MUTOH

ValueJet

VJ-626UF
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.

This system (including the housing and safety device) is a Class 2 laser product.

Laser specifications of this system (including the housing)

Wavelength: 655 nm, maximum output: 1mW or less, pulse duration: 3.0µs

Complies with IEC 60825-1 Edition 3.0 (2014-05).

Complies with FDA performance standards for laser products except for deviations pursuant to Laser notice No.50 dated June 24, 2007.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in radiation exposure.

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Chapter 2 Advanced Operations

Chapter 3 Maintenance

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Chapter 1 Basic Operations

Introduction

Name of each part

Printer's main body

UV-LED unit
Unit that emits the UV (ultraviolet) light to cure the ink.

Carriage
Contains the print head, the LED pointer and UV-LED unit.

Front cover
Open when loading media.

Maintenance cover
Open when performing maintenance.

Table
The media is printed on this. It has a vacuum fan inside.

LED pointer
Used for setting the media placement set position and the origin pointposition.

Handle
This handle is used for service/maintenance by maintenance personnel. DO NOT use it for any purpose other than instructed in this manual.

Operation panel
⇒ Operation panel P.9

Waste ink tube
Waste fluid is drained from the tube. (This tube is covered with the light blocking cover.)

Obstacle sensor
Sensor for making sure the media does not contact the print head.

AC Inlet

Cartridge slots
Install an ink cartridge or cleaning cartridge.

Network connector
Connect an Ethernet cable.

Operation panel

Power button
- Press it to turn the power on. Lights steady in blue when the power is on.
- Press it again to turn the power off. The button turns off while in power off.
- The button flashes while receiving data or in sleep mode.

[Reference]

The ⏻ symbol means "standby". Even when the power button is not turned on, the printer consumes a tiny amount of power so long as the power cable is connected. This state is referred to as the power being "off" in this Manual.

[Option] indicators
Lights steady green when using Rotary Unit (option).

[Media Set] indicator
Lights steady green when a media has been set in place and the printer is ready to print.

[Low speed] indicator
Lights steady green, except when [Low speed] is turned Off.

[Menu] key
Press this key to access to or exit the menu.

[Pause] / [Cancel] key
- Press this key to pause printing.
- Long press this key for more than 2 seconds to cancel the print job and delete the data received.

When setting a value:
Cancels a change of a setting value.

Error indicator
Lights up in orange when an error has occurred or a cover is open.
Flashes when the ink is low.

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

[Cleaning Mode] indicators
Light steady green to indicate the head cleaning mode.

[Enter] key
When you have set a media in place, pressing and holding this down for 2 seconds or longer will run a media set check.

When setting the menu:
- Press this to go to the menu item you select.
- Press this to confirm a set value.

[+] / [Set Media] key
- Press this key after loading media to put the printer into ready-to-print status.
- Long press this key for more than 2 seconds to move to "Height" setting menu.

When setting a value:
- Press this to move to another menu item
- Press this to change a set value.

[-] / [Remove Media] key
Press this key after printing to remove media from the table.

When setting a value:
- Press this to move to another menu item
- Press this to change a set value.

[<] / [Nozzle Check] key
Long press this key for more than 2 seconds to run a nozzle check.

When setting a value:
Press this to change a set value.

[>] / [Cleaning Mode] key
- For changing the cleaning mode.
- Long press this key for more than 2 seconds to execute head cleaning.

When setting a value:
- Press this to move to a lower level of menu items.
- Press this to change a set value.
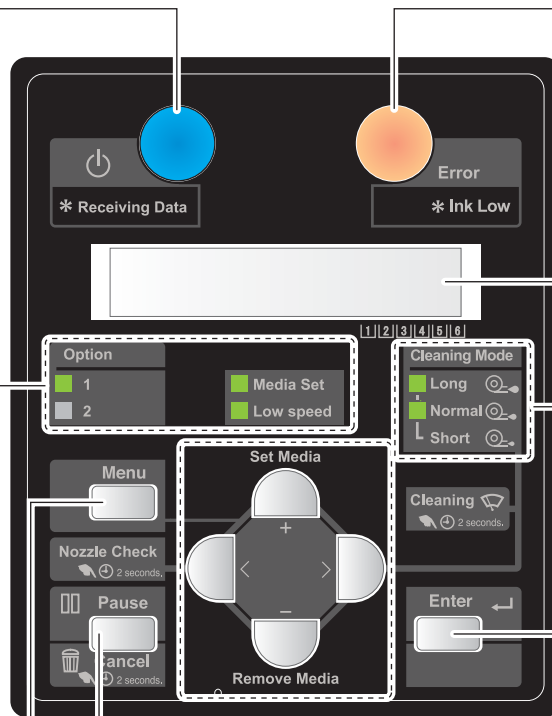
Icon displays on operation panel

Icons to indicate the status of the ink or cartridges are displayed in the following situations:

- When no menu is displayed

- When there is an ink or cartridge error

Icons

Slot numbers

1 2 3 4 5 6
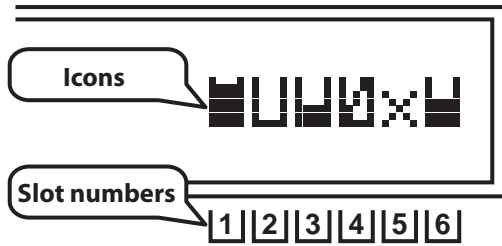
- There are printed slot numbers beneath the icons.

- In the display shown on the left, the slot 2 cartridge's ink is low, the slot 4 cartridge's ink has run out, and no cartridge has been inserted in slot 5.

- The following icons indicate the status of each slot:

Remaining ink amount: More than 80%, less than 100%	Remaining ink amount: Less than 20%
Remaining ink amount: More than 60%, less than 80%	Ink Low
Remaining ink amount: More than 40%, less than 60%	Ink End
Remaining ink amount: More than 20%, less than 40%	No cartridge

The ink colors and slot locations for each color are shown below.

slot 1	slot 2	6 colors	slot 3	
K	M		C	—

slot 1	slot 2	4 colors	slot 3	
M	M		C	—

	slot 4	6 colors	slot 5	slot 6
—	Y		Va	Wh

	slot 4	4 colors	slot 5	slot 6
—	C		K	Y

Menu chart

Setting menu 1

Menu		

Menu1: Setup > ▶

▶ Set1:	User Type	Enter → **to Setting Menu2**
▼ Set2:	Advanced >	▶ → **to Setting Menu3**
▼ Set3:	Init.Settings >	▶ → **to Setting Menu4**
▼ Set4:	Initialize	Enter → **to Setting Menu4**

Menu2: Test Print > ▶

▶ Test1:	Nozzle Check	
▼ Test2:	Nozzle CheckB	(This menu is available in 6-color configuration.)
▼ Test3:	Mode Print	
▼ Test4:	Setup List	
▼ Test5:	Palette	

Menu3: Maintenance > ▶

▶ Mnt.1:	Cleaning	Enter → **to Setting Menu4**
▼ Mnt.2:	ResetWasteInk	
▼ Mnt.3:	CR Maintenance	
▼ Mnt.4:	UV Scan >	▶ → **to Setting Menu4**
▼ Mnt.5:	Ink Discharge	
▼ Mnt.6:	Calibration	
▼ Mnt.7:	Moving Printer	
▼ Mnt.8:	Table Maint.	
▼ Mnt.9:	Daily Maint.	

Menu4: PrinterStatus > ▶

▶ Status1:	Ink	
▼ Status2:	Lifetimes	Enter → **to Setting Menu5**
▼ Status3:	Job Status	Enter → **to Setting Menu5**
▼ Status4:	Version	
▼ Status5:	Serial No.	

Menu5: Option > ▶

| ▶ Option1: | Rotary Unit |

Menu6: Sleep Mode > ▶

| ▶ Sleep Mode1: | Start |
| ▼ Sleep Mode2: | SetTimer |

Set1:   User Type

User: Type 1   [Enter]   * *> 1:   Print Mode   [Enter]   Mode :   Fine - >   [Enter]

Effect: i-Weave UV

* *> 2:   Adjust Print >

Adj.1:   Confirm Ptn.

Adj.2:   RoughPatternALL

Adj.X: RoughPatternX

Adj.6:   Fine Ptn. ALL

Adj.X: Fine Ptn.X

* *> 3:   PF Adjust >

PF1:   Initial Print

PF2:   Initial Change

PF3:   Confirm Print

PF4:   Micro Print

PF5:   Micro Change

* *> 4:   Vacuum Fan

* *> 5:   Media Setting >   ▶   to Setting Menu3

* *> 6:   Low Speed

* *> 7:   Show Edges

* *> 8:   Obst. Detect   ▶   to Setting Menu3

* *> 9:   User Copy

* *> 10:   Initialization

| * *> 5: | Media Setting > | ▶ |

Media1 :	Set Media
Media2 :	Size
Media3 :	Height	→ Enter → Ⓐ
Media4 :	Location
Media5 :	Origin
Media6 :	Detailed-Set

Ⓐ →

| Height : | Auto | Enter | PG Offset : | 0.0 mm |
| Height : | Manual | Enter | MediaHeight : | 0.0 mm |

→ Enter → Ⓑ

Ⓑ →

Obst. :	Auto
Obst. :	Print Cancel
Obst. :	Confirm

| * *> 8: | Obst. Detect | Enter |

Obst. :	Auto
Obst. :	Print Cancel
Obst. :	Confirm

| Set 2: | Advanced > | ▶ |

Adv.1:	Multi Strike
Adv.2:	Pass Wait
Adv.3:	Head Travel
Adv.4:	Header Dump
Adv.5:	Spitting
Adv.6:	AutoCleaning >	▶

Auto1 :	WaitingTime
Auto2 :	PrintingTime
Auto3 :	Before Print

| Adv.7: | Multi Layer |
| Adv.8: | White Maint. |

(This menu is available in 6-color configuration.)

| Set 3: | Init. Settings > | ▶ | Initial1: | Language |

| | | ▼ | Initial2: | Length |

| | | ▼ | Initial3: | Remain Ink |

| | | ▼ | Initial4: | IP Address |

| | | ▼ | Initial5: | Subnet Mask |

| | | ▼ | Initial6: | Gateway |

| | | ▼ | Initial7: | Alert Buzzer |

| Set 4: | Initialize | Enter | Init.: | User Type ALL |

| | | ▼ | Init.: | Adv. Settings |

| | | ▼ | Init.: | Init. Settings |

| | | ▼ | Init.: | ALL |

| Mnt.1: | Cleaning | Enter | Time : | Short |

| | | ▼ | Time : | Normal |

| | | ▼ | Time : | Long |

| | | ▼ | Time : | Little Charge |

| | | ▼ | Time : | Initial Charge |

| Mnt.4: | UV Scan > | ▶ | UV Scan1: | Start |

| | | ▼ | UV Scan2: | Scans |

| | | ▼ | UV Scan3: | Post Cure |

Status 2:	Lifetimes	Enter	Head :	E*** F
		▼	Pump :	E*** F
		▼	CR Motor :	Change
		▼	PF Motor :	E**** F
		▼	PG Motor :	E**** F
		▼	CPump :	E*** F
		▼	UV Lamp :	E*** F
		▼	WasteInkTank :	E*** F

Status 3:	Job Status	Enter	Job Status :	Completed
		▼	ToDoLength :	xxx.x m
		▼	Done :	xxx.x m
		▼	Remain:	xxx.x m

Menu during printing

```
Menu
  │
  ▼
┌──────────────────────────────────────┐
│ Menu1 :        PF Micro Adj.          │
└──────────────────────────────────────┘
  ▼
┌──────────────────────────────────────┐
│ Menu2 :        Backup                 │
└──────────────────────────────────────┘
  ▼
┌──────────────────────────────────────┐      Enter  ┌──────────────────────────────────────┐
│ Menu3 :        Job Status             │──────────→  │ ToDoLength :            xxx.x mm      │
└──────────────────────────────────────┘             └──────────────────────────────────────┘
  ▼                                                     ▼
                                                      ┌──────────────────────────────────────┐
                                                      │ Done :                  xxx.x mm      │
                                                      └──────────────────────────────────────┘
                                                        ▼
                                                      ┌──────────────────────────────────────┐
                                                      │ Remain :                xxx.x mm      │
                                                      └──────────────────────────────────────┘
                                                        ▼
                                                      ┌──────────────────────────────────────┐
                                                      │ Remain Time :           xxxx min      │
                                                      └──────────────────────────────────────┘
┌──────────────────────────────────────┐
│ Menu4 :        ResetWasteInk          │
└──────────────────────────────────────┘
```
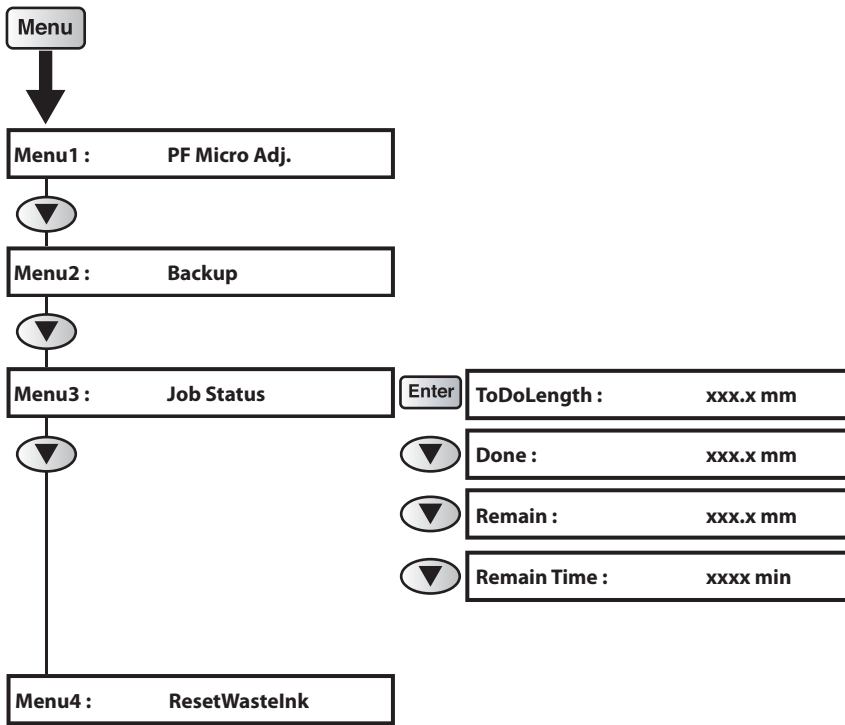
System configurations of this printer
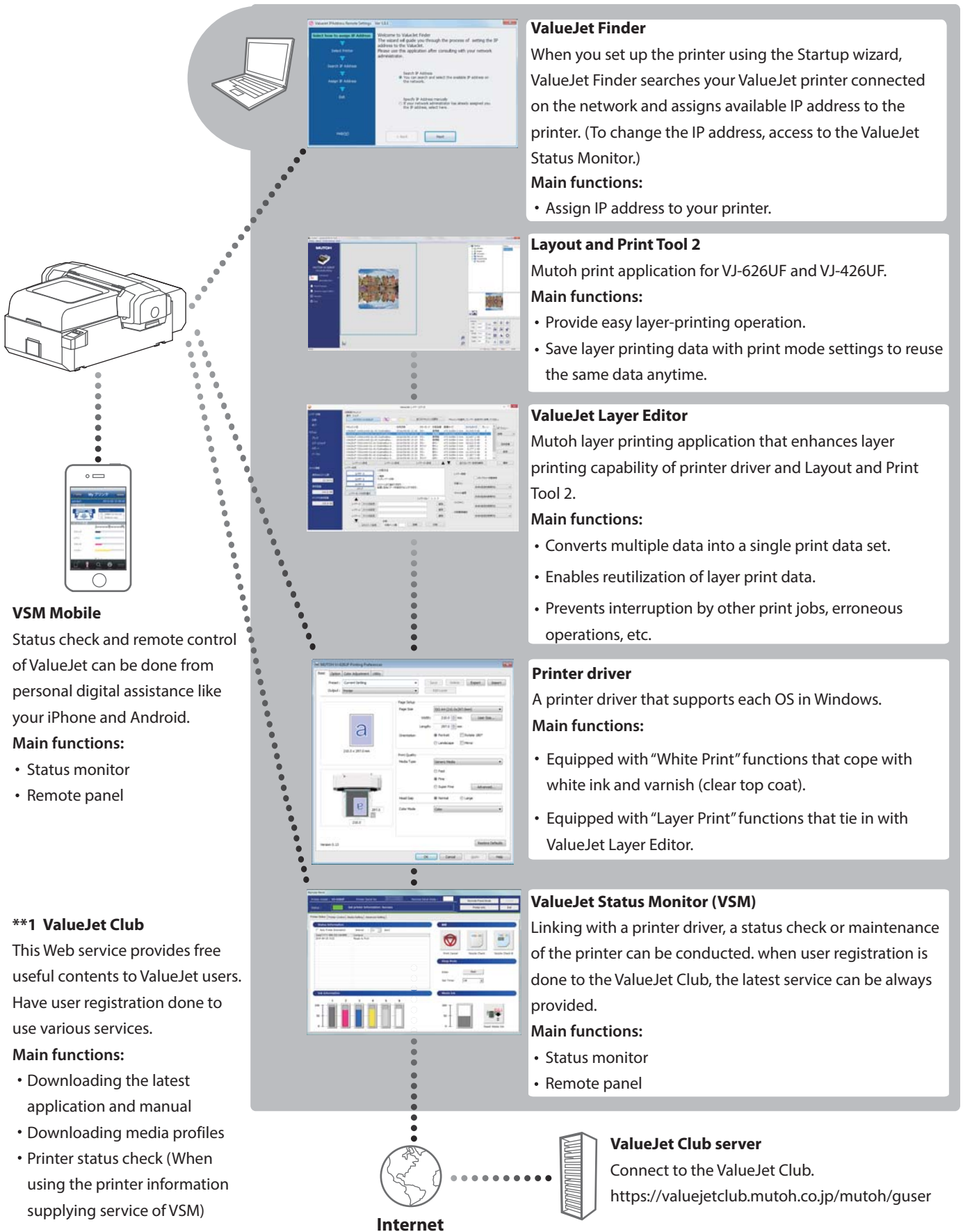
ValueJet Finder
When you set up the printer using the Startup wizard, ValueJet Finder searches your ValueJet printer connected on the network and assigns available IP address to the printer. (To change the IP address, access to the ValueJet Status Monitor.)
Main functions:
- Assign IP address to your printer.

Layout and Print Tool 2
Mutoh print application for VJ-626UF and VJ-426UF.
Main functions:
- Provide easy layer-printing operation.
- Save layer printing data with print mode settings to reuse the same data anytime.

ValueJet Layer Editor
Mutoh layer printing application that enhances layer printing capability of printer driver and Layout and Print Tool 2.
Main functions:
- Converts multiple data into a single print data set.
- Enables reutilization of layer print data.
- Prevents interruption by other print jobs, erroneous operations, etc.

Printer driver
A printer driver that supports each OS in Windows.
Main functions:
- Equipped with "White Print" functions that cope with white ink and varnish (clear top coat).
- Equipped with "Layer Print" functions that tie in with ValueJet Layer Editor.

VSM Mobile
Status check and remote control of ValueJet can be done from personal digital assistance like your iPhone and Android.
Main functions:
- Status monitor
- Remote panel

ValueJet Status Monitor (VSM)
Linking with a printer driver, a status check or maintenance of the printer can be conducted. when user registration is done to the ValueJet Club, the latest service can be always provided.
Main functions:
- Status monitor
- Remote panel

**1 ValueJet Club
This Web service provides free useful contents to ValueJet 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 VSM)
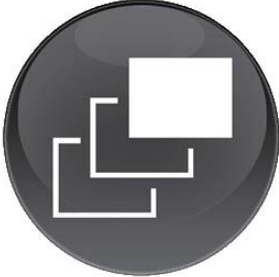
Internet

ValueJet Club server
Connect to the ValueJet Club.
https://valuejetclub.mutoh.co.jp/mutoh/guser

Appropriate Use of Layout and Print Tool 2 and ValueJet Layer Editor

The CDROM supplied with this printer contains two print application; Layout and Print Tool 2 and ValueJet Layer Editor.
To perform layer printing on VJ-626UF, please use Layout and Print Tool 2.

Each print application has following features.

	Layout and Print Tool 2	ValueJet Layer Editor
Functions	Enables to print more than one image layer by layer on the same media. Users can edit layer printing layout for up to 15 layers and save them.	• Receives print data from the printer driver. Users can assign the received data to each layer to perform layer printing. • To create print data file, use Layout and Print Tool 2 or other graphic applications.
Intended use	• Suitable for small print production or adding text to an image. • Recommended to use ValueJet Layer Editor for large print production.	Saves print data with format converted for the printer to print soon after sending from ValueJet Layer Editor and efficiently reprint the same data.
Image printing (PNG/TIFF)	✓	―
Multi layer printing (Print layer by layer on the same media)	✓	✓
Single layer printing (Print 2 or 3 layers in one pass)	―	✓
Change printer settings on output data	―	✓ (Change carriage speed, vacuum fan and more)

> **Note**
>
> For more details of layer printing and supported file format, see the Layout and Print Tool 2 Operation Manual and ValueJet Layer Editor Operation Manual.

Displaying the Printing Preferences screen of printer driver

[1] Windows 10
Click [Start], [All Apps], [Windows System], then [Control Panel].
In the screen that appears, click [Devices and Printers].

Windows 8 / Windows 8.1
Display the charm bar on Desktop, and click [Settings]. Click [Control Panel] - [View devices and printers].

Windows 7
Click [Start] - [Devices and Printers].

[2]
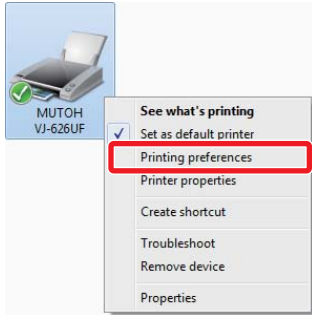
Right click the "MUTOH VJ-626UF" icon and click [Printing preferences].

- The "Printer Configuration" dialog box opens only at the first time.
- The Printing Preferences screen of printer driver opens from the second time.

[3]
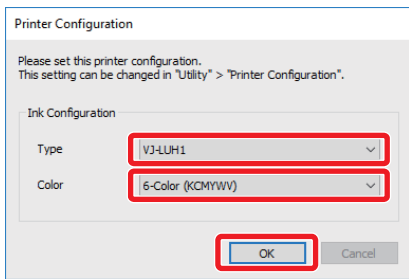
Select the ink type and the ink configuration settings and click [OK].

- After clicking, the Printing Preferences screen of printer driver opens.

📝 **Note**

If you use the Windows printer driver, make sure to select the ink type and the ink configuration settings of your printer.
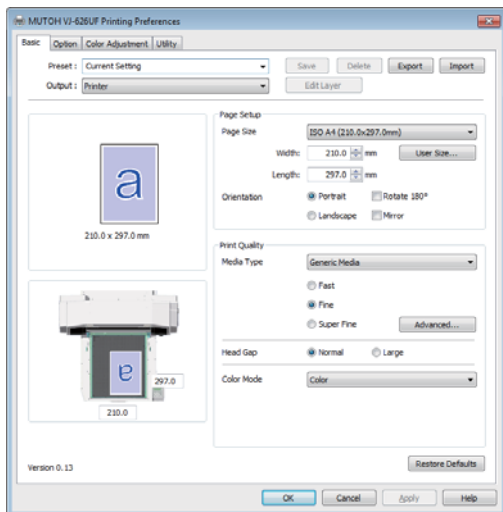
Printing Preferences screen of printer driver

Launching/Displaying/Exiting ValueJet Status Monitor (VSM)

Launching VSM

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

Windows 10 / Windows 7
Double click the VSM 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] - [ValueJet Status Monitor].

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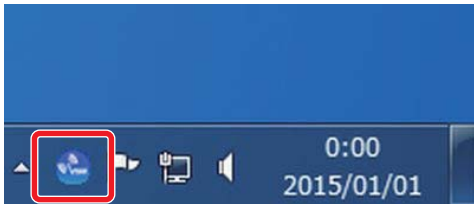
Double click the VSM icon in the task tray.

Displaying remote panel

The remote panel is used to view this printer's status or operate.

Click [Remote Panel].

• The remote panel opens.

Exiting VSM

Windows 8.1
Click the Down Arrow in the [Start] screen.
Click [ValueJet Status Monitor].
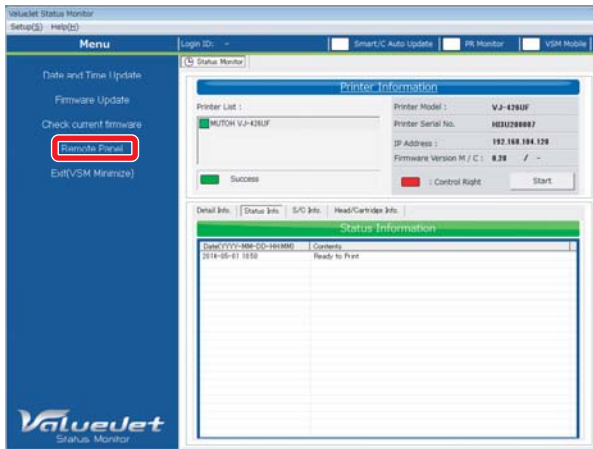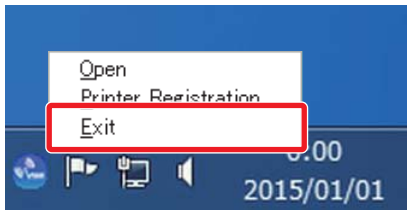
Right click the VSM icon in the task tray, and click [Exit].

> 📝 **Note**

When using the printer, do not exit VSM. When closing the VSM window, click [Settings] - [Close].

Launching ValueJet Finder

From the [Printer Registration] menu on the ValueJet Status Monitor, click "3. Search printer Assign/Change IP address".

> ✎ **Note**
>
> If you have used the old version of Startup wizard in your PC, ValueJet Finder has been already installed.
> In that case, uninstall the ValueJet Finder.

Launching Layout and Print Tool 2

Windows 8 / Window 8.1
Display the charm bar on the desktop, and then click [Search].

Enter "Layout and Print Tool 2", and then click 🔍.
Click the "Layout and Print Tool 2" icon displayed in the search result.

Windows 10 / Windows 7
From the [Start] menu, click [All Programs] (or [All Apps]) – [MUTOH] – [Layout and Print Tool 2] in order.

Launching ValueJet Layer Editor

Windows 8 / Window 8.1
Display the charm bar on the desktop, and then click [Search].

Enter "ValueJet Layer Editor", and then click 🔍.
Click the "ValueJet Layer Editor" icon displayed in the search result.

Windows 10 / Windows 7
From the [Start] menu, click [All Programs] (or [All Apps]) – [MUTOH] – [ValueJet Layer Editor] in order.

Displaying Help

A Help menu is available in the printer driver and ValueJet Finder.

Printer driver

Display the Printing Preferences screen of printer driver, and click [Help].
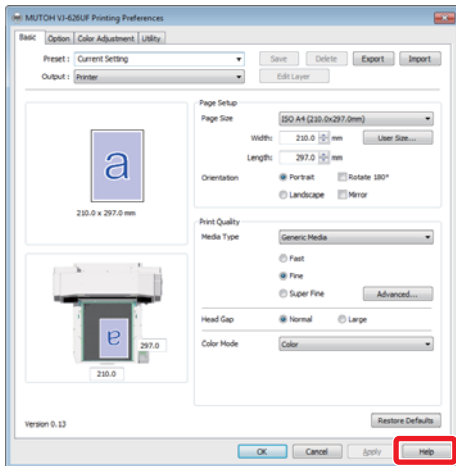
ValueJet Finder

Launch ValueJet Finder, and click [Help].
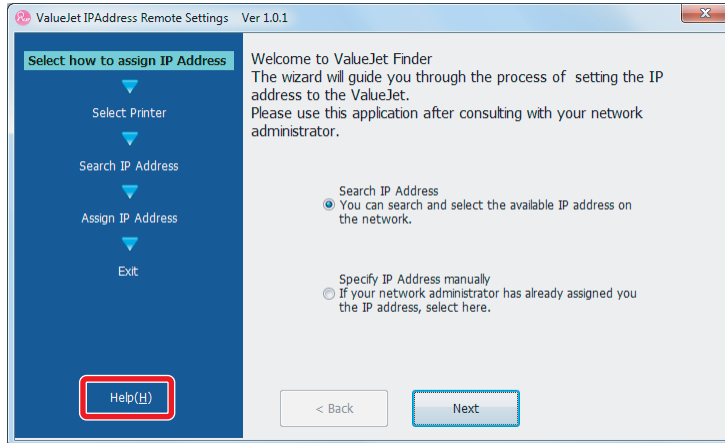
Requirements for usable media

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

Usable sizes

Maximum width	483 mm
Maximum length	594 mm
Maximum thickness	150 mm
Weight	up to 6 kg (including jig)

> 📢 **Important!**
>
> **The minimum media width and length that are settable in the User Type for the printer are 30 mm x 30 mm.**
>
> **To print onto media with dimensions smaller than these, you should take precautions to prevent the table from being dirtied with ink. Once UV ink stains on the table, it will be cured by UV lamp and will not be removed from the table.**

Cautions for handling media

To achieve expected print quality, follow the instructions below.
Failure to follow these instructions could result in damage to the printer.

- Use media with no wrinkle, fold or curl.
  If media does not sit flat on the table, secure it on the table using a thin tape to avoid any warps.

- If media has a chance to be deformed while printing, secure it on the table using a thin tape to avoid head strike.

- Do not use heat-sensitive media.
  The heat given off by the UV rays could deform such media.

- If printing onto a solid object that is liable to roll (such as a golf ball or ballpoint pen), use a jig or similar to stop it from rolling.

- When loading a small and heavy object or a jig on the table, place it as close to the center of the table as possible.

- If printing onto media that has level differences in it, note that adequate print results may not be obtained if there is a large distance between the lower-level printing surfaces and the print head.

- Do not use media that are liable to reflect the UV light.
  The reflective UV light can cure the ink on the print head.

Correctly load and set up media

When loading a new media, make sure to place it on an appropriate position and input correct media information.
If wrong information is entered, the printer can print on an unintended position of the table. If UV ink stains on the table, it will be cured by UV lamp and will not be removed from the table.

Precautions when using this printer

Do not turn the power off

Use the printer with its power turned permanently on. When you are not using the printer, always leave the power on and put the printer into the sleep mode while not in use. In the sleep mode, the printer will periodically circulate the ink inside the printer and carry out head cleaning automatically. If you do not put the printer into the sleep mode, the ink inside the printer could settle out and/or coagulate, causing poor image quality or printer failure.

