing G7 Calibration: Color Centro (page 3-64)**
- b Performing G7 Calibration: Touch panel (page 3-68)**

## Executing G7 Calibration: Color Centro

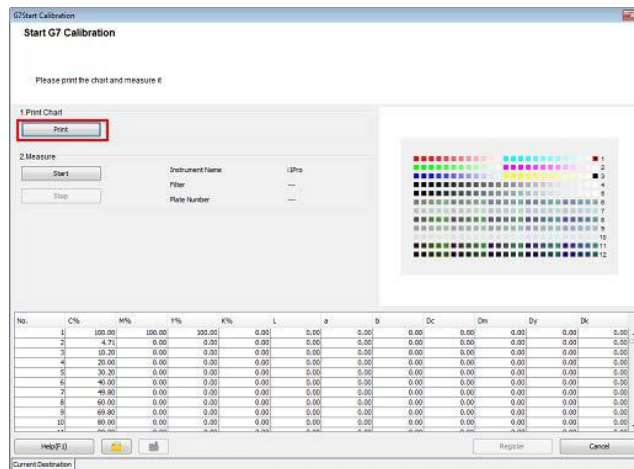
By executing the G7 calibration, you can apply the correction to the controller for enhanced color reproduction accuracy.

- 1 On the [Calibration Manager] screen, click [Start G7 Calibration] under [3. G7 Calibration].



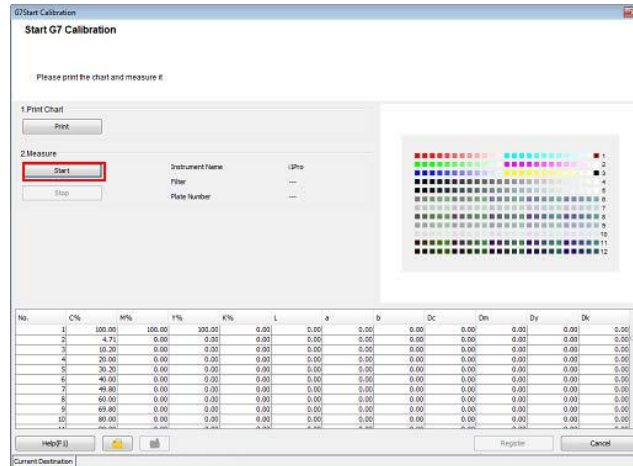
The [Start G7 Calibration] screen is displayed.

- 2 Click [Print].  
Print the color chart that is to be measured using the instrument.

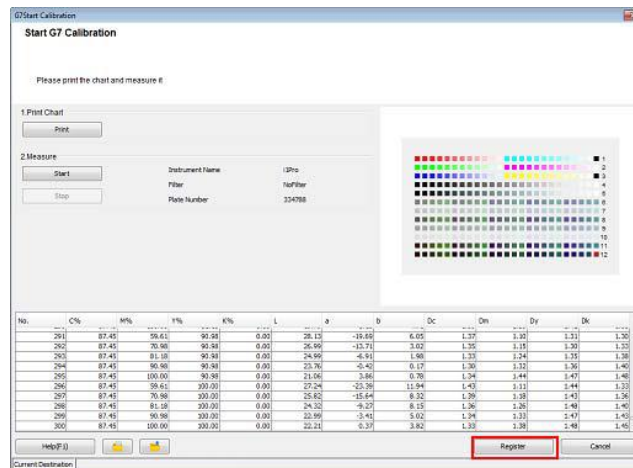


A test chart is printed.

### 3 Click [Start].

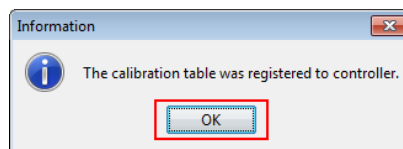


### 4 Measure the chart using the instrument. After you finish the chart measurement, click [Register]. Example: Measurement is performed using i1Pro.



