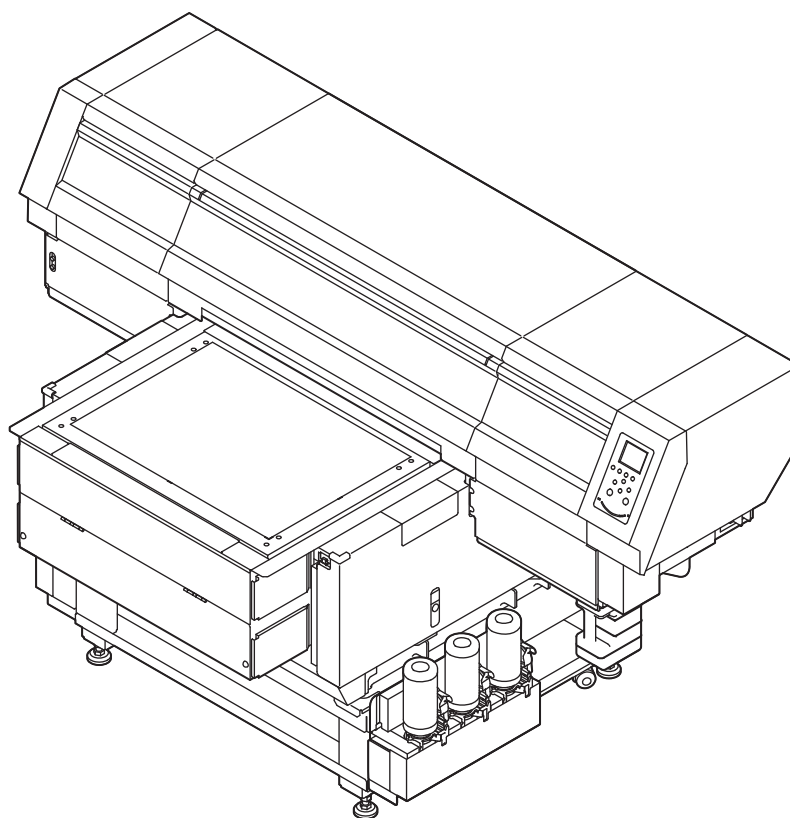


OPERATION MANUAL

UV INKJET PRINTER
UJF-7151 plus

OPERATION MANUAL



MIMAKI ENGINEERING CO., LTD.

<https://mimaki.com/>

D202901-20
Original instructions

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Foreword

Congratulations on your purchase of a MIMAKI "UJF-7151 plus" model of UV ink jet printer.

UV Inkjet Printer UJF-7151 plus uses ultraviolet ray curing ink (UV ink).

Read this Operation Manual carefully and make the most effective use of your printer.

DISCLAIMER OF WARRANTY

THIS LIMITED WARRANTY OF MIMAKI SHALL BE THE SOLE AND EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND MIMAKI NEITHER ASSUMES NOR AUTHORIZES DEALER TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY OR MAKE ANY OTHER WARRANTY OR MAKE ANY OTHER WARRANTY IN CONNECTION WITH ANY PRODUCT WITHOUT MIMAKI'S PRIOR WRITTEN CONSENT.

IN NO EVENT SHALL MIMAKI BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOSS OF PROFITS OF DEALER OR CUSTOMERS OF ANY PRODUCT.

Requests

- This Operation Manual describes the operation and maintenance of Model UJF-7151 plus Color Ink Jet Printer (hereinafter referred to as the machine).
- Please read and fully understand this Operation Manual before putting the machine into service. It is also necessary to keep this Operation Manual on hand.
- Make arrangements to deliver this Operation Manual to the person in charge of the operation of this machine.
- This Operation Manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact your local distributor, our sales office, or service center.
- Description contained in this Operation Manual are subject to change without notice for improvement.
- In the case where this Operation Manual should be illegible due to destruction or breakage, contact our sales office.
- You can also download the latest operation manual from our website.

FCC Statement (USA)

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 operation manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which cause the user will be required to correct the interference at his own expense.



- In the case where MIMAKI-recommended cable is not used for connection of this machine, limits provided by FCC rules can be exceeded. To prevent this, use of MIMAKI-recommended cable is essential for the connection of this machine.

Interference to televisions and radios

The product described in this manual generates low radio waves while it is in operation. The product can interfere with radios and televisions if set up or commissioned under improper conditions. The product is not guaranteed against any damage to specific-purpose radios and televisions.

The product's interference with your radio or television will be checked by turning on/off the power switch of the product.

In the event that the product is the cause of interference, try to eliminate it by taking one of the following corrective measures or taking some of them in combination.

- Change the direction of the receiving antenna or the feeder of your radio/television.
- Move the receiver away from the product.
- Plug the power cord of this machine into an outlet which is isolated from power circuits connected to the television set or radio.

CDRH REGULATION

The Center for Devices and Radiological Health for the U.S. Food and Drug Administration Implement regulations for laser products. The sentence of "This product complies with 21 CFR chapter I and subchapter J" indicates compliance with the CDRH regulations and is labeled on the product when marketed in the United States. This Model is equivalent to Class II laser device according to CDRH Regulation.

This product complies with 21 CFR chapter I
and subchapter J



- Use of controls, adjustments or performance of procedures other than those specified in this manual may results in hazardous radiation exposure.

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








For safe operation








Symbols

Symbols are used in this Operation Manual for safe operation and for prevention of damage to the machine. The indicated sign is different depending on the content of caution.










Symbols and their meanings are given below. Please follow these instructions as you read this manual.









Examples of symbols

Meaning	
	Failure to observe the instructions given with this symbol can result in death or serious injuries to personnel. Be sure to read it carefully and use it properly.
	Failure to observe the instructions given with this symbol can result in injuries to personnel or damage to property.
	Important notes in use of this machine are given with this symbol. Understand the notes thoroughly to operate the machine properly.
	Useful information is given with this symbol. Refer to the information to operate the machine properly.
	Indicates the reference page for related contents.
	The symbol "  " indicates that the instructions must be observed as strictly as the CAUTION instructions (including DANGER and WARNING instructions). A sign representing a precaution (the sign shown at left warns of hazardous voltage) is shown in the triangle.
	The symbol "  " indicates that the action shown is prohibited. A sign representing a prohibited action (the sign shown at left prohibits disassembly) is shown in or around the circle.
	The symbol "  " indicates that the action shown must be taken without fail or the instructions must be observed without fail. A sign representing a particular instruction (the sign shown at left instructs to unplug the cable from the wall outlet) is shown in the circle.









WARNING	
	<ul style="list-style-type: none"> Be sure to setup the appropriate air-moving system in case of using this machine in a closed room or a room with bad ventilation. <p>Cautions for constructing exhaust outlet</p> <ul style="list-style-type: none"> Please observe the following cautions to avoid breakdown of this machine. <ol style="list-style-type: none"> The opening area of the exhaust outlet requires more than half of the duct entrance area. If mounting a valve on the exhaust outlet, be sure to open the valve when using the machine.
	<ul style="list-style-type: none"> The ink used for this machine falls into the category of UN No.3082 and UN Class 9. Since the ink is flammable, never use fire when using the machine.
	<ul style="list-style-type: none"> When handling ink and cleaning solution, pay close attention to ventilation and be sure to wear the included safety glasses and gloves.
	<ul style="list-style-type: none"> Gloves are consumables. Use commercially-available ones if you lose or use up the supplied gloves.
	<ul style="list-style-type: none"> Before using ink and cleaning solution, be sure to read the Safety Data Sheet (SDS). Precautions regarding ink are indicated on the Ink bottle. Read these carefully and make sure you understand the contents before using the product. If anyone swallows ink or cleaning solution in mistake, get the person to vomit and see a doctor immediately. Do not let him or her swallow the vomit. Then, refer SDS about the inquiry. If you inhale a great deal of vapor and feel ill, immediately move to a location with plenty of fresh air, and keep yourself warm and quiet. Consult a doctor as soon as possible. Discard the waste ink according to the local regulations of the area that this machine is used. In case of ink leakage, please turn off the main power, unplug the power cable and contact your local distributor, our sales office, or service center.
	<ul style="list-style-type: none"> Do not place your fingers or other parts of body close to dangerous moving parts. There is a danger of injury.
	<ul style="list-style-type: none"> Keep children away from this machine.









Never do the following

 WARNING	
Do not disassemble or remodel the machine	
	<ul style="list-style-type: none"> Never disassemble or remodel this machine and the ink bottle. Disassembling or remodeling any of them will result in electric shocks or breakdown of this machine.
Do not use this machine in damp places	
	<ul style="list-style-type: none"> Avoid damp environment to use this machine. Do not splash water onto this machine. High humidity or water will give rise to fire, electric shocks or breakdown of this machine.
Power supply and voltage	
	<ul style="list-style-type: none"> Use this machine with indicated power specifications.
	<ul style="list-style-type: none"> Be sure to connect the power cable plug to the grounded outlet, or it may cause fire or electric shock.
	<ul style="list-style-type: none"> Never look at the LED UV being lit with your naked eyes, or it may cause pain in your eyes or visual impairment. Be sure to wear the included safety glasses. Do not apply ultraviolet (UV) light directly to your skin, or it may cause irritation on your skin.
	<ul style="list-style-type: none"> To prevent electrical shock, be sure to set OFF the main power circuit breaker and disconnect the power plug before carrying out maintenance. For some units, capacitors may take one minute for discharging; therefore, start maintenance work three minutes after setting OFF the main power circuit breaker and disconnecting the power plug. If LED UV has been damaged, you should replace the LED UV that has reached or has past its rating life.
	<ul style="list-style-type: none"> The main power circuit breaker should be set ON only by personnel with sufficient knowledge about operations of this machine. Do not touch the lamp with bare hands while lighting or right after the lamp off to avoid from burn injury.
Handling of ink bottles	
	<ul style="list-style-type: none"> Some of the ingredients (UV Curing initiator) have toxic consequences to aquatic life. Avoid leak into water system or sewage containing water. Store ink bottles and waste ink tank in a place that is out of the reach of children. If ink settles on the skin or clothes, immediately wash it off with detergent or water. If you get ink in your eyes, immediately wash your eyes with a lot of clean water, and then consult a doctor as soon as possible.

 WARNING	
Abnormal event occurs	
	<ul style="list-style-type: none"> If the machine is used under an abnormal condition where the machine produces smoke or unpleasant smell, fire or electric shocks can result. Be sure to turn off the power switch immediately and detach the plug from the receptacle. Check first to be sure that the machine no longer produces smoke, and contact a distributor in your district for repair. Never repair your machine by yourself since it is very dangerous for you to do so.
Handling of the antifreeze liquid	
	<ul style="list-style-type: none"> Use the exclusive antifreeze liquid, or the cooling device may be damaged. If the antifreeze liquid or mixed soft water with antifreeze liquid gets on the skin or clothes, immediately wash it off with soap. If you get the antifreeze liquid in your eyes, immediately wash your eyes with a lot of clean water. Then, consult a doctor as soon as possible. Before using the antifreeze liquid, be sure to read the Safety Data Sheet (SDS). If you swallowed the antifreeze liquid accidentally, try to get to vomit, and then consult a doctor as soon as possible. Discard the waste antifreeze liquid or used mixed soft water with antifreeze liquid as follows; <ul style="list-style-type: none"> * Absorb in a sawdust or waste cloth, then incinerate it. * Entrust to an industrial waste disposal contractor, clarifying their contents. Avoid causing ignition with static electricity, impact spark and so on.
	<ul style="list-style-type: none"> Be sure to wear the included safety glasses and gloves for handling the antifreeze liquid.
	
Wearing protective devices	
	<ul style="list-style-type: none"> When cleaning the suction nozzle, which may scatter ink, be sure to wear the included safety glasses and gloves, or ink and cleaning solution might enter your eyes or ink and cleaning solution put on your hands might make your hands rough.
Handling of the power cable	
	<ul style="list-style-type: none"> Use a power cable attached to this machine. Take care not to damage, break or work on the power cable. If a heavy things are put on the power cable, heated or drawn, the power cable can break to cause fire or electric shocks.
Handling of LED UV	
	<ul style="list-style-type: none"> Do not use the LED UV in an ambience with a possibility of catching fire (gasoline, combustible gas spray, thinner, lacquer, powder dust, etc.). In addition, do not put paper or cloth near or on the LED UV, or it may cause fire, or it may cause electrical shock.

Precautions for use

 CAUTION	
Warning labels	
	<ul style="list-style-type: none"> Warning labels are adhered on this machine. Be sure to fully understand the warnings given on the labels. In the case where any of the warning label has become so soiled that the warning message is illegible or has come off, purchase a new one from your local distributor or our sales office.
Ink bottles	
	<ul style="list-style-type: none"> If the ink bottle is moved from a cold place to a warm place, leave it in a place of use for three hours or more and use it. Open the ink bottle just before installing. Leaving it open for a long time will cause abnormal printing. Be sure to store ink bottles in a cold and dark place. Once the ink opened, be sure to use ink up early. The ink passed for a long time after opening the bottle will lower the printing quality.
	<ul style="list-style-type: none"> Using other than exclusive ink will break this machine. In this case, repairing of this machine is your responsibility. Never refill the ink bottle with ink. Do not pound the ink bottle nor shake it violently. If so, ink may leak out of the bottle.
Protection against dust	
	<ul style="list-style-type: none"> It is strongly recommended to use the machine in a room that is not dusty. Set the Refresh level 2 or 3 when in bad environment. When leaving the work place after the working hours, be sure to remove media from the printer. If any media is left on the printer, dust can put on it. Store media not to put dust on it. Wiping dust off the media, dust will be put on the media due to static electricity. Due to the dust on the head, ink drops will fall down on the media during printing. If so, be sure to clean up the head. (☞ P.2-7)
Handling of cleaning solution	
	<ul style="list-style-type: none"> Be sure to store the cleaning solution in a cold and dark place. Store the cleaning solution in a place that is out of the reach of children.
Handling the antifreeze liquid	
	<ul style="list-style-type: none"> Be sure to store the antifreeze liquid in a cold and dark place. Store the antifreeze liquid in a place that is out of the reach of children.
Hot parts	
	<ul style="list-style-type: none"> The LED UV and the interior of the UV irradiation device will have a very high temperature. When carrying out maintenance, wait until the temperature has been sufficiently lowered after the lamp is turned OFF.

 CAUTION	
	<ul style="list-style-type: none"> When it is unavoidable to touch hot parts, be sure to wear heat-insulating gloves to protect your hands.
UV light	
	<ul style="list-style-type: none"> A little UV light spills around the LED UV unit. UV light applied to your skin might cause inflammation and/or skin cancer. Even weak UV light causing no inflammation may lead to chronic disorders by repeated exposure. Avoid applying UV light to your skin and eyes.
	<ul style="list-style-type: none"> Impairment of eyes caused by UV light may be acute disorders, pain in eyes, tearing, chronic disorders, cataract, etc. When using this machine, protect your body such as gloves, long-sleeve cloth, light-resistant mask, attached light-resistant glasses, etc.
Notes on LED UV	
	<ul style="list-style-type: none"> When handling the glass on the bottom of the LED UV unit, be sure to wear the gloves attached and never touch them with bare hands. Or the UV ink curing level may significantly lower. If the glass becomes dirty, wipe it with clean gauze moistened with alcohol. (Do not use alcohol for cleaning the exterior cover, or the paint will peel off.)
	<ul style="list-style-type: none"> The LED UV performance and service life are significantly affected by the UV irradiation and UV power supply units used. Never use those UV devices other than those recommended by Mimaki. We would take no responsibility for any troubles caused through the use of a UV devices not recommended by Mimaki.
Cleaning	
	<ul style="list-style-type: none"> After using this machine long time, foreign materials and dust may be gathered on the conductive and insulating parts, causing electric leakage. Periodically clean such parts. For cleaning, do not use compressed air because it scatters foreign materials and dust, which may cause malfunctions when put inside the conductive parts. Be sure to use vacuum cleaner to vacuum off foreign materials and dust. Do not use the machine in a place where there is a possibility of being wet, or electricity may leak. Electrical leakage may lead to electrical shock of personnel or fire. To prevent accidents, be sure to carry out periodic inspections and replace periodic replacement parts.
Firing and smoking	
	<ul style="list-style-type: none"> Touching hot parts such as the LED UV with combustible materials may cause firing and/or smoking. Leaving combustible materials under the LED UV unit for a couple of minutes may also cause firing and/or smoking.

CAUTION



- After this machine is used long time, foreign materials or dust gathered may cause electrical leakage, or insulation deterioration may cause firing and/or smoking. Periodically clean this machine and replace the deteriorated parts after the insulation resistance.
- After this machine is used long time, screws or others on the conductive parts may be loosened, causing firing and/or smoking. Periodically tighten the screws.
- This machine is not an explosion-proof type. Do not use the machine in a flammable atmosphere. There is a danger of explosion.
- If abnormalities such as a strange odor, a smoking or a spark burn occurred, turn the power off and call our office immediately.

Periodic exchange parts



- There are some parts which must be periodically replaced. Contract with distributors or dealers for maintenance.

Adjusting the level



- Keep this machine horizontal.

