MUTOH

XPJ-1682WR

Operation Manual

Operations and Maintenance Methods

For Users in Europe

The CE marking is a mandatory European marking for certain product groups to indicate conformity with the essential health and safety requirements set out in European Directives.

By affixing the CE marking, the manufacturer, his authorized representative, or the person placing the product on the market or putting it into service ensures that the item meets all the essential requirements of all applicable EU directives and that the applicable conformity assessment procedures have been applied.

For Users in the United States

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Installation Location Requirements

This equipment is not suitable for use in locations where children are likely to be present.

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Chapter 3 Maintenance

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Chapter 1 Basic Operations

Introduction

Main components of your printer

Front side

Internal LED lights
The lights allows you to inspect inside of the printer or your print during printing.

Front cover
Open this cover when loading a roll media or removing a media jam. It is normally closed.

Front panel
⇒Front panel P. 11

Media feed lever
Push the lever to lower the pressure rollers to keep the media flat while printing. Pull it to release the media. The holddown pressure can be changed between High and Normal using this lever.

Maintenance cover L
Open this cover for cleaning. It is normally closed.

Maintenance cover R
Open this cover for cleaning or replacing consumables. It is normally closed.

Media guide
Front media path.

Waste ink tank
Collect waste ink produced during printing and cleaning cycle. Empty the tank as needed.

Adjuster

Stand

Carriage
The print head is installed on the carriage.

Pressure rollers
Keep the media in place to ensure proper feeding. The holddown pressure can be individually reduced or canceled by slide lock levers on the pressure rollers.

Edge holder
Place it on the edge of the media to prevent media curl while printing. While not printing, slide them to the left and right side edges of the platen.

Media cut groove
Manually cut the media along the groove.

Cutter
Automatically cut the media after printing.

Platen
Media is printed on here. There is an adsorption fan inside.

Rear side

Media feed lever
Hold down or release the media. This lever is interlocked with the media feed lever on the front side.

Media guide
Pass a roll media through the media guide.

Ink slots
Insert an ink bag case into the slot.

87654321

Front side

Slot number

Media feed slot
Insert the front edge of the media into this slot and pass it to the front side to load it into the printer.

Roll media holder
Attach the media flanges to both ends of a roll media and load it onto the roll media holder.

Network interface cable connector

AC inlet

Front panel

The printer has a touch-screen panel located on the front right of the printer. The active keys are lit up on the panel for guidance.

- Tap: Lightly touch the key with your finger, then immediately release.

- Long-touch: Keep touching the key.

Front panel

①	Status Bar	Indicates the printer status by LED light.

- Working normally: Solid green
- Error/Alert state: Solid red (error) or flash red (alert)

②	Display	Displays the printer status, setting menu, errors and so on.

③		[Home] key:

Access to or exit the menu.

④		[Cancel] key:

- Pause the print job. While pausing, tap the key again to resume printing.
- While the printer is not printing, tap the key to cut the media.

⑤		Arrow keys:

When you have entered the setup menu, the arrow keys are used to select a menu or enter a value.

- ⌃ key: Go to the previous item.
- ⌃ key: Return to the upper level menu without saving the change.
- ⌃ key: Go to the sub menu.
- ⌄ key: Go to the next item.

While the printer is in standby mode, it is used to feed media, run a nozzle check, or perform head cleaning.

- ⌃ key: Feed the media backward. Long-touch to feed it with high speed.
- ⌃ key: Tap to run a nozzle check.
- ⌃ key: Tap to perform cleaning.
- ⌄ key: Feed the media forward. Long-touch to feed it with high speed.

⑥		[Power] button:

- Long press to power on the printer. The Power LED (above the Power button) turns on with a solid white light.
- While the power is on, long press the button to power off the printer. In the Off state, the Power LED lights off.

> **Note**
>
> The ⏻ symbol means "standby". Even the Power LED turns off, the device still consumes some power unless the power cords are disconnected. This state is referred to as the power being "off" in this Manual.

⑦		[Enter] key:

Use the Enter key to select a menu or confirm a value.

Connecting to a Computer
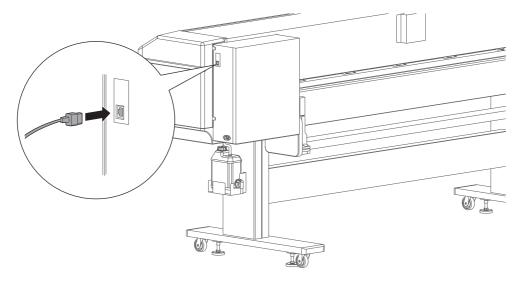
> **Important!**
>
> **Make sure your computer meets the following requirements.**
>
> - **OS: Windows 10 (64bit), Windows 8/8.1 (64bit), Windows 7 (64bit)**
>
> - **CPU: Intel (R) Core (TM) i5 / i7**
>
> - **Memory: 8GB minimum**
>
> - **Network:**
>   **Use a network port that supports Gigabit Ethernet, and an Ethernet cable that supports Category 6 Gigabit Ethernet or later.**
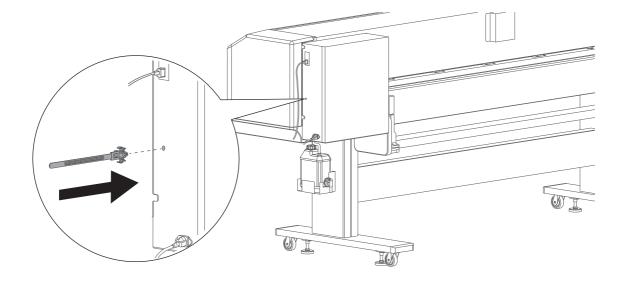
[1]   Connect the Gigabit Ethernet cable to the printer.
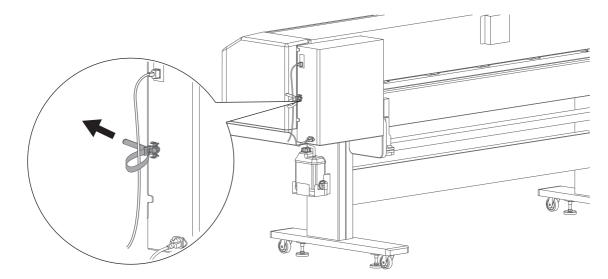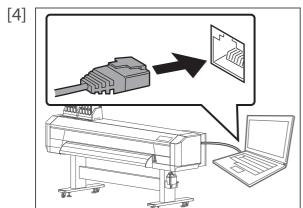
[2]   Insert the tip of the cable tie into the hole on the printer to attach it.

[3] Use the cable tie to secure the Ethernet cable to the printer.

[4]   Connect the Gigabit Ethernet cable to the computer.
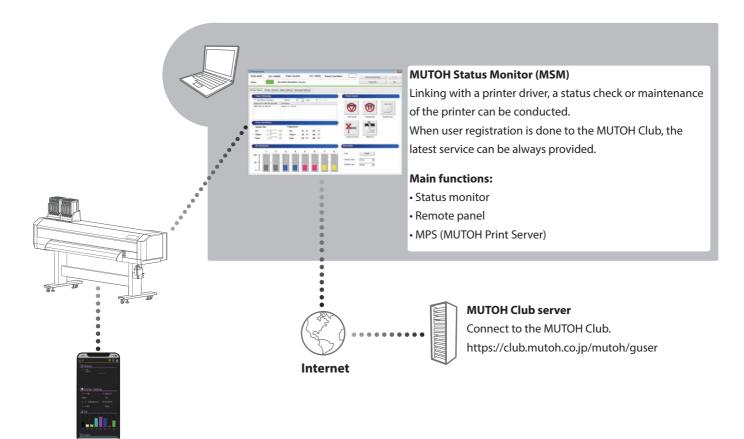
[5] Use the front panel on the printer to assign the IP address, subnet mask and gateway.

☞ **"Setup 23: IP Address"** P. 80, **"Setup 24: Subnet Mask"** P. 80, **"Setup 25: Gateway"** P. 80

> ✎ **Note**
>
> • The illustration above shows the peer-to-peer connection between this product and computer.
>
> • If you are using the LAN connection, make sure that your printer and computer are on the same subnet.

System configurations of this product

MUTOH Status Monitor (MSM)

Linking with a printer driver, a status check or maintenance of the printer can be conducted.

When user registration is done to the MUTOH Club, the latest service can be always provided.

Main functions:

• Status monitor

• Remote panel

• MPS (MUTOH Print Server)

Internet

MUTOH Club server

Connect to the MUTOH Club.

https://club.mutoh.co.jp/mutoh/guser

MSM Mobile

Enables you to remotely monitor printer status and control your printer through remote panel on your smartphone or tablet.

*1 MUTOH Club

This Web service provides free useful contents to users.

Have user registration done to use various services.

Main functions:

• Downloading the latest application and manual

• Downloading media profiles

• Printer status check (When using the printer information supplying service of MSM)

<Print Support Software>

To get the best out of this product, use the MUTOH Print Server (MPS) function available from MUTOH Status Monitor (MSM).

You can download the latest version of MSM from the MUTOH Club Server.

(To use MPS, specify the output port of RIP software to MPS.)

Launching/Displaying/Exiting MUTOH Status Monitor (MSM)

Launching MSM

Windows 8 / Windows 8.1
- In the [Start] screen, click [Desktop].
- Double click the MSM icon on the Desktop.

Windows 10 / Windows 7
Double click the MSM icon on the Desktop.

> **Note**

Launching from the Start Menu of Windows

- Windows 8 / Windows 8.1
  Right click somewhere the [Start] screen tiles are not displayed to display the application bar, and click [All Apps].

- Windows 10 / Windows 7
  From the [Start] menu, click [All Programs] (or [All Apps]) - [MUTOH] - [MUTOH Status Monitor].

Displaying MSM
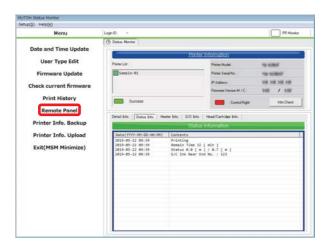
Double click the MSM icon in the task tray.

Displaying remote panel

The remote panel allows you to view the printer status or remotely operate your printer.

Click [Remote Panel].

- The remote panel opens.

Exiting MSM

Right click the MSM icon in the task tray, and click [Exit].

 Note
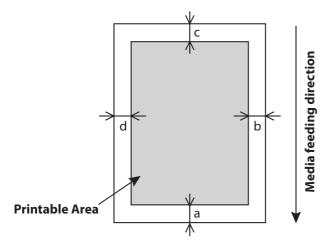
While using your printer, do not exit MSM. To close the MSM window, click [Settings] - [Close].

Windows 8.1
Click the Down Arrow in the [Start] screen.
Click [MUTOH Status Monitor].

Printing area

Printing is always started from Origin position (print start point) with following margin on all sides of a page as shown here.

a=5 mm *1
b=5 mm to 25 mm
c=5 mm
d=5 mm to 25 mm

Media feeding direction

Printable Area

*1 The value of "a" will be 15 mm in the following cases:
  • Immediately after media initialization
  • When feeding the media backward by using

The value of "a" will be 40 mm in the following cases:
  • When Media Initial menu is set to "Top&Width"
  • After cutting the media

Media size

Media that meet the requirements below can be used on this printer.

Roll media diameter	150 mm maximum
Media core diameter	2 inches: 50 mm to 52 mm
	3 inches: 75.5 mm to 79 mm
Weight	30 kg or less
Width	500 mm to 1,625 mm
Maximum thickness	2.8 mm (When the head height is set to "High")

Important!

The default head height is set to "Low".

In the "Low" setting, media up to 0.3 mm thick can be loaded on the printer.

Note

Contact your local MUTOH dealer about roll media recommended for your printer.

Precautions

Please use this product at least once a week

If the printer is not used for a long time, the print head nozzles can get clogged causing damage to the printer.

Please handle ink bag carefully

- Before using an ink bag, make sure to read the Safety Data Sheet (SDS).

- Do not disassemble Ink bag.
  Ink may come into contact with your eyes or skin, causing irritation or allergic reaction.

- Wear protective gloves, glasses, and mask when handling ink bags.

- Avoid contact with your eyes or on your skin.
  If in your eye or on your skin, immediately wash with water.
  It could cause bloodshot eyes or light inflammation. Should any anomalies occur, immediately seek medical attention.

- DO NOT drop or hit an ink bag.
  Ink may leak from the bag.

- Be sure to use the ink before it expires.
  The expired ink should be disposed of as industrial waste. The empty ink bag should be put in a plastic bag and should be disposed of according to the local regulations.

- MUTOH strongly recommends to use genuine ink.
  This printer is designed to bring out the best performance when using with the MUTOH genuine ink.
  Non-MUTOH ink may cause print defects or damage to the printer.

Conduct periodic maintenance

This product requires regular user maintenance.

- Run a nozzle check before and after printing.
  If nozzle missing is found, run a head cleaning.

- Clean the cleaning wiper and around the print head once a week.

- If you are not using the printer for an extended period*, run a head cleaning once a week.
  If you may not be able to perform weekly head cleaning, perform [Longstore] (☞ **"Long-term storage" P. 128**).
  *"Extended period" means one to four weeks.

- Clean inside of your printer once a month.

- Regularly check the waste ink tank and empty the tank as needed.

Some parts need to be replaced periodically

In this product, there are some parts required to be replaced after a long-term use.
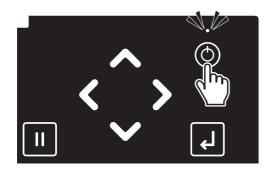
- User replaceable parts: Absorption material for the flushing box, Cutter, Cleaning wiper

- Parts required to be replaced by service personnel: Motors, Pumps, Print heads

Powering ON / OFF

Turning the power ON

[1] Close the front cover.

[2] Long press the Power button.

- The Power LED (above the Power button) lights up.
- The printer will start mechanical initialization.

Note
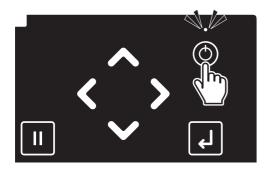
Once the Power LED lights up, release the Power button.

Turning the power OFF

[1] Make sure printing is done.

[2] Long press the Power button.

- The printer will start powering off.

[3] When the message on the left appears, release the Power button.

- The Power LED lights off.

Power Off

Loading a roll media

🔊 **Important!**

 Depending on the size of media, two or more people are required.

Load a roll media into the printer

Items Required:

- Roll media

- Media flange: ×2

1. Attach flanges to the media

[1]

(If you are using 2-inch core roll media) Remove the 3-inch adapter from the media flange.
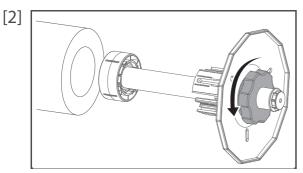
①: Pull two tabs on the adapter outward, then remove it from the flange.

②: Pull three tabs on the adapter outward, then remove it from the flange.

✏️ **Note**
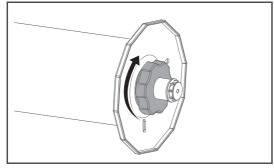
- If ② adaptor cannot be removed, turn the handle on the flange anti-clockwise to loose (see Step 2), then remove it.

- If you are using 3-inch core roll media, skip this step.

[2]

Push the media flange (×2) into the both ends of the media core.

- Before inserting, twist the handle on the flange anticlockwise to unlock it.

[3]

Twist the handle clockwise to lock the flange.
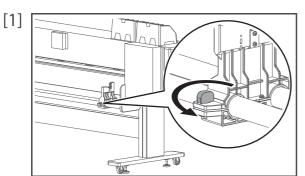
🔊 **Important!**

Check that the flange is firmly locked.
If not, the media can be removed from the flanges, affecting the print quality.
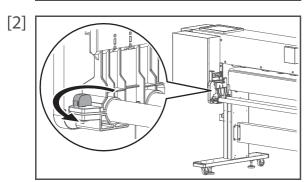
2. Enable torque on media holders

If you want to apply torque to the media holders, follow the steps below.
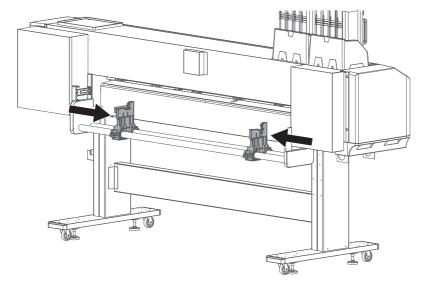
[1]

Twist the knob bolt on the right side of the media holder anticlockwise to loosen.

[2]
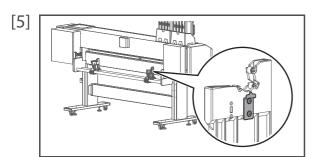
Twist the knob bolt on the left side of the media holder anticlockwise to loosen.

[3]   Slide both left and right media holders about 30 cm towards the center of the slider for easy access.
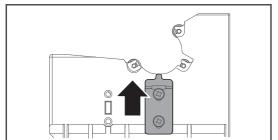
[4]   Tighten the knob bolts on both media holders.

[5]
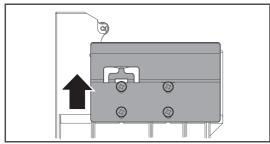
(When looking from the rear side of the printer) Use the screwdriver to loosen two screws securing the roller shaft guide plate to the right media holder.

[6]

Slide up the roller shaft guide plate as far as it will go and tighten the screws.

[7]
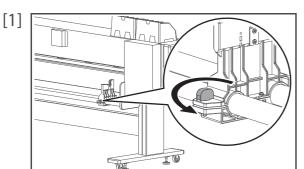
Do the same for the left media holder to slide up the roller shaft guide plate as far as it will go and tighten the screws.

> ✎ **Note**
>
> The shape, number of screws, and mounting location differ between left and right guide plates.

[8] Loosen the knob bolts and slide back both media holders to the original position.

[9] Tighten the knob bolts.

3. Place the media onto the media holder
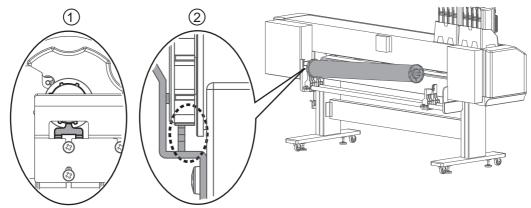
[1]

Twist the knob bolt on the right side of the media holder anticlockwise to loosen.

[2] Place the roll media onto the left media holder. Carefully and gently place it on the holder.
(If torque is enabled)

①: When looking from the left side, check that the protrusion on the roller shaft guide plate is fitted into between two protrusions on the flange end cap.

②: When looking from the rear side of the printer, check that the flange end cap is properly placed on the protrusion on the roller shaft guide plate.
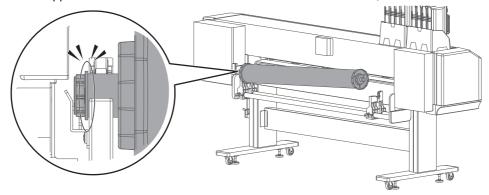
> ◁ **Important!**
>
> **Do not drop or apply excessive impact while placing the media. This will cause damage to the part.**

① ②

(If torque is disabled)

- Check that the stopper on the shaft is fitted into the slit as shown in the illustration (not on the media holder).
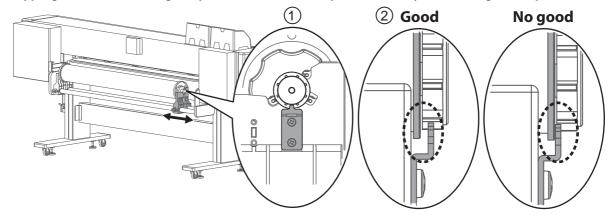
🔊 **Important!**

When you adjust the position of the media holder (left), do not move it more than 450 mm away from the left-hand end. The printer will not be able to detect media.

[3]   Slide the right side of the media holder to place the right side of the flange onto the holder.

Place the roll media onto the right media holder. Carefully and gently place it on the holder.

(If torque is enabled)

①: When looking from the right side, check that the protrusion on the roller shaft guide plate is fitted into between two protrusions on the flange end cap.

②: When looking from the rear side of the printer, check that there is a gap between the protrusion on the roller shaft guide plate and stopper on the shaft.
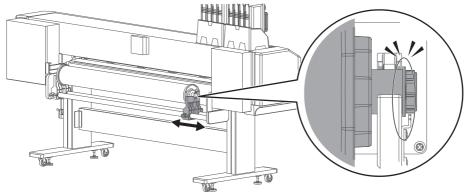
🔊 **Important!**

- **Do not drop or apply excessive impact while placing the media. This will cause damage to the part.**
- **If the stopper gets contact with the guide plate as "No Good" example below, it may cause damage to the part.**
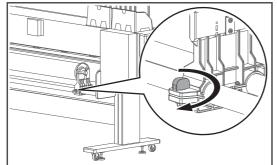
① ② **Good** **No good**

(If torque is disabled)

- Check that the stopper on the shaft is fitted into the slit as shown in the illustration (not on the media holder).

[4]
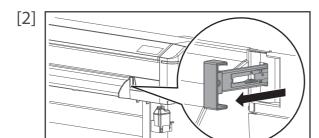
Twist the knob bolt on the right side of the media holder clockwise to tighten.
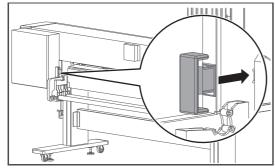
4. Load the media into the printer

[1]   Check that the printer is powered on.

[2]

From the front side of the printer, pull the media feed lever towards you as much as possible to release the pressure rollers.

You can access to the media feed lever from the rear side of the printer.
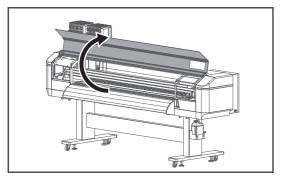
- To release the pressure rollers, push the media feed lever.
- To lock the pressure rollers, pull it towards you.

✏ **Note**

Using this lever, the holddown pressure can be changed between High and Normal. To apply high pressure, pull the lever towards you as much as possible.
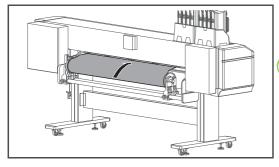
☞ **"Changing holddown pressure using media feed lever" P. 39**

[3]

Open the front cover.

[4]
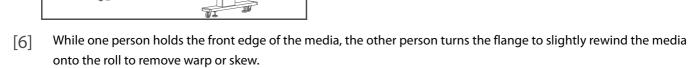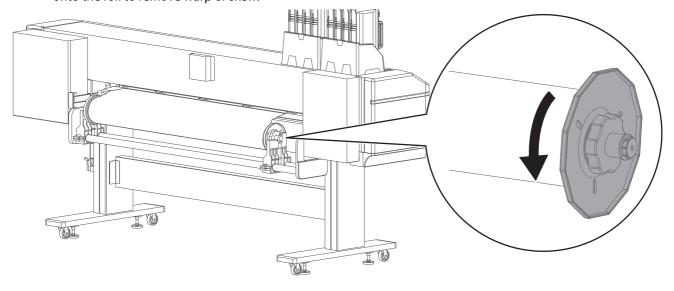
From the rear side of the printer, insert the front edge of the media into the media slot.

✏ **Note**

Before inserting, rewind the media properly.

[5]

From the front side of the printer, pull the media for approximately 1 m.

[6]   While one person holds the front edge of the media, the other person turns the flange to slightly rewind the media onto the roll to remove warp or skew.
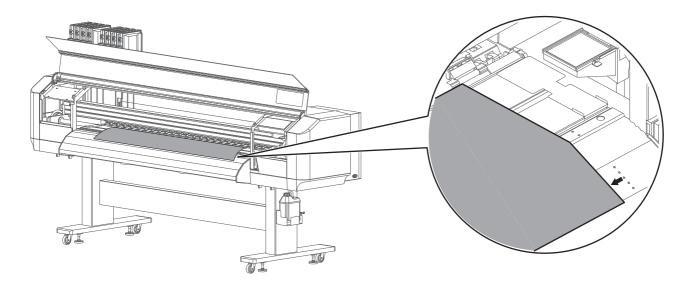
> **Note**
>
> If you remove your hands from the front edge of the media while rewinding, the media can be removed from the media slot.

[7]   Check that the right-hand edge of the media is located at the left side of the media guide line.
       If not, print quality can be affected.
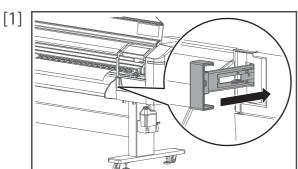
[8]   If needed, use a slide lock lever on the pressure rollers to individually cancel or reduce the holddown pressure.
       ☞ **"Canceling or reducing pressure rollers individually"** P. 40

✎ **Note**

Normally you do not need to adjust the holddown pressure by the slide lock levers.

