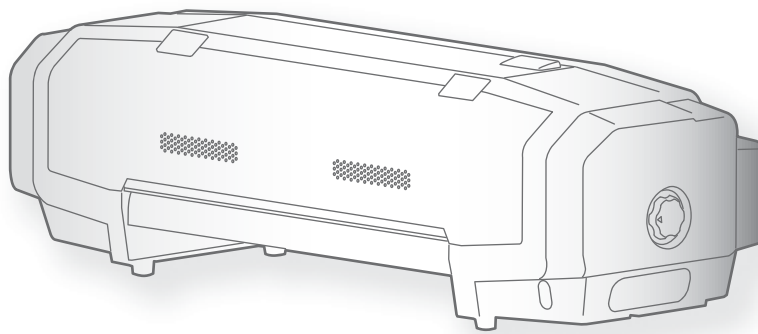


VJ-628/628X

Operation Manual

Operations and Maintenance Methods



-
- Unauthorized copying or duplication of the whole or part of the contents of this manual is prohibited.
 - Every care has been taken in writing the contents of this manual, but please contact MUTOH or the dealer you purchased the product from if you find any unclear, erroneous or otherwise unsatisfactory content in the manual.
 - Please be aware that MUTOH will not be liable in any way for failures or accidents that result from handling or operating the printer according to any procedures other than those set forth in this manual.
 - Company names and product names that appear in this manual are registered trademarks of the respective companies.

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.

Warranty Limitations

- MUTOH INDUSTRIES LTD. warrants part repair or replacement as a sole measure only if a failure is found in the system or in the materials and workmanship of the product the seller produced.
However, if the cause of failure is uncertain, decide the action after due mutual consultation.
- The warranty shall not apply to any direct or indirect loss, or compensation for the loss due to the product that has been subject to misuse, neglect, or improper alternation.

Screens for the software used in this manual

Screens displayed and functions for each software (applications and printer drivers) may differ depending on the printer model you are using. Screens used here are for VJ-628, unless otherwise specified.

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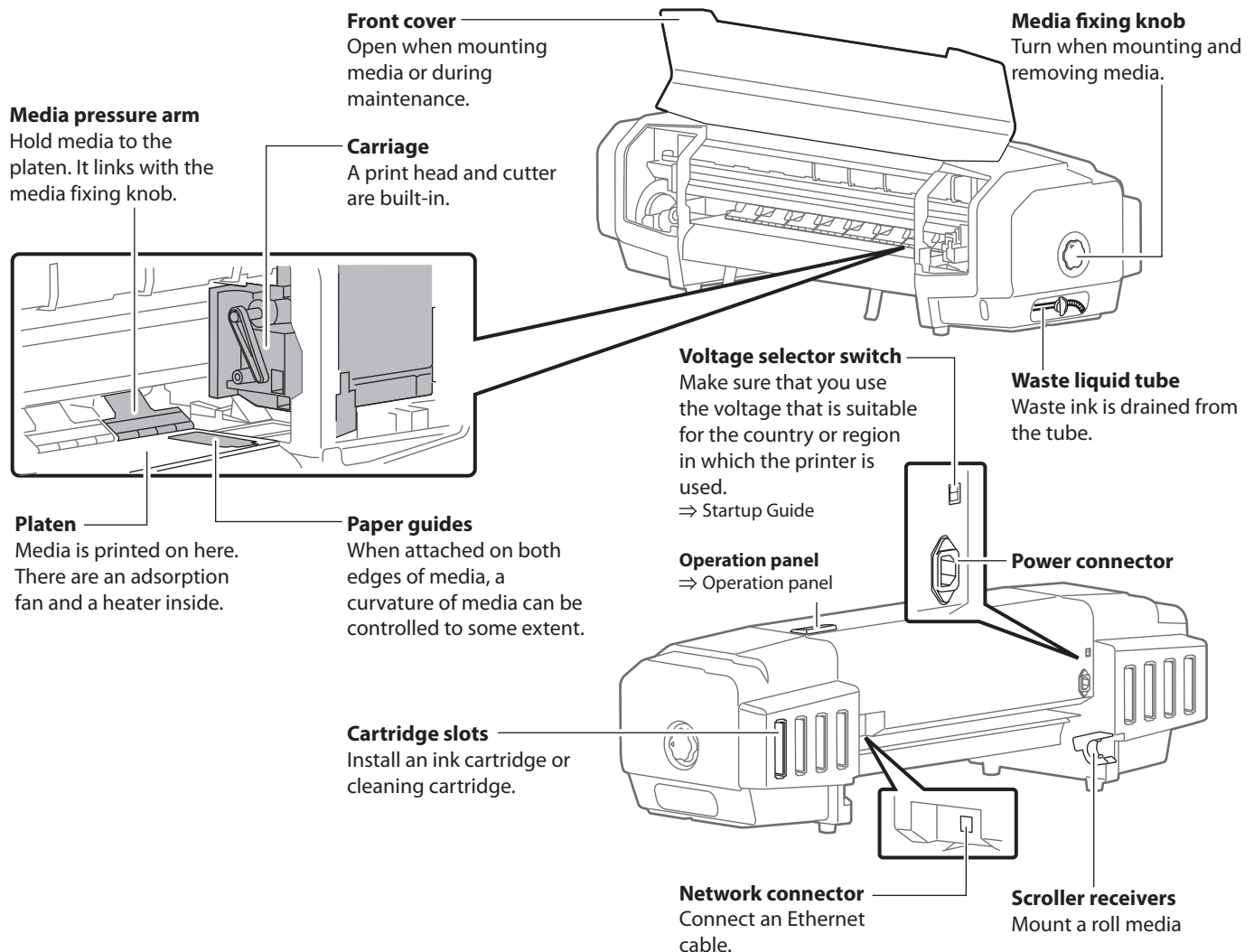
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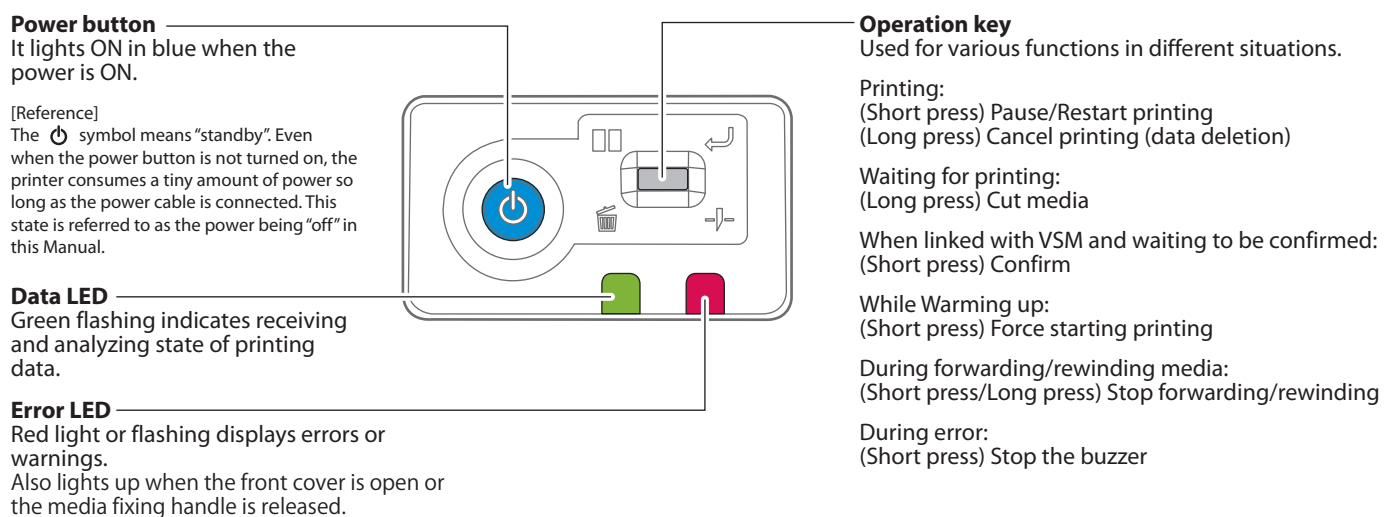
Introduction

Name of each part

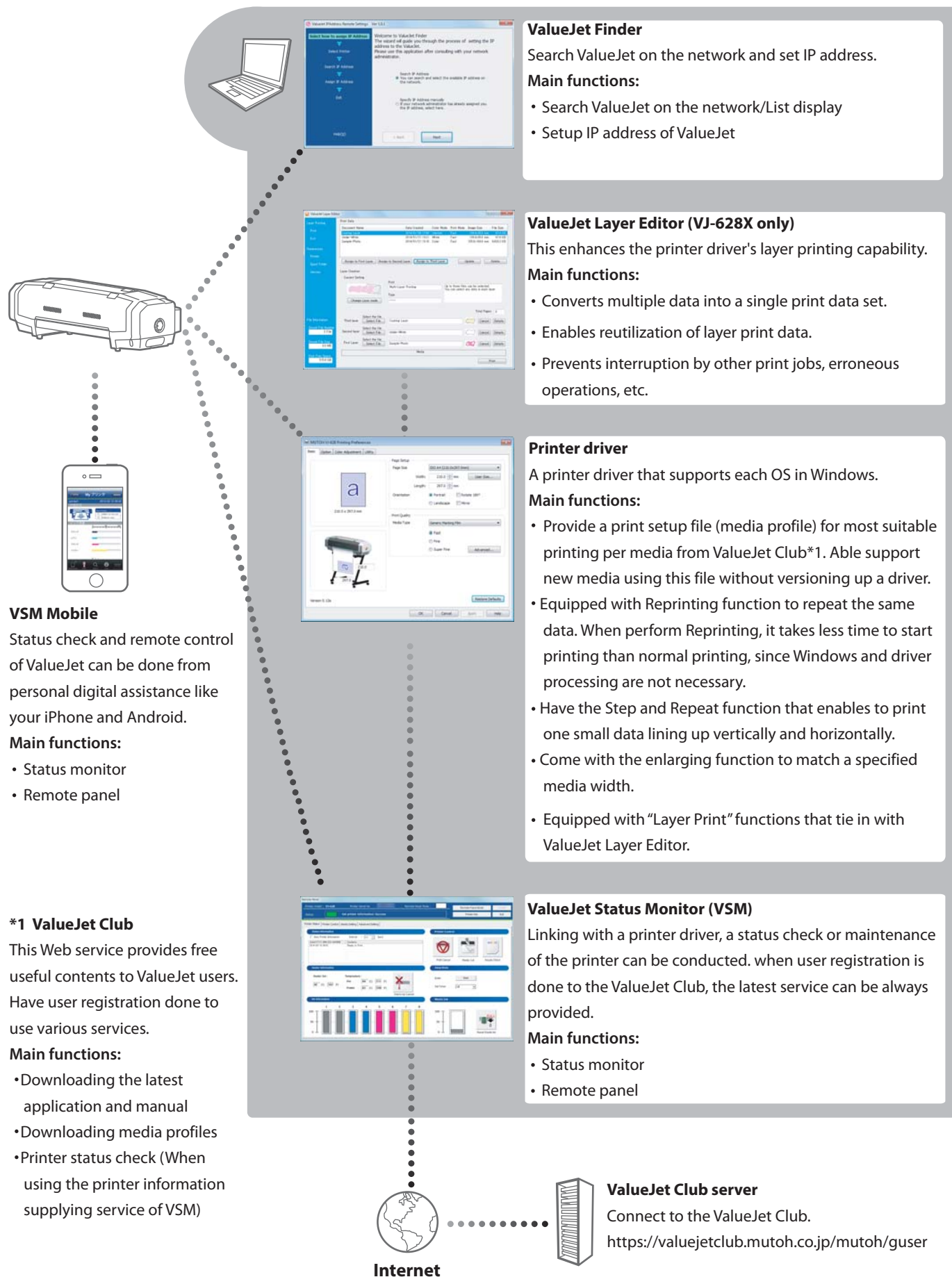
Printer's main body



Operation panel



System configurations of this product



Displaying the Printing Preferences screen of printer driver

[1] Windows 8/Windows8.1

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

Windows 7

Click [Start] - [Devices and Printers].

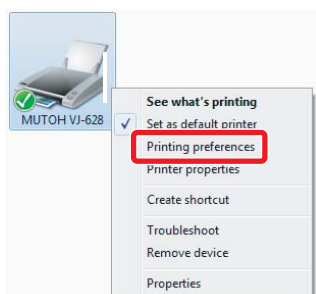
Windows Vista

Click [Start] - [Control Panel] - [Printer].

Windows XP

Click [Start] - [Printers and Faxes].

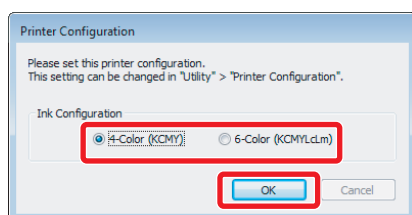
[2]



Right click the "MUTOH VJ-628" icon and click [Printing preferences].

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

[3]



Select the ink color configuration and click [OK].

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

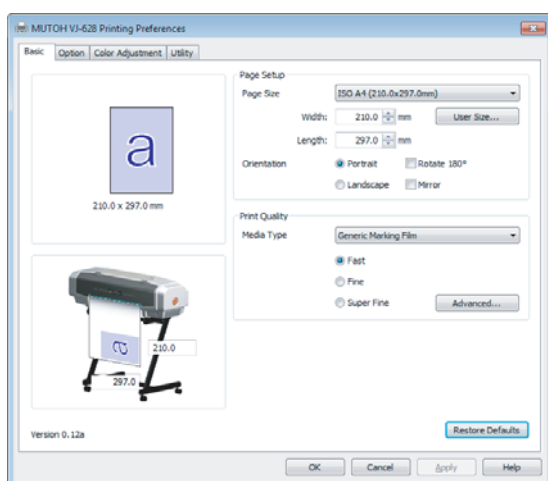


Note

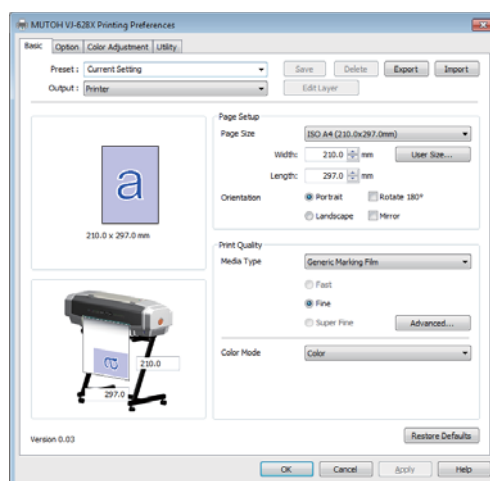
The screen on the left is for VJ-628.

Screens differ depending on the printer model you are using.

 ["Screens for the software used in this manual" on page 2](#)



VJ-628



VJ-628X

Launching/Displaying/Finishing ValueJet Status Monitor (VSM)

Launching VSM



Windows 8/Windows8.1

- In the [Start] screen, click [Desktop].
- Double click the VSM icon on the Desktop.

Windows7/Vista/XP

Double click the VSM icon on the Desktop.



Note

Launching from the Start Menu of Windows

- Windows 8/Windows8.1
Right click somewhere the [Start] screen tiles are not displayed to display the application bar, and click [All Apps].
Click [ValueJet Status Monitor]
- Windows7/ Vista/XP
From the [Start] menu, click [All Programs] (or [Programs]) - [MUTOH] - [ValueJet Status Monitor].

Displaying VSM



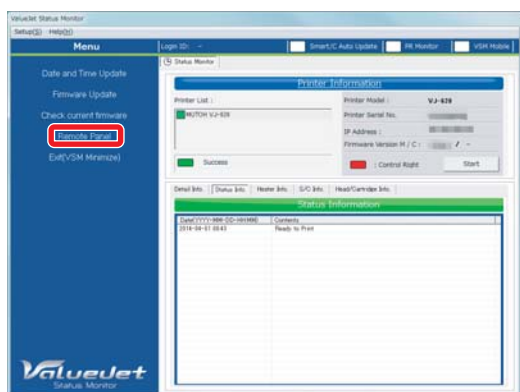
Double click the VSM icon in the task tray.

Displaying remote panel

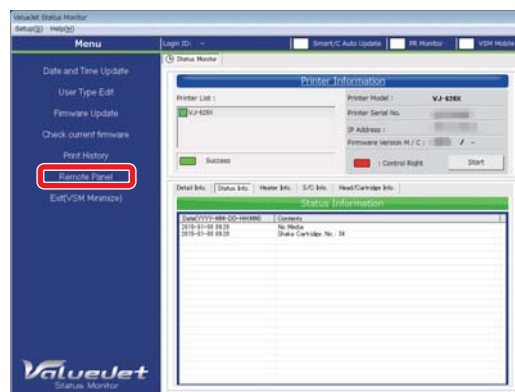
The remote panel is used to view this product's status or operate.

Click [Remote Panel].

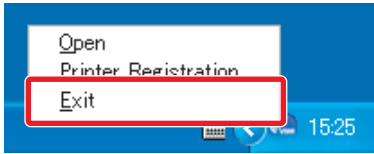
- The remote panel opens.



VJ-628



VJ-628X



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



Note

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

Windows8.1

Click the Down Arrow in the [Start] screen.
Click [ValueJet Status Monitor].

Launching ValueJet Finder

Windows 8/Window8.1

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.

Windows7/ Vista/XP

?From the [Start] menu, click [All Programs] (or [Programs]) - [MUTOH] - [ValueJet Layer Editor] in order.

Launching ValueJet Layer Editor

Windows 8/Window8.1

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.

Windows7/ Vista/XP

From the [Start] menu, click [All Programs] (or [Programs]) - [MUTOH] - [ValueJet Layer Editor] in order.



Note

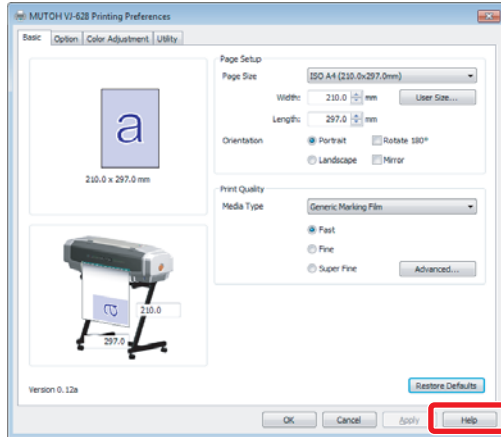
- Valuejet Layer Editor can only be used with VJ-628X.

Displaying Help

You can use the Help for the printer driver and ValueJet Finder.

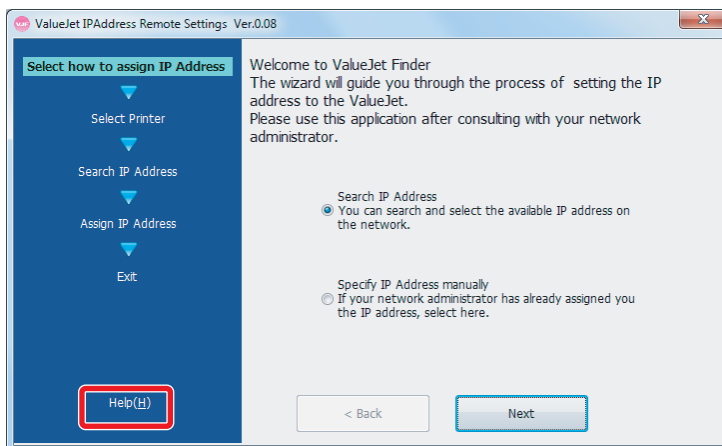
Printer driver

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



ValueJet Finder

Launch ValueJet Finder, and click [Help].



Conditions of usable media

Roll media can be used in this product.

Usable size

Maximum width		630mm (If paper tube > media width, then paper tube width)
Maximum thickness	Head height when Low	0.3mm
	Head height when High	1.3mm
Roll outer diameter		150mm
Paper tube diameter		2 or 3 inches
Weight		9 kg or less

Cautions when handling media

- Please use recommended media. Contact the sales store for recommended media.
- Be cautious of expansion and contraction of media from temperature and humidity.
After opening an unopened media, leave the media for approximately 30 minutes to adjust to environments.
- Do not use media with folds, scratches, tears, curvatures, winding curl and weaving.
- Do not leave a roll media set in this product for a long time. The media can be curled becoming unsuitable for printing.
When not using for a long time, remove a roll media and store in its original package box.

Cautions in using this product

Do not turn off the printer (VJ-628X)

When using metallic ink and white ink for VJ-628X, make sure that the power is always turned on. When you are not using the printer, always leave the power on and put the printer into the sleep mode. In the sleep mode, the printer will periodically circulate the ink in its interior and carry out head cleaning automatically. If you do not put the printer into the sleep mode, the ink in its interior could settle out and/or coagulate, causing poor image quality or printer failure.

Shake the ink cartridges (VJ-628X)

Shake the metallic and white ink cartridges for VJ-628X before use. Make sure that you shake them periodically. Otherwise, the ink inside the cartridges settles or coagulates and may cause poor print quality or a malfunction.

Please use this product periodically

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

Conduct periodic maintenance

This product requires daily maintenance.

- Check the nozzle before and after printing.
If nozzle clog is found, conduct a head cleaning.
- Clean the cleaning wiper once a week.
- When this product is not used for a long time (a week or more), conduct a head cleaning once a week.
- Clean its exterior and inside once a month.
- Drain waste ink in the waste liquid tank periodically.

Some parts need to be replaced periodically

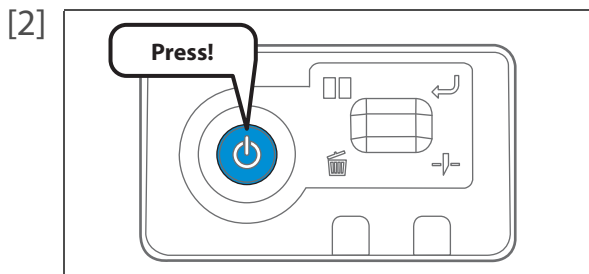
In this product, there are some parts required to be replaced after a long-term use.