Laser Module



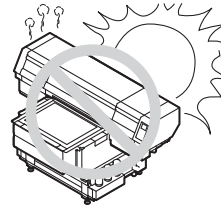
- The printer incorporates a laser module. The laser module is evaluates as Class 1 Laser Products.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
Laser Diode 655 - 660nm, max. 0.5mW
Maximum output : 0.12 mW
IEC60825-1: 2007

クラス1レーザー製品
CLASS 1 LASER PRODUCT

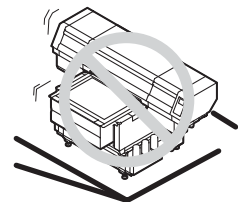
Cautions on Installation

CAUTION

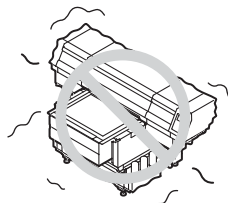
A place exposed to direct sunlight



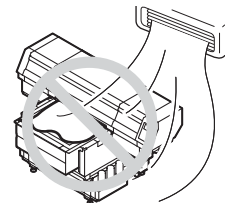
On an inclined surface



A place that vibrates



A place exposed to direct air flow from an air conditioner or the like.



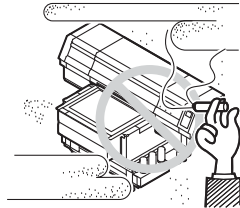
A place where temperature or humidity varies significantly



- Use the machine under the following environmental conditions:

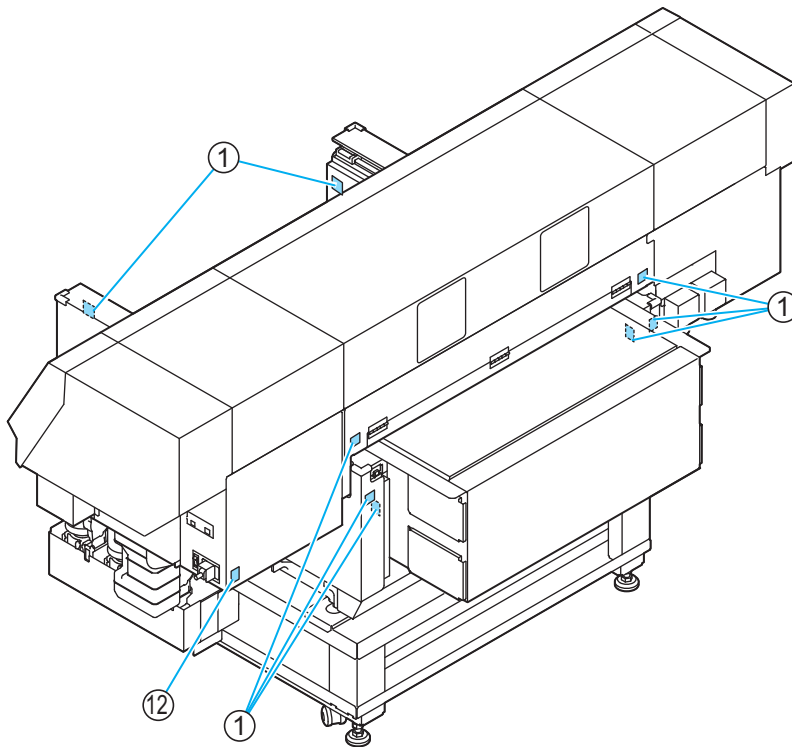
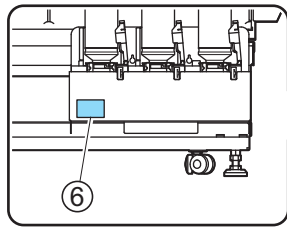
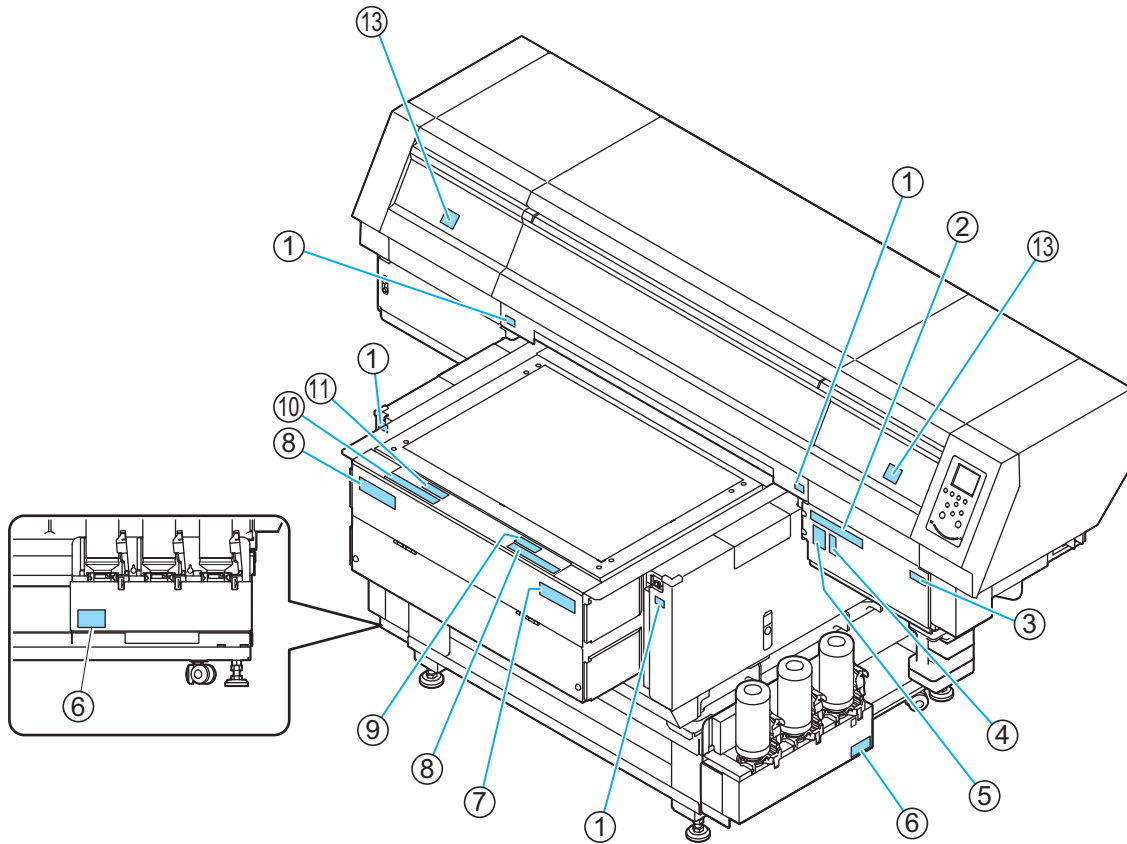
- Operating environment:
20 to 30 °C
(68 to 86 °F)
35 to 65 % (Rh)






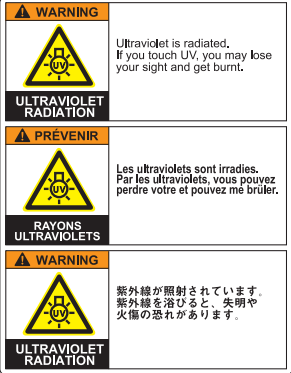
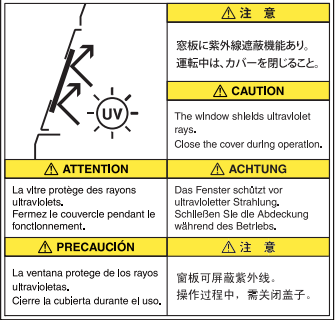


Around a place where fire is used



Position of the warning label

Warning labels are adhered on this machine. Be sure to fully understand the warnings given on the labels. In the case where any of the warning label has become so soiled that the warning message is illegible or has come off, purchase a new one from your local distributor or our office.



Order No.	Label	Order No.	Label
(1)M910540		(6)M906222	
(2)M901549		(7)M906115	
(3)M903330		(8)M903226	<p>このテーブルに腰掛けたり、寄り掛かる等の偏荷重をかけた下で、テーブルが変形し、故障の原因や、直前に影響が出る可能性があります。</p>
(4)M905980		(9)M912568	テーブル上に10kg以上のものを載せないで下さい。
		(10)M904325	Do not sit or lean on the table. Do not put any pressure on one side. These will deform the table and may cause damage and affects the printing.
		(11)M912569	DO NOT PUT OVER 10KG ON THE TABLE
(5)M910560		(12)M907935	
		(13)M910931	

Chapter 1

Before Use



This chapter

describes the items required to understand before use, such as the name of each part of the machine or the installation procedures.

Installing the machine	1-2	About ink bottle	1-8
Where to install the machine	1-2	Kinds of ink that can be used.....	1-8
Moving this machine	1-2	Caution in handling of ink bottles.....	1-9
Configuration and Function	1-3	Setting ink bottles.....	1-9
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Carriage	1-6	Menu mode	1-14
About table.....	1-6		
About tap position	1-6		
Connecting the cables	1-7		
Connecting the USB2.0 interface cable	1-7		
Connecting the LAN cable	1-7		
Connecting the power cable.....	1-8		

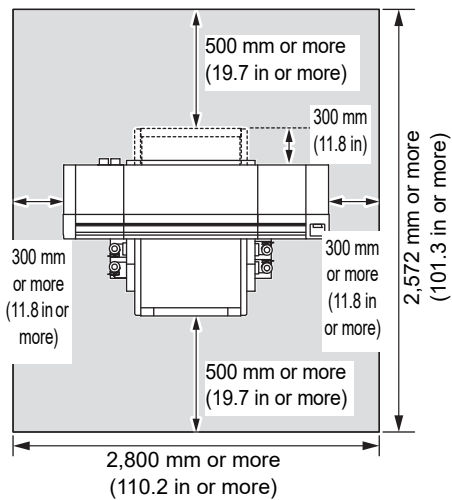
Installing the machine

Where to install the machine

Secure sufficient space for installation before assembling this machine.

Decide the place considering the size of the machine and a space required for printing.

Model	Width	Depth	Height	Total Weight
UJF-7151 plus	2,198 mm (86.5 in)	1,572mm (61.9 in)	1,273mm (50.1 in) (Including dedicated stand)	Approx.320 kg (705.5 lb)

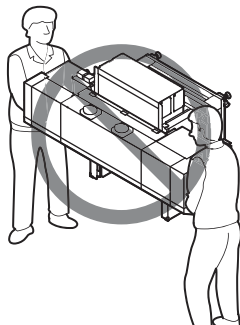


Moving this machine

Move this machine as follows when this machine is required to move on the step-free same floor.

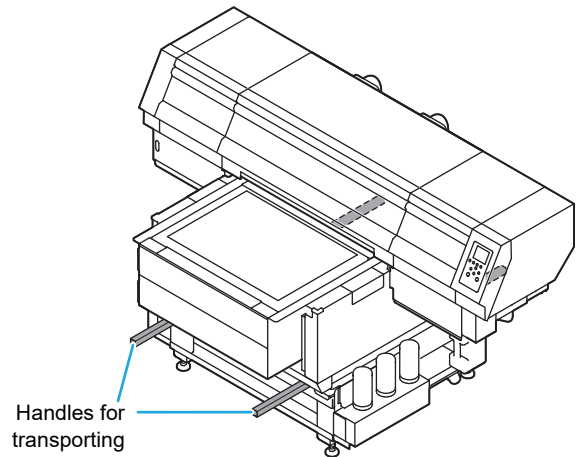


- When moving this machine, take care not to give a significant impact on it.
- When moving this machine, keep it as flatly as possible. Do not move it on its side. It may cause machine failure.
- The dedicated stand of this machine includes leveling feet to secure the machine. Before turning the power ON, make sure that the printer body is fixed with the leveling feet. The printer body may start moving during operation if it is not fixed with the leveling feet.



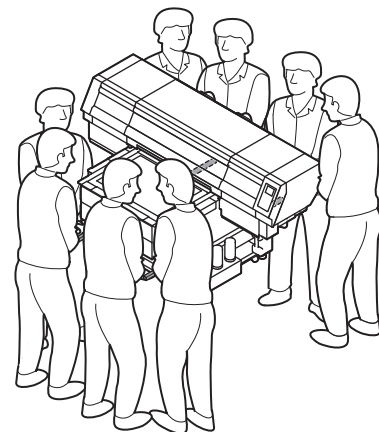
- **Before moving this machine, install the handles for transporting. (two places)**

Insert the handles into this machine, and fix them tightening screws.



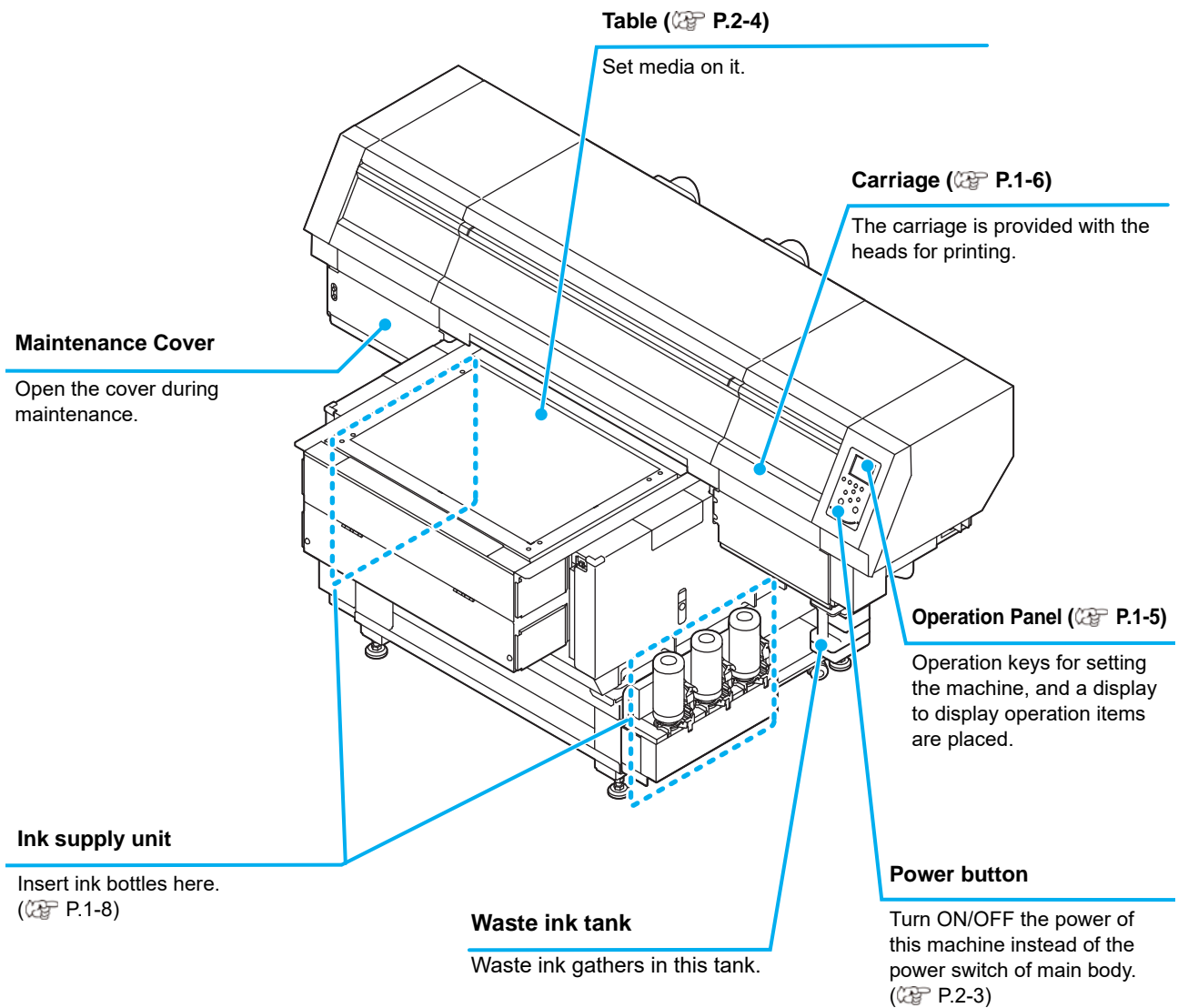
- **For safety, be sure to work it with more than 8 people.**

Do not push the cover to move this machine since the cover may be deformed. Be sure to hold the handles for transporting when moving the machine.