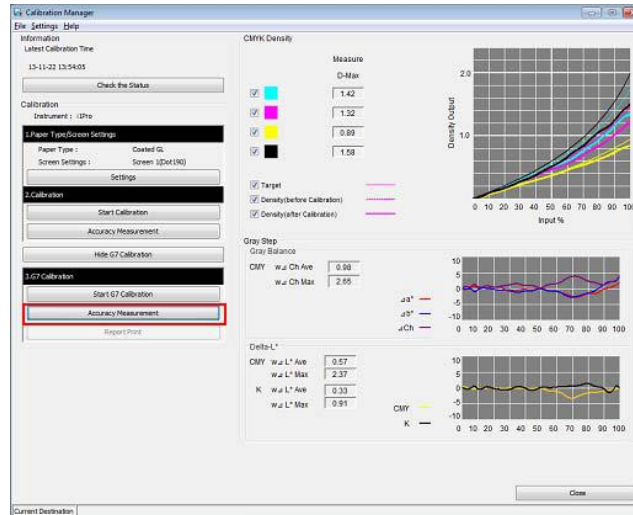
→ By registering the acquired calibration data in the image controller, this data can be applied when printing.

### 5 Click [OK] on the [Information] screen.



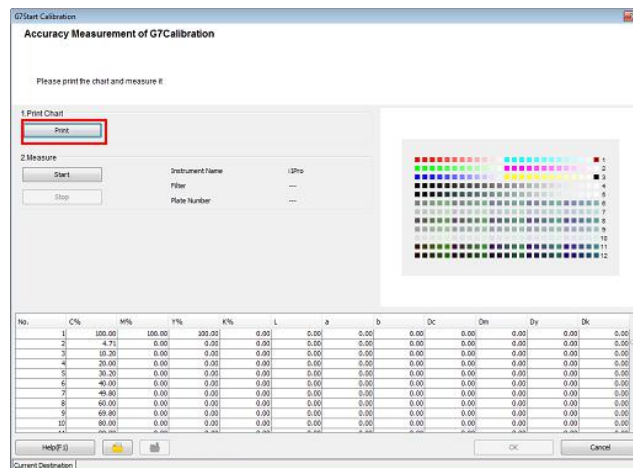
The calibration table is registered in the image controller.

- 6 On the [Calibration Manager] screen, click [Accuracy Measurement] under [3. G7 Calibration].



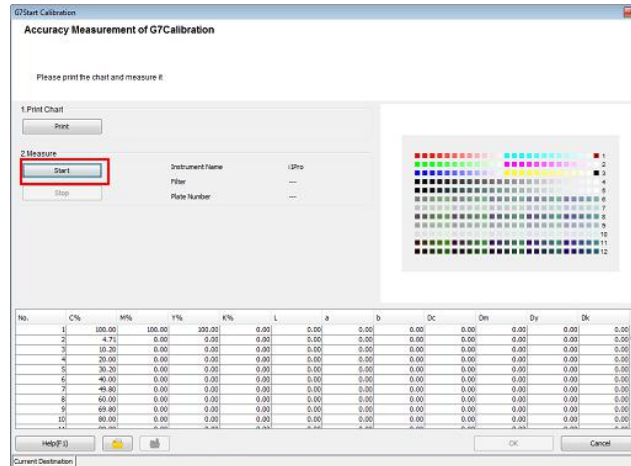
The [Accuracy Measurement of G7Calibration] screen is displayed.

- 7 Click [Print].  
Print the color chart that is to be measured using the instrument.

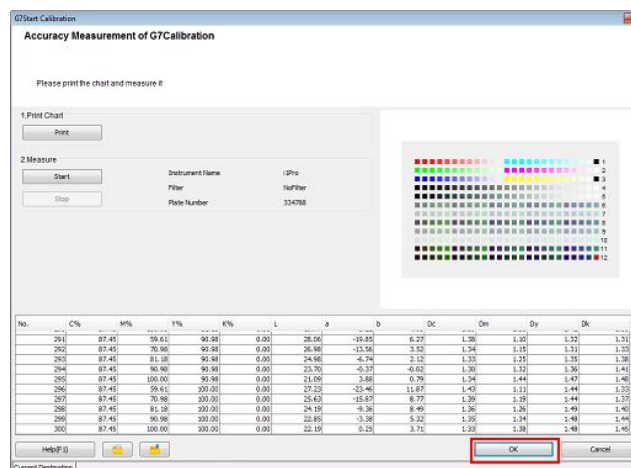


A test chart is printed.