Agitate the ink cartridges

Before installing a new ink cartridge, invert the ink cartridge back and forth to agitate ink. Periodical ink agitation is also required when prompted on the operation panel.
Otherwise, the ink inside the cartridges settles or coagulates and may cause poor print quality or a malfunction.

Avoid direct contact with uncured ink

The curing time for Mutoh UV ink varies by surface properties of media you use. Particularly a low ink density area on a print takes longer time to be cured (approximately one hour).
When you check if your print is fully cured, be sure to wear protective gloves.

Please use this printer periodically

It is recommended to use this printer at least once a week. When left unused for a long time, the print head nozzles can get clogged causing damage to the printer.

Conduct periodic maintenance

This printer requires daily maintenance.

- Perform the Nozzle check before and after printing.
  If nozzle clog is found, perform a head cleaning.

- Make sure to perform daily maintenance after you finish printing for the day.
  Failure to perform daily maintenance may affect print quality or result in damage to the printer.
  ☞"Daily Maintenance" on page 99

- Empty the waste ink tank when needed.

- Clean the interior of the printer once a month.

Some parts need to be replaced periodically

In this printer, following parts need to be replaced after a long-term use.

- Parts required to be replaced by users: Absorption material for the flushing box, Cleaning wiper

- Parts required to be replaced by service personnel: Various motors, pumps, Print head, Head cap unit, the UV lamp

Safety precautions to open and close the front cover and the maintenance cover

⚠ CAUTION

🚫 • **Do not open or close the cover while you are off balance.**
You may pinch your finger or get injured.

❗ • **Hold the handle of the front cover and gently open or close the cover.**
If excessive force is applied to the cover, it will shorten its life or will damage to the printer.

• **Always fully open the maintenance cover.**
If you leave it half-open, the maintenance cover can suddenly close.

• **When closing the maintenance cover, hold the tab on the maintenance cover to gently close it.**
Do not place your fingers on the edges of the printer's opening portion, or on any parts around those edges.
Your fingers could get caught and be injured.

<Opening and closing the front cover>
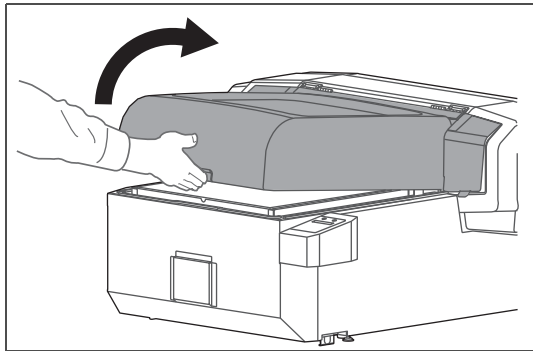
Hold the handle on the front cover to gently open it.
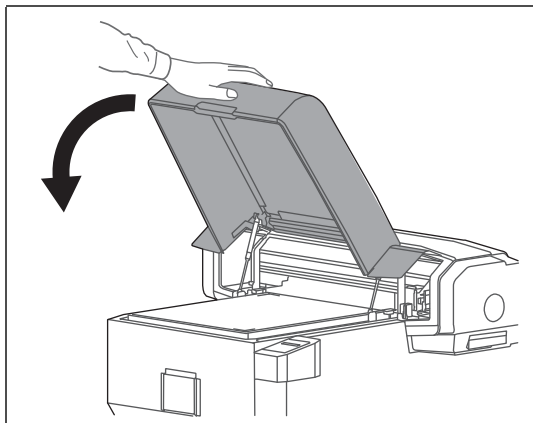
Hold the position shown on the left and gently close the cover.

<Opening and closing the maintenance cover>

To access to the wiper and the head cap unit for daily maintenance, you can open and close the maintenance cover on this printer.
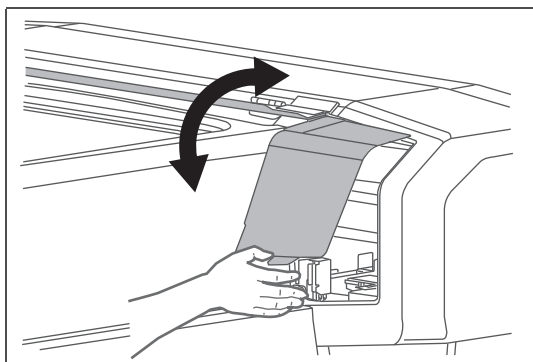
Hold the tab on the maintenance cover as shown on the left to gently open or close the cover.

Powering ON/OFF

Turning the power ON

[1]   Close the front cover.

[2]
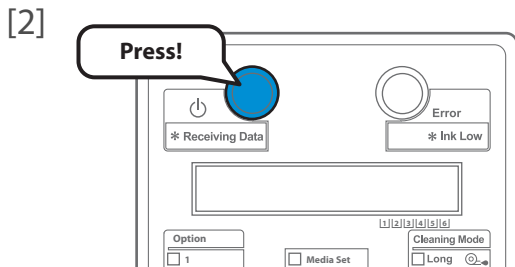
Press the power button to turn the power ON.

- The blue light turns on.
- This printer starts its initialization operations.

> **Note**
>
> - During printer initialization, the printer performs table height calibration to optimize the gap between the print head and media.
> - The table height calibration can be also performed from the operation panel "Mnt. 6: Calibration" menu.
>   ☞"Calibrating table height" on page 53

Turning the power OFF

> **Important!**
>
> **Use the printer with its power turned permanently on. When you are not using the printer, always leave the power on and put the printer into the sleep mode while not in use.**
> **If you do not put the printer into the sleep mode, the ink inside the printer could settle out and/or coagulate, causing poor image quality or printer failure.**
>
> ☞"Sleep Mode" on page 29

[1]   Check that the printer completes printing and no object including a jig is loaded on the table.

[2]   Prepare items required for daily maintenance.
         ☞"Preparing for Daily Maintenance" on page 100

[3]
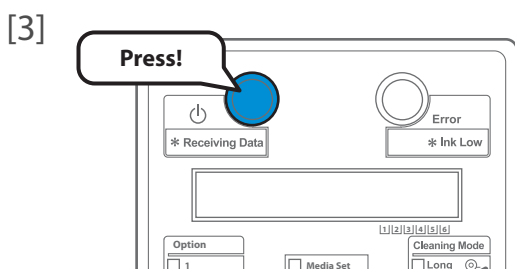
Press the power button to turn the power OFF.

[4]

Daily Maint. :   **Start**

Press the [Enter] key.

[5]

Remove Media   - >   E

The message on the left will appear.

- Remove the media and the jig on the table, and then press the [Enter] key.

Wait for a while

The table, carriage and cleaning wiper move to gain access to daily maintenance.

[6]

Daily Maint. :   End

The message on the left will appear.

- You can start daily maintenance.
  ☞"Performing Daily Maintenance" on page 102

- After the daily maintenance is complete, press the [Enter] key.

Cleaning   ** %

The printer automatically performs the "Short" cleaning.

Power Off Printer

After the "Short" cleaning, the printer will start turning off.

Sleep Mode

When you are not using the printer, always leave the power on and put the printer into the sleep mode while not in use. If you do not put the printer into the sleep mode, the ink inside the printer could settle out and/or coagulate, causing poor image quality or printer failure.

Make sure to follow the instructions on the operation panel to perform daily maintenance.

The following operations are performed during sleep mode.

- Automatic Head cleaning by timer set in the "SetTimer" menu.
- Ink circulation
- "Little Charge"

📢 **Important!**

To leave the printer in sleep mode for seven days or more, perform followings once a week:
- **Check the ink level and replace the relevant ink cartridge if "Ink Low" is displayed.**
- **Agitate the ink cartridges.**

Steps

[1] Make sure that the printer's operating condition is as follows:
- The front cover and the maintenance cover are closed.
- No object including a jig is loaded on the table.
- The remaining ink level is sufficient.
- The waste ink tank has enough space.

📢 **Important!**

If you are going to use the sleep mode for a prolonged period of time, first empty the waste ink tank.

[2] Prepare items required for daily maintenance.
☞"Preparing for Daily Maintenance" on page 100

[3]

Press the [Menu] key.

[4]
Menu6:	Sleep Mode >

Press the [-] key until "Menu6: Sleep Mode >" appears.
- Press the [>] key.

[5]
SleepMode 1:	Start

Press the [Enter] key.

[6]
Start Sleep Mode?	

Press the [Enter] key.

[7]

Daily Maint. :   Start

Press the [Enter] key.

[8]

Remove Media   - >   E

The message on the left will appear.
  • Remove the media and the jig on the table, and then press the
    [Enter] key.

Wait for a while

The table, carriage and cleaning wiper move to gain access to daily
maintenance.

[9]

Daily Maint. :   End

The message on the left will appear.
  • You can start daily maintenance.
    ☞"Performing Daily Maintenance" on page 102

  • After the daily maintenance is complete, press the [Enter] key.

Cleaning   ** %

The printer automatically performs the "Short" cleaning.

Restart   - >   Enter

The sleep mode will start.
  • To exit the sleep mode, press the [Enter] key.

> **Note**
>
> • The power button flashes in blue while the printer is in the sleep mode.
> • To set the timer for automatic head cleaning during sleep mode, see "SleepMode 2: SetTimer" on page 88.
> • Depending on the elapsed time from the previous automatic maintenance, the printer may automatically execute head cleaning and/or
>   ink charging, etc., when it exits the sleep mode. Such operation does not depend on the sleep mode settings. It is an automatic
>   maintenance function of the printer.

Printing

Printing area

- When loading new media, you need to enter the media size (height, width and length), media set position and origin position (print start position) from the operation panel.

- Minimum margins from media set position to the origin position are 5 mm x 5 mm.

- The guide line indicates the maximum media size (483 x 594 mm).

- Use the screw hole (M4) to attach your own jig.

- Printing is always started from origin position (print start point).
  See the figure below as example.
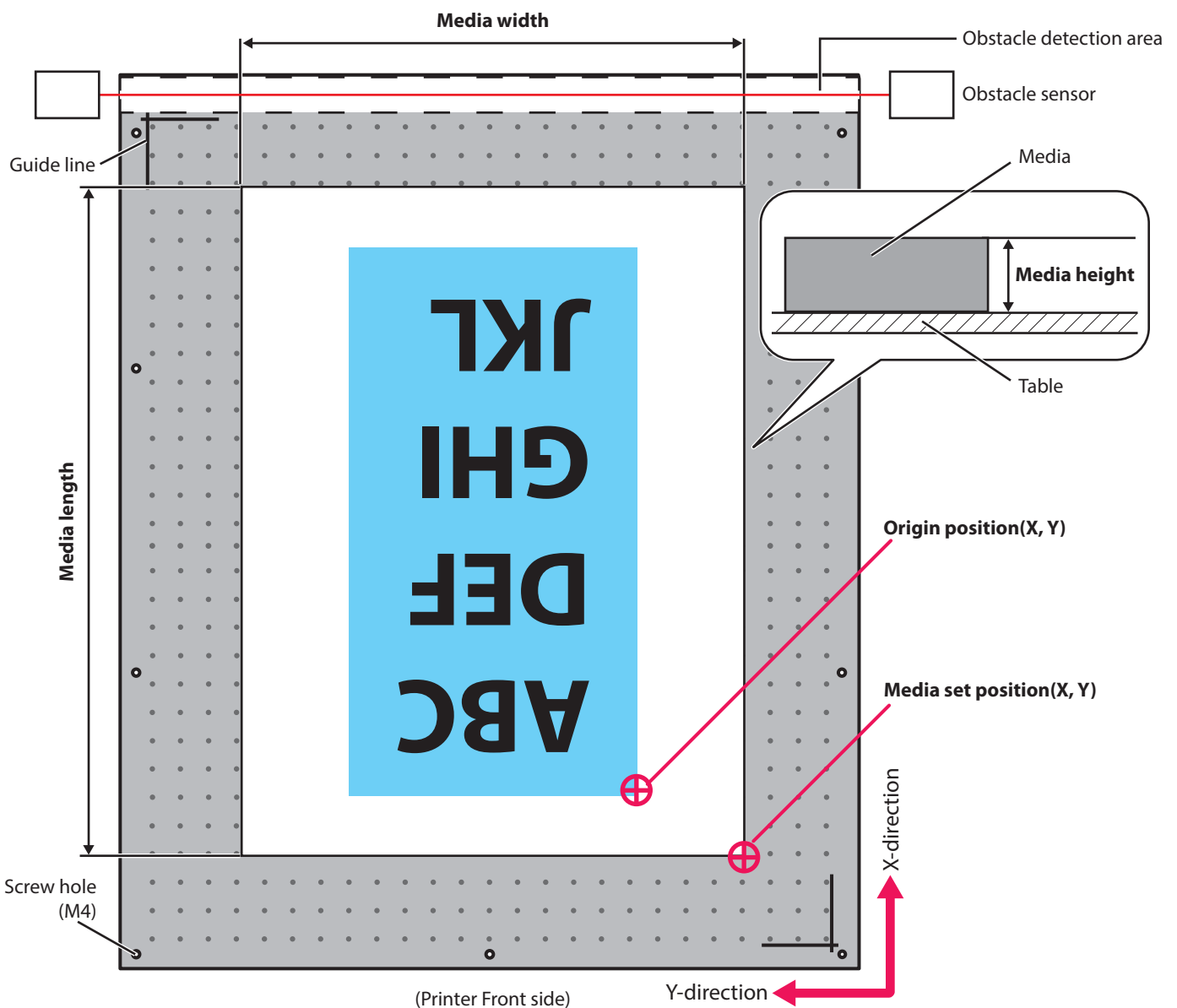
Important!

When using this printer, DO NOT place any objects around obstacle detection area.

Otherwise, it will cause false detection of the obstacle sensor and the printer may not be able to print correctly.

Loading media

⚠ CAUTION

🚫 • **Do not open or close the cover while you are off balance.**
You may pinch your finger or get injured.

❗ • **Hold the handle of the front cover and gently open or close the cover.**
If excessive force is applied to the cover, it will shorten its life or will damage to the printer.

📨 **Important!**

When loading a new media, make sure to place it on an appropriate position and input correct media information.
If wrong information is entered, the printer can print on an unintended position of the table. Once UV ink stains on the table, it will be cured by UV lamp and will not be removed from the table.

1. Placing the media on the table

[1]

Set Media, then

press Set Media key.

Check that the message on the left is displayed.

• If not displayed, press the [Remove Media] key.

[2]
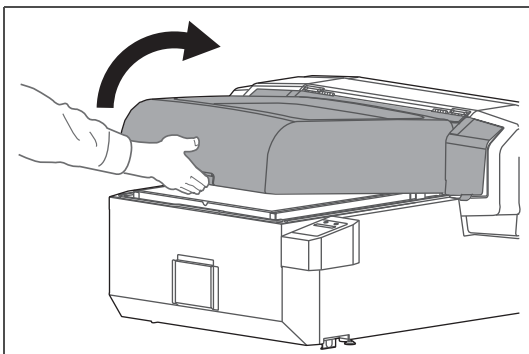
Hold the handle on the front cover to gently open it.

• Fully open the front cover.

Set media, then	+ -

close cover.	+ -

Check that the message on the left is displayed.

✏ **Note**

• If the message on the left is displayed, you can use the [+] and [-] keys to change the vacuum fan setting.
Change this setting depending on the thickness of the media.
• The vacuum fan will start operating when the [+] or [-] key is pressed.
• If you change the setting, it will be reflected in the currently selected User Type.

[3]
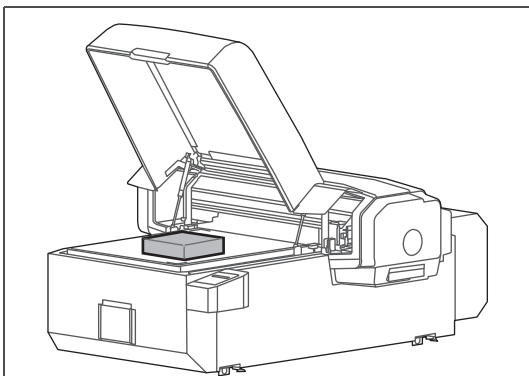
Place the media on the table.

[4]

Hold the position shown on the left and gently close the cover.

[5]

Press the [Set Media] key.

[6]

Detailed-Set :	On

Press the [Enter] key.

✎ **Note**

- This menu only appears when the User Type are selected for the first time.
- If you select "On", you will have to input the "Media height", "Obst.", "Media size", "Media location" and "Media origin" after pressing the [Set Media] key each time you set a media on the table.
- If you select "Off" via the [-] key, "Ready to Print" will be displayed after pressing the [Set Media] key each time you set a media on the table. In that case, t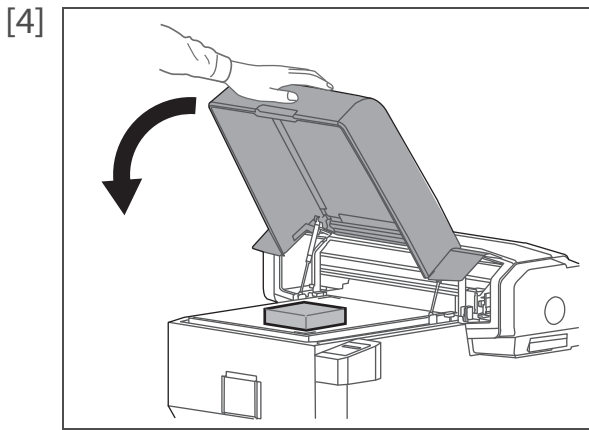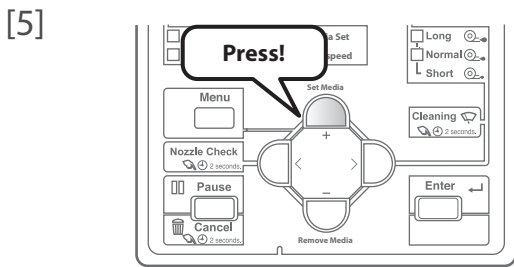he currently selected User Type values will be used for the "Media height", "Obst.", "Media size", "Media location" and "Media origin".

2. Media Height Setting & Printer Response Setting for Obstacle Detection

[1]

Height:	Auto
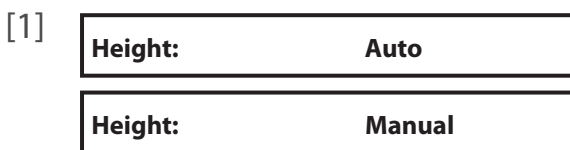
Height:	Manual

Use the [+] / [-] key to configure media height setting.

- "Auto": Printer automatically detects height of media and lowers the table until the obstacle sensor detects no obstacle.
- "Manual": User manually input height of media.

Press the [Enter] key.

- In "Auto" Setting

[2]

PG Offset:	0.0 mm

Use [+] or [-] key to specify the offset value between the print head and media.
Press the [Enter] key.

✎ **Note**

The default head gap from the surface of media is set to 1.2 mm.

When you want to increase the head gap, use this menu to specify value in range of 0.0 mm to 1.5 mm.

- Example: If "PG Offset" is set to 0.5 mm, the head gap from the surface of media will be 1.7 mm (1.2 mm + 0.5 mm).

• In "Manual" Setting

[2]

MediaHeight:	0.0 mm

Use the [+] / [-] key to input the media height.

Press the [Enter] key.

✎ **Note**

Any value from 0.0 mm to 150.0 mm can be set for the height.

[3]

Obst. :	Auto

Obst. :	Print Cancel

Obst. :	Confirm

Use the [+] / [-] key to configure the printer response setting for obstacle detection.

• "Auto": The printer pause the printing.
  It lowers the table until the sensor does not detect any obstacle, and then resumes the job.
• "Print Cancel": The printer cancels printing and prompts the obstacle error message.
• "Confirm": The printer pauses the printing and allows users to choose from two options; Print Continue or Print Cancel.

Press the [Enter] key.

✎ **Note**

• If the sensor still detects the obstacle after the table moves down to its lowest position, the printer cancels printing and prompts the obstacle error message.
• For details on the related sections of the Panel Setting menu, see the following.

☞"**>8: Obst. Detect" on page 69

[4]

Wait for a while

The message on the left will appear.

• While the table is moving to the print start position, the obstacle sensor will detect the media.

If no obstacle is detected, move to the next step.

☞"Inputting the media width and length" on page 35

If any obstacle is detected, an obstacle error message will appear on the operation panel.

• Press the [Remove Media] key.
  Press [Set Media] key and then enter the height of media.

☞"Loading media" on page 32

☞"Media Height Setting & Printer Response Setting for Obstacle Detection" on page 33

3. Inputting the media width and length

[1]

Width:	483 mm

Use the [+] / [-] key to input the media width.

Press the [Enter] key.

> **Note**
> - Any value from 30 mm to 483 mm can be set for the width.
> - If you use 483 mm width media, you cannot input a Y-direction value for the set position.

[2]

Length:	594 mm

Use the [+] / [-] key to input the media length.

Press the [Enter] key.

> **Note**
> - Any value from 30 mm to 594 mm can be set for the length.
> - If you use 594 mm length media, you cannot input an X-direction value for the set position.

> **Note**
> - If you entered the maximum media size (W: 483 mm, L: 594 mm), the message "MediaSize [Max.]" will appear on the panel.
>   Then, two seconds later or after pressing the [Enter] key, the message "Confirm SET Pos. ? No" will appear. To skip the "4. Inputting the set position" step, press the [Enter] key on the message.
> - If you want to check the media loading position on the table, use [-] key to select "Confirm SET Pos.? Yes", and then press the [Enter] key.

4. Inputting the set position

[1]

SET	X :	0.0	Y :	0.0

Press the [Enter] key.

> **Note**
> - If you know the media set position in advance, you can input it here, using the [+] / [-] key to enter the X (longitudinal) value and [<] / [>] key to enter the Y (lateral) value.
> - For the set position, any value from 0.0 to 564.0 can be set for the X value, and any value from 0.0 to 453.0 for the Y value.
>   *These ranges will vary depending on the values set for the media width and length.

Moving Location Pos.

- The table will move inward.
- The carriage will move to the set position, with its LED pointer lit steady.

[2]

SET	X :	10.0	Y :	20.0

Use the keys to align the LED pointer with right front corner of the media.

- Use the [+] / [-] key to move the table forward/backward.
- Use the [<] / [>] key to move the LED pointer leftward/rightward.
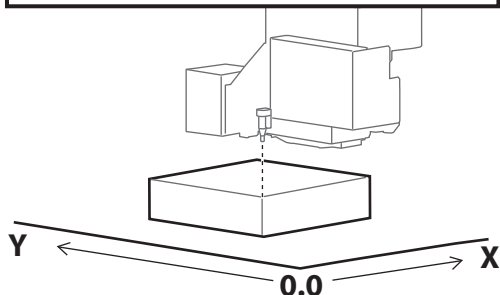
Press the [Enter] key to set the position.

[1]

Origin:	On

Press the [Enter] key.

> **Note**
>
> If you select "Off", the origin setting in the User Type will be X = 5.0, Y = 5.0.

> **Note**
>
> - If you entered the minimum media size (W: 30 mm, L: 30 mm), the message "MediaSize [Min.]" will appear on the panel.
>   Then, two seconds later or after pressing the [Enter] key, the message "Confirm ORG Pos. ? No" will appear. You can skip the origin position confirmation by pressing the [Enter] key. The origin is set to X: 5.0, Y: 5.0.
>
> - If you want to check the origin position on the media, use the [-] key to select "Confirm ORG Pos. ? Yes", and then press the [Enter] key.

[2]

ORG X :	5.0	Y :	5.0

Press the [Enter] key.

> **Note**
>
> - If you know the print origin position in advance, you can input it here, using the [+] / [-] key to enter the X (longitudinal) value and [<] / [>] key to enter the Y (lateral) value.
>
> - For the origin position, any value from 5.0 to 569.0 for the X value, and any value from 5.0 to 458.0 for the Y value, can be entered.
>   *These ranges will vary depending on the values set for the media width and length.
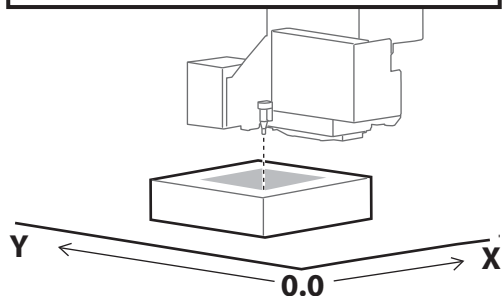
Moving Origin Pos.

- The table will move inward.
- The carriage will move to the set position, with its LED pointer lit steady.

[3]

ORG X :	15.0	Y :	40.0

Use the keys to move the LED pointer to the origin position (print start point).

- Use the [+] / [-] key to move the table forward/backward.

- Use the [<] / [>] key to move the LED pointer leftward/rightward. Press the [Enter] key to set the position.

Ready to Print

- That completes setting of the media.
- You can now start printing by sending print data from the computer.

> **Note**
>
> To display the input menu for "Media height", "Obst.", "Media size", "Media location" and "Media origin", long press the [Enter] key for more than 2 seconds while "Ready to Print" is displayed.
> Any values you input will be reflected in the currently selected User Type.

Nozzle check and cleaning

Before starting everyday operation, please perform nozzle check printing to check the print head condition. If nozzle clog is found, perform cleaning.

This printer offers the following two kinds of nozzle checks:

- Nozzle Check - Prints the nozzle check patterns.

- Nozzle Check B - Prints the nozzle check patterns on the partially colored background.

> **Note**
>
> - "Nozzle Check B" will only appear in the menu if the printer is set to 6-color configuration.
> - When using white ink, colored media, transparent films or semi-transparent films (such as OHP film, tracing paper and more) are recommended to use for nozzle check.

> **Important!**
>
> **Before loading media, read** "Cautions for handling media" on page 24 **and then load it on the table.**

⚠ CAUTION

🚫
- **Do not open or close the cover while you are off balance.**
  You may pinch your finger or get injured.

❗
- **Hold the handle of the front cover and gently open or close the cover.**
  If excessive force is applied to the cover, it will shorten its life or will damage to the printer.
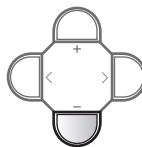
1. Nozzle check steps

[1]

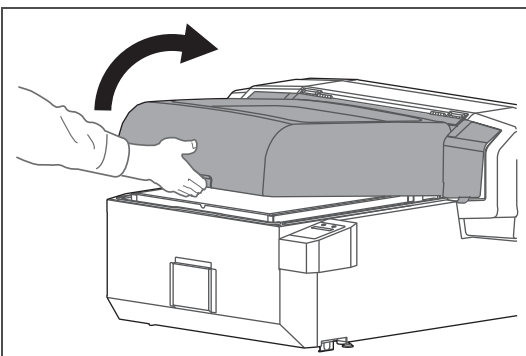| Set Media, then |
|---|

press Set Media key.

Check that the message on the left is displayed.

- If not displayed, press the [Remove Media] key.
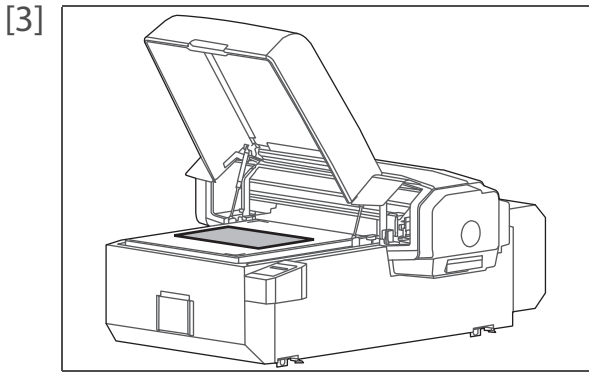

Remove Media

[2]

Hold the handle on the front cover to gently open it.
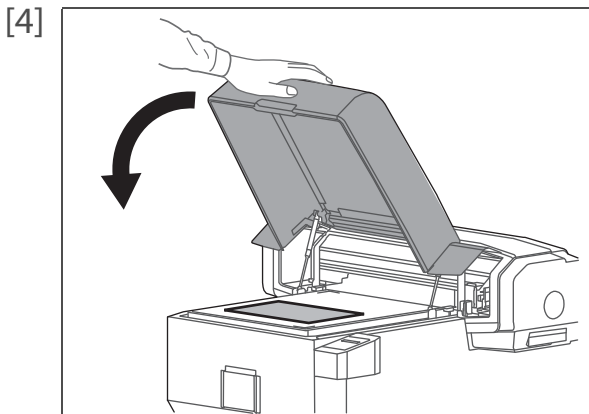
- Fully open the front cover.

[3]

Place the media on the table.

- Load an A4 or larger size media in landscape orientation on the table.

> **Important!**
>
> **The minimum required media size for nozzle check printing is width 260 mm x length 35 mm. If you use a media that is smaller than this, the printing will overshoot it.**
> **Once UV ink stains on the table, it will be cured by UV lamp and will not be removed from the table.**

[4]

Hold the position shown on the left and gently close the cover.

[5]

Press the [Set Media] key.

[6]

Wait for a while
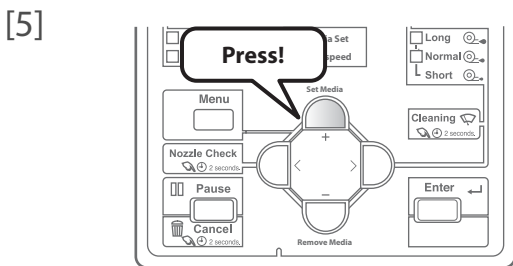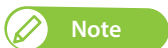
Press the [Set Media] key.

- While the table is moving to the print start position, the obstacle sensor will detect the media to automatically adjust the table to the appropriate height.
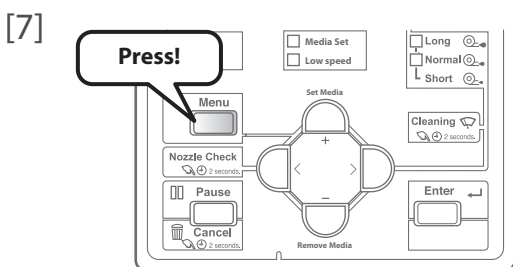
> **Note**
>
> If "Detailed-Set" is set to "On", you need to enter the "Media height", "Obst.", "Media size", "Media location" and "Media origin".

[7]

Press the [Menu] key.

[8]

Menu2:	Test Print >

- Press the [-] key until "Menu2: Test Print >" appears.
- Press the [>] key.

[9]

Test1:	Nozzle Check

Test2:	Nozzle Check B

- Press the [Enter] key.
- To select Nozzle Check B, press the [-] key to display "Nozzle Check B", then press the [Enter] key.
- Nozzle check patterns will be printed.

[10] Check the nozzle check print.