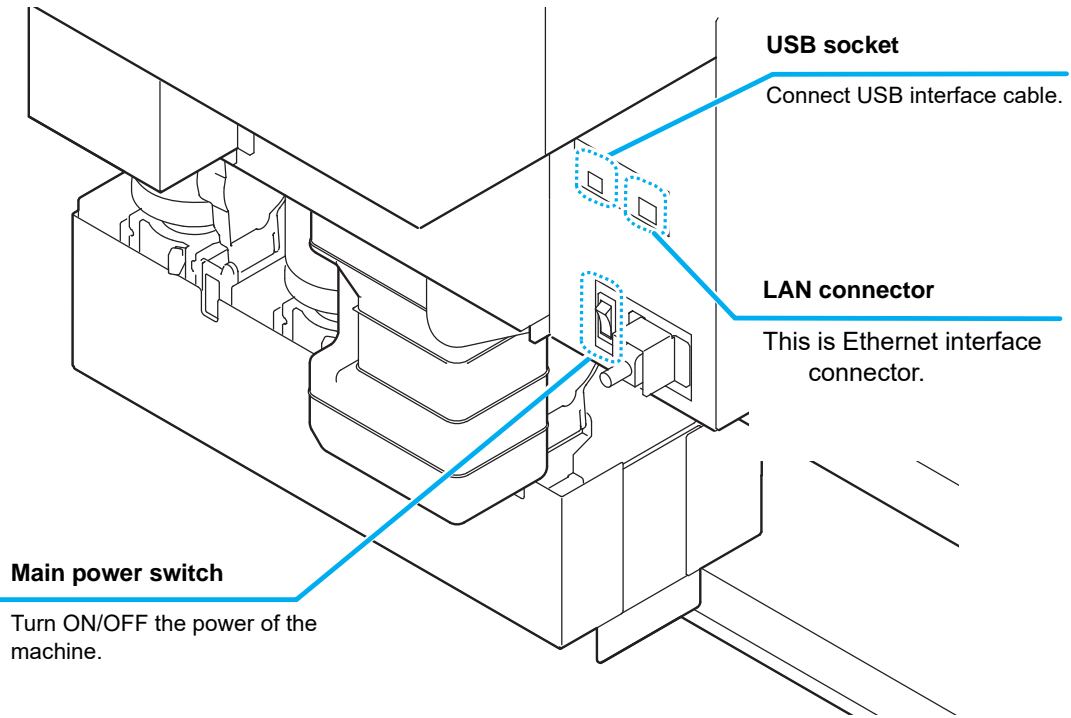


Configuration and Function

Front



Rear



Operation Panel

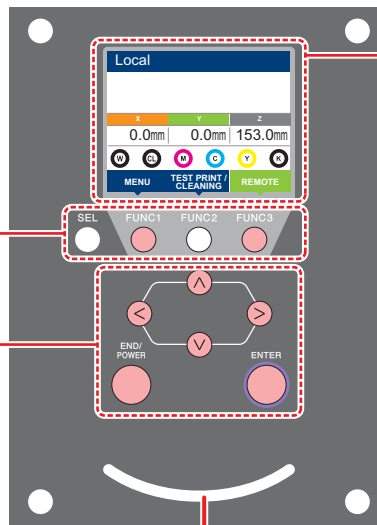
The operation panel is used for setting of printing method and each operation.

SEL key

Changes over the functions of the function keys ([FUNC1]–[FUNC3]).

FUNC1 / **FUNC2** / **FUNC3** key

Press this to set various functions or to do test printing. The function keys' functions are changed each time [SEL] key is pressed.



Display

Displays the following items:

- Printer status
- Ink status
- Functions assigned to [FUNC1] to [FUNC3]

JOG key

Use these keys to shift the carriage or the media in [LOCAL]. Also use them to select an item of printing conditions.

END/POWER key

Cancels the last input value or returns the setting menu to the immediate higher level of the hierarchy. Also, press this to turn the power on or off. (Give it a long press to turn the power off.)

ENTER key


Registers the last input value as the setting value or goes to the immediate lower level of the hierarchy.

Status indicator lamp

Indicates the machine's status (printing, error occurred, etc).

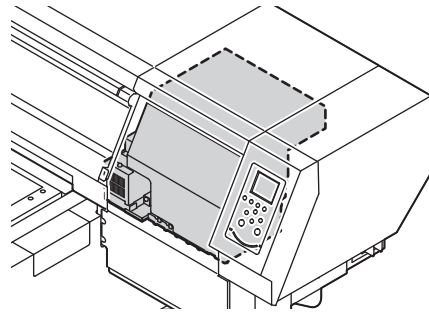
Condition of Lamp	Condition of machine
OFF	Machine is in LOCAL mode, no print data has been received, and no errors have occurred.
Lit steady Light blue	Switched to Remote mode.
Flashing Light blue	Currently printing.
	In test printing: printing a pattern stored inside the machine.
Lit steady blue	Print data still remains in the machine.
Flashing red	Error has occurred.
Lit steady red	Error (SYSTEM HALT) has occurred.



- The [ENTER] key under the operation panel lights in blue when the power is turned on, and off when the power switch is turned off. The operation for preventing ink sedimentation is carried out periodically even with the power switch turned OFF when the main power switch is turned ON. ( P.1-4)

Carriage

A print head for printing, LED UV device, and a light pointer in the print head cover are mounted on the carriage.



About table

It is necessary to adjust the table height depending on the media thickness because various media can be set for printing.

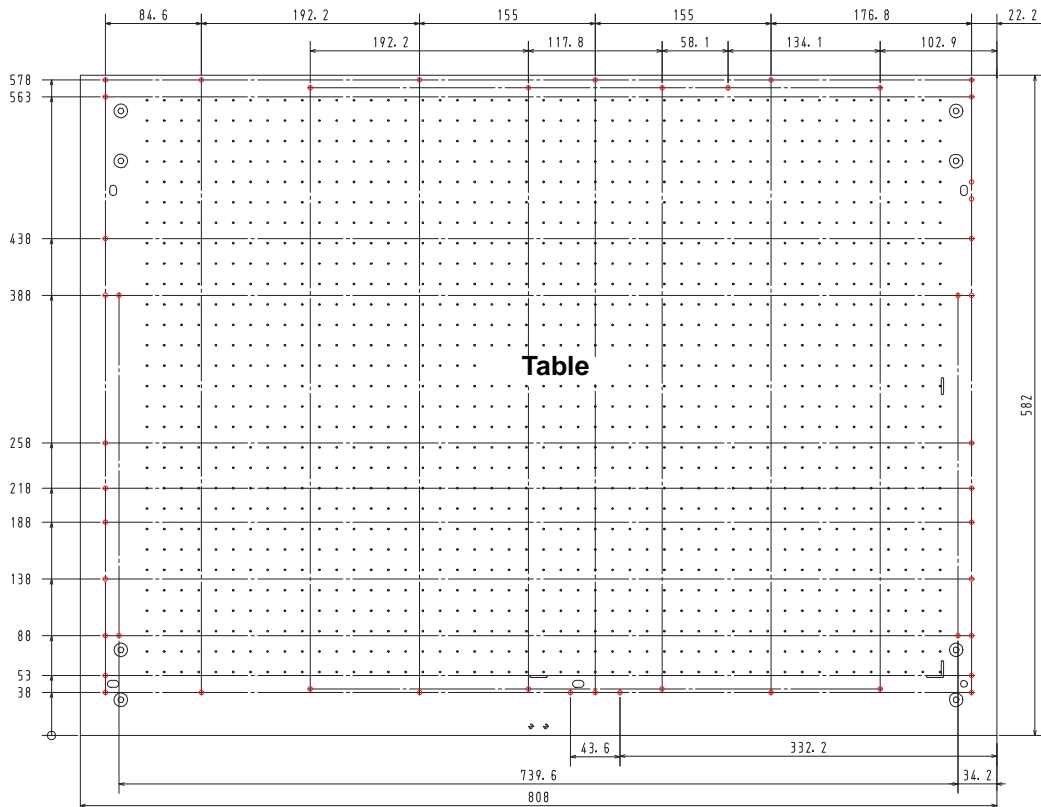
The specification of each table is as less:

	Table
Acceptable media weight *1	10kg and less
Vacuum function	Yes
Table movable area	0 to 153mm
Media thickness	0 to 153mm

*1. If you put a heavier thing than specified, the quality image may be degraded.

About tap position

The table and the vacuum table on which the media set have the M4 tap (47 positions) of the size below respectively.



- Although tap holes are open except the tap position in the printing (○), they are necessary in the production process. Therefore, please do not use them.
- We may change the position except specified tap holes (○) without prior notice.

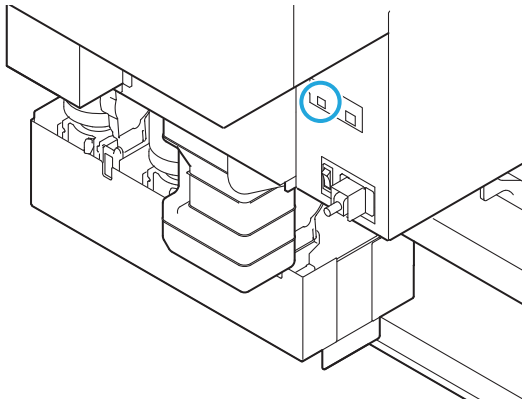
Connecting the cables

Connecting the USB2.0 interface cable

Connect a computer to this machine with the USB2.0 interface cable.



- Prepare the USB2.0 interface cable. (USB2.0 interface cable is not supplied with this machine.)
- Your RIP is required to support USB2.0 interface.
- If USB2.0 interface is not installed in your computer, ask a RIP maker near you or our branch office.



Notes on USB 2.0 Interface

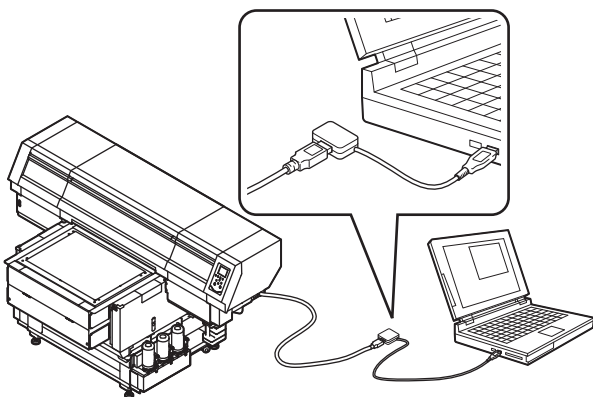


- Your RIP must be compatible with USB 2.0.

● When two or more UJF-7151 plus machines are connected to one personal computer

When two or more UJF-7151 plus machines are connected to one personal computer, the personal computer may not recognize all the UJF-7151 plus machines normally.

Reconnect the unrecognized UJF-7151 plus machine to another USB port, if available, and check to see if it is recognized. If the UJF-7151 plus machine is not recognized by the newly connected USB port, use USB 2.0 repeater cables available on the market.



● Notes on peripheral devices in USB high speed mode

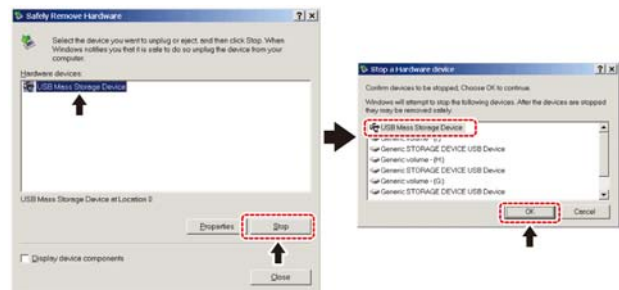
When a peripheral device (USB memory or USB HDD) to be operated in USB high speed mode is connected to the same personal computer that a UJF-7151 plus machine is connected to, the USB device may not be recognized. When UJF-7151 plus is connected to the personal computer to which an external HDD is connected via USB, the speed of data output to UJF-7151 plus may drop. That can cause the head unit to stop temporarily at the right or left end during printing.

● Removing USB memory

If a USB memory module is inserted in the personal computer to which a UJF-7151 plus machine is connected, click "Stop" in the "Safely Remove Hardware" window by following the instructions given there first and then remove the module.

Leaving a USB memory module inserted can cause [ERROR 10 COMMAND ERROR].

Copy the data onto the hard disk before outputting it for printing.



Connecting the LAN cable

When connecting LAN cable, be sure to follow the note below:



- Surely insert LAN cable until clicking noise sounds.
- Do not plug in or unplug any cable during data transferring.

Printing Via a Network

If printing via a network, you need to configure your network with the following environment.

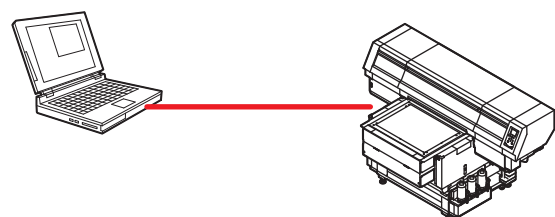
If you configure it with an inappropriate environment, it could cause printing to stop.

- Use LAN cables that are category 6 or higher.
- Use a switching hub and PC that support 1000BASE-T.

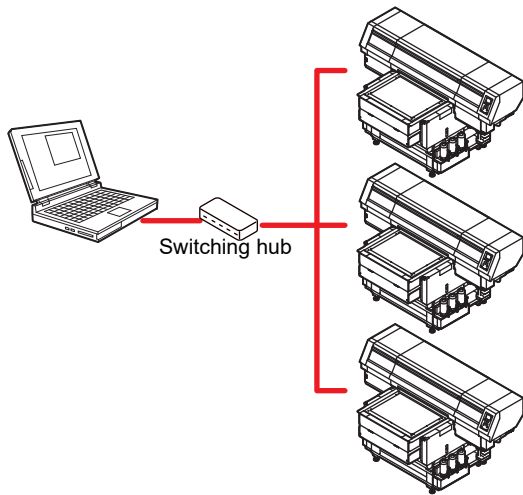


- Set the PC sending the print data and the printer to the same network.
- You cannot connect via a router.

● If connecting directly to the printer



● If connecting via a switching hub



If the PC or device connected to the printer is not 1000BASE-T, you cannot perform printing. After connecting, check the following.

- (1) Check the printer screen display.
 - On the local screen or the media detection screen, press the [Enter] key several times to display the information screen.
- (2) Check the green light of the LAN connector.
 - After turning on the machine, the lamp for the LAN connector will light up as follows.

Color	Lamp status	Condition
Green	ON	Connected with 1000BASE-T
	OFF	Connected without 1000BASE-T
Yellow	ON	Link-up
	Blinking	Receiving data
	OFF	Link-down

Important! • If the yellow light only lights up, or is blinking, the status is not 1000Mbps. Check the specifications of the PC, device, and cables.

Connecting the power cable

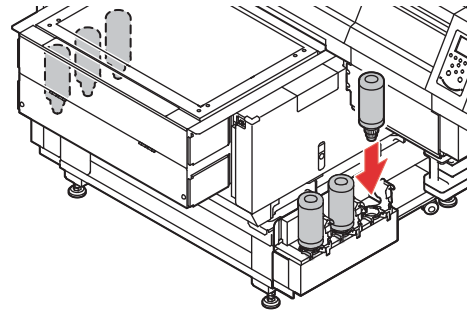


- Use only the supplied power cable.
- Be sure to connect the power cable plug to the grounded outlet, or it may cause fire or electric shock.
- Take care not to damage, break or work upon the power cable. Or if putting a heavy thing on, heating, or pulling the power cable, the power cable can break to cause fire or electric shocks.

About ink bottle

Use the ink bottle inserting it into the ink supply unit. Three ink bottles are located on both the right and left sides.

Kinds of ink that can be used



Ink Type	Color
UV Ink	Magenta
	Cyan
	Yellow
	Black
	White
	Clear
	Primer
Cleaning bottle *1	

*1. To be used when the head is cleaned.

Each color is displayed on the LCD as follows:

Display	Color	Display	Color	Display	Color
M	Magenta	K	Black	P	Primer
C	Cyan	W	White		
Y	Yellow	CL	Clear		

Precautions at the time of setting the ink bottle

When setting the ink bottle, pay attention to the followings:



- Confirm the ink slot number and insert the ink bottle of the correct color.
- Insert the ink bottle securely all the way in the slot. Moreover, do not insert or pull out the bottle roughly.
- Insert the ink IC chip into the insertion hole on the ink supply unit. (P.1-8 "About ink bottle")

Caution in handling of ink bottles



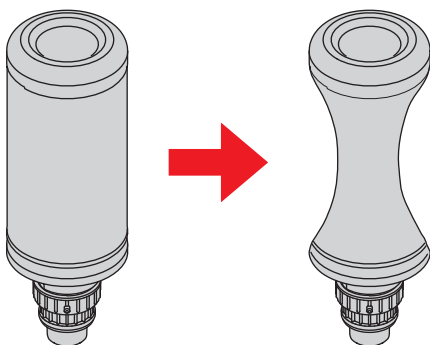
- If you get ink in your eyes, immediately wash your eyes with a lot of clean running water for at least 15 minutes. In doing so, also wash the eyes to rinse ink away completely. Then, consult a doctor as soon as possible.
- Use genuine ink bottles for this machine. This machine functions by recognizing the genuine ink bottles. In case of troubles caused by modified ink bottles or the like, it shall be out of the warranty even within the warranty period.
- Store the ink bottle in a place not more than 1 m off the ground. If you store it in a place higher than 1 m, should the ink bottle fall, the cap may come off, spilling the ink.
- If the ink bottle is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.
- Make sure to store ink bottles in a cool and dark place.
- Store ink bottles and waste ink tank in a place that is out of the reach of children.
- Some component (photoinitiator) of the ink is toxic against aquatic organisms. Avoid leakage of it to natural water system or domestic waste water.
- Before using an ink bottle, be sure to read the Safety Data Sheet (SDS).
- Request an industrial waste processor for processing of empty ink bottles.



- Do not shake ink bottles violently. This may result in ink leakage from the ink bottles.
 - Never refill the ink bottles with ink. This may result in troubles.
- MIMAKI will not bear any responsibility for any damage caused by the use of the ink bottles refilled with ink.
- Do not touch or stain the contacts of the ink IC chip. This may cause damages on printed circuit boards.



- The shape of an ink bottle installed in the machine might collapse as shown in the figure on the right. This is normal, and does not affect the use or operation of the machine.