- Parts required to be replaced by users: absorption material for the flushing box, cutter
- Parts required to be replaced by service personnel: Various motors, print head

Powering ON/OFF

Turning the power ON

[1] Close the front cover.

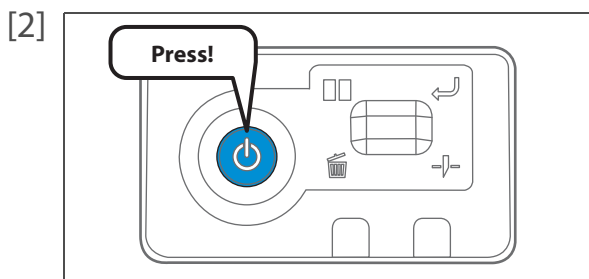


Press the power button of this product to turn the power ON.

- The blue light becomes ON.
- This product starts its initialization operations.

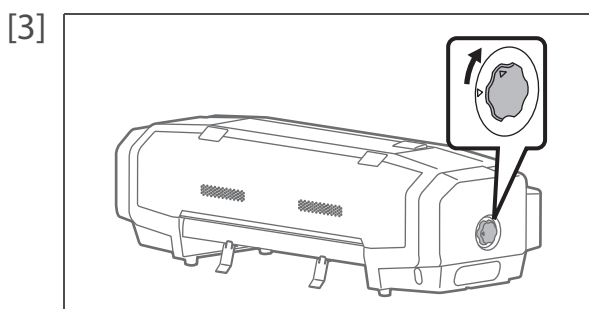
Turning the power OFF

[1] Make sure printing is done.



Press the power button of this product to turn the power OFF.

- The blue light becomes OFF.
- This product starts its powering off operations.



Turn the media fixing knob to release the lock.

Note

When not using this product, release the lock of the media fixing knob regardless of power being OFF.

Important!

- When using metallic ink and white ink for VJ-628X, make sure that the power is always turned on. When you are not using the printer, always leave the power on and put the printer into the sleep mode. If you do not put the printer into the sleep mode, the ink in its interior could settle out and/or coagulate, causing poor image quality or printer failure.

Sleep Mode

When using metallic ink or white ink, use sleep mode instead of turning off the printer. If you do not put the printer into the sleep mode, the ink in its interior could settle out and/or coagulate, causing poor image quality or printer failure.

The following operations are performed during sleep mode.

- Automatic head cleaning is performed after the time set in the Timer Setting Menu has elapsed.
- Some of the ink inside the printer is circulated. Circulates part of ink inside the printer (every hour, only for VJ-628X)

Important!

To continue the sleep mode for seven days or longer, when seven days have passed, perform the following:

- "Check the ink level and replace the relevant ink cartridge if "Ink Low" is displayed."
- Shake the metallic and white ink cartridges (for VJ-628X).
- Perform nozzle check. If the nozzles are clogged, perform cleaning.

Starting and Canceling Sleep Mode

1. Starting sleep mode

[1] Check the following printer status.

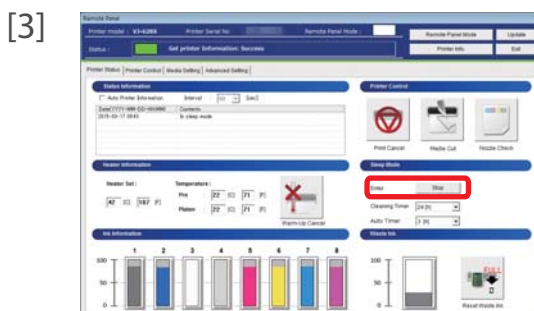
- The front cover is closed.
- There is ample amount of ink in the ink cartridges.
- There is enough free space in the waste fluid tank.

Important!

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

[2] Launch Start the VSM remote panel.

 ["Displaying remote panel" on page 11](#)

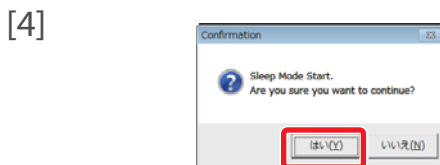


Click "Sleep Mode" - "Start".

- The confirmation window opens.

Note

- The screen on the left is for VJ-628X. Screens differ depending on the printer model you are using.
- You can also start sleep mode from the printer driver.



Click "Yes".

- Sleep mode starts.

Note

- The data LED flashes during sleep mode.

2. How to Cancel Sleep Mode

[1]



To cancel sleep mode, click "Sleep Mode" - "Stop" while in sleep mode.

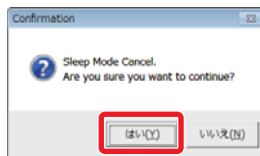
- The confirmation window opens.



Note

- The screen on the left is for VJ-628X. Screens differ depending on the printer model you are using.

[2]



Click "Yes".

- Sleep mode ends.



Note

- The printer may automatically execute head cleaning and/or ink charging, etc., when it exits the sleep mode. Such operation will depend on the time that has elapsed since the last time. Such operation does not depend on the sleep mode settings. It is an automatic maintenance function of the printer.

Setting the Timer

- [Cleaning Timer]: Set the interval for the automatic head cleaning during sleep mode.
- [Auto Timer]: You can set the interval for entering sleep mode automatically from standby condition. This menu is displayed when using metallic ink or white ink on VJ-628X.

Procedure

[1]



To change the cleaning intervals during sleep mode, click [Sleep Mode] - [Cleaning Timer], and then select the time.

[2]



To change the time before entering sleep mode, click [Sleep Mode] - [Auto Timer], and then select the time.

[3]



Click [Update].

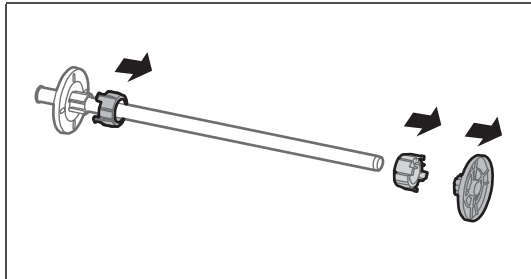
- The timer has been set.

Note

- You can change the strength of head cleaning from [Cleaning Mode] on the [Advanced Setting] tab of the VSM remote panel.

Setting up media

[1]

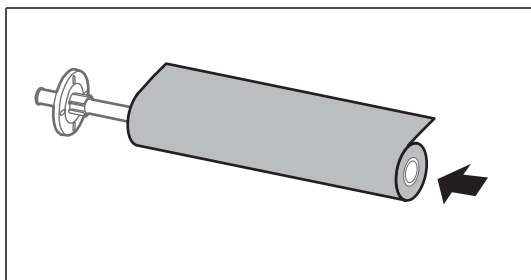


Remove the 3 inches adaptor and media stopper (movable) from the scroller.

 Note

When using a roll media with 3 inches paper tube diameter, leave the 3 inches adaptor on.

[2]

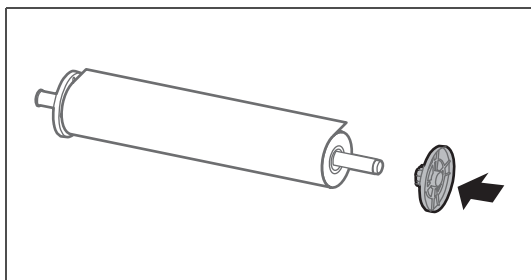


Attach a roll media to the scroller.

 Note

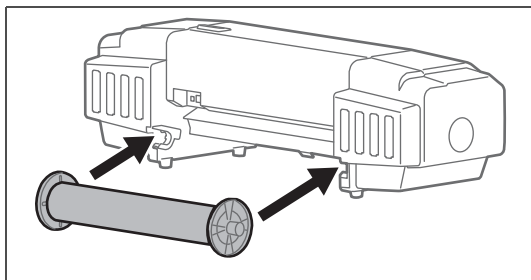
- Attach the media in the rolling direction to be the same with the figure.
- Push in the roll media so that there is no space with the media stopper (fixed).

[3]



Push in the media stopper (movable) until there is no space with the roll media.

[4]

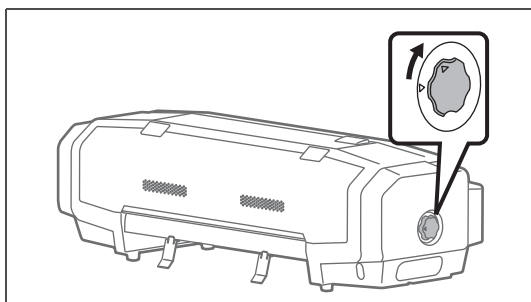


Attach the scroller to the scroller receivers.

 Note

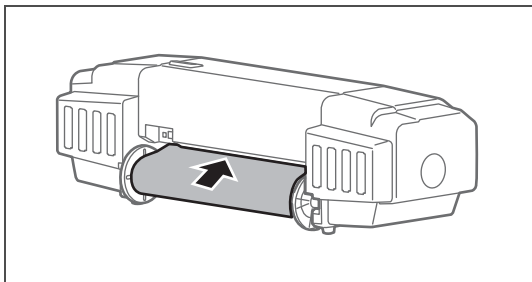
Attach the media stopper (movable) to face to the right, when this product is looked from its back.

[5]



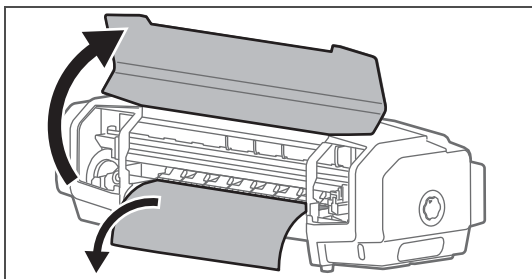
Turn the media fixing knob to release the lock.

[6]



Let the roll media pass through the paper feed slot.

[7]



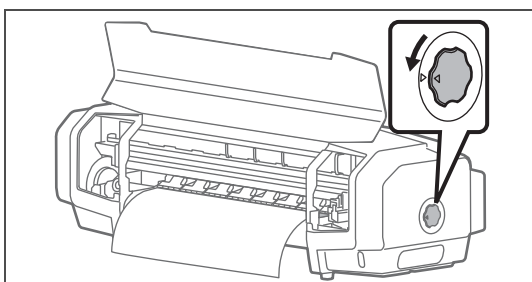
- Open the front cover.
- Pull out the media roller from the front side of the product.



Note

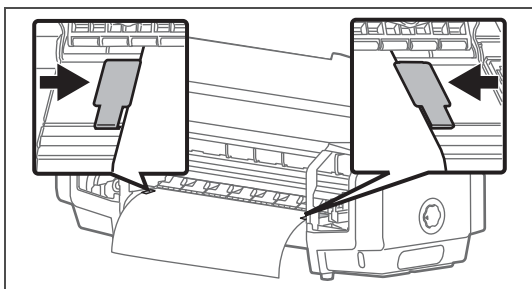
If the media gets loose, rewind the scroller to correct the looseness.

[8]



Turn the media fixing knob to lock.

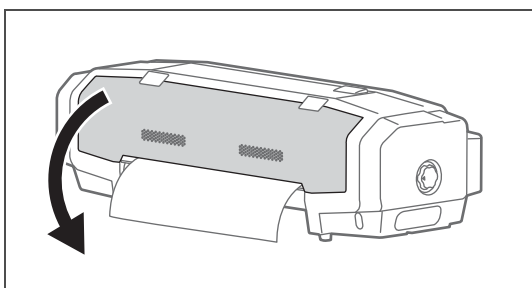
[9]



Set the paper guides to media.

- Slide from both sides of platen and set.

[10]



Close the front cover.

Adjusting image quality

For the following cases, please conduct this adjustment.

- Using this product for the first time.
- Changing a media type.

For any other cases, please proceed to ["Nozzle check and cleaning" on page 32.](#)

This adjustment corrects print shifting that can be generated during bidirectional printing per media type.

Bidirectional printing

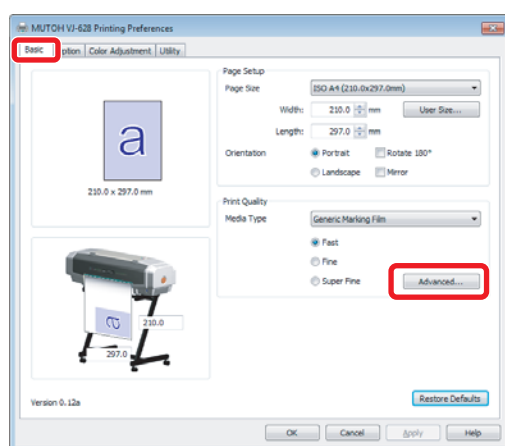
The print head goes back and forth on media during printing. When printing is done for both back and forth directions, it is called "bidirectional printing". Though a printing speed gets faster with a bidirectional printing, a slight shifting can be generated in the print joints. "Image quality adjustment" corrects such shifting.

Setup method of bidirectional printing

- [1] Display the Printing Preferences screen of printer driver.

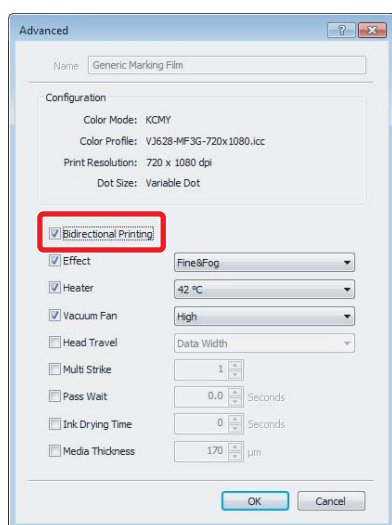
 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click [Advanced...] under the [Basic] tab.

[3]



Place a checkmark in [Bidirectional Printing].



Note

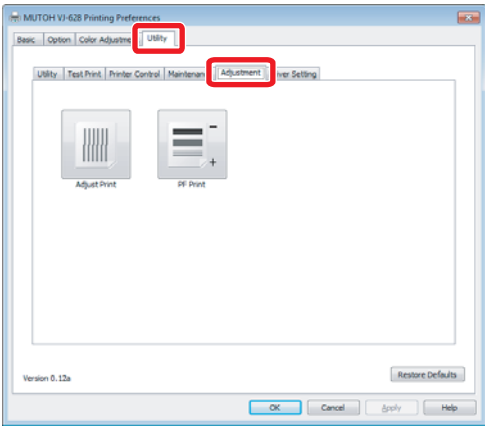
- By default, it is checked.

Steps for image quality adjustment

1. Media thickness

[1] Display the Printing Preferences screen of printer driver.
☞ ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2] Click the [Adjustment] tab under the [Utility] tab.

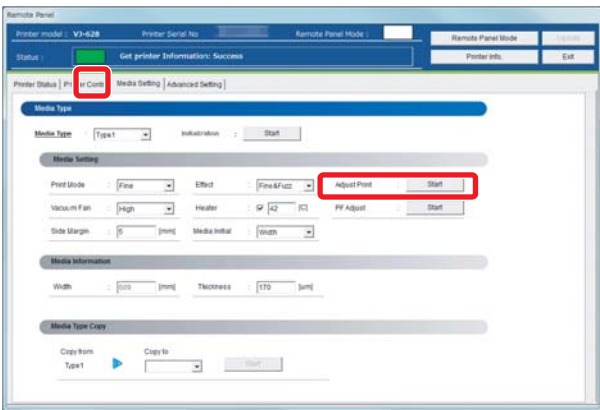


[3] Click [Adjust Print]
• The remote panel of ValueJet Status Monitor (VSM) launches.

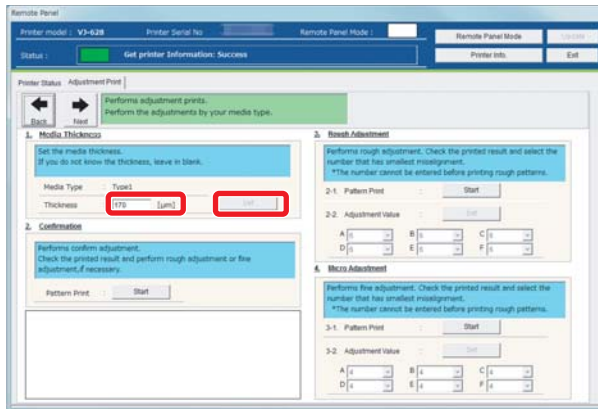
 **Note**

VSM can be launched directly.
☞ ["Launching VSM" on page 11](#)

[4] Click [Start] in [Adjust Print] of the [Media Setting] tab.
• The [Adjust Print] window opens.

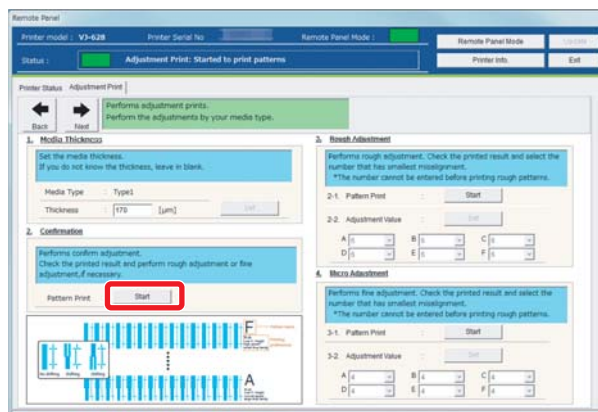


- [5] Enter [Thickness] ([μm]) in [1. Media thickness], and click [Setting].
- Enter the thickness of a set media.

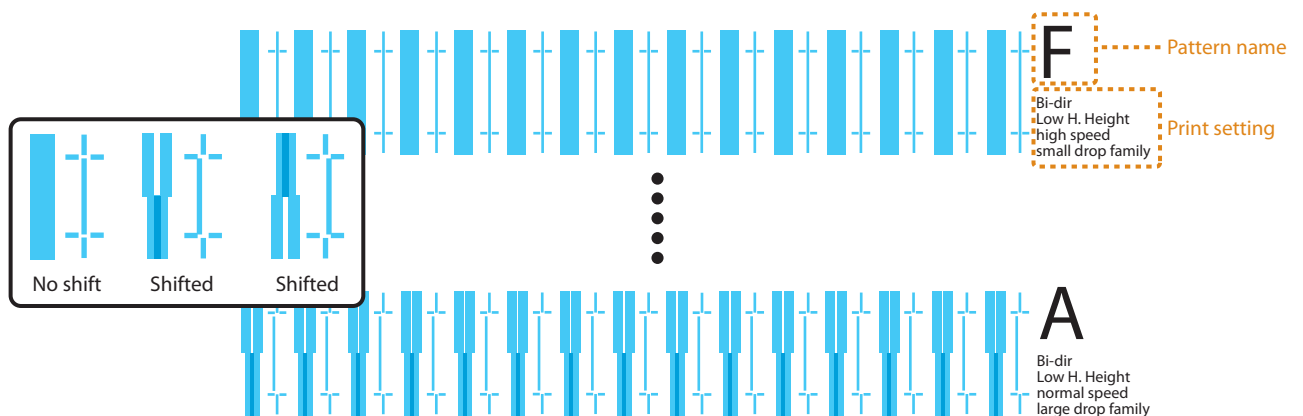


2. Checking picture quality

- [1] Click [Start] in [2. Confirmation].
- Patterns are printed.



- [2] Check from Pattern A to Pattern F, and if there are shifting problems, proceed to "Rough adjustment" on page 25.
- In the example below, there are shifting problems in Pattern A.



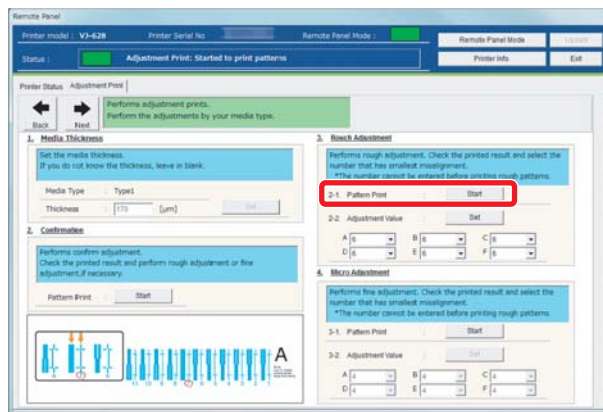
Note

The example is 4 colors setting. When using 6 colors to 8 colors, the pattern color is in Magenta (red type color). The pattern color of rough adjustment and micro adjustment is the same.

3. Rough adjustment

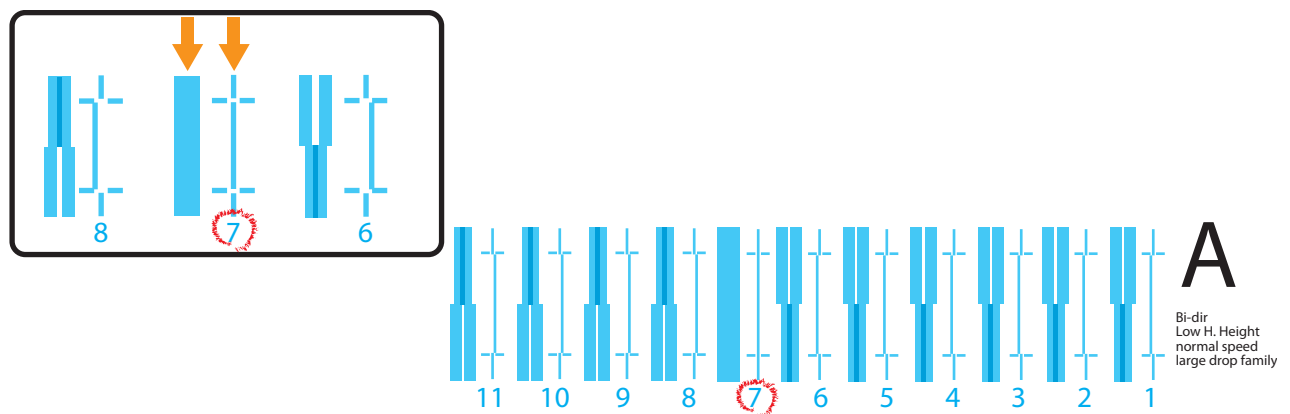
[1] Click [Start] in [3-1 Pattern Print] of [3. Rough Adjustment].