5. After loading the media...

[1]
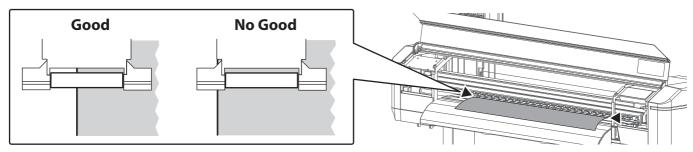
From the front side of the printer, push the media feed lever to hold the media flat with pressure rollers.

> 📝 **Note**
>
> Using this lever, the holddown pressure can be changed between High and Normal. Normally push the lever until it clicks to apply normal pressure.

☞ **"Changing holddown pressure using media feed lever" P. 39**
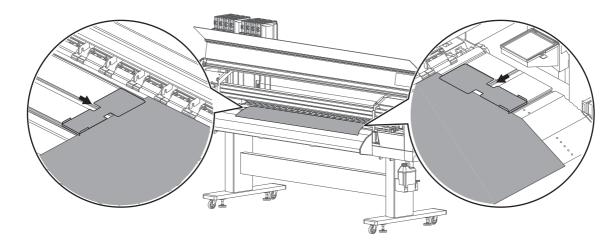
[2] Check that the pressure rollers hold down the both edges of the media properly.
- If it holds as a "No Good" example, pull the media feed lever towards you as much as possible, then adjust the position of the left or right side of the media holder until the both edges of the media are held down properly (see **"Load the media into the printer" P. 24** for more details).

Good   No Good
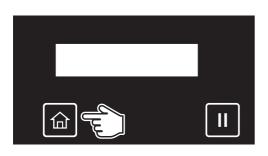
[3] Place the edge holders on both edges of the media.

> 📢 **Important!**
>
> **In the default setting, the printer starts printing with 5 mm margin on the sides.**
> **DO NOT hold down the edge of the media more than 5 mm with the edge holder.**

[4]

Tap [Home].

[5]

Menu 1

Setup

Tap ❯.

[6]

Setup3

Side Margin

Use ⌄ to choose the menu shown left.

- Tap ❯.

[7]

Side Margin :
(5 - 25)　　　　　　　　**10 mm**

Enter the side margin. At least 10 mm margin is required.

- Use ⌃ or ⌄ to enter the value.
- Tap [Enter] to confirm the setting.
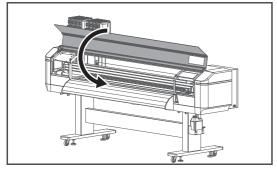
> **Note**
>
> The side margin can be set between 5 mm and 25 mm.

[8]

Close the front cover.

[9]

User:　　　　　　　　**Type 1 OK?**

"User: Type** OK?" appears on the touch panel.

- Use ⌃ or ⌄ to choose the correct user type and tap [Enter] to start media initialization.
  End the media loading.
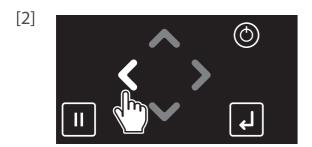
Nozzle check and cleaning

Before you start daily printer operation, run a nozzle check. If nozzle missing is found, perform cleaning.

Nozzle check

Nozzle check steps
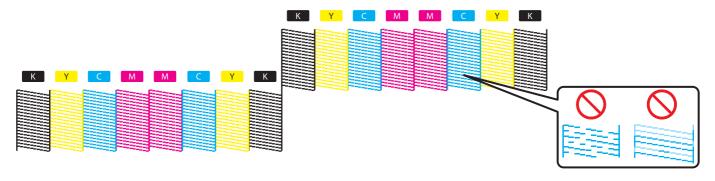
[1] Load a roll media for Nozzle check.

  ☞ **"Loading a roll media" P. 20**

[2]

Tap ◁ .

[3]

Print Nozzle Check?

Start   -> Enter

Tap [Enter].
- The printer will print the nozzle check pattern.

[4] Check the nozzle check print to see all nozzles are clear.
- If you find missing or thin lines on the print, go to **"Cleaning steps" P. 30**.
- If all lines are clearly printed, you can start printing.
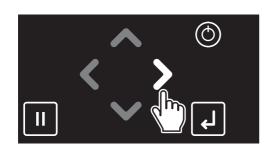
> **Note**
- The pattern shown above is an example when printed with 4-color configuration.
- The printer information (date and time printed, printer's serial number, firmware version) is printed on the nozzle check pattern.

Cleaning
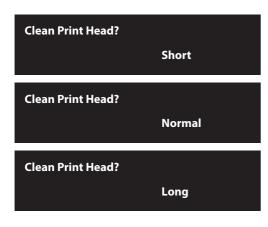
Cleaning steps

[1]

Tap ▸ .

[2]

Clean Print Head?

Short

Clean Print Head?

Normal

Clean Print Head?

Long

Use ▲ or ▼ to choose the cleaning mode.
Tap [Enter].

• The printer will start cleaning.

[3]   Run a nozzle check again.

☞ **"Nozzle check steps" P. 29**

• If the problem persists, repeat normal cleaning until all nozzles are clear.
  See **"Head cleaning" P. 107** for "Short" and "Long" cleaning.
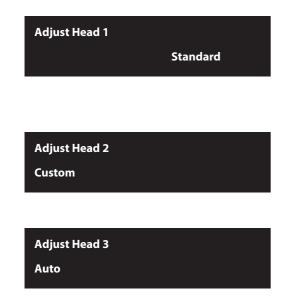
Calibrating your printer

Before printing an image on your printer for the first time, follow these steps to calibrate your printer to ensure accurate print quality.

Head alignment

You can print out the adjustment pattern in this menu to check the misalignment of the print head, and then adjust it.

You can choose one of the following methods:

Adjust Head 1

             Standard

The Standard option performs the head alignment for the print mode saved in the currently selected user type.
When you use this option, make sure that the resolution, number of pass, and printing direction of the print mode on your RIP is the same as the print mode saved in the user type currently selected.

Adjust Head 2

Custom

Allows you to adjust also a print mode other than the print mode used by the current user definition.
This method optimizes print quality even if the print mode on the RIP side is different from the user-defined mode.

Adjust Head 3

Auto

Perform the automatic adjustment using the embedded color sensor.
Allows you to adjust also a print mode other than the print mode used by the current user definition.
This method optimizes print quality even if the print mode on the RIP side is different from the user-defined mode.

> **Note**
>
> - If you experience following problems, the head alignment can help to improve print quality:
>   - Suffering from poor print quality in unidirectional printing mode. ☞ **"Details of print mode" P. 55**
>   - Print quality does not improve even after performing print quality adjustment
> - After you have performed head adjustment, make sure you perform print quality calibration.
>   There may be misalignment caused by head adjustment. ☞ **"Print quality calibration" P. 33**
> - If you change the print mode after performing the Standard head alignment, you need to perform the head alignment for the print mode chosen.
> - Since all print modes are adjusted at once after performing Custom head adjustment, head adjustment is not required even after changing the print mode.
> - When specifying a print mode for RIP software, etc, that is different from the mode set in the user type setting, perform Custom head adjustment and check all patterns (A to F), and then adjust any patterns that are misaligned beforehand.
> - If print defects (like banding or grainy look) still appear on the print, try an auto calibration again, or go to "Adjust Print1/ Standard" or "Adjust Print2/ Custom" to perform calibration.
> - If a roll media starts to cockle during calibration, load the media again.

Head alignment steps

[1] Turn the printer ON and load a roll media.

👉 **"Loading a roll media"** P. 20

[2] Tap [Home].

[3]

Menu 2
Test Print

Tap ⌄ until the menu on the left appears.

• Tap [Enter].

[4]

Test Print 5
Adjust Head

• Tap ⌄ until the menu on the left appears.

• Tap ❯.

[5]

Adjust Head 1
Standard

Adjust Head 2
Custom

Adjust Head 3
Auto

• Use ⌃ or ⌄ to choose the alignment method.

• Tap [Enter].

[6] The printer will print the confirmation pattern.

[7] Follow the steps below to align the two print heads.

👉 **"Standard or Custom Adjustment Methods"** P. 87

👉 **"Auto Adjustment Method"** P. 88

Print quality calibration

This menu calibrates the dot placement of bidirectional printing. Print the alignment pattern to see if dot placement is perfectly aligned. If misaligned, enter the alignment value to correct the accuracy of dot placement.

You can choose one of the following methods:

** : Adjust Print 1

Standard

The Standard option performs dot placement alignment for the print mode saved in the currently selected user type.
When you use this option, make sure that the resolution, number of pass, and printing direction of the print mode on your RIP is the same as the print mode saved in the user type currently selected.

** : Adjust Print 2

Custom

Allows you to adjust also a print mode other than the print mode used by the current user definition.
This method optimizes print quality even if the print mode on the RIP side is different from the user-defined mode.

** : Adjust Print 3

Auto

Perform the automatic adjustment using the embedded color sensor.
Allows you to adjust also a print mode other than the print mode used by the current user definition.
This method optimizes print quality even if the print mode on the RIP side is different from the user-defined mode.

> **Note**
>
> - If you are suffering from print quality defects after changing installation site or a roll media loaded on the printer, perform the print quality calibration.
> - If you change the user type after performing the Standard calibration, you need to perform the print quality calibration for the print mode chosen.
> - Since all print modes are adjusted at once after performing Custom adjust print, adjust print is not required even after changing the print mode. When specifying a print mode for RIP software, etc, that is different from the mode set in the user type setting, perform Custom head adjustment and check all patterns (A to F), and then adjust any patterns that are misaligned beforehand.
> - If you experience following problems, the head alignment can help to improve print quality:
>   For adjustment procedure, see ☞ **"Head alignment" P. 31**
>   - Print quality is poor when using the uni-direction print mode.
>   - Print quality does not improve by print quality calibration.
> - After you have performed head adjustment, make sure you perform print quality adjustment.
>   There may be misalignment caused by head adjustment.

Print quality calibration steps

[1] Turn the printer ON and load a roll media.

☞ **"Loading a roll media" P. 20**

[2]

Tap [Home].

[3]

Menu 1

Setup

Tap ❯.

[4]

Setup 1

User Type

Tap ❯.

[5]

User Type:

Type 1

Use ⌃ or ⌄ to choose the user type you want to use.

• Tap [Enter].

[6]

Type ** : 2

Adjust Print

Tap ⌄ until the menu on the left appears.

• Tap ❯.

[7]

Thickness:

(80 - 2800)   **170 µm**

Enter the thickness of the media.

• Use ⌃ or ⌄ to specify the thickness.
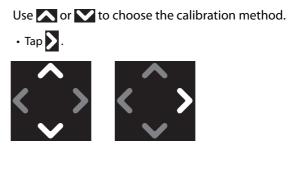
• Tap [Enter].

[8]

** : Adjust Print 1

Standard

** : Adjust Print 2

Custom

** : Adjust Print 3

Auto

Use ⌃ or ⌄ to choose the calibration method.

• Tap ❯.

Note

- In Standard print quality adjustment and Custom print quality adjustment, the names in the available patterns are different.
  For details, refer to the page below.
  ☞ **"Adjust Print 1: Standard"** P. 57
  ☞ **"Adjust Print 2: Custom"** P. 58
  ☞ **"Adjust Print 3: Auto"** P. 58

- For a pre-adjustment check, select "Confirm Pattern.".
  Check the printing results in "Confirm Pattern.",

  - To adjust large misalignment, select "Rough Pattern".

  - To adjust small misalignment, select "Fine Pattern".

[9]   Follow the steps below and adjust the print quality.
  ☞ **"Standard or Custom Adjustment Methods"** P. 60
  ☞ **"Auto Adjustment Method"** P. 62

Media feed adjustment

This adjustment must be performed when:

- you use this product for the first time.

- you use a new type of the media.

- you have changed the holddown pressure on the pressure rollers.

Other than above cases, move to **"Nozzle check and cleaning" P. 29**.
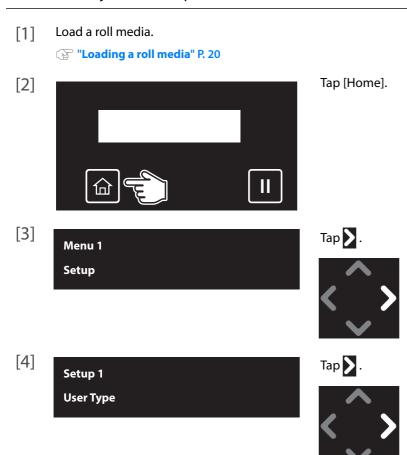
You will need a ruler to perform this adjustment.
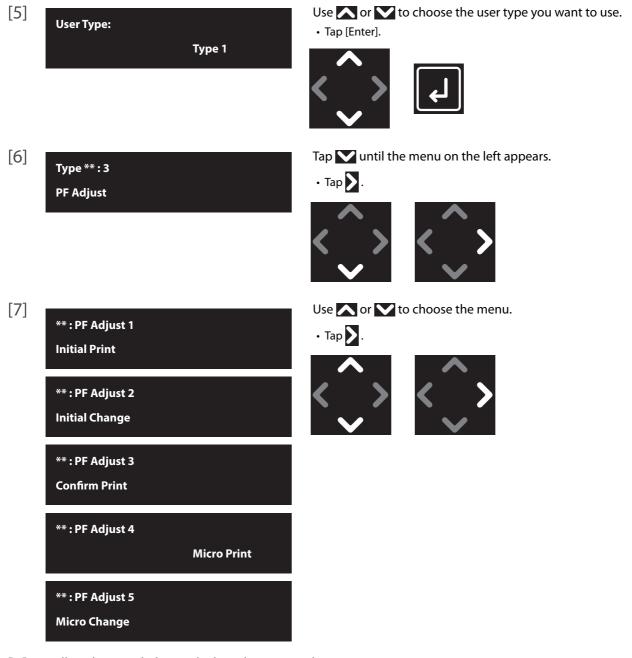
> **✎ Note**
>
> If the following symptom appears on your print, this adjustment may help to solve the problem.
>
> - Image overlapping.
>
> - Horizontal white lines on the print.

Media feed adjustment steps

[1]   Load a roll media.

    ☞ **"Loading a roll media" P. 20**

[2]   Tap [Home].

[3]   **Menu 1**

    Setup

    Tap ❯ .

[4]   **Setup 1**

    User Type

    Tap ❯ .

[5]

User Type:

Type 1

Use ⌃ or ⌄ to choose the user type you want to use.

 • Tap [Enter].

[6]

Type ** : 3

PF Adjust

Tap ⌄ until the menu on the left appears.

 • Tap ❯.

[7]

**** : PF Adjust 1**

Initial Print

**** : PF Adjust 2**

Initial Change

**** : PF Adjust 3**

Confirm Print

**** : PF Adjust 4**

Micro Print

**** : PF Adjust 5**

Micro Change

Use ⌃ or ⌄ to choose the menu.

 • Tap ❯.

[8]   Follow the steps below and adjust the print quality.

☞ **"Steps" P. 63**

Advanced settings

Changing the Head Height
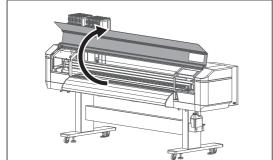
If you use a roll media that warps easily or perform high-density print, the print head may contact the media while printing. If you experience such problem, try changing the head height higher.

After you change the head height, make sure to perform the print quality calibration.
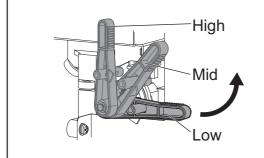
> **Important!**
>
> **Do not open Front cover and change the head height during printing.**
> **Print quality cannot be guaranteed.**

[1]

Open the front cover.
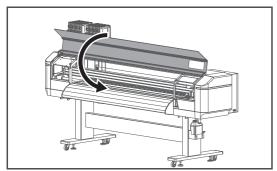
[2]

Use the head height adjustment lever (orange) to change the head height to "Mid" or "High".

- High: set the head height to High.
- Mid: set the head height between Low and High.
- Low: Default head height.

[3]

Close the front cover.

[4]   Perform print quality calibration.
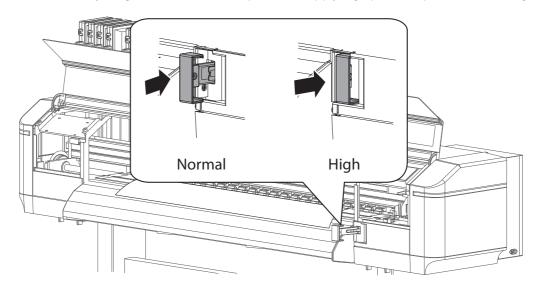
☞ **"Print quality calibration" P. 33**

Changing holddown pressure using media feed lever

If you want to change the holddown pressure applied across the entire width of media, use the media feed lever.

Depending on the position of the lever, you can choose the pressure between Normal and High.

- Normal: Recommended for typical roll media. To apply normal pressure, push the lever from the front side of the printer until it clicks.

- High: Recommended for heavy weight media (such as Tarpaulin). To apply high pressure, push it as far as it goes.

Important!

Every time after you change the holddown pressure by the media feed lever, you must perform the media feed adjustment.

☞ **"Media feed adjustment" P. 36**

Canceling or reducing pressure rollers individually

When printing on thin media or media without stiffness, the media tends to cockle causing head strikes.
By reducing pressure or disabling the pressure rollers individually, it helps to reduce the chance of head strike.

Using the slide lock lever on the individual pressure roller, the holddown pressure can be changed between Normal, Low and Cancel.

- Normal: Recommended for typical roll media. The factory default is set to Normal.

- Low: It reduces the holddown pressure.

- Cancel: It disables the pressure roller.

However, if the media feed lever is set to High, you can only choose between Normal and Cancel (even you set it to Low, the holddown pressure will not be reduced).

To cancel the individual pressure rollers, release the pressure rollers by pulling the media feed lever towards you as much as possible.

Media feed lever	Slide lock lever
Normal	Normal/ Low/ Cancel
High	Normal/ Cancel

📢 **Important!**

Every time after you change the holddown pressure by individual slide lock lever, you must perform the media feed adjustment.

☞ **"Media feed adjustment" P. 36**

✏️ **Note**
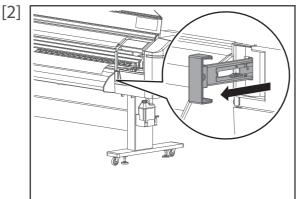
- Thin media or media without stiffness is likely to be wrinkled during printing. Wrinkles can contact the bottom side of the print head causing the media to become dirty. When both edges of the pressurizing rollers of media are released, it can prevent wrinkles.

- When printing on thin media or media without stiffness, wrinkles can be prevented by turning down the vacuum fan.
  ☞ **"**>4: Vacuum Fan" P. 68**

Procedure

[1] Open the front cover.

[2]

(To cancel the individual pressure rollers) From the front side of the printer, pull the media feed lever towards you as much as possible to release the pressure rollers.

(To set the slide lock lever to the Low position) Set the media feed lever to the Normal position.

☞ **"Changing holddown pressure using media feed lever" P. 39**

✏️ **Note**
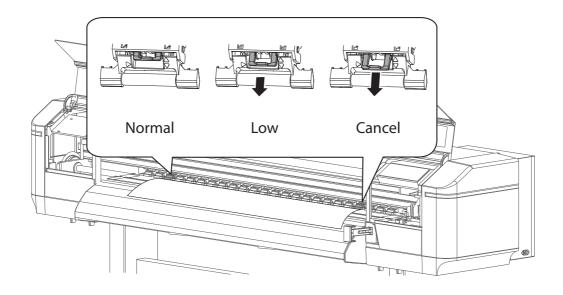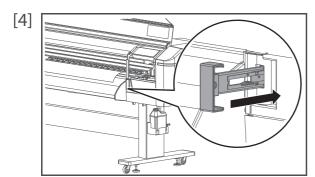
- You cannot cancel the individual pressure rollers unless you release the pressure rollers by the media feed lever.

[3] **Push down the tab on the slider lock lever, then slide it to the front.**

- **To reduce pressure, slide it to front until it clicks.**
- **To cancel the pressure roller, fully slide it to the front until it clicks into place.**

> ✎ **Note**
>
> First, try to reduce or cancel the rollers on both edges of the media. It the problem persists, reduce or cancel more rollers.

Normal   Low   Cancel

[4]
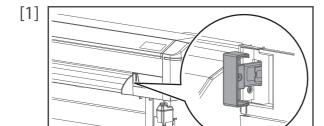
(To cancel the individual pressure rollers) Push the media feed lever back to the original position to lock the pressure rollers.
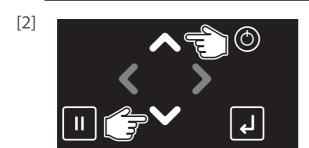
[5] Close the front cover.

[6] Perform media feed adjustment.

☞ **"Media feed adjustment" P. 36**

Operating from Front panel

Feeding media

[1]

Check that the pressure rollers hold down the media.

[2]

Long-touch ⌃ or ⌄ to feed a roll media until it reaches to the desired position.

- ⌃ key: Feed the media backward.
- ⌄ key: Feed the media forward.

✎ **Note**

Long tap the key to feed the media with high speed.

[3]   Once it has reached the intended position, release the key.

Pausing / Restarting printing

[1]

Tap [Cancel] while printing.

- The printer will pause the job.

✎ **Note**

- You cannot cancel the job by tapping [Cancel].
- To cancel the job, see the following section.

☞ **"Canceling printing" P. 43**

[2]

Pausing Print

Cancel Print   -> Enter

Tap [Cancel] again to resume printing.

▮▮

⊲ **Important!**
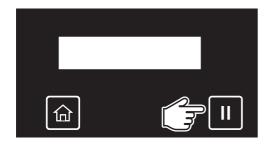
MUTOH cannot guarantee the print quality when you resume the printing.

Canceling printing

[1]

Tap [Cancel] while printing.
- The printer will pause printing.

> 🖉 **Note**
>
> To resume printing, tap [Cancel] again.

[2]

Pausing Print

Cancel Print   **-> Enter**

Tap [Enter] to cancel printing. (Once canceled, you cannot resume the job again.)
- The data sent to the printer will be deleted.
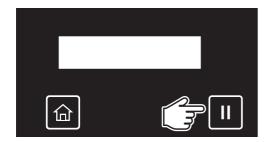
> 🖉 **Note**
>
> You can also cancel the job from the remote panel on MSM.

Cutting media

[1]

Check that the job has been printed.
- Tap [Cancel].

[2]

Cut Media?

Start   **-> Enter**

Tap [Enter].
- The printer will advance the media for the bottom margin and will cut it.

> 🖉 **Note**
>
> - If the front edge of a new roll media is not straight, cut it before printing.
> - When the media detection is set to "Off", the printer does not cut the media automatically.
>   ☞ **"Setup 4: Media Initial" P. 70**
> - When the Output mode menu is set to "Auto Cut", the printer cuts the media automatically after printing.
>   ☞ **"Setup 6: Output Mode" P. 71**
> - The cutter blade is consumable parts. Replace it when needed.
>   ☞ **"Replacing Cutter" P. 122**

Menus you can access while printing

[1]
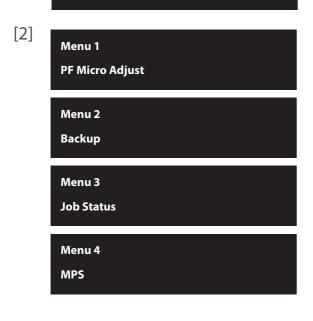
Receiving

PG: Low   **W: 1625 mm**
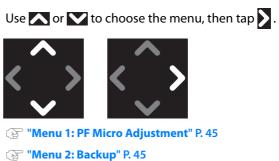
Printing

PG: Low   **W: 1625 mm**

Converting

PG: Low   **W: 1625 mm**

Tap [Home] while one of the three messages on the left appears on the touch panel.

[2]

Menu 1

PF Micro Adjust

Menu 2

Backup

Menu 3

Job Status

Menu 4

MPS

Use ⌃ or ⌄ to choose the menu, then tap ❯ .
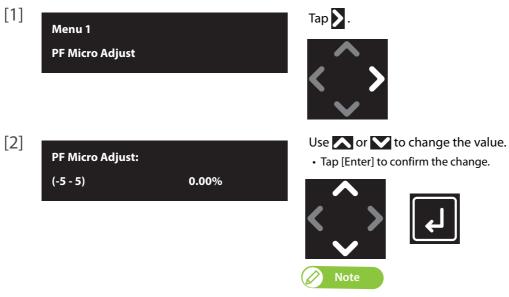
Menu 1: PF Micro Adjustment

You can change the micro adjustment value to correct media feeding for the currently print job.
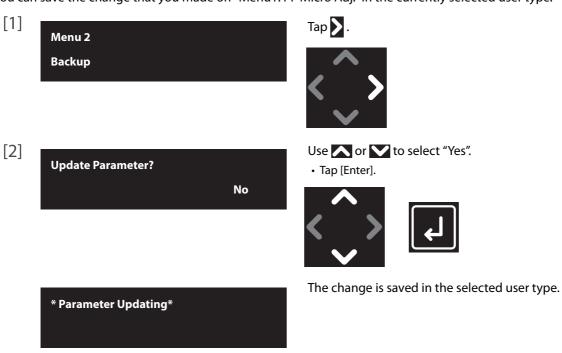
- See the following related sections of Panel Setting Menus: ☞ **"**>3: PF Adjust" P. 63**

[1]

> **Menu 1**
>
> **PF Micro Adjust**

Tap ❯ .