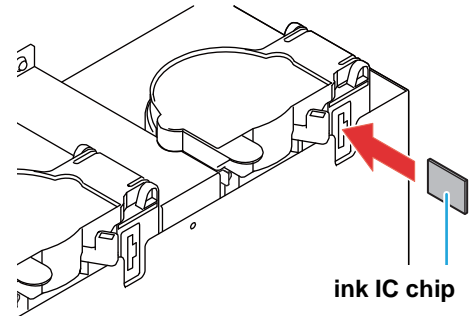


Setting ink bottles

1

Insert the ink IC chip.

- Insert the ink IC chip with the left side with metal upward. If you insert the wrong side by accident, it causes faulty or damage of the ink IC chip.
- Do not touch the metal part of the ink IC chip. It may break the ink IC chip by static, or may cause read error by stain or flaw.
- For the setting orders of the ink bottles, refer to P.6-4.

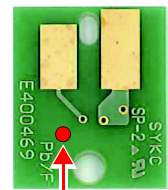


Important!

About ink IC chip

- The ink IC chip has information of ink color, remaining amount of ink, expiration data, etc. When setting the ink bottle, insert the ink IC chip packed with the ink bottle into the ink IC chip inserting port attached with the ink cover.
- If you set the ink IC chip not being the pair of the ink bottle, image quality defect etc. may occur.
- The mark indicating color information is pasted on the ink IC chip.

ink IC chip



Mark indication position

Ink color and indication mark

Ink color	Indication mark
Black	● (one black circle)
Cyan	● (one blue circle)
Magenta	● (one red circle)
Yellow	● (one yellow circle)
White	○ (one white circle)
Clear	○○ (two white circles)
Primer	○○○ (three white circles)

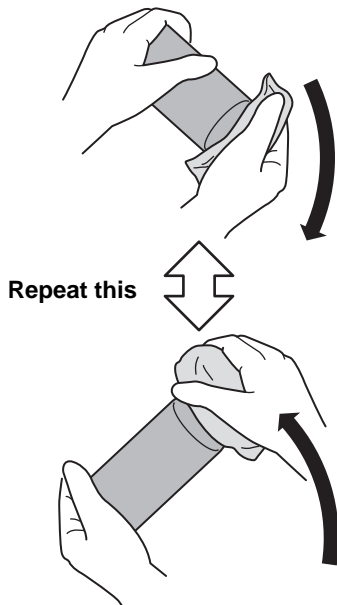
2 Take out the ink bottle, and slowly shake it twenty times and more.

- To prevent ink from leaking when you shake it, wear gloves and cover the ink bottle cap with a paper towel etc. Being in that status, slowly shake it twenty times and more by flowing ink.



- Before shaking it, check that the cap is firmly closed.
- If you shake it too strong, it may cause ink leakage. Therefore, perform this carefully.
- If the remaining amount of ink is less, ink in the bottle cannot be beaten enough. Tilt the ink bottle until it becomes vertical.

Cover with paper towel firmly and shake ink slowly

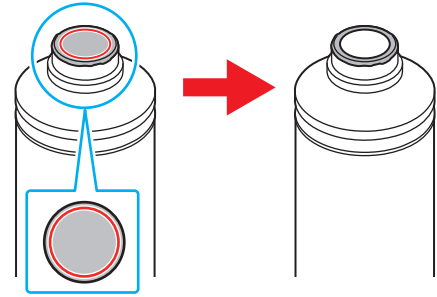


3 Remove the cap of the ink bottle.



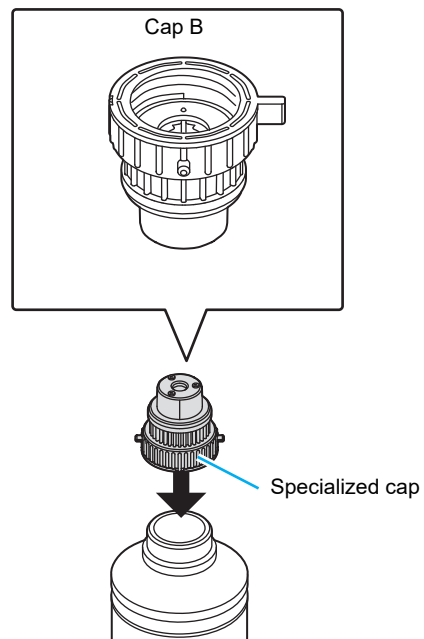
Important!

- If the mouth of the bottle is fitted with a seal, cut this open using a craft knife. Be careful not to drop the seal into the bottle.

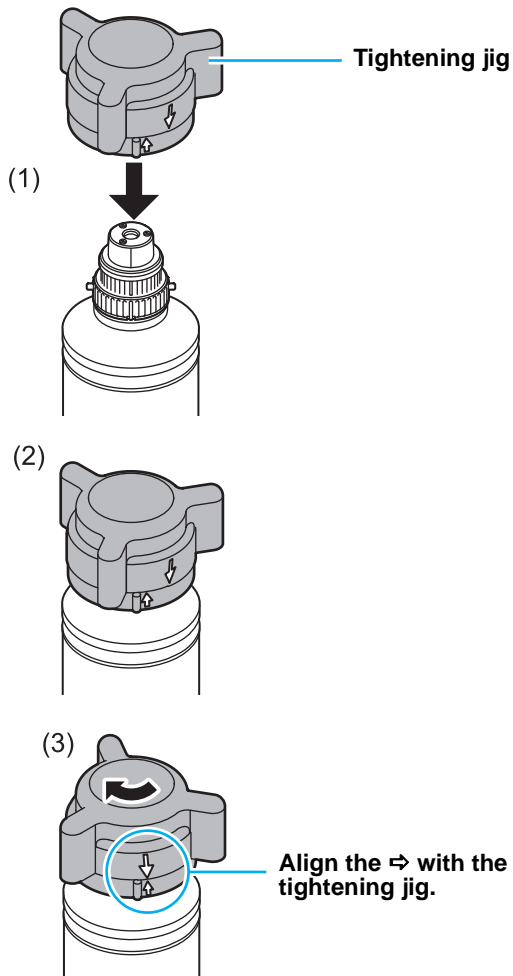


4 Attach the specialized cap to the ink bottle.

(1) Set the specialized cap on the bottle.

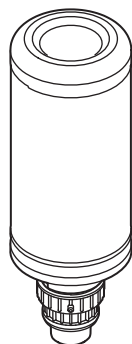


- (2) Tighten the specialized cap using the tightening jig.



- Tighten until the arrows on the tightening jig are aligned.
- Do not tighten the dedicated cap too

- (3) Turn the bottle upside-down and check that ink does not leak.



- Do not leave an ink bottle with the specialized cap attached in a location where it is exposed to light for a long period of time. Doing so can result in the ink in the bottle curing (hardening).

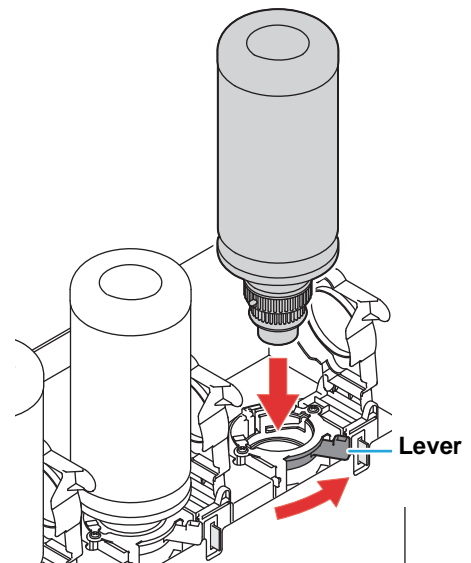
5

Set the ink bottle on the tank.

- Set the ink bottle while moving the lever on the tank completely to the right.

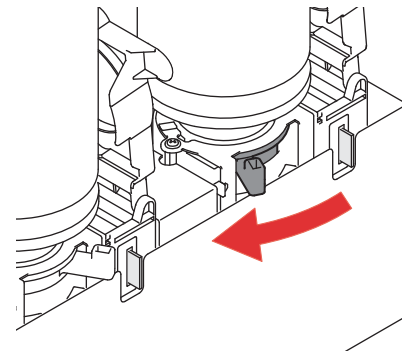


- Do not ever rotate the ink bottle at all after setting it into the tank. Doing so can result in ink leakage.



6

Move the lever on the tank completely from the right to the left side.



Replace the ink bottle

Perform as follows when [INK END] or [INK NEAR END] is displayed on the display.



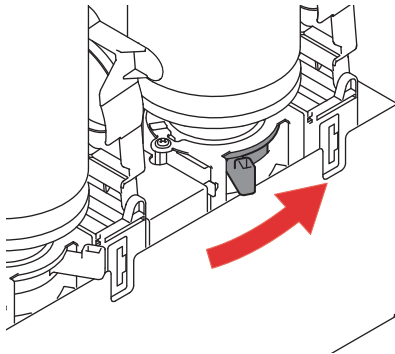
- Check for dust or debris on the cap before setting the bottle. If any paper or dust adheres to the cap, it may cause a clogged path deflection.

● When [INK END] is displayed

1 Move the lever on the tank completely from the left to the right end.



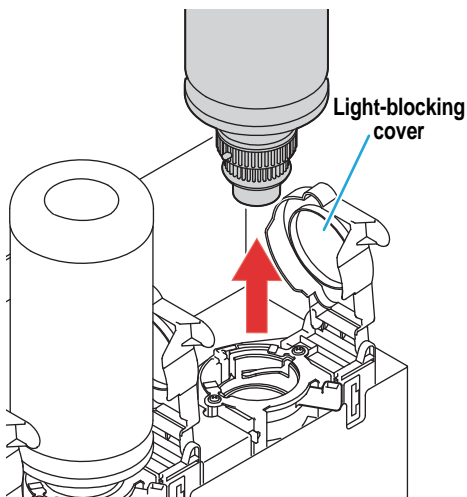
- Do not ever rotate the ink bottle at all after setting it into the tank. Doing so can result in ink leakage.



2 Lift out the ink bottle while keeping it completely straight.



- Check that the light-blocking cover closes when removing the ink bottle from the tank. Close by hand if the cap does not close. Leaving the light-blocking cover open can result in the ink curing.



3

Wipe off any ink adhering to the cap.

- (1) Set the bottle with cap upright and use a paper towel or the like to wipe off any ink adhering to the cap.



4

Remove the cap from the used ink bottle.

- Use the tightening jig to remove the cap if it is difficult to remove.

5

Refer to P.1-9 “Setting ink bottles” to set the new ink bottle.



- Do not leave an ink bottle with the specialized cap attached in a location where it is exposed to light for a long period of time. Doing so can result in the ink in the bottle curing.

● When [INK NEAR END] is displayed

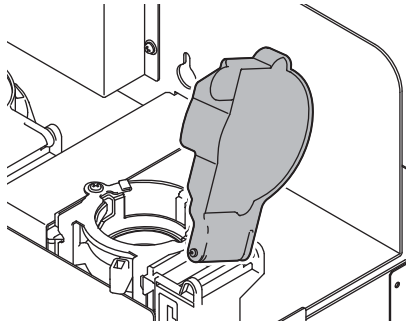
There is a little of ink left. It is recommended to replace the ink bottle soon since ink may become empty in printing while printing is continuously enabled.

When you press the **ENTER** key in LOCAL, you can check the bottle to be replaced in the local guidance. (P.3-30)

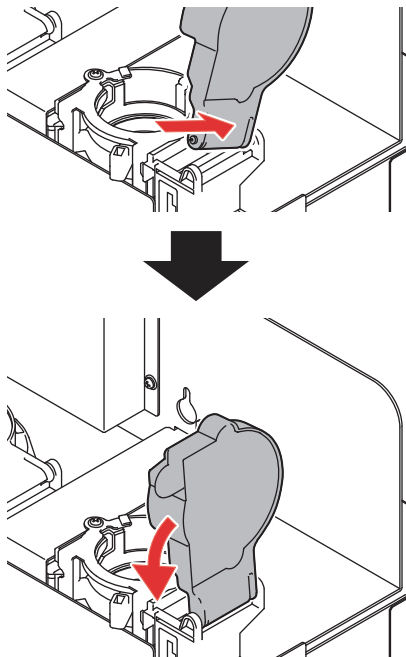
If the light-blocking cover comes off

If the light-blocking cover comes off, light striking the inside of the tank can result in the ink curing. Perform the following procedures if the light-blocking cover comes off.

- 1** Insert the nub (on one side) of the light-blocking cover into the hole on the tank.



- 2** While pressing towards the side of the inserted hole of Step 1, insert the other nub into the other side.



About ink expiration date

The ink expiration date is indicated on the Ink bottle. Expired ink may cause printing defects or alter the color tone. Printing is possible even if the ink has passed its expiration date. Nevertheless, we recommend replacing with new ink or use up as quickly as possible.

Ex.) When the expiration date is April 2020

May : Replace with new ink or use up as quickly as possible. Printing is possible.

June: Replace with new ink or use up as quickly as possible. Printing is possible.

July : Printing is not possible.



- The message appears on the display.

About ink end and ink near end

When very little ink remains in the ink bottle, the warning message "INK NEAR END" appears. It is recommended that you replace the ink bottle with a new one as soon as you can.

When no ink remains in the ink bottle, the warning message "INK END" appears. Replace the ink bottle with a new one.

About Media

The sizes of media that can be used and the method of handling are described here.

The sizes of media that can be used

Maximum width	730 mm (28.0 in)
Maximum length	530 mm (20.1 in)
Max. printing width	710 mm (28.0 in)
Max. printing length	510 mm (20.1 in)
Thickness	153 mm or less (6.0 in or less)
Weight *1	10 kg (22.0 lb)

*1. A rough guide is 27kg per 1 m².

Precautions in handling the media

Carefully observe the following when handling the media.



- **Extension and shrinkage of the media**
Do not use the media in the sheet form shortly after the package was opened. The media could extend or shrink depending on the temperature and humidity inside the room. For more than 30 minutes after opening of the package, the media has to be exposed to the ambient air of the location it is to be used.
- **Warping of the media**
As for the media of the sheet form, use the flat one, or the one warping downward (the one with floating central part when placed the printing surface facing upward.) Store the media liable to be warped on the slightly smaller platform or palette so that it may warp downward.
- **Other precautions**
 - a Do not place any article on the surface of the coated paper. Some coated paper could change its color.
 - b Curled media that cannot be absorbed or the media that misaligns when the table is moved may not be used. Before using, fix the media with adhesive tape, etc.
 - c Do not use the media that will generate warping or deformation.

Menu mode

This machine has three modes. Each mode is described below.

● Local

Local is a mode in printing preparation state.

All keys are available.

Receiving of data from the computer is allowed, however, printing is not executed.

The following operations are allowed in the local.

- (1) Setting an origin and the table height by pressing the JOG keys.
- (2) Executing "Test printing" by pressing the [FUNC2](TEST PRINT/CLEANING) key.
- (3) Executing "head cleaning" by pressing the [FUNC2](TEST PRINT/CLEANING) key.
- (4) Execute setting of each function by pressing the [FUNC1](MENU) key.

● Menu Mode

Press the [FUNC1](MENU) key during the Local Mode to call the Function Mode.

Function settings on printing method can be set.

● Remote

Remote is a mode in printing received data.

Pressing of the [FUNC3](REMOTE) key suspends the machine.

Press the [FUNC3](REMOTE) during the Local Mode to switch to the Remote.

Chapter 2

Basic Operations



This chapter

describes procedures and setting methods for ink and media preparation, and printing.

Operation flow	2-2	Starting the printing operation.....	2-8
Turning the Power ON/OFF	2-3	Interruption of printing.....	2-8
Turning the Power ON	2-3	Checking printing data that is being received or has been received	2-9
Turning the Power OFF.....	2-3	When [! WORK High] is displayed	2-9
Setting the media	2-4	When [Head gap 2.1 mm or more, LD mode recommended, continue print] is displayed.....	2-9
Set the media in another method	2-6	If you open the cover during printing	2-9
Test printing	2-6		
Execution of head cleaning.....	2-7		
Printing an image from source data	2-8		

Operation flow

1

Turning the Power ON

See "Turning the Power ON" (☞ P.2-3)

2

Setting the media

See "Setting the media" (☞ P.2-4)

3

Test printing

See "Test printing" (☞ P.2-6)

4

Execution of head cleaning

See "Execution of head cleaning" (☞ P.2-7)

5

Printing an image from source data

See "Printing an image from source data" (☞ P.2-8)

6

Turning the Power OFF

See "Turning the Power OFF" (☞ P.2-3)

Turning the Power ON/OFF

Turning the Power ON

This machine is provided with the following two power switches:

Main power switch :

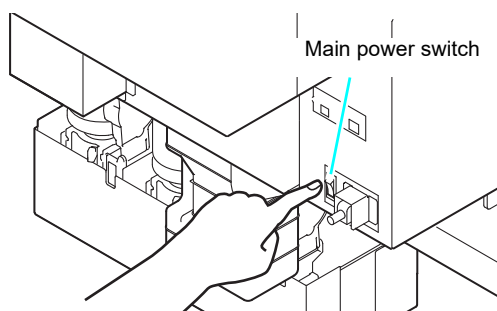
It is located on the side of this machine. Keep this switch ON all the time.

[END/POWER] key :

Normally, use this key to turn the power ON/OFF. The function for preventing ink sedimentation works even with the [END/POWER] key turned OFF when the main power switch is turned ON.