- Patterns are printed.



[2] Look for and mark a number printed under a pattern that has least shifting in Pattern A.

- The same pattern (A to F) is printed repeatedly in the center and both edges of media.



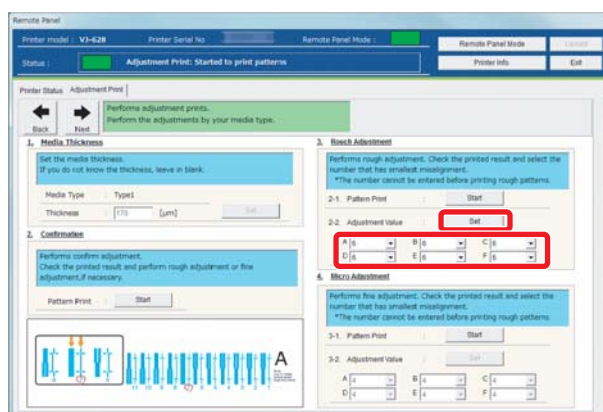
Note

Even in the same pattern, the number that has no shifting may be different between the center and both edges of media. In such a case, look for a number that has the least shifting in average.

[3] Mark a number likewise from Pattern B to Pattern F.

[4] Enter marked values in A to F of [2-2 Adjust Change] in [3. Rough Adjustment], and click [Setting].

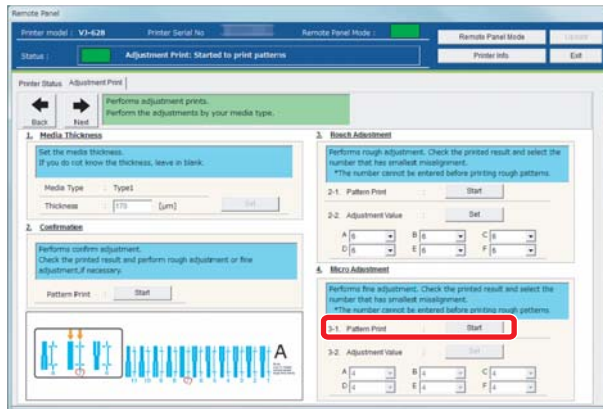
- Proceed to "[Micro adjustment](#)" on page 26.



4. Micro adjustment

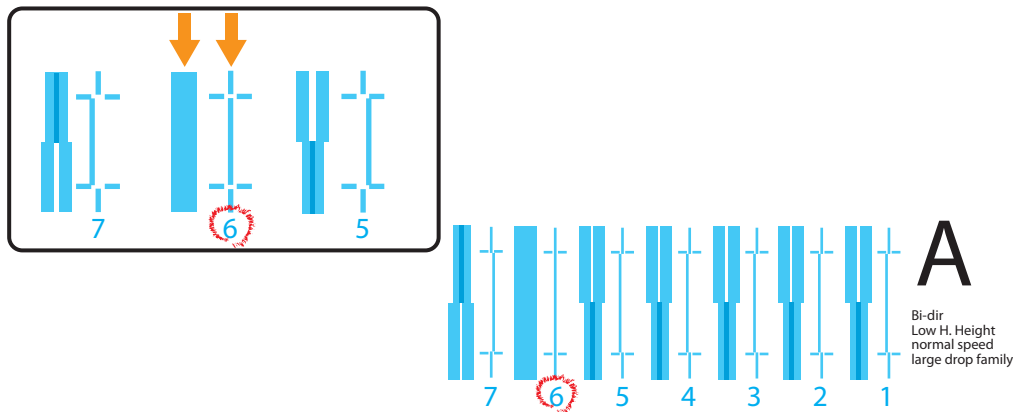
[1] Click [Start] in [4-1 Pattern Print] of [4. Micro Adjustment].

- Pattern A to Pattern F are printed.



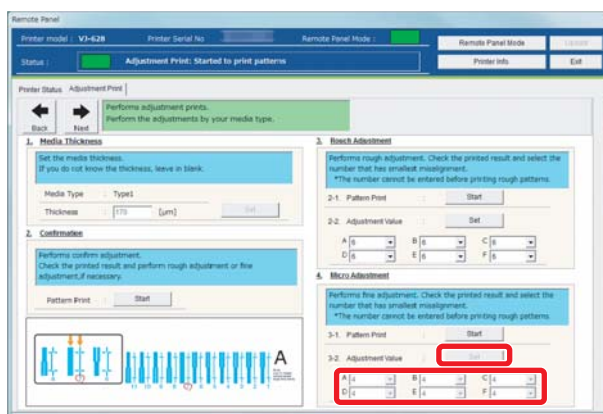
[2] Similar to "3. Rough adjustment", mark a number printed under the pattern that has the least shifting.

- Mark on Pattern A to Pattern F.



[3] Enter marked values in A to F of [4-2 Adjust Change] in [4. Micro Adjustment], and click [Setting].

- This completes the picture quality adjustment.



Correcting paper feed

For the following cases, please conduct this adjustment.

- Using this product for the first time.
- Changing a media type.

For any other cases, please proceed to ["Nozzle check and cleaning" on page 32.](#)

A ruler is used for this adjustment. Please prepare a commercially available ruler.



Note

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

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

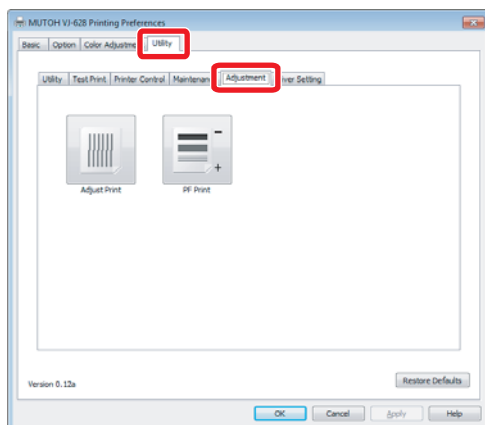
Paper feed correction steps

1. Initial adjustment

- [1] Display the Printing Preferences screen of printer driver.

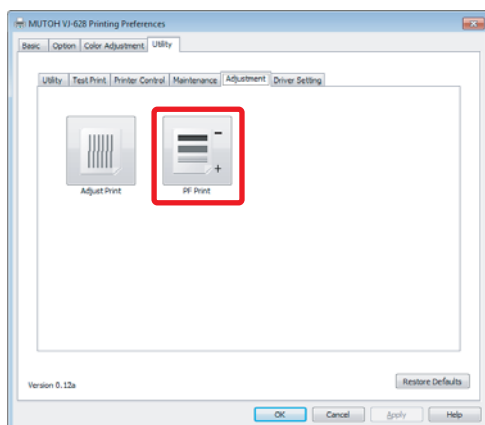
 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click the [Adjustment] tab under the [Utility] tab.

[3]



Click [PF Print].

- The remote panel of VSM launches.



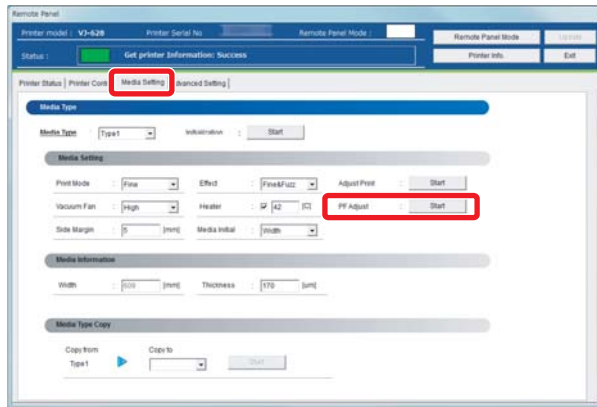
Note

VSM can be launched directly.

 ["Launching VSM" on page 11](#)

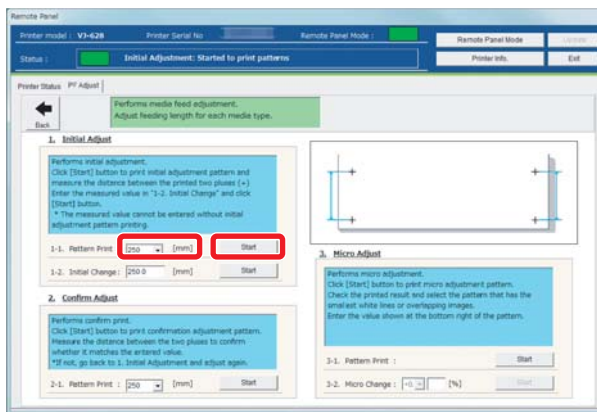
[4] Click [Start] in [PF Adjust] of the [Media Setting] tab.

- The [PF Adjust] window opens.

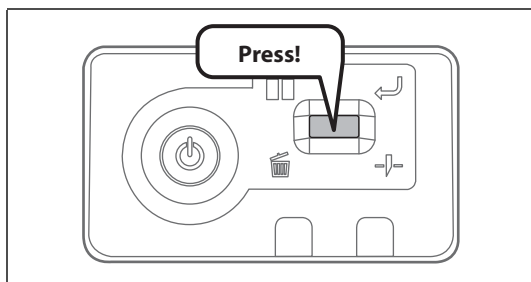


[5] Select the length ([mm]) of [1-1 Pattern Print] in [1. Initial Adjust], and click [Start].

- Select a length that can be measured with a prepared ruler. When a pattern is longer, a precision level improves.
- A pattern is printed.



[6]

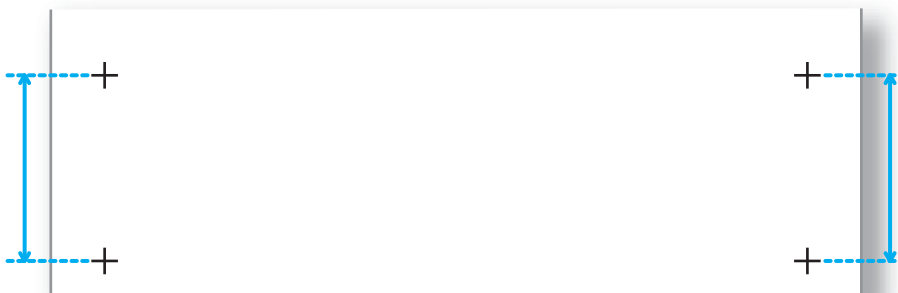


Cut the media.

- Press and hold the operation key on the operation panel for 2 seconds or more.
- The built-in cutter in this product cuts the media.

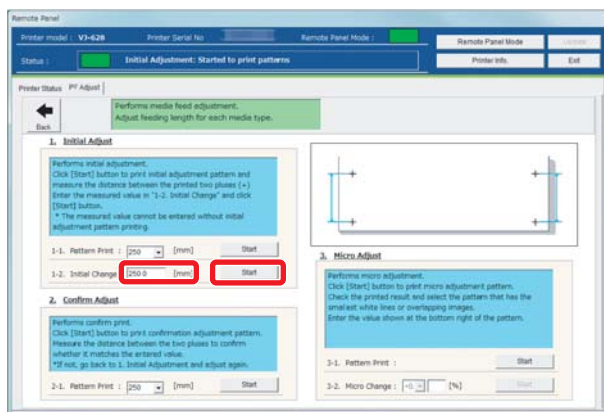
[7] With a ruler, measure the length between "+" in the pattern.

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



[8] Enter a measured length to the length ([mm]) of [1-2. Initial Change], and click [Start].

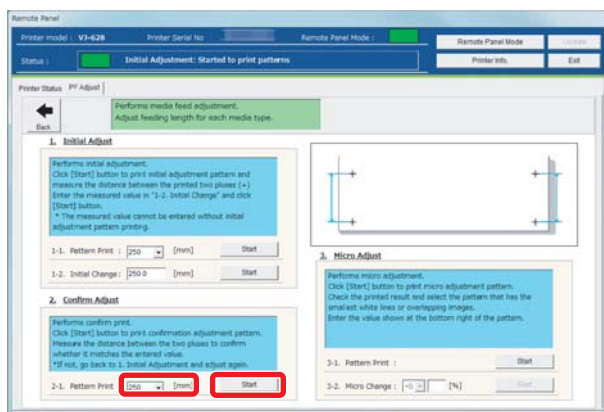
- The initial change value is saved.
- Please proceed to ["Confirming adjustment" on page 29.](#)



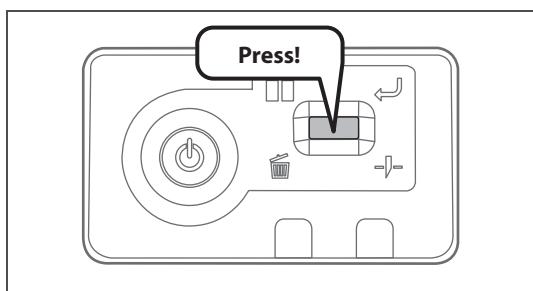
2. Confirming adjustment

[1] In [2. Confirm Adjust], select a length ([mm]) of [2-1. Pattern Print] from the dropdown menu, and click [Start].

- A pattern is printed.



[2]

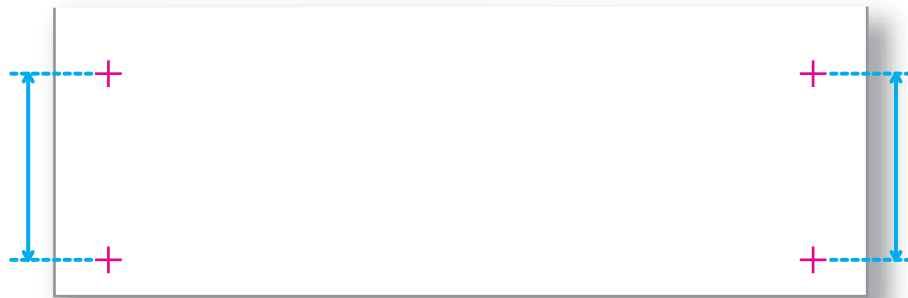


Cut the media.

- Press and hold the operation key on the operation panel for 2 seconds or more.
- The built-in cutter in this product cuts the media.

[3] Using 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).



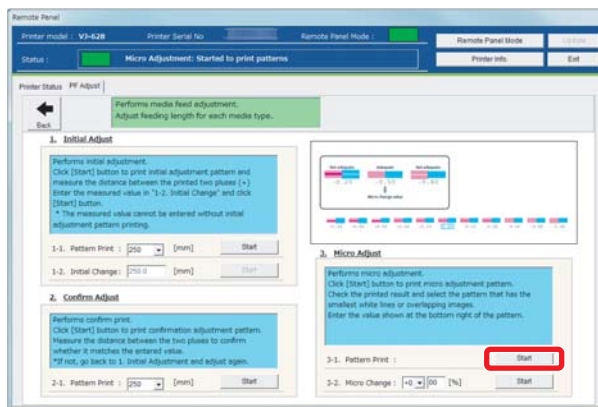
[4] Confirm the measured length.

- If the measured length matches the length selected in Step 1, proceed to ["Micro adjustment" on page 26](#).
- If the measured length does not match the selected length, re-correct with ["Checking picture quality" on page 24](#).

3. Micro adjustment

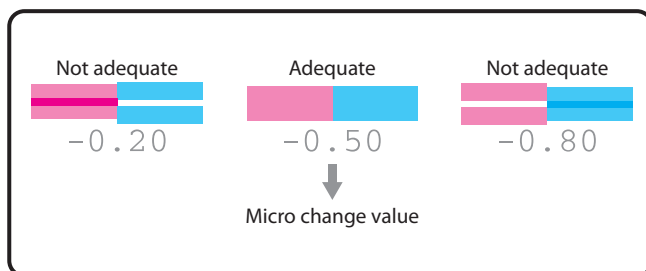
[1] Click [Start] in [3-1. Pattern Print] of [3. Micro Adjust].

- A pattern is printed.



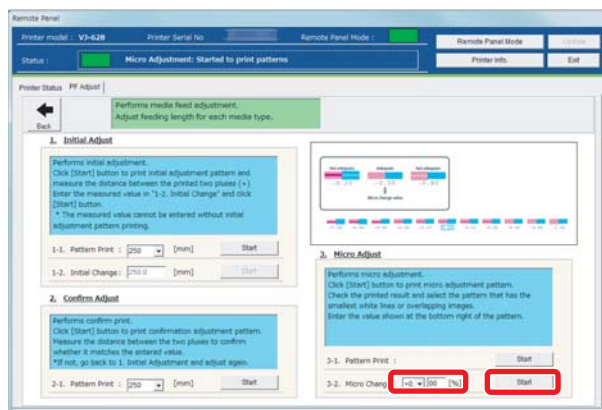
[2] Observe the pattern and verify the micro change value.

- 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 change value.



[3] Enter the checked value in Step 2 to [3-2. Micro Change], and click [Start].

- The micro change value is saved.
- This completes the paper feed correction.



Note

The micro change value saved in Step 3 becomes the pattern's standard value.

For example, if “-0.50” is saved as the micro change value and a pattern is printed again, the number below the center pattern changes from “0.00” to “-0.50”, and the left edge to “+0.70” and right edge to “-1.70”.

Nozzle check and cleaning

Before starting everyday operation, please check the nozzle. If nozzle clog is found, conduct cleaning.

1. Nozzle check steps

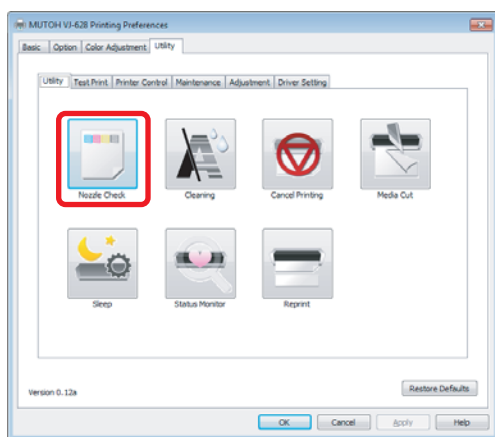
When not using white ink

When you are not using white ink, take the following steps to perform nozzle check.

- [1] Display the Printing Preferences screen of printer driver.

 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click [Nozzle Check] in the [Utility] tab under the [Utility] tab.

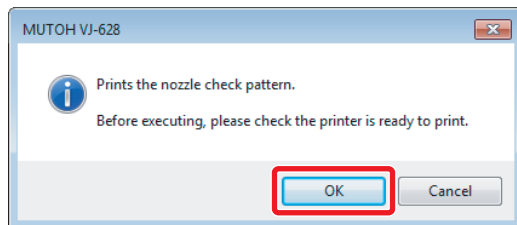
- The confirmation window opens.



Note

The same can be also done with the remote panel of VSM.

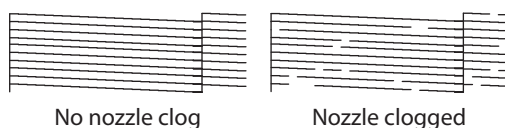
[3]



Click [OK].

- A pattern is printed.

[4]



Check the pattern.

- When there is nozzle clog, proceed to ["Cleaning steps" on page 34](#).
- When there is no nozzle clog, proceed to ["Starting printing" on page 35](#).

When using white ink

When you are using white ink, you can select from regular nozzle check and nozzle check for white ink.

If you select the background color (nozzle check B), the background for some of the nozzle check patterns are printed in color so that the nozzle condition is easy to see.

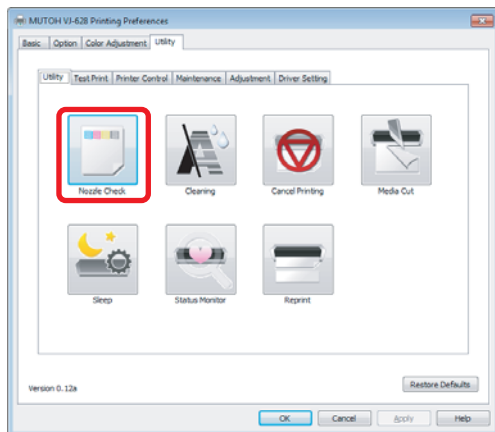
- Part of the background for the white nozzles is black.
- Part of the background for the white nozzles is not printed.
- The background of the KCMY nozzles are white.

[1] Displays the Printing Preferences screen for the printer driver.

 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2] Click [Nozzle Check] from the [Utility] tab on the [Utility] tab.

- The selection window opens.

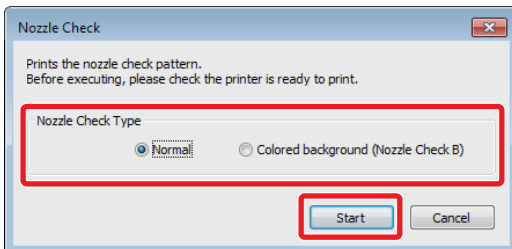


Note

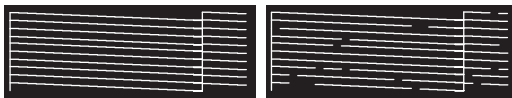
You can also do this for VSM remote panel.

[3] Select the nozzle check type, and then click [Start].

- Normal
Prints the standard nozzle check pattern.
- Colored background (Nozzle Check B)
Prints the nozzle check pattern for white ink.



[4] Check the adjustment pattern.



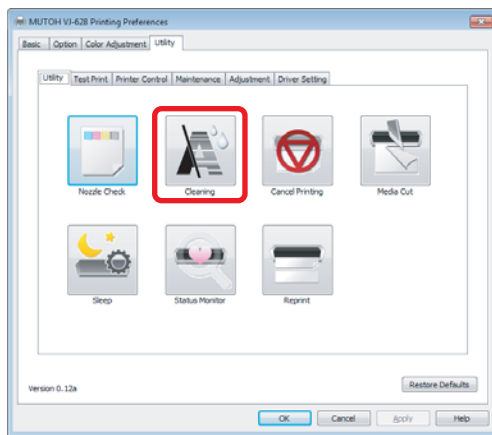
No nozzle clog

Nozzle clogged

- The illustration on the left is the image of when selecting "Colored background (Nozzle Check B)".
- If the nozzles are clogged, proceed to ["Cleaning steps" on page 34](#).
- If there are no clogged nozzles, proceed to ["Starting printing" on page 35](#).