- If parts of lines are missing or faint, go to "Cleaning steps" on page 40.
- If all lines are clearly printed, go to "Starting printing" on page 41.
- The figure below are examples of the Nozzle Check patterns.
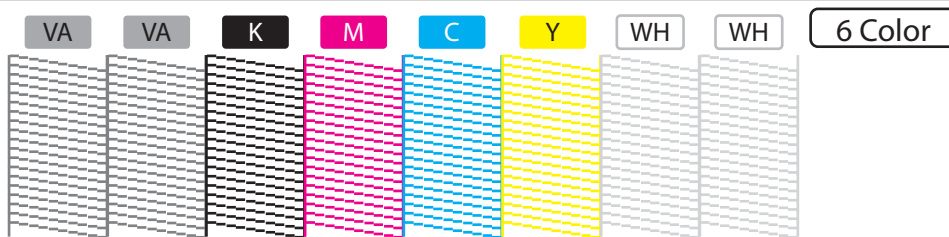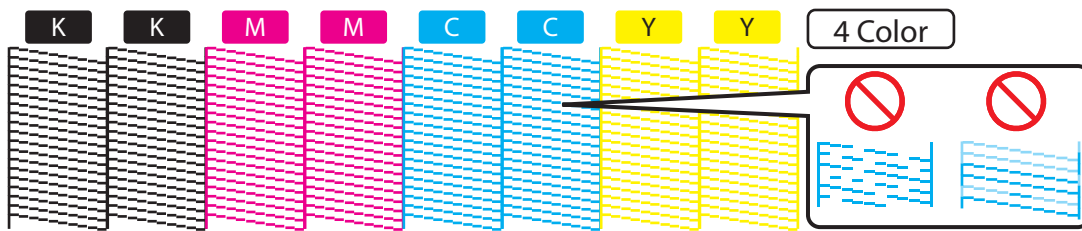
- Nozzle Check B is printed on the partially colored background.
- The figure below is an example of the Nozzle Check B pattern. In this example, non-colored background area is shown in gray.
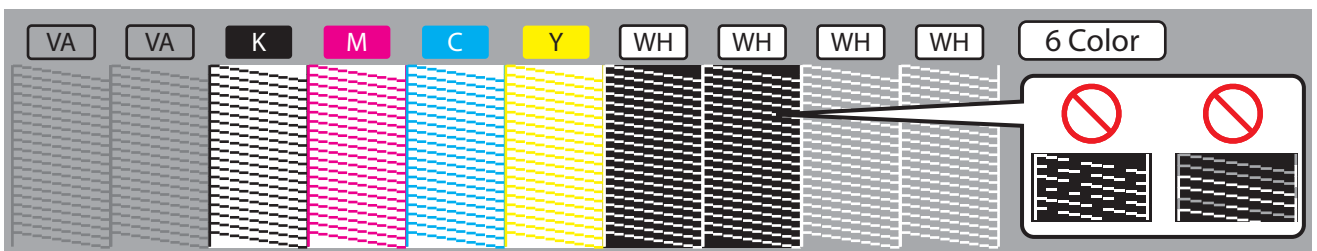
Note

The printer information (date and time of printing, printer's serial number, firmware version) is printed on the nozzle check pattern.

2. Cleaning steps

[1]
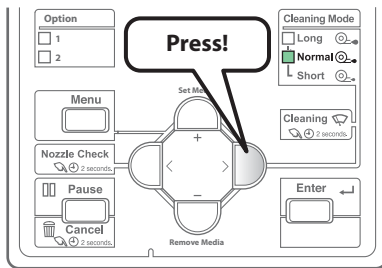
Press the [Cleaning] key, so that the "Normal" indicator (one of the "Cleaning Mode" indicators) lights steady.

• The cleaning mode will be set to "Normal".
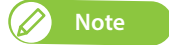
> **Note**

You can alternatively do this via the printer driver or the VSM's remote panel.

[2]
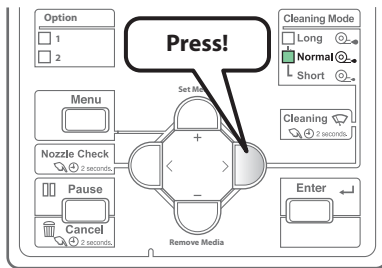
Press the [Cleaning] key for more than two seconds.

• Cleaning will start.

[3]   Perform a nozzle check, again.
      ☞"Nozzle check steps" on page 37

• If there is still nozzle clogging, repeat Normal cleaning. See "Head cleaning" on page 107 regarding "Short", "Long" and "LittleCharge" cleaning.

Starting printing

Printing from the Layout and Print Tool 2

You can lay out and print out the images using the bundled CD-ROM software, Layout and Print Tool 2.

This section explains the basic printing instructions only. For the details, see the operation manual for Layout and Print Tool 2.

Layout and Print Tool 2 supports following graphic file formats:

- PNG (.png)
- TIFF (.tif)

> **Note**
>
> For the details of supported file format, see the Layout and Print Tool 2 Operation Manual.

[1] Start Layout and Print Tool 2.
☞"Launching Layout and Print Tool 2" on page 22

[2]
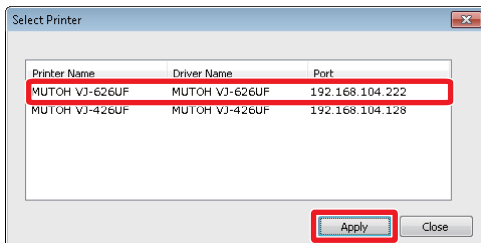
Select the printer driver.
- Click [Apply].

[3]
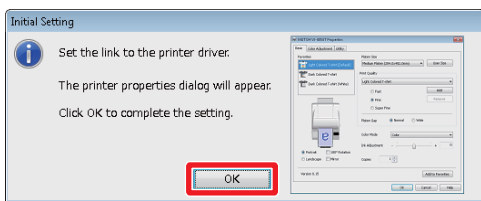
If the driver settings have not been completed, the dialog on the left will appear.
- Click [OK].

[4]
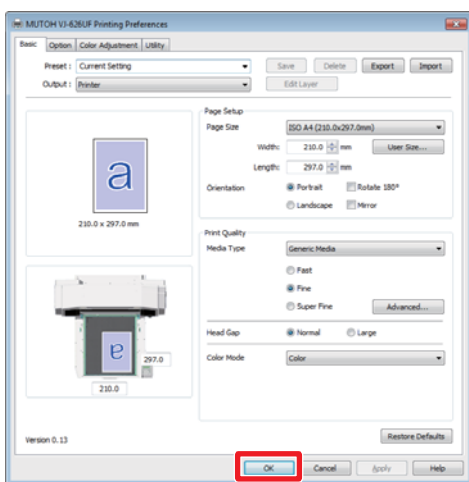
The dialog on the left will appear.
- Click [OK].

[5]
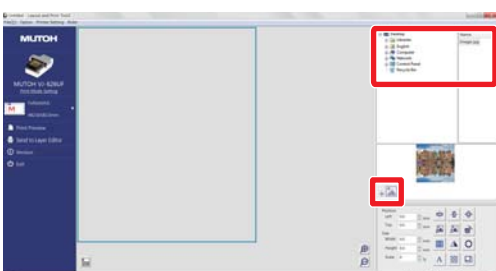
Select the image to be used in printing.
- Click the [icon] button to insert the image.

[6]
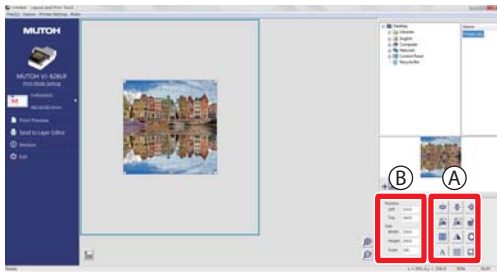
Align the image by using the following methods:
- Click the edit buttons (A on the left illustration).
- Enter values directly (B on the left illustration).

[7]
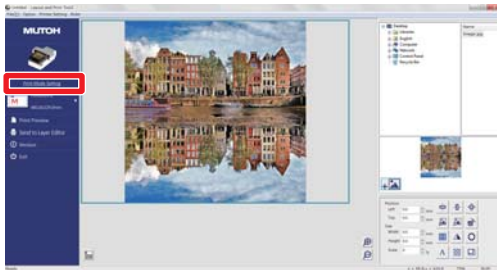
Click [Print Mode Setting].

[8]
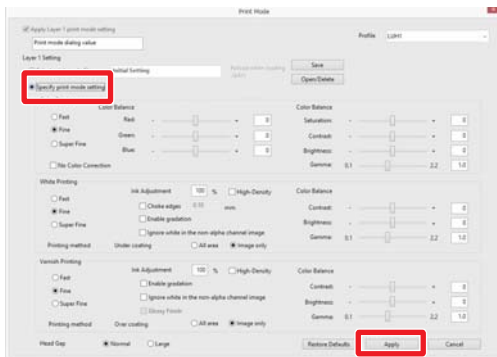
- Select [Specify print mode setting].
- After specifying all the settings, click [Apply].

[9]
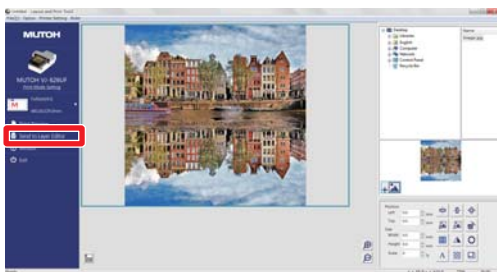
Click [Send to Layer Editor].
- The "Choose Print Mode" dialog will appear.

[10]
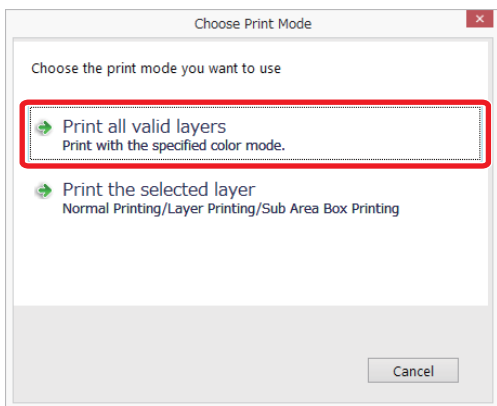
Select the Print Mode.
- Printing is executed.

Note

For more details of layer printing, see the Layout and Print Tool 2 Operation Manual.

Printing from the Printer Driver

In this section, a method to print from the printer driver is explained.

[1]   Open printing data from application software to execute printing.

[2]   Open the print setup screen of the VJ-626UF printer driver from the application software.

[3]   Conduct print setup.

 • Set [Page Size], [Orientation] and [Print Quality].
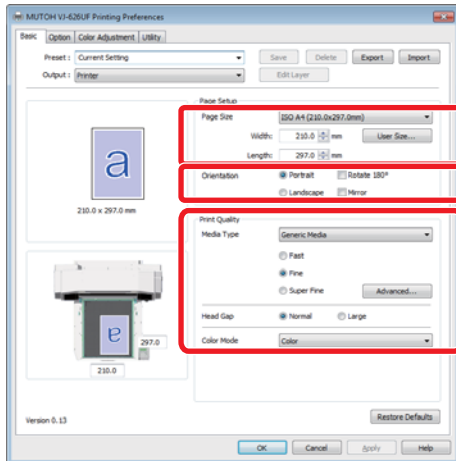
[4]   Click [OK].
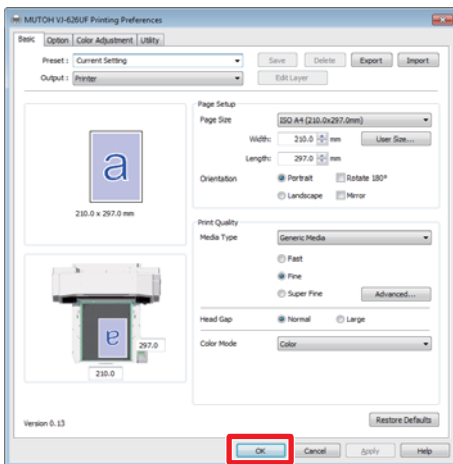
[5]   Printing is executed.

Pausing / Restarting printing
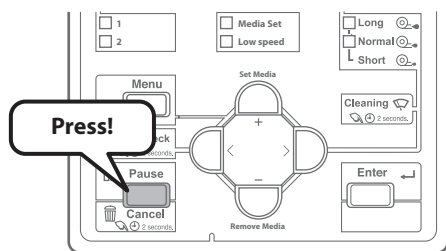
To halt printing, press the [Cancel] key.

- The printing pauses.
- To resume printing, press the [Enter] key.

Note

- In this operation, printing data sent to the printer are not deleted.
- Please see the followings when canceling printing and deleting data.
  ☞"Canceling printing" on page 44

Canceling printing
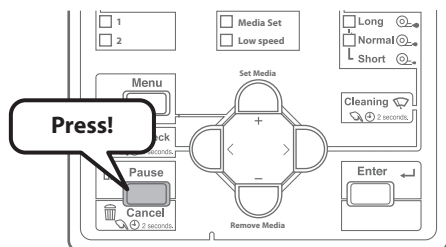
Press and hold the operation key on the operation panel for two seconds or more during printing.

- The printing is canceled (it cannot be restarted).
- The printing data sent to the printer are deleted.

Note

You can alternatively do this via the printer driver or the VSM's remote panel.

What you can do on the operation panel during printing

[1]

Receiving

Printing

Processing

Press the [Menu] key while any of the messages on the left is displayed.

[2]

Menu1 :	PF Micro Adj.

Menu2 :	Backup

Menu3 :	Job Status

Menu4 :	ResetWasteInk

Use the [+] / [-] key to select a menu.
☞"Menu1: PF Micro Adjustment" on page 45
☞"Menu2: Backup" on page 45
☞"Menu3: Job Status" on page 46
☞"Menu4: Reset Waste Ink" on page 46

Menu1: PF Micro Adjustment

With this menu, you can alter the micro-adjustment value for the feed correction. The alteration will be valid for the current printing only.

- See the following related sections of Panel Setting Menus (Chapter 2 below):
  ☞"**>3: PF Adjust" on page 63

[1]

Menu1 :	PF Micro Adj.

Press the [Enter] key to access the menu.

[2]

Micro :	5.00 %

- Use the [+] / [-] key to change the setting value.
- Press the [Enter] key to set the changed value.

> ✎ **Note**
> - The changed value set with this menu will become invalid when the printing ends.
> - To have the change reflected in the currently selected User Type, save it using "Menu2: Backup".

Menu2: Backup

With this menu, you can have a change that you made via "Menu1: PF Micro Adj." reflected in the currently selected User Types.

[1]

Menu2:	Backup

Press the [Enter] key.

[2]

Update Parameter?

Press the [Enter] key.

* Parameter Updating *

The setting value will be saved.

Menu3: Job Status

This menu displays data on the job being printed.

- See the following related sections of Panel Setting Menus (Chapter 2 below):

  ☞"Status 3: Job Status" on page 87

[1]

Menu3:	Job Status

Press the [Enter] key to access the menu.

[2]

ToDoLength:	xxx.x m

Done:	xxx.x m

Remain:	xxx.x m

Remain Time:	xxxx min

Use the [+] / [-] key to select a menu.

- ToDoLength: display this to check the total length (paper feed direction) of the job being printed.
- Done: display this to check how much of the current job has been printed.
- Remain: display this to check how much of the current job remains to be printed.
- Remain time: displays the time remaining to complete the print job.

✎ **Note**

- The values displayed by this function are approximate. They are not guaranteed to be rigorously accurate.
- If the print job data contains no length information, "0" will be displayed for all these items.

Menu4: Reset Waste Ink

Use this menu to reset the waste ink counter to zero, if you empty out the waste ink tank during printing.

- See the following related sections of Panel Setting Menus (Chapter 2 below):

  ☞"Mnt. 2: ResetWasteInk" on page 82

[1]

Menu4:	ResetWasteInk

Press the [Enter] key to access the menu.

[2]

Initial. Parameter?

Press the [Enter] key.

** Initializing **

The counter will be reset to zero.

Checking the printing area

To avoid printing on an unwanted area on your media, the Show Edges function helps to check the printing area of the print date before printing. By specifying this setting before printing, LED pointer shows where the image will be printed on the media. This helps to avoid misprinting especially when printing on an object that you do not have more than one pieces.

With this function, you can check the following:

- Whether an image can be printed on the intended area on the media.
- Whether the print data can be fitted on the media.

Operation

- Locate the four corners of the printing area by the LED pointer.
- The LED pointer flashes (every second) on the point.
- The LED pointer lights up when moving from point to point.
- If the print data is too big for the media, the LED pointer flashes fast (twice a second) on the point.
- Move the LED pointer from the "position1" to "position4" in order in the following illustration.

Media

Printing area

Position3
Position4
Position2
Position1

X-direction

(Front side of the table)   Y-direction
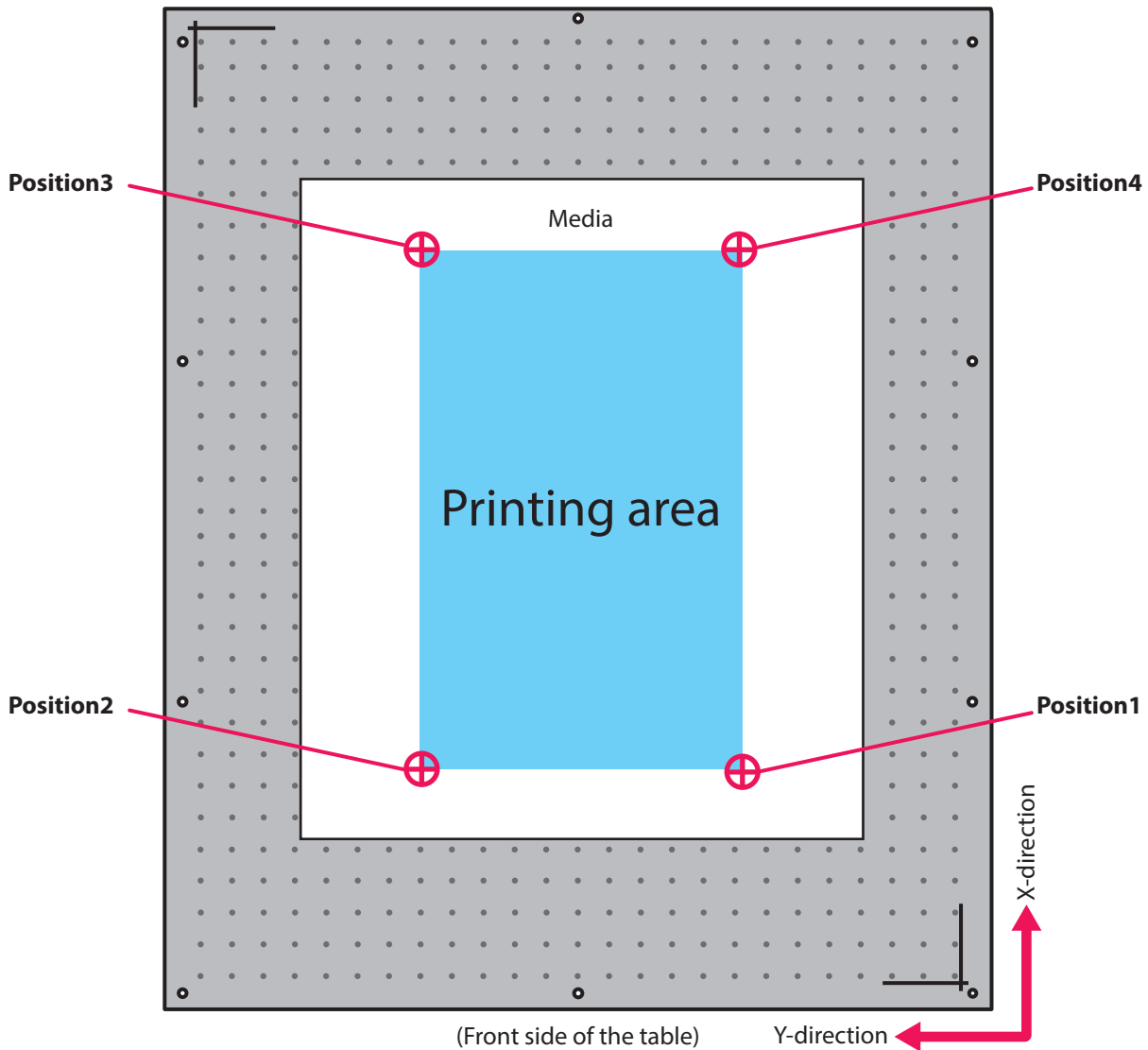
> **Note**
>
> When the print data does not have the length information (X direction length), the LED pointer does not move from Position3 and 4.

1. Setting "Show Edges" function

[1]

Press!

Press the [Menu] key.

[2]

Menu1:	Setup >

Press the [>] key.

[3]

Set1:	User Type
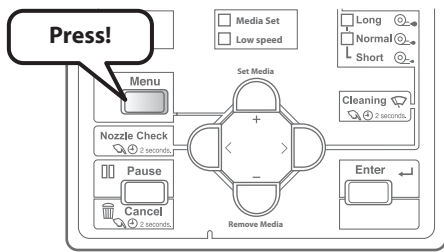
Press the [Enter] key.

[4]

User:	Type 1

- Use the [+] or [-] key to select the user type from Type 1 to Type 10.
- Press the [Enter] key.

> **Important!**

If you have changed the User Type to another type, all settings that can be changed by User Type settings change to the settings of the selected user type.

- When the "Media Setting" for the User Type settings have been changed, the settings for the "Media height", "Obst.", "Media size", "Media location" and "Media origin" are changed to the settings of the selected User Type. Therefore, be careful with the print start position. Images might be printed at the position that was not intended or outside the media.

- You can change the settings for the "Media Setting" from the Panel Setting menu.

  ☞

[5]

**>7:	Show Edges

- Press the [-] key until "**>7: Show Edges" appears.
- Press the [Enter] key.

[6]

Show Edges:	Off

Show Edges:	Step

Show Edges:	Auto

Use the [+] or [-] key to select the setting.
- Off: LED pointer does not show the printing area. This is the default setting.
- Step: LED pointer shows where the image will be printed on the media and the printer will ask you at each point of corner if the position is OK.
- Auto: LED pointer shows where the image will be printed on the media without checking with the user.

[7]   Press the [Enter] key to confirm.

2. How to check the printing area

This section explains about when the checking method is set to "Step".

> **Note**
>
> When it is set to "Auto", the following steps 2 to 5 are skipped. After step 1, the LED pointer moves from the "position1" to "position4" in order.

[1]

Start Show Edges   - > E

- When the media is loaded and the print data is sent to the printer, the left message is displayed.
- Press the [Enter] key.

> **Note**
>
> If you press the [Cancel] key, the printer starts printing without showing printing area.

Wait for a while

- The LED pointer moves to the bottom right corner of the print range (position1) while the LED is turned off.

Confirming PrintArea

- After moving, the LED pointer flashes every second, for a total of 3 times.
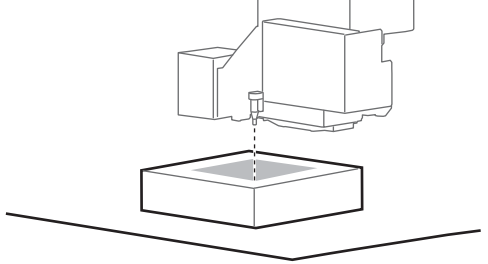
[2]

Position 1 OK?

Check that the LED pointer's position is not misaligned with the media position, and then press the [Enter] key.

> **Note**
>
> - The LED pointer remains on until the [Enter] key is pressed.
> - Printing is canceled when the [Cancel] key is pressed.

Confirming PrintArea

- The LED pointer moves to the bottom left corner of the print range (position2).
- The LED pointer remains on while moving.
- After moving, the LED pointer flashes every second, for a total of 3 times.

> **Note**
>
> When the print data's width (Y direction length) is too big for the media, the LED pointer flashes twice a second, for a total of 6 times after moving.

[3]

Position 2 OK?

Check that the LED pointer's position is not misaligned with the media position, and then press the [Enter] key.

> **Note**
> - The LED pointer remains on until the [Enter] key is pressed.
> - Printing is canceled when the [Cancel] key is pressed.

Confirming PrintArea

- The LED pointer moves to the top left corner of the print range (position3).
- The LED pointer remains on while moving.
- After moving, the LED pointer flashes every second, for a total of 3 times.

> **Note**
> When the print data's width (Y direction length) is too big for the media, the LED pointer flashes twice a second, for a total of 6 times after moving.
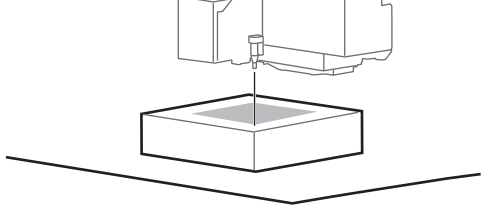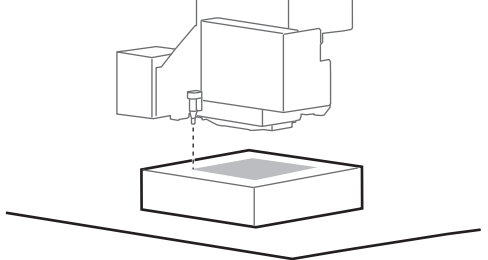
[4]

Position 3 OK?

Check that the LED pointer's position is not misaligned with the media position, and then press the [Enter] key.

> **Note**
> - The LED pointer remains on until the [Enter] key is pressed.
> - When the print data's length (X direction length) is too big for the media, the LED pointer flashes twice a second, for a total of 6 times after moving.
> - Printing is canceled when the [Cancel] key is pressed.

Confirming PrintArea

- The LED pointer moves to the top right corner of the print range (position4).
- The LED pointer remains on while moving.
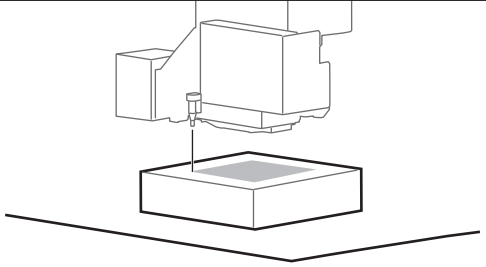- After moving, the LED pointer flashes every second, for a total of 3 times.

> **Note**
> When the print data's length (X direction length) is too big for the media, the LED pointer flashes twice a second, for a total of 6 times after moving.
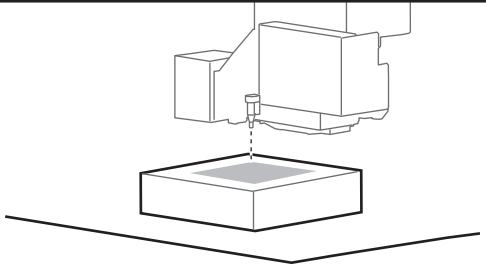
[5]

Position 4 OK?
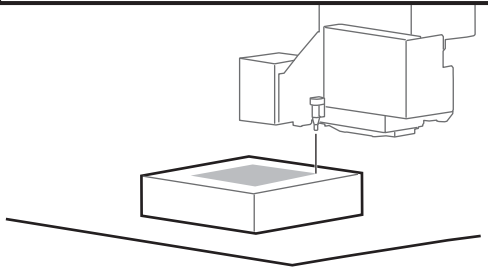
Check that the LED pointer's position is not misaligned with the media position, and then press the [Enter] key.

✎ **Note**

- The LED pointer remains on until the [Enter] key is pressed.
- Printing is canceled when the [Cancel] key is pressed.
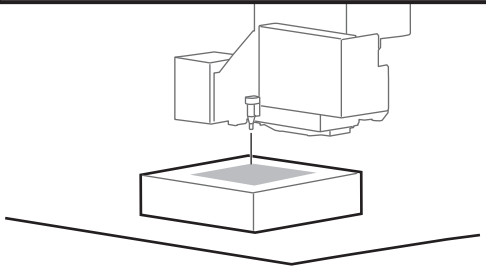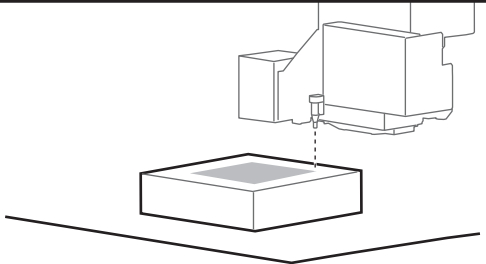
Confirming PrintArea
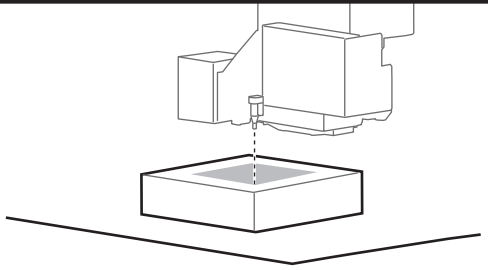
- The LED pointer moves to the bottom right corner of the print range (position1).
- The LED pointer remains on while moving.
- After moving, the LED pointer flashes every second, for a total of 1 time.

Wait for a while

- The carriage returns to the original position (capping station).
- Checking the print range is complete.

[6]

Start Printing ?

Press the [Enter] key to start printing.

✎ **Note**

Printing is canceled when the [Cancel] key is pressed.

Applying additional UV light after printing

When you want to promote ink curing, you can apply additional UV light on the print after printing.

This is useful for the following cases:

- When printing on media that soaks ink, such as a cloth and so on.

- When printing an image that uses a lot of ink.

- When the multi-layered ink on the media is thick.

[1]

After printing, press the [Menu] key.

[2]

Menu3:	Maintenance >

- Press the [-] key until "Menu3: Maintenance >" appears.
- Press the [>] key.

[3]

Mnt.4:	UV Scan >

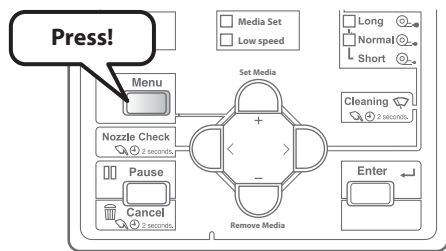- Press the [-] key until "Mnt.4: UV Scan >" appears.
- Press the [>] key.

[4]

UV Scan1:	Start

Press the [Enter] key.
- The printer applies UV light on the print.

> **Note**
> - The range to apply UV light depends on the User Type's "MediaSetting" – "Size" and "Location" settings that are currently selected.
> - See the following when changing the number of reciprocating motions for every 1 inch in the media feeding direction while performing UV scanning.
>   ☞"UV Scan 2: Scans" on page 84
> - To apply additional UV-LED light automatically every time after printing, see the following.
>   ☞"UV Scan 3: Post Cure" on page 84

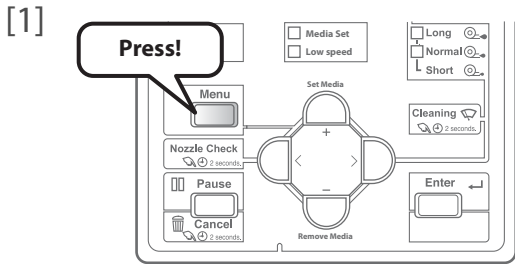For details on the related sections of the Panel Setting menu, see the following.