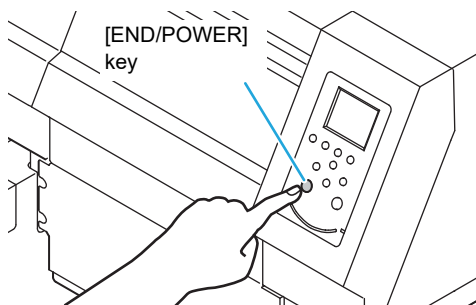
1 Turn the main power switch ON.

- Set the main power switch located on the side of this machine to the "I" side.



2 Turn the power on, by pressing the [END/POWER] key.

- The machine enters LOCAL.



- The firmware version is displayed when the power is turned ON, and then the machine performs its initial operation.

3 Turn ON the power of the connected PC.



- Turn the power ON after the front cover and maintenance cover are closed.
- The head nozzle may result in nozzle clogging if the main power switch is left OFF for a long time.

Turning the Power OFF

When having ended the operation of the machine, turn the power OFF by pressing the [END/POWER] key.

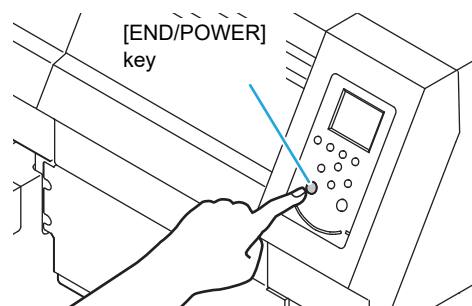
Check the following items when turning the power OFF.

- If the machine is receiving data from the PC or if there is any data that has not been output yet
- If the head has returned to the capping station
- If any error has occurred
(☞ P.5-6 "Error messages")

1 Turn OFF the power of the connected PC.

2 Turn the power off, by giving the [END/POWER] key a long press.

- Do not turn OFF the main power switch located on the side of the machine.
- To use this machine again, press the [END/POWER] key .



Cautions about Turning the Power OFF

● Do not turn the main power switch OFF.

When the main power switch is ON, the power periodically turns ON and the operation for preventing ink sedimentation is carried out.

When the main power switch has been turned OFF, the function for preventing ink sedimentation will not work, and this may cause nozzle clogging.

● Keep the front cover and the maintenance cover closed.

If the cover is opened, the function for preventing ink sedimentation does not work.

● Turn the power OFF after having checked the position of the head.

If the power is turned OFF in a state where the head has not returned to the capping station, the ink head dries, which may cause nozzle clogging.

In this case, turn the power ON again and check that the head has returned to the capping station, and then turn the power OFF.

● Do not turn the power OFF during printing.

The head may not return to the capping station.

● After having turned the power switch OFF by pressing [END/POWER] key, turn the main power switch OFF.

When turning the main power switch off for moving the machine or for solving the error or the like, press the [END/POWER] key a long time on the front of the machine, check the display is turned off on the operation panel, and then turn the main power switch off.

Setting the media



- The peripheral parts of the media could roll up due to heat. Fix the media supplementarily using adhesive tapes, etc.

1

Setting the media thickness.

- (1) Press the [FUNC1] (MENU) ➡ [▼] (1 time) ➡ [ENTER] key in LOCAL.
- (2) Select "MEDIA THICKNESS", and press the [ENTER] key.
- (3) Press [▲][▼] to set the media thickness, and press the [ENTER] key.



- When using a jig, enter the jig's height + the media thickness.

Setting the Table Height

If the table height is changed, Media Thickness is also changed.

- 1 Press the **FUNC1 (MENU)** → **ENTER** key in LOCAL.
 - HEAD HEIGHT MENU will be displayed.
- 2 Press **▲** **▼** to select "TABLE HEIGHT", and press the **ENTER** key.
- 3 Press **▲** **▼** to set the table height, and press the **ENTER** key.

Set value : 0.0 to 153.0mm
- 4 Press the **END/POWER** key several times to end the setting.

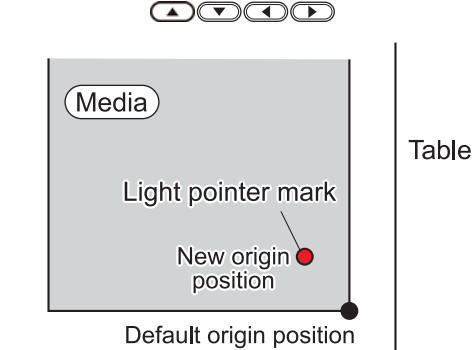
Changing origin

The default origin position can be changed by pressing JOG keys **▲****▼****◀****▶**.



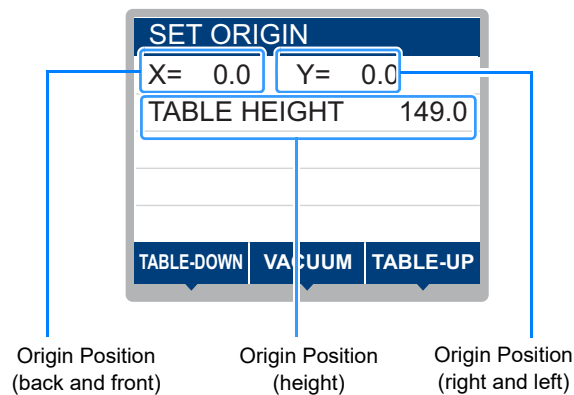
- The origin can also be changed from "ORIGIN SETUP MENU". (P.3-4)

Changing with the JOG keys



Origin position by JOG keys

- 1 Press the **▲** **▼** **◀** **▶** keys in the local mode.
 - The origin setting mode starts
 - A red light pointer mark [●] is projected on the table or the media.
- 2 Move the light pointer mark by pressing the **▲** **▼** **◀** **▶** keys.



- Move the light pointer mark to the position to set a new origin.

- 3 Press the **ENTER** key when the printing origin is determined.

- The origin is changed.



- The height of the table is also fixed at the same time. Adjust the height of the table by pressing the [FUNC1] key (down), the [FUNC3] key (up) in advance.
- The setting value for the origin set with the JOG keys is cleared by cutting the power.
- The setting of the table height holds even if turning off the power.

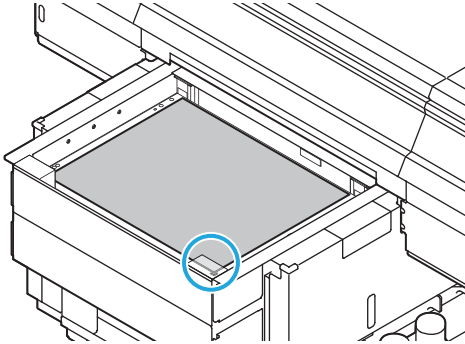
Set the media in another method

You can lower the table to set media more easily.

1 Press the **FUNC1** (MENU) → **ENTER** key in LOCAL.

- The table moves down.

2 Set media along the L-shaped mark (print origin) on the right corner of the table.



- To change the printing origin, see the following page. (P.2-5 "Changing origin")
- To use tools, set into the shaves (8.0 mm-deep) on the corners of the table.

3 Press the **ENTER** key.

- The table moves up to the table height for drawing.

About switching vacuum fan

The vacuum function to fix the media at printing automatically starts.



- You can set the vacuum function operation. For details, refer to P.3-11 "Setting of FAN MODE."
- When you set the "Fan mode" of the setting mode to "Manual", switch ON/OFF by pressing the [SEL] and [FUNC1].

Test printing

Make test printing in the specified direction to check whether there is nozzle clogging or other printing failures (such as wearing or missing).



- When you use white or clear ink, print on the clear film to check.

Check before starting test printing

• Is media set? (P.2-4)	• Is origin point set? (P.2-5)
• Is the table height appropriate? (P.2-5)	

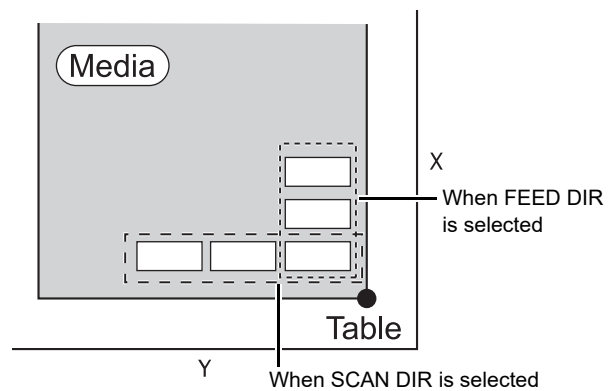
1 Press the **FUNC2** (TEST PRINT/CLEANING) in the local.

2 Press **▲** **▼** to select the printing direction, and press the **ENTER** key.

- When nozzle recovery is not set, test printing is started in the selected direction.
- SCAN DIR: Draws in the scan (widthwise) direction of the media.
FEED DIR: Draws in the feed (longwise) direction of the media.



- When nozzle recovery is set, press **▲**/**▼** to set ON/ OFF and then press the **ENTER** key.
ON : Draws with nozzle recovery ON.
OFF : Draws with nozzle recover OFF.

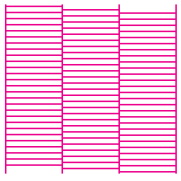
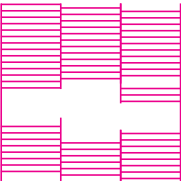
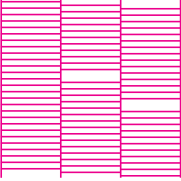
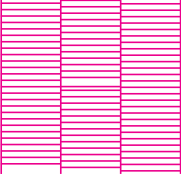


3 Test printing ends.

- The table moves to the front side, and then the mode returns to the local.

4 Check result of printing.

- When the result is normal, finish the operation. (P.2-8)
- When the result is abnormal, execute head cleaning. (P.2-7)

Normal pattern	
	
Abnormal patterns	
Nozzle drop out	 <p>Many lines are missing.</p>
Nozzle missing	 <p>The lines are missing as if the teeth are lost.</p>
Deflection	 <p>The distance between the lines is narrowing or double lines are formed.</p>

Execution of head cleaning

When a correct pattern is not obtained in the test printing, perform the head-cleaning. As for the head cleaning, the following 3 types are available.

normal	To be used if ten odd numbers of the lines are missing when the test pattern is made. Wiping will be performed.
hard	To be used when the missing of the lines does not improve with the "normal" cleaning.
soft	To be used when the lines are curved.

1 Press the **FUNC2** (TEST PRINT/CLEANING) in the local.

2 Select the head, set execution/non-execution of cleaning, and press the **ENTER** key.

(1) Select the head with [**◀**][**▶**].

(2) Select execution/non-execution of the head cleaning with [**▲**][**▼**].

• Select execution of cleaning for every head.
Execute Cleaning : Head color being set is displayed.

Not Execute Cleaning : " - " is displayed.

3 Press **▲** **▼** to select the cleaning type, and press the **ENTER** key.

4 Press the **ENTER** key.

• Cleaning is started.

• When the cleaning is completed, a mode is returned to the local mode.

5 Execute test printing and check the result of the test printing.

• Repeat cleaning and test printing until normal result is obtained.

Printing an image from source data

Starting the printing operation



- If the temperature of the head has not reached the predetermined value, a message is displayed. Printing is not allowed in such cases. When the display is disappeared, printing can be started.



- Data transmission is allowed even if errors are displayed. Printing is started after the display is disappeared.

1

Set the media. (☞ P.2-4)

- When you set the FAN MODE setting (☞ P.3-11) to "MANUAL", press [SEL] and [FUNC1] (REMOTE) depending on the use and vacuum the media.

2

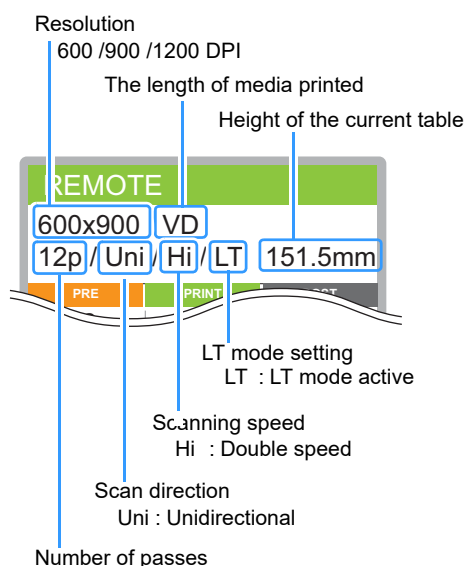
Press the **[FUNC3] (REMOTE)** in local.

- The machine goes in the remote mode and data from the computer can be received.
- The table height (including the vacuum table and the table spacer) is displayed.

3

Transmit data to be drawn from the computer.

- Printing conditions are displayed.
- As for the data transmission method, see the instruction manual of the output software.



- Use LT mode when you need more flexibility.
- When LT mode is enabled, UV light intensity is adjusted. Please check the printing status.

4

Start printing.

- The printing origin is not changed after completion of the printing.

5

Taking out the media after completion of printing.

- (1) When you made vacuum ON, Press the [FUNC1] (VACUUM) to turn the adsorption OFF.



- When you use the vacuum function of the vacuum table to draw, turn OFF the vacuum when printing has been completed.

- (2) Remove the media.

Important!

- During printing, media may be heated by the LED UV and raised, causing printing to be interrupted. In this case, set new media and restart printing.

Interruption of printing

To interrupt printing, stop the printing operation and erase the received data from the machine.

1

Press **[FUNC3] (LOCAL)** while printing.

- Printing operation stops.
- When data is transmitted from the computer, the computer stops transmission of data.



- To restart printing, press the [FUNC3] (REMOTE).

2

Press the **[SEL]** key once.

- "DATA CLEAR" appears on the lower line of the display.

3

Press **[FUNC3] (DATACLEAR)**.

4

Press the **[ENTER]** key.

- Received data is erased and the machine returns to the local mode. The table moves to the evacuation position.

Checking printing data that is being received or has been received

When printing is interrupted or print data is received on the local mode, the warning message "DATA REMAIN" appears on the display.

At this time, if you press the [FUNC3] (REMOTE) to migrate to the remote, printing is started or restarted.

When [! WORK High] is displayed

When warning message " ! WORK High" is displayed on the screen and the printing operation stops during printing, restart printing with the procedures below:



- During printing, the sensor always monitors the media height. When the gap check function (P.3-3) is set to "OFF", if the sensor detects the media, the printing operation is interrupted automatically, and " ! WORK High" is displayed on the screen.

1

Press the [ENTER] key.

- Start printing.

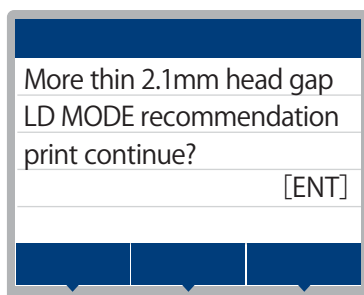
2

Check the media setting status, and press the [FUNC3] (REMOTE).

- The machine restarts printing.
- If you do not wish to restart printing, refer to the P.2-8 "Interruption of printing" and interrupt printing.

When [Head gap 2.1 mm or more, LD mode recommended, continue print] is displayed

The following screen is displayed when print data of the profile of the normal mode is sent with the setting of 2.1mm or more head gap. Please select start or stop printing.



When starting printing

1

Press the [ENTER] key.

- Start printing.

Canceling printing

1

Press the [END/POWER] key.

- Return to local.



The display on this screen can be avoided by any of the following printing conditions.

- Set the head gap to 2.0 mm or less and send print data of the profile in the normal mode.
 - Send print data of profile in LD mode.
- For details on how to select a profile, refer to the operation manual of the output software.



- When printing with setting the head gap to 2.1 mm or more, set it to refresh level 2 or higher to prevent nozzle clogging.

If you open the cover during printing

If you open the cover during printing, the warning message "Reset a switch" is displayed on the screen.

1

Close the cover and press the [ENTER] key to suspend printing.

- Machine starts initialization.



- If the cover is opened while printing is not performed, "Close the cover." is shown on the display. In this case, press the [ENTER] key

2

Chapter 3

Setup



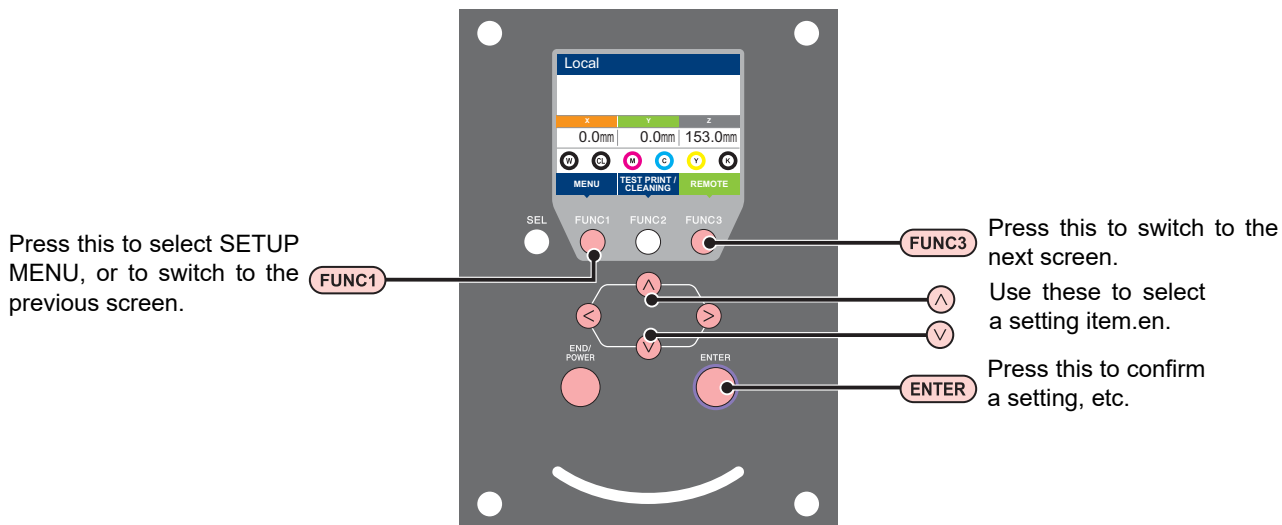
This chapter

describes the various setting of this machine.