2. Cleaning steps

[1]



Click [Cleaning] in the [Utility] tab under the [Utility] tab.

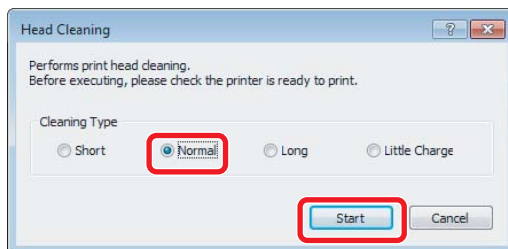
- The [Head Cleaning] window opens.



Note

The same can be also done with the remote panel of VSM.

[2]



Select [Normal] and click [Start].

- A cleaning starts.

[3] Conduct a nozzle check, again.

👉 ["Nozzle check steps" on page 32](#)

- If there is still nozzle clog, repeat [Normal] cleaning. Refer to ["Head cleaning" on page 59](#) for [Short], [Long] and [Little Charge].

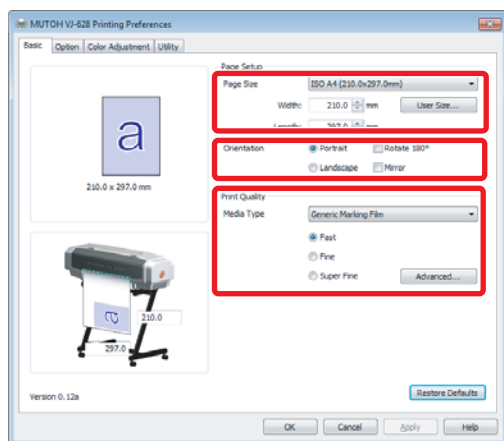
Starting printing

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

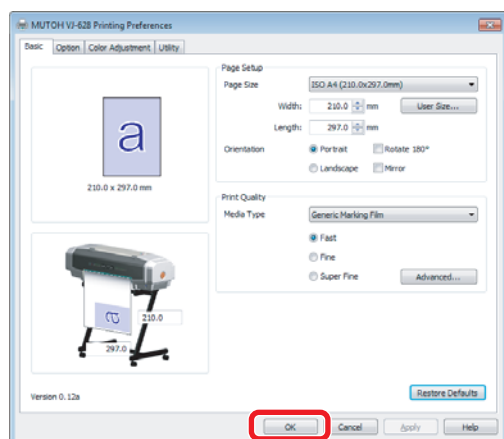
[1] Open printing data from application software to execute printing.

[2] Open the print setup screen of the VJ-628 printer driver from the application software.

[3] Conduct print setup.
• Set [Paper Size], [Orientation] and [Print Quality].



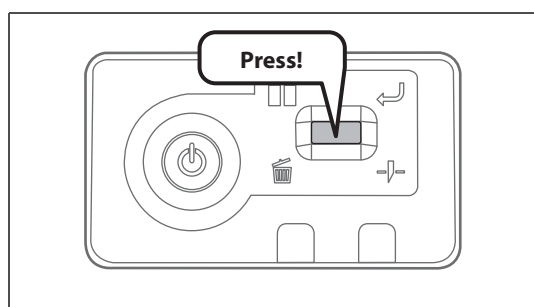
[4] Click [OK].



[5] Printing is executed.

[6] Cut the media.
 ["Cutting media" on page 38](#)

Pausing/Restarting printing



During printing, short press the operation key on the operation panel.

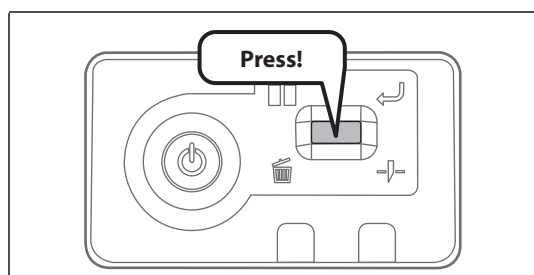
- The printing pauses.
- Press the operation key again to restart the printing.

Note

- In this operation, printing data sent to the product are not deleted.
- Please see the followings when canceling printing and deleting data.
👉 ["Canceling printing" on page 36](#)

Canceling printing

Canceling printing from the operation panel



Press and hold the operation key on the operation panel for 2 seconds or more during printing.

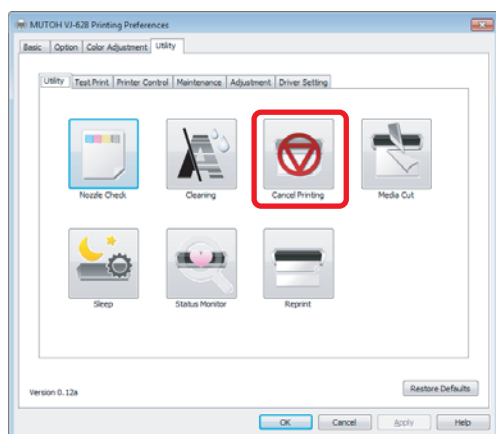
- The printing is canceled (it cannot be restarted).
- The printing data sent to the product are deleted.

Canceling printing from printer driver/VSM

- [1] Display the Printing Preferences screen of printer driver during printing.

👉 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

- [2]



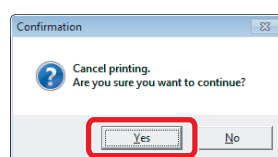
Click [Cancel Printing] in the [Utility] tab under the [Utility] tab.

- The remote panel of VSM launches.
- The [Confirmation] window opens.

Note

- VSM can be launched directly.
👉 ["Launching VSM" on page 11](#)

- [3]



Click [Yes].

- The printing is canceled.

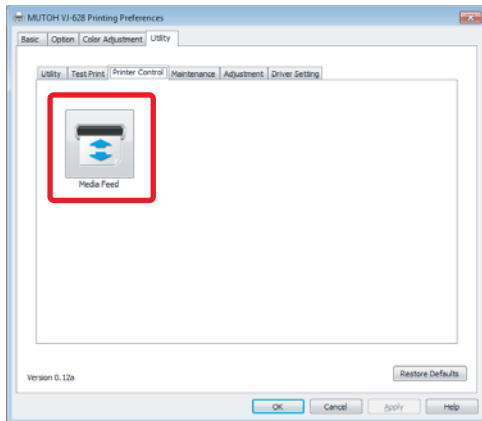
Forwarding/Rewinding media

Forwarding/rewinding media from printer driver/VSM

- [1] Display the Printing Preferences screen of printer driver.

☞ ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

- [2] Click [Media Feed] in the [Printer Control] under the [Utility] tab.
• The remote panel of VSM launches.

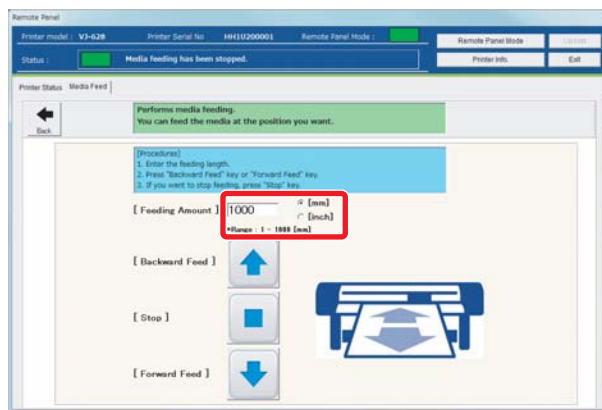


Note

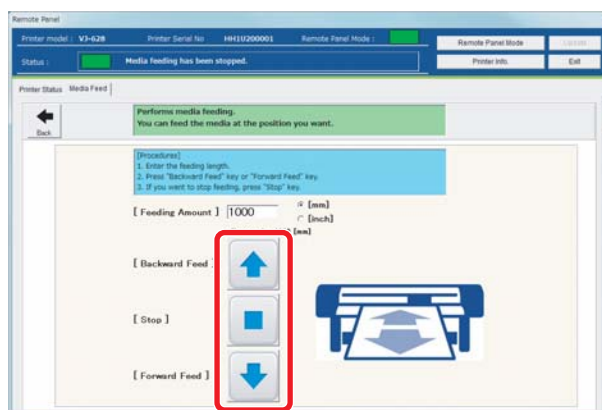
VSM can be launched directly.

☞ ["Launching VSM" on page 11](#)

- [3] Enter [Feed Amount].
- The unit of [Feed Amount] can be selected from [mm] and [inch].
 - The media is forwarded/rewound by the entered length in the [Feed Amount].



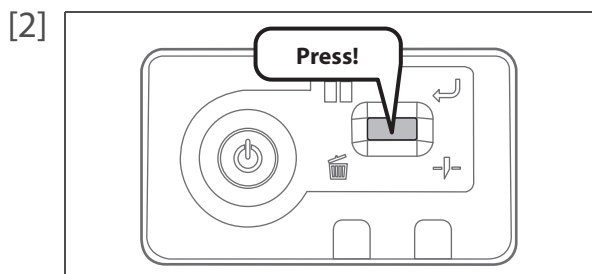
- [4] When [Forward Feed]/ [Backward Feed] is clicked, the media is forwarded/rewound.
- Click [Stop] during forwarding/rewinding to stop the operation.
 - Or short press the operation key on the operation panel to stop the operation.



Cutting media

Cutting from the operation panel

[1] Check printing is done.



Press and hold the operation key on the operation panel for 2 seconds or more.

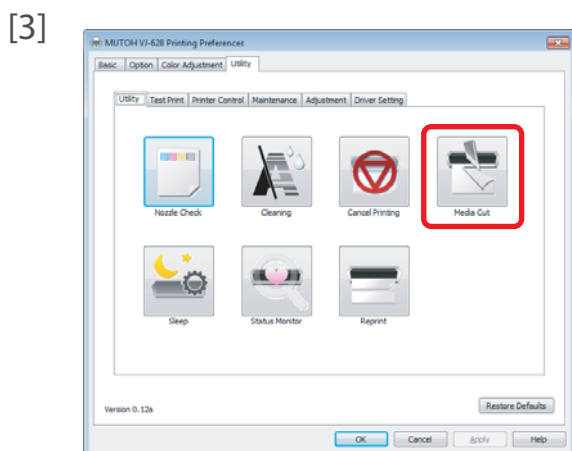
- The built-in cutter in the product cuts the media.

Cutting from printer driver/VSM

[1] Check printing is done.

[2] Display the Printing Preferences screen of printer driver.

 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)



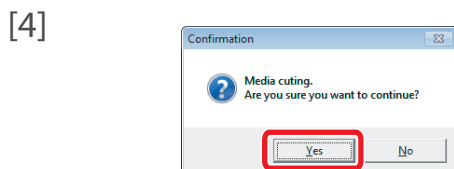
Click [Media Cut] in the [Utility] tab under the [Utility] tab.

- The remote panel of VSM launches.
- The [Confirmation] window opens.

 **Note**

- VSM can be launched directly.

 ["Launching VSM" on page 11](#)



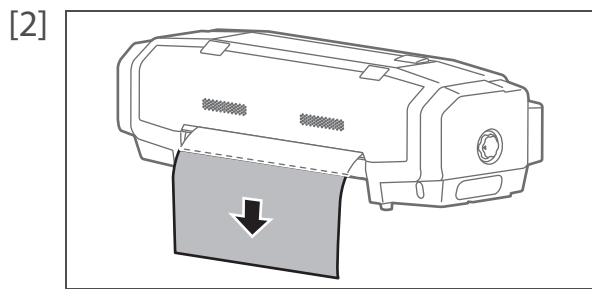
Click [Yes].

- The built-in cutter in the product cuts the media.

Cutting by hand

For media that cannot be cut with the built-in cutter in the product, please cut following the next steps.

[1] Check printing is done.

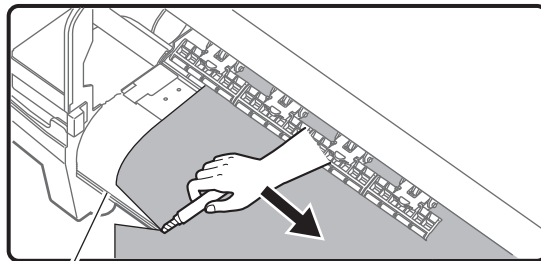


Feed the media to a position where printing results can be cut.

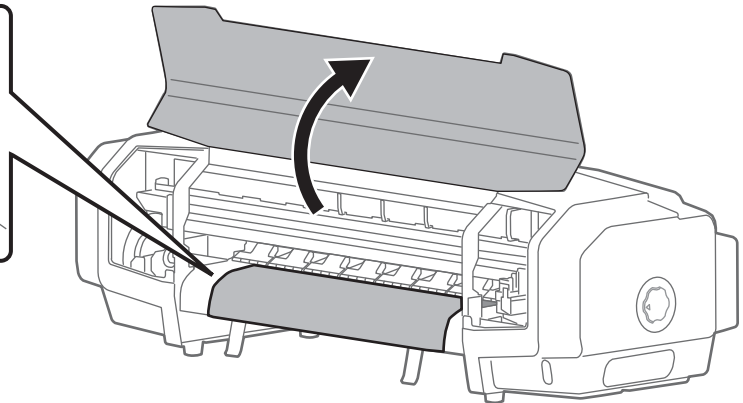
 ["Forwarding/Rewinding media" on page 37](#)

[3] Open the front cover, and cut the media with a commercial available cutter.

- Cut along the media cut groove.



Media cut groove



[4] Close the front cover.

Cutting automatically

In this product, a setup is possible to cut media automatically after printing is done. Refer to the setup methods described below.

 ["Setting auto cut" on page 44](#)

About the high-capacity ink pack adapter

To install the 1,000 ml ink pack to the high-capacity ink pack adapter, refer to the operation manual included with the high-capacity ink pack adapter.

When using High-capacity ink pack adapter for the first time

The air inside the high-capacity ink pack adapter may go into Ink tubes and cause nozzle clogging. In the following cases, perform the initial ink replenishment from the printer driver or the VSM remote panel.

- When using a high-capacity ink pack adapter for the first time on the printer whose ink is filled.
- When replacing a high-capacity ink pack adapter that has been in use with a new one

See the following for the procedure of the initial ink charging.

 ["Initial charging" on page 78](#)

About replacing the plug

Once you have removed and inserted the high-capacity ink pack adapter for a certain times, the plug needs to be replaced.

For related procedures, refer to the following.

 ["Replacing the plug for the high-capacity ink pack adapter" on page 70](#)

Chapter 2 Advanced Operations

- Changing head height 42
- Releasing pressure arms individually 43
- Advanced settings 44
 - Setting auto cut 44
 - Setting the vacuum fan..... 46
 - Setting the heater 47
 - White maintenance settings 48

Changing head height

If media is lifted or when printing that use a large amount of ink is conducted, the media rubs against the print head and becomes dirty. In such a case, it may improve by setting the print head height high.

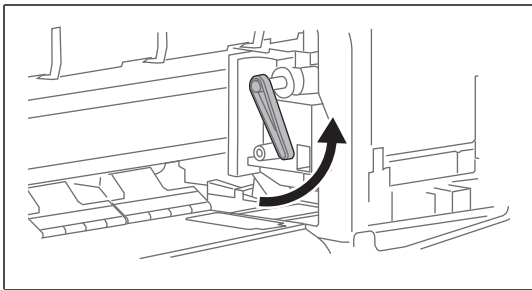
When the print head height is changed, always conduct image quality adjustment.

Note

- If media is lifted, the lifted part contacts the bottom part of the print head causing the media to become dirty.
- If media containing a lot of ink becomes sodden and lifted, it contacts the bottom part of the print head causing the media to become dirty.

Procedure

[1] Open the front cover.

[2]  Lift the lever and raise the head height.

[3] Close the front cover.

[4] Conduct image quality adjustment.
 ["Adjusting image quality" on page 22](#)

Important!

Do not change the print head height while printing.

Releasing pressure arms individually

When printing on thin media or media without stiffness, the media rubs against the print head and becomes dirty. In such a case, it may improve when releasing the pressure arms holding both sides of media.

When releasing the pressure arms individually, always conduct paper feed correction.

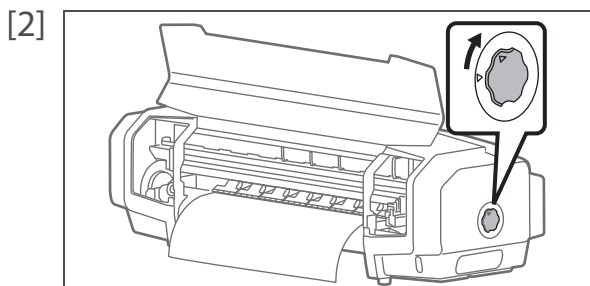
Note

- Thin media or media without stiffness is likely to be wrinkled during printing. Wrinkles can contact the bottom side of the print head causing the media to become dirty. When both edges of the pressure arms of media are released, it can prevent wrinkles.
- When printing on thin media or media without stiffness, wrinkles can be prevented by turning down the vacuum fan.

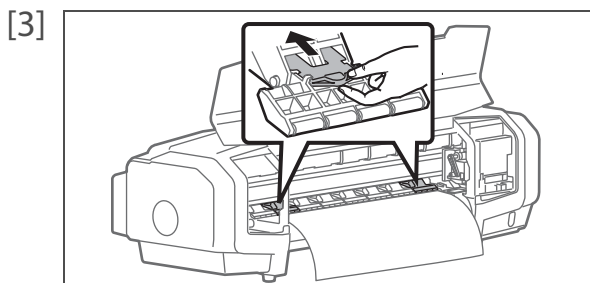
 ["Setting the vacuum fan" on page 46](#)

Procedure

[1] Open the front cover.



Turn the media fixing knob to release the lock.



Release the pressure arms on both edges of media.

- Push in the release switch to release.

[4] Conduct paper feed correction.

 ["Correcting paper feed" on page 27](#)

Note

- If media still remains dirty, it may improve by increasing the number of pressure arms to release. In such a case, release the same number of pressure arms for right and left each.

[5] Close the front cover.

Advanced settings

Settings in this product can be changed to match your usage.

Only a part of functions is introduced here.

For usage functions of software, please refer to help or manual of software.

 ["Displaying Help" on page 13](#)

Setting auto cut

It can be set to cut media automatically, when printing is done.

Setup is done to match the width, thickness and material of media.



Note

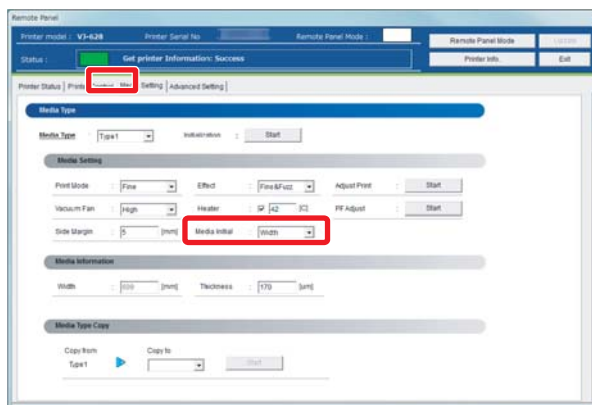
Depending on media, cutting cannot be done. In such a case, cut manually.

Procedure

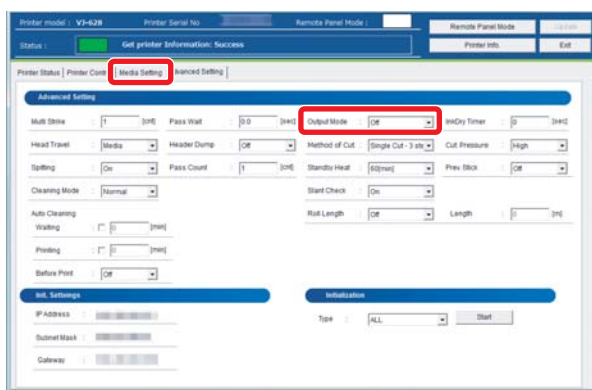
- [1] Launch the remote panel of VSM.

 ["Displaying remote panel" on page 11](#)

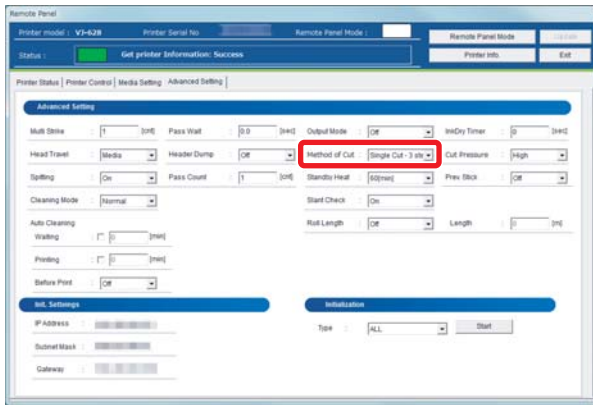
- [2] Select anything but [Off] in the [Media Initial] menu under the [Media Setting] tab.



- [3] Select [Auto Cut] in the [Output Mode] menu under the [Advanced Setting] tab.



[4] Select a cut method from the [Method of Cut] menu.

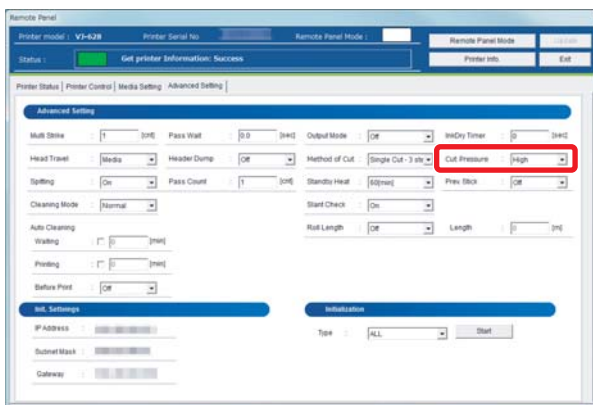


There are following modes in the [Method of Cut] menu.