☞"Mnt. 4: UV Scan" on page 83

Calibrating table height

To optimize the gap between the print head and media, calibrate the table height position.

This menu helps to correct following symptoms on your print:
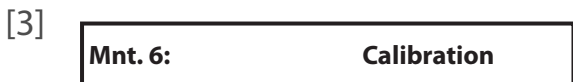
- Ink bleeding
- Faint print
- Ink mottling

[1]

After printing, press the [Menu] key.

[2]

Menu3:	Maintenance >

Press the [-] key until "Menu3: Maintenance >" appears.
- Press the [>] key.

[3]

Mnt. 6:	Calibration

Press the [-] key until "Mnt.6: Calibration" appears.
- Press the [Enter] key.

[4]

Calibration:	Start

Press the [Enter] key.

Wait for a while

The message on the left will appear.
- The table moves to the front side of the printer.

[5]

Remove Media	->	Enter

The message on the left will appear.
- Remove the media, and then press the [Enter] key.

Wait for a while

The message on the left will appear.
- The printer starts table height calibration.

[6]

Set Media, then

press Set Media key.

The calibration is now complete.

> **Note**
>
> If the problem still persists after the calibration, go to following menus to perform printing adjustment and media feeding adjustment.
> ☞"**>2: Adjust Print>" on page 61
> ☞"**>3: PF Adjust" on page 63

For details on the related sections of the Panel Setting menu, see the following.
☞"Mnt. 6: Calibration" on page 84

Layer printing

This printer has the capability for layer printing.

- To perform layer printing using Layout and Print Tool 2 or ValueJet Layer Editor, see Layout and Print Tool 2 Operation Manual or ValueJet Layer Editor Operation Manual.

  ☞"Displaying Help" on page 23

- See the following related sections of Panel Setting Menus (Chapter 2 below):

  ☞"Adv. 1: Multi Strike" on page 71

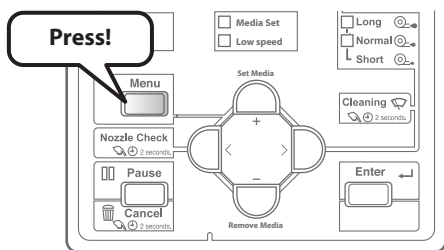 ☞"Adv. 7: Multi Layer" on page 75

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 the panel setting menus, press the [Menu] key.

> **Note**
>
> You cannot access the panel setting menus while printing or receiving data (the power button is flashing).

[2]

Menu 1:	Setup >
Menu 2:	**Test Print >**
Menu 3:	Maintenance >
⋮	
Menu 6:	Sleep Mode >
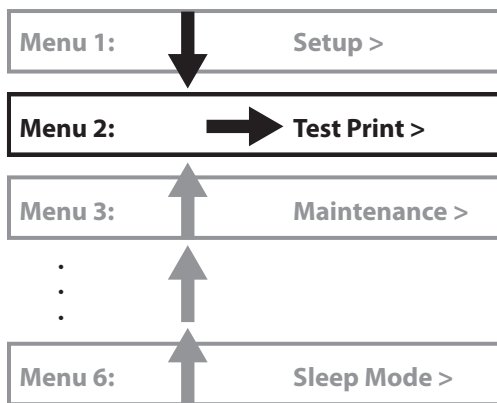
Use the [+] / [-] key to scroll through the menus.
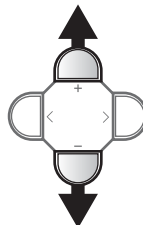
Press the [>] key to access the menu you are on.

[3]

Test 1:	Nozzle Check
Test 2:	Nozzle Check B
Test 3:	Enter **Mode Print**
Test 4:	Setup List
Test 5:	Palette
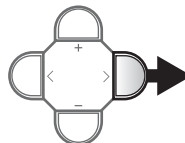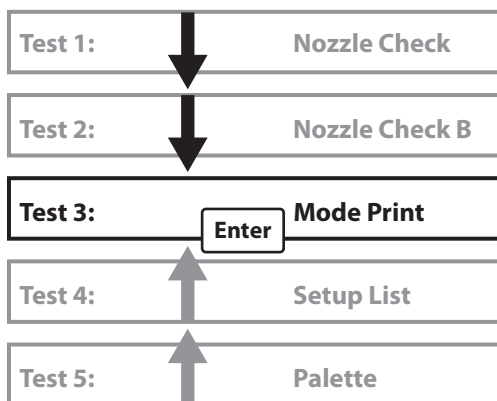
Use the [+] / [-] key to select submenus, enter numeric values and so forth.
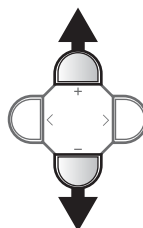
Press the [Enter] key to set/execute.

Use the [Cancel] key to return to the menu/submenu.
(In the case shown on the left, pressing [Cancel] key will return to "Menu2: Test Print>".)

Panel setup menu

Menu 1: Setup

| Menu 1 :   Setup > |

Configures various settings of the printer.

Submenus

| Set 1 :   User Type | ☞ **Set 1: User Type**

| Set 2 :   Advanced > | ☞ **Set 2: Advanced**

| Set 3 :   Init.Settings > | ☞ **Set 3: Initial Settings**

| Set 4 :   Initialize | ☞ **Set 4: Initialize**

Menu 2: Test Print

| Menu 2 :   Test Print > |

Performs nozzle check of the print head and prints a printer setup list.

Submenus

| Test 1 :   Nozzle Check | ☞ **Test 1: Nozzle Check**

| Test 2 :   Nozzle Check B | ☞ **Test 2: Nozzle Check B**

| Test 3 :   Mode Print | ☞ **Test 3: Mode Print**

| Test 4 :   Setup List | ☞ **Test 4: Setup List**

| Test 5 :   Palette | ☞ **Test 5: Palette**

> **Note**
>
> "Nozzle Check B" will only appear in the menu if the printer is set to 6-color configuration.

Menu 3: Maintenance

| Menu 3 :   Maintenance > |

Performs maintenance for Print head and ink.

Submenus

| Mnt. 1 :   Cleaning | ☞ **Mnt. 1: Cleaning**

| Mnt. 2 :   ResetWasteInk | ☞ **Mnt. 2: ResetWasteInk**

| Mnt. 3 :   CR Maintenance | ☞ **Mnt. 3: CR Maintenance**

| Mnt. 4 :   UV Scan > | ☞ **Mnt. 4: UV Scan**

| Mnt. 5 :   Ink Discharge | ☞ **Mnt. 5: Ink Discharge**

Mnt. 6 : Calibration	☞ **Mnt. 6: Calibration**
Mnt. 7 : Moving Printer	☞ **Mnt. 7: Moving Printer**
Mnt. 8 : Table Maint.	☞ **Mnt. 8: Table Maint.**
Mnt. 9 : Daily Maint.	☞ **Mnt. 9: Daily Maint.**

Menu 4: Printer Status

Menu 4 :   PrinterStatus >

Provides printer status information.

Submenus

Status 1 : Ink	☞ **Status 1: Ink**
Status 2 : Lifetimes	☞ **Status 2: Lifetimes**
Status 3 : Job Status	☞ **Status 3: Job Status**
Status 4 : Version	☞ **Status 4: Version**
Status 5 : SerialNo.	☞ **Status 5: SerialNo.**

Menu 5: Option

Menu 5 :   Option >

Use this menu to attach the Rotary Unit (option).
For more details of this menu, see the Rotary Unit Operation Manual.

Submenus

Option 1 : Rotary Unit	☞ **Option 1: Rotary Unit**

Menu 6: Sleep Mode

Menu 6 :   Sleep Mode >

Configures or activates sleep modes.

Submenus

SleepMode 1 : Start	☞ **SleepMode 1: Start**
SleepMode 2 : SetTimer	☞ **SleepMode 2: SetTimer**

Menu 1: Setup

Set 1: User Type

The User Type is one of user-settings to set media types and printing conditions for printing.

Set 1 :	User Type

You can have up to 10 groups of User Type, labeled "Type1" to "Type10". When you select a User Type group ("Type") and press the [Enter] key, that definition group will be set for the printer. Also, a submenu will be displayed.

Setting values

User :	Type 1

Select a "Type" number, from "Type1" to "Type10".

> **Important!**
>
> **When you have changed to another User Type, all the settings that are alterable via the User Type will be changed to the values in the currently selected User Type.**
>
> - **When the "Media Setting" for the User Type settings have been changed, the settings for the "Media height", "Obst.", "Media size", "Media location" and "Media origin" are changed to the settings of the selected User Type. That means the print start position will also change. Make sure that the printer will start printing from the intended position. If not, the printer could print onto the wrong part(s) of the media or print outside it.**
>
> **"Detailed-Set: On" (on/off for the set check display when a media is set on the table) only appears when the User Type is selected for the first time. Use the [+] / [-] key to select "On" or "Off", and press the [Enter] key.**
>
> - **If you select "Detailed-Set: On", you will have to input the "Media height", "Obst.", "Media size", "Media location" and "Media origin" after pressing the [Set Media] key each time you set a media on the table.**
> - **If you select "Detailed-Set: Off", "Ready to Print" will be displayed after pressing the [Set Media] key each time you set a media on the table. The currently selected User Type values will be used for the "Media height", "Obst.", "Media size", "Media location" and "Media origin".**

User :	Type 1

Configures the printer settings for selected User Type.

Submenus

**>1 :	Print Mode

☞ **>1: Print Mode

**> 2 :	Adjust Print >

☞ **>2: Adjust Print>

**> 3 :	PF Adjust >

☞ **>3: PF Adjust

**> 4 :	Vacuum Fan

☞ **>4: Vacuum Fan

**> 5 :	MediaSetting >

☞ **>5: MediaSetting

* *> 6 :	Low Speed

☞ **>6: Low Speed

**>7:	Show Edges

☞ **>7: Show Edges

**> 8 :	Obst. Detect

☞ **>8: Obst. Detect

**> 9 :	User Copy

☞ **>9: User Copy

**> 10 :	Initialization

☞ **>10: Initialization

**>1: Print Mode

| **> 1 : Print Mode |

Selects the print mode.

- By holding down the [>] key while each print mode is displayed, you can check the resolution, number of passes and printing direction of the print mode.
- After setting the print mode, go on to setting of effect.

Setting values

| Mode : Fast - > |

High-speed printing

| Mode : Fine - > |

This is the default setting.

| Mode : Super Fine - > |

High-quality printing

Details of print mode

Print Mode	Color set	Resolution	Pass	Direction	Initial values for effect
Fast	6 Colors	720 x 1080	12 pass	Uni (unidirectional)	i-Weave UV
	4 Colors	720 x 1080	6 pass	Uni (unidirectional)	i-Weave UV
Fine	6 Colors	720 x 1440	16 pass	Uni (unidirectional)	i-Weave UV
	4 Colors	720 x 1440	8 pass	Uni (unidirectional)	i-Weave UV
Super Fine	6 Colors	1440 x 1440	32 pass	Uni (unidirectional)	i-Weave UV
	4 Colors	1440 x 1440	16 pass	Uni (unidirectional)	i-Weave UV

Effect

| Mode : Fine - > |

Selects the effect.
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 applied.

| Effect : i-Weave UV |

The printing joint will shade off.
This is the default setting.

**> 2 :	Adjust Print >

Adjusts the printer to optimize the print quality for the media.

• Required media size: width 210 mm x length 100 mm.

☞"Confirm pattern" on page 62

☞"Rough adjustment pattern" on page 62

☞"Fine adjustment pattern" on page 62

Submenus

Adj. 1 :	Confirm Ptn.

Print a confirm pattern.

Adj. 2 :	RoughPtn. ALL

Print rough adjustment patterns A to C and enter adjustment values.

Adj. 3 :	RoughPatternA

Print rough adjustment pattern A only and enter an adjustment value.

Adj. 4 :	RoughPatternB

Print rough adjustment pattern B only and enter an adjustment value.

Adj. 5 :	RoughPatternC

Print rough adjustment pattern C only and enter an adjustment value.

Adj. 6 :	Fine Ptn. ALL

Print fine adjustment patterns A to C and enter adjustment values.

Adj. 7 :	Fine PatternA

Print fine adjustment pattern A only and enter an adjustment value.

Adj. 8 :	Fine PatternB

Print fine adjustment pattern B only and enter an adjustment value.

Adj. 9 :	Fine PatternC

Print fine adjustment pattern C only and enter an adjustment value.

Steps

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

2. Print rough adjustment patterns and enter correction values.

   • Select "ALL", or one of "A" to "C".

3. Print fine adjustment patterns and enter correction values.

   • Select "ALL", or one of "A" to "C".

Confirm pattern

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

- Check the pattern print. If there are misalignments, proceed to rough adjustment pattern printing.

- In the picture below, there are misalignments.
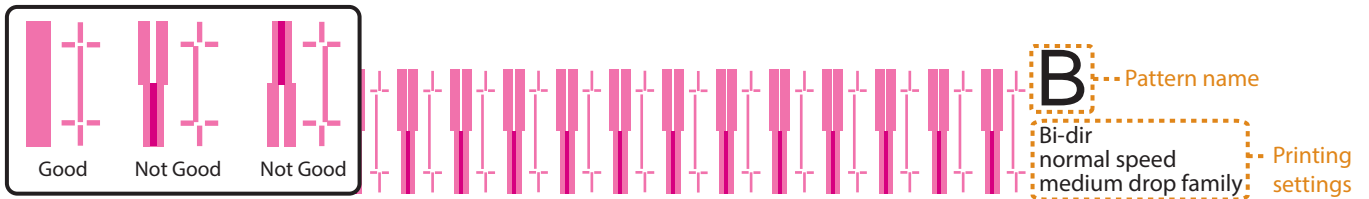
Rough adjustment pattern

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

- Look for and mark a number printed under a pattern that has least misalignment.

- "Pattern B: 6" or similar will appear in the display. Use the [+] / [-] key to enter in the display the number that you marked, and press the [Enter] key.

- In the case of the picture below, enter "7", so that the display reads "Pattern B: 7".
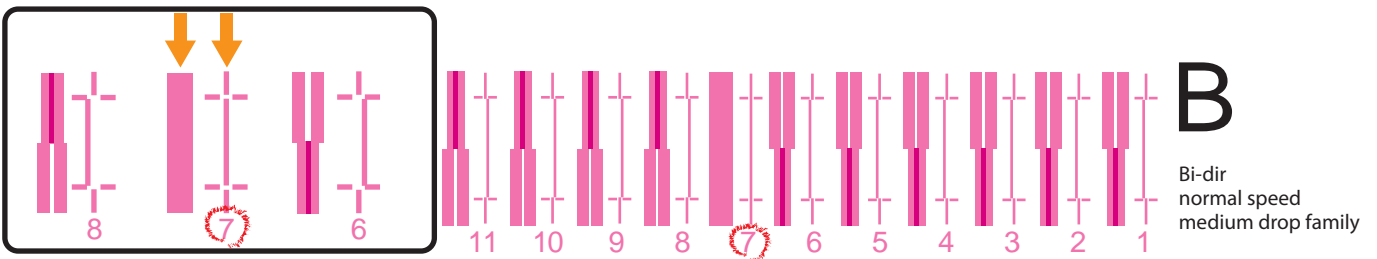
Fine adjustment pattern

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

- Look for and mark a number printed under a pattern that has least misalignment.

- "Pattern B: 4" or similar will appear in the display. Use the [+] / [-] key to enter in the display the number that you marked, and press the [Enter] key.

- In the case of the picture below, enter "6", so that the display reads "Pattern B: 6".
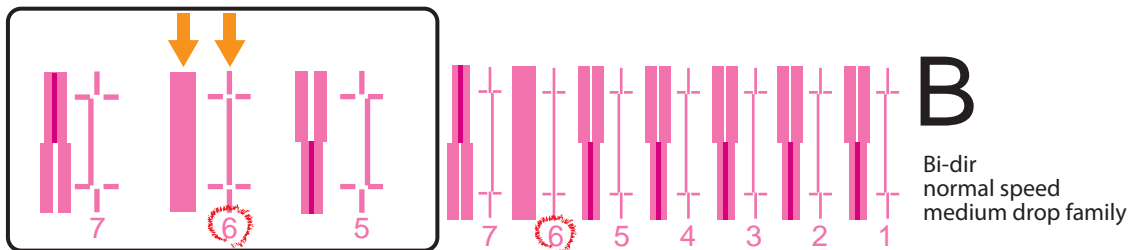
**>3: PF Adjust

**> 3 :   PF Adjust >

Performs media feed adjustment.

- Required media size: width 210 mm x length 110 mm.
- A ruler is required for this adjustment. Please prepare a commercially available ruler.

When the following defects are found in your prints, they may improve by conducting a paper feed correction.

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

Submenus

PF1 :   Initial Print

☞"PF 1. Initial Print" on page 64

PF2 :   Initial Change

☞"PF2. Initial Change" on page 64

PF3 :   Confirm Print

☞"PF3. Confirm Print" on page 65

PF4 :   Micro Print

☞"PF4. Micro Print" on page 66

PF5 :   Micro Change

☞"PF5. Micro Change" on page 66

Steps

1. Print a "PF1: Initial Print", and measure the distance between the "+" marks with a ruler.

2. Enter the distance measured as the "Initial Change".

3. Determine the feed length for the "PF3: Confirm Print", print it, and measure the distance between the "+" marks with a ruler.

- Check that there is no deviation from the feed length.

4. Print a "PF4: Micro Print", and find the pattern with the least white streaks and image overlaps.

- The numeral below that pattern is the micro adjustment value.

5. Enter the micro adjustment value according to the test pattern print in Step 4.

PF 1. Initial Print

PF1 :	Initial Print

Performs initial adjust print. Enter the "FeedLength", and press the [Enter] key. Print a "+" mark at the beginning, feed the media according to the setting value, and print another "+" mark.

Setting values

FeedLength :	250 mm

100 mm to <250 mm> to 550 mm
<> indicates the default setting.

- With a ruler, measure the length between "+" in the pattern.

- In the example below, the measured place is shown in blue dotted lines and arrows (the blue parts are not actually printed).
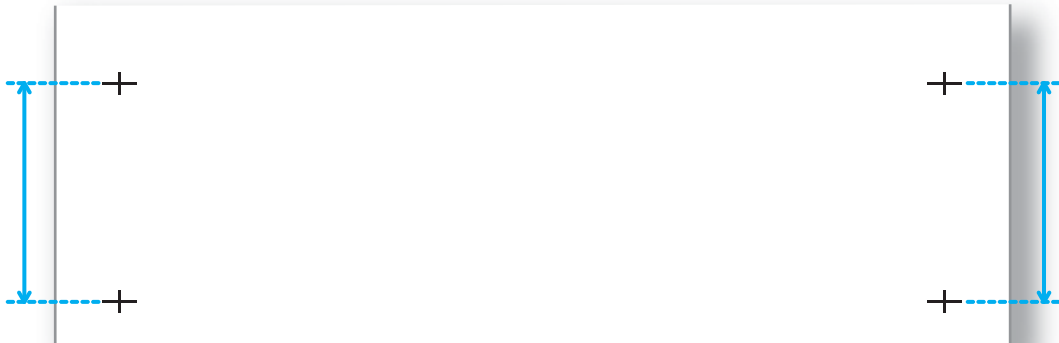
🔊 **Important!**

- **The maximum setting value for the feed length will vary depending on the settings for "MediaSetting" - "Size" - "Length" in the User Type. (The same applies to "Confirm Print".)**

- **Some media lengths cannot be used.**
  For example, if a media has a length of 100 mm or below, "Media size error: [Length]" will appear on the panel and printing will not be carried out.

PF2. Initial Change

PF2 :	Initial Change

Enter the value that you measured. Provided there is no discrepancy between that value and the value set during initial adjustment printing, press the [Enter] key to set the value.

Setting values

Init. :	260.0 / 250 mm

<Initial Print menu setting value>
± 10.0 mm
<> indicates the default setting.

PF3. Confirm Print

PF3 :	Confirm Print

Performs Confirm Print. Enter the "FeedLength", and press the [Enter] key.
Print a "+" mark at the beginning, feed the media according to the setting value, and print another "+" mark.

Setting values

FeedLength :	250 mm

100 mm to <250 mm> to 550 mm
<> indicates the default setting.

- With a ruler, measure the length between "+" in the pattern.

- If there is discrepancy between the value set for "FeedLength" and the value measured, carry the procedure out again from 1. "Initial Print". If there is no discrepancy, go to 4. "Micro Print".

- In the example below, the measured place is shown in blue dotted lines and arrows (the blue parts are not actually printed).
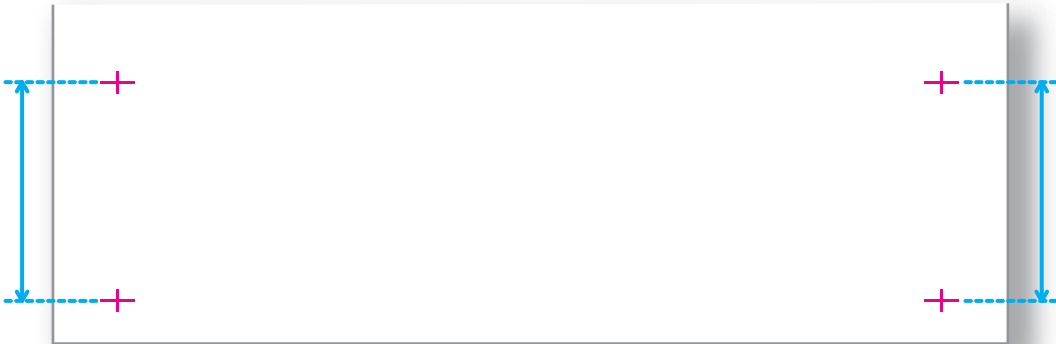
PF4. Micro Print

PF4 :	Micro Print

Performs Micro adjustment print.
Enter the appropriate micro adjustment value according to the test pattern print.

- 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 test pattern print.

Not adequate   Adequate   Not adequate

−0.10   −0.20   −0.50

↓

Micro adjustment value

+0.50   +0.20   +0.10   0.00   −0.10   −0.20   −0.50
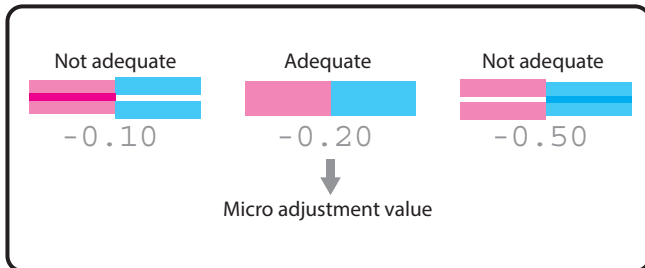
Note

The micro adjustment value saved becomes the pattern's standard value.

For example, if "-0.20" is saved as the micro adjustment value and a pattern is printed again, the number below the center pattern changes from "0.00" to "-0.20", and the left edge to "+0.30" and right edge to "-0.70".

PF5. Micro Change

PF5 :	Micro Change

Use the [+] / [-] key to enter the micro adjustment value, and press the [Enter] key.

Setting values

Micro :	5.00%

-5.00% to <0.00%> to 5.00%
<> indicates the default setting.

**>4: Vacuum Fan

**> 4 :	Vacuum Fan

Sets up vacuum fan operation. It has the role of fixing the media to the table.

- 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

High / Medium-Hi / <Medium>/ Low / Off
<> indicates the default setting.

```
**> 5 :              MediaSetting >
```

This is for setting the conditions for placing the media on the table.

Submenus

```
Media 1 :              Set Media
```

For entering the media width and length, and setting the set position and origin position.

- Specify this setting with the media set in place on the table.

```
Media 2 :              Size
```

For entering the media width and length only.

```
Media 3 :              Height
```

Select Auto or Manual to determine the table height and specify the printer response when detecting obstacle while printing.

- Specify this setting before loading media.

```
Media 4 :              Location
```

For entering the set position only.

- Specify this setting with the media set in place on the table.

```
Media 5 :              Origin
```

- If you select "Origin: On", you can then set the origin position (Specify this setting with the media set in place on the table).

- If you select "Origin: Off", the origin position input menu ("ORG: X:__, Y:__") will not appear. Also, the origin position set in the User Type will be X = 5.0, Y = 5.0.

```
Media 5 :              Detailed-Set
```

- If you select "Detailed-Set: On", you will have to input the "Media height", "Obst.", "Media size", "Media location" and "Media origin" after pressing the [Set Media] key each time you set a media on the table. However, you can eliminate the need for such input by pressing the [Cancel] key. If you do so, the values set in the User Type will be used.

- If you select "Detailed-Set: Off", "Ready to Print" will be displayed after pressing the [Set Media] key each time you set a media on the table.
The currently selected User Type values will be used for the "Media height", "Obst.", "Media size", "Media location" and "Media origin".

**>6: Low Speed

| **> 6 :   Low Speed |

Use this when you want a slower printing speed.

- It helps to enhance print quality when you print on an uneven surface media or curved object (e.g. golf ball, ballpoint pen, smart phone case).
- If you set anything other than "Off" for this, the "Low speed" indicator will light steady.

Setting values

| Low Speed :   Off |

The printing speed will not be lowered.
This is the default setting.

| Low Speed :   50 % |

The printing speed will be lowered to 50%.

| Low Speed :   25 % |

The printing speed will be lowered to 25%.

**>7: Show Edges

| **>7:   Show Edges |

To check the printing area before printing, LED pointer shows where the image will be printed on the media.
☞"Checking the printing area" on page 47

Setting values

| Show Edges :   Off |

LED pointer does not show the printing area.
This is the default setting.

| Show Edges :   Step |

LED pointer shows where the image will be printed on the media and the printer will ask you at each point of corner if the position is OK.

| Show Edges :   Auto |

LED pointer shows where the image will be printed on the media without checking with the user.

**>8: Obst. Detect

| **> 8 :   Obst. Detect |

Selects the printer operation when the obstacle sensor has detected an obstacle.

Submenus

| Obst. Detect :   Auto |

The printer pause the printing.
It lowers the table until the sensor does not detect any obstacle, and then resumes the job.
This is the default setting.

> ✎ **Note**
>
> If the sensor still detects the obstacle after the table moves down to its lowest position, the printer cancels printing and prompts the obstacle error message.

| Obst. Detect :   Cancel |

The printer cancels printing and prompts the obstacle error message.

| Obst. Detect :   Confirm |

The printer pauses the printing and allows users to choose from two options;
Print Continue or Print Cancel.

> ✎ **Note**
>
> - "Obst. - > PrintContinue"
>   Hold the media flat on the table without any warp, fold or curl.
>   Press the [Enter] key to resume the job without changing the table height.
> - "Obst. - > Print Cancel"
>   Press the [Enter] key to cancel the job and prompts the obstacle error message.

**>9: User Copy

| **> 9 :   User Copy |

This is for copying the currently selected User Type setting into another User Type.

- The items that will be copied are: "Print Mode", "Effect", the "Confirm Print" and "PF Adjust" adjustment values, "Vacuum Fan", "MediaSetting", "Low Speed", "Show Edges" and "Obst. Detect".

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.

**>10: Initialization

| **> 10 :   Initialization |

Returns all settings of the currently selected User Type to factory default.

Set 2: Advanced

Set 2 :   Advanced >

Configures various advanced settings.

Submenus

Adv.1 :   Multi Strike

☞"Adv. 1: Multi Strike" on page 71

Adv.2 :   Pass Wait

☞"Adv. 2: Pass Wait" on page 72

Adv.3 :   Head Travel

☞"Adv. 3: Head Travel" on page 72

Adv.4 :   Header Dump

☞"Adv. 4: Header Dump" on page 72

Adv.5 :   Spitting

☞"Adv. 5: Spitting" on page 73

Adv.6 :   AutoCleaning >

☞"Adv. 6: Auto Cleaning" on page 74

Adv.7 :   Multi Layer

☞"Adv. 7: Multi Layer" on page 75

Adv.8 :   White Maint.

☞"Adv. 8: White Maintenance" on page 75

*This only appears when 6-color is set.

Adv.1 :	Multi Strike

Sets the number of times to print the same line.

• The display will shift to setting of layer printing number of strikes only when "Strike Cnt" is set to 1 in 6-color configuration.

Setting values

Strike Cnt :	1 cnt

<1 times> to 9 times
<> indicates the default setting.

Layer Multi Str.

Strike Cnt :	1 cnt

The display will shift to layer selection.

Submenus

Layer Multi Str.1 :	Co

Layer Multi Str.2 :	Wh

Layer Multi Str.3 :	Va

Layer Multi Str.1: Co

Layer Multi Str.1 :	Co

Sets the number of times to print the same line in color (CMYK) layer.

Setting values

Color :	1 cnt

<1 times> to 9 times
<> indicates the default setting.

Layer Multi Str.2: Wh

Layer Multi Str.2 :	Wh

Sets the number of times to print the same line in white layer.

Setting values

White :	1 cnt

<1 times> to 9 times
<> indicates the default setting.

Layer Multi Str.3: Va

Layer Multi Str.3 :	Va

Sets the number of times to print the same line in varnish layer (clear topcoat).

Setting values

Varnish :	1 cnt

<1 times> to 9 times
<> indicates the default setting.

Adv. 2: Pass Wait

Adv.2 :	Pass Wait

Sets the waiting time between passes in multi-strike setting and normal printing.

Setting values

Pass Wait :	0.0 sec

<0.0 sec.> to 5.0 sec.
<> indicates the default setting.

Adv. 3: Head Travel

Adv.3 :	Head Travel

Sets up the range that Print head moves while printing.

Setting values

Distance :	Data

Print head moves the range of the print data width.

Distance :	Machine

The print head will travel the maximum distance possible with the printer.

Distance :	Media

Print head shifts within the media width. This is the default setting.

Adv. 4: Header Dump

Adv.4 :	Header Dump

Sets whether to print the following information when printing.
(Required media size: width 250 mm x length 50 mm.)

- Data header
- Data dot number (printed only when Header Dump setting is ON)
- Printer serial number
- Firmware version

Setting values

Header Dump :	Off

Dump data is not printed.
This is the default setting.

Header Dump :	On

Dump data is printed after the original image is printed.

Header Dump :	Dump

Prints only header dump.
"Data dot number" is not printed.

> **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.

Adv. 5: Spitting

Adv.5 :   Spitting

Enables or disables the spitting function.

- The display will shift to setting of the pass count only if "On" is set for "Spitting".

Setting values

Spitting :   On

Off / <On>
<> indicates the default setting.

> **Note**
>
> Spitting is a maintenance operation for preventing clogging of the print head's nozzles. It consumes ink.

Pass Count

Spitting :   On

Sets the frequency that the printer spits ink from the print head.

- The head will carry out spitting operation every time it completes the number of passes that you set here.