[2]

> **PF Micro Adjust:**
>
> **(-5 - 5)**   **0.00%**

Use ⌃ or ⌄ to change the value.
- Tap [Enter] to confirm the change.

✎ **Note**

- The change made is applied to the current job only and is not saved in the printer.
- To save the change in the user type currently selected, go to "Menu 2: Backup".

Menu 2: Backup

You can save the change that you made on "Menu1: PF Micro Adj." in the currently selected user type.

[1]

> **Menu 2**
>
> **Backup**

Tap ❯ .

[2]

> **Update Parameter?**
>
>   **No**

Use ⌃ or ⌄ to select "Yes".
- Tap [Enter].

> *** Parameter Updating***

The change is saved in the selected user type.

Menu 3: Job Status
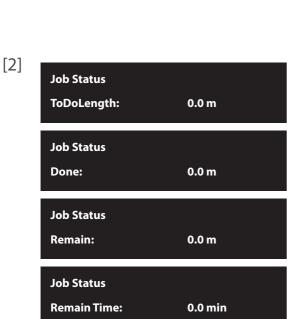
You can check the current status of the print job being printed.

- See the following related sections of Panel Setting Menus:

[1]

Menu 3
Job Status

Tap ▷.

[2]

Job Status	
ToDoLength:	0.0 m

Job Status	
Done:	0.0 m

Job Status	
Remain:	0.0 m

Job Status	
Remain Time:	0.0 min

Use ⋀ or ⋁ to choose the information you want to check.

- ToDoLength: displays the length of the current job (in media feeding direction).
- Done: displays the length of the current job that has been already printed.
- Remain: displays the remaining length to finish printing.
- Remain time: displays remaining time to finish printing.
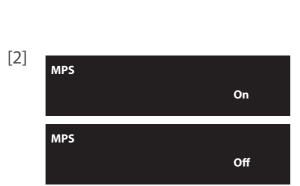
> **Note**
> - Indicated value is approximate. The accuracy of the value is not guaranteed.
> - If the print job data does not contain length information, "0" will be displayed in the Job Status menu.

Menu 4: MPS

You can check the status of MPS.

[1]

Menu 4
MPS

Tap ▷.

[2]

MPS	
	On

MPS	
	Off

The status of MPS is displayed On or Off.

> **Note**
> - The MPS settings can be changed in MSM.

Chapter 2 Advanced Operations

Introduction

Using the panel setting menus, configure various kinds of settings for the printer.
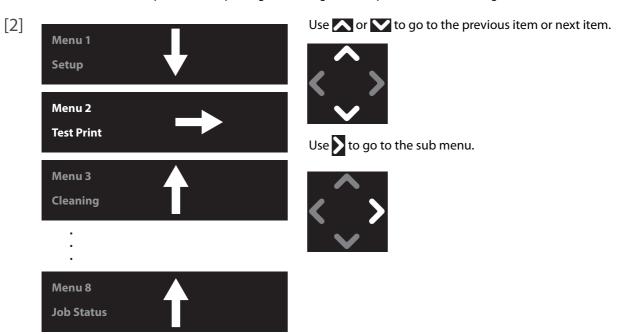
Operating the keys to use the menus

[1] To access to the setup menu, tap [Home].
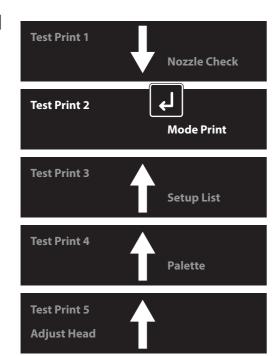
> **Note**
> You cannot access to the setup menu while printing or receiving data (the power button is flashing).

[2]

Use ▲ or ▼ to go to the previous item or next item.

Use ▶ to go to the sub menu.

[3]

Test Print 1	
	Nozzle Check
Test Print 2	↵
	Mode Print
Test Print 3	
	Setup List
Test Print 4	
	Palette
Test Print 5	
Adjust Head	

Use ⌃ or ⌄ to choose the option from the sub menu or enter the value.

To confirm the value or execute the selected function, tap [Enter].

Use ⟨ to return to the upper level menu.

(In the example on the left, the display will return to "Menu2: Test Print".)
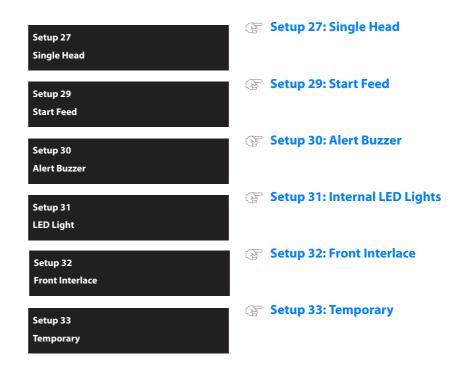
Panel setup menu

Menu 1: Setup

Menu 1
Setup

Configure printer settings.
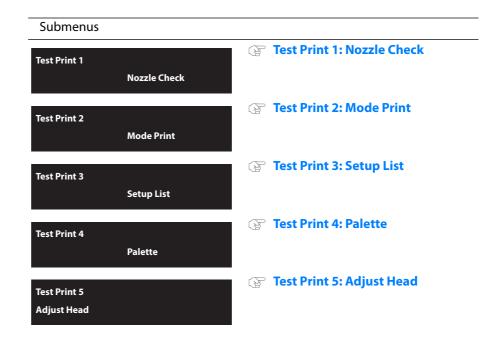
Submenus

Setup1
User Type

☞ **Setup 1: User Type**

Setup 2
Spitting

☞ **Setup 2: Spitting**

Setup 3
Side Margin

☞ **Setup 3: Side Margin**

Setup 4
Media Initial

☞ **Setup 4: Media Initial**

Setup 5
Media Width

☞ **Setup 5: Media Width**

Setup 6
Output Mode

☞ **Setup 6: Output Mode**

Setup 7
Method of Cut

☞ **Setup 7: Method of Cut**

Setup 8 **Origin**	☞ **Setup 8: Origin**
Setup 11 **Head Travel**	☞ **Setup 11: Head Travel**
Setup 12 **Multi Strike**	☞ **Setup 12: Multi Strike**
Setup 13 **Strike Wait**	☞ **Setup 13: Strike Wait**
Setup 14 **Slant Check**	☞ **Setup 14: Slant Check**
Setup 15 **Auto Cleaning**	☞ **Setup 15: Auto Cleaning**
Setup 16 **Ink Status**	☞ **Setup 16: Ink Status**
Setup 17 **Roll Length**	☞ **Setup 17: Roll Length**
Setup 18 **Exhaust Fan**	☞ **Setup 18: Exhaust Fan**
Setup 19 **Longstore**	☞ **Setup 19: Longstore**
Setup 20 **CR Maintenance**	☞ **Setup 20: CR Maintenance**
Setup 21 **Initialization**	☞ **Setup 21: Initialization**
Setup 22 **Life Times**	☞ **Setup 22: Life Times**
Setup 23 **IP Address**	☞ **Setup 23: IP Address**
Setup 24 **Subnet Mask**	☞ **Setup 24: Subnet Mask**
Setup 25 **Gateway**	☞ **Setup 25: Gateway**
Setup 26 **Header Dump**	☞ **Setup 26: Header Dump**

Setup 27 **Single Head**	☞ **Setup 27: Single Head**
Setup 29 **Start Feed**	☞ **Setup 29: Start Feed**
Setup 30 **Alert Buzzer**	☞ **Setup 30: Alert Buzzer**
Setup 31 **LED Light**	☞ **Setup 31: Internal LED Lights**
Setup 32 **Front Interlace**	☞ **Setup 32: Front Interlace**
Setup 33 **Temporary**	☞ **Setup 33: Temporary**

Menu 2: Test Print

Menu 2 **Test Print**	Run a test print to check for nozzle condition, current printer settings, printer configuration, color palette, and print head alignment.

Submenus

Test Print 1 Nozzle Check	☞ **Test Print 1: Nozzle Check**
Test Print 2 Mode Print	☞ **Test Print 2: Mode Print**
Test Print 3 Setup List	☞ **Test Print 3: Setup List**
Test Print 4 Palette	☞ **Test Print 4: Palette**
Test Print 5 Adjust Head	☞ **Test Print 5: Adjust Head**

Menu 3: Cleaning

Menu 3
Cleaning

Perform the print head cleaning and initial ink charging.

☞ **Menu 3: Cleaning**

Menu 4: Menu Option

Menu 4
Menu Option

Choose to show or hide the menus that are displayed in "Menu 1: Setup".

☞ **Menu 4: Menu Option**

Menu 5: System Information

Menu 5
System Info.

Displays the version of the printer's firmware and total printed area in the printer.

☞ **Menu 5: System Info.**

Menu 6: Sleep Mode

Menu 6
Sleep Mode

Choose the head cleaning mode and timer to be performed before entering to or while in sleep mode.

Submenus

Sleep Mode 1
Cleaning Setting

☞ **Sleep Mode 1: Cleaning Setting**

Sleep Mode 2
Start

☞ **Sleep Mode 2: Start**

Menu 7: Display

Menu 7
Display

Change the language, and unit of temperature and length displayed on the front panel.

Submenus

Display 1
Language

☞ **Display 1: Language**

Display 2
Temperature

☞ **Display 2: Temperature**

Display 3
Length

☞ **Display 3: Length**

Menu 8: Job Status

Menu 8
Job Status

Displays the last print job status.

☞ **Menu 8: Job Status**

Menu 1: Setup

Setup 1: User Type

Setup1
User Type

You can have up to 15 groups of User Type, labeled "Type1" to "Type15". When you select a User Type group ("Type") and tap [Enter], that definition group will be set for the printer. Also, a submenu will be displayed.

Setting values

User Type:

Type 1

Select a "Type" number, from "Type1" to "Type15".

📢 **Important!**

When you change to another User Type, all the settings that can be set via the User Type will be changed.

The following settings can be saved in the user type.

- **Settings for "Print Mode", "Effect"**
- **Adjustment values for "Adjust Print", "PF Adjust"**
- **Settings for "Vacuum Fan", "Thickness"**

When using the printer for the first time or using a new roll media, configure a user type settings.

User Type:

Type 1

Making media settings.

Submenus

Type ** : 1
Print Mode

☞ ****>1: Print Mode**

Type ** : 2
Adjust Print

☞ ****>2: Adjust Print>**

Type ** : 3
PF Adjust

☞ ****>3: PF Adjust**

Type ** : 4
Vacuum Fan

☞ ****>4: Vacuum Fan**

Type ** : 5
Thickness

☞ ****>5: Thickness**

Type ** : 6
Copy User Type

☞ ****>6: Copy User Type**

**>1: Print Mode

Type ** : 1
Print Mode

Select a print mode for the media.

• Once selected, the panel displays the effect menu.

Setting values

| Mode: | | Quality 1 |
| 1440 x 1440 | 16pass | Uni |

High-quality print mode.
The four types of mode are available:
Quality 1 to Quality 4.

| Mode: | | Graphics 1 |
| 720 x 1080 | 6pass | Uni |

Standard print mode.
There are two types: Graphics 1 and
Graphics 2. Graphics 2 is the initial setting.

| Mode: | | Banner 1 |
| 720 x 720 | 4pass | Uni |

High-speed print mode.
There are four types: Banner 1 to Banner 4.

Details of print mode
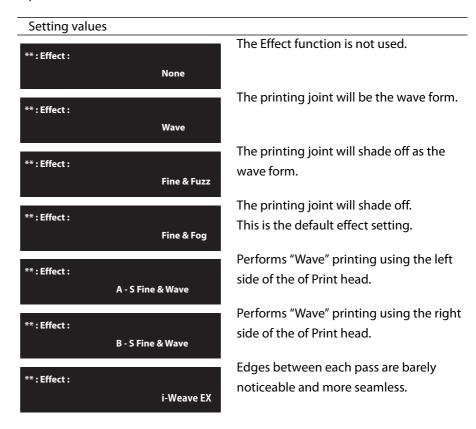
Print Mode	Resolution	Pass (4-color setting)	Pass (7-color setting)	Direction	Default effect settings
Quality 1	1440 × 1440	16 pass	32 pass	Uni (unidirectional)	Fine&Fog
Quality 2	1440 × 1440	16 pass	32 pass	Bi (bidirectional)	Fine&Fog
Quality 3	720 × 1440	8 pass	16 pass	Uni (unidirectional)	Fine&Fog
Quality 4	720 × 1440	8 pass	16 pass	Bi (bidirectional)	Fine&Fog
Graphics 1	720 × 1080	6 pass	12 pass	Uni (unidirectional)	Fine&Fog
Graphics 2	720 × 1080	6 pass	12 pass	Bi (bidirectional)	Fine&Fog
Banner 1	720 × 720	4 pass	8 pass	Uni (unidirectional)	Fine&Fog
Banner 2	720 × 720	4 pass	8 pass	Bi (bidirectional)	Fine&Fog
Banner 3	360 × 720	2 pass	4 pass	Uni (unidirectional)	None
Banner 4	360 × 720	2 pass	4 pass	Bi (bidirectional)	None

Effect

Mode:			Quality 1
1440 x 1440	↵	16pass	Uni

Select an effect setting.
Set up this menu when you want to improve print quality by adjusting the set print mode.

Setting values	

** : Effect : None	The Effect function is not used.
** : Effect : Wave	The printing joint will be the wave form.
** : Effect : Fine & Fuzz	The printing joint will shade off as the wave form.
** : Effect : Fine & Fog	The printing joint will shade off. This is the default effect setting.
** : Effect : A - S Fine & Wave	Performs "Wave" printing using the left side of the of Print head.
** : Effect : B - S Fine & Wave	Performs "Wave" printing using the right side of the of Print head.
** : Effect : i-Weave EX	Edges between each pass are barely noticeable and more seamless.

| Type ** : 2 |
| Adjust Print |

Sets up when adjusting the printer for the optimum quality of image print. Before adjusting this setting, enter the thickness of the media.

Submenus

| ** : Adjust Print 1 |
| Standard |

Adjusts only the print mode in the user type setting which is currently set.

| ** : Adjust Print 2 |
| Custom |

Adjusts the print modes other than the mode in the user type setting which is currently set.

| ** : Adjust Print 3 |
| Auto |

Perform an automatic calibration that the printer automatically prints and scans a pattern with the embedded color sensor to correct dot placement.
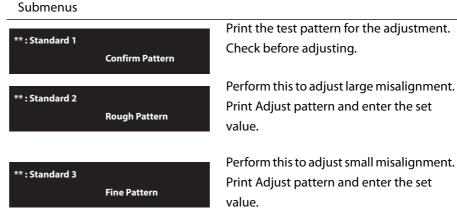
Adjust Print 1: Standard

| ** : Adjust Print 1 |
| Standard |

Adjusts only the print mode in the user type setting which is currently set.

☞ **"Confirm pattern" P. 60**
☞ **"Rough adjustment pattern" P. 61**
☞ **"Fine adjustment pattern" P. 61**

Submenus

| ** : Standard 1 |
| Confirm Pattern |

Print the test pattern for the adjustment. Check before adjusting.

| ** : Standard 2 |
| Rough Pattern |

Perform this to adjust large misalignment. Print Adjust pattern and enter the set value.

| ** : Standard 3 |
| Fine Pattern |

Perform this to adjust small misalignment. Print Adjust pattern and enter the set value.

Adjust Print 2: Custom

```
** : Adjust Print 2
Custom
```

Perform adjustment for all patterns (A to F).

☞ **"Confirm pattern" P. 60**

☞ **"Rough adjustment pattern" P. 61**

☞ **"Fine adjustment pattern" P. 61**

Submenus

```
** : Custom 1
            Confirm Pattern
```
The test patterns of A to F will be printed for Adjust print. Check before adjusting.

```
** : Custom 2
            Rough Pattern ALL
```
For printing all rough adjustment patterns from A to F.

```
** : Custom 3
            Rough Pattern A
```
For printing an adjust pattern selected from A to F.

•
•
•

```
** : Custom 8
            Rough Pattern F
```

```
** : Custom 9
            Fine Pattern ALL
```
For printing all fine adjustment patterns from A to F.

```
** : Custom 10
            Fine Pattern A
```
For printing an adjust pattern selected from A to F.

•
•
•

```
** : Custom 15
            Fine Pattern F
```

Adjust Print 3: Auto

```
** : Adjust Print 3
Auto
```

Perform the automatic adjustment using the embedded color sensor.

☞ **"Auto Adjustment Method" P. 62**

Submenus

```
**:Auto1
                    ALL
```
Perform automatic adjustment for all patterns (A to F) using the color sensor.

```
**:Auto2
            Standard
```
Perform automatic adjustment for the currently selected print mode using the color sensor (calibrate the same print mode as "Adjust Print 1 Standard").

```
** : Auto 3
            Adjust Pattern A
```
Choose the adjustment pattern between A and F for automatic adjustment.

•
•
•

```
** : Auto 6
            Adjust Pattern F
```

Adjustment patterns for each print mode
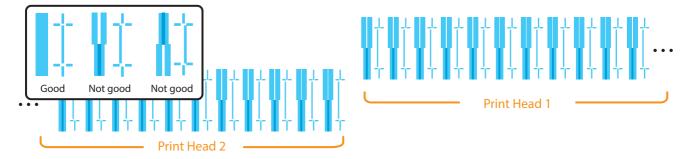
Print mode	Print mode specifications	Adjustment pattern
Quality 1	1440 x 1440, 16 pass / 32 pass, Uni	C
Quality 2	1440 x 1440, 16 pass / 32 pass, Bi	
Quality 3	720 x 1440, 8 pass / 16 pass, Uni	B
Quality 4	720 x 1440, 8 pass / 16 pass, Bi	
Graphics 1	720 x 1080, 6 pass / 12 pass, Uni	
Graphics 2	720 x 1080, 6 pass / 12 pass, Bi	
Banner 1	720 x 720, 4 pass / 8 pass, Uni	A
Banner 2	720 x 720, 4 pass / 8 pass, Bi	
Banner 3	360 x 720, 2 pass / 4 pass, Uni	
Banner 4	360 x 720, 2 pass / 4 pass, Bi	

Standard or Custom Adjustment Methods

1. Print a confirm pattern and check it for printing errors.

2. Print "Rough pattern" and look for a place that is properly adjusted in the printing results of print head 1.

- If you selected "Adjust Print 2: Custom", select "ALL" or "A" to "F".

- The number printed under the pattern without alignment errors is the adjustment value.

3. Enter the adjustment values.

4. Follow the same procedure to adjust print head 2.

5. Print "Fine pattern" and look for a place that is properly adjusted in the printing results of print head 1.

- If you selected "Adjust Print 2: Custom", select "ALL" or "A" to "F".

- The number printed under the pattern without alignment errors is the adjustment value.

6. Enter the adjustment values.

7. Follow the same procedure to adjust print head 2.

Confirm pattern

- Press the [Enter] key to carry out printing.

- Check the printing results. If there are shifting problems, proceed to rough adjustment pattern printing.

- In the picture below, there are misalignments.
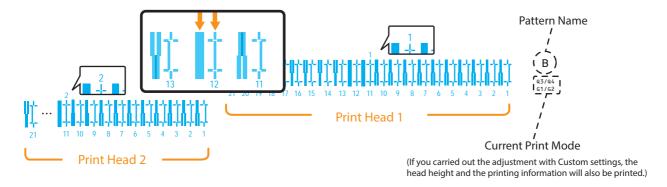
> **Note**
>
> Because this printer has 2 Print heads, 2 rows of confirmation pattern will be printed.

Rough adjustment pattern
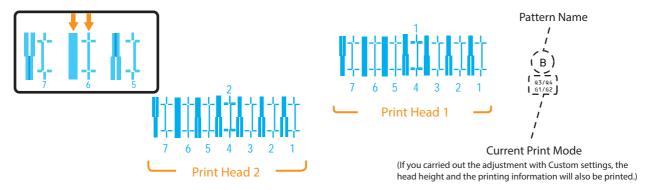
- Tap [Enter] to carry out printing.

- For Head 1, check the print results and select the number that looks most aligned between 1 and 21.

- Pattern names such as "Pattern B1: 11" are shown on the display. Use ⌃ or ⌄ to enter the number of the best-adjusted pattern, and tap [Enter].

- In the case of the picture below, enter "12", so that the display reads "Pattern B1: 12".
  Follow the same procedure to adjust print head 2.

Pattern Name

Current Print Mode
(If you carried out the adjustment with Custom settings, the head height and the printing information will also be printed.)

Print Head 1

Print Head 2

Fine adjustment pattern

- Tap [Enter] to carry out printing. For the Fine pattern, the same patterns will be printed repeatedly on both sides and center of the media.

- For Head 1, check the print results on both sides and center of the media and select the number that looks most aligned between 1 and 7.

- Pattern names such as "Pattern B1: 4" are shown on the display. Use ⌃ or ⌄ to enter the number of the best-adjusted pattern, and tap [Enter].

- In the case of the picture below, enter "6", so that the display reads "Pattern B1: 6".
  Follow the same procedure to adjust print head 2.

Pattern Name

Current Print Mode
(If you carried out the adjustment with Custom settings, the head height and the printing information will also be printed.)

Print Head 1

Print Head 2

Auto Adjustment Method

1. Select the adjustment pattern from "ALL", "Standard", or any specific pattern between "Adjust Pattern A" and "Adjust Pattern F".

   - The selected adjustment pattern is printed.

   - The printer scans the print using the embedded color sensor, then automatically corrects the dot placement.

2. Once successfully completed, the message "Auto Adjust Succeeded End->Enter" will appear on the panel.

   - If failed, the message "Auto Adjust Failed End -> Enter" will appear on the panel.
     Tap [Enter] to end the adjustment.

   - Try Auto Adjust again or perform Standard or Custom adjustment.

3. Tap [Enter] to exit the menu.

> **Note**
> - If failed in the middle of the calibration, the adjustment value for the pattern which has been successfully calibrated will be saved in the printer, but the adjustment value for the pattern which has been failed to calibrate or has not been calibrated yet will not be saved in the printer.
> - If print defects (like banding or grainy look) still appear on the print, try an auto calibration again, or go to "Adjust Print1/ Standard" or "Adjust Print2/ Custom" to perform calibration.
> - If a roll media starts to cockle during calibration, load the media again.

**>3: PF Adjust

```
Type ** : 3
PF Adjust
```

Sets up various settings on the Media feed correction.
When the following defects are found in printing results, they may improve by conducting a media feed correction.

- Images are overlapping.
- There are white lines in images.

Submenus

```
** : PF Adjust 1
Initial Print
```
☞ **"PF Adjust 1: Initial Print" P. 65**

```
** : PF Adjust 2
Initial Change
```
☞ **"PF Adjust 2: Initial Change" P. 65**

```
** : PF Adjust 3
Confirm Print
```
☞ **"PF Adjust 3: Confirm Print" P. 66**

```
** : PF Adjust 4
            Micro Print
```
☞ **"PF Adjust 4: Micro Print" P. 67**

```
** : PF Adjust 5
Micro Change
```
☞ **"PF Adjust 5: Micro Change" P. 67**

Steps

1. Select "PF Adjust 1: Initial Print".

  - "Feed Length: 250 mm" is displayed on the front panel.

2. After the initial adjustment printing, cut the media.

  - Measure the distance between the " + " in the initial adjustment print using a ruler.

3. Refer to Chapter 1 **"Media feed adjustment steps" P. 36** and select "PF Adjust 2: Initial Change" on the front panel.

4. Use ⌃ or ⌄ on the front panel and enter the measured value in Step 2.

  - Tap [Enter] to save the initial adjustment value.

5. Use ⌃ or ⌄ on the front panel to select "PF Adjust 3: Confirm Print".

  - "Feed Length: 250 mm" is displayed on the front panel.

6. After the confirmation adjustment printing, cut the media.

   •Measure the distance between the " + " in the confirmation adjustment print using a ruler. Then, confirm that the distance matches the feeding length when printing.

   •If the distance does not match the feeding length, follow the procedure from Step 1 to Step 5 and readjust.