## 8 Click [Start].



## 9 Measure the chart using the instrument. After you finish the chart measurement, click [OK].



- When the values of  $\Delta Ch$  and  $\Delta E^*$  are not standard as the result of the accuracy check, the dialogue is displayed. You can choose to recalculate and register the calibration table to fit in the target range or register as is in the dialogue. When you recalculate, you can print the report about the current correction data before executing.
- When you recalculate, you are recommended to return to Step 6 to measure the accuracy after executing.

## 10 Check the measurement results (CMYK density and Gray Step) on the [Calibration Manager] screen.

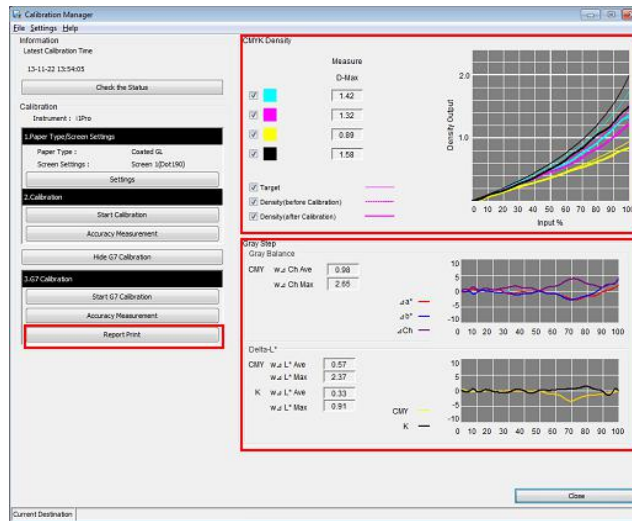
When the calibration accuracy measurement is completed, the measurement results for CMYK density and Gray Step (gray balance) are displayed.

- [CMYK Density]:

Check whether the [D-Max] (maximum density) under [Measure] is in its appropriate range. Check whether the [Target] and [Density (after Calibration)] in the graph are close.

•[Gray Step]:

Based on the [Gray Balance], [Delta-L\*], [ $\Delta a^*$ ], [ $\Delta b^*$ ], and [ $\Delta Ch$ ] values, check the gray reproducibility.

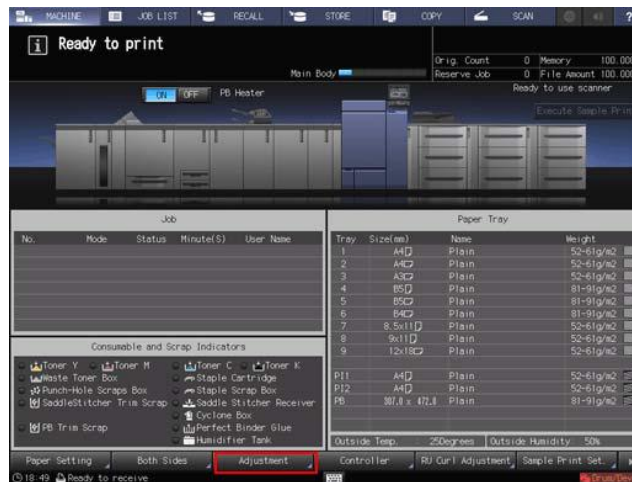


→ When [Report Print] is clicked, the measurement results for G7 calibration is printed.

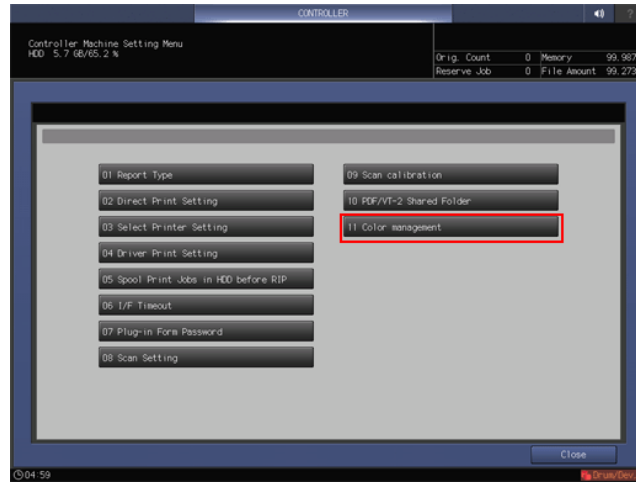
### Executing G7 Calibration: Touch panel

To use this function, install **Intelligent Quality Optimizer IQ-501**.