Single Cut - 2 steps	Cut with fewer steps than “Single Cut - 3 steps”. Suitable for media with narrow width.
Single Cut - 3 steps	By default, this cut method is used.
Double Cut - 2 steps	Set when unable to cut with “Single Cut - 2 steps”. Suitable for media with narrow width.
Double Cut - 3 steps	Set when unable to cut with “Single Cut - 3 steps”.

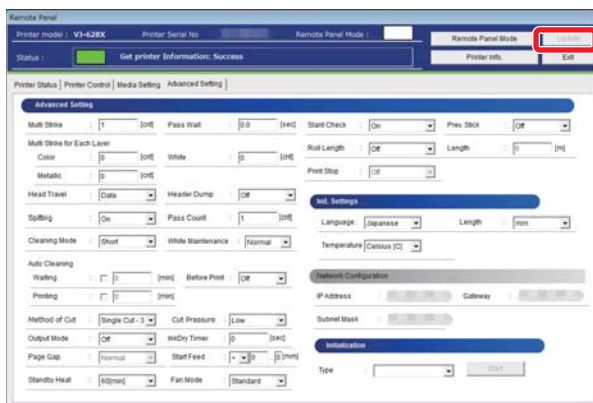
[5] Select [High] or [Low] for cut strength in the [Cut Pressure] menu.

- [Low] is used for thin media.



[6] Click [Update].

- The setting is reflected on the product.



Setting the vacuum fan

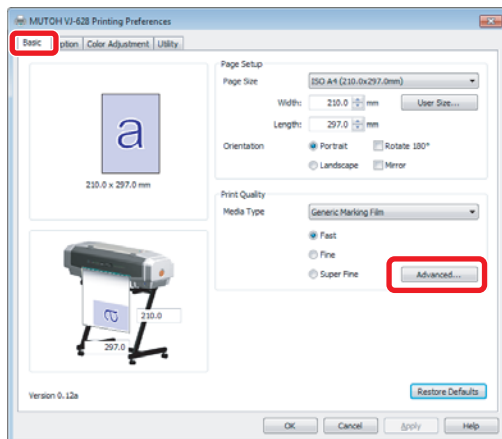
When printing on thin media or media without stiffness, it can prevent wrinkles or media jamming, if the vacuum fan is set to Low.

Procedure

- [1] Display the Printing Preferences screen of printer driver.

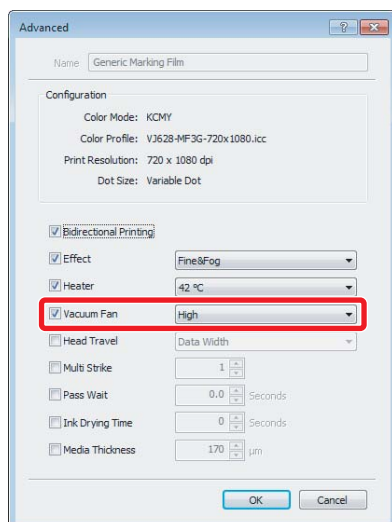
 "Displaying the Printing Preferences screen of printer driver" on page 10

- [2]



Click [Advanced...] in the [Basic] tab.

- [3]



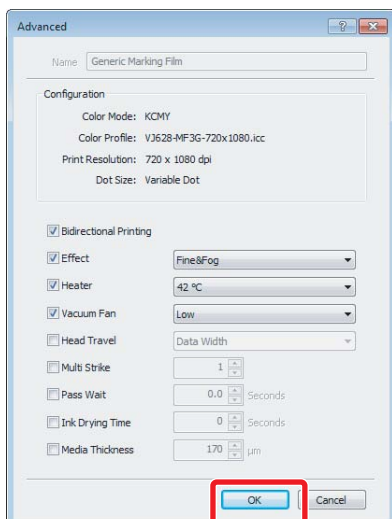
From the [Vacuum Fan] menu, select [Middle] or [Low].



Note

- If the checkmark is removed from the checkbox, the setting already registered in the printer's main body has priority.
- The same can be also done with the remote panel of VSM. Set in the [Vacuum Fan] menu of the [Advanced] tab.

- [4]



Click [OK].

- The setting is reflected in this product.

Setting the heater

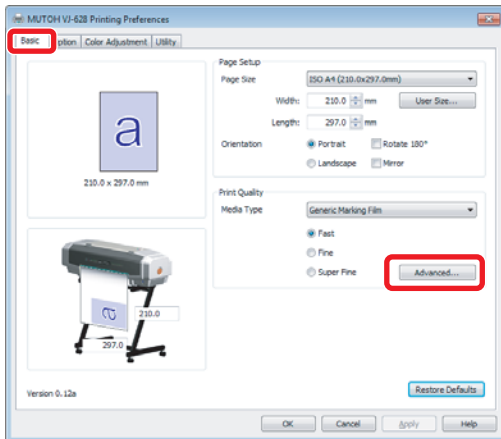
Functions of the heater are to warm up media before and after printing to improve print quality and promote fast drying. If the heater setting is changed matching the thickness or material of media, better results can be obtained.

Procedure

- [1] Display the Printing Preferences screen of printer driver.

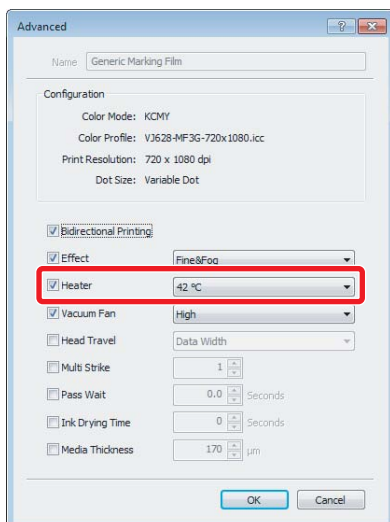
 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click the [Advanced...] in the [Basic] tab.

[3]



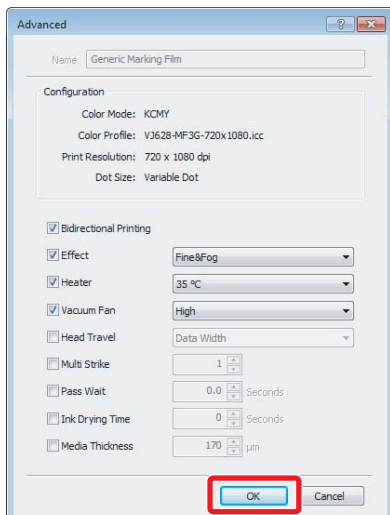
In [Heater] menu of the [Advanced] tab, enter a temperature.

- It can be set to OFF, or between 30 °C and 45 °C.
- Since the most suitable temperature differs depending on media, conduct test print.

Note

- If the checkmark is removed from the checkbox, the setting already registered in the printer's main body has priority.
- The same can be also done with the remote panel of VSM. Set in the [Heater] menu of the [Advanced] tab.

[4]



Click [OK].

- The setting is reflected in this product.

White maintenance settings

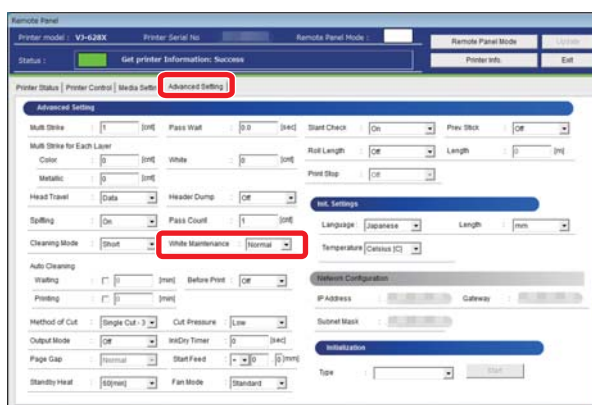
Sets up maintenance operation for metallic ink and white ink.

If you do not usually use metallic ink and white ink for regular printing, set to "Little" to curb metallic ink and white ink consumption in standby status.

This menu is only available for 7 colors and 8 colors settings.

Procedure

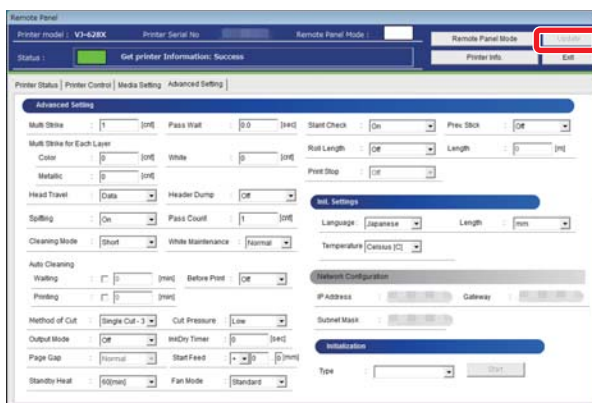
- [1] Launch remote panel for the VSM.
 ["Launching/Displaying/Finishing ValueJet Status Monitor \(VSM\)" on page 11](#)
- [2] Select the maintenance operation from [White Maintenance] menu on the [Advanced Setting] tab.



[White Maintenance] includes the following modes.

Normal:	The printer performs metallic ink and white ink's maintenance operations at a regular frequency. This is the default setting.
Little	The printer performs fewer maintenance operations for the minimum metallic ink and white ink.

- [3] Click "Update".
The setting value is applied to the printer.



Note

Metallic ink and white ink tend to settle or coagulate inside the print head or ink tubes. Therefore, the printer regularly discharges a small amount of metallic ink and white ink to maintain the performance, even in standby status.

Chapter 3 Maintenance

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Maintenance

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

Before and after daily operation	"Shaking ink cartridges" on page 52
	"Nozzle check and cleaning" on page 32
Based on your usage condition	"Head cleaning" on page 59
	"Replacing ink cartridge" on page 55
	"Emptying waste ink tank" on page 57
	"Replacing absorption material for the flushing box" on page 66
	"Replacing cutter" on page 69
Weekly	"Replacing the plug for the high-capacity ink pack adapter" on page 70
	"Cleaning of cleaning wiper" on page 61
Monthly	"Cleaning of print head circumference" on page 63
	"Inside cleaning" on page 65
When not used for a week or more	Weekly "Head cleaning" on page 59

Important!

Since a service technician has to handle following cases, please contact your local MUTOH dealer.

- Emergency mode is happening repeatedly.
- The message to notify the life of print head and various motors is displayed in VSM.

 ["Handling messages/error messages" on page 82](#)

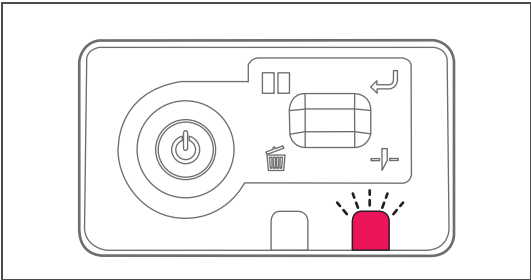
Shaking ink cartridges (VJ-628X)

When using metallic ink or white ink, shake the ink cartridges in the following cases to avoid ink settlement or coagulation.

- Before and after daily operations
- When the error lamp on the operation panel turns on and the following message is displayed on the "Status Information" of VSM.
"Shake the cartridges No. **" (** indicates the cartridge slot number)

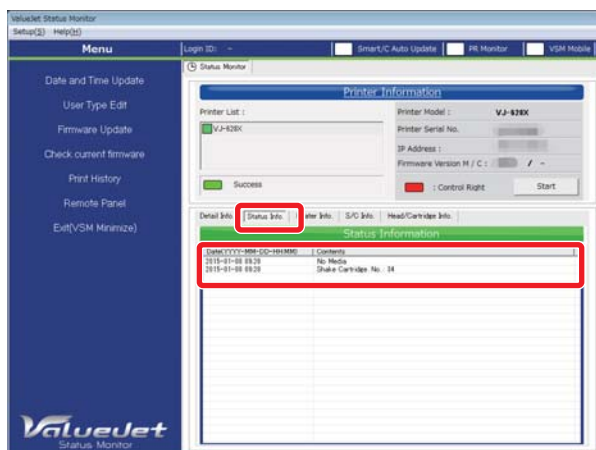
How to check the message

Procedure

- [1]  Check that the error lamp on the operation panel is on.

- [2] Launch VSM.
 ["Launching VSM" on page 11](#)

- [3] Check the [Status Information].
- For instance, if the message "Shake Cartridge. No. 34" is displayed, shake the ink cartridges number 3 and 4.



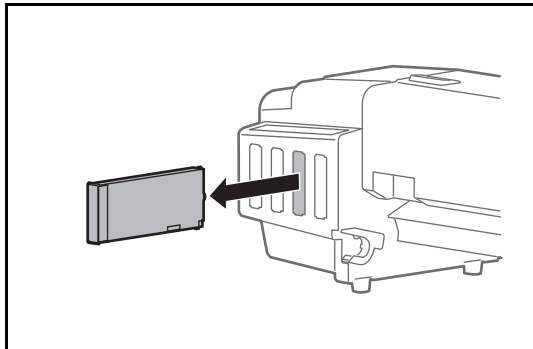
Note

- You can check the slot numbers with the ink color display label on the rear side of the printer.
- When you have launched the VSM remote panel, you can also check from [Printer Status] - [Status Information].

Shaking ink cartridges

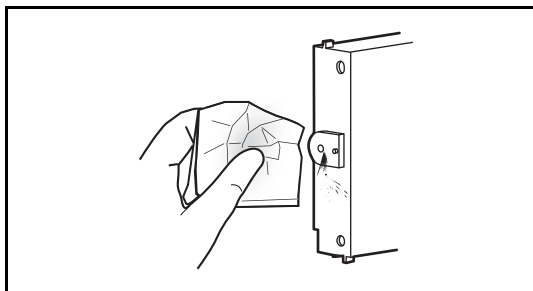
Procedure

[1]



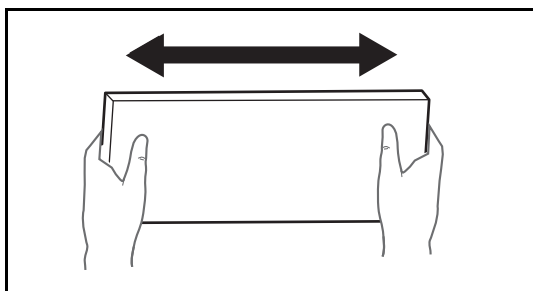
- Check that the printer is turned on.
- Wear the supplied gloves and remove ink cartridges from ink cartridge slots.

[2]



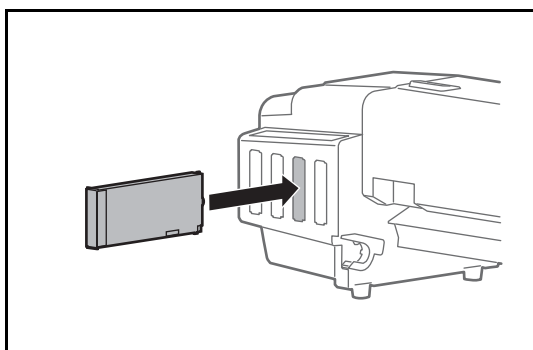
Using the paper towel provided with the printer to wipe off the ink attached to the printer plug of Ink cartridge.

[3]



While holding the printer plug with a paper towel, shake the ink cartridge horizontally 10 times.

[4]



Insert the ink cartridges into the original 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.

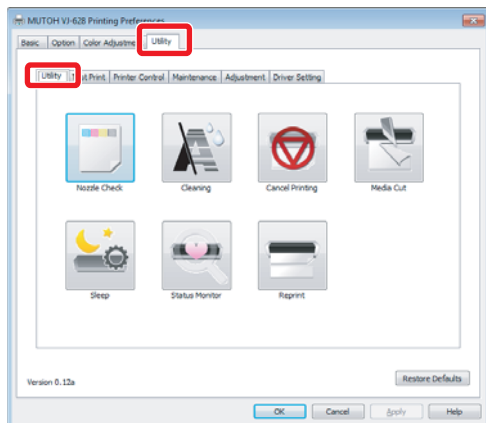
Checking ink and replacing ink cartridge

Checking ink level

[1] Display the Printing Preferences screen of printer driver.

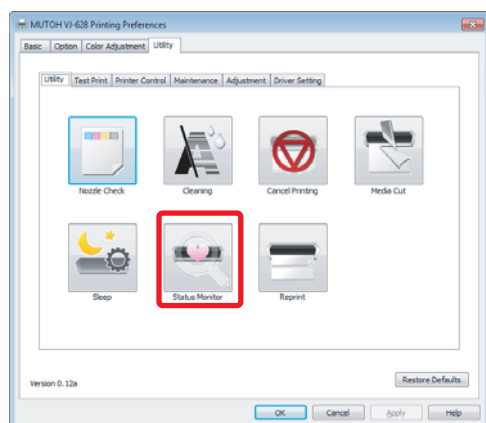
☞ "Displaying the Printing Preferences screen of printer driver" on page 10

[2]



Click the [Utility] tab under the [Utility] tab.

[3]



Click [Status Monitor].

- The VSM remote panel opens.



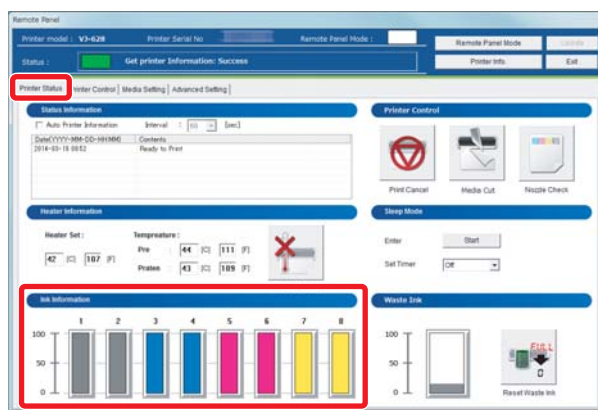
Note

- VSM can be launched directly.

☞ "Launching VSM" on page 11

[4] Check [Ink Information] in the [Printer Status] tab.

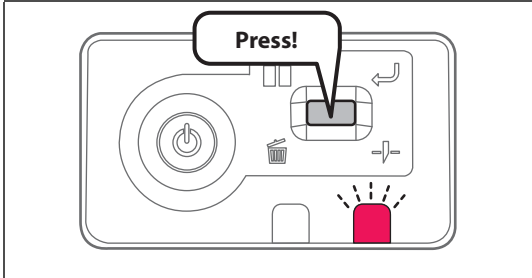
- As ink is used, the colored scale becomes low.



When it becomes time to replace ink cartridge

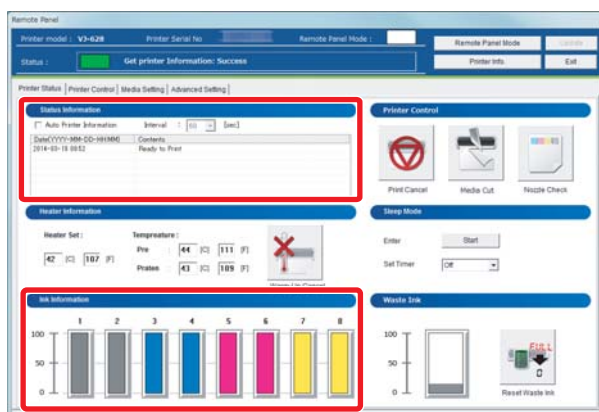
When the ink level becomes low, the error LED of the operation panel flashes and a buzzer sounds.

Procedure

- [1]  Short press the operation key on the operation panel.
- The buzzer stops.

- [2] Check the ink cartridge that needs to be replaced.
 ["Checking ink level" on page 53](#)

- Check [Status Information] also.



- [3] Prepare an ink cartridge to replace.



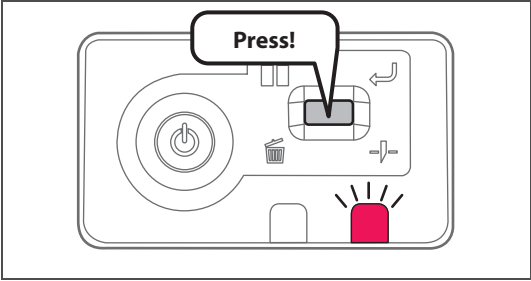
Note

Sleep mode continues after stopping the buzzer.

Replacing ink cartridge

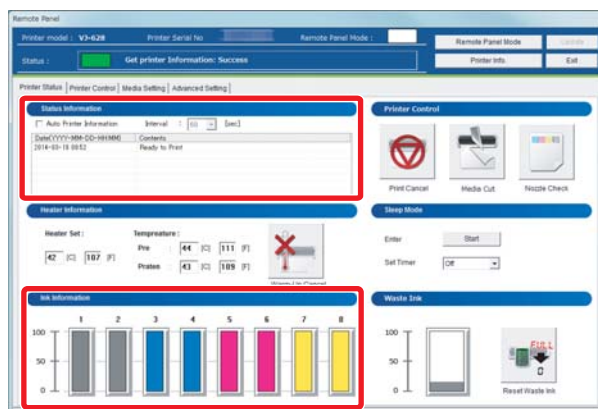
When ink level becomes low, the error LED of the operation panel flashes and a buzzer sounds. Printing pauses temporarily. It restarts after changed with a new ink cartridge.

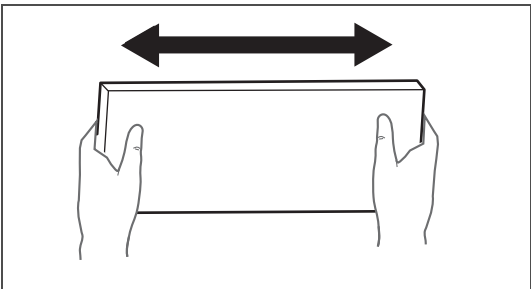
Procedure

- [1]  Short press the operation key on the operation panel.
- The buzzer stops.

- [2] Check the ink cartridge that needs to be replaced.
 ["Checking ink level" on page 53](#)

- Check [Status Information] also.