   •If the distance matches the feeding length, proceed to Step 7.

7. Refer to Chapter 1 **"Media feed adjustment steps" P. 36** and select "PF Adjust 4: Micro Print" on the front panel.

   •Check the pattern and micro adjustment value. In the pattern, look for a place that has least white lines or overlapping in images. The number printed below the adequate pattern is the micro adjustment value.

8. Enter the micro adjustment value according to the printing result in Step 7.

When you know the adjustment value (when changing the media or for similar operations)

1. Enter the adjustment value for "PF Adjust 5: Micro Change".

2. Select whether you wish to print a confirm pattern and complete the setup.

PF Adjust 1: Initial Print

** : PF Adjust 1
Initial Print

Performs Initial Print. Enter the "Feed Length" and tap [Enter].
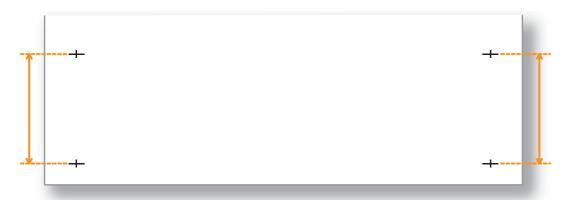
Setting values

** : Initial Print :
Feed Length: 250 mm

100 mm to <250 mm> to 500 mm

<> indicates the initial value.

- After the initial adjustment printing, cut the media.

- With a ruler, measure the length between " ┼ " in the pattern.
  In the example below, the measured place is shown in orange dotted lines and arrows.

> **Note**
>
> The length of media that is fed (feeding length) for initial adjustment printing is normally set at 250 mm. If you increase the feeding length, the accuracy of the Media feed adjustment improves.
>
> To change the feeding length, tap ∧ or ∨ on the front panel and change the set value.

PF Adjust 2: Initial Change

** : PF Adjust 2
Initial Change

Use ∧ or ∨ to enter the adjustment value, and tap [Enter].

Setting values

** : Initial Change :
Init. :   250.0 mm / 250 mm

You can set a value that is between +50 mm and -50 mm of the feed length configured in "Initial Print".

PF Adjust 3: Confirm Print

```
** : PF Adjust 3
Confirm Print
```

Performs Confirm Print.

Enter the "Feed Length" and tap [Enter].
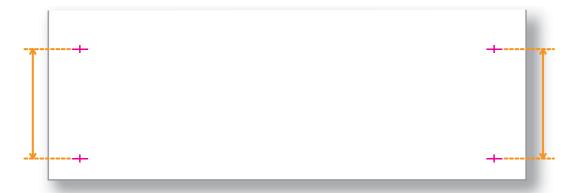
Setting values

```
** : Initial Print :
Feed Length:                250 mm
```

100 mm to <250 mm> to 500 mm

<> indicates the initial value.

- After the confirmation adjustment printing, cut the media.

- With a ruler, measure the length between " ╋ " in the pattern. In the example below, the measured place is shown in orange dotted lines and arrows (the orange parts are not actually printed).

- If the measured length does not match the feeding length, re-correct with **PF Adjust 1: Initial Print**.

- If the measured length matches the feeding length, proceed to **PF Adjust 4: Micro Print**.

> ✎ **Note**
>
> The length of media that is fed (feeding length) for initial adjustment printing is normally set at 250 mm.
> If you increase the feeding length, the accuracy of the Media feed adjustment improves.
> To change the feeding length, tap ⌃ or ⌄ on the front panel and change the set value.

PF Adjust 4: Micro Print

** : PF Adjust 4

Micro Print

Performs Micro adjustment Print.

Enter the appropriate micro adjustment value according to the print result.

- Observe the pattern and verify the micro adjustment value. In the pattern, look for a place that has least white lines or overlapping in images. The number printed below the pattern is the micro adjustment value.
  Enter the micro adjustment value according to the print result.

> **Note**
>
> Once an appropriate micro adjustment value has been saved, the value will be the baseline value from the next time to be printed in the center of the pattern.
>
> For example, if you have entered "-0.20" and print a micro adjustment pattern, values printed below block pattern will be changed to (from left) +1.00, +0.60, +0.30, 0.00, -0.20 (baseline value), -0.30, -0.40, -0.70, -1.00, -1.40.

PF Adjust 5: Micro Change

** : PF Adjust 5

Micro Change

Use ⌃ or ⌄ to enter the adjustment value, and tap [Enter].

Select whether you wish to perform confirmation print and complete the setup.

Setting values	
** : Micro : **(-5 - 5)** 　　　　　　**0.00%**	-5.00% to <0.00%> to 5.00% <> indicates the initial value.

**>4: Vacuum Fan

Type ** : 4 **Vacuum Fan**	Selects the vacuum level. Use ⌃ or ⌄ to select the value, and tap [Enter]. • If you are using a thin or delicate media and there is risk of it wrinkling due to the fan, set a lower value for the fan.

Setting values

**** : Vacuum Fan :** **High**	Low / Medium / <High> / Ex High <> indicates the initial value.

**>5: Thickness

Type ** : 5 **Thickness**	Sets the thickness of the media you are using. Use ⌃ or ⌄ to enter the value, and tap [Enter].

Setting values

**** : Thickness :** **170 µm**	80 µm to <170 µm> to 2,800 µm <> indicates the initial value.

> **Note**
>
> • This menu is to automatically adjust print quality to a certain extent. If you want to improve print quality, manually adjust it.
>
>   ☞ **"**>2: Adjust Print>" P. 57**
>
> • If you have adjusted the print settings, you do not need to configure the thickness of the media in this menu.

**>6: Copy User Type

Type ** : 6 **Copy User Type**	This is for copying the currently selected User Type setting into another User Type. The items that will be copied are: • Settings for "Print Mode", "Effect" • Adjustment values for "Adjust Print", "PF Adjust" • Settings for "Vacuum Fan", "Thickness"

Setting values

**** : UserCopy :**
                Type **   ->   1
 	
**** : UserCopy :**
                Type **   ->   ALL
	Here you can select the User Type to copy the settings into.
	If you select ALL, the settings will be copied into all the User Type.
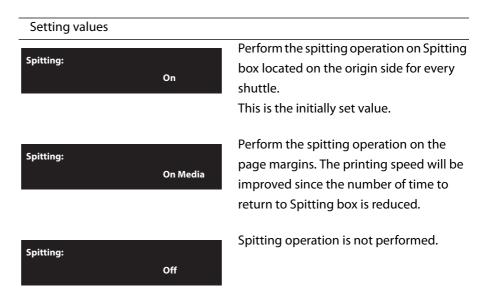
Setup 2: Spitting

Setup 2

Spitting

Sets up the spitting operation while printing.
The display will shift to setting of the pass count only if "On" is set for "Spitting".

Setting values

Spitting:

On

Perform the spitting operation on Spitting box located on the origin side for every shuttle.
This is the initially set value.

Spitting:

On Media

Perform the spitting operation on the page margins. The printing speed will be improved since the number of time to return to Spitting box is reduced.

Spitting:

Off

Spitting operation is not performed.

Note

- Spitting is a maintenance operation for preventing clogging of the print head's nozzles. It consumes ink.
- When Spitting is set to "Off", nozzles will become easily clogged because spitting is not performed. In such a case, print quality cannot be guaranteed.
- When the spitting setting is "On Media", the maximum printable media width becomes 16 mm shorter.
  Therefore, the side margins become the value that you have set in Side Margin menu +8 mm.
  ☞ **"Setup 3: Side Margin" P. 70**

Pass Count menu

Spitting:

On

↵

Spitting:

On Media
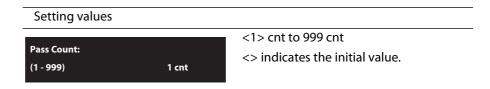
This is for setting the interval at which the print head will carry out spitting operation.
The head will carry out spitting operation every time it completes the number of passes that you set here.
Use ⋀ or ⋁ to enter the value, and tap [Enter].

Setting values

Pass Count:

(1 - 999)   **1 cnt**

<1> cnt to 999 cnt
<> indicates the initial value.

Important!

If larger count is selected, the printing time will be faster, but it will increase the chance of nozzle clogging.

In such a case, print quality cannot be guaranteed.

\<Example of spitting operation\>

Spitting setting	Pass Count setting	Operation
On	1 cnt	Perform the spitting operation on Spitting box every time Print head returns to the origin position. Spitting operation is not performed over the media.
On	5 cnt	Performs the spitting operation on Spitting box on the origin side every five times Print head returns to the origin position. Spitting operation is not performed over the media.
On Media	1 cnt	Performs the spitting operation on Spitting box on the origin side every time Print head returns to the origin position. Perform the spitting operation on Spitting box every time Print head returns to the origin position.
On Media	5 cnt	Performs the spitting operation on Spitting box on the origin side every five times Print head returns to the origin position. Perform the spitting operation on Spitting box every time Print head returns to the origin position.
Off	—	Spitting is not performed on Spitting box or the media.

Setup 3: Side Margin

Setup 3
Side Margin

Set up the right and left margins (side margins) while printing.

Use ⌃ or ⌄ to enter the value, and tap [Enter].

Setting values

Side Margin:
(5 - 25)   5 mm

\<5 mm\> to 25 mm
\<\> indicates the initial value.

> **✎ Note**
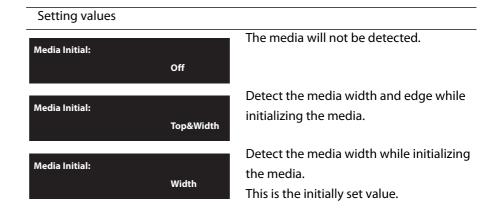
When the "Spitting menu" is set to "On Media", the maximum printable media width becomes 16 mm shorter.

Therefore, the side margins become the value that you have set in Side Margin menu +8 mm.

☞ **"Setup 2: Spitting" P. 69**

Setup 4: Media Initial

Setup 4
Media Initial

Sets whether to detect the media width while initializing the media.

Setting values

Media Initial:
**   Off**

The media will not be detected.

Media Initial:
**   Top&Width**

Detect the media width and edge while initializing the media.

Media Initial:
**   Width**

Detect the media width while initializing the media.
This is the initially set value.

> **✎ Note**
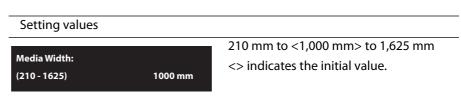
When "Media Initial menu" is set to "Off", set the media width of the current media in Media Width menu.

Setup 5: Media Width

Setup 5
Media Width

Sets the width of the current media when the "Media Initial menu" is set to "Off".
When the "Media Initial menu" is set to "Width", the detected media width will be displayed.
Use ▲ or ▼ to enter the value, and tap [Enter].

Setting values

Media Width:
(210 - 1625)   **1000 mm**

210 mm to <1,000 mm> to 1,625 mm
<> indicates the initial value.

Setup 6: Output Mode
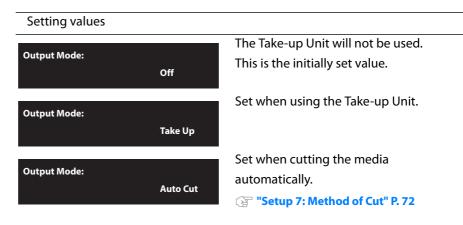
Setup 6
Output Mode
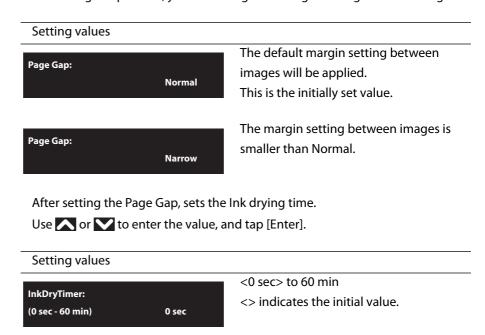
Sets how the media is handled after printing.

Setting values

Output Mode:
                                    Off

The Take-up Unit will not be used.
This is the initially set value.

Output Mode:
                                    Take Up

Set when using the Take-up Unit.

Output Mode:
                                    Auto Cut

Set when cutting the media automatically.
☞ **"Setup 7: Method of Cut" P. 72**

When the "Output Mode" is set to "Take Up"
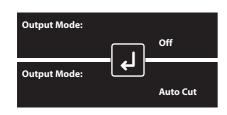
Output Mode:
                                    Take Up
↵

When the "Output Mode" is set to "Take up", the menu is shifted to "Page Gap".
In the "Page Gap menu", you can change the margin setting between images.

Setting values

Page Gap:
                                    Normal

The default margin setting between images will be applied.
This is the initially set value.

Page Gap:
                                    Narrow

The margin setting between images is smaller than Normal.

After setting the Page Gap, sets the Ink drying time.
Use ▲ or ▼ to enter the value, and tap [Enter].

Setting values

InkDryTimer:
(0 sec - 60 min)   **0 sec**

<0 sec> to 60 min
<> indicates the initial value.

When the "Output Mode" is set to "Off" or "Auto Cut"

Output Mode:
Off
Output Mode:
Auto Cut

↵

Sets the ink drying time.

Use ⌃ or ⌄ to enter the value, and tap [Enter].

Setting values

InkDryTimer:	
(0 sec - 60 min)	0 sec

<0 sec> to 60 min

<> indicates the initial value.

Setup 7: Method of Cut
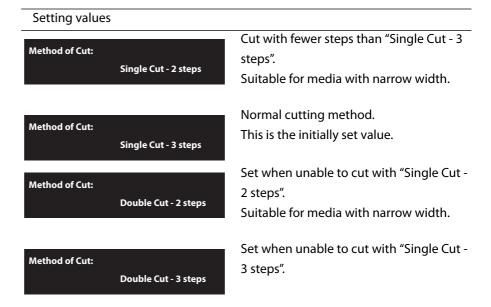
Setup 7
Method of Cut

Sets the media cutting operation after printing.

Setting values

Method of Cut:	
	Single Cut - 2 steps

Cut with fewer steps than "Single Cut - 3 steps".

Suitable for media with narrow width.

Method of Cut:	
	Single Cut - 3 steps

Normal cutting method.

This is the initially set value.

Method of Cut:	
	Double Cut - 2 steps

Set when unable to cut with "Single Cut - 2 steps".

Suitable for media with narrow width.

Method of Cut:	
	Double Cut - 3 steps

Set when unable to cut with "Single Cut - 3 steps".

> ✎ **Note**
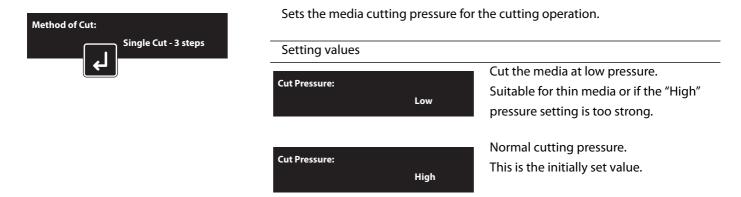
- When the media detection is set to "Off", the media cannot be cut automatically.

  ☞ **"Setup 4: Media Initial" P. 70**

- Some media may not be cut (cannot be cut at all or cannot be cut finely). In such a case, set the "Output Mode menu" to "Off" and cut the media manually.

  ☞ **"Setup 6: Output Mode" P. 71**

Cut Pressure menu

Method of Cut:	
	Single Cut - 3 steps

↵

Sets the media cutting pressure for the cutting operation.

Setting values

Cut Pressure:	
	Low

Cut the media at low pressure.

Suitable for thin media or if the "High" pressure setting is too strong.

Cut Pressure:	
	High

Normal cutting pressure.

This is the initially set value.

Setup 8: Origin
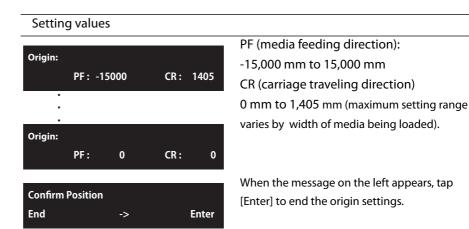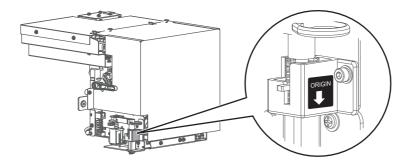
Setup 8
Origin

- Sets the print start position (origin) on the media.
  If you want to change the print start position to print an image on the blank space of the media, use this menu.
- ⬆ / ⬇：Change the print start position (origin) in the PF (media feeding) direction.
- ◀ / ▶ ： Change the print start position (origin) in the CR (carriage traveling) direction.
- Tap [Enter] to confirm the setting.

Setting values

```
Origin:
        PF :  -15000      CR :   1405
          •
          •
          •
Origin:
        PF :      0       CR :      0
```

PF (media feeding direction):
-15,000 mm to 15,000 mm
CR (carriage traveling direction)
0 mm to 1,405 mm (maximum setting range varies by width of media being loaded).

```
Confirm Position
End                 ->          Enter
```

When the message on the left appears, tap [Enter] to end the origin settings.

The arrow mark on the origin label shows the current print start position in CR direction.

ORIGIN

Note

- Depending on the set value of the side margin, the maximum set value of Y (print head transferring distance) decreases.
  ☞ **"Setup 3: Side Margin" P. 70**

- The right side margin will be the following sum depending on the setting.
  Y of Origin menu + 8 mm (when the spitting is set to On Media) + Value set in Side Margin menu.
  ☞ **"Setup 2: Spitting" P. 69**, **"Setup 3: Side Margin" P. 70**

Setup 11: Head Travel

Setup 11 **Head Travel**	

Sets up the range that Print head moves while printing.

Setting values

Head Travel: **Data**	Print head moves the range of the print data width.
Head Travel: **Machine**	Print head moves from origin to the maximum printable media width.
Head Travel: **Media**	Print head shifts within the media width. This is the initially set value.

Setup 12: Multi Strike

Setup 12 **Multi Strike**	

Sets up the overwrite count per line.

Use ⌃ or ⌄ to enter the value, and tap [Enter].

Setting values

Multi Strike: **(1 - 9)** **1 cnt**	<1 cnt> to 9 cnt <> indicates the initial value.

Setup 13: Strike Wait

Setup 13 **Strike Wait**	

Sets up the waiting time while overwrite printing.

Use ⌃ or ⌄ to enter the value, and tap [Enter].

Setting values

Strike Wait: **(0.0 - 5.0)** **0.0 sec**	<0.0 sec> to 5.0 sec <> indicates the initial value.

Setup 14: Slant Check

Setup 14 **Slant Check**	

Sets up slanting detection during media loading.

Setting values

Media Slant: **Off**	Slant Check is not performed. This is the initially set value.
Media Slant: **On**	Slant Check is performed.

Setup 15: Auto Cleaning

Setup 15
Auto Cleaning

Configure the settings for the auto cleaning operation.

Submenus

Auto Cleaning 1
Standby Mode

☞ **Standby Mode menu**

Auto Cleaning 2
While Printing

☞ **While Printing menu**

Auto Cleaning 3
Before Print

☞ **Before Print menu**

Standby Mode menu

Auto Cleaning 1
Standby Mode

The display goes to the Cleaning Interval setting to set the timer for auto cleaning while in standby mode.
The cleaning type is fixed to "Little Charge".

Setting values

Cleaning Interval:
Off

<Off> / 10 min to 1,440 min
<> indicates the initial value.

While Printing menu

Auto Cleaning 2
While Printing

The display goes to the Cleaning Interval setting to set the timer for auto cleaning while in printing.
The cleaning type is fixed to "Little Charge".

Setting values

Cleaning Interval:
Off

<Off> / 5 min to 180 min
<> indicates the initial value.

Before Print menu

Auto Cleaning 3
Before Print

Choose the auto cleaning mode to be performed before printing.

Setting values

Before Print:
Off

<Off> / Short / Normal / Long
<> indicates the initial value.

Setup 16: Ink Status

Setup 16
Ink Status

Displays the percentage of ink level in each ink bag.
To identify the ink slots corresponding to the numbers shown here, see **"Main components of your printer" P. 9**.

```
1 2 3 4 :            100 / 90 / 90 / 80
5 6 7 8 :            100 / 90 / 90 / 80
```

> 📝 **Note**

To display various information of Ink, use genuine ink and S/C cards.
If Ink bags other than genuine Ink bags are used, ink status will not be displayed correctly.

Setup 17: Roll Length

Setup 17
Roll Length

Sets up the media length.

Setting values

Roll Kind: Off	Roll Length is not used. This is the initially set value.
Roll Kind: Roll *	Sets up the media length. The set values of the media length can be set as "Roll1" to "Roll3".

When the "Roll Kind" is set to "Roll 1", "Roll 2" or "Roll 3"

Length menu

Roll Kind:

Roll 1

↵

Sets up the media length.
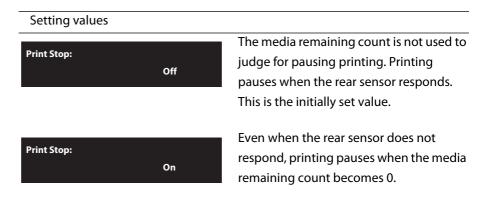
Setting values

Length: (1 - 1500) 30 m	1 m to <30 m> to 1,500 m <> indicates the initial value.

Print stop menu

```
Length:
(1 - 1500)              30 m
  ↵
```

Sets whether or not to display "Roll Remain Error" and pause printing when the length of the media that is counted inside the printer becomes 0.

Setting values

```
Print Stop:
              Off
```

The media remaining count is not used to judge for pausing printing. Printing pauses when the rear sensor responds. This is the initially set value.

```
Print Stop:
              On
```

Even when the rear sensor does not respond, printing pauses when the media remaining count becomes 0.
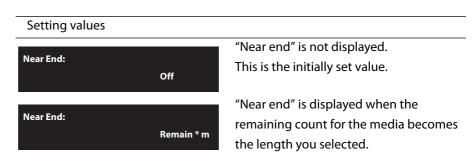
> **Note**
>
> • Normally you can set this as "Off" as the rear sensor detects when the roll paper is finished.
>
> • If you are using the media that does not come off the paper core easily when it is finished, printing may not be paused when the media is finished, if the "Print stop menu" is set to "Off". If this happens, set this to "On".

Near End menu

```
Print Stop:
              On
  ↵
```

Sets whether or not to display "Roll Near End: *m" (* is replaced with a number between 1 and 10) before the length of the media that is counted inside the printer becomes 0.

Setting values

```
Near End:
              Off
```

"Near end" is not displayed.
This is the initially set value.

```
Near End:
         Remain * m
```

"Near end" is displayed when the remaining count for the media becomes the length you selected.

Setup 18: Exhaust Fan
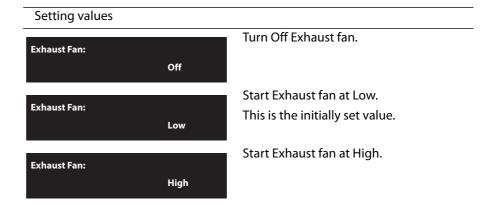
Setup 18
Exhaust Fan

Sets up Exhaust fan operation.

Ventilates the inside of the printer to stabilize the parts performance. It also decreases the contamination by ink mist inside the printer.

We recommend that you use Exhaust fan, especially when printing for a long time.

Setting values

Exhaust Fan:
Off

Turn Off Exhaust fan.

Exhaust Fan:
Low

Start Exhaust fan at Low.
This is the initially set value.

Exhaust Fan:
High

Start Exhaust fan at High.

Setup 19: Longstore

Setup 19
Longstore

Wash Print head with the cleaning fluid.

Submenu

Longstore
Start   -> Enter

Wash Print head with the cleaning fluid.
Tap [Enter] to perform head cleaning.

☞ **"Long-term storage" P. 128**

> **Important!**
>
> **Be sure to use the designated cleaning bag.**

Setup 20: CR Maintenance

Setup 20
CR Maintenance

Performs maintenance. Used in the following cases.

- Cleaning and replacing of cleaning wiper
- Cleaning of print head circumference
- Replacing absorption material for the flushing box
- Replacing cutter

☞ **"Maintenance" P. 100**

Submenus

CR Maintenance
Start   -> Enter

Performs maintenance.

CR Maintenance
End   -> Enter

Completes maintenance.
Perform the pumping operation (start/stop) by using ⌄.

Setup 21: Initialization

Setup 21
Initialization

Restore the printer settings to the factory default.

Setting values

Initialization:
ALL

For initializing the settings of all the menus.

Initialization:
UserType

Initializes the settings in the User Type menu.

Initialization:
Except UserType

Initializes the settings other than the ones in the User Type menu.

Setup 22: Life Times
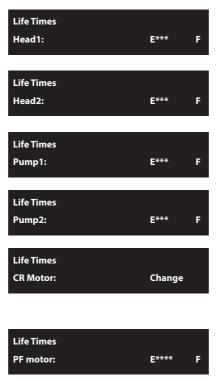
Setup 22
Life Times

Displays the operational life time of each part.