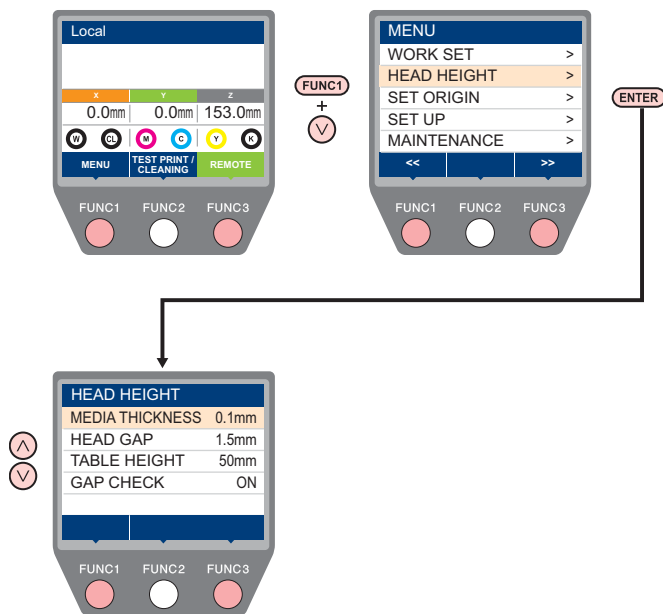
About Head Height MENU	3-2	Setting of LT mode	3-14
Head Height MENU table	3-2	About MACHINE SETUP MENU	3-16
Setting the Media Thickness	3-3	MACHINE SETUP MENU table	3-17
Setting the HEAD GAP	3-3	Setting Time	3-18
Gap check	3-3	Setting Unit (Temperature/ Length)	3-18
About ORIGIN SETUP MENU	3-4	Setting a KEY BUZZER	3-18
ORIGIN SETUP MENU table	3-4	Set the network	3-19
Setting the X offset (remote), X offset (local)	3-5	Setting event mail function	3-20
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About Head Height MENU

On SETUP MENU, you can set the print conditions to match the media you usually use.



◆ SETUP MENUs at-a-glance



Head Height MENU table

Function name	Set value ^{*1}	Outline
MEDIA THICKNESS (☞ P.3-3)	<u>0.0</u> to 153.0mm	Setting the thickness of media.
HEAD GAP (☞ P.3-3)	<u>1.5</u> to 4.0mm	Setting the head gap.
TABLE HEIGHT (☞ P.2-5)	0.0 to <u>153.0</u> mm	Setting the height of the vacuum table.
GAP CHECK (☞ P.3-3)	ON/ <u>OFF</u> / INDIVIDUAL	Selecting an operation when obstacles are detected during printing.

*1. The underlined value is set at the time of purchase.

Setting the Media Thickness

If the media thickness is changed, Table Height is also changed.

- 1 Press the **FUNC1 (MENU)** → **▼** → **ENTER** key in LOCAL.
 - HEAD HEIGHT MENU will be displayed.
- 2 Press **▲▼** to select “MEDIA THICKNESS”, and press the **ENTER** key.
- 3 Press **▲▼** to set the media thickness, and press the **ENTER** key.
 - Set value : 0.0 to 153mm
- 4 Press the **END/POWER** key several times to end the setting.

Setting the HEAD GAP

If the head gap is changed, Table Height is also changed.

- 1 Press the **FUNC1 (MENU)** → **▼** → **ENTER** key in LOCAL.
 - HEAD HEIGHT MENU will be displayed.
- 2 Press **▲▼** to select “HEAD GAP” **ENTER** key.
- 3 Press **▲▼** to set the table spacer, and press the **ENTER** key.
 - Setting value: 1.5 to 4.0 mm
- 4 Press the **END/POWER** key several times to end the setting.

Gap check

Select the operation when an obstacle is detected before printing (at the time of remote pressed) or during printing.

- 1 Press the **FUNC1 (MENU)** → **▼** → **ENTER** key in LOCAL.
 - HEAD HEIGHT MENU will be displayed.
- 2 Press **▲▼** to select “GAP CHECK”, and press the **ENTER** key.
- 3 Press **▲▼** to select the mode, and press the **ENTER** key.
 - Set value: ON, OFF
 - When ON is selected:
 - Before drawing, the work height is checked with the specified table height (media thickness).
 - Before and during drawing, if the work sensor is shielded, the table is lowered until it is unshielded to change the table height.
 - If the work sensor is shielded when the table is lowered to the bottom, a message of [WORK High] appears and the operation stops.
 - When OFF is selected:
 - Before drawing, the work height is checked with the specified table height (media thickness), and if the work sensor is shielded, a message of [WORK High] appears and the operation stops.
 - If the work sensor is shielded during printing, lower the table until the work sensor is no longer in the dark and interrupt the print and display [WORK High]. (For the head hit prevention)
 - When you resume plotting, then return to the original table height.
 - When INDIVISUAL is selected.
 - Press **▲▼** to select "ON" or "OFF" and press the **ENTER** key.
 - Item : BEFORE PRINT, ON PRINT

Item	Applied action
BEFORE PRINT	<ul style="list-style-type: none"> • When switching from local to remote. • When WORK CHK is selected from the work set. • Before printing the built-in pattern.
ON PRINT	<ul style="list-style-type: none"> • During the Online printing. • During printing the built-in pattern.

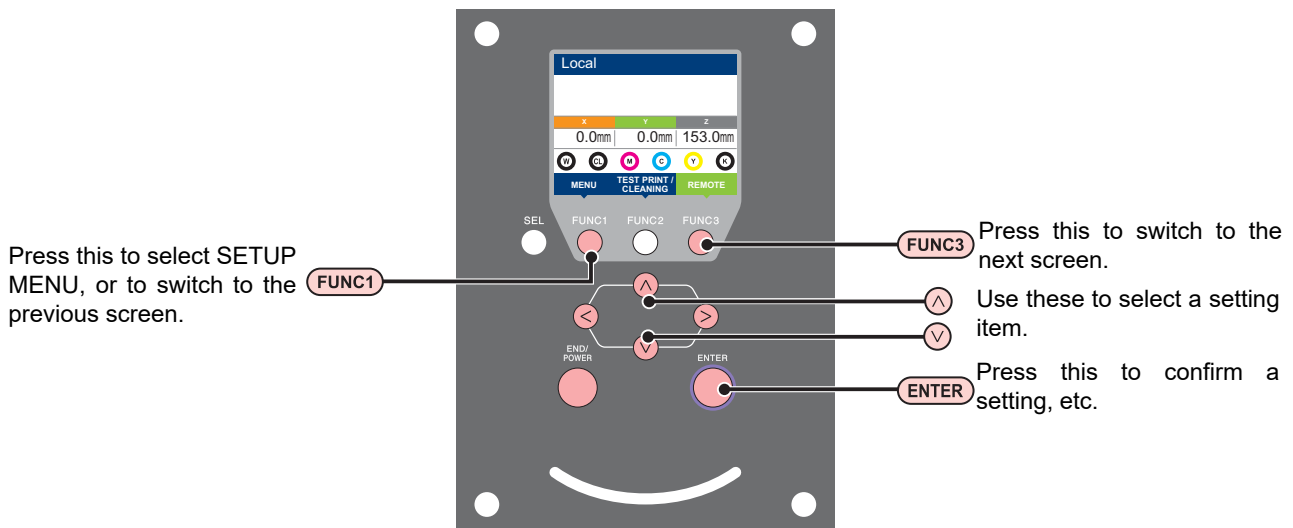
- 4 Press the **END/POWER** key several times to end the setting.

Important!

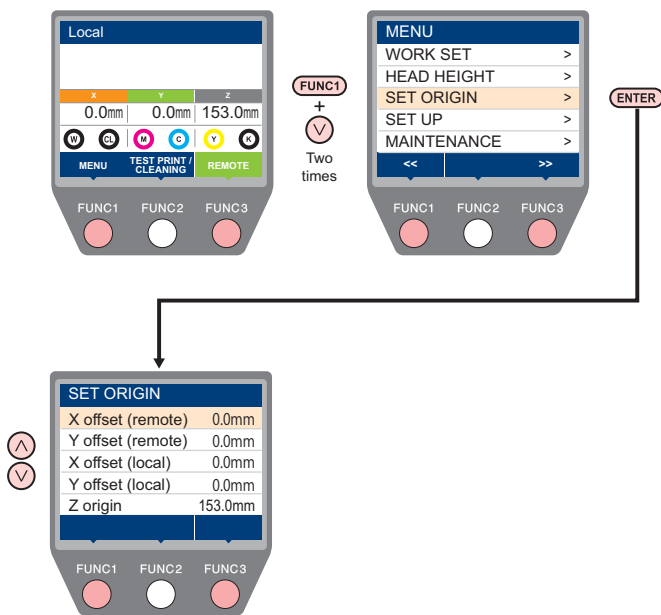
- The gap check function is not a function to avoid the head hit completely by detecting obstacles. Even when the GAP CHECK is “ON”, be sure to check the work height visually before drawing.

About ORIGIN SETUP MENU

Common settings are functions for using this machine easily.
The following items can be set in Origin settings.



◆ SETUP MENUs at-a-glance



ORIGIN SETUP MENU table

Function name	Set value	Outline
X offset (remote) (P.3-5)	0.0mm~510.0mm	Setting the X-axis origin position of online printing. (offset value)
Y offset (remote) (P.3-5)	0.0mm~710.0mm	Setting the Y-axis origin position of online printing. (offset value)
X offset (local) (P.3-5)	0.0mm~510.0mm	Setting the X axis origin position of the built-in pattern such as test print.
Y offset (local) (P.3-5)	0.0mm~710.0mm	Setting the Y axis origin position of the built-in pattern such as test print.
Z origin (P.3-5)	0.0mm~153.0mm	Setting the Z origin (table height).

Setting the X offset (remote), X offset (local)

For X offset (remote), set the X axis origin position of online printing.

For X offset (local), set the X axis origin position of the built-in pattern such as test print.

1 Press the **FUNC1** (MENU) \rightarrow **▼** (twice) \rightarrow **ENTER** key in LOCAL.

- ORIGIN SETUP MENU will be displayed.

2 Press **▲▼** to select “X offset (remote)” or “X offset (local)”, and press the **ENTER** key.

3 Press **▲▼** to set the X-axis origin position, and press the **ENTER** key.

4 Press the **END/POWER** key several times to end the setting.

Setting the Y offset (remote), Y offset (local)

For Y offset (remote), set the Y axis origin position of online printing.

For Y offset (local), set the Y axis origin position of the built-in pattern such as test print.

1 Press the **FUNC1** (MENU) \rightarrow **▼** (twice) \rightarrow **ENTER** key in LOCAL.

- ORIGIN SETUP MENU will be displayed.

2 Press **▲▼** to select “Y offset (remote)” or “Y offset (local)”, and press the **ENTER** key.

3 Press **▲▼** to set the Y-axis origin position, and press the **ENTER** key.

4 Press the **END/POWER** key several times to end the setting.

Setting the Z origin

1 Press the **FUNC1** (MENU) \rightarrow **▼** (twice) \rightarrow **ENTER** key in LOCAL.

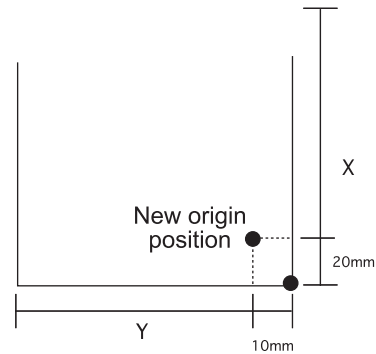
- ORIGIN SETUP MENU will be displayed.

2 Press **▲▼** to select “Z ORIGIN”, and press the **ENTER** key.

3 Press **▲▼** to set the origin position of Z-axis, and press the **ENTER** key.

4 Press the **END/POWER** key several times to end the setting.

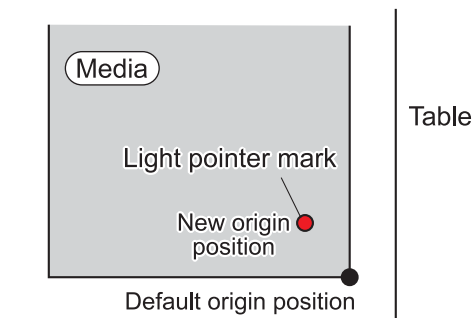
Changing with the “ORIGIN” in the FUNCTION menu



Changing the origin using the JOG keys

You can also change the origin using the JOG keys.

Changing with the JOG keys



Origin position by JOG keys

1 Press **▲▼◀▶** keys in local.

- The origin setting mode starts
- A red light pointer mark [●] is projected on the table or the media.

2 Press **▲▼◀▶** to move the light pointer mark

- Move the light pointer mark to the position to set a new origin.

3 Press the **ENTER** key to set the print origin.

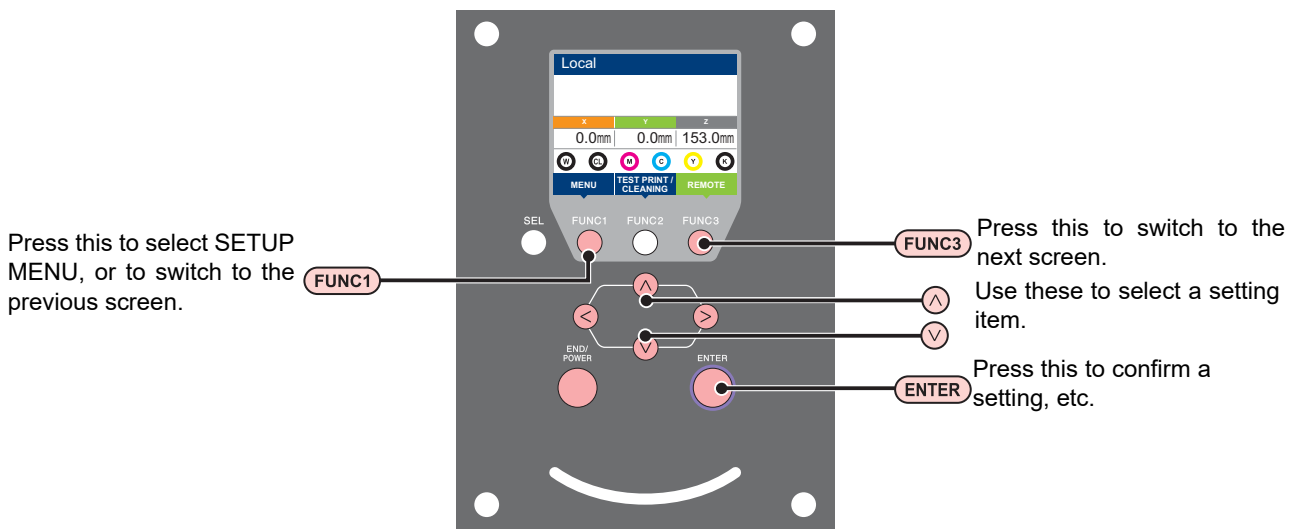
- The origin is changed.

Important!

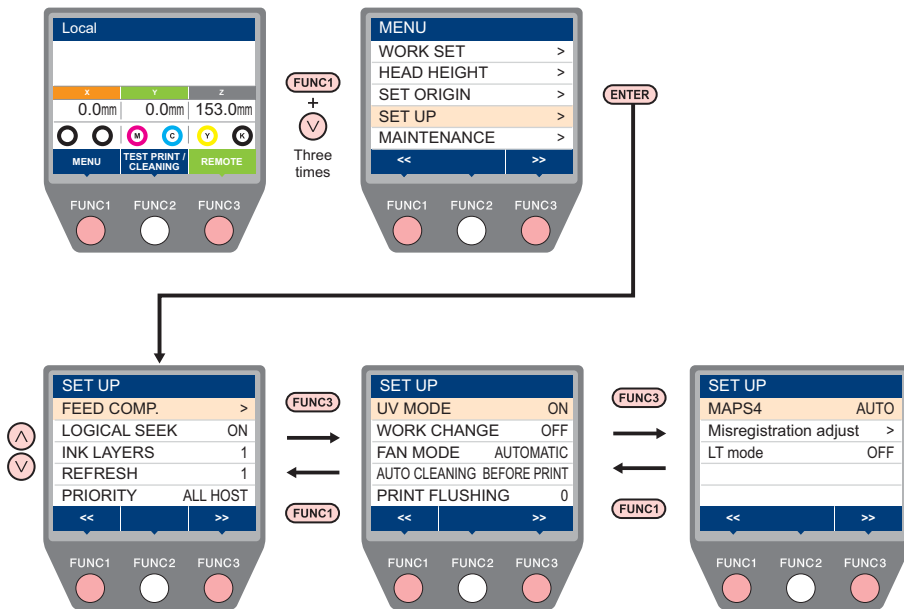
- The height of the table is also fixed at the same time. Adjust the height of the table by pressing the [TABLE-UP][TABLE-DOWN] keys in advance.
- The setting value for the origin set with the JOG keys is cleared by cutting the power.
- The setting of the table height holds even if turning off the power.
- When setting the origin by jog, the origin set by jog is given priority in both local origin and remote origin.
- To cancel the origin set by jog, proceed to the origin setting menu and reset the origin position either to X offset (remote), Y offset (remote), X offset (local), or Y offset (local).