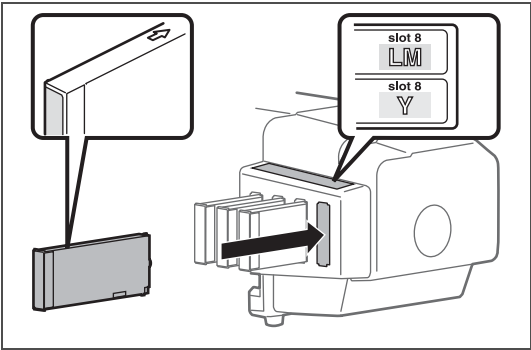


- [3]  Shake the ink cartridge 2 or 3 times lightly.



Note

Shake the metallic and white ink cartridges 10 times horizontally.

- [4]  Remove the empty ink cartridge and insert the new one.
- Make sure to match the ink cartridge color with the label of this product.
 - The arrow should face up.
 - Insert all the way to the end.

 Important!

- Do not replace ink cartridge when the power of this product is OFF.
Ink level cannot be detected correctly.
- If ink cartridge is moved from cold to warm place, leave it at least 3 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

When a certain amount of ink is used, the error LED in the operation panel of this product becomes ON, and a buzzer sounds. Pour waste ink inside the waste ink tank to PET bottle, and discharge.

CAUTION

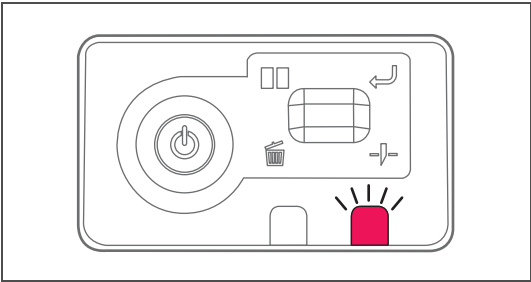


- Be cautious that ink does not get into your eye or make a contact with your skin. Wear goggles and gloves. When ink gets into your eye or make a contact with your skin, wash with water immediately. If left as it is, it may cause red eye or light inflammation. If it is necessary, please see your doctor immediately.

Important!

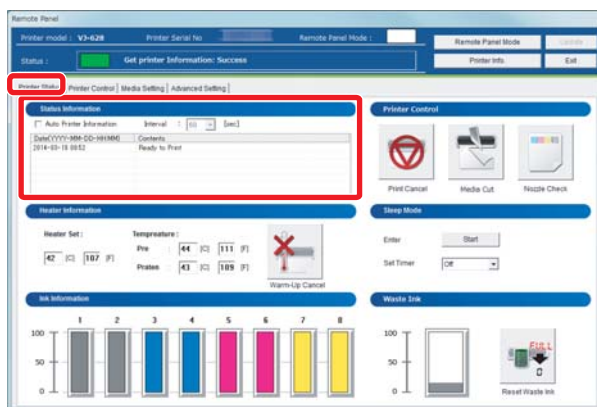
When moving this product, always empty the waste ink tank even if it is for a short distance.
If ink splashes inside the waste ink tank while being moved, it can cause damage.

Procedure

- [1]  Check the error LED is flashing.

- [2] Launch VSM and display the remote panel.
 ["Launching/Displaying/Finishing ValueJet Status Monitor \(VSM\)" on page 11](#)

- [3] Check [Status Information] in the [Printer Status] tab.
• A message indicating that the waste ink tank is full is displayed.

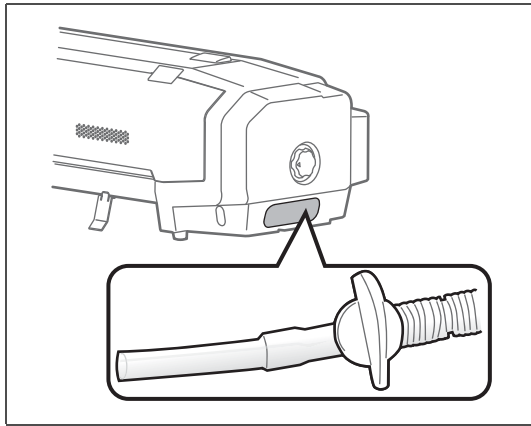


- [4] Prepare a container like PET bottle to transfer the waste ink.

Important!

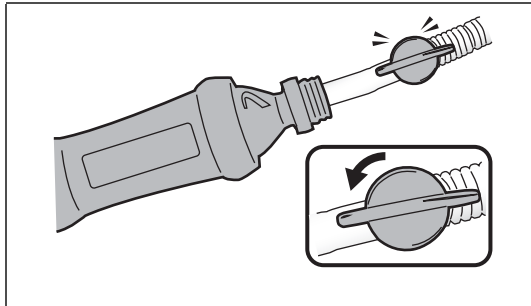
The capacity of waste ink tank is 1400 ml. Make sure to prepare a container that has enough capacity when discharging waste ink.

[5]



Pull out the tip of the waste ink tube.

[6]



- Insert the waste ink tube into a container.
- Turn the tab of the tube clamp and position it as shown in the illustration on the left.
- Pour waste ink into the container.
- When the waste liquid has been moved, return the tube clamp tab to the original position.

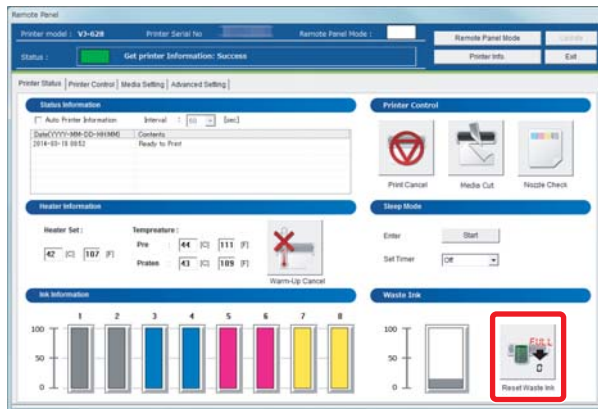
⚠ WARNING



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.

[7] Click [Reset Waste Ink].

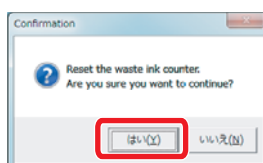
- The confirmation window opens.



📝 Note

[Reset Waste Ink] can be also done from [Utility] - [Maintenance] of the printer driver.

[8]



Click [Yes].

- The waste ink counter is set to 0.

Cleaning each part

To use this product always in its best condition, please clean periodically.

Head cleaning

When nozzle clogging is found in nozzle check, conduct head cleaning. Head cleaning consumes ink.

There are several cleaning modes in this product. Please use them accordingly based on your usage condition.

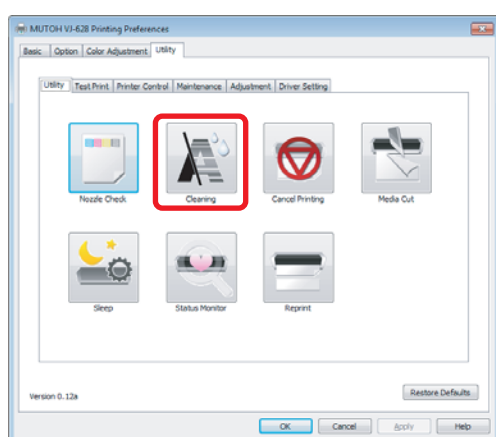
Short cleaning	Consumes less ink than Normal cleaning.
Normal cleaning	Conduct nozzle check before and after printing, and use when nozzle clogging is found.
Long cleaning	Consumes more ink than Normal cleaning. When nozzle clogging still occurs after Normal cleaning, conduct Long cleaning.
Little Charge	Though much better cleaning results can be expected than Long cleaning, it consumes a large amount of ink.

Steps for head cleaning

- [1] Display the Printing Preferences screen of the printer driver.

☞ ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

- [2]



Click [Cleaning] in the [Utility] tab under the [Utility] tab.

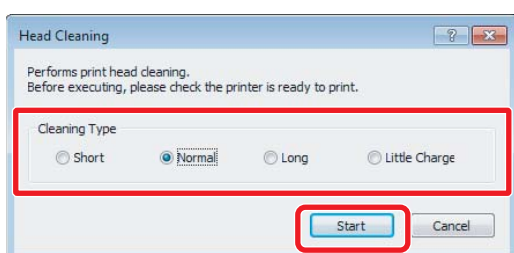
- The "Head Cleaning" window opens.



Note

The same can be also done with VSM.

- [3]



Select a mode of cleaning and click [Start].

- Cleaning starts.

[4] Conduct Nozzle Check.

- If nozzle clogging still remains, repeat cleaning and nozzle check.

 ["Steps for head cleaning" on page 59](#)



Note

- When nozzle clogging remains even after repeating normal cleaning several times, conduct Long cleaning.
- When nozzle clogging remains even after repeating Long cleaning several times, conduct ["Cleaning of cleaning wiper" on page 61](#) or ["Cleaning of print head circumference" on page 63](#).
- Yet, when nozzle clogging remains, conduct "Little Charge".

Cleaning of cleaning wiper

Cleaning period:

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

Preparation:

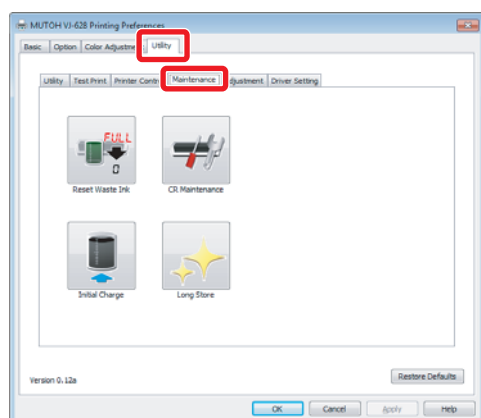
- Cleaning stick

Procedure

[1] Display the Printing Preferences screen of printer driver.

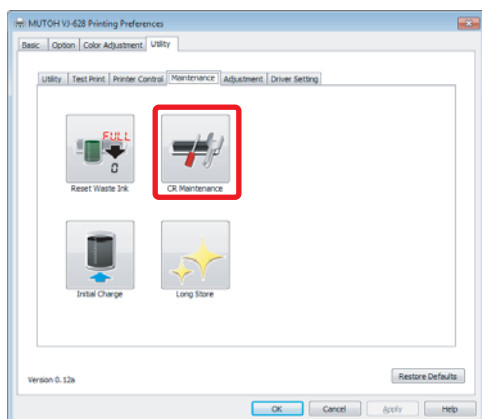
☞ ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click the [Utility] tab under the [Maintenance] tab.

[3]



Click [CR Maintenance].

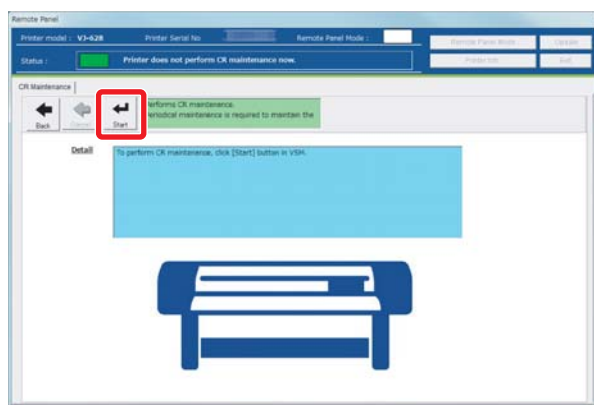
- The VSM remote panel opens.

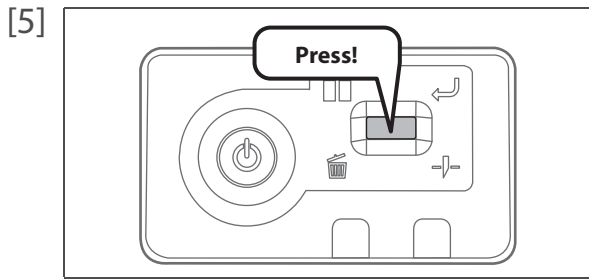
Note

- VSM can be launched directly.

☞ ["Launching VSM" on page 11](#)

[4] Click [Start].





Short press the operation key on the operation panel.

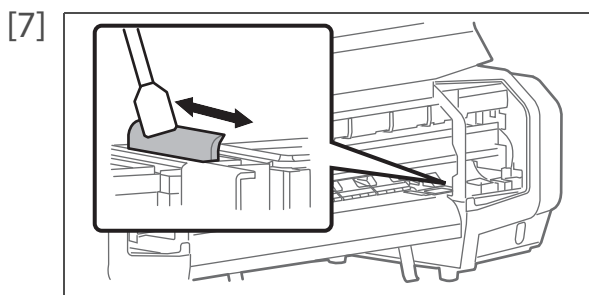
- The carriage moves to the maintenance position inside the front cover.

[6] Open the front cover.

Important!

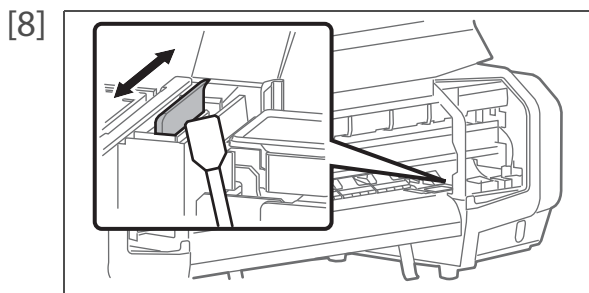
When cleaning the cleaning wiper, please note the followings.

- Use a cleaning stick in dry condition. If moisten with water or solution, it can cause damage to the print head.
- Do not reuse a cleaning stick. Dusts can adhere causing damage to the print head.
- Standard cleaning time should be within 5 minutes. If it takes longer, the stick can dry causing damage to the print head.

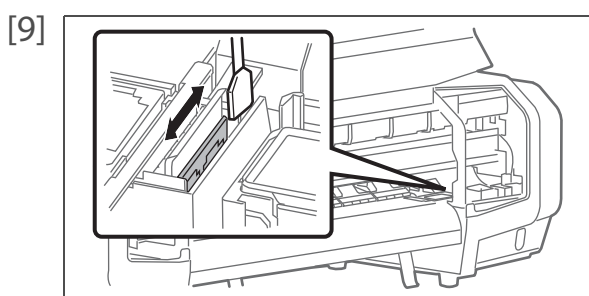


Wipe the cleaning wiper with a cleaning stick.

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

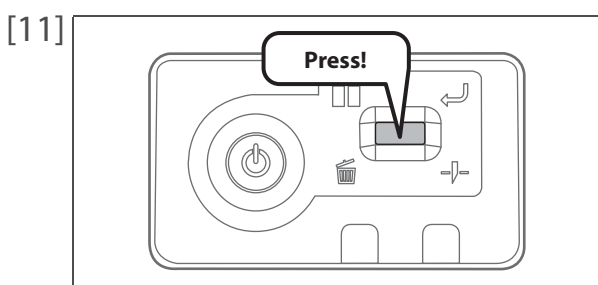


Wipe the right side surface of cleaning wiper going back and forth.



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

[10] Close the front cover.



Short press the operation key on the operation panel.

- The carriage moves to the original position inside the front cover.

Cleaning of print head circumference

Cleaning period:

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

Preparation:

Cleaning stick



During cleaning, please note the followings.

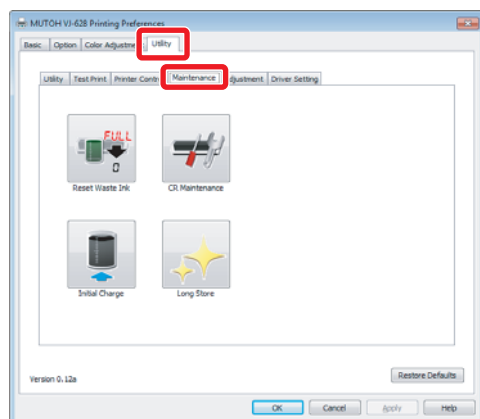
- Use a cleaning stick in dry condition. If moisten with water or solution, it can cause damage to the print head.
- Do not touch the tip of a cleaning stick with fingers. If sebum is adhered, it can cause damage to the print head.
- Do not reuse a cleaning stick. Dusts can adhere causing damage to the print head.
- Standard cleaning time should be within 5 minutes. If it takes longer, the stick can dry causing damage to the print head.

Procedure

- [1] Display the Printing Preferences screen of printer driver.

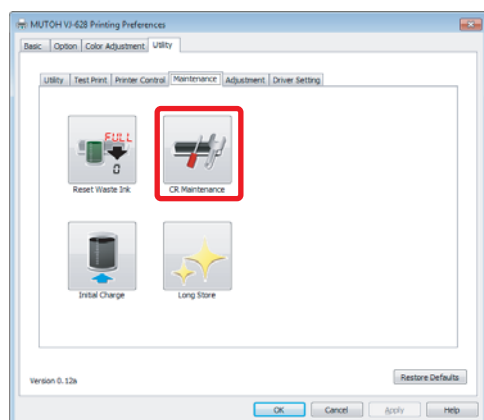
["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click the [Maintenance] tab under the [Utility] tab.

[3]



Click [CR Maintenance].

- The VSM remote panel opens.

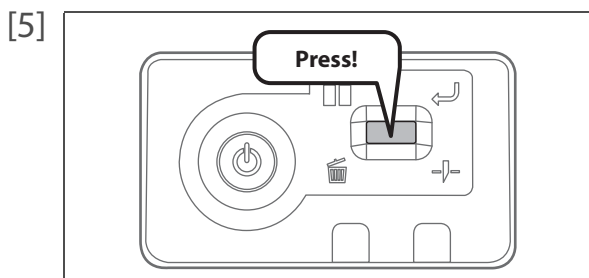
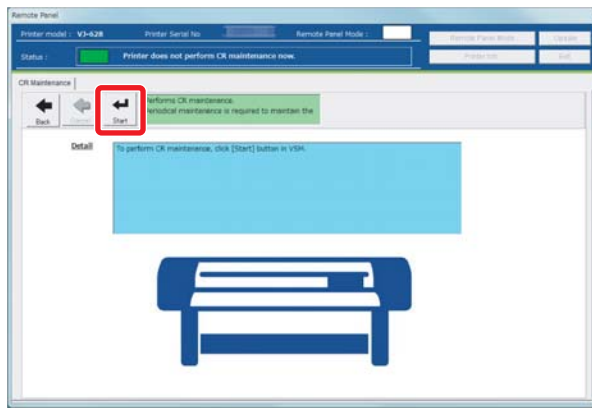


Note

- VSM can be launched directly.

["Launching VSM" on page 11](#)

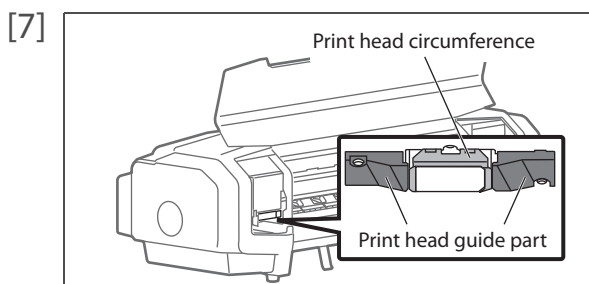
[4] Click [Start].



Short press the operation key on the operation panel.

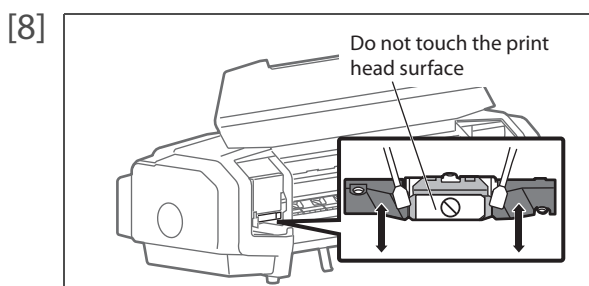
- The carriage moves to the maintenance position inside the front cover.

[6] Open the front cover.



Look at the bottom side of the carriage and check if dusts and ink lump are adhered.

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

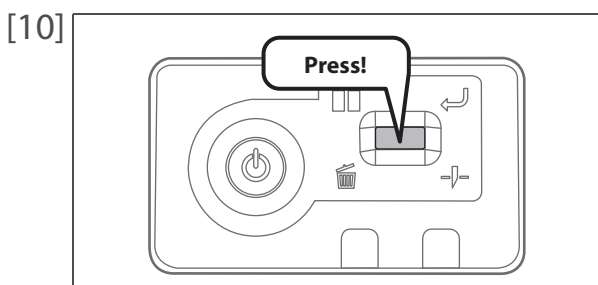


If dusts or ink lump are adhered, clean with a cleaning stick.



- Do not touch the print head surface with fingers or a cleaning stick. It can cause damage to the print head.
- Do not touch the platen or media guide. The temperature may be high.

[9] Close the front cover.



Short press the operation key on the operation panel.

- The carriage returns to the original position inside the front cover.

Inside cleaning

Cleaning period:

- Monthly

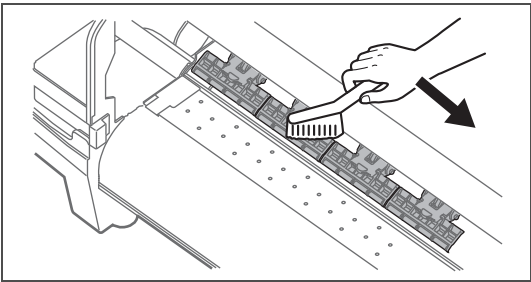
Procedure

[1] Check the power is OFF.

[2] Open the front cover.

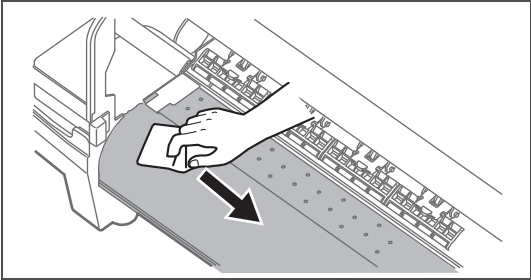
Important!

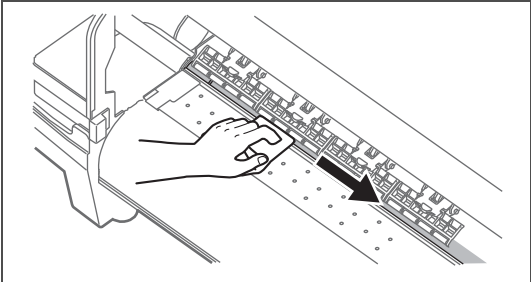
Immediately after turning off the power, the temperature of the heater in this product is very high. Touch the platen or media guide and if it is too hot, wait for a while before starting cleaning.