Setting values

Pass Count :   1 cnt

<1 time> to 999 times

> **Important!**
>
> **If the number of spitting returns is set high, there is a higher chance of nozzle clogging when printing for a long time.**
> **In such a case, print quality cannot be guaranteed.**

Adv.6 :	AutoCleaning >

Sets the timer to perform auto cleaning during standby, before printing, and during printing.

Submenus

Auto1 :	Waiting Time

☞"Auto1: Waiting Time" on page 74

Auto2 :	PrintingTime

☞"Auto2: Printing Time" on page 74

Auto3 :	Before Print

☞"Auto3: Before Print" on page 74

Auto1: Waiting Time

Auto1 :	Waiting Time

Sets the timer to perform auto cleaning during standby mode.

Setting values

Time :	Off

<Off> / 10 min. to 1,440 min.
<> indicates the default setting.

Auto2: Printing Time

Auto2 :	PrintingTime

Sets the timer to perform auto cleaning while printing.

Setting values

Time :	Off

<Off> / 5 min. to 180 min.
<> indicates the default setting.

Auto3: Before Print

Auto3 :	Before Print

Enables or disables auto cleaning before printing.

Setting values

Before Print :	Off

<Off> / On
<> indicates the default setting.

Adv. 7: Multi Layer

Adv.7 :	Multi Layer

Enables or disables to print more than one image data on the same media layer by layer.

Setting values

Multi Layer :	Off

<Off> / On
<> indicates the default setting.

> **Note**
>
> - If you select "Off", the printer will ask you to remove media after printing one data and load a new media to print next data.
> - If you select "On", just sending the next data to the printer, you can print more than one data on the same area of the media.
>   - In the case of "Adjust Print", "PF Adjust" or "Test Print", you will have to set the media in place again even if you select "On" for this.

Adv. 8: White Maintenance

Adv.8 :	White Maint.

Sets up white ink's maintenance operation.

- If you do not usually use white ink for regular printing, set to "Little" to minimize white ink consumption in standby status.
- This menu will only appear in 6-color configuration.

Setting values

White Maint. :	Normal

White ink maintenance operation will be carried out at a normal frequency.
This is the default setting.

White Maint. :	Little

White ink maintenance operation will be carried out at a lower frequency.

> **Note**
>
> White ink tends to settle or coagulate inside the print head or ink tubes.
> Therefore, the printer regularly discharges a small amount of white ink to maintain the performance, even in standby status.

Set 3: Initial Settings

Set 3 :	Init.Settings >

Select a language and unit displayed on the LCD.

Submenus

Initial1 :	Language

☞"Initial 1: Language" on page 76

Initial2 :	Length

☞"Initial 2: Length" on page 76

Initial3 :	Remain Ink

☞"Initial 3: Remain Ink" on page 77

Initial4 :	IP Address

☞"Initial 4: IP Address" on page 77

Initial5 :	Subnet Mask

☞"Initial 5:Subnet Mask" on page 77

Initial6 :	Gateway

☞"Initial 6: Gateway" on page 78

Initial7 :	Alert Buzzer

☞"Initial 7: Alert Buzzer" on page 78

Initial 1: Language

Initial1 :	Language

Selects a language to be displayed on the operation panel.

Setting values

Lang. :	エイゴ	English

Displays will be in English.
This is the default setting.

Lang. :	ニホンゴ	Japanese

Displays the menu items in Japanese.

Initial 2: Length

Initial2 :	Length

Selects a length unit to be displayed on the operation panel.

Setting values

Length :	mm

Displays the length in millimeters (mm).
This is the default setting.

Length :	inch

Displays the length in inches (inch).

Initial 3: Remain Ink

Initial3 :	Remain Ink

Selects how the remaining ink amount will be displayed.

Setting values

Remain Ink :	Off

Remaining ink icons will not be displayed. Slot numbers and remaining ink will be displayed in numerals.

Remain Ink :	On

Remaining ink icons will be displayed. This is the default setting.

Initial 4: IP Address

Initial4 :	IP Address

Sets the IP address of the printer.

- Use the [+] key to increase a setting value.
- Use the [-] key to decrease a setting value.
- Press the [Enter] key to confirm your input for a value. The cursor will move on to the next setting value.
- Confirm your input for each value.

Setting values

IP :	192.	168.	1.	253

0.0.0.0 to <192.168.1.253> to 255.255.255.255
<> indicates the default setting.

Initial 5:Subnet Mask

Initial5 :	Subnet Mask

Sets the subnet mask of the printer.

- Use the [+] key to increase a setting value.
- Use the [-] key to decrease a setting value.
- Press the [Enter] key to confirm your input for a value. The cursor will move on to the next setting value.
- Confirm your input for each value.

Setting values

MASK :	255.	255.	255.	0

0.0.0.0 to <255.255.255.0> to 255.255.255.255
<> indicates the default setting.

Initial 6: Gateway

Initial6 :	Gateway

Sets the gateway.

- Use the [+] key to increase a setting value.
- Use the [-] key to decrease a setting value.
- Press the [Enter] key to confirm your input for a value. The cursor will move on to the next setting value.
- Confirm your input for each value.

Setting values

GW :	19<u>2</u>.	168.	1.	254

0.0.0.0 to <192.168.1.254> to
255.255.255.255
<> indicates the default setting.

Initial 7: Alert Buzzer

Initial7 :	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 :	Off

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

Alert Buzzer :	On

Press any key on Operation panel to turn off beep sound.
This is the default setting.

Set 4: Initialize

Set 4 :	Initialize

Restore the settings of the printer to factory default.

Submenus

Init. :	User Type ALL

Initialize the User Type settings (Type1 to Type10) in all the submenus of the "Set 1: User Type".

Init. :	Adv. Settings

Initialize the settings in all the submenus of the "Set 2: Advanced"

Init. :	Init.Settings

Initialize the settings in all the submenus of the "Set 3: Initial Settings".

Init. :	ALL

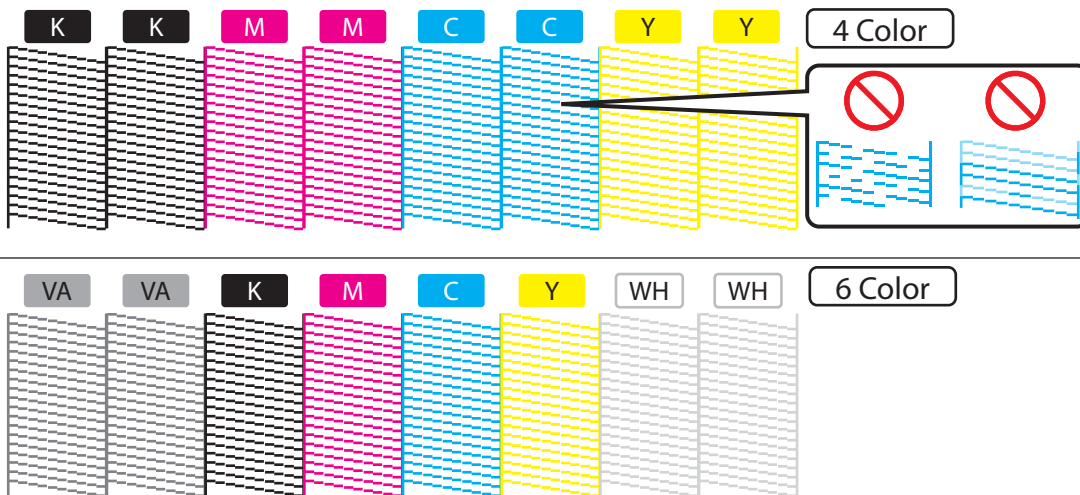Initialize the settings of all the menus.

Menu 2: Test Print

Test 1: Nozzle Check

Test 1 :	Nozzle Check

It is used to check whether there are any clogged heads, or missing or blurred prints.
(Required media size: width 260 mm x length 35 mm)

☞"Nozzle check steps" on page 37

Note

The printer information (date and time of printing, printer's serial number, firmware version) is printed on the nozzle check pattern.
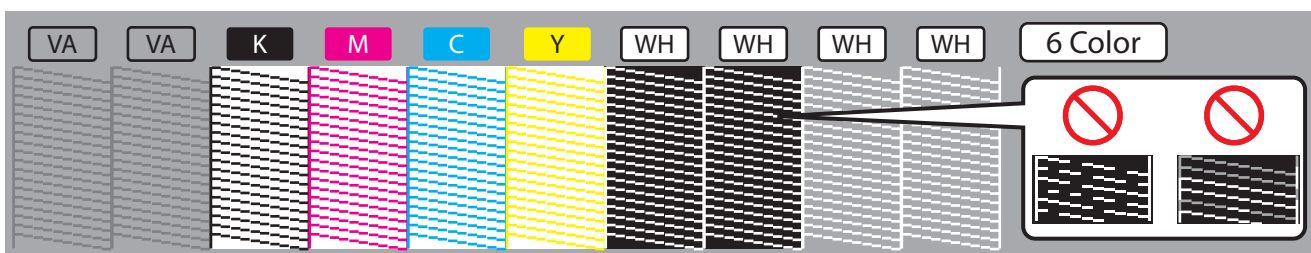
Test 2: Nozzle Check B

Test 2 :	Nozzle Check B

This is nozzle check for white ink.
The background for some of the nozzle check pattern is printed in color so that the nozzle condition is easy to see.

- Part of the background for the white nozzles is black.

- The background of the KCMY nozzles are white.

- For varnish (and part of white) nozzles, the background is not printed.

(Required media size: width 260 mm x length 35 mm)

☞"Nozzle check steps" on page 37

Note

- "Nozzle Check B" will only appear in the menu if the printer is set to 6-color configuration.

- The printer information (date and time of printing, printer's serial number, firmware version) is printed on the nozzle check pattern.

Test 3: Mode Print

Test 3 :	Mode Print

Print following settings of the selected User Type configured from the operation panel. Used to confirm the following printing conditions.

- Print quality
- Effect
- Fine adjustment value for feed correction.

(Required media size: width 220 mm x length 25 mm)

2017/03/01 0:00 Fine (720x1440 16Pass Uni)-i-Weave UV/PF Adjust: 0.00%

Test 4: Setup List

Test 4 :	Setup List

Setup list printing is performed.
Use this to check the current setting contents and the User Type.

(Required media size: width 420 mm x length 297 mm)

Setup List

User Type List

Test 5: Palette

Test 5 :	Palette

Palette print is executed for the color demonstration.
(Required media size: width 210 mm x length 210 mm)
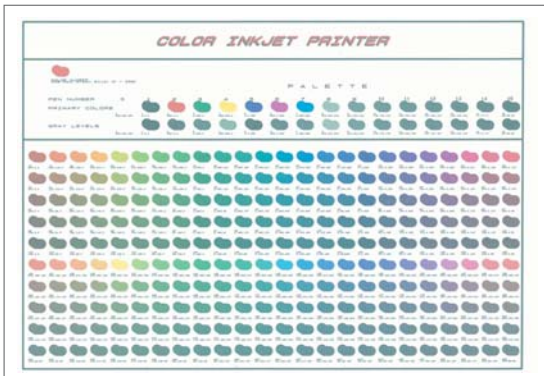
Menu 3: Maintenance

Mnt. 1: Cleaning

Mnt. 1 :	Cleaning

Perform Head cleaning.

Submenus

Time :	Short

Consumes less ink than "Normal" cleaning.

Time :	Normal

Perform "Normal" cleaning if nozzle clogging is found in the nozzle check print.

Time :	Long

Perform "Long" cleaning if nozzle clogging still persists after performing "Normal" cleaning. It consumes more ink than "Normal" cleaning.

Time :	Little Charge

Provide higher cleaning effect than "Long" cleaning, but it also consumes more ink.

Time :	Initial Charge

Provide higher cleaning effect than "Little Charge", but it also consumes more ink.

- When "Empty WasteInk ->E" appears, empty out the waste fluid and press the [Enter] key.
  ☞"Drain waste fluid into container" on page 97

Mnt. 2: ResetWasteInk

Mnt. 2 :	ResetWasteInk

This resets the waste ink counter to zero.
☞"Resetting waste ink counter" on page 98

Mnt. 3: CR Maintenance

Mnt. 3 :	CR Maintenance

Use this for replacing absorption material for the flushing box and cleaning wiper.

☞"Replacing absorption material for the flushing box" on page 116
☞"Replacing the cleaning wiper" on page 119

Submenus

CR Maint. :	Start

Press the [Enter] key to replace the absorption material for the flushing box.

- The carriage moves to the center of the printer.
- The cleaning wiper moves upward.

CR Maint. :	End

After the replacement is complete, press the [Enter] key.

- The printer moves the carriage and the cleaning wiper back to each original position.

Mnt. 4: UV Scan

Mnt. 4 :	UV Scan >

Performs further UV curing.
Use this when you want to promote ink curing by applying additional UV light.

Submenus

UV Scan1 :	Start

☞"UV Scan 1: Start" on page 84

UV Scan2 :	Scans

☞"UV Scan 2: Scans" on page 84

UV Scan3 :	Post Cure

☞"UV Scan 3: Post Cure" on page 84

> **Note**
>
> The range over which the UV scanning is executed will depend on the current settings for "Size" and "Location" in the "MediaSetting" User Type.

UV Scan 1: Start

UV Scan1 :	Start

Performs further UV curing when needed.
When the media is not loaded, "No Media" is displayed, and the screen returns to the previous screen.

- Application is canceled when the [Cancel] key is pressed for 2 seconds and more while applying UV light.

Setting

UV Scan1 :	Start

Press the [Enter] key to start.

UV Scan 2: Scans

UV Scan2 :	Scans

Sets the number of times to apply UV light on the area.

- The settings here are reflected on "UV Scan1: Start" and "UV Scan3: Post Cure" only.

Setting

UV Scans:	4

2 / <4> / 8 / 16
<> indicates the default setting.

UV Scan 3: Post Cure

UV Scan3 :	Post Cure

When it is set to "On", the printer automatically performs post curing to apply additional UV light after printing.

Setting

Post Cure:	Off

<Off> / On
<> indicates the default setting.

Mnt. 5: Ink Discharge

Mnt. 5 :	Ink Discharge

Discharges the ink in the printer. This operation is performed before moving the printer.

☞"Transporting the printer" on page 123

Mnt. 6: Calibration

Mnt. 6 :	Calibration

Calibrate table height position information to optimize the gap between the print head and media.

☞"Calibrating table height" on page 53

Mnt. 7: Moving Printer

Mnt. 7 :   Moving Printer

Before packing printer for moving or transporting, use this menu to automatically move the table to the position to secure the table with shipping brackets.

☞"Changing Table Position for Packing" on page 124

Mnt. 8: Table Maint.

Mnt. 8 :   Table Maint.

Use this menu to automatically move the table to the position to perform the table maintenance.

☞"Table Maintenance" on page 113

Mnt. 9: Daily Maint.

Mnt. 9 :   Daily Maint.

Use this menu in following cases:

- If the nozzle missing still persists after performing head cleaning.
- If you perform printing all day without entering to sleep mode and you need to perform daily maintenance.

☞"Clean daily maintenance parts" on page 109

Submenus

Daily Maint. :   Start

Press the [Enter] key to start maintenance.

Daily Maint. :   End

After the maintenance is complete, press the [Enter] key.

- The printer automatically performs the Short cleaning.

Important!

To perform daily maintenance after using the printer for the day, see "Daily Maintenance" on page 99**.**

Menu 4: Printer Status

Status 1: Ink

Status 1 :	Ink

Displays the various information about ink cartridge.

Submenus

1 2 3 4 :	1 0 0 / 9 0 / 8 0 / 7 0

Displays the remaining ink in Slots 1 to 4, as percentages of the full levels.

5 6 :	1 0 0 / 9 0

Displays the remaining ink in Slots 5 and 6.

Status 2: Lifetimes

Status 2 :	Lifetimes

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.

Submenus

Head :	E*** F

Displays the service life for the print head.

Pump:	E*** F

Displays the service life for the pump.

CR Motor :	Change

Displays the service life for the CR motor.

PF Motor :	E**** F

Displays the service life for the PF motor.

PG Motor :	E**** F

Displays the service life for the PG motor.

CPump :	E*** F

Displays the service life for the Circulation pump.

UV Lamp :	E*** F

Displays the service life for the UV lamp.

WasteInkTank :	E*** F

Displays the service life for the waste ink tank.

Status 3: Job Status

Status 3 :	Job Status

Displays various information of previous print.

Submenus

JobStatus :	Canceled

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

ToDoLength :	xxx.x m

Displays the total length of print data (media feeding direction).

Done :	xxx.x m

Displays the printed length.

Remain :	xxx.x m

Displays the remaining length of print data.

> 📝 **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 "What you can do on the operation panel during printing" of "Menu3: Job Status" on page 46.

Status 4: Version

Status 4 :	Version

Displays the versions of the firmware.

Submenus

Version:	x. xx

Status 5: SerialNo.

Status 5 :	SerialNo.

Displays the printer's serial number.

Submenus

SerialNo. :	**********

Menu 5: Option

Option 1: Rotary Unit

Option 1 :	Rotary Unit

Use this menu to attach the Rotary Unit (option).
For more details of this menu, see the Rotary Unit Operation Manual.

Note

If the printer starts switching to Rotary Mode due to wrong key operation, you can cancel it by pressing the Cancel key while the following message is displayed on the operation panel.

- "Remove Media ->Enter"
- "Install Rotary Unit -> E"

Menu 6: Sleep Mode

SleepMode 1: Start

SleepMode 1 :	Start

Activate Sleep Mode. Make sure to follow the instructions on the operation panel to perform daily maintenance.
☞"Sleep Mode" on page 29

SleepMode 2: SetTimer

SleepMode 2 :	SetTimer

Sets the timer to perform head cleaning in the sleep mode.

Setting values

CleaningTimer :	Off

<Off> / 1 / 2 / 3 / 4 / 5 / 6 / 9 / 12 / 18 / 24 hours
<> indicates the default setting.
If you set an interval, the display will shift to "SleepMode 1: Start".

Important!

In following cases, the printer does not perform head cleaning by the timer in sleep mode.

- **Front cover is open.**
- **Maintenance cover is open.**
- **The waste ink tank is full.**
- **There is little remaining ink in the ink cartridge (or no ink).**
- **The ink cartridge has been removed.**
- **The inserted ink cartridge is not the genuine ink cartridge, 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.

Chapter 3 Maintenance

Maintenance

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

Before daily operation	"Wearing the gloves and goggles" on page 91
	"Agitating ink cartridges" on page 92
	"Nozzle check and cleaning" on page 37
After daily operations	"Daily Maintenance" on page 99
Based on your usage condition	"Head cleaning" on page 107
	"Replacing ink cartridge" on page 95
	"Emptying waste ink tank" on page 96
	"Printer Maintenance" on page 107
	"Replacing absorption material for the flushing box" on page 116
Monthly	"Inside cleaning" on page 111
Every six months	"Replacing the cleaning wiper" on page 119

> **Important!**
>
> **In following cases, please contact your local MUTOH dealer to request service personnel.**
>
> - **The same system error repeatedly occurs.**
> - **The message to notify the life of motor, pump, or UV lamp is displayed.**

☞"Messages and Error Messages" on page 130

Wearing the gloves and goggles

Skin or eye contact with UV curable ink may cause skin inflammation or allergic reaction.
Wear protective gloves, goggles and/or face shield, and clothing while using of the printer.

Especially when performing any of the following operations, be sure to wear the supplied gloves (or solvent resistant gloves) and goggles.

- "Agitating ink cartridges" on page 92
- "Replacing ink cartridge" on page 95
- "Emptying waste ink tank" on page 96
- "Performing Daily Maintenance" on page 102
- "Clean daily maintenance parts" on page 109
- "Replacing absorption material for the flushing box" on page 116
- "Replacing the cleaning wiper" on page 119

How to wear the supplied gloves
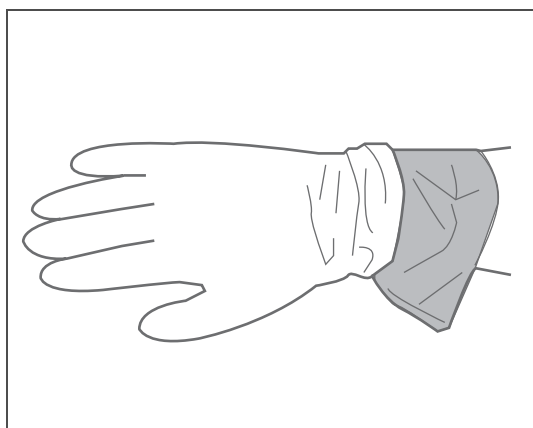
Wear the rubber gloves (white) over the plastic gloves (pink).

⚠ **CAUTION**

🚫 **Do not touch uncured UV ink with bare hands.**

❗ • **If glove becomes contaminated with ink, replace it with new.**
• **If protective clothing becomes contaminated with ink, immediately remove and wash for re-use.**
• **If ink gets on skin, immediately wash with soap and plenty of water for 15 minutes.**
  Seek medical advice/attention if irritation or inflammation are present.
• **If ink gets in eyes, flush eyes with plenty of water for 15 minutes and seek medical advice/attention immediately.**
• **If swallowed, rinse mouth immediately and do not induce to vomiting.**
  Seek medical advice/attention.

Agitating ink cartridges

Agitating ink cartridges

Agitate the ink at the following times to prevent it from settling out and/or coagulating:

- Before installing new ink cartridge
- When any of the messages below appears

6-color configuration:

Shake W Cartridge	Agitate the White (Wh) ink cartridge. • Displays every 12 hours.
Shake KMCY Cartridge	Agitate the Black (K), Magenta (M), Cyan (C), and Yellow (Y) ink cartridges. • Displays every 72 hours.
Shake KMCYW Cart.	Agitate the Black (K), Magenta (M), Cyan (C), Yellow (Y), and White (Wh) ink cartridges.

4-color configuration:

Shake ALL Cart.	Agitate the Black (K), Magenta (M), Cyan (C), and Yellow (Y) ink cartridges. • Displays every 72 hours.

> **Important!**
>
> - **Agitate the ink cartridges periodically.**
>   **Otherwise, the ink inside the cartridges settles or coagulates and may cause poor print quality or a malfunction.**
> - **You should agitate the ink cartridges when the message appears. Otherwise, for 12 hours after the message appears, you will repeatedly have to wait a certain time before you can print.**
>   **When 12 hours have passed, the printer will not print any data. In either case, you can restore the printer to normal condition by agitating the ink cartridges.**

⚠ **CAUTION**
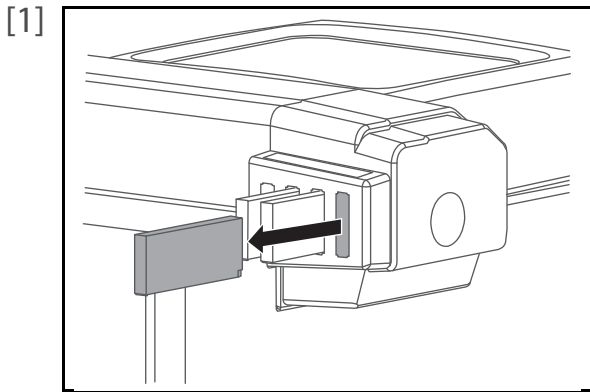
Skin or eye contact with UV curable ink may cause skin inflammation or allergic reaction.
For this operation, be sure to wear the supplied gloves (or solvent resistant gloves) and goggles to prevent ink from contacting with your eyes or skin.

Steps

[1]

- Check the power is ON.
- Wear the supplied gloves and remove ink cartridges from Ink cartridge slots.

[2]
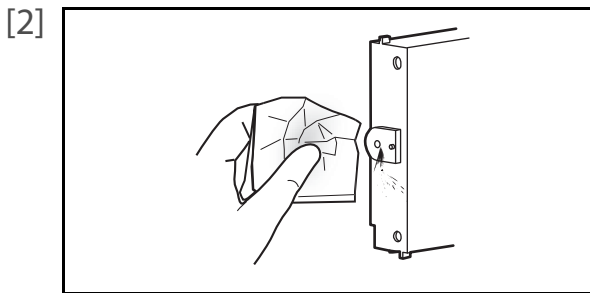
Using the paper towel provided with the printer to wipe off the ink attached to the printer plug of Ink cartridge.

[3]

3 sec.

3 sec.

x 10
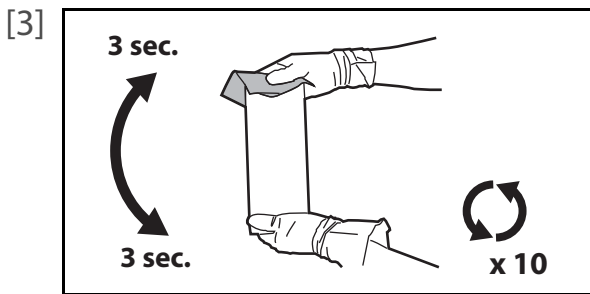
- Place the lint-free cloth over the ink plug of the cartridge, turn the plug up and maintain vertical position for three seconds.
- Rotate cartridge upside down (plug facing down) and hold for three seconds.
- Repeat it 10 times.

[4]
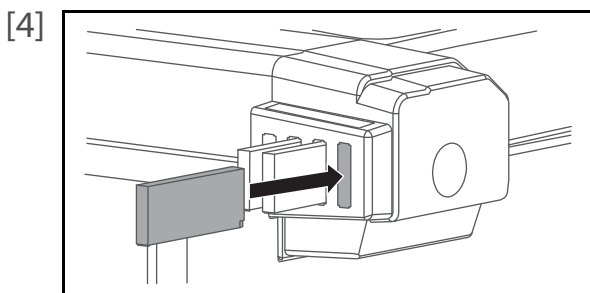
Re-insert the ink cartridges into Ink cartridge slots.

📢 **Important!**

Make sure you insert the ink cartridges into the original slots. Even when you have the same color ink cartridges, do not switch and insert them into different slots.

Checking ink level and replacing ink cartridge

Checking ink level

[1]

```
1 2 3 4 5 6
```

Check the remaining ink icons.

• To do a more detailed check, press the [Menu] key.

> **Note**
>
> You can alternatively check the remaining ink amount via the VSM's remote panel.
>
> ☞"Launching VSM" on page 20

[2]

```
Menu 4 :              PrinterStatus >
```

• Press the [-] key until "Menu 4: PrinterStatus >" appears.
• Press the [>] key.

[3]

```
Status 1 :                    Ink
```
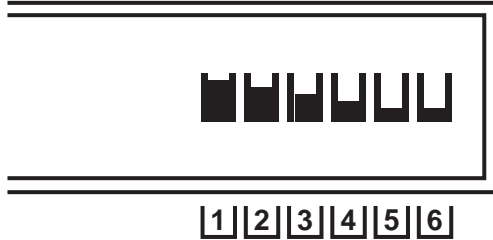
Press the [Enter] key.

[4]

```
1 2 3 4 :           9 6 / 6 3 / 4 2 / 3 7
```

```
5 6 :                    1 9 / 1 0
```
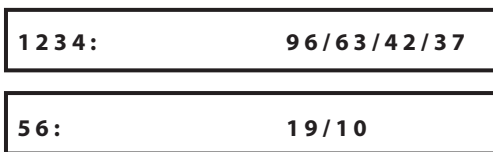
• Displays the remaining ink in Slots 1 to 4, as percentages of the full levels.
• Press the [-] key to flip to the display for Slots 5 and 6.

When cartridge is nearly out of ink

When the ink level becomes low, the error LED on the operation panel flashes with beep sounds

Steps

[1]

```
[ 2 ]     Ink Low
```

```
Ink Low
```
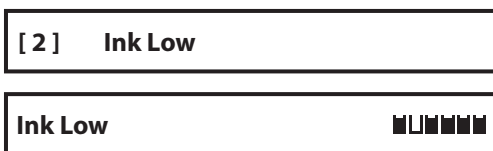
Press the [Enter] key.

• The buzzer stops.
• In the icons shown on the left, the Slot 2 cartridge is nearing replacement time.

[2]   Prepare an ink cartridge to replace.

> **Note**
>
> Sleep mode continues after stopping the buzzer.

Replacing ink cartridge

When a cartridge is out of ink, the error LED on the operation panel flashes with beep sounds.
The printer pauses printing. After replacing with the new ink cartridge, it resume printing.

Steps

[1]

[4 6]   Ink End

Ink End

Press the [Enter] key.
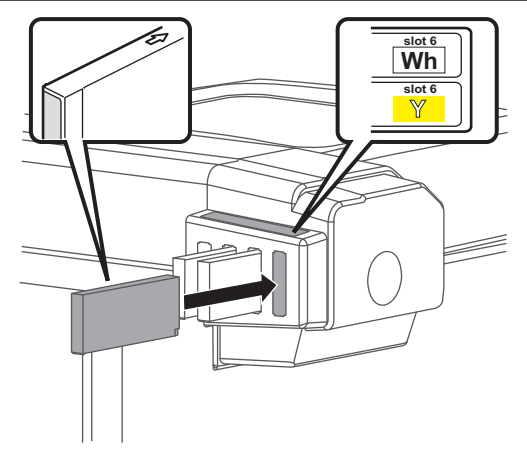
- The buzzer stops.
- In the icons shown on the left, the Slot 4 and 6 cartridges need replacing.

[2]

3 sec.

3 sec.

x 10

Make sure you agitate the ink cartridge after you unpack it.

- Turn the ink plug upward and wait for three seconds.
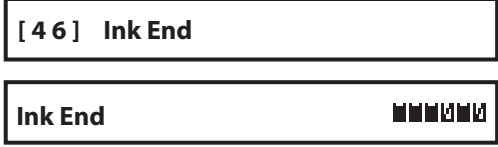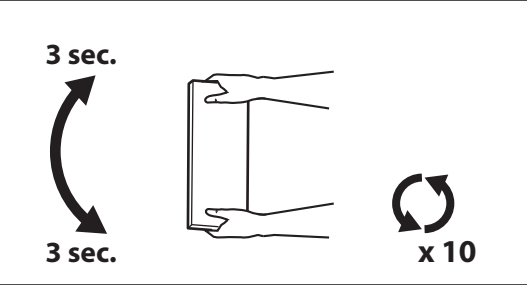- Next, turn the ink plug downward and wait for three seconds.
- Repeat that 10 times.

> **Note**

When replacing varnish ink, you do not have to agitate it.

[3]

slot 6
Wh

slot 6

Remove the empty ink cartridge and insert the new one.

- Make sure to match the ink cartridge color with the label of this printer.
- The arrow should face up.
- Insert all the way to the end.

> **Important!**

- **Do not replace ink cartridge when the power of this printer is OFF.**
  Ink level cannot be detected correctly.
- **If there is no ink cartridge for replacement at hand, leave the empty ink cartridge inserted in the printer. Leaving the printer with the ink cartridge removed may cause the print head to clog.**
- **If ink cartridge is moved from cold to warm place, leave it at least three hours.**

⚠ **WARNING**

Leave ink cartridges away from fire or high temperature objects.
It may cause fire.