About SETUP MENU

On SETUP MENU, you can set the print conditions to match the media you usually use.



◆ SETUP MENUs at-a-glance



SETUP MENU table



- For each setting item below, you can set it so that the machine may operate according to the value specified when you printed from your RIP software in the connected host PC.
- **Set Item** : FEED COMP./INK LAYER/Logical Seek/REFRESH
- When you operate the machine according to the contents specified with the RIP software, set each item to “Host” when registering this machine type. When you set it other than “Host”, the machine operates according to the machine setting.
- For the specifying method with the RIP software, refer to the operation manual of the RIP software.

Function name		Set value *1	Outline
FEED COMP. (☞ P.3-8)		-9999 ~ <u>0</u> ~ 9999	Used to print a pattern for correcting a media-feeding rate and correct it.
LOGICAL SEEK (☞ P.3-8)		<u>ON</u> / OFF	Sets the scan movable area during printing.
INK LAYERS (☞ P.3-9)		<u>1</u> ~ 9	Sets the number of layers in which ink is to be applied.
REFRESH LEVEL (☞ P.3-9)		0 ~ <u>1</u> ~ 3	Sets the interval of refresh performed during printing.
PRIORITY (☞ P.3-9)		<u>ALL HOST</u> /ALL PLOT/ INDIVIDUAL	Selects the priority from the settings on this machine (PLOT) or the settings on a computer (HOST) about the following items. Items: FEED COMP./INK LAYER/Logical Seek/REFRESH
UV MODE (☞ P.3-10)		<u>ON</u> /OFF/NO PRINT/ Calibration	Sets the UV irradiation during printing.
WORK CHANGE (☞ P.3-10)		ON / <u>OFF</u>	Set whether to return to the local mode or keep the remote mode after online drawing.
FAN MODE (☞ P.3-11)		<u>AUTOMATIC</u> /MANUAL	Sets the vacuum function.
AUTO CLEANING (☞ P.3-11)		<u>BEFORE PRINT</u> / AFTER PRINT / OFF	Sets the automatic cleaning operation for the head performed before printing or after printing.
PRINT FLUSHING LEVEL (☞ P.3-11)		<u>0</u> ~ 3	Sets the flushing amount before printing.
MAPS4 (☞ P.3-12)		MANUAL, <u>AUTO</u>	Perform setting to reduce stripes between passes.
Misregistration adjust (☞ P.3-13)	Feed Direction	-8 ~ <u>0</u> ~ 8	Correct the mis-registration occurs at printing the color/spot color version.
	Feed Direction		
	Reverse Print	-2.00 ~ <u>0.55</u> ~ 2.00mm	
LT mode (☞ P.3-13)		ON / <u>OFF</u>	When LUS - 120 ink is printed on a media (synthetic leather) where may bending and stretching occurs, and then left in a low - temperature environment (20 ° C or less), the printed surface may crack. By specifying this mode, cracks can be reduced.

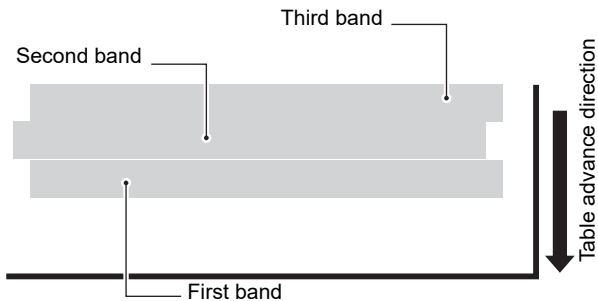
*1. The underlined value is set at the time of purchase.

Setting of Media Correction

A pattern for media correction is printed and a feeding rate is corrected.



- Three bands are printed in the correction pattern.
- Make adjustment so that an even color density is obtained in the boundary between the three bands.



1 Set a media. (☞ P.2-4)

2 Press the **FUNC1** (MENU) → (3 times) → **ENTER** key in LOCAL.

- SETUP MENU will be displayed.

3 Press **▲** **▼** to select "FEED COMP.", and press the **ENTER** key.

4 Press **ENTER** the key to print a correction pattern.

5 Check the correction pattern and enter a correction value.

- A screen for entering the correction value will be displayed.
- **Enter a correction value in "+":**
The boundary between the two bands is widened.
- **Enter a correction value in "-":**
The boundary between the two bands is narrowed.
- When you change the correction value by "1", the width of the boundary changes by about 0.83µm.

6 Press the **ENTER** key.

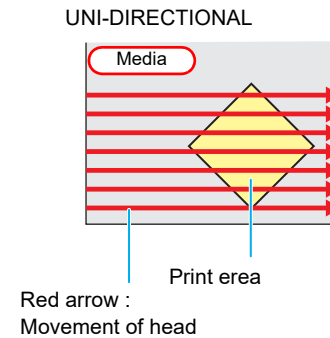
- Print a correction pattern again and check it.
- When media correction is needed, perform the operation in Step 5 to make correction.

7 Press the **END/POWER** key several times to end the setting.

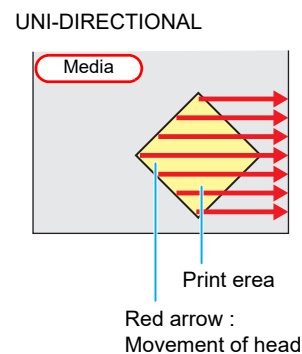
Setting of LOGICAL SEEK

The head's operation varies depending on the LOGICAL SEEK settings, as shown in the figure below.

Movement of heads when LOGICAL seek is OFF



Movement of heads when LOGICAL seek is ON



1 Press the **FUNC1** (MENU) → (3 times) → **ENTER** key in LOCAL.

- SETUP MENU will be displayed.key.

2 Press **▲** **▼** to select "LOGICAL SEEK", and press the **ENTER** key.

3 Press **▲** **▼** to select a set value, and press the **ENTER** key.

- Set value : ON / OFF

4 Press the **END/POWER** key several times to end the setting.

Setting of INK LAYERS

Set the number of times for over painting.
Finer drawing can be obtained by over painting.

- 1 Press the **FUNC1 (MENU)** \rightarrow **▼** (3 times) \rightarrow **ENTER** key in LOCAL.
 - SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select "INK LAYERS", and press the **ENTER** key.
- 3 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : 1 to 9 times
- 4 Press the **END/POWER** key several times to end the setting.

Important! • To perform over painting, be sure to set "PLOT" for INK LAYER in PRIORITY.

Setting of REFRESH LEVEL

Set the refresh level of the print head for preventing the head clogging in a dusty environment or high head gap.
The larger level number indicates more frequent refreshing times.

- 1 Press the **FUNC1 (MENU)** \rightarrow **▼** (3 times) \rightarrow **ENTER** key in LOCAL.
 - SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select "REFRESH", and press the **ENTER** key.
- 3 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Level 0 to 3
- 4 Press the **END/POWER** key several times to end the setting.

Important! • When printing with setting the head gap to 2.1 mm or more, please set it to the level 2 or higher to prevent nozzle clogging.

Setting of PRIORITY

Select priority of setting of this machine or that of the computer on the following items respectively.

Item : FEED COMP/INK LAYERS/LOGICAL SEEK/REFRESH

- Important!** • When you give priority to the setting at the RIP software side, make the setting value "Host".
- 1 Press the **FUNC1 (MENU)** \rightarrow **▼** (3 times) \rightarrow **ENTER** key in LOCAL.
 - SETUP MENU will be displayed.
 - 2 Press **▲** **▼** to select "PRIORITY", and press the **ENTER** key.
 - 3 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : ALL HOST/ALL PLOT/INDIVIDUAL
 - If you select [INDIVIDUAL], proceed to Step 4. If you select other items, proceed to Step 5.
 - 4 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - 5 Press the **END/POWER** key several times to end the setting.

Setting of UV MODE



The mode of the LED UV may be set in 4 stages. This setting is made when the media vulnerable to the heat is used or when the test drawing is made in which the lighting of the LED UV is not desired.

ON	The LED UV is lit.
OFF	The LED UV is not lit.
NO PRINT	The drawing is not performed and only the LED UV is lit. Use when drawing is performed without the LED UV is lit etc., and when you wish to make it cure afterward.
Calibration	Normally, white ink turns slightly yellow immediately after printing, and then it gradually turns white. Thus, if you calibrate the colors immediately after printing, the calibration results may not be correct. The color calibration mode reduces the yellow tone that occurs shortly after printing by changing the UV illuminance in order to enable color calibration immediately after printing. However, the ink of the materials printed in the color calibration mode is not so adhesive or abrasive, and those prints are not suitable as final products. Restore the original settings after the calibration process.

1 Press the **FUNC1 (MENU)**  (3 times)  **ENTER** key in LOCAL.

• SETUP MENU will be displayed.

2 Press the **FUNC3 (>>)**.

3 Press   to select "UV MODE", and press the **ENTER** key.

4 Press   to select a set value, and press the **ENTER** key.

• Set value : ON/OFF/NO PRINT/ Calibration

5 Press the **END/POWER** key several times to end the setting.


Setting of WORK CHANGE

Set whether to return to local mode or to leave in remote mode when finishing online printing.

1 Press the **FUNC1 (MENU)**  (3 times)  **ENTER** key in LOCAL.

• SETUP MENU will be displayed.

2 Press the **FUNC3 (>>)**.

3 Press   to select "WORK CHANGE", and press the **ENTER** key.

4 Press   to select a set value, and press the **ENTER** key.

• Set value : ON/ OFF

5 Press the **END/POWER** key several times to end the setting.

Setting of FAN MODE

You can set whether the vacuum function to fix the media set on the table is performed automatically or you perform it manually.

The factory default is "AUTOMATIC".

- 1 Press the **FUNC1** (MENU) \rightarrow \downarrow (3 times) \rightarrow **ENTER** key in LOCAL.
 - SETUP MENU will be displayed.
- 2 Press the **FUNC3** (>>).
- 3 Press \uparrow \downarrow to select "FAN MODE", and press the **ENTER** key.
- 4 Press \uparrow \downarrow to select a set value, and press the **ENTER** key.
 - Set value : AUTOMATIC/ MANUAL
- 5 Press the **END/POWER** key several times to end the setting.

- Important!**
- When the "FAN MODE" is set to "AUTO" and AUTO CLEANING (P.3-11) is set to "AFTER PRINT", the vacuum function is automatically turned off before AUTO CLEANING.

Setting of AUTO CLEANING

Sets the automatic cleaning operation for the head performed before printing or after printing.

- 1 Press the **FUNC1** (MENU) \rightarrow \downarrow (3 times) \rightarrow **ENTER** key in LOCAL.
 - SETUP MENU will be displayed.
- 2 Press the **FUNC3** (>>).
- 3 Press \uparrow \downarrow to select "AUTO CLEANING", and press the **ENTER** key.
- 4 Press \uparrow \downarrow to select a set value, and press the **ENTER** key.
 - Set value : BEFORE PRINT / AFTER PRINT / OFF
- 5 Press the **END/POWER** key several times to end the setting.

- Important!**
- If you set it to "AFTER PRINT", also set the work change (P.3-10) to "ON".



- During the AUTO CLEANING of "AFTER PRINT", you can switch the vacuum function ON and OFF by pressing the [FUNC1] key.

Setting of PRINT FLUSHING LEVEL

When using a clear acrylic jig and so on, the ink may splash on the print result as the ink on the nozzles thickens due to stray light.

If this happens, increase the flushing amount before printing to prevent ink from splashing.

- 1 Press the **FUNC1** (MENU) \rightarrow \downarrow (3 times) \rightarrow **ENTER** key in LOCAL.
 - SETUP MENU will be displayed.
 - 2 Press the **FUNC1** (<<).
 - 3 Press \uparrow \downarrow to select "PRINT FLUSHING", and press the **ENTER** key.
 - 4 Press \uparrow \downarrow to select a set value, and press the **ENTER** key.
 - Set value : Level 0 to 3
- Important!**
- For the amount of ink consumed for each level, see the following.

Level 0	: 0.003 cc
Level 1	: 0.007 cc
Level 2	: 0.015 cc
Level 3	: 0.024 cc
- 5 Press the **END/POWER** key several times to end the setting.

Setting of MAPS

If performing media correction does not resolve feeding stripes, use the MAPS (Mimaki Advanced PassSystem) function to disperse the pass boundary to make the feeding stripes less visible.

1 Press the **FUNC1** (MENU) **▼** (3 times) **▶** **ENTER** key in LOCAL.

- SETUP MENU will be displayed.

2 Press the **FUNC1** (<<).

3 Press **▲** **▼** to select "MAPS4", and press the **ENTER** key.

4 Press **▲** **▼** to set "AUTO" or "MANUAL".

AUTO : Set the print pattern and smoothing level to the recommended value automatically depending on printing mode.

MANUAL : You can adjust the set value.

- Important!**
- If feeding stripes and color change is not improved by "AUTO" setting, please adjust the print pattern and smoothing level by "MANUAL" setting.

5 Press the **ENTER** key.

- If you select AUTO in Step 4, return to Step 3.
- If you select MANUAL in Step 4, proceed to Step 6.

6 Set the smoothing for the color ink.

- (1) Press the **▲****▼** keys to select smoothing level.
- 0~100% : The MAPS effect become strong as the set value increase, and become weak as the set value decrease. (set in units of 5%)
- (2) Press the **ENTER** key.
- Set the color ink smoothing level and proceed to Step 7.
- (3) Press the **◀****▶** key.
- Set the color ink smoothing level and proceed to Step 10.

7 Set the smoothing for the spot color ink.

- (1) Press the **▲****▼** keys to select smoothing level.
- 0~100% : The MAPS effect become strong as the set value increase, and become weak as the set value decrease. (set in units of 5%)
- (2) Press the **ENTER** key.
- Set the spot color ink smoothing level and proceed to Step 9.
- (3) Press the **◀****▶** key.
- Set the spot color ink smoothing level and proceed to Step 8.

8 Press the **END/POWER** key several times to end the setting.

- Important!**
- MAPS4 will be disabled for the following printing conditions.
- Clear
 - 600 x 600, 8pass
 - 600 x 900, 12pass
 - White High concentration
 - 600 x 900, 12pass

Setting of the Misregistration adjust

It is used when the mis-registration occurs at printing the color/spot color version.

1 Press the **FUNC1** (MENU) \rightarrow **ENTER** (3 times) \rightarrow **ENTER** key in LOCAL.

- SETUP MENU will be displayed.

2 Press the **FUNC1** (<<).

3 Press \uparrow \downarrow to select "Misregistration adjust", and press the **ENTER** key.

4 Press \uparrow \downarrow to choose "feed direction", "scan direction" or "reverse print".

Feed direction : correct the mis-registration of feed direction

Scan direction : correct the mis-registration of scan direction

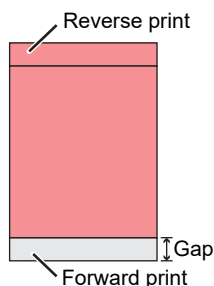
Reverse print : correct the mis-registration of feed direction in the forward print (color to spot color) and reverse print (spot color to color)

5 Press the **ENTER** key.

- If you select the feed direction or scan direction in Step 4, proceed to Step 6.
- If you select the reverse print in Step 4, enter the deviation amount of feed direction of forward print and reverse print in 0.01mm unit.(See figure below).

When the result of reverse print is

- above against the forward print > enter the "minus" value.
- lower against the forward print > enter the "plus" value.



6 Press \uparrow \downarrow to select the resolution to adjust, and press the **ENTER** key.

Feed direction: 600dpi/900dpi/1200dpi

Scan direction: 600dpi/1200dpi

7 Press \uparrow \downarrow to select "Print" or "Set Adjust", and press the **ENTER** key.

print: print the adjustment pattern.

*Use transparent media with the A4 landscape size or more in Y direction.

Set Adjust: back to Step 6.

8 Print the adjustment pattern.

- The straight line of the central pattern (correction value is 0) is a little longer than others both for the feed direction and scan direction.

9 Check the adjustment pattern (see figure below), and enter the adjustment value.

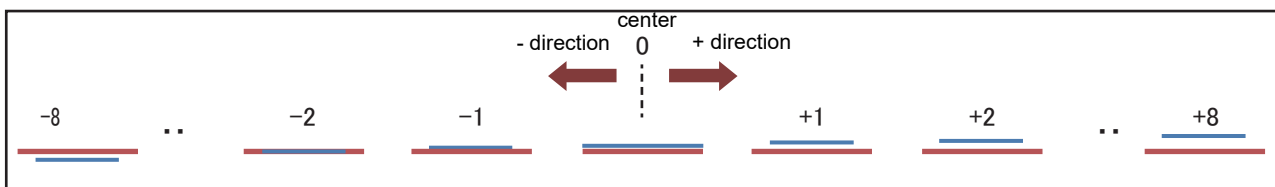
- Input screen of the correction value is displayed.
- Choose the number that two lines are overlapped to clean in the adjustment pattern and enter to the correction value.