[3]  Brush off dusts on the pressure arms with a soft brush.

Important!

- Do not blow off dusts inside the product with a gas duster. It may cause abnormal noise.

[4]  Using a soft cloth that is soaked in water and squeezed tightly, wipe dirt on the platen and media guide.

[5]  Using a soft cloth that is soaked in water and squeezed tightly, wipe dirt on the silver part of grid roller.

[6] Close the front cover.

Replacing consumable parts

Replacing absorption material for the flushing box

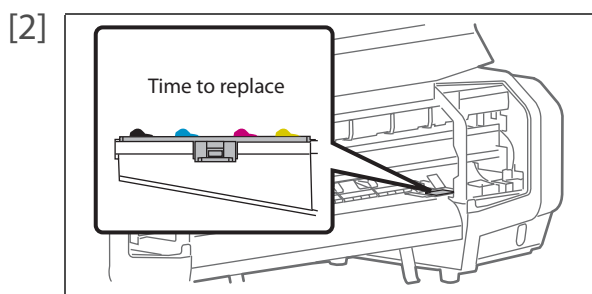
The flushing box is a part that keeps receiving ink discharged from the print head. Please replace the absorption material for the flushing box periodically. If used without replacing, it can cause damage to the print head.

Cleaning period:

- Approx. every 2 months (since it differs depending on usage frequency, please check periodically)

1. Checking steps

[1] Open the front cover.



Check the absorption material for the flushing box.

- When there are lumps of ink rise from the frame of the flushing box, it is time to replace.

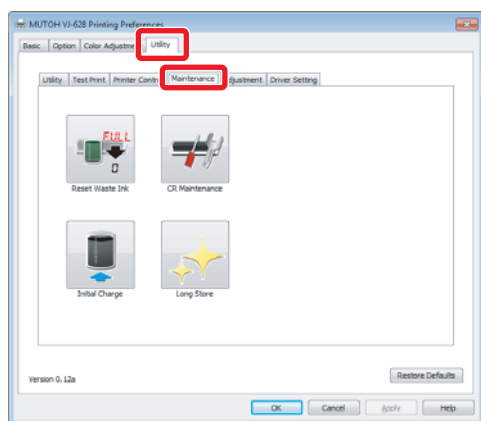
[3] Close the front cover.

2. Replacing steps

[1] Display the Printing Preferences screen of printer driver.

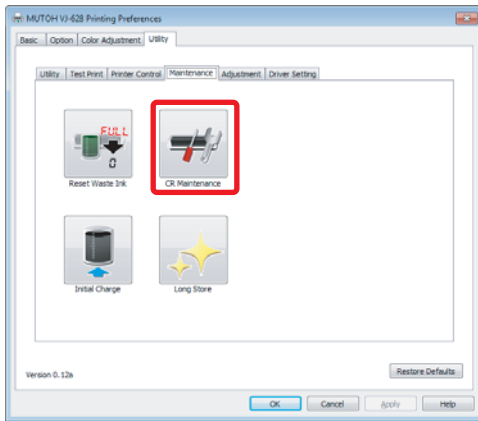
☞ ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click the [Maintenance] tab under the [Utility] tab.

[3]



Click [CR Maintenance].

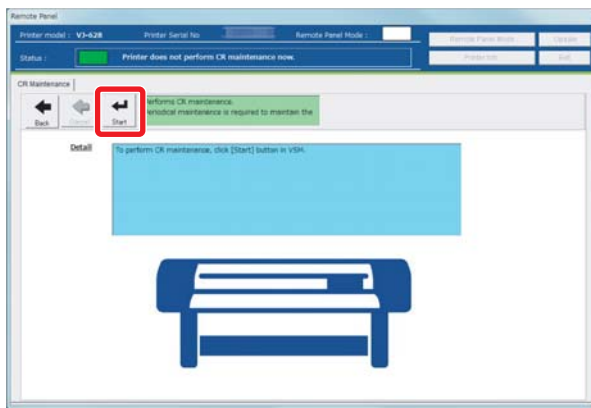
- The VSM remote panel opens.



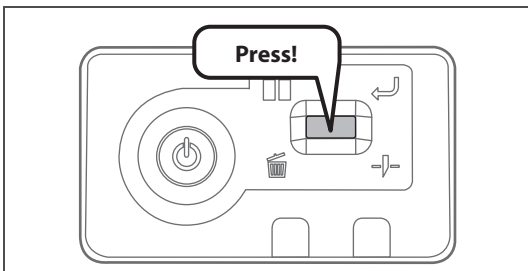
Note

- VSM can be launched directly.
👉 ["Launching VSM" on page 11](#)

[4] Click [Start].



[5]

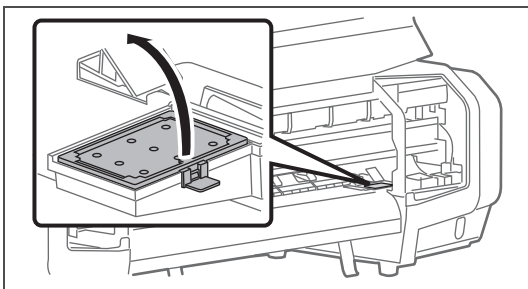


Short press the operation key on the operation panel.

- The carriage moves to the maintenance position inside the front cover.

[6] Open the front cover.

[7]



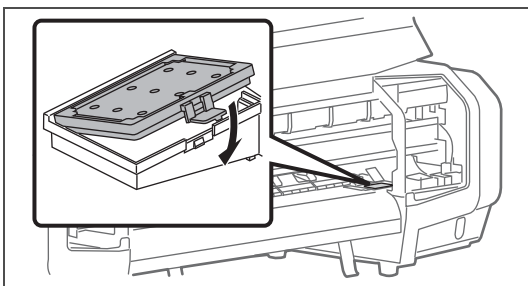
Remove the absorption material for the flushing box.

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



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

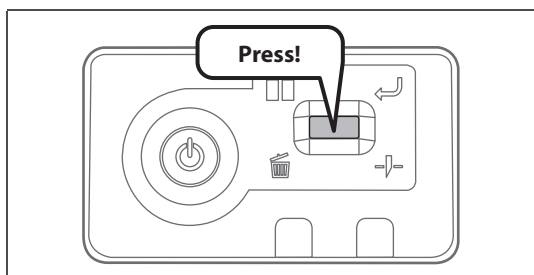
[8]



Attach new absorption material for the flushing box.

[9] Close the front cover.

[10]



Short press the operation key on the operation panel.

- The carriage moves to the original position inside the front cover.

Replacing cutter

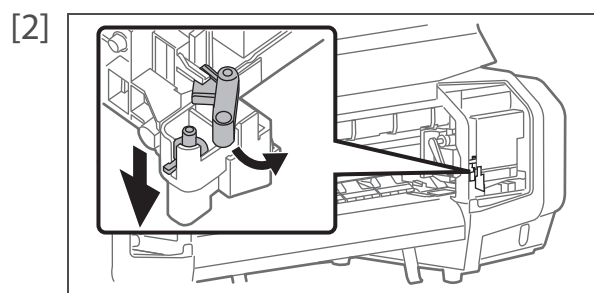
When the cutter blade becomes dull, replace with a new cutter.

CAUTION

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

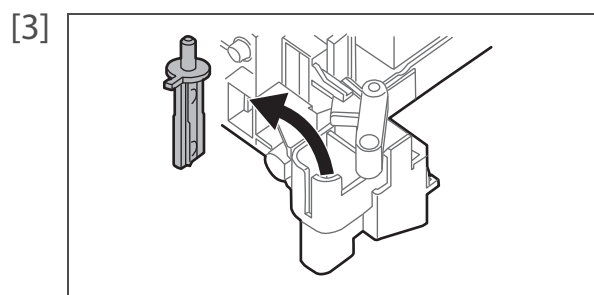
Procedure

[1] Open the front cover.

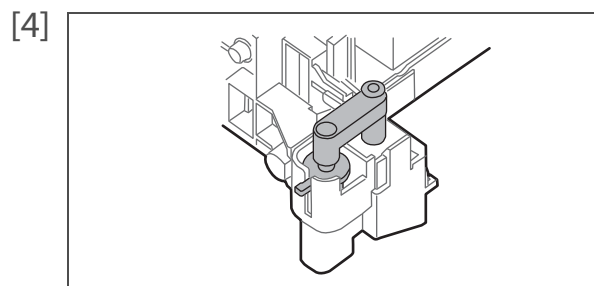


Move the cutter holder a little so that the cutter can be removed.

- While pushing down the cutter knob lightly, move the cutter holder to your side.



Remove the cutter.



Attach a new cutter.

- Set the cutter for the cutter holder to be in the original position.

[5] Close the front cover.

Replacing the plug for the high-capacity ink pack adapter

Once you have removed and inserted the high-capacity ink pack adapter for a certain times, the plug needs to be replaced.

1. How to check the plug life

The more the high-capacity ink pack adapter is removed and inserted, the shorter the plug life becomes.?

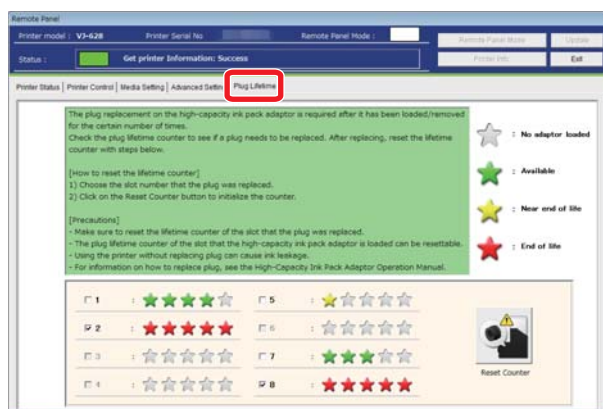
Follow the procedure below to regularly check the plug life.

[1] Launch the VSM remote panel.

 ["Displaying remote panel" on page 11](#)

[2] Click the [Plug Lifetime] tab.

- The life is indicated by the number of the green stars. 5 stars are displayed at the beginning.
- As the plug life is running out, the number of star decreases one by one (20 %).
- When a yellow star is displayed, it means that the plug needs to be replaced soon. Have a replacement plug ready.
- When a red star is displayed, it means that the plug needs to be replaced now.



Note

- The replacement plug is supplied with the high-capacity ink pack adapter.
- In the operation manual for the high-capacity ink pack adapter, the plug is described as the "connector rubber".

2. Replacing the plug

When the plug life runs out, the error LED on the operation panel turns on and a message is displayed on the "Status Information" of VSM.

Follow the procedure below to replace the plug.

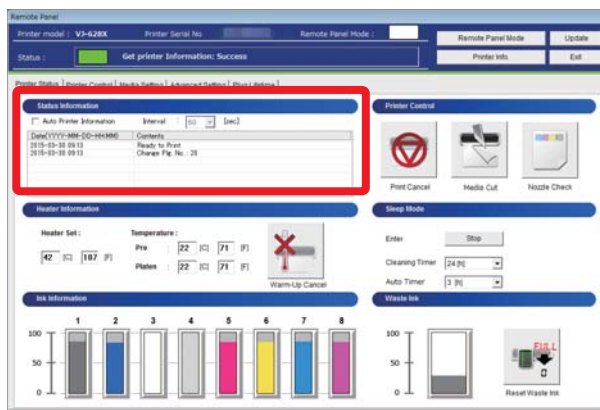
Once the plug is replaced and the plug life is initialized, the error LED turns off.

- [1] Start the VSM remote panel.

👉 ["Displaying remote panel" on page 11](#)

- [2] Check the [Status Information].

- For instance, if the message "Change Plg. No. 28" is displayed, replace the high-capacity ink pack adapters from the slot number 2 and 8.



- [3] See the operation manual for the high-capacity ink pack adapter to replace the plug.

👉 [Operation manual for the high capacity ink pack adapter "3.3 Replacing Connector Rubber" P.13](#)

- [4] Initialize the plug life for the slot number that has been replaced.

👉 ["Initializing the plug life" on page 72](#)

Note

- The screen above is for VJ-628X. Screens differ depending on the printer model you are using.
- In the operation manual for the high-capacity ink pack adapter, the plug is described as "connector rubber".

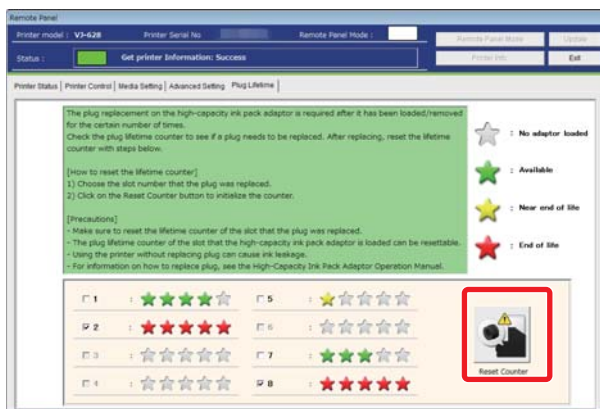
3. Initializing the plug life

If you have changed the plug for the high-capacity ink pack adapter, follow the procedure below to initialize the plug life.

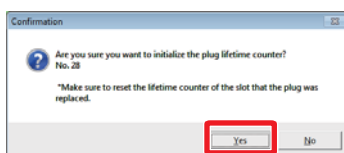
- [1] Start the VSM remote panel.
 ["Displaying remote panel" on page 11](#)
- [2] On the [Plug Lifetime] tab, check the slot for which the plug has been replaced.



- [3] Click [Reset Counter].
 - The confirmation window opens.



- [4] Click [Yes].
 - The plug life for the selected slot is initialized.



Important!

- Do not initialize the plug life for the slot number that has not been replaced. This may cause ink leakage.
- If you do not initialize the slot for which the plug has been replaced, a replacement message is displayed sooner than usual.

Transporting and long-term storage

Please refer to this section when transporting or storing this product for a long time.

Transporting

When transporting this product, it is necessary to wash inside with cleaning cartridge, discharge waste ink and fixate the print head with packaging material. If transported as it is, it can cause ink leakage and damage to the print head.

When it is used again, conduct reinstallation work and initial charging.

Important!

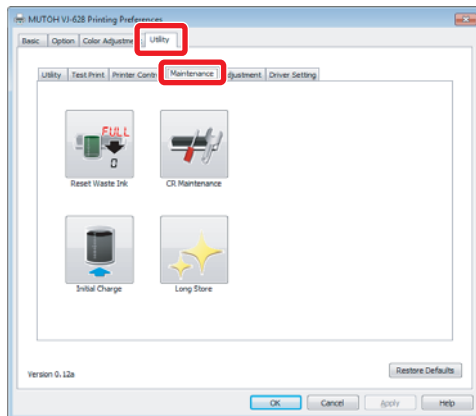
- When moving this product, always empty the waste ink tank even if it is for a short distance.
If ink splashes inside the waste ink tank while being moved, it can cause damage.
- Do not tilt, set against something or place this product upside down.
Otherwise the ink may leak or the handling mentioned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

1. Head cleaning and discharging waste ink

[1] Display the Printing Preferences screen of printer driver.

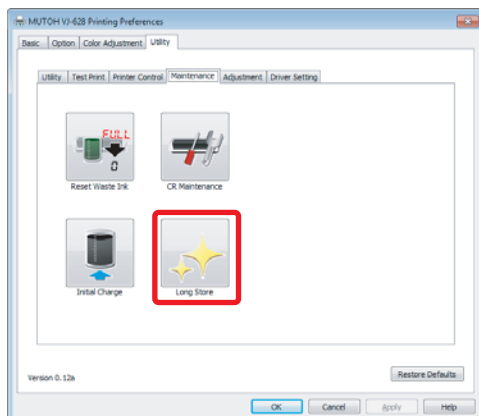
 ["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[2]



Click the [Maintenance] tab under the [Utility] tab.

[3]



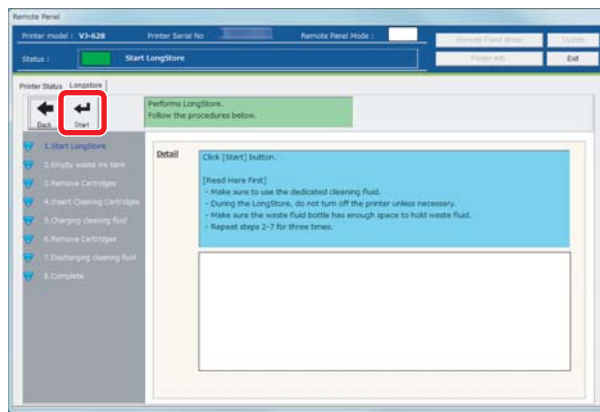
Click [Long Store]

- The VSM remote panel opens.

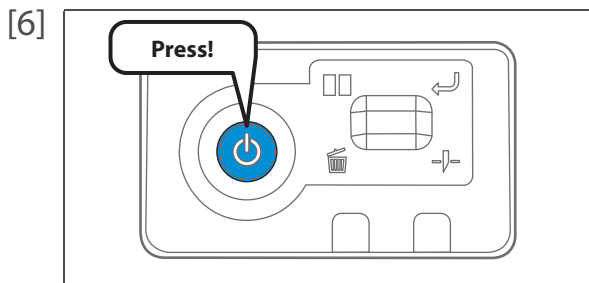
Note

- VSM can be launched directly.
 ["Launching VSM" on page 11](#)

- [4] Click [Start] in the [Longstore] tab.
- Conduct head cleaning following the screens.
 - After head cleaning is done, do not conduct re-launching and initial charging.



- [5] Empty the waste ink tank.
- 👉 ["Emptying waste ink tank" on page 57](#)



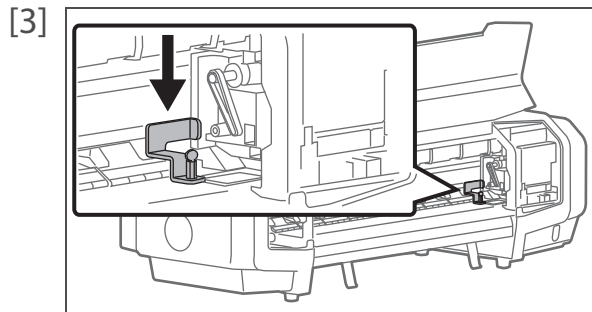
Turn the power button of this product OFF.

- Blue light becomes OFF.
- The product starts powering off operations.

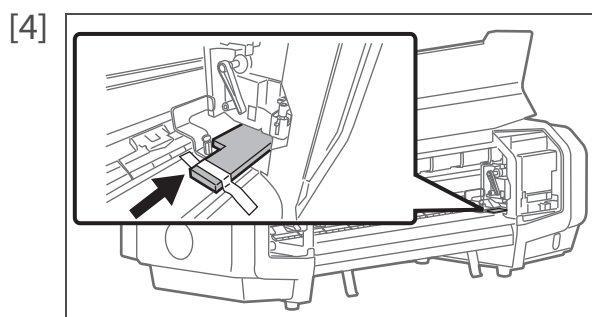
2. Repacking

[1] Remove all cables like power cable.

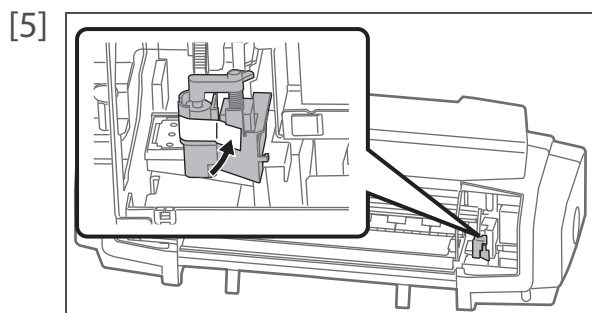
[2] Open the front cover.



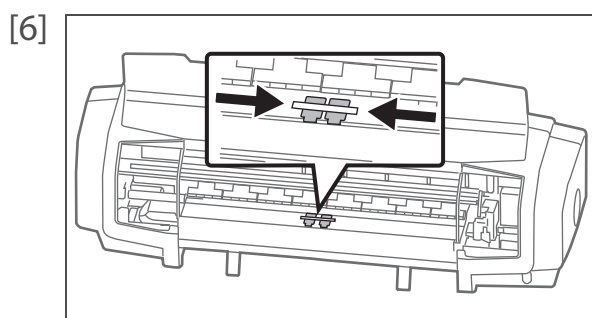
Attach the head fixing plate with screws.



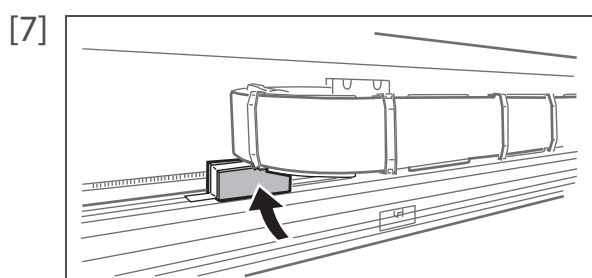
Install the print head protective materials and secure them with tape.



Secure the cutter with tape.

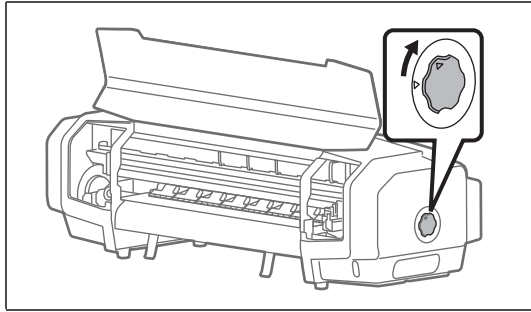


Move the paper guides to the center and place taping.