> **Note**

Sleep mode continues after stopping the buzzer.

Emptying waste ink tank

Emptying waste ink tank

When a certain amount of waste fluid has been collected in the waste ink tank, the error LED on the operation panel of this printer turns on with beep sounds.
Drain all waste fluid in the waste ink tank into a container (e.g. PET bottle). After emptying the waste ink tank, reset the waste ink counter.

Display messages

NearFullWasteInkTank	The waste ink tank is about to become full. Mutoh recommends that you empty the waste ink tank before it is completely full. • Printing or other operation will continue while you do this.
Full WasteInkTank	The waste ink tank has become full. Empty the waste ink tank immediately. • Printing or other operation will stop. It will resume when you have carried out "ResetWasteInk".

⚠ **WARNING**

🛑 **Do not mix waste fluid with any other chemicals, even in a small amount.**
If mixed with other chemicals (e.g. oxidizing agent), it may produce heat.
Before pouring waste fluid into a container, make sure:

- **the container is empty.**

- **inside the container is completely dry.**

⚠ **CAUTION**

🛑 **Skin or eye contact with UV curable ink may cause skin inflammation or allergic reaction.**
For this operation, be sure to wear the supplied gloves (or solvent resistant gloves) and goggles to prevent ink from contacting with your eyes or skin.

📢 **Important!**

Empty the waste ink tank before moving the printer.
If ink splashes inside the waste ink tank while being moved, it can cause damage.

1. Drain waste fluid into container

[1]   Prepare a container like PET bottle to drain the waste fluid.
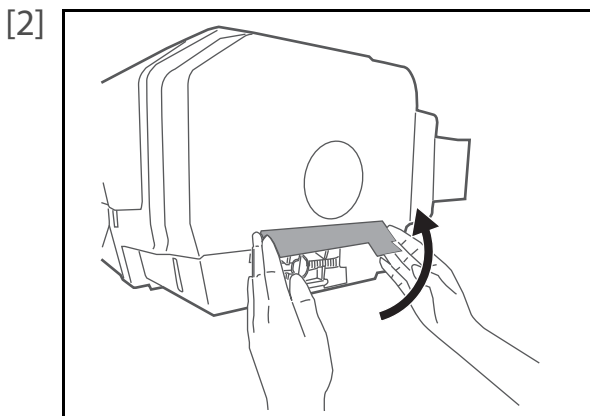
📢 **Important!**

The capacity of waste ink tank is 1,400 ml. Make sure to prepare a container that has enough capacity when discharging waste fluid.
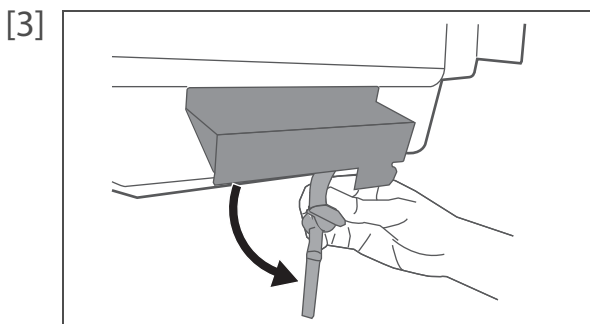
⚠️ **CAUTION**

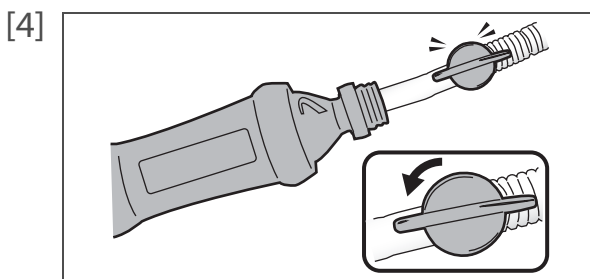🛑 **Make sure to completely empty the waste ink tank.**
If not, the waste ink counter cannot count the waste fluid level correctly and it can lead waste fluid leaks inside or from the printer.

[2]   Hold both sides of the light-blocking cover, and open it.

[3]   Pull out the waste ink tube.

[4]
- Insert the waste ink tube into a container.
- Turn the hand valve as shown in the figure left to drain the waste fluid.
- Drain waste fluid into the container.
- After emptying the waste ink tank, return the hand valve to the original position.
- Return the waste ink tube to the original position.
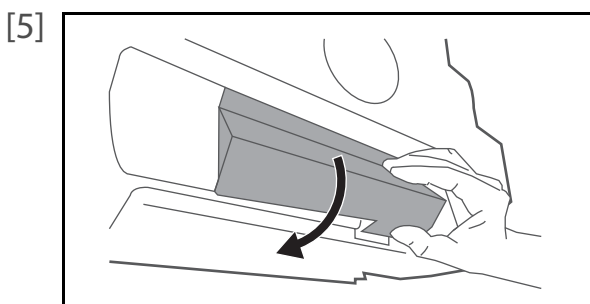
[5]   While inserting the light-blocking cover's knob into the printer's slot, close the light blocking cover.

 Important!

Be sure to close the light-blocking cover.
Otherwise, the ink inside the tube clamp is cured and the waste fluid cannot be discharged.

⚠ **WARNING**

🚫 • **You are obligated to properly dispose of waste fluid from the printer in compliance with Wastes Disposal and Public Cleansing Act and local ordinances. Delegate disposal to an industrial waste disposal contractor.**

• **Waste fluid from this printer is harmful to aquatic organisms. Avoid the waste fluid from out flowing to sewage or natural water systems.**

• **Keep out of direct sunlight and store the waste fluid container in a cool, dark place.**

• **Do not mix waste fluid with any other chemicals, even in a small amount.**

2. Resetting waste ink counter

⚠ **CAUTION**

🚫 **Before resetting the counter, make sure the waste ink tank is completely empty.**
If not, it can lead waste fluid leaks inside or from the printer.

[1]

| Menu 3 : Maintenance > |

• Press the [Menu] key.
• Press the [-] key until "Menu 3: Maintenance >" appears.
• Press the [>] key.

[2]

| Mnt. 2 : ResetWasteInk |

• Press the [-] key until "Mnt.2: ResetWasteInk" appears.
• Press the [Enter] key.

[3]

| Initial. Parameter? |

Press the [Enter] key.

| ** Initializing ** |

The waste ink counter is being reset.
• The waste ink tank has been emptied.

✎ **Note**

• "ResetWasteInk" can alternatively be carried out via "Maintenance" in the printer driver's "Utility" section.

• It can also be carried out via the VSM's remote panel.

• To carry out [ResetWasteInk] during printing, see "Menu4: Reset Waste Ink" on page 46 under "What you can do on the operation panel during printing".

Daily Maintenance

Flow of Daily Maintenance

This printer requires daily maintenance.
Follow the steps below to perform daily maintenance after you finish your printing for the day.

- "Perform Daily Maint." is prompted on the operation panel after certain period of time from the previous daily maintenance.
  Make sure to perform daily maintenance when prompted.

📢 Important!

If you perform printing all day without entering to sleep mode, make sure to perform daily maintenance once a day.

Failure to perform daily maintenance may affect print quality or result in damage to the printer.

To perform daily maintenance without entering to sleep mode, go to "Mnt.9: Daily Maint." on the operation panel.

☞"Mnt. 9: Daily Maint." on page 85

☞"Clean daily maintenance parts" on page 109

Prepare required items for Daily Maintenance

Leave the printer in Sleep Mode

Clean the UV Lamp

Moisten the surface of print head nozzles

Clean the print head circumference

Clean the cleaning wiper and the circumference of the cap

The printer automatically performs the Short cleaning

Daily Maintenance completed !

Preparing for Daily Maintenance

Required Items

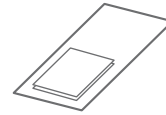[1]   Prepare the following items to perform daily maintenance.

|				
Plastic gloves	**Rubber gloves**	**Protective goggles**	**Paper towel or Polyester knit wiper**	**Dropper**
Dedicated maintenance cleaner	**Plastic cup**	**Cleaning stick**	**Tray**	**Scraper**
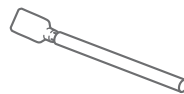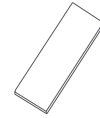
> **Important!**
>
> - **Use a paper towel supplied with the printer or optional polyester knit wiper. DO NOT use a tissue.**
>   **Lints or flakes on tissue may cause damage to the print head.**
> - **DO NOT use non-dedicated maintenance cleaner.**
> - **If you want to purchase the optional maintenance cleaner, contact your local Mutoh dealer or nearest Mutoh sales office.**

[2]
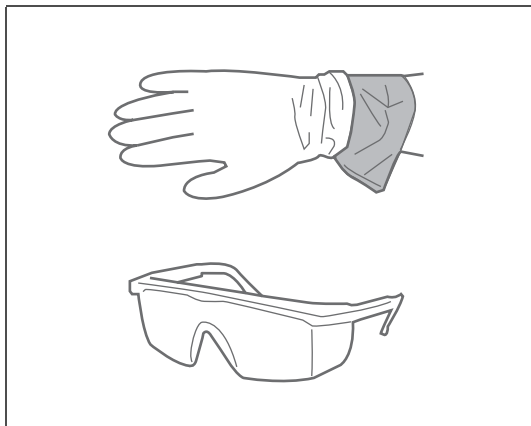
- Wear the rubber gloves (white) over the plastic gloves (pink).
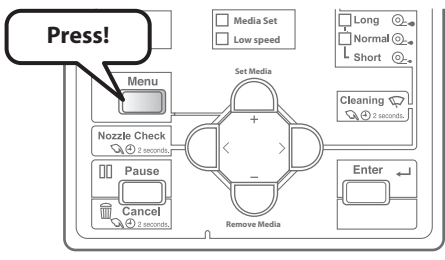- Wear protective goggles.

⚠ CAUTION

Skin or eye contact with UV curable ink may cause skin inflammation or allergic reaction.
For this operation, be sure to wear the supplied gloves (or solvent resistant gloves) and goggles to prevent ink from contacting with your eyes or skin.

Entering to sleep mode

[1]

Press the [Menu] key.

[2]

Menu6:	Sleep Mode >

Press the [-] key until "Menu5: Sleep Mode >" appears.

• Press the [>] key.

[3]

SleepMode 1:	Start

Press the [Enter] key.

[4]

Start Sleep Mode?

Press the [Enter] key.

[5]

Daily Maint. :	Start

Press the [Enter] key.

[6]

Remove Media	- >	E

The message on the left will appear.

• Remove the media and the jig on the table, and then press the [Enter] key.

Wait for a while

The table, carriage and cleaning wiper move to gain access to daily maintenance.

[7]

Daily Maint. :	End

The message on the left will appear.
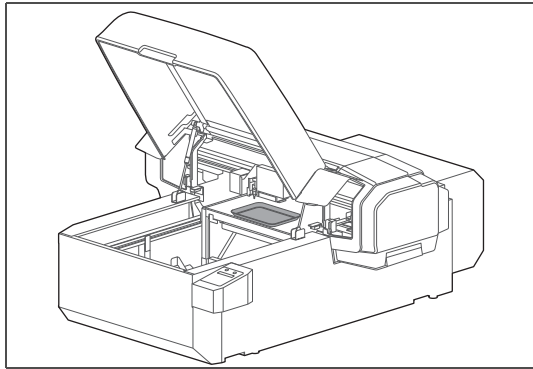
• You can start maintenance.

🔊 **Important!**

Make sure to complete this maintenance within 5 minutes while the printer is in Daily maintenance state.

Performing Daily Maintenance

1. Cleaning of UV Lamp

[1]

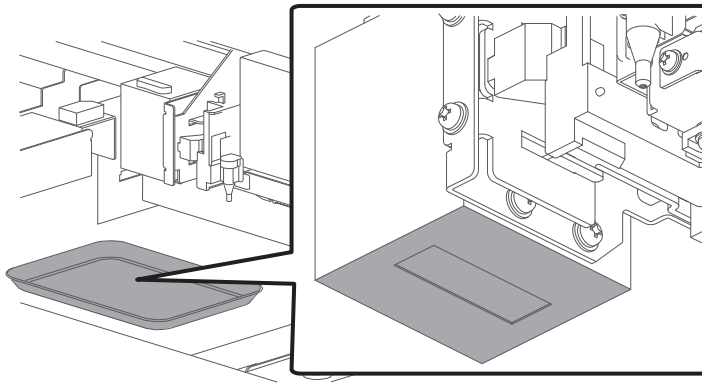Open the front cover gently, and then place the tray on the table.

> 📨 **Important!**
>
> **Do not place any object inside the printer.**

[2] Look in the stainless tray to check for ink or dust on the UV lamp.

- If no ink or dust is found on the UV lamp, skip this step and move on to .

[3] If any ink or dust is found, using a paper towel, remove ink and dust from the UV lamp.

- If ink deposits cannot be removed with the paper towel, use the scraper supplied with the printer.
- Press the scraper on the ink deposits with a slight angle and scrape off the ink deposits.
- Use the paper towel to clean the ink scraped from the lamp.
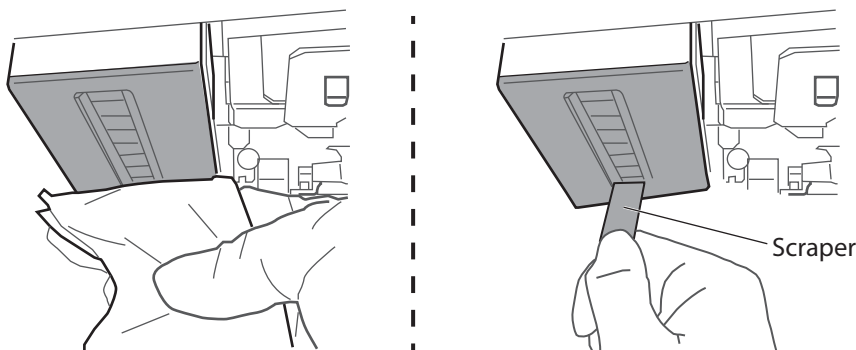
Scraper

> 📨 **Important!**
>
> - **Make sure to use the scraper supplied with the printer.**
>
> - **Never use the corner of the scraper. It can damage the UV lamp.**
>
> - **When using the scraper, do not apply too much pressure to the lamp. It can damage the UV lamp.**

[4] Next moisten the surface of print head nozzles.
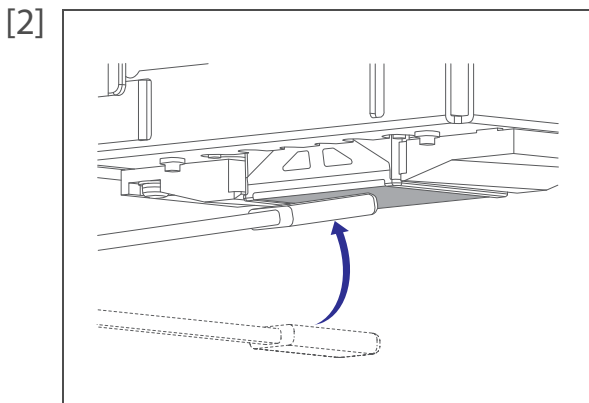
2. Moistening the surface of print head nozzles

During cleaning, please note the followings:

• **Always follow this steps to perform daily maintenance.**

• **When moistening the surface of nozzles, do not use the cleaning stick already used to clean the print head circumference, cleaning wiper or cap circumference. Doing so may result in damage to the print head.**

• **Always use a new cleaning stick and dampen it with dedicated maintenance cleaner.**
  DO NOT use non-dedicated maintenance cleaner. It may cause nozzle clogging.

• **Do not touch the tip of a cleaning stick with fingers.**
  If sebum is adhered, it can cause damage to the print head.

• **Do not reuse a cleaning stick.**
  Dusts can adhere causing damage to the print head.

[1]
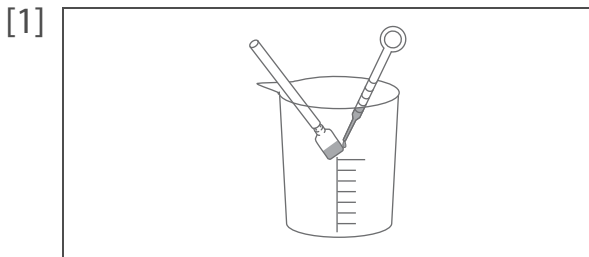
• Put a cleaning stick in the plastic cup.

• Use the dropper to dampen the swab of cleaning stick with dedicated maintenance cleaner.
  (Amount used: 0.5 ml)

[2]

Look in the stainless tray to check the bottom of the carriage. Using the cleaning stick dampened with the maintenance cleaner, moisten the surface of the print head nozzles.
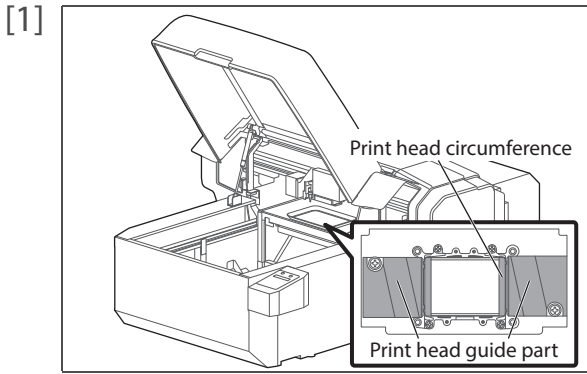
• Lightly touch with the cleaning stick to moisten the nozzle surface.

• Repeat it a couple of times to moisten the entire nozzle surface.

Important!

• **DO NOT rub into the nozzle surface.**
  It can cause damage to the print head.

• **If the entire nozzle surface has been moistened, you can stop it.**

[3]   Next clean the print head circumference.

3. Cleaning of print head circumference

[1]

Look in the tray to check the bottom of the carriage.
Check if dusts and ink deposit are adhered.

- Print head circumference (silver metal part)
- Print head guide part (black plastic part)

🔊 **Important!**

If maintenance cleaner is splashed onto the printer, use a paper towel to wipe it off.

[2]   Use the cleaning stick to remove the ink and dust on the circumference of the bottom of the carriage.

    ⬛ Cleaning required

    🟨 DO NOT touch the surface of a print head (the yellow portions in the illustration below)
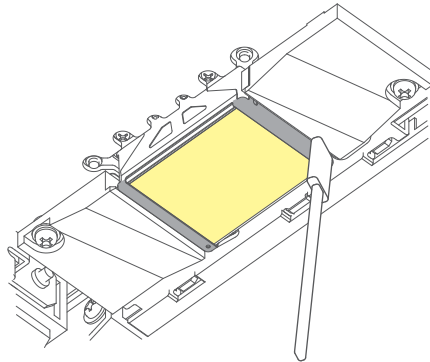
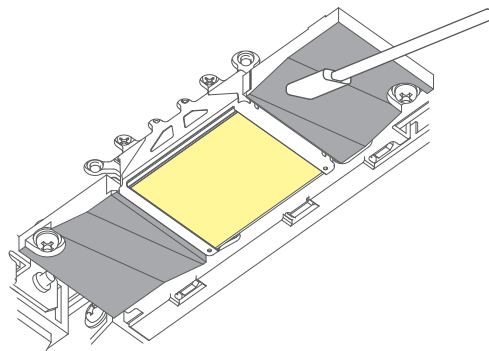Print head circumference (silver metal part)   Print head guide part (black plastic part)
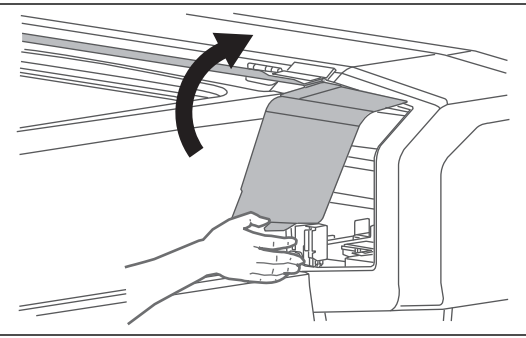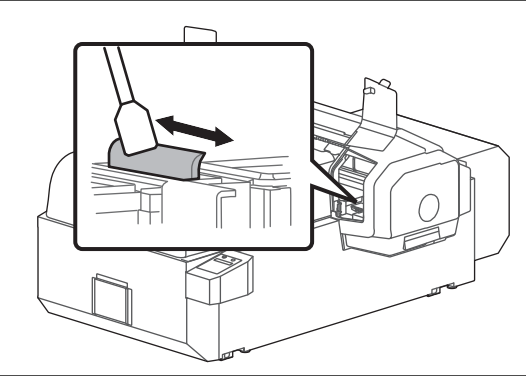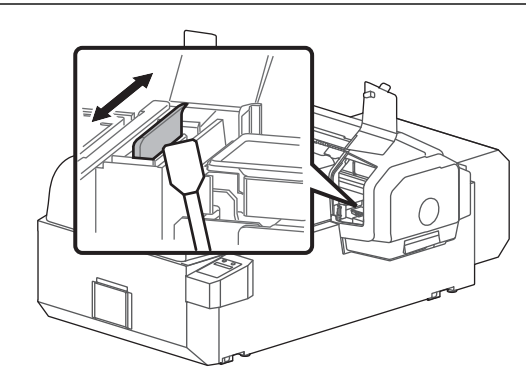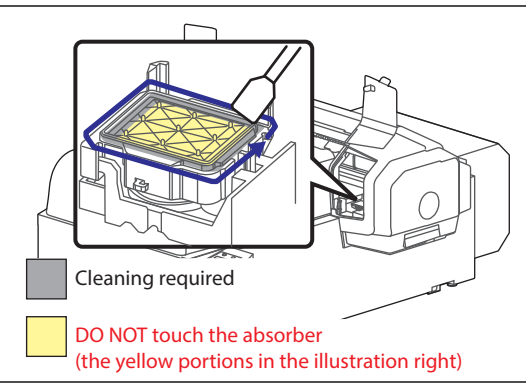

[3]   Remove the tray from the table, and then close the front cover gently.

[4]   Next clean the cleaning wiper and the cap circumference.

4. Cleaning of cleaning wiper and the circumference of the cap

[1]

Hold the tab on the maintenance cover as shown on the left to gently open the cover.

- Fully open the maintenance cover.

[2]

Wipe the cleaning wiper with a cleaning stick.

- Wipe the left side surface of cleaning wiper going back and forth.

[3]

Wipe the right side surface of cleaning wiper going back and forth.

[4]

Use the cleaning stick to remove the ink and dust on the circumference of the cap.

Cleaning required

DO NOT touch the absorber
(the yellow portions in the illustration right)

[5]   Close the maintenance cover gently.

[6]   Next finish the daily maintenance.

5. Finishing daily maintenance

[1]

Daily Maint. :	End

Press the [Enter] key.

[2]　　The printer automatically performs the "Short" cleaning.

[3]　　When the Short cleaning is complete, the printer automatically enters to sleep mode.

[4]　　• Dispose of the used cleaning stick.

　　　• Use a paper towel to wipe the maintenance cleaner off the dropper.

　　　• Dispose of the maintenance cleaner in the plastic cup and dry the cup well using the paper towel.

　　　• Use a paper towel to clean the tray.

🔊 **Important!**

- **Do not reuse a cleaning stick.**
  Dusts can adhere causing damage to the print head.
- **Check that the lid of the maintenance cleaner is shut properly and store it.**

[5]　　Now the daily maintenance is complete.

Printer Maintenance

Head cleaning

When nozzle clogging is found in nozzle check, perform head cleaning. Head cleaning consumes ink.
There are several cleaning modes in this printer. Please select an appropriate mode based on your usage condition.

|	
Short cleaning	Consumes less ink than Normal cleaning.
Normal cleaning	Perform nozzle check before and after printing, and use when nozzle clogging is found on the nozzle check print.
Long cleaning	Consumes more ink than Normal cleaning. When nozzle clogging still occurs after Normal cleaning, perform Long cleaning.
Little Charge	Provides higher cleaning effect than Long cleaning, it consumes a large amount of ink. *This mode cannot be selected via the "Cleaning" key. Select it from the Cleaning submenu in the Panel Setting Menus. ☞"Mnt. 1: Cleaning" on page 82
Initial Charge	Provides higher cleaning effect than "LittleCharge", but also consumes rather more ink. *This mode cannot be selected via the "Cleaning" key. Select it from the Cleaning submenu in the Panel Setting Menus. ☞"Mnt. 1: Cleaning" on page 82

> **🔊 Important!**
>
> **Comply strictly with the following when you performing "Little Charge" or "Initial Charge". If charging is interrupted, ink will be lost when charging is resumed.**
>
> • **Do not open the Front cover or the Maintenance cover.**
>
> • **Do not use ink cartridges that have little ink remaining.**

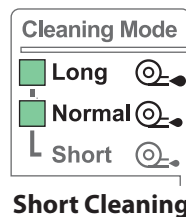## Steps for head cleaning

[1]
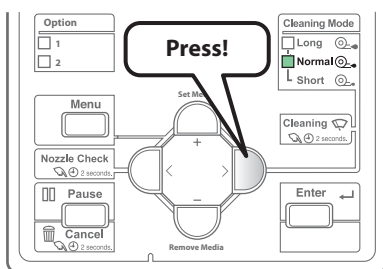
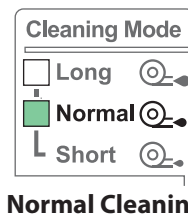Use the [Cleaning] key to select a cleaning mode.

• The "Cleaning Mode" indicators will change each time the key is pressed.

> **✎ Note**
>
> • You can alternatively do this via the printer driver or the VSM's remote panel.
>
> • The "Cleaning Mode" indicators will change as shown below.

Short Cleaning   **Normal Cleaning**   **Long Cleaning**
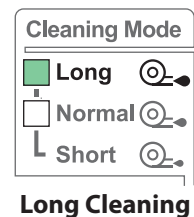
[2]
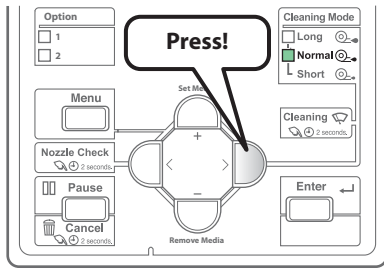
Press the [Cleaning] key for more than two seconds.

- Cleaning will start.

[3]   Perform Nozzle Check.

- If nozzle clogging still remains, repeat cleaning and nozzle check.
   ☞"Steps for head cleaning" on page 107

Note

- When nozzle clogging remains even after repeating "Normal cleaning" several times, perform "Long cleaning".
- When nozzle clogging remains even after repeating "Long cleaning" several times, conduct "Printer Maintenance" on page 107.
- If it does not help to recover the nozzle, carry out "LittleCharge" via the Cleaning submenu in the Panel Setting Menus.

Clean daily maintenance parts

In following cases, clean the daily maintenance parts.

- If faint print or dot missing still persists even after head cleaning has been performed.
- If you perform printing all day without entering to sleep mode and you need to perform daily maintenance.

Preparation:

See "Preparing for Daily Maintenance" on page 100 to prepare items required for the maintenance.

🔊 **Important!**

If you want to continuously use the printer after this maintenance, follow the steps below.

If you will not use the printer after this maintenance, enter to sleep mode and then perform maintenance.

☞"Daily Maintenance" on page 99

1. Putting the printer into the Daily maintenance mode

[1]   Check that no object including a jig is loaded on the table.

[2]

Press the [Menu] key.

[3]

Menu 3 :	Maintenance >

- Press the [-] key until "Menu 3: Maintenance >" appears.
- Press the [>] key.

[4]

Mnt. 9 :	Daily Maint.

- Press the [+] key to bring up "Mnt.9: Daily Maint.".
- Press the [Enter] key.

[5]

Daily Maint. :	Start

Press the [Enter] key.

[6]

Remove Media	- >	E

The message on the left will appear.

- Remove the media and the jig on the table, and then press the [Enter] key.

Wait for a while

The table, carriage and cleaning wiper move to gain access to maintenance.

[7]

Daily Maint. :	End

The message on the left will appear.

- You can start maintenance.

2. Cleaning daily maintenance parts

The maintenance procedure and parts to be cleaned are the same as "Daily Maintenance" on page 99.
Follow the steps described in "Performing Daily Maintenance" on page 102 to clean each part.
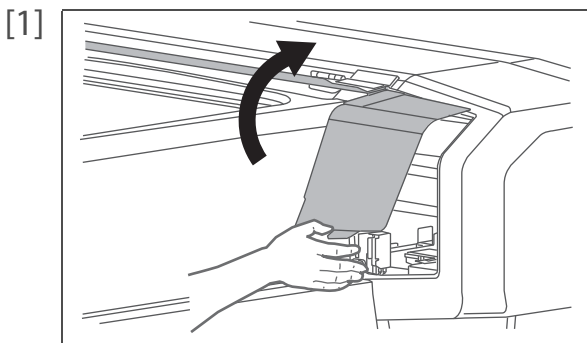
- ☞"Cleaning of UV Lamp" on page 102
- ☞"Moistening the surface of print head nozzles" on page 103
- ☞"Cleaning of print head circumference" on page 104
- ☞"Cleaning of cleaning wiper and the circumference of the cap" on page 105

⊠ Important!

Make sure to complete this maintenance within 5 minutes while the printer is in Daily maintenance state.

3. Finishing maintenance

[1]

Hold the tab on the maintenance cover as shown on the left to gently open the cover.

⚠ CAUTION

When closing the maintenance cover, hold the tab on the maintenance cover to gently close it.
Do not place your fingers on the edges of the printer's opening portion, or on any parts around those edges. Your fingers could get caught and be injured.

[2]

Daily Maint. :	End

Press the [Enter] key.

[3]   The printer automatically performs the Short cleaning.

[4]   • Dispose of the used cleaning stick.
    • Use a paper towel to wipe the maintenance cleaner off the dropper.
    • Dispose of the maintenance cleaner in the plastic cup and dry the cup well using the paper towel.
    • Use a paper towel to clean the tray.

⊠ Important!

- **Do not reuse a cleaning stick.**
  Dusts can adhere causing damage to the print head.
- **Check that the lid of the maintenance cleaner is shut properly and store it.**

[5]   Now the maintenance is complete.

Inside cleaning

Cleaning period:

- Monthly

⚠ CAUTION

🚫
- **Do not open or close the cover while you are off balance.**
  You may pinch your finger or get injured.

- **When cleaning table, do not apply too much pressure on the table.**
  It can affect print quality.

❗ **Hold the handle of the front cover and gently open or close the cover.**
If excessive force is applied to the cover, it will shorten its life or will damage to the printer.

---

1. Cleaning on the table
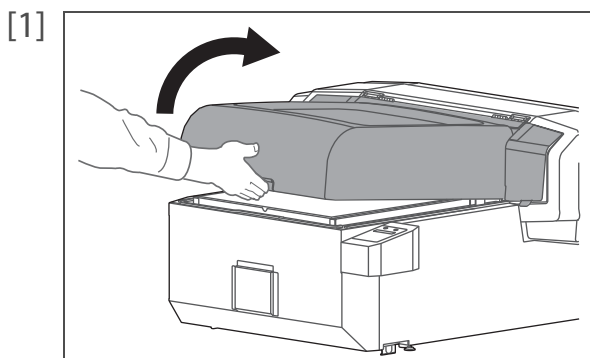
---

[1]

Hold the handle on the front cover to gently open it.