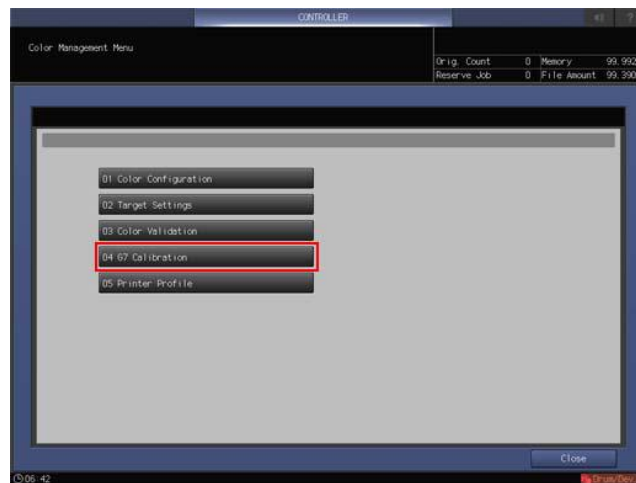
- 1 Press [Controller].



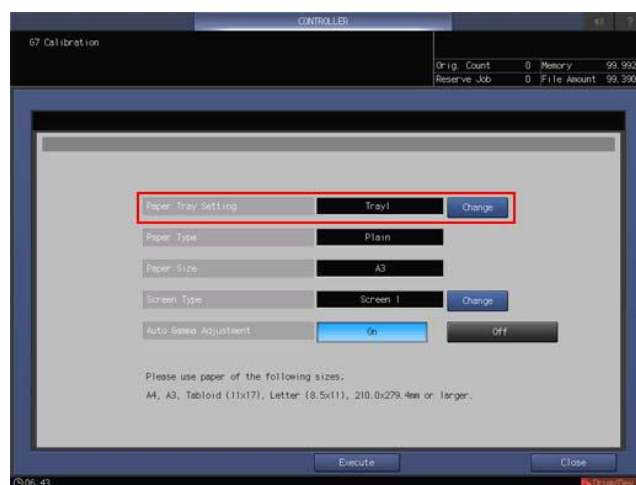
- 2 Press [Color Management].



- 3 Press [G7 Calibration].

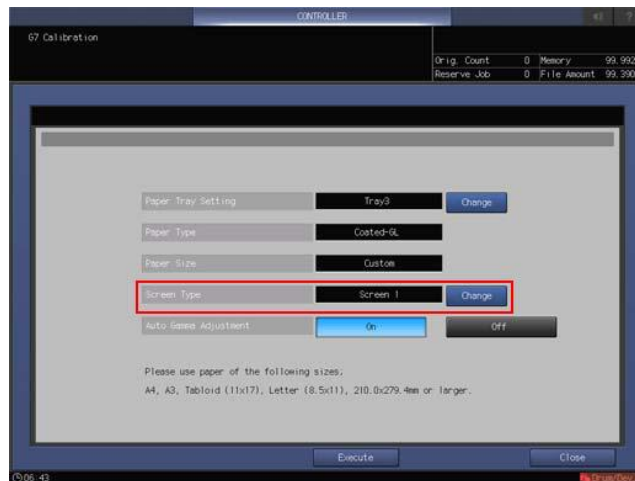


- 4 Press [Change] in [Paper Tray Setting], and then select a tray.  
To appropriately a chart, select a tray that has an appropriate size of paper.





- 5 Press [Change] of [Screen Type], and then select a screen.  
If you select [Custom Screen], the custom screen setting is displayed.