- The lifetime of each part is indicated by the asterisks (Maximum 5 asterisks: 100% left). As the part deteriorates, the number of asterisks decreases one by one (20%).
- The part should be changed when all of the asterisks have disappeared and "Change" is displayed.
  Contact your local MUTOH dealer to ask for replacing parts.
- After "Change" appears, "Life Times [Pump *]" or a similar message will be displayed when you are not in this menu.
  You can delete this message by pressing the [Cancel] key.

Life Times
Head1:   E***   F

Displays the service life for the print head 1.
The service life in this case is at 60%.

Life Times
Head2:   E***   F

Displays the service life for the print head 2.
The service life in this case is at 60%.

Life Times
Pump1:   E***   F

Displays the service life for the pump 1.
The service life in this case is at 60%.

Life Times
Pump2:   E***   F

Displays the service life for the pump 2.
The service life in this case is at 60%.

Life Times
CR Motor: Change

Displays the service life for the CR motor.
The service life of the component in this case is over.
Have the component replaced.

Life Times
PF motor: E****   F

Displays the service life for the PF motor.
The service life in this case is at 80%.

Setup 23: IP Address

Setup 23
IP Address

Sets the IP address of the printer.

- Use ⋀ to increase a digit.
- Use ⋁ to decrease a digit.
- Use ❮ to move the cursor to the previous digit.
- Use ❯ to move the cursor to the next digit.

Tap [Enter] after entering each digit.

Setting values

IP Address:

　　　19<u>2</u>.　　168.　　1.　　253

0.0.0.0 to <192.168.1.253> to
255.255.255.255
<> indicates the initial value.

Note

Be sure to set the IP address, Subnet mask, and Gateway after consulting the network administrator.

Setup 24: Subnet Mask

Setup 24
Subnet Mask

Sets the subnet mask of the printer.

- Use ⋀ to increase a setting value.
- Use ⋁ to decrease a setting value.
- Use ❮ to move the cursor to the previous digit.
- Use ❯ to move the cursor to the next digit.

Tap [Enter] after entering each digit.

Setting values

Subnet Mask:

　　　25<u>5</u>.　　255.　　255.　　0

0.0.0.0 to <255.255.255.0> to
255.255.255.255
<> indicates the initial value.

Setup 25: Gateway

Setup 25
Gateway

Sets the gateway.

- Use ⋀ to increase a setting value.
- Use ⋁ to decrease a setting value.
- Use ❮ to move the cursor to the previous digit.
- Use ❯ to move the cursor to the next digit.

Tap [Enter] after entering each digit.

Setting values

Gateway:

　　　19<u>2</u>.　　168.　　1.　　254

0.0.0.0 to <192.168.1.254> to
255.255.255.255
<> indicates the initial value.

Setup 26: Header Dump

Setup 26
Header Dump

Sets whether to print the following information when printing.

- Data header
- Data dot number (printed only when Header damp setting is "On")
- Printing date and time
- Printer serial number
- Firmware version
- Receiving time (printed only when Header damp setting is "Dump")
- Receiving size (printed only when Header damp setting is "Dump")

Setting values

Header Dump: Off	Dump data is not printed. This is the initially set value.
Header Dump: On	Dump data is printed after the original image is printed.
Header Dump: Dump	Prints only damp data. "Data dot number" is not printed.
Header Dump: Print	Prints the last header dump. If no history is available, "No Print Data" will appear on the front panel.
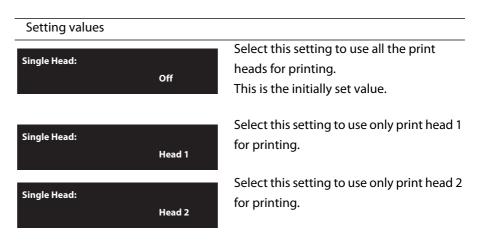
> **Note**
> - The data will be useful when contacting technical support.
> - Performing printing if the printer is connected to PC, the print settings of RIP soft you are using are printed on data header.

Setup 27: Single Head

Setup 27
Single Head

Selects a print head for printing.
You can still print even if some of the print heads malfunction. However, in that case the printing speed will drop.

Setting values

Single Head: Off	Select this setting to use all the print heads for printing. This is the initially set value.
Single Head: Head 1	Select this setting to use only print head 1 for printing.
Single Head: Head 2	Select this setting to use only print head 2 for printing.

> **Important!**
>
> **In case of any problems with the print heads, contact your local MUTOH dealer.**

Setup 29: Start Feed

Setup 29
Start Feed

You can change the margin setting between images.
- Value greater than 0: The margin setting between images will be wider than when setting "0".
- Value equal to 0: The default margin setting between images will be applied.
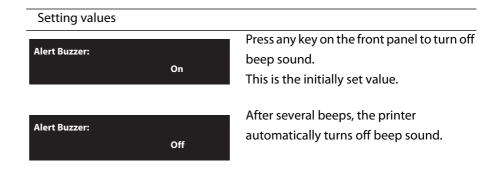- Value less than 0: The margin setting between images will be smaller than when setting "0".

Setting values

Start Feed:
(-10 - 500)   **0 mm**

-10 mm to <0 mm> to 500.0 mm
<> indicates the initial value.

> **Note**

With take-up system: if you want to set "Start Feed" to below 0, set "Page Gap" to "Narrow".
If not, the Start Feed setting is not reflected properly.

☞ **"When the "Output Mode" is set to "Take Up"" P. 71**

Setup 30: Alert Buzzer

Setup 30
Alert Buzzer

Selects how to turn off the printer beep sound when an error occurs.
For unattended printing, you can select "Off" setting to avoid continuous buzzer beep.

Setting values

Alert Buzzer:
                              On

Press any key on the front panel to turn off beep sound.
This is the initially set value.

Alert Buzzer:
                              Off

After several beeps, the printer automatically turns off beep sound.

Setup 31: Internal LED Lights

Setup 31
LED Light

Selects the internal LED lights settings.
The lights help to inspect inside of the printer or your print during printing.

Submenus

LED Light:
                    Auto

The LED lights automatically turn on while printing, front cover open, initializing media, cutting media, specifying print start position (origin), and feeding media.
The default is set to Auto.

LED Light:
                    On

The LED lights are always on. It will turn off while in sleep mode or when the printer is powered off.

LED Light:
                    Off

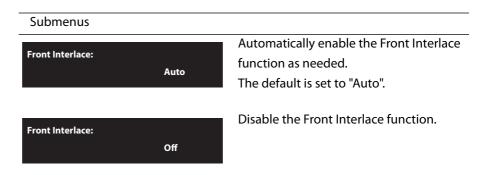The LED lights are disabled.

Setup 32: Front Interlace

Setup 32
Front Interlace

Select to enable or disable the Front Interlace function.
It automatically fine tunes the media feeding amount of the first print swath to improve print quality.
Use the "Auto" setting for normal print job.
In following cases, try with "Off" setting to see if the print quality is improved:
  • If the print defect due to nozzle missing is found on the first print swath of the print.
  • If the print quality is clearly different between the first print swath and rest of the area on the print.

Submenus

Front Interlace:
                    Auto

Automatically enable the Front Interlace function as needed.
The default is set to "Auto".

Front Interlace:
                    Off

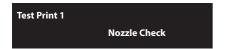Disable the Front Interlace function.

Setup 33: Temporary

Setup 33
Temporary

Displays the menus which have been set to hide in the "Menu4: Menu Option" temporarily.
Tap [Enter] to return to the previous menu with all set up items displayed.
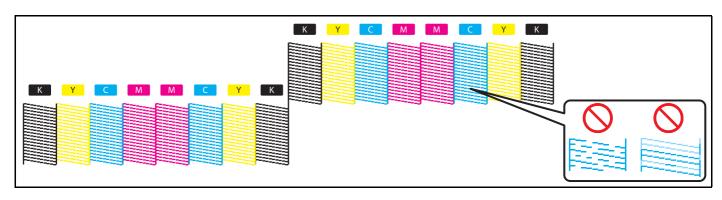
Menu 2 : Test Print

Test Print 1: Nozzle Check

Test Print 1

Nozzle Check

Use this menu to check that the print head and print nozzles you selected can properly print without nozzle clogging and missing or too light lines.

☞ **"Nozzle check" P. 29**

> **Note**
>
> - The pattern shown above is an example when printed with 4-color configuration.
> - The printer information (date and time printed, printer's serial number, firmware version) is printed on the nozzle check pattern.

Test Print 2: Mode Print

Test Print 2

Mode Print

Mode print can be performed. Used to confirm the following printing conditions.

- Print quality
- Effect
- Micro adjustment value for feed correction

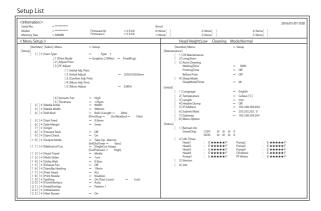2020/1/01 0:00 G2(720x1080 6Pass Bi) -Fine&Fog/PF Adjust : 0.00%

Test Print 3: Setup List

Test Print 3

     Setup List

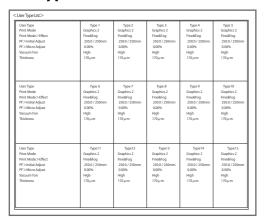Setup list printing is performed.

Use this to check the current setting contents and the User Type.

Setup List

User Type List
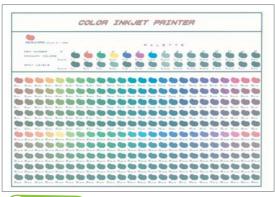

Test Print 4: Palette

Test Print 4

     Palette

Palette print is executed for the color demonstration.

> ✎ **Note**

When the selected print mode of the user type is Graphics 1 or Graphics 2, Palette menu is not displayed.

☞ **"**>1: Print Mode" P. 55**

Test Print 5: Adjust Head

Test Print 5
Adjust Head

This menu calibrates the dot placement between two print heads installed on this printer.

Tap ❯ to open the submenu.

Align the heads in the following cases:

- If the image quality does not improve after you have used the "Adjust Print" menu.
- When switching to thin media or a type of media where ink drops do not spread.

After executing this menu, be sure to perform the "Adjust Print" function.
If you don't, the image quality during bidirectional printing may drop.

Submenus

Adjust Head 1
Standard

Adjustment is performed only for the print mode set by the current User Type. You can make the adjustments more quickly than by selecting "Fine Pattern ALL" in "Custom".

When selecting "Standard" here, you need to use the same print mode settings for the RIP (Raster Image Processor) as the print mode settings for the User Type. Use the same settings for the resolution, pass and printing direction in the RIP print mode as in the print mode for the User Type.

Adjust Head 2
Custom

You can also adjust a print mode other than the one used for the current User Type. You can print with an optimal image quality even if the RIP print mode is different from the print mode used for the User Type.

Adjust Head 3
Auto

Perform the automatic adjustment using the embedded color sensor.
It helps to reduce time and increase the alignment accuracy.

✏ Note

- If print defects (like banding or grainy look) still appear on the print, try an auto calibration again, or go to "Adjust Print1/ Standard" or "Adjust Print2/ Custom" to perform calibration.
- If a roll media starts to cockle during calibration, load the media again.

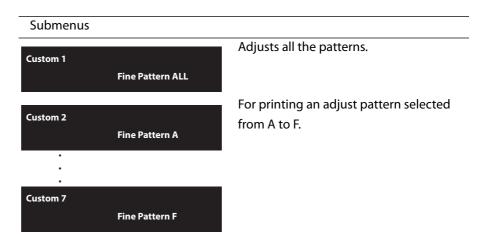## When "Adjust Head 2 Custom" is selected

Adjust Head 2
Custom

You can select the adjustment method.Tap ❯ to open the submenu.

When selecting "Fine Pattern X (A to F)", select the option that corresponds to the print mode used for printing.

If the resolution, pass and the printing direction of the RIP print mode differ from the print mode for the User Type, select the fine pattern that is suitable for the RIP.

☞ **"Adjustment patterns for each print mode" P. 59**

Submenus	
Custom 1 Fine Pattern ALL	Adjusts all the patterns.
Custom 2 Fine Pattern A ⋮ Custom 7 Fine Pattern F	For printing an adjust pattern selected from A to F.

Standard or Custom Adjustment Methods

1. Print the Head adjustment pattern and look for a place in the pattern that has least white lines or overlapping images.

- If you selected "Adjust Head 2: Custom", select "ALL" or "A" to "F".

- The number printed under the pattern without alignment errors is the adjustment value.

2. Enter the adjustment value.

Head adjustment pattern

- Press the [Enter] key to carry out printing. For the Head adjustment pattern, the same patterns will be printed on both sides and center of the media.

- Check the print results and select the number that looks most aligned between 1 and 7.

- Pattern names such as "Pattern B: 4" are shown on the display. Use the ⋀ / ⋁ key to enter the number of the best-adjusted pattern, and press the [Enter] key.

- In the case of the picture below, enter "5", so that the display reads "Pattern B: 5".

- If you selected "Head Adj. 2: Custom" and "Fine Pattern ALL", enter the adjustment value for A to F.

Pattern Name

B

Q3/Q4/G1/G2

Current Print Mode
(If you carried out the adjustment with Custom settings,
the head height and the printing information will also be printed.)

When "Adjust Head 3 Auto" is selected

Adjust Head 3
Auto

You can select the adjustment method.Tap **>** to open the submenu.

Perform the automatic adjustment using the embedded color sensor.

If the resolution, pass and the printing direction of the RIP print mode differ from the print mode for the User Type, select the fine pattern that is suitable for the RIP.
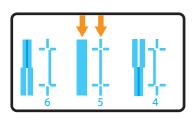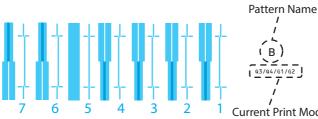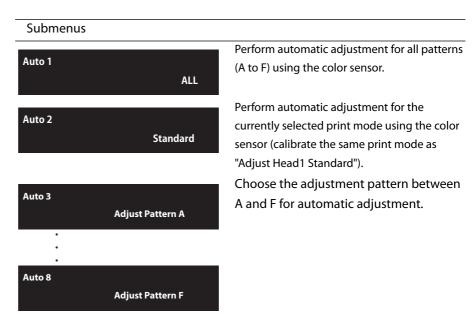
☞ **"Adjustment patterns for each print mode" P. 59**

Submenus	
Auto 1 **ALL**	Perform automatic adjustment for all patterns (A to F) using the color sensor.
Auto 2 **Standard**	Perform automatic adjustment for the currently selected print mode using the color sensor (calibrate the same print mode as "Adjust Head1 Standard").
Auto 3 **Adjust Pattern A** · · ·	Choose the adjustment pattern between A and F for automatic adjustment.
Auto 8 **Adjust Pattern F**	

Auto Adjustment Method

1. Select the adjustment pattern from "ALL", "Standard", or any specific pattern between "Adjust Pattern A" and "Adjust Pattern F".

- The selected adjustment pattern is printed.

- The printer scans the print using the embedded color sensor, then automatically corrects the dot placement.

2. Once successfully completed, the message "Auto Adjust Succeeded   End->Enter" will appear on the panel.

- If failed, the message "Auto Adjust Failed   End -> Enter" will appear on the panel.
  Tap [Enter] to end the adjustment.

- Try Auto Adjust again or perform Standard or Custom adjustment.

3. Tap [Enter] to exit the menu.

> ✎ **Note**
>
> - If failed in the middle of the calibration, the adjustment value for the pattern which has been successfully calibrated will be saved in the printer, but the adjustment value for the pattern which has been failed to calibrate or has not been calibrated yet will not be saved in the printer.
> - If print defects (like banding or grainy look) still appear on the print, try an auto calibration again, or go to "Adjust Print1/ Standard" or "Adjust Print2/ Custom" to perform calibration.
> - If a roll media starts to cockle during calibration, load the media again.

Menu 3 : Cleaning

Menu 3
Cleaning

Tap [Enter] to select the print heads you wish to clean.
If nozzle missing is occurred in specific print head, select the print head that you want to perform cleaning. In this way, you can reduce ink waste.

Setting values

Select Print Head ALL	Select this setting to clean all the print heads.
Select Print Head Head 1	Select this setting to clean only print head 1.
Select Print Head Head 2	Select this setting to clean only print head 2.

Select Print Head
    ↵   ALL

Select the cleaning type.

Setting values

|	
Cleaning Type1 Short	Consumes less ink than Normal cleaning.
Cleaning Type2 Normal	Conduct nozzle check before and after printing, and use when nozzle missing is found.
Cleaning Type3 Long	Consumes more ink than Normal cleaning. When nozzle missing still occurs after Normal cleaning, conduct Long cleaning.
Cleaning Type4 Little Charge	Though much better cleaning results can be expected than Long cleaning, it consumes a large amount of ink.
Cleaning Type5 **Initial Charge**	Gives a rather higher cleaning effect than "LittleCharge", but also consumes rather more ink.

✎ **Note**
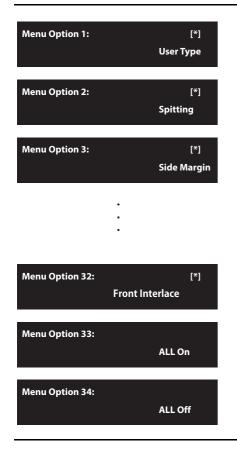
"InitialCharge" is available only when the Select Print Head menu is set to "ALL".

Menu 4 : Menu Option

You can choose whether to display the menus in "Menu 1: Setup".
Choose whether you wish to display a menu by tapping [Enter].

[*]= the item will be displayed
[ ]= the item will not be displayed

Menu Option 1:	[*]
	User Type

Displays the "User Type menu".
The initial value is [*].

Menu Option 2:	[*]
	Spitting

Displays the "Spitting menu".
The initial value is [*].

Menu Option 3:	[*]
	Side Margin

Displays the "Side Margin menu".
The initial value is [*].

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.
.

Menu Option 32:	[*]
	Front Interlace

Displays the "Front Interlace menu".
The initial value is [*].

Menu Option 33:	
	ALL On

If you tap [Enter], all the items in Menu Option will be marked with a [*] (displayed).

Menu Option 34:	
	ALL Off

If you tap [Enter], all the items in Menu Option will be marked with a [ ] (not displayed).

Menu 5 : System Info.

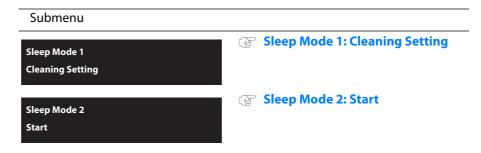Displays the versions of the firmware and total printed area.

Menu 5
System Info.

Version	
	0.00

Displays the version of the printer firmware.

Total Print Area	
	42949672m 2

Displays total printed area in the printer since the purchase.
This information may be used for reference for maintenance.

Menu 6 : Sleep Mode
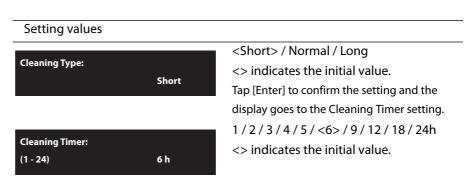
Start Sleep Mode and set the head cleaning interval during Sleep Mode.

Menu 6
Sleep Mode

Submenu

Sleep Mode 1
Cleaning Setting

☞ **Sleep Mode 1: Cleaning Setting**

Sleep Mode 2
Start

☞ **Sleep Mode 2: Start**

Sleep Mode 1: Cleaning Setting

Set the timer to perform the head cleaning while in sleep mode.

Sleep Mode 1
Cleaning Setting

Setting values

Cleaning Type:	
	Short

<Short> / Normal / Long
<> indicates the initial value.
Tap [Enter] to confirm the setting and the display goes to the Cleaning Timer setting.

Cleaning Timer:	
(1 - 24)	**6 h**

1 / 2 / 3 / 4 / 5 / <6> / 9 / 12 / 18 / 24h
<> indicates the initial value.

Sleep Mode 2: Start

Put the printer into sleep mode.

- Tap **>**.

- "Sleep Mode   Start -> Enter" is displayed.
  Tap [Enter].

- "In Sleep Mode   Wake up -> Enter" is displayed.
  The sleep mode will start.

- To exit the sleep mode, tap [Enter].

Important!

During Sleep Mode, even if the set amount of time has passed, print-head cleaning is not performed under the following circumstances.

- **When the front cover is open.**

- **When the maintenance cover is open.**

- **The pressure rollers is released.**

- **The waste ink tank is full.**

- **The ink bag case has been removed.**

- **The S/C card has been removed.**

- **The inserted S/C card is not the genuine S/C card, etc.**

If one of the above conditions occurs during Head cleaning, cleaning is stopped.
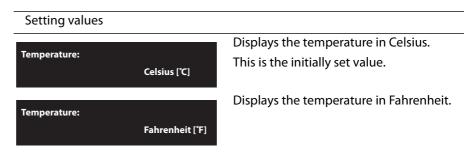**When the printer returns to a normal state, Head cleaning is restarted.**

Menu 7 : Display

Display 1: Language

Display 1
Language

Choose the language of the front panel from the following selection.

Setting values

Language:	
	English

Default setting.

Language:	
	Dutch

Language:	
	Spanish

Language:	
	French

Language:	
	Italian

Language:	
	Portuguese

Language:	
	German

Language:	
	Japanese

Display 2: Temperature
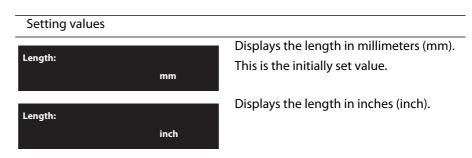
Display 2
Temperature

Choose the unit of the temperature displayed on the front panel.

Setting values

Temperature:	
	Celsius [℃]

Displays the temperature in Celsius.
This is the initially set value.

Temperature:	
	Fahrenheit [℉]

Displays the temperature in Fahrenheit.

Display 3: Length

Display 3
Length
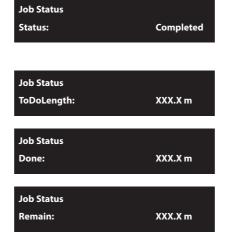
Choose the unit of the length displayed on the front panel.

Setting values

Length:
mm

Displays the length in millimeters (mm).
This is the initially set value.

Length:
inch

Displays the length in inches (inch).

Menu 8 : Job Status

Menu 8
Job Status

Various information of previous print will be displayed.

Job Status
Status: **Completed**

Displays if the print is completed.
- When the print is completed: [Completed]
- When the print is canceled: [Canceled]

Job Status
ToDoLength: **XXX.X m**

The total length of print data (media feeding direction) will be displayed.

Job Status
Done: **XXX.X m**

The printed length will be displayed.

Job Status
Remain: **XXX.X m**
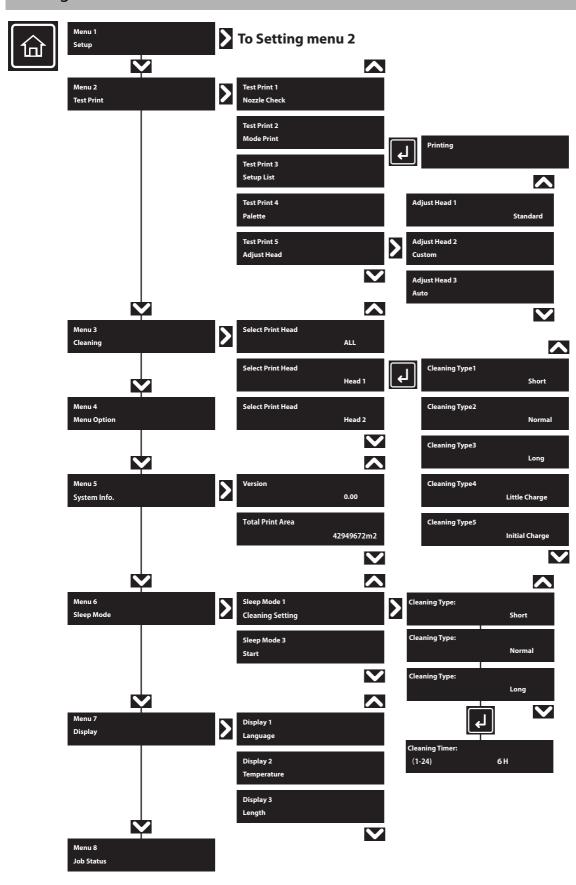
The remaining length of print data will be displayed.