- Fully open the front cover.

[2]
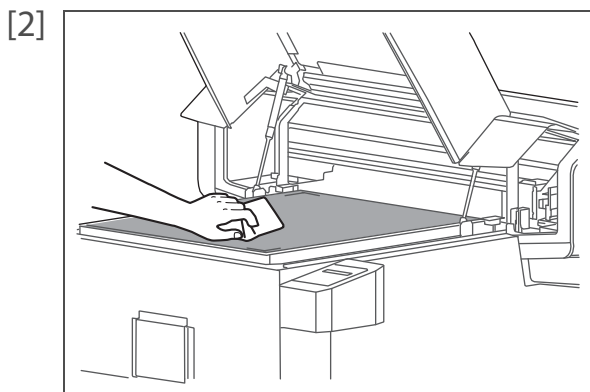
Clean away dirt from the table using a cloth soaked in water and thoroughly wrung out.

📢 **Important!**

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

2. Cleaning on the table rail

[1]

Check that the cover is closed and then press the [Set Media] key.

- The table moves to the rear side of the printer.

[2]　Hold the handle on the front cover to gently open it.

[3]

If found any dirt or dust on the table rail, use a soft cloth, dampened with water and then wrung water out of the cloth, to remove it from the rail.

🔊 **Important!**

- **If any dirt or dust remains on the table rail, it may reduce print quality.**
- **Do not blow off dusts inside the printer with a gas duster.**
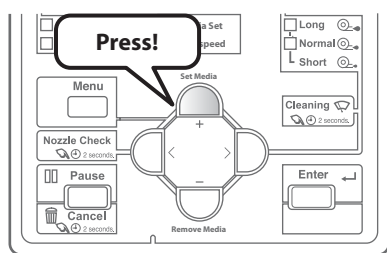 **Dust can attach to moving parts, causing abnormal sound or malfunctions.**

[4]

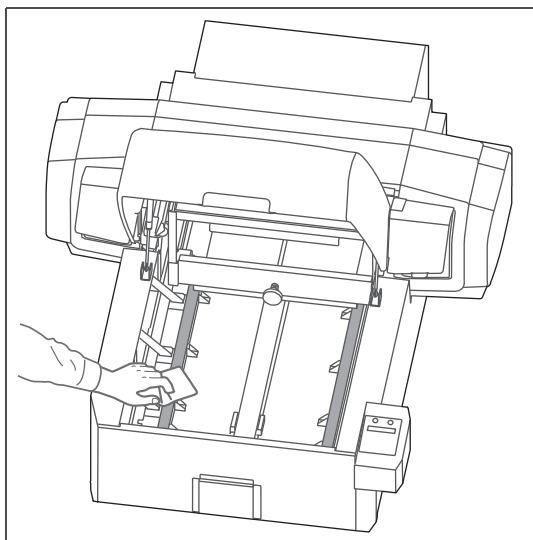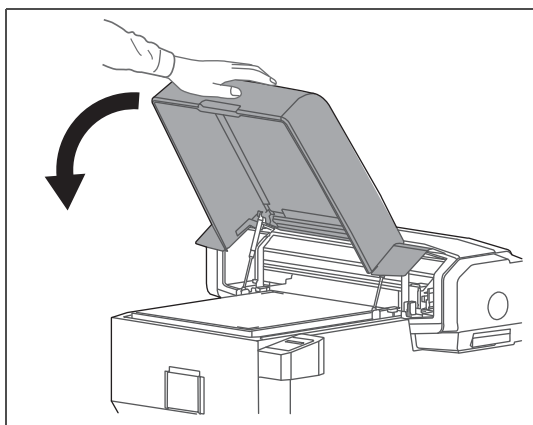Close the front cover slowly, holding it by the place shown in the picture.

[5]
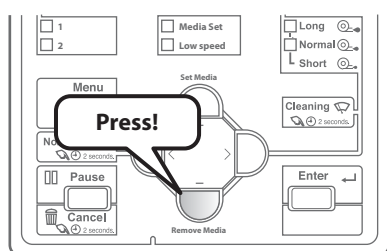
Check that the cover is closed and then press the [Remove Media] key.

- The table moves to the front side of the printer.
- That ends the procedure.

3. Table Maintenance

Preparation:

- Paper Towel (Lint-free cloth) or Polyester knit wiper (optional)
- Lubricating grease
- Cleaning stick

> **Important!**
>
> **During cleaning, please note the followings.**
>
> - **DO NOT apply lubricating grease on area other than specified.**
> - **Always use the paper towel (lint-free cloth) supplied with the printer or optional polyester knit wiper.**
>   **DO NOT use tissue paper.**

Before greasing

[1]   If any media or jig is loaded on the table, open the front cover and remove it.

[2]   Check that the front cover is closed, and press the [Menu] key.

[3]

Menu 3 :	Maintenance >

- Press the [-] key until "Menu 3: Maintenance >" appears.
- Press the [>] key.

[4]

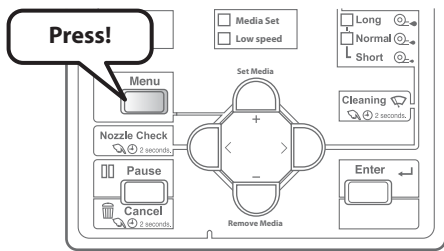| Mnt. 8 :	Table Maint.

- Press the [-] key until "Mnt.8: Table Maint." appears.
- Press the [Enter] key.

[5]

Table Maint. :	Start

The message on the left will appear.
- Press the [Enter] key.

Wait for a while

The message on the left will appear.
- The table moves to the front side of the printer.

[6]

Remove Media	-> Enter

The message on the left will appear.
- Remove the media and the jig on the table, and then press the [Enter] key.

Wait for a while

The message on the left will appear.
- The table moves to the position to perform the screw shaft maintenance.

[7]

Table Maint. :	End

The message on the left will appear.
- You can start table maintenance.

Steps for greasing
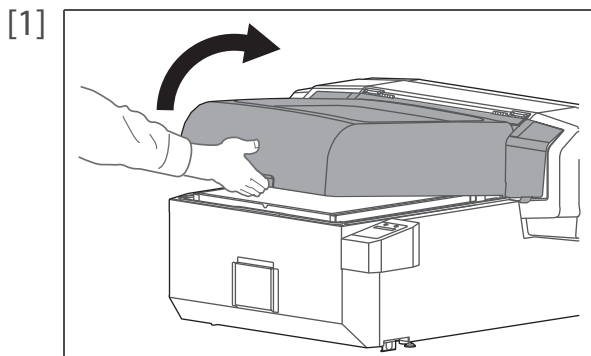
[1]

Hold the handle on the front cover to gently open it.

• Fully open the front cover.

[2]
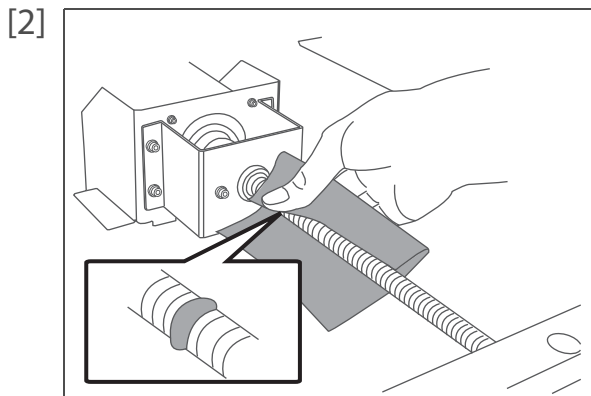
Use the paper towel supplied with the printer to lightly wipe off grease built up on the screw shaft as shown in figure left.

[3]

Apply approximately 5 mm of lubricating grease on the cleaning stick.

[4]
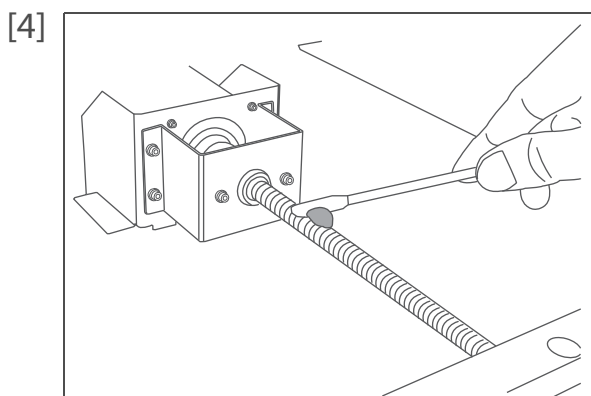
Apply the grease on the screw shaft.

• Apply it on the area where the grease was built up in Step 4.

[5]
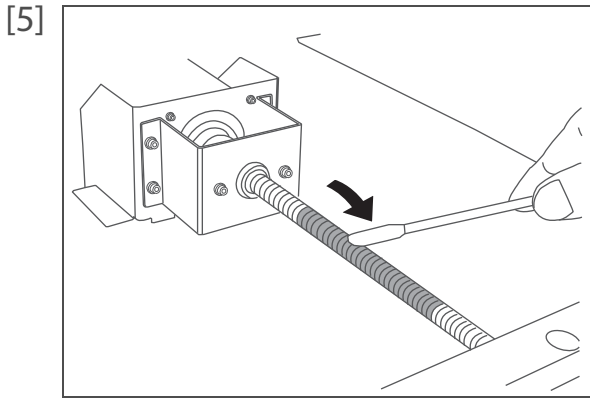
Apply it evenly on the screw shaft.

- Using the cleaning stick, apply it towards the front to evenly grease on the screw shaft.

After greasing
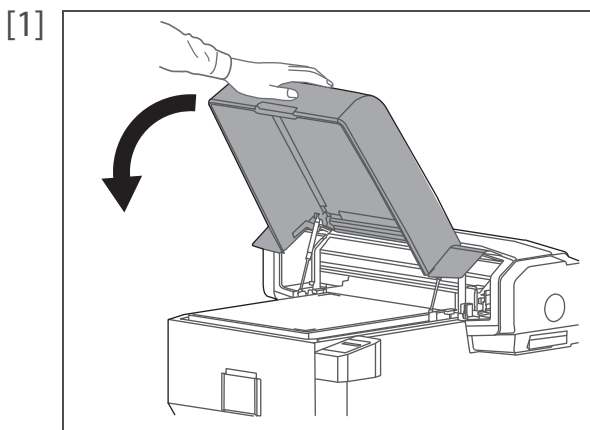
[1]
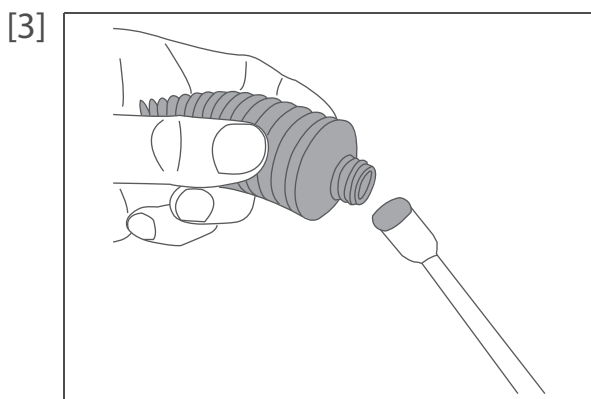

Close the front cover slowly, holding it by the place shown in the picture.

[2]

Table Maint. :	End
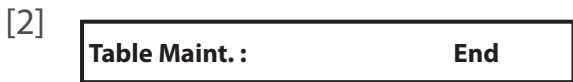
Press the [Enter] key.

- The table moves up and down to smooth out the grease on the shaft.
- The table moves to the original position.

[3]

Set Media, then

press Set Media key.
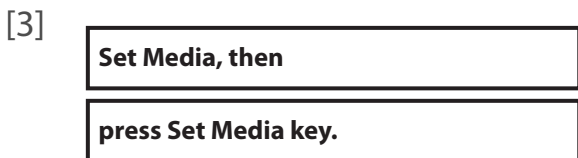
The message on the left will appear.

- That ends the procedure.

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 ink clumps have accumulated on the flushing-box sponges beyond the flushing-box frame. (since it differs depending on usage frequency, please check periodically)

⚠ CAUTION

Skin or eye contact with UV curable ink may cause skin inflammation or allergic reaction.
For this operation, be sure to wear the supplied gloves (or solvent resistant gloves) and goggles to prevent ink from contacting with your eyes or skin.

Do not open or close the cover while you are off balance.
You may pinch your finger or get injured.

1. Checking steps
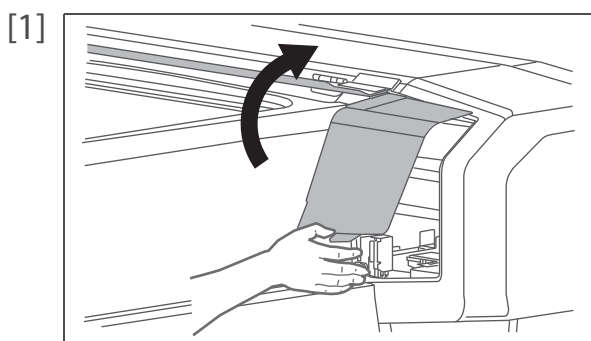
[1]

Hold the tab on the maintenance cover as shown on the left to gently open the cover.

- Fully open the maintenance cover.

⚠ CAUTION

Always fully open the maintenance cover.
If you leave it half-open, the maintenance cover can suddenly close.

[2]

Time to replace

- Check the absorption material for the flushing box.
- If the ink deposit is visible on the flushing box, replace the absorption material.

[3] Hold the tab on the maintenance cover as shown on the left to gently close the cover.

⚠ CAUTION

When closing the maintenance cover, hold the tab on the maintenance cover to gently close it.
Do not place your fingers on the edges of the printer's opening portion, or on any parts around those edges. Your fingers could get caught and be injured.

2. Replacing steps

[1] Check that no object including a jig is loaded on the table.
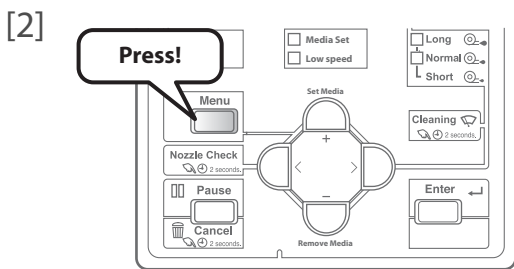
[2] Press the [Menu] key.

[3]

Menu 3 :	Maintenance >

• Press the [-] key until "Menu 3: Maintenance >" appears.
• Press the [>] key.

[4]

Mnt. 3 :	CR Maintenance

• Press the [-] key until "Mnt.3: CR Maintenance" appears.
• Press the [Enter] key.

[5]

CR Maint. :	Start

Press the [Enter] key.
• The carriage moves to the center of the printer.
• The cleaning wiper moves upward.

CR Maint. :	End

The message on the left will appear.

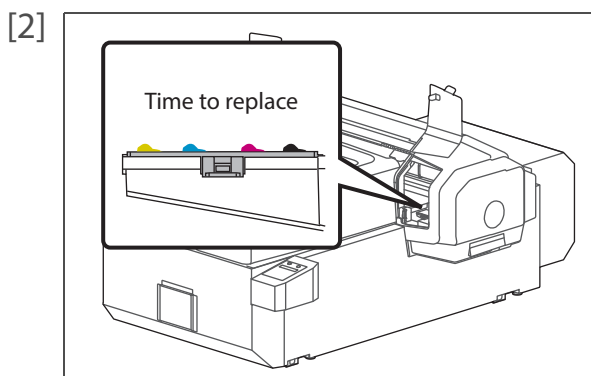[6] Hold the tab on the maintenance cover as shown on the left to gently open the cover.
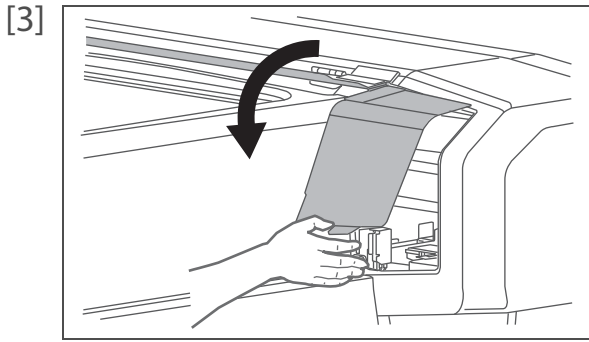• Fully open the maintenance cover.

⚠ CAUTION

🛑 **Always fully open the maintenance cover.**
If you leave it half-open, the maintenance cover can suddenly close.

[7]

Remove the absorption material for the flushing box.

- Pull the tab up of the absorption material for the flushing box, and release the hook.

📨 **Important!**

When removing the absorption material for the flushing box, be cautious of ink drops.

[8]
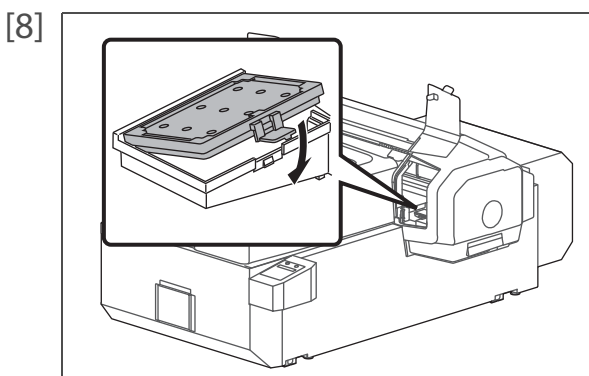
Attach new absorption material for the flushing box.
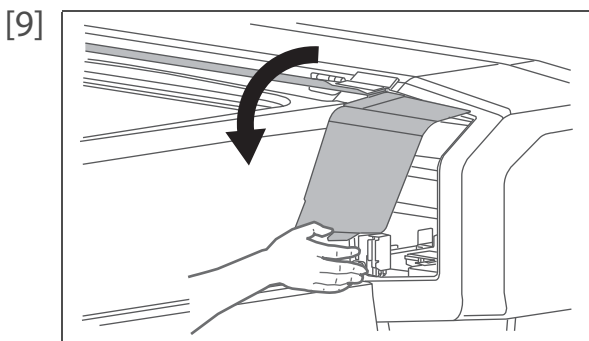
[9]

Hold the tab on the maintenance cover as shown on the left to gently close the cover.

⚠ CAUTION

🛑 **When closing the maintenance cover, hold the tab on the maintenance cover to gently close it.**
Do not place your fingers on the edges of the printer's opening portion, or on any parts around those edges. Your fingers could get caught and be injured.

[10]

```
CR Maint. :                    End
```

Press the [Enter] key.

```
CR Maint. :                    Start
```

- The message on the left will appear.
- That ends the procedure.

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

> **Note**
>
> If a non-replaceable wiper is installed on your printer (as shown in the illustration left below), you cannot replace it by yourself.
>
> - For replacement, contact your local Mutoh dealer.

Non-replaceable wiper
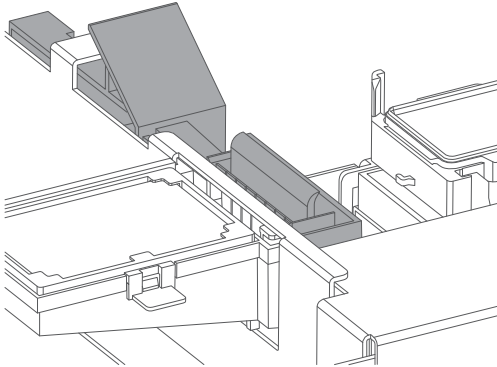
Replaceable wiper

⚠ **CAUTION**

🚫 **Skin or eye contact with UV curable ink may cause skin inflammation or allergic reaction.**
For this operation, be sure to wear the supplied gloves (or solvent resistant gloves) and goggles to prevent ink from contacting with your eyes or skin.

🚫 **Do not open or close the cover while you are off balance.**
You may pinch your finger or get injured.

Replacing steps

[1]   Check that no object including a jig is loaded on the table.

[2]

Press the [Menu] key.

[3]
Menu 3 :	Maintenance >

- Press the [-] key until "Menu 3: Maintenance >" appears.
- Press the [>] key.

[4]
Mnt. 3 :	CR Maintenance

- Press the [-] key until "Mnt.3: CR Maintenance" appears.
- Press the [Enter] key.

[5]

CR Maint. :	Start

Press the [Enter] key.

- The carriage moves to the center of the printer.
- The cleaning wiper moves upward.

The message on the left will appear.

CR Maint. :	End

[6]

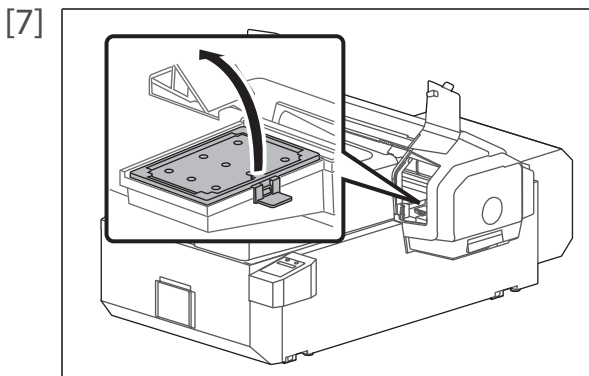Hold the tab on the maintenance cover as shown on the left to gently open the cover.

- Fully open the maintenance cover.

⚠ CAUTION

🛇 **Always fully open the maintenance cover.**
If you leave it half-open, the maintenance cover can suddenly close.

[7]   Remove the cleaning wiper.

- Lift the cleaning wiper hook and release the hook. Then, remove the cleaning wiper.
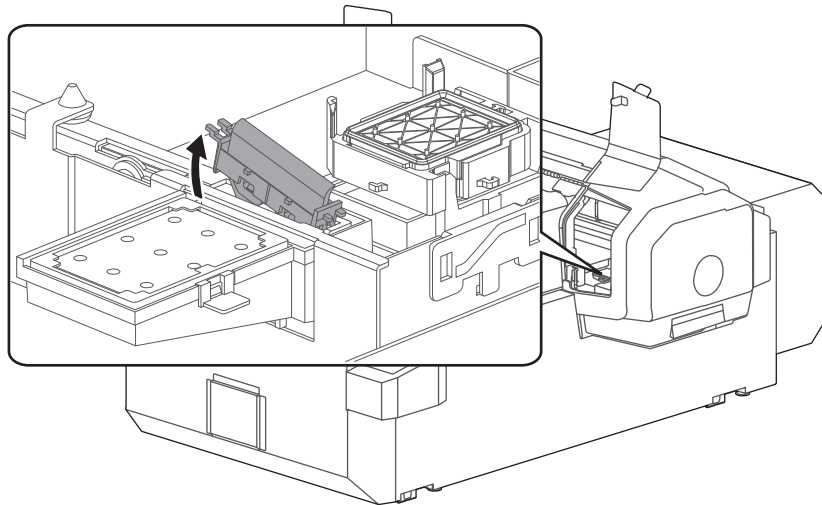
📩 **Important!**

When removing the cleaning wiper, be cautious of ink drops.

[8]
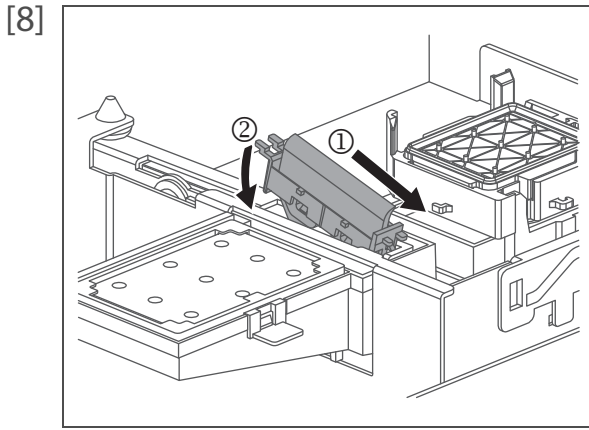
Follow the steps below to install new cleaning wiper.

- 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.
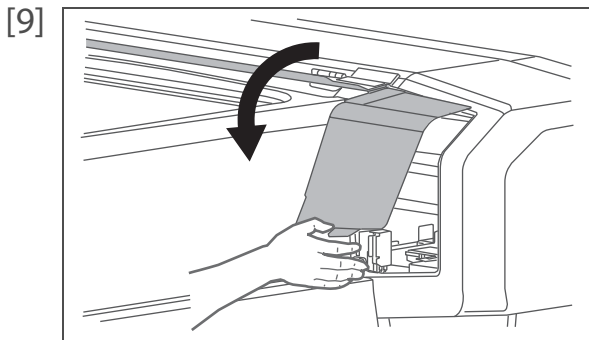
[9]

Hold the tab on the maintenance cover as shown on the left to gently close the cover.

⚠ **CAUTION**

🚫 **When closing the maintenance cover, hold the tab on the maintenance cover to gently close it.**
Do not place your fingers on the edges of the printer's opening portion, or on any parts around those edges. Your fingers could get caught and be injured.

[10]

CR Maint. :	End

Press the [Enter] key.

CR Maint. :	Start

- The message on the left will appear.
- That ends the procedure.

Moving and Transporting

Please refer to this section when moving or transporting this printer.

⚠ CAUTION

🛇
- **This procedure requires four or more people.**
- **Keep this printer level when moving it.**

📣 **Important!**

- **When moving this printer, always empty the waste ink tank even moving short distance.**
  If ink splashes inside the waste ink tank while being moved, it can cause damage.
- **Do not tilt, set against something or place this printer upside down.**
  Otherwise the ink may leak or the handling mentioned above may cause abnormality.

Moving the printer

When moving this printer, it is necessary to empty the waste ink tank.
Moving without emptying the tank can cause ink leakage.

After moving, reinstall the printer.

1. Preparation before moving

[1]   Empty the waste ink tank.
        ☞"Emptying waste ink tank" on page 96

[2]   Reset the waste ink counter.
        ☞"Resetting waste ink counter" on page 98

[3]   Turn the printer OFF, then remove all the cables from the printer.

[4]   Move the printer.

2. Installation after moving
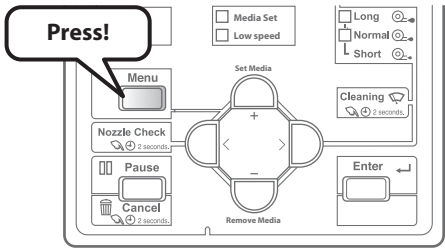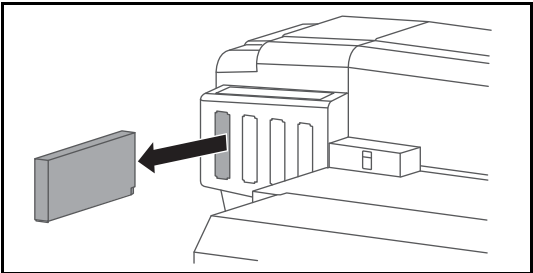
[1]   Select a suitable place for installation.
        ☞ "Startup Guide"

[2]   Plug cables into the printer.

[3]   Move the printer to the installation area and level the printer.
        ☞ "Startup Guide"

[4]   Perform Nozzle check, and then check that there is no clogging in Print head.
        ☞"Nozzle check and cleaning" on page 37

Transporting the printer

When transporting this printer, it is necessary to empty the waste ink tank. and fixate the print head and the table with packaging material. If transported without these steps, it can cause ink leakage and damage to the print head.

To use the printer again, reinstall the printer and perform initial charging.

1. Discharging the ink in the printer and waste ink

[1]   Press the [Menu] key.

[2]

Menu 3 :	Maintenance >

- Press the [-] key until "Menu 3: Maintenance >" appears.
- Press the [>] key.

[3]

Mnt.5 :	Ink Discharge

- Press the [-] key until "Mnt.5: Ink Discharge" appears.
- Press the [Enter] key.

[4]

Ink Discharge :	Start

Press the [Enter] key.

[5]

Empty WasteInk	- > E

When the message on the left appears, transfer the waste fluid into a container.

☞"Drain waste fluid into container" on page 97 under "Emptying waste ink tank"

[6]

Remove Cartridges

- Press the [Enter] key.
- The message on the left will appear.

[7]   Remove the cartridges from all the cartridge slots.

During discharge	**%

The message on the left will appear.
- Discharging the ink will start.

[8]

[123456]	No Cartridge

No Cartridge	××××××

When the message on the left appears, transfer the waste fluid into a container.

☞"Drain waste fluid into container" on page 97 under "Emptying waste ink tank"

[9] Reset the waste ink counter.
☞"Resetting waste ink counter" on page 98

2. Changing Table Position for Packing

[1]
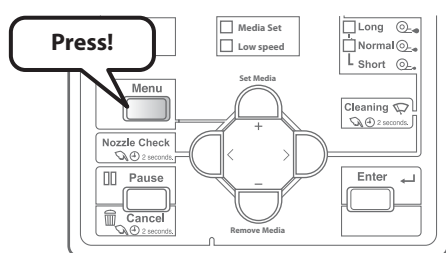
Press!

Menu

Nozzle Check
2 seconds

Pause

Cancel
2 seconds

Media Set
Low speed

Set Media

Remove Media

Long
Normal
Short

Cleaning
2 seconds

Enter

Press the [Menu] key.

[2]

Menu 3 :	Maintenance >

- Press the [-] key until "Menu 3: Maintenance >" appears.
- Press the [>] key.

[3]

Mnt.7 :	Moving Printer

- Press the [-] key until "Mnt.7: Moving Printer" appears.
- Press the [Enter] key.

[4]

Execute Menu ?	No

The message on the left will appear.
- Press the [-] key.

[5]

Execute Menu ?	Yes

The message on the left will appear.
- Press the [Enter] key.

[6]

Wait for a while

The message on the left will appear.
- The table moves to the front side of the printer.

[7]

Remove Media	-> Enter

The message on the left will appear.
- Remove the media and the jig on the table, and then press the [Enter] key.

[8]

Wait for a while

The message on the left will appear.
- The table moves to the position to secure with shipping brackets.

[9]

Power Off Printer

The message on the left will appear.
- Press the power button to turn OFF the printer.

⚠ **CAUTION**

🚫 **Do not open or close the cover while you are off balance.**
You may pinch your finger or get injured.

❗ **Hold the handle of the front cover and gently open or close the cover.**
If excessive force is applied to the cover, it will shorten its life or will damage to the printer.