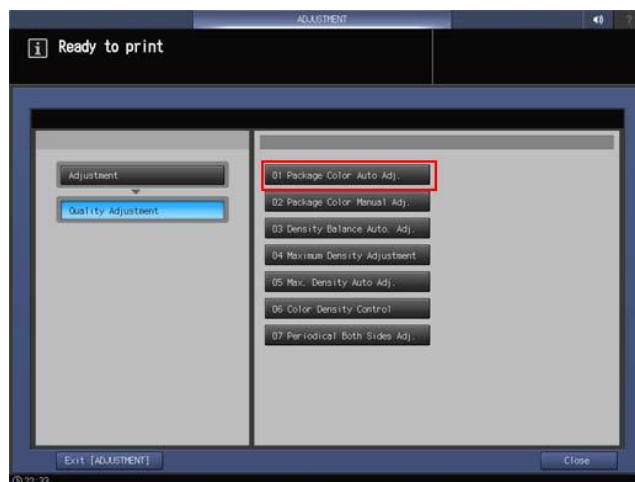


- 6 Press [Execute].  
[Controller] flashes in red during execution.  
A chart is printed up to 5 times.  
When processing is completed, a message is displayed.
- 7 Press [Close].  
The result is displayed.  
To print the result, press [Report Print].
- 8 Press [OK].

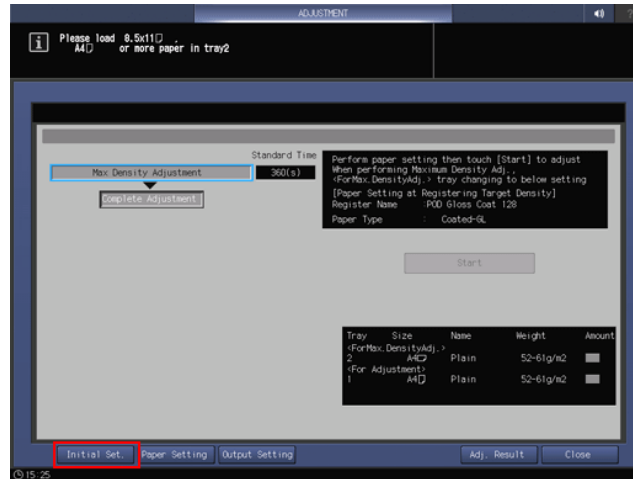
### 3.6.13 [Package Color Auto Adj.]

Automatically adjust colors collectively. This menu item is to be displayed on the machine mounted with **Intelligent Quality Optimizer IQ-501**.

- 1 Press [Adjustment] on the [MACHINE] screen to display the [Adjustment Menu] screen.
- 2 Press [Quality Adjustment] and [Package Color Auto Adj.] in sequence.



- 3 Before making adjustments, you can press [Initial Set.] to change adjustment settings as needed.

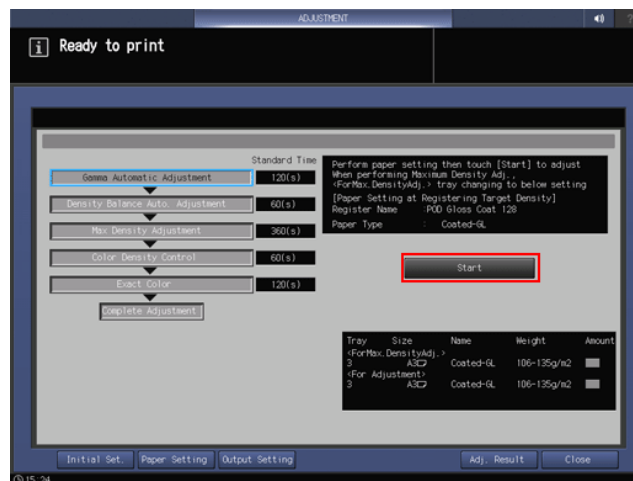


- 4 Change any setting ([Screen of Adjustment Target], [Additional Adjustment], [Maximum Density Adjustment Tray], or [Adjustment Tray]).



→ You can press [Previous] or [Next] to move the page.

- 5 Press [Start].



- 6 When the adjustment is completed, the adjustment result is displayed.

ADJUSTMENT

Package Color Adjustment Result

Result List

		Detailed Result			
		Y	M	C	K
Density Balance Auto. Adj.	Adj. Value	+10	+10	+10	+10
Max. Density Auto Adj.	TargetDens.	0.99	1.50	1.76	1.95
	Dens. Value	0.90	1.38	1.46	1.56
Color Density Control	Detailed Result				

Close

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