> ✎ **Note**
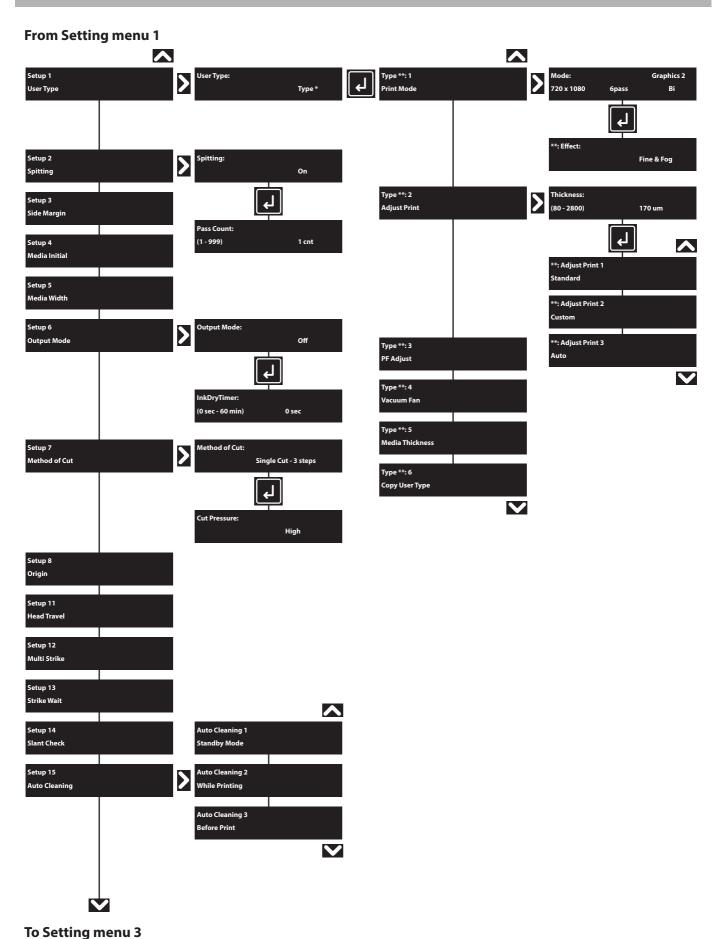
- The values displayed in this function are just standard values, not guarantee the accuracy.
- If the print data includes no length data, all information will be displayed as "0".
- This function is to check the information of print data with the print operation is completed. For the details on data while printing, please refer to the **"Menu 3: Job Status" P. 46**.
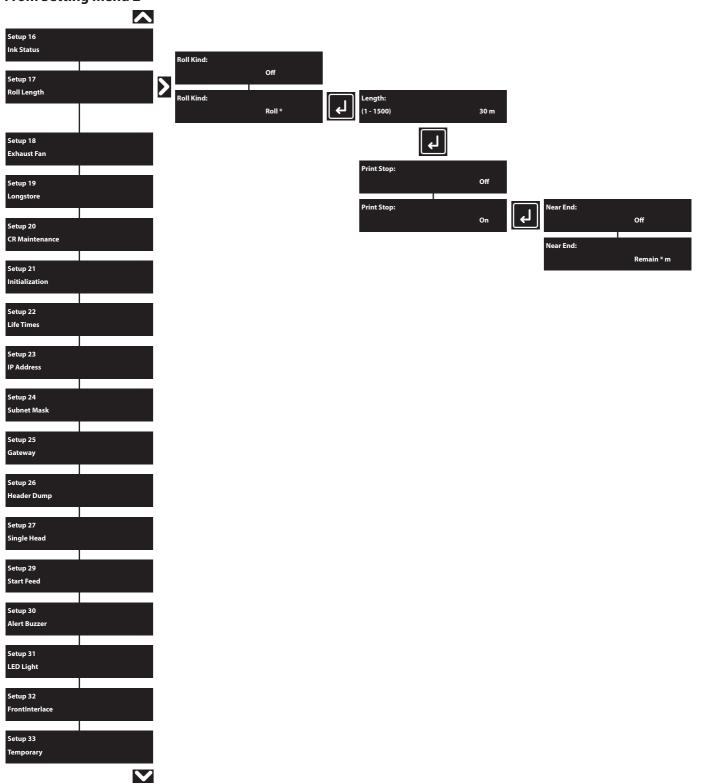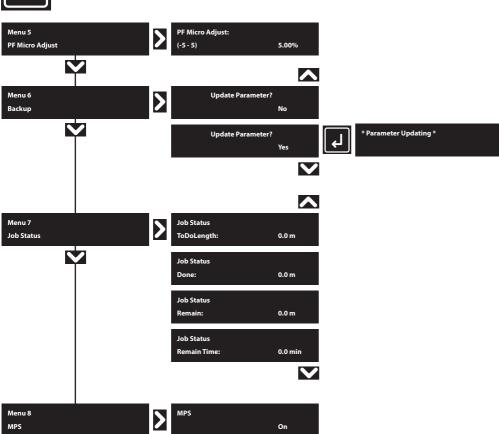
Menu chart

Setting menu 1

Menu 1 Setup	**To Setting menu 2**

Menu 2 Test Print

- **Test Print 1** Nozzle Check
- **Test Print 2** Mode Print → Printing
- **Test Print 3** Setup List
- **Test Print 4** Palette
- **Test Print 5** Adjust Head
  - **Adjust Head 1** Standard
  - **Adjust Head 2** Custom
  - **Adjust Head 3** Auto

Menu 3 Cleaning

- **Select Print Head** ALL
- **Select Print Head** Head 1
- **Select Print Head** Head 2
  - **Cleaning Type1** Short
  - **Cleaning Type2** Normal
  - **Cleaning Type3** Long
  - **Cleaning Type4** Little Charge
  - **Cleaning Type5** Initial Charge

Menu 4 Menu Option

Menu 5 System Info.

- **Version** 0.00
- **Total Print Area** 42949672m2

Menu 6 Sleep Mode

- **Sleep Mode 1** Cleaning Setting
  - **Cleaning Type:** Short
  - **Cleaning Type:** Normal
  - **Cleaning Type:** Long
  - **Cleaning Timer:** （1-24） 6 H
- **Sleep Mode 3** Start

Menu 7 Display

- **Display 1** Language
- **Display 2** Temperature
- **Display 3** Length

Menu 8 Job Status

Setting menu 2

From Setting menu 1

Setup 1 User Type	▸	User Type: Type *

Setup 2 Spitting	▸	Spitting: On

↵

Pass Count:
(1 - 999) 1 cnt

Setup 3 Side Margin

Setup 4 Media Initial

Setup 5 Media Width

Setup 6 Output Mode	▸	Output Mode: Off

↵

InkDryTimer:
(0 sec - 60 min) 0 sec

Setup 7 Method of Cut	▸	Method of Cut: Single Cut - 3 steps

↵

Cut Pressure:
High

Setup 8 Origin

Setup 11 Head Travel

Setup 12 Multi Strike

Setup 13 Strike Wait

Setup 14 Slant Check

Setup 15 Auto Cleaning	▸

Auto Cleaning 1
Standby Mode

Auto Cleaning 2
While Printing

Auto Cleaning 3
Before Print

Type **: 1 Print Mode	↵	Mode: Graphics 2 720 x 1080 6pass Bi

↵

**: Effect:
Fine & Fog

Type **: 2 Adjust Print	▸	Thickness: (80 - 2800) 170 um

↵

**: Adjust Print 1
Standard

**: Adjust Print 2
Custom

**: Adjust Print 3
Auto

Type **: 3 PF Adjust

Type **: 4 Vacuum Fan

Type **: 5 Media Thickness

Type **: 6 Copy User Type

To Setting menu 3

Setting menu 3

From Setting menu 2

⌃

| Setup 16 |
| Ink Status |

| Setup 17 |
| Roll Length |

> ❯

| Roll Kind: |
| **Off** |

| Roll Kind: |
| **Roll *** |

↵

| Length: |
| (1 - 1500)   **30 m** |

↵

| Print Stop: |
| **Off** |

| Print Stop: |
| **On** |

↵

| Near End: |
| **Off** |

| Near End: |
| **Remain * m** |

| Setup 18 |
| Exhaust Fan |

| Setup 19 |
| Longstore |

| Setup 20 |
| CR Maintenance |

| Setup 21 |
| Initialization |

| Setup 22 |
| Life Times |

| Setup 23 |
| IP Address |

| Setup 24 |
| Subnet Mask |

| Setup 25 |
| Gateway |

| Setup 26 |
| Header Dump |

| Setup 27 |
| Single Head |

| Setup 29 |
| Start Feed |

| Setup 30 |
| Alert Buzzer |

| Setup 31 |
| LED Light |

| Setup 32 |
| FrontInterlace |

| Setup 33 |
| Temporary |

⌄

Menu during printing

```
[home icon]
```

| Menu 5 | > | PF Micro Adjust: |
| PF Micro Adjust | | (-5 - 5)   5.00% |

[down]   [up]

| Menu 6 | > | Update Parameter? |
| Backup | | No |

[down]

| | | Update Parameter? | [enter] | * Parameter Updating * |
| | | Yes |

[down]

[up]

| Menu 7 | > | Job Status |
| Job Status | | ToDoLength: 0.0 m |

[down]

| | | Job Status |
| | | Done: 0.0 m |

| | | Job Status |
| | | Remain: 0.0 m |

| | | Job Status |
| | | Remain Time: 0.0 min |

[down]

| Menu 8 | > | MPS |
| MPS | | On |

Chapter 3 Maintenance

Maintenance

To maintain the performance of this product, please conduct maintenance by yourself.
The types of maintenance are shown next.

Before and after daily operation	**"Nozzle check and cleaning" P. 29**
Based on your usage condition	**"Head cleaning" P. 107**
	"Cleaning around the capping unit" P. 113
	"Cleaning around the print head" P. 115
	"Cleaning the color sensor" P. 117
	"Replacing ink bag" P. 102
	"Emptying waste ink tank" P. 105
	"Replacing absorption material for the flushing box" P. 120
	"Replacing Cutter" P. 122
Weekly	**"Cleaning of cleaning wiper" P. 110**
Monthly	**"Inside cleaning" P. 119**
Every six months	**"Replacing the cleaning wiper" P. 124**
When not used for a week or more	**"Head cleaning" P. 107** (Once a week)
When not used for a long period	**"Long-term storage" P. 128**

> ◁) **Important!**
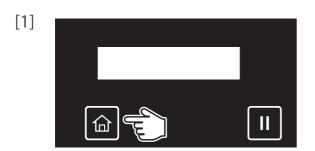
Since a service technician has to handle following cases, please contact your local MUTOH dealer.

- **Error requiring restart is happening repeatedly.**
- **The message to notify the life of print head, pump and various motors is displayed.**

☞ **"Messages and Error Messages" P. 138**

Checking ink and replacing ink bag

Checking ink level

[1]

Tap [Home].

[2]

Menu 1

Setup

Tap ❯ .

[3]

Setup 16

Ink Status

Tap ⌄ until the menu on the left appears.

• Tap ❯ .

[4]

1 2 3 4 :   **100 / 90 / 90 / 80**

5 6 7 8 :   **100 / 90 / 90 / 80**

The ink level is displayed from 0% to 100%.

> **Note**
>
> • To identify the ink slots corresponding to the numbers shown here, see **"Main components of your printer" P. 9**.

• 4-color setting

1	K1 (Black)	2	K2 (Black)	3	C1 (Cyan)	4	C2 (Cyan)
5	M1 (Magenta)	6	M2 (Magenta)	7	Y1 (Yellow)	8	Y2 (Yellow)

• 7-color setting

1	M (Magenta)	2	Lm (Light Magenta)	3	C (Cyan)	4	Lc (Light Cyan)
5	K (Black)	6	Cl (Cleaner)	7	Y (Yellow)	8	Lk (Light Black)

When it becomes time to replace ink bag

When the ink level becomes low, the error LED of the front panel flashes and a buzzer sounds.

[1]

[4] S / C Ink Low	
PG: Low	W: 1625 m

Tap [Enter].
- The buzzer stops.
- In the figure to the left, the slot 4 ink bag is nearing replacement.

[2]   Prepare the replacement ink bag.

Replacing ink bag

When an ink bag runs out of ink, the error message [Ink End] or [S/C Ink End] appears on the panel with blinking error LED and beep sound. Replace an ink bag immediately. The printer will not resume printing until the ink bag is replaced.
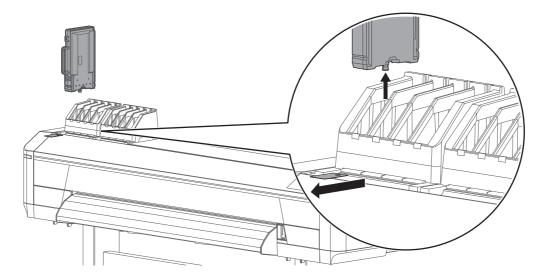
> **Important!**
>
> - **Do not replace ink bag when the printer is powered off.**
>   **Ink level cannot be detected correctly.**
>
> - **If ink bag is moved from cold to warm place, leave it in the room temperature at least three hours.**
>
> - **If you do not have any replacement ink bag, do not remove the empty ink bag from the printer.**
>   **This may cause the nozzle clogs.**

1. Removing the ink bag case
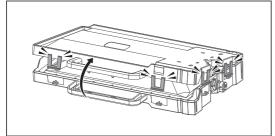
[1]

[4] Ink End

Tap [Enter].
- The buzzer stops.
- In the figure to the left, the slot 4 ink bag must be replaced.

[2]   Remove the ink bag case and S/C card that you need to replace from each slot.

[3]
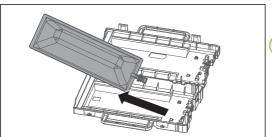
Unlock four latches and open the ink bag case.

🔈 **Important!**

Try not to apply excessive force to unlock them. This will cause damage to the latch.

[4]

Remove the empty ink bag.

✏️ **Note**
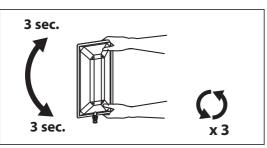
Place the used ink bag in a plastic bag or the like and dispose of the ink bag according to the local regulations.

2. Installing the ink bag

[1]

3 sec.

3 sec.

x 3
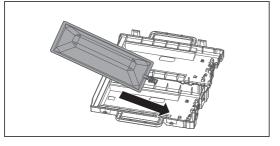
Prepare the new ink bag, and follow the instructions below to invert it to mix the ink.
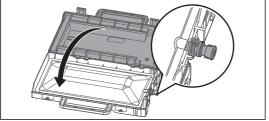
- Face the ink spout side upwards for 3 seconds.
- Invert it and count for 3 seconds.
- Repeat that 3 times.

[2]

Put the ink bag into the case.

[3]
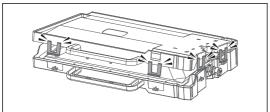
Close the ink bag case.

🔈 **Important!**

Make sure the spout of ink bag is properly fitted into the groove in the case.
If not fitted, the printer cannot correctly detect ink bag.

Close all the latches (×4) of the case properly.

🔈 **Important!**
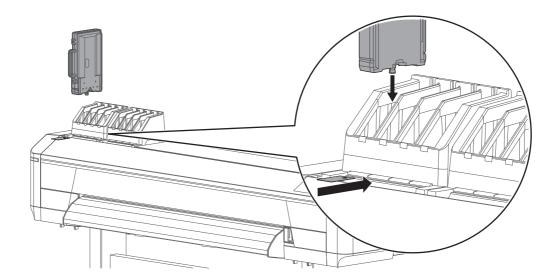
Check that all the latches (×4) are closed.
If not, it may cause ink spillage.

[4] Insert the ink bag case with the new ink bag installed and new S/C card into each slot.

- Match the colors of the ink color indicating label on the printer and the label on the ink bag.
- Face the latch side toward you and insert the case into each slot.
- Make sure that they are fully inserted.

Emptying waste ink tank

Emptying waste ink tank

In the following cases, drain waste ink in the waste ink tank into a container to empty the tank.

- When the waste ink tank is more than half full.

- When "Full WasteInkTank" is displayed on the front panel.

Display messages

Full Waste Ink Tank

The waste ink tank is full. Empty the tank immediately.

- The printer will stop operation until you empty the waste ink tank.

---

1. Drain waste ink into a container

⚠️ **WARNING**

🚫 **Waste ink collected from this product is classified as industrial waste. Dispose of waste ink according to the local waste disposal regulations.**

⚠️ **CAUTION**

🚫 **Wear the protective gloves・glasses・mask and avoid contact with your eyes or skin.**
Eye or skin contact may cause slight irritation or bloodshot eyes. If in eyes or on skin, immediately flush with water.
If irritation is present, seek medical advice/attention immediately.
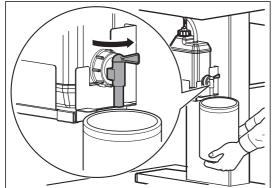
[1]　Prepare a container to collect waste ink.

📧 **Important!**

The capacity of the waste ink tank is 2,000 ml. Make sure to prepare a container with at least 2,000 ml capacity.

[2]　Cover the floor just under the waste ink tank using a paper that you do not use.

[3]

Open the waste ink valve and drain waste ink into the container.

> ![Important!] **Important!**
>
> **To avoid ink splash, move the container closer to the waste ink valve while draining waste ink.**

[4]

Once you empty the tank, close the waste ink valve securely.

- Wipe the opening of the valve with a cloth.

[5]   Dispose of waste ink according to the local waste disposal regulations.

Cleaning

To maintain your printer in the best condition, cleaning must be performed as instructed.

Head cleaning

If you find missing or thin lines on your print or nozzle check print, perform head cleaning.
Following cleaning modes are available:

Short cleaning	Consumes less ink than Normal cleaning.
Normal cleaning	If nozzle missing is found on the nozzle check print, perform Normal cleaning.
Long cleaning	If nozzle missing still persists after Normal cleaning, perform Long cleaning. It consumes more ink than Normal cleaning.
Little Charge	Little Charge gives higher cleaning than Long cleaning, but consumes large amount of ink. To access to this menu, go to "Menu 3 Cleaning" > "Select Print Head" > "Cleaning Type". ☞ **"Menu 3: Cleaning" P. 89**
Initial Charge	Initial Charge offers more powerful cleaning than Little Charge, but consumes large amount of ink. To access to this menu, go to "Menu 3 Cleaning" > "Select Print Head" > "Cleaning Type". ☞ **"Menu 3: Cleaning" P. 89**

Important!
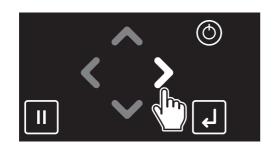
When you perform "Little Charge" or "Initial Charge",

- **Do not power off the printer.**
- **Do not disconnect the power cords.**
- **Do not open the front cover and maintenance cover during cleaning.**
- **Do not release the pressure rollers.**
- **Do not remove ink bag cases and S/C cards from the printer.**
- **Be sure that remaining ink in the ink bag is enough to perform cleaning.**

If cleaning is interrupted, it may consume more amount of ink.
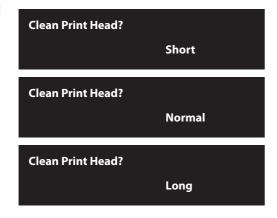
1. Performing Head cleaning

[1]

Tap ❯ .

[2]

Clean Print Head?

Short

Clean Print Head?

Normal

Clean Print Head?

Long

Use ⌃ or ⌄ to choose the cleaning mode.
Tap [Enter].
• The printer will start cleaning.
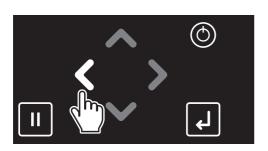
[3]   Run a nozzle check.

2. Performing Nozzle check

[1]   Load a roll media to print the nozzle check pattern.
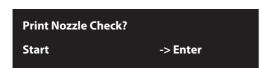
☞ **"Loading a roll media" P. 20**

[2]

Tap ❮ .

[3]

Print Nozzle Check?

Start   -> Enter
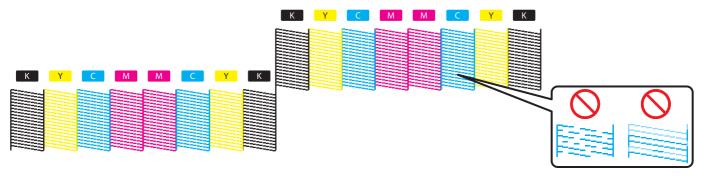
Tap [Enter].
• The printer will print the nozzle check pattern.

[4] Check the print result.

- If you find missing or thin lines on the print, go to **"Performing Head cleaning" P. 108**.
- If all lines are clearly printed, you can start printing.

Note

- The pattern shown above is an example when printed with 4-color configuration.
- If nozzle missing persists after repeating normal cleaning several times, perform Long cleaning.
- If several Long cleaning does not help to recover nozzles, perform **"Cleaning of cleaning wiper" P. 110** or **"Cleaning around the print head" P. 115**.
- If nozzle missing still persists, perform Little Charge from "Menu 3 Cleaning" > "Select Print Head" > "Cleaning Type".   ☞ **"Menu3: Cleaning" P. 89**

Cleaning of cleaning wiper

Cleaning period:

- Weekly

- When print blurring and dot missing remain after head cleaning is done.

Preparation:

- Cleaning stick
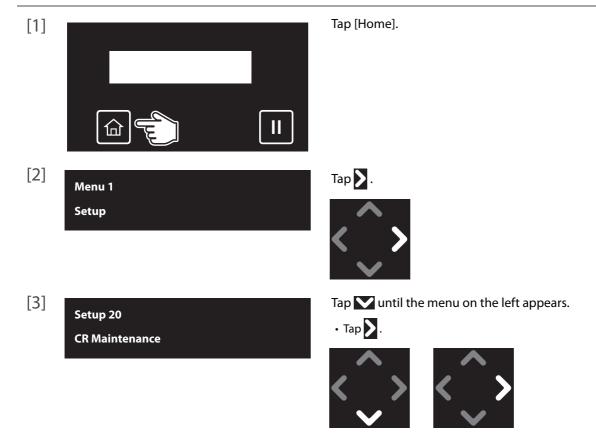
> **Important!**
>
> **During cleaning, please note the followings.**
>
> - **If it is hard to remove the stain, perform "Short" Head cleaning, and then clean again.**
>
> - **Use a dry cleaning stick. A damp stick can cause damage to the print head.**
>
> - **Do not touch the tip of a cleaning stick with fingers. Skin oil will damage the print head.**
>
> - **Do not reuse a cleaning stick. Dust on the stick will damage the print head.**
>
> - **This cleaning takes about 5 minutes. If it takes longer, the stick will get dry causing damage to the print head.**

1. Putting the printer into the CR maintenance mode

[1]

Tap [Home].

[2]

Menu 1

Setup

Tap ⟩.

[3]

Setup 20

CR Maintenance

Tap ⌄ until the menu on the left appears.

- Tap ⟩.

[4]

CR Maintenance

Start   **-> Enter**

Tap [Enter].

- The carriage will move to the left side of the printer.
- The cleaning wiper will move upward.

[5]

CR Maintenance

End   **-> Enter**
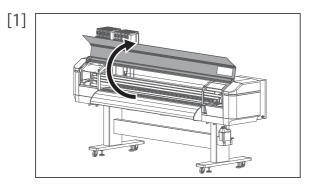
The message on the left will appear.

- The printer will start cleaning.
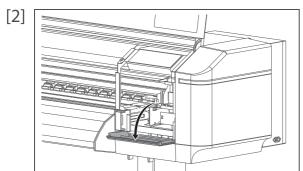
> ✎ **Note**
>
> If you tap the ⌄ key while "CR Maintenance　End -> Enter" is displayed, the pump is activated, sucking up the ink in the cap.
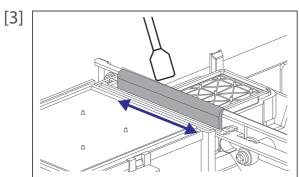
2. Cleaning the cleaning wiper

[1]

Open the front cover.

[2]

Open the maintenance cover on the right side.

[3]
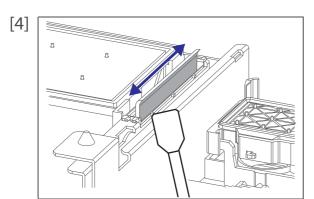
Wipe the cleaning wiper with a cleaning stick.
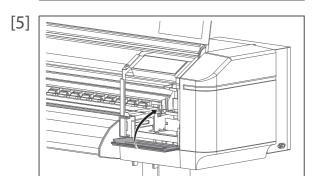
- Wipe the left side of the wiper back and forth.
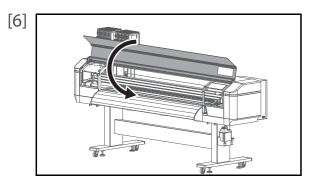
> 🔊 **Important!**
>
> **If it is hard to remove the stain, perform "Short" Head cleaning, and then clean again.**

[4] Wipe the right side of the wiper back and forth.