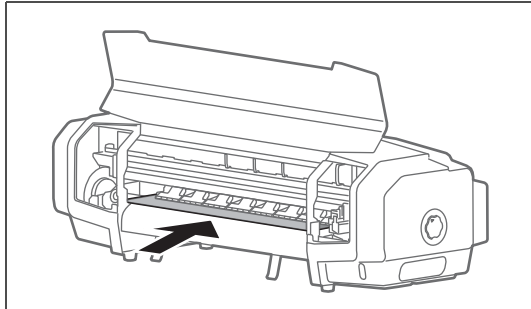
Install the steel bearer protective materials and secure them with tape.

[8]



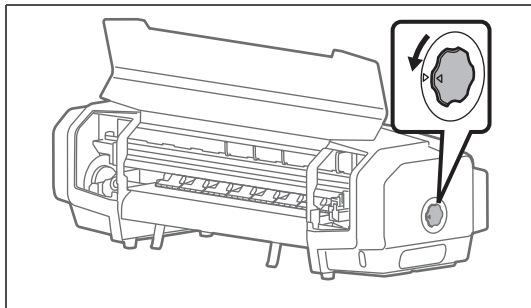
Turn the media fixing knob to release the lock.

[9]



Attach the roller protective sheet.

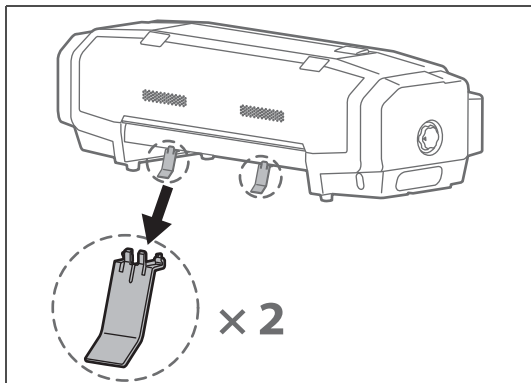
[10]



Turn the media fixing knob to lock.
• The roller protective sheet is fixed.

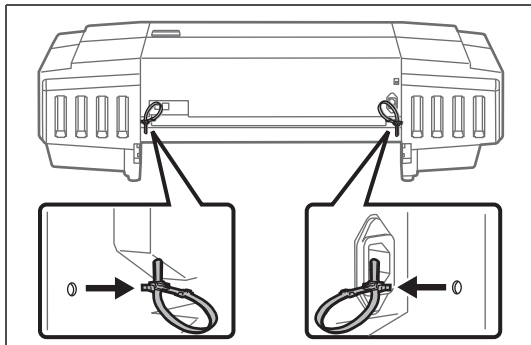
[11] Close the front cover.

[12]

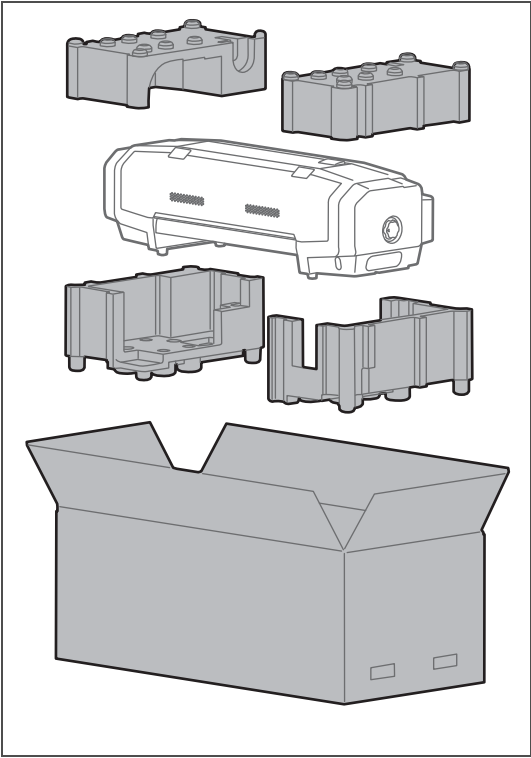


Remove 2 media guides.

[13]



Remove 2 tying bands.

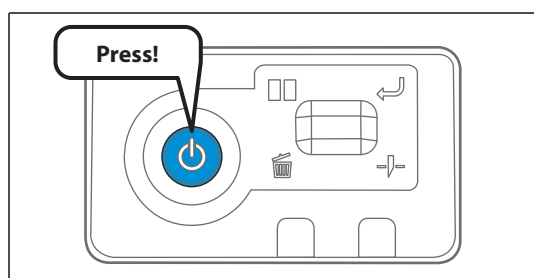
- [14]  The diagram illustrates the final step of packing the printer. At the top, there are two grey protective foam pieces. Below them is the printer itself, shown in a white outline. Underneath the printer are two more grey foam pieces, which appear to be side supports. At the bottom of the diagram is a large, open cardboard shipping box. The text to the right of the diagram instructs the user to place the buffer materials and the printer into this box.
- Put the buffer materials, and then insert the printer into the packaging box.

3. Reinstalling

- [1] Referring to “Startup Guide”, unpack the product and assemble.
- Conduct up to “Starting Setup” .
- [2] Conduct initial charging.
-  ["Initial charging" on page 78](#)

Initial charging

[1]



Turn the power button of this product ON.

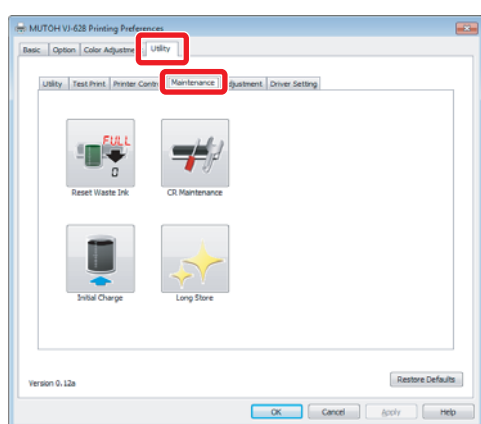
- Blue light becomes ON.
- The product starts initialization operations.

[2]

Display the Printing Preferences screen of printer driver.

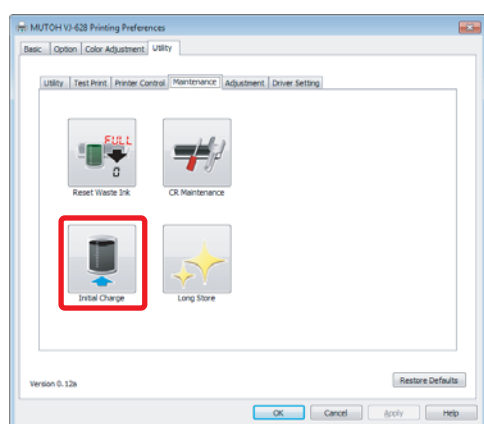
["Displaying the Printing Preferences screen of printer driver" on page 10](#)

[3]



Click the [Maintenance] tab under the [Utility] tab.

[4]



Click [Initial Charge].

- The VSM remote panel opens.



Note

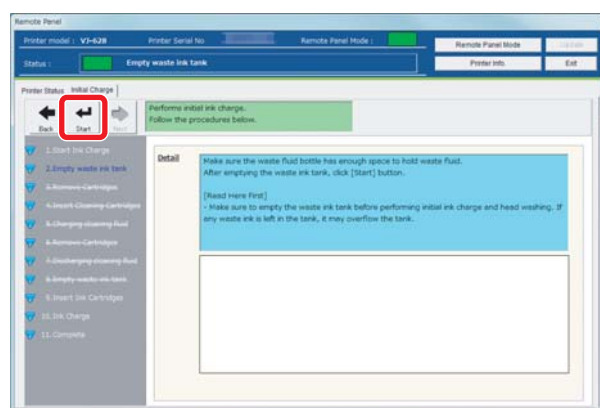
- You can perform [Initial Charge] from the [Printer Control] tab on the VSM remote panel.

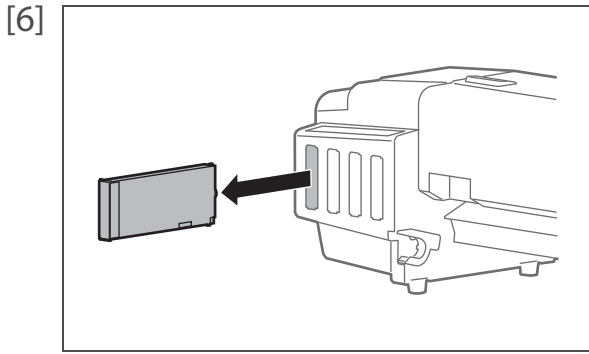
["Launching VSM" on page 11](#)

[5]

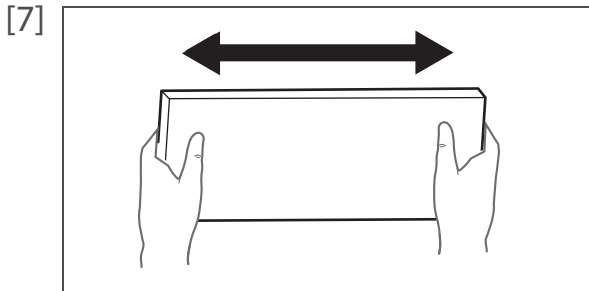
Click [Start] after emptying the waste ink tank.

["Emptying waste ink tank" on page 57](#)





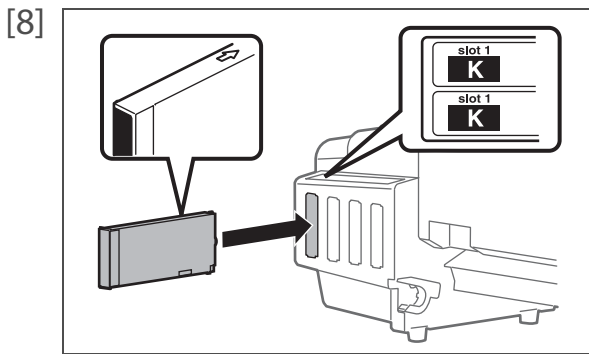
When ink cartridges are inserted to the cartridge slots, remove them all.



Shake the ink cartridge 2 or 3 times lightly.



Shake the metallic and white ink cartridges 10 times horizontally.



Insert ink cartridge to this product.

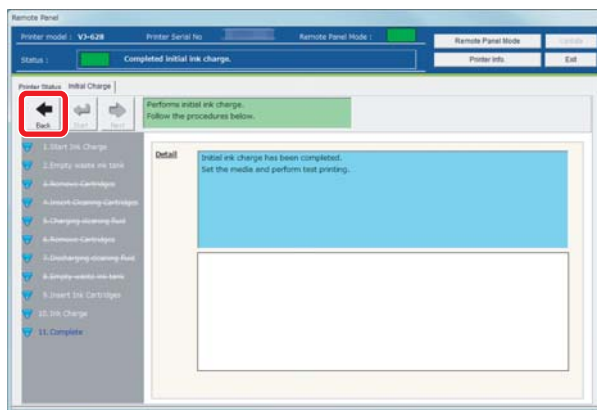
- Match the label of this product to the color of ink cartridge.
- The arrow should face up.
- Insert all the way to the end.



- After all ink cartridges are inserted, this product starts ink charging.

[9] In the [Finish] screen, click [Back].

- It finishes initial charging.



Storing for a long time

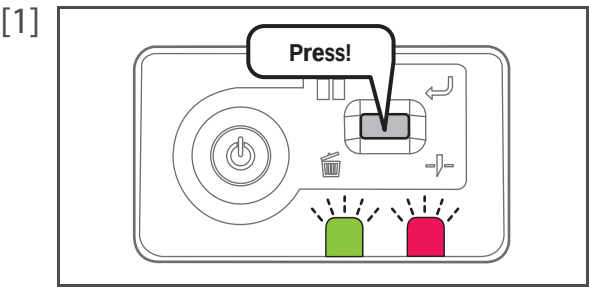
- [1] When not using for a long time, conduct head washing and discharging of waste ink.
 ["Transporting" on page 73](#) in ["Head cleaning and discharging waste ink"](#)
- [2] When used again, conduct initial charging.
 ["Initial charging" on page 78](#)

Chapter 4 Appendix

- Troubleshooting 82
 - Handling messages/error messages.....82
 - Clearing a media jam.....85
- Specifications of this product 86
 - Drawing area.....86
 - List of specifications.....87

Emergency mode

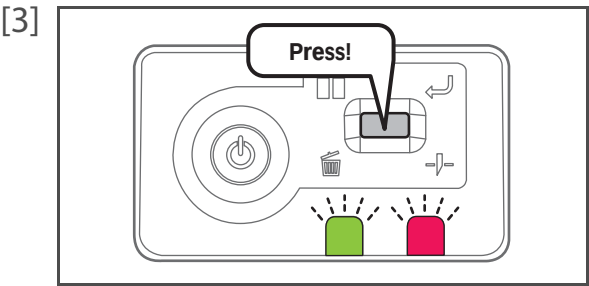
When a serious error happens, the data LED and error LED in the operation panel flash simultaneously, and the buzzer sounds in a fixed interval.



Short press the operation key on the operation panel, when the buzzer continues sounding.

- The buzzer stops.

- [2] Check the serious error contents with VSM.
- ☞ ["Checking failure contents of the emergency mode" on page 84](#)
- After checking it, proceed to step 5.
 - When the status monitor cannot be viewed, proceed to step 3.



When the status monitor cannot be viewed, short press the operation key on the operation panel again.

- LED flashes and the buzzer sounds in a regular pattern.
The pattern indicates error number.

- [4] Count the number of buzzer sounds (or number of short flashes of LED).
- Error number is 3 digits.
 - Long sounding buzzer indicates a digit of error number, and the short sounding buzzer after the long buzzer indicates error number.
 - For example, the No. 154 error shows the next pattern.
3 long, **1 short**, 2 long, **5 short**, 1 long, **4 short**, 3 long.

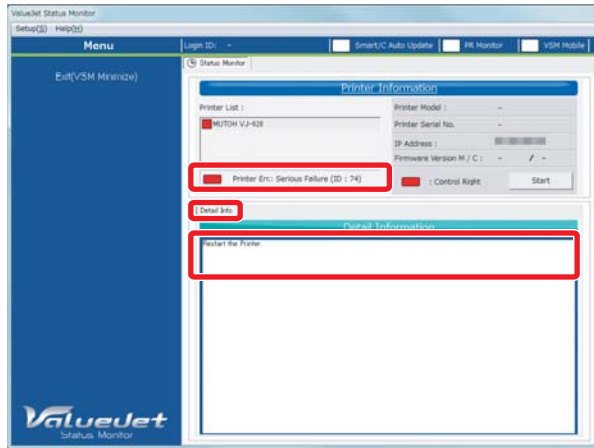


Note

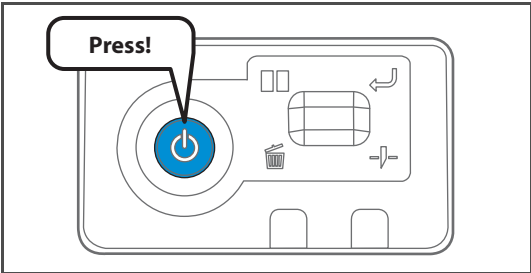
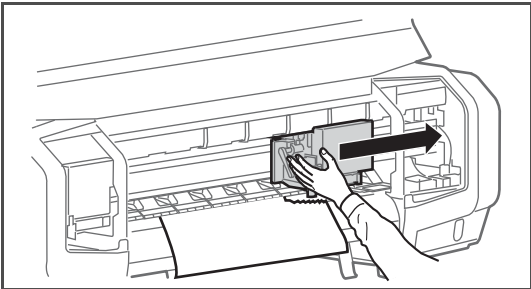
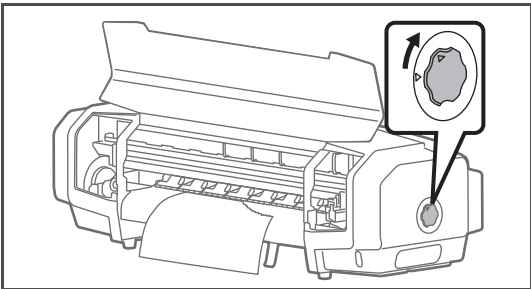
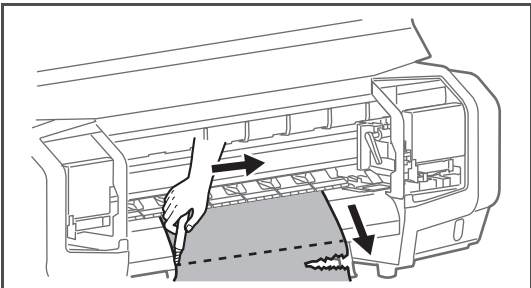
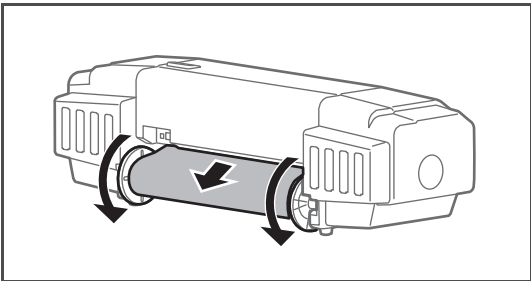
- The pattern will not repeat. To check it again, short press the operation key on the operation panel.
 - If error number of a digit is "0", a long buzzer (buzzer indicating a digit), then after having no sound for a fixed time, a long buzzer indicating the next digit sounds. For LED, there is a long flash only, and it moves on to a long flash without having a short flash.
- [5] Check the followings.
- Open the front cover and if media is jammed, remove it.
 - If there is a replaced part, check it is installed correctly.
- [6] Turn the power of this product OFF. Wait for 10 seconds or more and turn the power ON.
If the same error occurs after re-launching, please contact your local MUTOH dealer.

Checking failure contents of the emergency mode

- [1] Launch VSM.
☞ ["Launching VSM" on page 11](#)
- [2] Check [Printer Information] and [Detail Info].
 - Contents of serious errors and countermeasures are displayed.

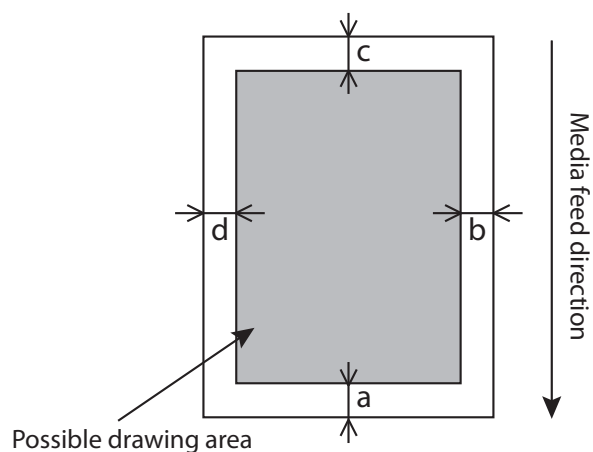


Clearing a media jam

- [1]  Turn the power button of this product OFF.
• Blue light becomes OFF.
• The product starts powering off operations.
- [2] Open the front cover.
- [3]  Move the carriage from the top of the media to the right.
- [4]  Turn the media fixing knob to release the lock.
- [5]  Pull the media to your side, and cut the media with a commercial available cutter.
- [6]  Lift both ends of the scroller, and manually rewind the roll media.
- [7] If foreign substances or pieces of media remain inside the printer, remove them.

Specifications of this product

Drawing area



a=5 mm *1 *2

b=5 mm to 25 mm *3

c=5 mm

d=5 mm to 25 mm *3

*1 After media initial and manual feedback, and pasting prevention process, printing starts at 15 mm.

*2 While the media initial tip and auto-cut is ON, printing starts at 40 mm.

*3 According to the remote panel settings

List of specifications

Model name		VJ-628/628X
Print method		On demand piezo method
Drive method		Firmware servo/DC motor drive
Paper feed method		Horizontal conveyance, roll paper, set from the back of the product, front discharge paper with paper feed operation, limited to outward roll
Media fix		Pressure roller down method with manual media fixing knob
Conditions of usable media	Roll paper peripheral	150 mm
	Roll paper weight	9 kg or less
	Maximum paper width	630 mm (In case of paper tube > paper width, paper tube width)
	Maximum paper thickness	Head height when set to "Low": 0.3 mm Max. Head height when set to "High": 1.3 mm Max.
Maximum print width		620 mm
Media cut method		Auto cut or manual cut
Heater		Installed under the media guide, OFF/30 °C to 45 °C
Head height adjustment		2 levels, Low and High
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, Light Cyan, Light Magenta) 7 colors*: (Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, White) 8 colors*: (Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, White, Metallic) *for VJ-628X only
	Type	220ml Cartridge /1,000ml ink pack (Black, Cyan, Magenta, Yellow) 220ml Cartridge (Light Cyan, Light Magenta, White, Metallic)
Waste ink tank		Fixed to the body type, capacity 1400 ml, waste ink discharge by users

Environmental conditions	Operating environment	Temperature 20 to 32 °C, humidity 40 to 60 %, (Non-condensing)
	Ranges to ensure printing precision	Temperature 22 to 30 °C, humidity 40 to 60 %, (Non-condensing)
	Change rate	Temperature: No more than 2 °C per 1 hour Humidity: No more than 5 % per 1 hour (Non-condensing)
	Environment for storage	• If not charged with ink when stored: up to 6 months Temperature -20 to +60 °C, humidity 20 to 80 %. (Non-condensing) • If charged with ink when stored: up to 1 week* *Up to 4 days if the ambient temperature is 32 °C or higher. Temperature -10 to +40 °C, humidity 20 to 80 %. (Non-condensing)
Power supply specifications	Voltage	AC 100 V to 120 V ± 10 % or 200 V to 240 V ± 10 %
	Frequency	50 / 60 Hz ± 1 Hz
	Capacity	No less than 10 A
Power consumption	Power off	AC100 V to 120 V, 1 W or below AC200 V to 240 V, 1.1 W or below.
	Operation	830 W or below
Voltage switch		Manual switching with 100/200 V, Selector switch set on 200 V when shipped.
Current consumption	100 V to 120 V	6.5 A or below
	200 V to 240 V	3.5 A or below
External dimensions	Height	366 mm (with exclusive stand: 1166 mm)
	Width	1190 mm
	Depth	438 mm (with exclusive stand: 590 mm)
Weight	Main body	31.8 kg
	Legs	8.7 kg

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