[1]　Remove all cables like power cable.
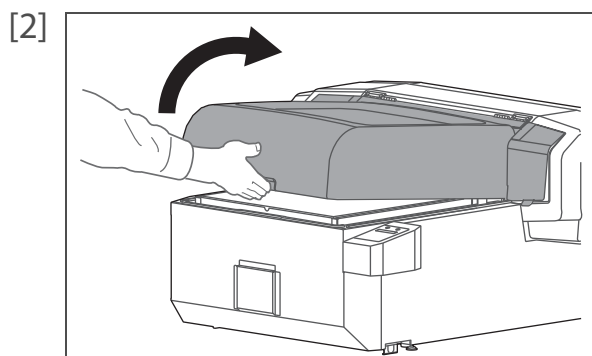
[2]

Hold the handle on the front cover to gently open it.

- Fully open the front cover.

[3]
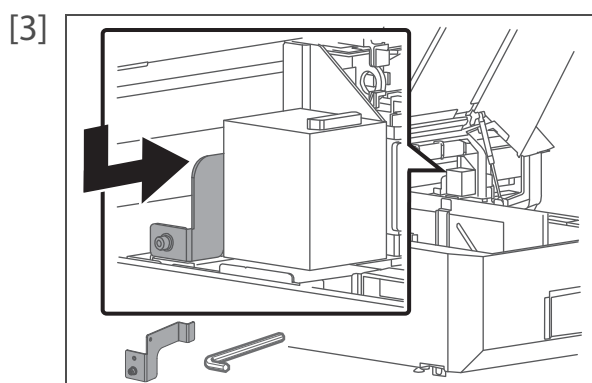
Attach the head fixing plate with screws.

- Slide the head fixing plate leftward to attach it.
- Use the hexagon wrench supplied with the printer.

📢 **Important!**

Attach the head fixing plate carefully, so that it does not scratch any of the surrounding parts.If they are scratched, the print quality could drop.

[4]
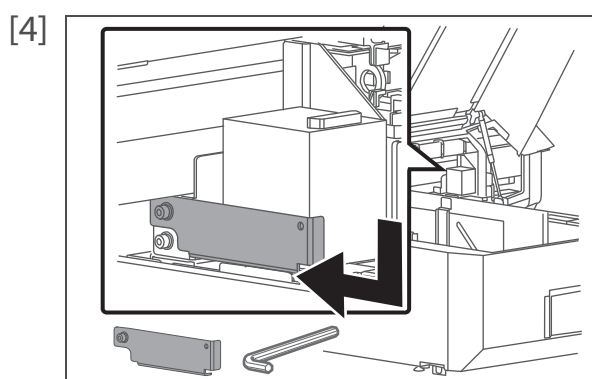
Attach the UV-LED lamp fixing plate with screws.

- Slide the UV lamp fixing plate in from the front side of the printer until it reaches to the head fixing plate.
- Use the hexagon wrench supplied with the printer.

📢 **Important!**

Attach the UV-LED lamp fixing plate carefully, so that it does not scratch any of the surrounding parts.If they are scratched, the print quality could drop.

[5]
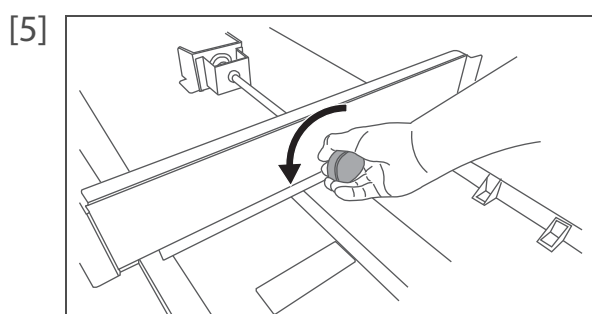
Turn the handle half rotation anticlockwise.

- It lowers the table.

📢 **Important!**

**DO NOT turn the handle too much.
It can cause damage to the printer.**
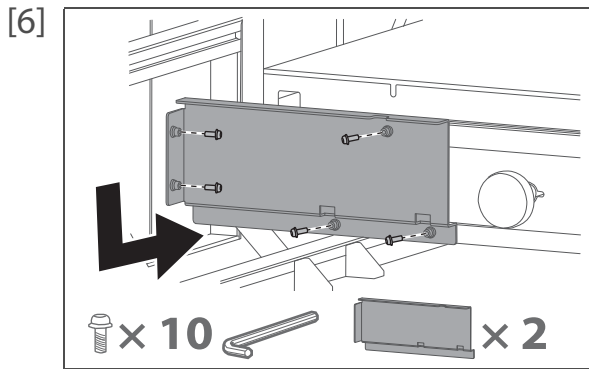
[6]

Attach two table fixing plate with screws.
• Use the hexagon wrench supplied with the printer.

🔩× 10 ⌐ ▭ × 2

[7]

Attach two table fixing plate with screws.
• Use the hexagon wrench supplied with the printer.

🔩× 8 ⌐ ▮ × 2

[8]
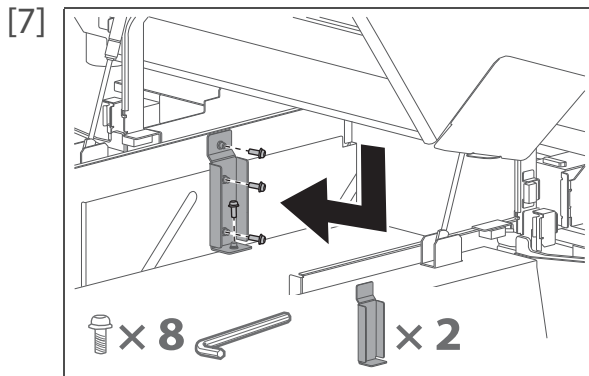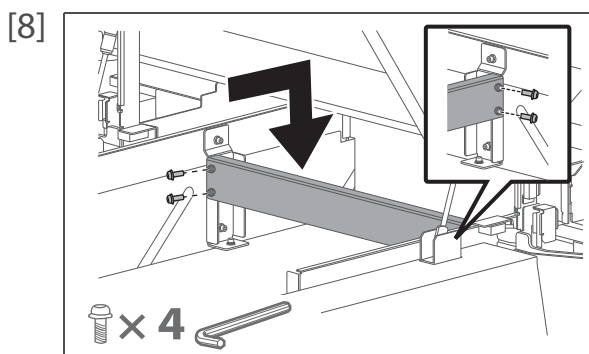
Attach the support brace between table fixing plates with screws.
• Use the hexagon wrench supplied with the printer.

🔩× 4 ⌐

[9]
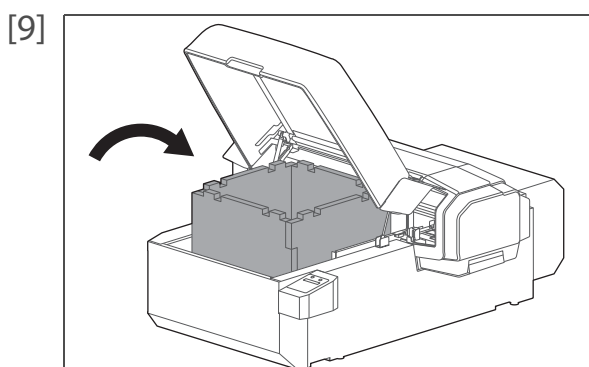
Put the protective material on the table.

[10]

Hold the position shown on the left and gently close the cover.

[11]
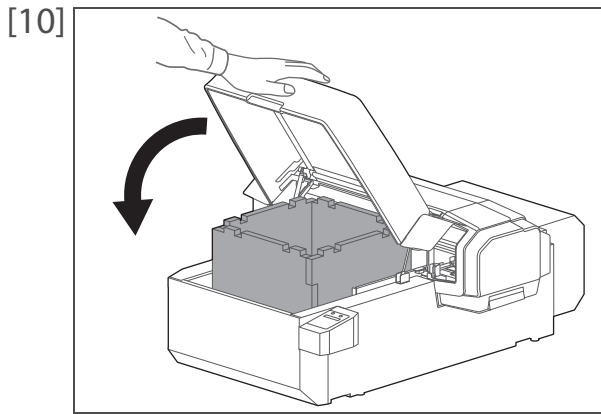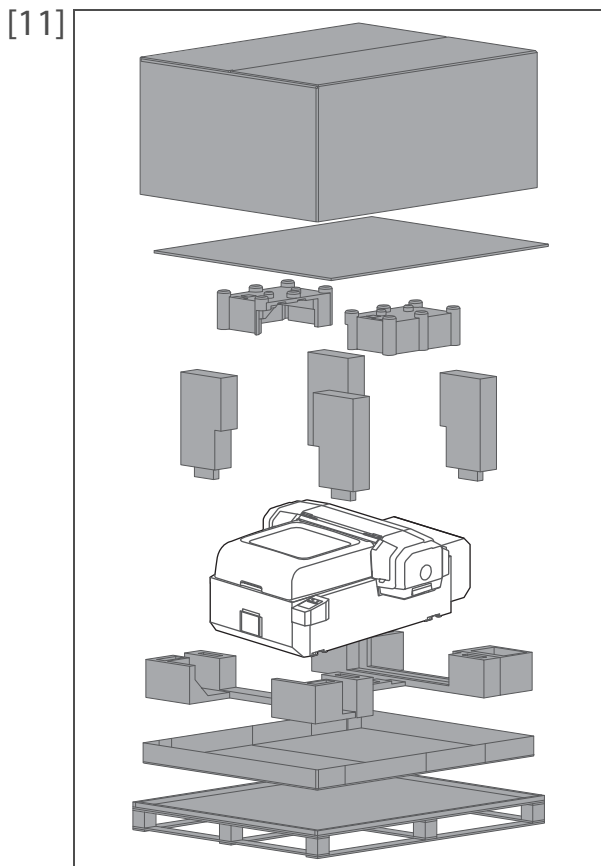
Attach protection materials, and place the printer inside the package box.

4. Reinstalling

[1]   Referring to "Startup Guide", unpack the printer and assemble.
- Conduct up to "Leveling Printer".

[2]   Carry out initial ink charging after ink discharge.
☞"How to perform initial ink charging after ink discharge" on page 128

How to perform initial ink charging after ink discharge

[1]
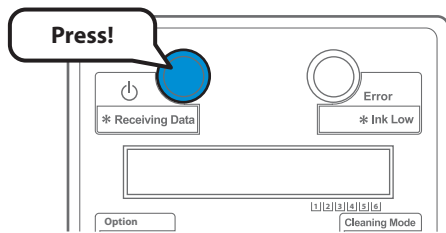
Turn the power button of this printer ON.
- Blue light turns on.
- The printer starts initialization operations.

[2]

Start Ink Charge	- > E

Press the "Enter" key when the message on the left appears.

[3]

Empty WasteInk	- > E

When the message on the left appears, empty the waste ink tank.
☞"Drain waste fluid into container" on page 97

[4]

Insert InkCartridges

- Press the [Enter] key.
- The message on the left will appear.

[5]
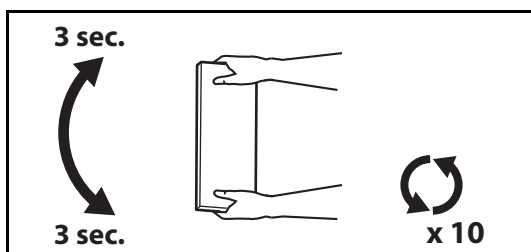
3 sec.

3 sec.

x 10

Make sure you agitate the ink cartridge after you unpack it.
- Turn the ink plug upward and wait for three seconds.
- Next, turn the ink plug downward and wait for three seconds.
- Repeat that 10 times.

✎ **Note**

You do not have to agitate varnish ink before use.

[6]

slot 1 **K**
slot 1 **M**
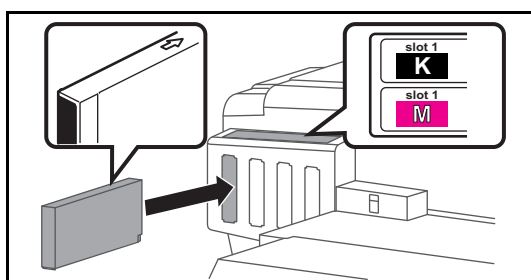
Insert ink cartridge to this printer.
- Match the label of this printer to the color of ink cartridge.
- The arrow should face up.
- Insert all the way to the end.

◀ **Important!**

Load the same ink color configuration as before.

Ink Charge	**%

The message on the left will appear.
- This printer starts ink charging.

⚠ **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.**

Set Media, then

press Set Media key.

When ink charging is complete, the message on the left will appear.

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 printer is operating correctly, each operation status is displayed on the operation panel as below.

Display	Description
Activation required	Activation has not been executed. Consult the relevant section of the Startup Guide, and carry out activation. ☞ "Step1 Carrying out activation" of the "Startup Guide" on page P.29
Ready to Print	Standby (Media is loaded).
Set media, then press Set Media Key	Standby (Media is not loaded).
Receiving	Receiving data.
Converting	Analyzing data.
Printing	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.
PrintRestart->Enter	Printing is paused. To resume, press the [Enter] key.
Power Off	Turning OFF the printer. Wait for a while.
S/C Reading	Reading the S/C card.
Ink Circulation	Ink is circulating inside the printer.
*** Remote Mode ***	The remote panel mode is running, via VSM or similar. In the remote panel mode, operations via the operation panel are not possible. To terminate the remote panel mode, press the [Cancel] key for more than two seconds.
Start Ink Charge ->E	Ink charging starts. Please wait a while.
Insert CleaningCart.	Washing Print head. Install the cleaning cartridges.
Busy-Washing **%	• Initial charging, ejecting filler fluid. • Washing the print head by cleaning fluid. Please wait a while.
Remove Cartridges	Washing Print head or discharging ink. Remove the cartridges.
Insert Ink Cartridges	Charging the ink. Insert Ink Cartridges
Ink Refill **%	Charging the ink. Please wait a while.
Discharging	Discharging the Ink. Please wait a while.

Display	Description
Empty WasteInk ->E	Transfer the waste fluid from the waste ink tank into a container, and press the [Enter] key. ☞"Emptying waste ink tank" on page 96
Perform Daily Maint.	Make sure to perform daily maintenance when prompted. ☞"Clean daily maintenance parts" on page 109

Error message display and possible solutions

This section describes error messages and possible solutions.
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 operation panel and stop operation.

Display	Description
Cover Open	The front cover is open. Close the front cover.
Maint. Cover Open	The maintenance cover is open. Close the maintenance cover.
[******] Ink End	Ink has run out. (Stops operation) Replace with a new ink cartridge. ☞"Replacing ink cartridge" on page 95
[******] NoCartridge	Ink cartridge is not inserted. (Stops operation) Insert Ink cartridge.
[*******] Discharged	Ink is not filled. Perform initial ink charging. ☞"How to perform initial ink charging after ink discharge" on page 128
Full WasteInkTank	The waste ink tank has become full. (Operation will stop when this happens.) Immediately transfer the waste fluid into a container. ☞"Emptying waste ink tank" on page 96
NearFullWasteInkTank	The waste ink tank is about to become full. (Operation will continue in this condition.) Transfer the waste fluid into a container. ☞"Emptying waste ink tank" on page 96
[*] Ink Low	Slot * ink is low. Get a replacement cartridge ready.
[******] S/C ReadErr	Reading S/C Card has been failed. Insert ink cartridge again. If S/C Card still cannot be read, insert new ink cartridge.
[******] S/C Col.Err	Ink cartridges are inserted in wrong slots. Insert ink cartridges correctly again.
[*] S/C Ink Err	The ink cartridge cannot be used for this printer. Contact your local MUTOH dealer.
[*] S/C CodeErr	Inserted ink cartridge is not a proper one. Contact your local MUTOH dealer.
[*] Broken Chip	S/C Card has been broken.Insert new ink cartridge.

Display	Description
[******] Check Ink	Ink cartridges were not recognized correctly. Insert ink cartridges correctly again. Contact your local MUTOH dealer.
[*] Reseat Ink	Because the Smart chip card is poor in contact, the reinsertion of the ink cartridge is necessary. Reseat all the ink cartridges.
Daily Maint. Error	An obstacle has been detected. Press any key on the operation panel. Remove any object including a jig from the table and then perform daily maintenance.
Obstacle detected Press Remove Media Key.	An obstacle has been detected. Press the [Remove Media] key, and reset the media in place. ☞"Loading media" on page 32
Table Height Error Press Remove Media Key.	The printer cannot lower the table any further as specified by RIP software, and will cancel the printing.
Obst. - > Print Cancel	An obstacle has been detected. Press the [Enter] key to cancel the job.
Obst. - > PrintContinue	An obstacle has been detected. Press the [Enter] key to resume the job without changing the table height.
Err! Reboot Printer	Activation has failed. Restart the printer and activate the printer again.
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.
Life Times [PG Motor]	The operational life of the PG motor has almost expired. (Continues operation) Contact your local MUTOH dealer.
Life Times [C Pump]	The operational life of Circulation pump motor is almost expired. (Continues operation) Contact your local MUTOH dealer.
Life Times [UV Lamp]	The operational life of UV LED has almost expired. (The operation continues.) Contact your local MUTOH dealer.
Shake W Cartridge	Agitate the White (Wh) ink cartridge.
Shake KMCY Cartridge	Agitate the Black (K), Magenta (M), Cyan (C), and Yellow (Y) ink cartridges.
Shake KMCYW Cartridge	Agitate the Black (K), Magenta (M), Cyan (C), Yellow (Y), and White (Wh) ink cartridges.
Shake ALL Cartridge	Agitate all ink cartridges. Agitate the Black (K), Magenta (M), Cyan (C), and Yellow (Y) ink cartridges.

Display	Description
Life Warning [CPump]	You must replace the Circulation Pump. Please contact your Mutoh dealer to replace the Circulation-Pump. If you want to stop the beep and continue printing, follow these steps. 1. Press the [Enter] or [Cancel] key to stop the beep. 2. The message "MaintenanceCall?" appears on the operation panel. Use the [+]/[-]key to select [Yes] or [No]. 3. Press the [Enter] key. • When [Yes] is selected, the message "Ready To Print" will appear on the operation panel. You can continue printer operation. • When [No] is selected, the message "Printer Stop Shortly" will appear on the operation panel. Go to Step 4. 4. Press the [Enter] key. The message "Ready To Print" appears on the operation panel.
Replace [CPump]	The Circulation Pump reached the end of the life cycle. You cannot operate the printer from the operation panel until replacing the pump. 1. Press the [Enter] or [Cancel] key to stop the beep. 2. Contact your dealer immediately to replace the Circulation-Pump. • In this stage, the automatic ink maintenance will no longer work. The printer performance after the replacement cannot be guaranteed.

> **Note**
>
> • The color inside [*******] in the error display represents the ink color with a problem.
>
> • If no ink and no cartridge occur at the same time, no cartridge 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 LED lights on the operation panel blink and the printer beeps continuously.

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

Pressing any key on the operation 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 message is repeatedly 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
Emergency Mode: E ***	A problem that does not have a remedy has occurred. 1. Check if the replaced parts are installed correctly. 2. Turn the power button off. Wait a short while, then turn the power button on, to restart the printer.
Emergency Mode: AC	The power was shut down instantaneously while the printer is operating. 1. Turn the power button off. Wait a short while, then turn the power button on, to restart the printer.
Emergency Mode: CPU	CPU error occurred. 1. 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.

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 VSM.
>   If your printer is not operating correctly, check this Status Information first.
>
> - Make sure to use the latest version of VSM.
>   To check the latest available version, go to Help > Version > Check for updates on VSM.
>   If old version is installed in your computer, download the latest version from ValueJet Club.
>   ☞ ValueJet Status Monitor Operation Manual

Installation and initial setup troubleshooting

Cannot perform the initial ink charging.

Is the front cover, or the maintenance cover open?
- Close the front cover, or the maintenance cover.

Are ink cartridges inserted all the way into the printer?
- Make sure that all ink cartridges are correctly seated.

Ink does not come out after ink charging.

Is the ink cartridge too cold?
- Leave the ink cartridge at room temperature for at least three hours, and perform cleaning several times.

Is the power turned OFF during ink charging?
-Turn the power ON again and continue ink charging.

Nozzle missing occurs after initial ink charging.

Did you perform head cleaning?
- Perform cleaning or "LittleCharge", then, check the nozzle check print.
- If the cleaning does not help, leave the printer unused for an hour or more. Then perform cleaning or "LittleCharge" again and check the nozzle check print.
- If the problem still persists, contact your local Mutoh dealer.

☞"Head cleaning" on page 107

VSM or RIP cannot access to the 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.

☞"Initial 4: IP Address" on page 77, "Initial 5:Subnet Mask" on page 77, "Initial 6: Gateway" on page 78

Boot-up troubleshooting

Does not work at all after 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 there any error message displayed on VSM? - Go to the Printer Status tab in VSM and check that if any error message is displayed in the Status Information.
	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" on page P.5

Media-related troubleshooting

<table>
<tr>
<td rowspan="4">The printer does not detect the media.</td>
<td>Is any media or jig present on the obstacle detection area?

- DO NOT place any objects around obstacle detection area.
  Otherwise, it will cause false detection of the obstacle sensor and the printer may
  not be able to print correctly.</td>
</tr>
<tr>
<td>Do you use transparency or low opacity media?

- The sensor may not detect those media. Make sure that the sensor correctly detects
  the media being used.</td>
</tr>
<tr>
<td>Do you use textured media or uneven media?

- The sensor detects the highest position on the media as media surface.
  The printer may not be able to print properly.</td>
</tr>
<tr>
<td>Do you use the media with uneven or curved bottom surface?

- The laser light will not be blocked by the rear edge of media so that the printer may not
  be able to optimize the table height.</td>
</tr>
<tr>
<td rowspan="5">Print head strikes media while printing.</td>
<td>Is the media loaded correctly?

- Load the media correctly.</td>
</tr>
<tr>
<td>Is any wrinkles present on the media?

- Smooth out the media to sit flat on the table.</td>
</tr>
<tr>
<td>Is warp, fold or curl present on your media?

- Follow the instructions in "Cautions for handling media" on page 24.

- If media does not sit flat on the table, secure it on the table using a thin tape to avoid
  any warps.</td>
</tr>
<tr>
<td>Did you select an appropriate vacuum fan setting?

- If media warps, change the vacuum fan setting higher to reduce the chance of warp.

- If it does not help, cover the vacuum holes around the media with papers to increase
  suction power.</td>
</tr>
<tr>
<td>Is there any curls on the media while printing?

- While printing, media may curl by UV lamp or ink curing.
  Use heat-resistant media or use a jig to prevent curls.</td>
</tr>
</table>

☞"Printing area" on page 31, "Requirements for usable media" on page 24, "Loading media" on page 32, "Cautions for handling media" on page 24, "**>4: Vacuum Fan" on page 66

Table-related troubleshooting

Noise occurs while the table moves up and down.
/ Table does not move and noise is present.

<table>
<tr><td>Do you perform table maintenance as instructed?

- Apply lubricating grease on the table screw shaft.

📝 **Note**
  Perform this maintenance once a month.</td></tr>
<tr><td>Did you place a small and heavy media or jig on either end of the table?

- If you are using those items, place it as close to the center of the table as possible.</td></tr>
<tr><td>Do items on the table exceed 6 kg?

- The maximum weight on the table is 6 kg.
  Remove items on the table and reboot the printer.

- If the problem still persists, please contact your local Mutoh dealer.</td></tr>
</table>

Printing-related troubleshooting

The printer does not print.

<table>
<tr><td>Is Ethernet cable connected correctly?

- Securely connect the Ethernet cable to the Ethernet Port.</td></tr>
<tr><td>Is there any error message displayed on VSM?

- Go to the Printer Status tab in VSM and check that if any error message is displayed in the Status Information.</td></tr>
</table>

Smears constantly appear on the print and noise occurs.

<table>
<tr><td>Is an obstacle or dirt present on the table rail?

- Check on the table rail and clean it.

- If noise still persists, please contact your local Mutoh dealer.</td></tr>
</table>

The printing position is incorrect (some parts of the media cannot be printed on).

<table>
<tr><td>Is the media loaded on the correct position?

- Go to the Show Edges menu to check the printing area by LED pointer.</td></tr>
<tr><td>Did the printer start printing from the correct position?

- Go to the Show Edges menu to check the print start position by LED pointer.</td></tr>
</table>

📝 **Note**

To check the printing area before printing, go to "**>7: Show Edges" and select "Step" or "Auto".

Printer doesn't expectedly print (ink mottle, ink bleed or faint print appears)

Is the media loaded correctly? - Load the media correctly.
Are Nozzles in good condition? - Perform Nozzle check. Then if nozzle missing is found, conduct head cleaning. - Perform Daily Maintenance. - The problem still persists, perform "LittleCharge".
Did you perform the table height calibration? - Go to "Mnt.6: Calibration" to perform table height calibration. It can help to improve print quality.
Did you perform Print quality adjustment? - Perform Print quality adjustment.
Did you perform Media feed adjustment? - Perform Media feed adjustment.
Did you select an appropriate vacuum fan setting? - Try lowering the vacuum fan setting. It might improve print quality. 📢 **Important!** When you lower the vacuum fan setting, make sure that your media does not warp.
Is Ink cartridge within the validity period? - Use a non-expired ink cartridge.
Did you agitate ink in the cartridge? - When "Shake XX Cartridge" message appears on the operation panel, agitate ink in the cartridge.

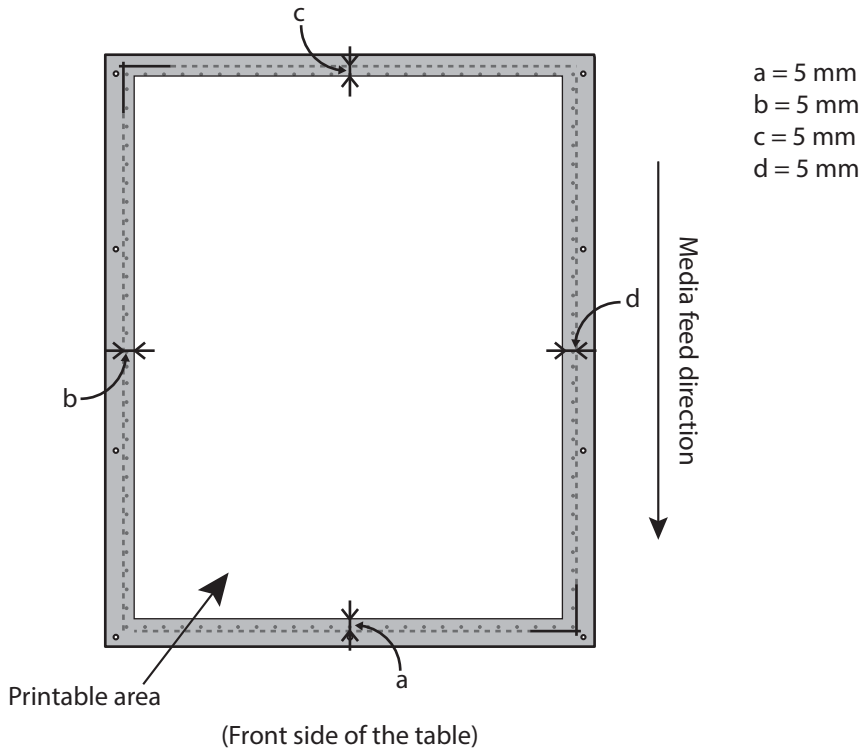| Printed color is not accurate. | Are Nozzles in good condition?

- Perform Nozzle check. Then if nozzle missing is found, conduct head cleaning.

- Perform Daily Maintenance.

- the problem still persists, perform "LittleCharge". |
| | Did you agitate ink in the cartridge?

- When "Shake XX Cartridge" message appears on the operation panel, agitate ink in the cartridge. |
| Nozzle missing remains after head cleaning. | Is there any ink stains or deposits on the cleaning wiper or circumference of the print head?

- Perform head cleaning or "Little Charge" again and check the nozzle check print.

- Perform Daily Maintenance and check the nozzle check print.

- The problem still persists, contact your local Mutoh dealer. |

Important!

Do not use media that are liable to reflect the UV light.
The reflective UV light can cure the ink on the print head.

Specifications of this printer

Printing area

a = 5 mm
b = 5 mm
c = 5 mm
d = 5 mm

Media feed direction

Printable area

(Front side of the table)

List of specifications

Model Name		VJ-626UF
Print method		On demand piezo method
Drive method		Firmware servo/DC motor drive
Paper feed method		Setting on (removing from) the table from the front, with the front cover open
Media hold down method		Vacuum Table
Ink curing device		UV-LED Lamp
Conditions of usable media	Maximum width	483 mm
	Maximum length	594 mm
	Maximum thickness	150 mm
	Weight	up to 6 kg (including jig)
Maximum print width		473 mm
Maximum print length		584 mm
Head height adjustment		Automatic table height control by the obstacle sensor (manual adjustment is also available)
CPU		64 bit RISC CPU
Memory		256 MB
Interface		Ethernet (10/100BASE-TX)
Ink	Color	4 colors (Black, Cyan, Magenta, Yellow)
		6 colors (Black, Cyan, Magenta, Yellow, White, Varnish)
	Type	220 ml cartridge
Waste Ink Tank		Fixed to the body type, capacity 1,400 ml, waste fluid discharge by users
Environmental conditions	Operation environment	Temperature 20 to 32 °C, Humidity 40 to 60% No condensation
	Recommended Printing Environment	Temperature 20 to 32 °C, Humidity 40 to 60% No condensation
	Change rate	Temperature: No more than 2 °C per 1 hour Humidity: No more than 5% per 1 hour
	Environment for storage	Storage without ink charging: up to 6 months Temperature -20 to +60 °C, Humidity 20 to 80%
		Storage with ink charging: up to 30 days [1][2] Temperature 5 to +30 °C, Humidity 20 to 80%
		[1] Perform the Daily Maintenance in the operation manual. [2] Always leave the printer in sleep mode and check the remaining ink level once a week. Agitate white ink in the cartridge once a week as instructed.

Power supply specifications	Voltage	AC 100 V to 240 V ±10%
	Frequency	50/ 60Hz ±1Hz
	Capacity	No less than 4 A
Power consumption	Power off	AC 100 V to 120 V, 2.1 W or below AC 200 V to 240 V, 3.2 W or below
	Operation	300 W or below
Current consumption	100 V to 120 V	4 A or below
	200 V to 240 V	2 A or below
External dimensions	Height	604.3 mm (with stand: 1,254.3 mm)
	Width	1,188 mm
	Depth	1,533.6 mm
Weight	Main body	120 kg
	Stand (option)	21 kg

Options / Supply list

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

Revision History

Date	Version	Manual code	Supported Firmware
2017. 3	00	VJ626UFE-A-00	V.1.00
2017. 4	01	VJ626UFE-A-01	V.1.01
2017. 6	02	VJ626UFE-A-02	V.1.01
2017. 11	03	VJ626UFE-A-03	V.1.02
2018. 2	04	VJ626UFE-A-04	V.1.03
2018. 7	05	VJ626UFE-A-05	V.1.04
2018. 10	06	VJ626UFE-A-06	V.1.04
2019. 3	07	VJ626UFE-A-07	V.1.04 or later

MUTOH