[5] Close the maintenance cover.

[6] Close the front cover.

[7]

CR Maintenance

End **-> Enter**

Tap [Enter].

[8]

CR Maintenance

Start **-> Enter**

Tap [Home] to end the cleaning process.

📝 **Note**

Used cleaning stick should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

Cleaning around the capping unit

Cleaning period:

- When print blurring and dot missing remain after head cleaning is done.
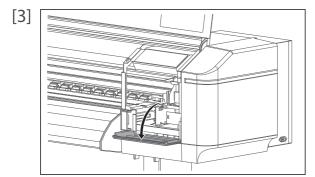
Preparation:

- Cleaning stick

> 📢 **Important!**
>
> **During cleaning, please note the followings.**
> - **Use a dry cleaning stick. A damp stick can cause damage to the print head.**
> - **Do not touch the tip of a cleaning stick with fingers. Skin oil will damage the print head.**
> - **Do not reuse a cleaning stick. Dust on the stick will damage the print head.**
> - **This cleaning takes about 5 minutes. If it takes longer, the stick will get dry causing damage to the print head.**

[1] Put the printer into the CR maintenance mode.

☞ **"Putting the printer into the CR maintenance mode" P. 110**

[2] Open the front cover.

[3]   Open the maintenance cover on the right side.

[4]

Clean this part (grey)

DO NOT touch the absorber (yellow)

Use the cleaning stick to clean around the rubber part of the capping unit to remove the ink deposits and dust.

(Capping unit) 2

> 📢 **Important!**
>
> **If it is hard to remove the stain, perform "Short" Head cleaning, and then clean again.**

[5]   Close the maintenance cover.

[6]   Close the front cover.

[7]

CR Maintenance

End   **-> Enter**

Tap [Enter].

[8]

CR Maintenance

Start   **-> Enter**

Tap [Home] to end the cleaning process.

> **Note**
>
> Used cleaning stick should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

Cleaning around the print head

Cleaning period:

- When print blurring and dot missing remain after head cleaning is done.
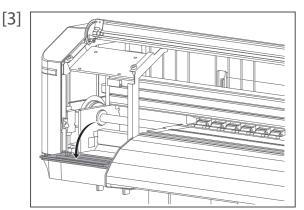
Preparation:

- Cleaning stick

> 📣 **Important!**
>
> **During cleaning, please note the followings.**
>
> - **Use a dry cleaning stick. A damp stick can cause damage to the print head.**
> - **Do not touch the tip of a cleaning stick with fingers. Skin oil will damage the print head.**
> - **Do not reuse a cleaning stick. Dust on the stick will damage the print head.**
> - **This cleaning takes about 5 minutes. If it takes longer, the stick will get dry causing damage to the print head.**

[1]   Put the printer into the CR maintenance mode.

☞ **"Putting the printer into the CR maintenance mode" P. 110**

[2]   Open the front cover.

[3]   Open the maintenance cover on the left side.

[4]   Use the cleaning stick to remove the ink deposits or dust on the bottom of the carriage.
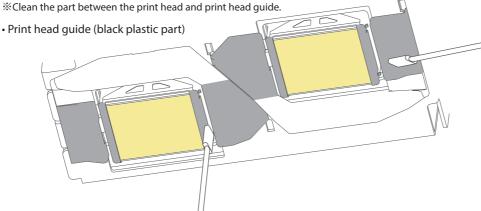
⬛ Clean this part (grey)

🟨 DO NOT touch the surface of a print head (yellow)

• Surface around print head (silver metal part)
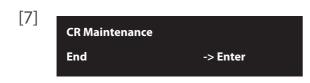
※Clean the part between the print head and print head guide.

• Print head guide (black plastic part)

[5]

Close the maintenance cover.

[6]   Close the front cover.

[7]

CR Maintenance

End   **-> Enter**

Tap [Enter].

[8]

CR Maintenance

Start   **-> Enter**

Tap [Home] to end the cleaning process.

> **Note**
>
> Used cleaning stick should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

Cleaning the color sensor

Cleaning period:

- If you repeatedly failed to perform an auto head alignment (Adjust Head 3 Auto) or auto print quality calibration (Adjust Print 3 Auto).
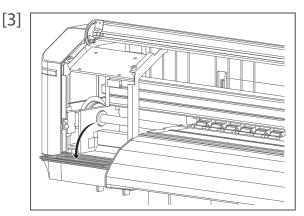
Preparation:

- Cleaning stick
- Ethanol (commercially available item: Use one with a concentration of 50% or higher.)
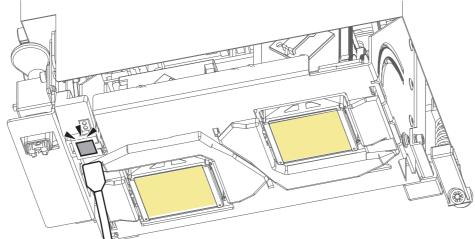
> 🔊 **Important!**
>
> **During cleaning, please note the followings.**
>
> - **Do not push the glass on the color sensor too hard with a cleaning stick. This will damage the glass.**
> - **Do not reuse a cleaning stick. Dust may adhere to the color sensor causing malfunction.**
> - **This cleaning takes about 5 minutes. If it takes longer, the stick will get dry causing damage to the print head.**

[1] Put the printer into the CR maintenance mode.

☞ **"Putting the printer into the CR maintenance mode" P. 110**

[2] Open the front cover.

[3]

Open the maintenance cover on the left side.

[4] Using a cleaning stick slightly dampened with ethanol, gently clean the glass on the color sensor located at the bottom of the carriage to remove ink and dust.

⬛ Clean this part   (Do not push the glass too hard.)

🟨 DO NOT touch the surface of a print head (yellow)

[5] Close the maintenance cover.

[6]　　Close the front cover.

[7]

CR Maintenance

End　　　　　　　　　　**-> Enter**

Tap [Enter].

[8]

CR Maintenance

Start　　　　　　　　　　**-> Enter**

Tap [Home] to end the cleaning process.

Important!

If the problem still persists, contact your local MUTOH dealer or MUTOH customer support.

Note

Used cleaning stick should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

Inside cleaning

Cleaning period:

- Monthly
- When dust or ink stains are visible

Preparation:

- Soft brush
- Paper towel or Soft cloth
- Ethanol (commercially available item: Use one with a concentration of 50% or higher.)
- Gloves
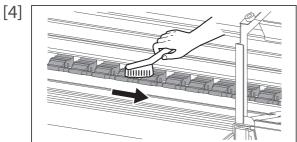
⚠ CAUTION

Unplug the power cable with the power OFF, before cleaning the inside of the printer.

Steps
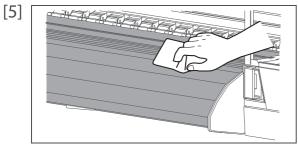
[1] Remove the media.

[2] Make sure that the printer is turned OFF.

[3] Open the front cover.

[4]

Brush off dusts on the pressure rollers with a soft brush.

📢 **Important!**

Do not blow off dusts inside the product with a gas duster. Dust can attach to moving parts, causing abnormal sound or malfunctions.

[5]

Use a soft cloth or paper towel slightly dampened with ethanol to clean off the ink on the platen, media guide and paper guide.

📢 **Important!**

Wear protective gloves while cleaning.

[6] Close the front cover.

Replacing consumable parts

Replacing absorption material for the flushing box

The flushing box is a part that keeps receiving ink discharged from the print head. Please replace the absorption material for the flushing box periodically. If used without replacing, it can cause damage to the print head.

Replacing period:

- When there are lumps of ink rise from the frame of the flushing box (Approx. every two months).
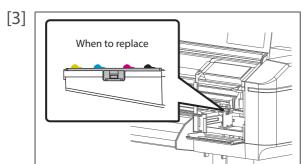 *Since it differs depending on usage frequency, please check periodically.
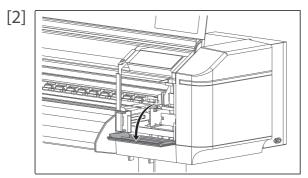
Preparation:

- Absorption material for the flushing box

- Paper you can get dirty (paper which ink will not bleed through)

1. Checking steps

[1]   Open the front cover.

[2]   Open the maintenance cover on the right side.
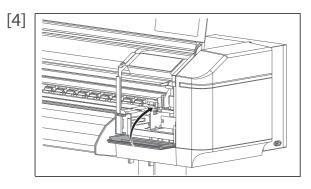
[3]   Check the absorption material for the flushing box.
- When there are lumps of ink rise from the frame of the flushing box, it is time to replace.

When to replace
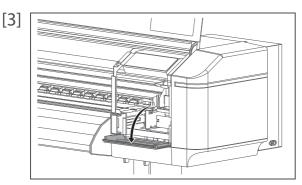
[4]   Close the maintenance cover.

[5]   Close the front cover.

2. Replacing steps

[1] Put the printer into the CR maintenance mode.

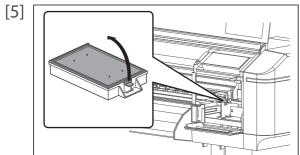☞ **"Putting the printer into the CR maintenance mode" P. 110**

[2] Open the front cover.

[3]

Open the maintenance cover on the right side.

[4] Cover the platen with the paper you can get dirty.

> 📢 **Important!**
>
> **Ink may drip from the absorption material for the flushing box.**
> **We recommend covering the floor with paper as well.**

[5]

Pull the tab up of the absorption material for the flushing box, and release the hook.
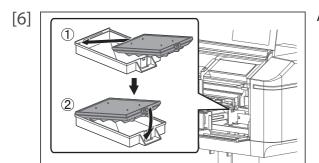
Then remove the absorption material for the flushing box.
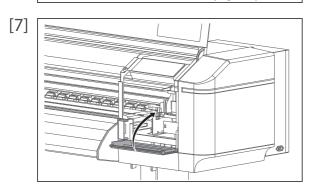
> 📢 **Important!**
>
> **When removing the absorption material for the flushing box, be cautious of ink drops.**

> ✎ **Note**
>
> Used absorption material for the flushing box should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

[6]

Attach new absorption material for the flushing box.

[7]

Close the maintenance cover.

[8]   Close the front cover.

[9]

CR Maintenance

End   -> Enter

Tap [Enter].

[10]

CR Maintenance

Start   -> Enter

Tap [Home] to end the cleaning process.

Replacing Cutter

Replacing period:

- When the media is not cut smoothly
- When the cut surface is feathered, etc

Preparation:
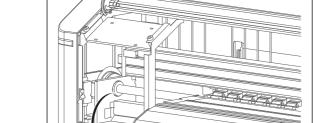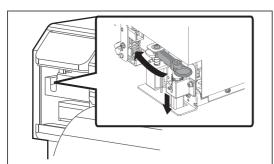
- Cutter replacement blade

⚠ CAUTION

🚫

- **Do not push the knob of cutter or release suddenly.**
  Because there is a spring under the cutter, the cutter can jump out.
- **Do not touch the cutter blade.**
  It may cause injury.

Steps

[1]   Put the printer into the CR maintenance mode.

        ☞ **"Putting the printer into the CR maintenance mode" P. 110**

[2]   Open the front cover.
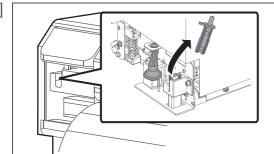
[3]

Open the maintenance cover on the left side.

[4]

Press the cutter cap lightly, turn Cutter holder in the direction as illustrated below.

📢 **Important!**

**Do not push down the cutter cap.
It may damage the part.**

[5]
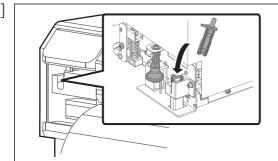

Remove the Cutter.

✏️ **Note**
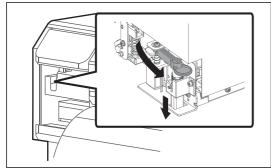
Used Cutter should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.
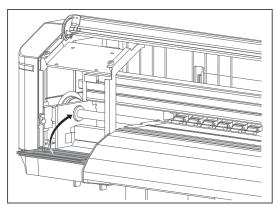
[6]

Attach a new cutter.

[7]

Press the cutter cap lightly, return Cutter holder to its initial position.

[8]

Close the maintenance cover.

[9]   Close the front cover.

[10]

CR Maintenance

End   -> Enter

Tap [Enter].

[11]

CR Maintenance

Start   -> Enter

Tap [Home] to end the cleaning process.

Replacing the cleaning wiper

The cleaning wiper is an essential part to make printing consistent. Please replace it periodically.

Replacing period:

- Approx. every six months

Preparation

- Plastic gloves, glasses, mask
- Absorption material for the flushing box
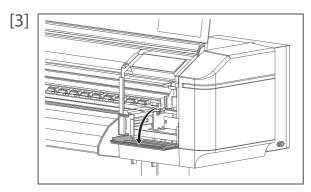- Paper you can get dirty (paper which ink will not bleed through)

⚠ CAUTION

🛇 **Wear the protective gloves・glasses・mask and avoid contact with your eyes or skin.**
Eye or skin contact may cause slight irritation or bloodshot eyes. If in eyes or on skin, immediately flush with water.
If irritation is present, seek medical advice/attention immediately.

Steps

[1]   Put the printer into the CR maintenance mode.

☞ **"Putting the printer into the CR maintenance mode" P. 110**
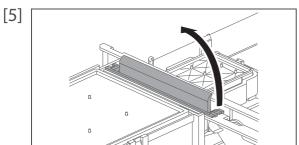
[2]   Open the front cover.

[3]

Open the maintenance cover on the right side.

[4]   Cover the platen with the paper you can get dirty.

> **⚠ Important!**
>
> **Ink may drip from the cleaning wiper.**
> **We recommend covering the floor with paper as well.**

[5]

Remove the cleaning wiper.

- Lift the cleaning wiper hook and release the hook. Then, remove the cleaning wiper.

> **⚠ Important!**
>
> **When removing the cleaning wiper, be cautious of ink drops.**

> **✎ Note**
>
> Used cleaning wiper should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.
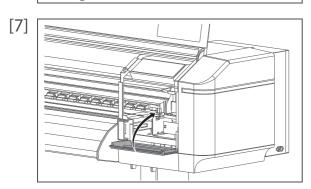
[6]

Follow the steps below to install new cleaning wiper.

- Slide the front side of the new cleaning wiper into its slot.
- Press the wiper hook down until it clicks into place.

> **⚠ Important!**
>
> **Do NOT touch the cleaning wiper rubber with your bare hand.**
> **If finger oil gets on the rubber, it will damage the print head.**

[7]

Close the maintenance cover.

[8]   Close the front cover.

[9]

CR Maintenance

End   -> Enter

Tap [Enter].

[10]

CR Maintenance

Start   -> Enter

Tap [Home] to end the cleaning process.

Moving or transporting the printer

This section describes how to move or transport the printer.
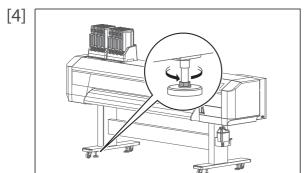
Moving the printer

This section describes how to move the printer.

> ⚐ **Important!**
>
> - **When moving the printer, make sure to maintain a horizontal position.**
> - **Do not tilt, set against something or place this product upside down.**
>   **Otherwise the ink may leak or the handling mentioned above may cause abnormality.**

1. Preparation before moving

[1]   Make sure that the printer is turned OFF.

[2]   Dispose of waste fluid.

☞ **"Emptying waste ink tank" P. 105**

[3]   Remove all the cables, such as Power cord set.

[4]   Loosen the four adjusters of Stand as shown in the left.

[5]   Move the printer.

[1]   Select a suitable place for installation.

☞Startup Guide

[2]   Move and install the printer to the location.

[3]   Attach Cables, such as Power cord set.

[4]   Perform Nozzle check, and then confirm that there is no clogging in Print head.

☞ **"Nozzle check steps" P. 29**

[5]   Perform print quality adjustment.

☞ **"Print quality calibration steps" P. 34**

Transporting the printer

When transporting the printer, make sure to pack it in the same condition as purchased, using protective and packing materials to protect the printer from vibration and shocks.

📢 **Important!**

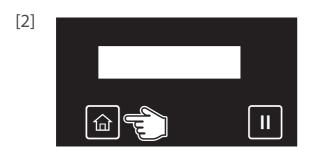**When transporting the printer, consult the MUTOH product dealer at your point of purchase.**

Long-term storage

If not using the printer for a long time, execute [Longstore].

Preparation:

- Cleaning bag: 8

[1] Empty the waste ink tank.

☞ **"Emptying waste ink tank" P. 105**
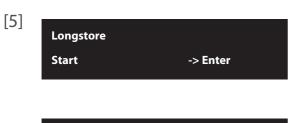
[2]   Tap [Home].

[3]
| Menu 1 |
| Setup |

Tap [>].

[4]
| Setup 19 |
| Longstore |

Tap [v] until the menu on the left appears.

- Tap [>].
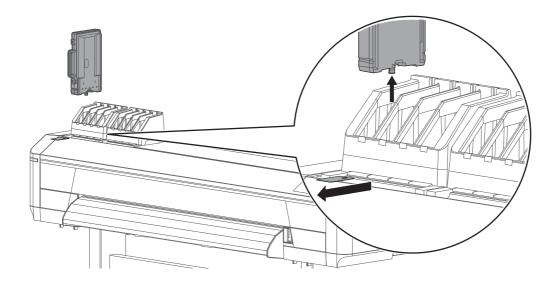
[5]
| Longstore | |
| Start | -> Enter |

Tap [Enter].

| Remove Bags |

The message on the left will appear.

[6] Remove all ink bag cases and S/C cards.

• Store the ink bag together with the corresponding S/C card.

Washing Head	The message on the left will appear. • Ink discharging begins.

Insert Cleaning Bags	When the discharge is complete, the message to the left is displayed.

[7]

Unlock four latches and open the ink bag case.

📢 **Important!**

Try not to apply excessive force to unlock them. This will cause damage to the latch.

[8]

Put the cleaning bag into the case.

[9] Close the ink bag case.
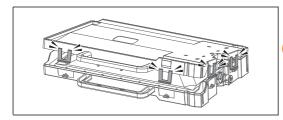
> ◁ **Important!**
>
> **Make sure the spout of cleaning bag is properly fitted into the groove in the case.**
> **If not fitted, the printer cannot correctly detect cleaning bag.**
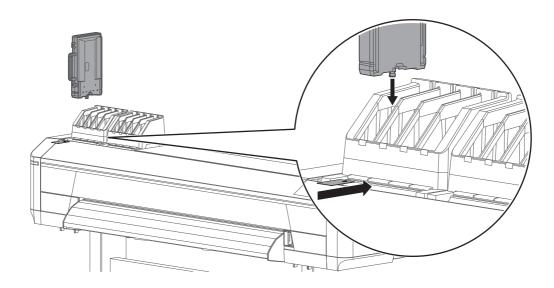
 Close all the latches (×4) of the case properly.

> ◁ **Important!**
>
> **Check that all the latches (×4) are closed.**
> **If not, it may cause cleaner spillage.**

[10] Insert the ink bag cases with cleaning bags and S/C cards into each slot.

- Face the latch side toward you and insert the case into each slot.
- Make sure that they are fully inserted.

Washing Head

The message on the left will appear.

- Charging of the cleaner begins.

Remove Bags

When charging of the cleaner is complete, the message to the left is displayed.

[11]   Remove all ink bag cases and S/C cards.
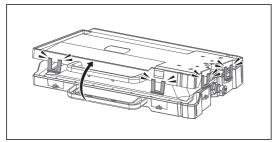

| Washing Head | The message on the left will appear. |
| | • Cleaner discharging begins. |

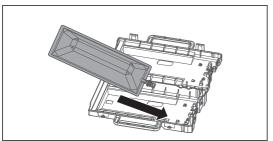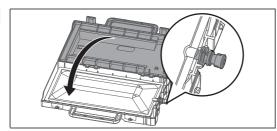| Insert Cleaning Bags | When the discharge is complete, the message to the left is displayed. |

[12]   Insert the ink bag cases with cleaning bags and S/C cards into each slot.
    • Face the latch side toward you and insert the case into each slot.
    • Make sure that they are fully inserted.
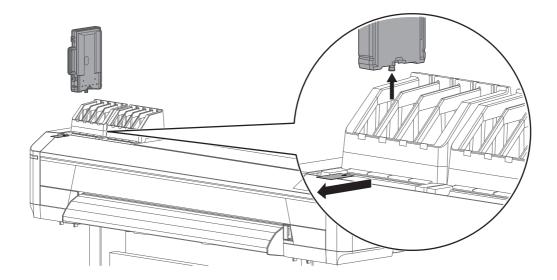

| Washing Head | The message on the left will appear. |
| | • Charging of the cleaner begins. |

| Remove Bags | When charging of the cleaner is complete, the message to the left is displayed. |

[13]   Remove all ink bag cases and S/C cards.
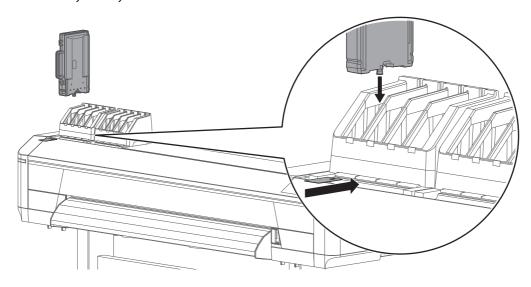

Washing Head
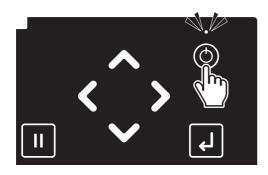
The message on the left will appear.
  • Cleaner discharging begins.

[ALL] Discharged

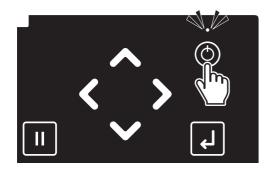When discharging is complete, the message to the left is displayed.

[14]

Long press the Power button.
  • This product starts its powering off operations.
  • When the message "Power Off" appears on the panel, release the Power button.
  • The Power LED lights off.

Performing initial charging after head cleaning

[1]

Long press the Power button.

- The Power LED (above the Power button) lights up.
- This product starts its initialization operations.

Note

Once the Power LED lights up, release the Power button.

[2]

Ink Charge

Start   **-> Enter**

When the message to the left is displayed, tap [Enter].

[3]

Wash Retry?

         No

When the message to the left is displayed, tap [Enter].

Note
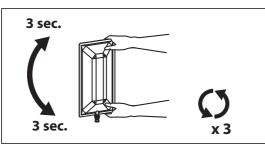
If you need to perform a head cleaning and "Wash retry? No" is displayed, tap the ⌄ key to change the display to "Wash retry? Yes" and tap [Enter].
After that, follow the instructions displayed on the front panel.
When cleaning is complete, "Insert InkBags" is displayed. Proceed to step 4 in this section.

Insert Ink Bags

The message on the left will appear.

[4]

3 sec.

3 sec.   **x 3**

Make sure you agitate the ink bag after you prepare it.
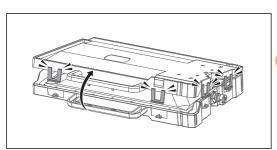
- Face the ink spout side upwards for 3 seconds.
- Invert it and count for 3 seconds.
- Repeat that 3 times.

Important!

Be sure to use new ink bags.
If a half-used ink bag does not have enough ink, it will run out of ink during initial ink charging and will consume more ink.

[5]
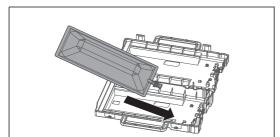
Unlock four latches and open the ink bag case.

Important!
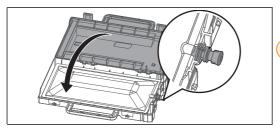
Try not to apply excessive force to unlock them. This will cause damage to the latch.

[6]

Put the ink bag into the case.

[7]
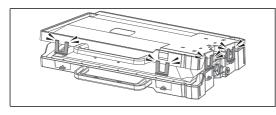
Close the ink bag case.

> **Important!**
>
> **Make sure the spout of ink bag is properly fitted into the groove in the case.**
> **If not fitted, the printer cannot correctly detect ink bag.**

Close all the latches (×4) of the case properly.
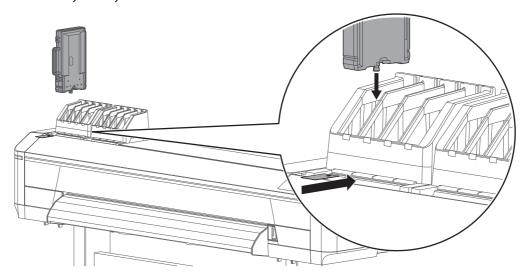
> **Important!**
>
> **Check that all the latches (×4) are closed.**
> **If not, it may cause ink spillage.**

[8]   Insert the ink bag cases and S/C cards into each slot.

- Match the colors of the ink color indicating label on the printer and the label on the ink bag.
- Face the latch side toward you and insert the case into each slot.
- Make sure that they are fully inserted.

The message on the left will appear.

- Ink charging begins.

Ink Refill	**%*

⚠ CAUTION

🚫   **During ink charging, make sure:**
- **Not to turn OFF the printer.**
- **Not to unplug the power cable of the printer.**
- **Not to open the front cover.**
- **Not to open the maintenance cover.**
- **Not to release the pressure rollers.**

```
Media End

PG: Low
```

When ink charging is complete, the message to the left is displayed.

> 🔈 **Important!**

If the printer perform the nozzle check printing immediately after the initial ink charge is complete, the following results may occur.

- **Printed lines become blurred.**

- **The data is partially not printed.**

In such cases, follow "Menu 3: Cleaning" P. 89 and perform "Little Charge". Then, check the print result.
If there is no improvement in the print result even after performing "Little Charge", leave the printer unused for an hour or more.
Then perform "Little Charge" again and check the print result.
If there is still no improvement, contact your local MUTOH dealer.

Chapter 4 Appendix

Messages and Error Messages

This section describes messages displayed during normal printer operation or when errors occur, and solutions to the messages.

Status messages

This section describes messages displayed during printer normal operation.
When the product is operating correctly, each operation status is displayed on the front panel as below.

Display	Description
Ready to Print PG: Low W: XXXX mm	Standby (Media is loaded).
Media End PG: Low	Standby (Media is not loaded). ☞ **"Loading a roll media" P. 20**
Receiving PG: Low W: XXXX mm	Receiving data.
Converting PG: Low W: XXXX mm	Analyzing data.
Printing PG: Low W: XXXX mm	Under printing.
Remain: XXX.Xm	Displays the length of the data that has not been printed in meters for the data currently being printed.
Remain Time: XXX.Xmin	Displays the time remaining to print in minutes for the data currently being printed.
Media Remain: XXX m	Displays the remaining length of the media currently set in meters.
Pausing Print Cancel Print -> Enter	Pausing printing. • Tap [Cancel] to resume printing. • Tap [Enter] to cancel the print job.
Cleaning **%	Cleaning. Please wait a while.
Ink Refill **%	Charging the ink. Please wait a while.
SubTank Refill **%	Charging the subtank. Please wait a while.
Busy-Washing	• Initial charging, ejecting filler fluid. • Washing the print head by cleaning fluid. Please wait a while.
During discharge	Flushing ink from the print head in the head cleaning process. Please wait a while.
User: Type ** OK? Media Initial	Initializing the media. Please wait a while. (** represents the set User type.)

Display	Description
Move To Origin Position	The print head is moving to the print start position to check the print origin Please wait a while.
Confirm Position End -> Enter	The print head has moved to the print start position. If it shows the intended position, tap [Enter].
Power Off	Turning OFF the printer. Wait for a while.
Insert Ink Bags	Charging the ink. Insert ink bag cases.
Insert Cleaning Bags	Washing Print head. Install cleaning bags.
Remove Bags	Washing Print head or discharging ink. Remove ink bag cases.
S/C Reading	Reading the S/C card.
*** Remote Mode *** End -> Enter	The remote panel mode is running, via MSM or similar. In the remote panel mode, operations via the front panel are not possible. To terminate the remote panel mode, press the [Cancel] key for more than two seconds.
Roll Remain Error	The remaining roll paper count has become 0. (Printing stops)
Roll Near End: *m	The remaining roll paper count is almost 0. The remaining roll paper is *m.
Color: * color	Choose the ink configuration you want to use.
Life Times [Pump]	The operational life of the pump motor has almost expired. (Continues operation) Contact your local MUTOH dealer.
Life Times [CR Motor]	The operation life CR motor has almost expired. (Continues operation) Contact your local MUTOH dealer.
Life Times [PF Motor]	The operational life of the PF motor has almost expired. (Continues operation) Contact your local MUTOH dealer.

Error message display and remedies

This section describes error messages and remedies.

Error messages are displayed when certain failures occur during printer operation.

If an error that can be displayed occurs, the printer may display the following error messages on the front panel and stop operation.

Display	Description
Cover Open	Any or all of covers (front cover, maintenance cover right, maintenance cover left) are open. Close the cover.
Put Lever Back	The pressure rollers is released. Lower the pressure rollers.
Hold Media	The media is not loaded. Load the media. ☞ **"Loading a roll media" P. 20**
Undefined Media	Media detection has failed. (Stops operation) Reload the media.
Media Slant	Media is fed obliquely. (Stops operation) Reload the media.
Media Cut Error	The media was not cut. (Stops operation)
Change Head Gap *** PG: *** W: ****mm	The head height on the printer does not match with the one specified on the print data. ☞ **"Changing the Head Height" P. 38**
End Of Roll	The Media has run out. (Stops operation) Load a new media. ☞ **"Loading a roll media" P. 20**
[*****] Ink End	Ink has run out. (Stops operation) Replace with a new ink bag. ☞ **"Replacing ink bag" P. 102**
[*****] No Bag	Ink bag case is not inserted. (Stops operation) Insert Ink bag case.
[*****] No S/C Card	S/C card is not inserted. (Stops operation) Insert S/C card.
[*] S/C Ink Low	Slot * ink is low. Get a replacement bag ready.
[*****] S/C Ink End	Ink has run out. (Stops operation) Replace with a new ink bag. ☞ **"Replacing ink bag" P. 102**
[******] Discharged	Ink is not filled. Perform initial ink charging. ☞ **"Performing initial charging after head cleaning" P. 133**
Full WasteInkTank	The waste ink tank is full. (Stops operation) Immediately empty the tank. ☞ **"Emptying waste ink tank" P. 105**

Display	Description
[*****] S/C ReadErr	Reading S/C Card has been failed. Insert S/C Card again.
[*****] S/C Col.Err	Ink bag cases are inserted in wrong slots. Insert ink bag cases correctly again.
[*] S/C Ink Err	The ink bag cannot be used for this printer. Contact your local MUTOH dealer.
[*] S/C CodeErr	Inserted ink bag is not a proper one. Contact your local MUTOH dealer.
[*] S/C Ink Low	Slot * ink is low. Get a replacement bag ready.
[*] Broken Chip	S/C Card has been broken. Insert new ink bag.
[*****] Check Ink	Ink bag case is not correctly detected. Insert ink bag case again. If there is still no improvement, contact your local MUTOH dealer.

Note

- "***" in the message "Change Head Gap ***" represents the head height (High, Mid, or Low).

- [*******] in the error message indicates the target ink cartridge slot.

- If "Ink End" or "No S/C Card" and "No Bag" occur at the same time, "No Bag" message has priority to be displayed.

Error requiring restart

An error requiring restart is displayed if a fatal operational failure such as the following occurs.

- When an obstacle that prevents printing occurs.

- When a problem occurs with the electrical circuit (PCB, motor, sensor, etc.) of the printer.

- When a failure in the printer control program occurs.

If an error requiring restart occurs, the printer stops operating after performing the following operations.

1. The drive power automatically shuts down.

2. All lamps on the front panel blink, and the buzzer rings continuously.

3. The error message is displayed on the front panel.

Pressing any key on the front panel stops the beeping.
For an error requiring restart, operation will return to normal after removing the cause of the error and restarting the printer.
If the same error continues to be displayed, contact the your local MUTOH dealer.
Be sure to tell us the code no. of the error message when you contact us.

Display	Description
E***Err [ ]	A problem that does not have a remedy has occurred. 1. Remove obstacles such as paper scraps in the drive system. 2. Confirm that the replaced items are correctly attached. 3. Turn the power button off. Wait a short while, then turn the power button on, to restart the printer.

> **Note**

- "***" in the error message is the code no. that indicates what type of error occurred.

- The command code representing the error occurred may be indicated in [ ].

Troubleshooting

This section describes undisplayed malfunctions and failures of the printer, possible causes and countermeasures.

> **Note**
>
> - The current status and error information of your printer can be checked from the Printer Status tab > Status Information on MSM.
>   If your printer is not operating correctly, check this Status Information first.
>
> - Make sure to use the latest version of MSM.
>   To check the latest available version, go to Help > Version > Check for updates on MSM.
>   If old version is installed in your computer, download the latest version from MUTOH Club.
>   ☞ MUTOH Status Monitor Operation Manual

Installation and initial setup troubleshooting

Description	Possible cause and Remedy
Cannot perform the initial inkcharging.	**Is the front cover, or the maintenance cover open?** • Close the front cover, or the maintenance cover.
	Is the media loading lever raised? • Lower the media loading lever.
	Are ink bag cases and S/C cards inserted all the way into the printer? • Make sure ink bag cases and S/C cards are all inserted properly. ☞ **"Installing the ink bag" P. 103**
Ink does not come out afterink charging.	**Is the ink bag too cold?** • Leave the ink bag at room temperature for at least three hours, and perform cleaning several times. ☞ **"Head cleaning" P. 107**
	Is the power turned OFF during ink charging? • Turn the power ON again and continue ink charging.
Nozzle missing occurs afterinitial ink charging.	**Did you perform head cleaning?** • Perform cleaning, then, check the print result. ☞ **"Head cleaning" P. 107** • If there is no improvement in the print result even after performing cleaning, leave the printer unused for an hour or more.Then perform cleaning or "Little Charge" again and check the print result. • If the problem still persists, contact your local Mutoh dealer.
MSM or RIP cannot access tothe printer.	**Is Ethernet cable connected correctly?** • Securely connect the Ethernet cable to the Ethernet Port.
	Are the network settings configured correctly? • Configure the network settings correctly.
	Do the printer's network settings match the computer's settings? • Match this product's network settings with the computer side environment. ☞ **"Connecting to a Computer" P. 12**, **"Setup 23: IP Address" P. 80**, **"Setup 24: Subnet Mask" P. 80**, **"Setup 25: Gateway" P. 80**

Boot-up troubleshooting

Symptom	Possible cause and Remedy
Does not work at allafter power activation /after loading the media.	**Is the power cable connected to the plug?** • Connect the power cable.
	Does the AC power supply provide the specified voltage? • Connect the cable to another outlet.
	Is the front cover, or the maintenance cover open? • Close the front cover, or the maintenance cover.
	Is the pressure rollers released? • Lock the pressure rollers.
	Is the media loaded correctly? • Load the media correctly. ☞ **"Loading a roll media" P. 20**
	Is the ink bag case inserted? • Insert the ink bag case.
	Do you use the printer within recommended environmental conditions? • Make sure to use the printer within the specification range. ☞ "Ensuring a suitable place for installation" of the "Startup Guide"
	Is there any error message displayed on MSM? • Go to the Printer Status tab in MSM and check that if any error message is displayed in the Status Information.

Media-related troubleshooting

Symptom	Possible cause and Remedy
The media slips, is torn /crumpled during initialization.	**Is the media loaded correctly?** • Load the media correctly. ☞ **"Loading a roll media" P. 20**
	Are there any foreign materials such as torn paper attached to Pressure rollers? • Clean Pressure rollers. ☞ **"Inside cleaning" P. 119**
	Do you use the printer within recommended environmental conditions? • Make sure to use the printer within the specification range. ☞ "Ensuring a suitable place for installation" of the "Startup Guide"
	Are any curls or warps present on your media? • Set the edge holder at both edges of the media. • Check that you select the appropriate vacuum fan setting. ☞ **"After loading the media..." P. 27**, **"**>4: Vacuum Fan" P. 68**
	Are you using creased, damaged, torn or curled media? • Replace the media.
	Is holddown pressure adequate for the roll media? • Use the slide lock lever on the individual pressure rollers to reduce or cancel the pressure. ☞ **"Canceling or reducing pressure rollers individually" P. 40**

> **Note**
>
> If the media is jammed or torn, remove it according to **"The media is jammed" P. 150**

Symptom	Possible cause and Remedy
The printer does not detectthe media.	**Is the media loaded correctly?** • Load the media correctly. ☞ **"Loading a roll media" P. 20**
	Is the media loaded at an angle? • Load the media straight. ☞ **"Loading a roll media" P. 20**
	Do you use the printer within recommended environmental conditions? • Make sure to use the printer within the specification range. ☞ "Ensuring a suitable place for installation" of the "Startup Guide"
	Did you load the media which has been printed before? • Use a new media.

Symptom	Possible cause and Remedy
Media jams frequently occur.	**Do you use the printer within recommended environmental conditions?** • Make sure to use the printer within the specification range. ☞ "Ensuring a suitable place for installation" of the "Startup Guide"
	Are any curls or warps present on your media? • Set the edge holder at both edges of the media. • Check that you select the appropriate vacuum fan setting. ☞ **"After loading the media..." P. 27**, **"**>4: Vacuum Fan" P. 68**
	Are you using creased, damaged, torn or curled media? • Replace the media.

> **Note**
>
> If the media is jammed or torn, remove it according to **"The media is jammed" P. 150**

Symptom	Possible cause and Remedy
The media skews during printing.	**Is the media loaded correctly?** • Load the media correctly. ☞ **"Loading a roll media" P. 20**

Printing-related troubleshooting

Symptom	Possible cause and Remedy
The printer does not print.	**Is Ethernet cable connected correctly?** • Securely connect the Ethernet cable to the Ethernet Port. ☞ **"Connecting to a Computer" P. 12**
	Is there any error message displayed on MSM? • Go to the Printer Status tab in MSM and check that if any error message is displayed in the Status Information.
The carriage pauses at either side of the printerwhile printing.	**Does your computer meets the following requirements?** • OS: Windows 10 (64bit), Windows 8/8.1 (64bit), Windows 7 (64bit) • CPU: Intel (R) Core (TM) i5 / i7 • Memory: No less than 8G byte • Network: Use a network port that supports Gigabit Ethernet, and an Ethernet cable that supports Category 6 Gigabit Ethernet or later.
	Do you use a Gigabit Ethernet cable? • To connect your printer to your computer, use a Gigabit Ethernet cable Category 6 or later.
	Is MPS enabled? • Check the status of MPS. ☞ **"Menu 4: MPS" P. 46** When set to "On": Check that your computer (specification, CPU load), Ethernet cable (specification, connectivity) and network environment meet the requirements. When set to "Off": In MSM, the checkbox "MUTOH Print Server (MPS)" is unchecked or "MPS Optimization" is set to "Disable". Try enabling MPS in MSM. ✐ **Note** • **MPS settings can be changed in MSM.**
Smears or missing area partially appears on the prints.	**Are any curls or warps present on your media?** • Set the edge holder at both edges of the media. • Check that you select the appropriate vacuum fan setting. ☞ **"After loading the media..." P. 27**, **"**>4: Vacuum Fan" P. 68**
	Does the media contain moisture or are you using the creased or wrinkled media? • Replace it with the new media.
The printing position is incorrect (some parts of the media cannot be printed on).	**Is the media loaded correctly?** • Load the media correctly. ☞ **"Loading a roll media" P. 20**
	Did you set up the origin? • Cancel or reset the settings of the origin. ☞ **"Setup 8: Origin" P. 73**

Symptom	Possible cause and Remedy
Printing is blurred.	**Is the media printed on the printing surface?** • Check the printing surface of the media and set it correctly.
	Did you perform Print quality adjustment? • Perform Print quality adjustment. ☞ **"**>2: Adjust Print>" P. 57**
	Did you perform Media feed adjustment? • Perform Media feed adjustment. ☞ **"**>3: PF Adjust" P. 63**
White or black lines appearon printed media.	**Is the media loaded correctly?** • Load the media correctly. ☞ **"Loading a roll media" P. 20**
	Does the media contain moisture or are you using the creased or wrinkled media? • Replace it with the new media.
	Are Nozzles in good condition? • Perform Nozzle check. • Then if nozzle missing is found, conduct cleaning. ☞ **"Nozzle check and cleaning" P. 29**
	Did you perform Print quality adjustment? • Perform Print quality adjustment. ☞ **"**>2: Adjust Print>" P. 57**
	Did you perform Media feed adjustment? • Perform Media feed adjustment. ☞ **"**>3: PF Adjust" P. 63**
Printing lines are not straight/ are duplicated or patchy.	**Are Nozzles in good condition?** • Perform Nozzle check. • Then if nozzle missing is found, conduct cleaning. ☞ **"Nozzle check and cleaning" P. 29**
	Did you perform Print quality adjustment? • Perform Print quality adjustment. ☞ **"**>2: Adjust Print>" P. 57**
	Did you perform Media feed adjustment? • Perform Media feed adjustment. ☞ **"**>3: PF Adjust" P. 63**
	Is Ink bag within the validity period? • Use a non-expired ink bag.

| Symptom	Possible cause and Remedy

Printed color is not accurate.	**Are Nozzles in good condition?**
	• Perform Nozzle check.
	  Then if nozzle missing is found, conduct cleaning.
	  ☞ **"Nozzle check and cleaning" P. 29**

	Did you install an ink bag on each ink pack case with correct ink color of S/C card? • Check that the ink color written on S/C card matches the ink color of ink bag installed on each ink pack case. • If it does not match, perform "Longstore" to clean the print head and then perform initial ink charging.
Nozzle missing remains afterhead cleaning.	**Is there any ink stains or deposits on the cleaning wiper or circumference of the print head?** • Clean the cleaning wiper and circumference of the print head. ☞ **"Cleaning of cleaning wiper" P. 110**, **"Cleaning around the print head" P. 115**

	Did you select an appropriate cleaning setting?
	• Head Select: Select "ALL" or the print head which nozzle missing occurs.
	  ☞ **"Menu3: Cleaning" P. 89**
	• Cleaning Mode: If nozzle missing still persists after attempting Normal Cleaning or Long Cleaning two or three times, perform "Little Charge".
	  ☞ **"Menu3: Cleaning" P. 89**

Printed area does not dry completely.	**Did you select an appropriate print mode?** • Check that the print mode is set to the appropriate mode. ☞ **"**>1: Print Mode" P. 55**
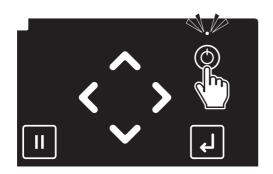
> **Note**
>
> • **If an image contains high ink density area, the area may not dry easily.**
>
> • **Depending on the media being used, printed area may not dry easily.**

The media is jammed

When the media is jammed in the printer, follow the procedure below to remove it.
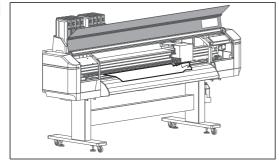
[1]
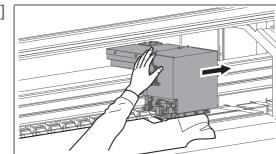

Long press the Power button.
- This product starts its powering off operations.
- When the message "Power Off" appears on the panel, release the Power button.
- The Power LED lights off.

[2]

Open the front cover.

[3]

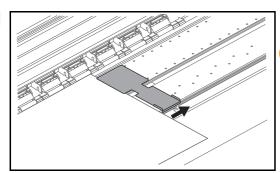Move the carriage from the top of the media to the right.

🔲 **Important!**

When the head height is set to Low, change it to High and then shift Head.
After shifting Head, change the setting back to Low.

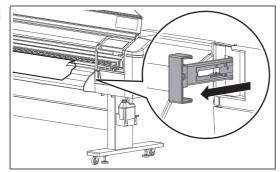☞ **"Changing the Head Height" P. 38**

[4]

Slide the edge holder to the right to remove it from the media.

🔲 **Important!**

If any deformation is found on the media holder, stop using it and contact your local MUTOH dealer.
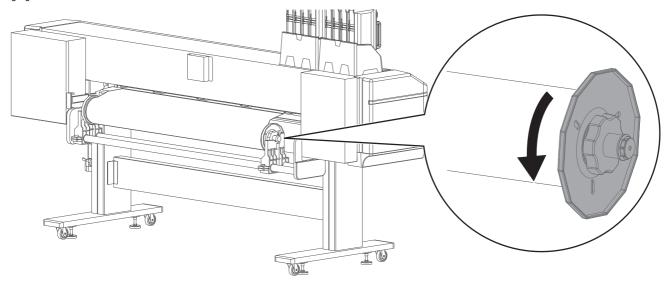
[5]

From the front side of the printer, pull the media feed lever towards you to release the pressure rollers.
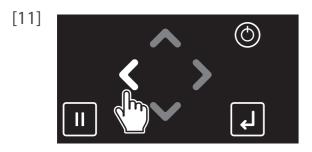
[6]

Pull the media towards you and use a cutter to cut the torn part of the media along the groove.

[7] Rewind the media a little by rolling Flange on the media holder.

[8] If paper dust or pieces of paper remain inside the printer, remove them.

[9] Turn the printer ON.

[10] Load a roll media for Nozzle check.

☞ **"Loading a roll media" P. 20**

[11]

Tap ◀.

[12]

Print Nozzle Check?

Start -> **Enter**

Tap [Enter].

• The printer will print the nozzle check pattern.

[13] Check the nozzle check print to see all nozzles are clear.

• If you find missing or thin lines on the print, go to **"Cleaning steps" P. 30**.
• If all lines are clearly printed, you can start printing.

Note

Specifications of this product

List of specifications

Model Name		XPJ-1682WR
Print method		On demand piezo method
Drive method		Firmware servo/DC motor drive
Media feed method		Multipoint pressurizing Grid roller system
Media hold down system		Pressure roller down system by manual lever
Conditions of usable media	Media outer diameter	Φ150 mm or less
	Media core diameter	2 inches or 3 inches
	Weight	30 kg or less
	Width	500 mm to 1,625 mm
	Maximum thickness	0.3 mm (when the head height is set to Low) 1.3 mm (when the head height is set to Mid) 2.8 mm (when the head height is set to High)
Maximum Printable Width		1,615 mm
Maximum print length		1,500 m
Head height adjustment		Three-level adjustment of Low, Mid, and High
Interface		Gb-Ethernet (1000BASE-T)
Waste ink tank		2,000 ml tank is attached to the printer. Empty the tank when needed.
Ink	Color	4 colors (Black, Cyan, Magenta, Yellow)
		7 colors (Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, Light Black)
	Type	1,000 ml ink bag, 2,200 ml ink bag （**Cleaner is 600ml**）

Environmental conditions	Printer Operation Environment	Temperature 20 to 32 ℃, humidity 40 to 60% No condensation
	Recommended Printing Environment	Temperature 22 to 30 ℃, humidity 40 to 60% No condensation
	Change rate	Temperature: No more than 2 ℃ per 1 hour Humidity: No more than 5% per 1 hour
	Printer Storage Environment	・Storage without ink charging: up to 6 months Temperature -20 to +60 ℃, humidity 20 to 80% No condensation ・Storage with ink charging: Temperature -5 to 35 ℃, humidity 20 to 80% No condensation
	Ink Storage Environment	• Black/Cyan/Magenta/Yellow/Light Cyan/Light Magenta/ Light Black/ (1,000 ml each, or 2,200 ml each) Temperature -5 to 40 ℃, Avoid direct sunlight, When unopened Humidity: 5 to 85%, No condensation • Cleaning bag (600 ml) Temperature -10 to 40 ℃ Humidity: up to 80%, No condensation
Power supply specifications	Printer	・Voltage: AC 100V to AC 120V ±10% / AC 200V to 240V ±10% • Frequency: 50/ 60Hz ±1Hz • Capacity: AC 100V to AC 120V: No less than 2.5 A AC 200V to AC 240V: No less than 1 A
Power consumption	Power off	AC100V to 120V, 1.0 W or below AC200V to 240V, 1.0 W or below
	Standby	AC100V to 120V, 40 W or below AC200V to 240V, 40 W or below
	Sleep Mode	AC100V to 120V, 30W or below AC200V to 240V, 30W or below
	Operation	AC100V to 120V, 180 W or below AC200V to 240V, 180 W or below
Current consumption	100V to 120V	2.5 A or below
	200V to 240V	1 A or below
Dimensions	Height	1,428 mm When installing 1,000 ml ink bag cases: 1,611 mm When installing 2,200 ml ink bag cases: 1,712 mm
	Width	2,770 mm
	Depth	895 mm
Weight	Main body	143 kg
	Stand	32 kg

Options / Supply list

For more information about the options and the supply items, contact your local MUTOH dealer.

Important!

MUTOH strongly recommends to use genuine ink bags.
This printer is designed to bring out the best performance when using with the MUTOH genuine ink.
Non-MUTOH ink may cause print defects or damage to the printer.

Revision History

Date	Version	Manual code	Supported Firmware
2019.12	00	XPJ16xxWRE-A-00	V.1.03
2020.2	01	XPJ16xxWRE-A-01	V.1.04 or later

MUTOH