In the case of the figure below, for the best pattern is "-2", enter "-2" in correction value.

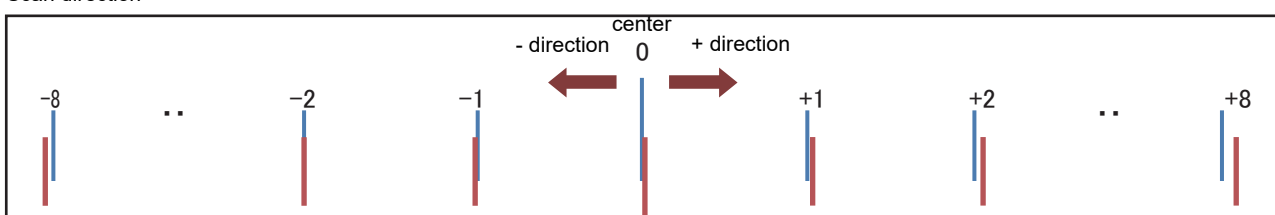
10 Press the **END/POWER** key several times to end the setting.

Adjustment pattern

Feed direction



Scan direction



Setting of LT mode

To enable LT mode, set it to ON.

Set LT mode when you need more flexibility than the default UV mode print.

Since UV light intensity adjustment is performed, check the print performance (stickiness, odor etc.) before using the LT mode.

1 Press the **FUNC1** (MENU) \rightarrow **▼** (3 times) \rightarrow **ENTER** key in LOCAL.

- SETUP MENU will be displayed.

2 Press the **FUNC1** (<<).

3 Press **▲** **▼** to select "LT mode", and press the **ENTER** key.

4 Press **▲** **▼** to select a set value, and press the **ENTER** key.

- Set value : ON / OFF
- When "ON", the LT mode is enabled under the following printing conditions.

Ink type	Printing condition		Resolution	Pass	Media
LUS120	Color layers	1 layer	600 x 600	8 pass	Artificial leather

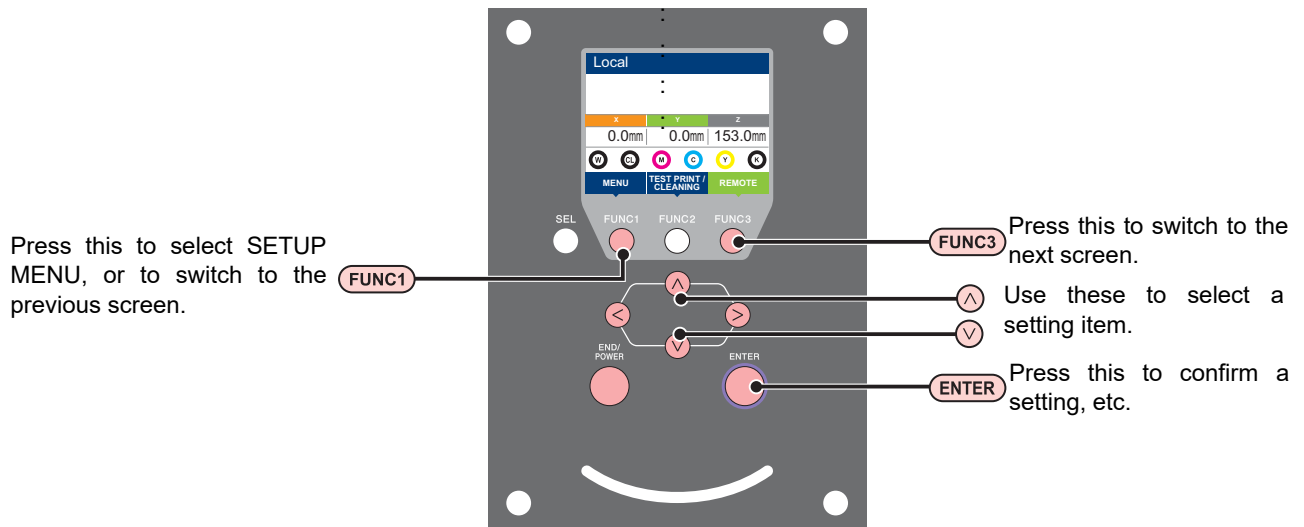
Important!

- If the printing conditions are different from the above, LT mode will not be valid even if LT mode is ON.
- When printing in LT mode, "LT" is displayed on the screen during printing.

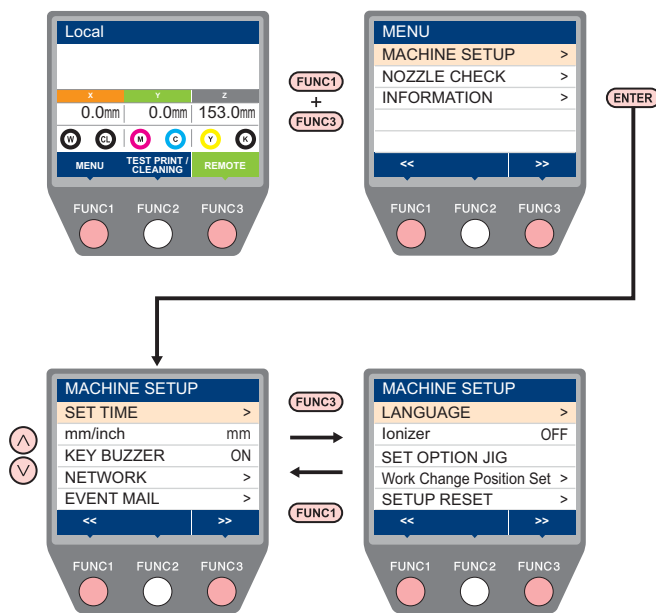
5 Press the **END/POWER** key several times to end the setting.

About MACHINE SETUP MENU

Common settings are functions for using this machine easily.
The following items can be set in Machine settings.





◆ SETUP MENUs at-a-glance



MACHINE SETUP MENU table

Function name		Set value		Default	Meaning	
TIME (☞ P.3-18)		+4h ~ -20h		Japan time	Time difference is corrected.	
mm/ inch (☞ P.3-18)		mm / inch		mm	A unit for displaying length is set.	
KEY BUZZER (☞ P.3-18)		ON / OFF		ON	A buzzer sound when keys are pressed is set.	
NETWORK (☞ P.3-19)	Set the network.					
	Check IP Addr.	The IP address currently used by this machine is displayed.				
	Check MAC Addr.	The IP address currently used by this machine is displayed.				
	DHCP	ON / OFF			When it is ON, the IP address given by the DHCP server is used.	
	AutoIP	ON / OFF			When it is ON, the IP address is determined by the AutoIP protocol. However, DHCP is ON, DHCP has priority.	
	IP Address *1	Set the IP address used by this machine.				
	Default Gateway *1	Set the default gateway used by this machine.				
	DNS Address *1	Set the DNS server address used by this machine.				
	SubNet Mask *1	Set the digit number of the subnet mask used by this machine.				
EVENT MAIL	Mail Delivery (☞ P.3-20)	ON / OFF		OFF	Set whether you send/ do not send the e-mail when the set event occurs.	
	Select Event (☞ P.3-20)	Print Start Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail at the start of printing.	
		Print End Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail at the end of printing.	
		Error Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail when a error occurs.	
		Warning Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail when a warning occurs.	
		Other Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail when an event other than the above occurs.	
	Mail Address (☞ P.3-21)	Set the e-mail address to which you send the event mail.		Alphanumeric characters and symbols (within 96 characters)		
	Message Subject (☞ P.3-21)	Set the characters to write in the subject of the event mail.		Alphanumeric characters and symbols (within 8 characters)		
	Server Setup (☞ P.3-21)	SMTP Address		Set the SMTP server.		
		SMTP Port No.		Set the SMTP port number.		
		SENDER ADDRESS		Set the e-mail address to be used as the sender mail address.		
		Authentication	POP before SMTP	Set the SMTP server authentication method (SMTP authentication).		
			SMTP Authentication			
			OFF			
		User Name *2		Set the user name used for the authentication.		
Pass Word *2		Set the password used for the authentication.				
POP3 Address *3		Set the POP server.				
APOP *3		Set ON/ OFF of APOP.				
Transmit Test (☞ P.3-22)	Send the test e-mail.					
LANGUAGE (☞ P.3-24)		English / 日本語		English	Displayed language is changed.	
Ionizer (☞ P.3-24)		ON / OFF		OFF	Set the operation for the Ionizer (option).	
SET OPTIN JIG (☞ P.3-24)		Set the installation / removal of the Kebab MkII L system (optional item).				

Function name	Set value	Default	Meaning	
Work Change Position Set* ⁴ ( P.3-24)	Accept Position	FRONT / REAR	FRONT	If using MDL commands to control the printer, set the front/rear position of the table for receiving work.
	Accept Height	Bottom / Top / On Print	On Print	If using MDL commands to control the printer, set the height of the table for receiving work.
	Collect Position	FRONT / REAR	FRONT	If using MDL commands to control the printer, set the front/rear position of the table for collecting work.
	Collect Height	Bottom / Top / On Print	On Print	If using MDL commands to control the printer, set the height of the table for collecting work.
SETUP RESET( P.3-25)				All setting values are returned to the status default.

- *1. Settable when both of DHCP and AutoIP are [OFF]
 *2. Settable only when Auth. is not OFF
 *3. Settable only when Auth. is POP before SMTP
 *4. Settings are only valid when "MDL commands" are used to control the printer

Setting Time

You can set time of your country (time difference).

- 1** Press the **FUNC1 (MENU)** → **FUNC3 (>>)** → **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2** Press **▲** **▼** to select "TIME", and press the **ENTER** key.
- 3** Press **▲** **▼** **◀** **▶** to enter time, and press the **ENTER** key.
 - Hour/Minute/Second/Time selecting: by the [**◀**]**|**[**▶**] keys.
 - Hour/Minute/Second/Time inputting: by the [**▲**]**|**[**▼**] keys.
- 4** Press the **END/POWER** key several times to end the setting.



- -20 hours to +4 hours can be set.

Setting Unit (Temperature/ Length)

Units used by this machine are set.

- 1** Press the **FUNC1 (MENU)** → **FUNC3 (>>)** → **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2** Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value of length : mm / inch
- 3** Press the **END/POWER** key several times to end the setting.

Setting a KEY BUZZER

You can turn off the buzzer sound when pressing the key.

- 1** Press the **FUNC1 (MENU)** → **FUNC3 (>>)** → **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2** Press **▲** **▼** to select "KEY BUZZER", and press the **ENTER** key.
- 3** Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : ON/ OFF
- 4** Press the **END/POWER** key several times to end the setting.



- When the key buzzer is set to "OFF", the buzzer sound for errors, warnings, operation completion, etc. cannot be shut off.

Set the network

1 Press the **FUNC1** (MENU) → **FUNC3** (>>) → **ENTER** key in LOCAL.

- MACHINE SETUP MENU will be displayed.

2 Press **▲▼** to select “NETWORK”, and press the **ENTER** key.

3 Press **▲▼** to select “CHECK IP ADDRESS”, and press the **ENTER** key.

- The IP address currently used by this machine is displayed.
- When you have finished the check, press the [ENTER] key.



- After connecting with the network, it takes time until the IP address is determined. If the IP address has not been determined, “0.0.0.0” is displayed.

4 Press **▲▼** to select “CHECK MAC ADDRESS”, and press the **ENTER** key.

- The MAC address currently used by this machine is displayed.
- When you have finished the check, press the [ENTER] key.

5 Press **▲▼** to select “DHCP”, and press the **ENTER** key.

6 Press **▲▼** to select a set value, and press the **ENTER** key.

- Set value : ON/ OFF
- When it is ON, the IP address given by the DHCP server is used.

7 Press **▲▼** to select “AutoIP”, and press the **ENTER** key.

8 Press **▲▼** to select a set value, and press the **ENTER** key.

- Set value : ON/ OFF
- When it is ON, the IP address is determined by the AutoIP protocol. However, DHCP is ON, DHCP has priority.

9 Press **▲▼** to select “IP ADDRESS”, and press the **ENTER** key.

Setting event mail function

Set the function to send e-mails to the set e-mail address when events such as cutting start/ end and stop due to an error.

10 Press **▲▼** to select a set value, and press the **ENTER** key.

11 Press the **END/POWER** key several times to end the setting.



- To reflect network setting, once turn off the power supply and turn it on again.

- Disclaimer
- The customer is responsible for the communication fee for Internet communication such as e-mail notification.
- The notification by the event mail function may not be delivered due to Internet environment, failure of the device/ the power supply, etc. Mimaki has absolutely no responsibility for any damages or loss resulting from non-delivery or delays.

Important!

- You can use event mail function by connecting LAN to this machine. Please prepare for LAN cable connection beforehand.
- Not compatible with SSL communication.

Enable the event mail function

- 1 Press the **FUNC1** (MENU) → **FUNC3** (>>) → **ENTER** key in LOCAL.
• MACHINE SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select “EVENT MAIL”, and press the **ENTER** key.
- 3 Press **▲** **▼** to select “MAIL DELIVERY”, and press the **ENTER** key.
- 4 Press **▲** **▼** to select “ON”, and press the **ENTER** key.
- 5 Press the **END/POWER** key several times to end the setting.

Set the event to send an event mail

- 1 Press the **FUNC1** (MENU) → **FUNC3** (>>) → **ENTER** key in LOCAL.
• MACHINE SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select “EVENT MAIL”, and press the **ENTER** key.
- 3 Press **▲** **▼** to select “SELECT EVENT”, and press the **ENTER** key.
- 4 Press **▲** **▼** to select the “ON” or “OFF” of the event, then press the **ENTER** key.
• Select the ON / OFF of the event in the order shown in the table below.
After the ON / OFF setting, please proceed to the next event settings by pressing the [ENTER] key.
• Press the [END / POWER] key when you return to the previous setting.

Event name	Outline
PRINT START	Sets sending/not sending of an email when printing starts.
PRINT END	Sets sending/not sending of an email when printing ends.
ERROR	Sets sending/not sending of an email when printing is stopped due to occurrence of an error.
WARNING	Sets sending/not sending of an email when a warning occurs during printing.
OTHER	Sets sending/not sending of an email when an event other than the above occurs.

- 5 Press the **END/POWER** key several times to end the setting.

Set the e-mail address


- 1 Press the **FUNC1** (MENU) \rightarrow **FUNC3** (>>) \rightarrow **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select “EVENT MAIL”, and press the **ENTER** key.
- 3 Press **▲** **▼** to select “MAIL ADDRESS”, and press the **ENTER** key.
- 4 Press **▲** **▼** **◀** **▶** to set mail address, and press the **ENTER** key.
 - Set the e-mail address to which you send the event mail.
 - Set it with alphanumeric characters and symbols within 96 characters.
- 5 Press the **END/POWER** key several times to end the setting.

Set the subject

- 1 Press the **FUNC1** (MENU) \rightarrow **FUNC3** (>>) \rightarrow **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select “EVENT MAIL”, and press the **ENTER** key.
- 3 Press **▲** **▼** to select “MESSAGE SUBJECT”, and press the **ENTER** key.
- 4 Press **▲** **▼** **◀** **▶** to set subject, and press the **ENTER** key.
 - Set the characters to write in the subject of the event mail.
 - Set it with alphanumeric characters and symbols within 8 characters.
- 5 Press the **END/POWER** key several times to end the setting.

Set the server

- 1 Press the **FUNC1** (MENU) \rightarrow **FUNC3** (>>) \rightarrow **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2 Press **▲** **▼** to select “EVENT MAIL”, and press the **ENTER** key.
- 3 Press **▲** **▼** to select “SERVER SETUP”, and press the **ENTER** key.
- 4 Press **▲** **▼** to select “SMTP ADDRESS”, and press the **ENTER** key.
- 5 Press **▲** **▼** **◀** **▶** to set SMTP Address, and press the **ENTER** key.
 - Press the jog key [**▲**][**▼**][**◀**][**▶**] to set SMTP address.
 - Input the SMTP address name.
 - Set it with alphanumeric characters and symbols within 40 characters.
- 6 Press **▲** **▼** to select “SMTP PORT No.”, and press the **ENTER** key.
- 7 Press **▲** **▼** to set SMTP Port No., and press the **ENTER** key.
 - Set the SMTP port number.
- 8 Press **▲** **▼** to select “SENDER MAIL ADDR”, and press the **ENTER** key.
- 9 Press **▲** **▼** **◀** **▶** to set SENDER MAIL ADDRESS, and press the **ENTER** key.
 - Press [**▲**][**▼**][**◀**][**▶**] and set the e-mail address to be used as the sender mail address.
 - Set it with alphanumeric characters and symbols within 64 characters.
 - Depending on your server, if you do not set the e-mail address not supporting the account, sending/ receiving e-mails may be unavailable.
- 10 Press **▲** **▼** to select “AUTHENTICATION”, and press the **ENTER** key.
- 11 Press **▲** **▼** to set authentication method, and press the **ENTER** key.
 - Set the authentication method of the SMTP server.
 - When you select [OFF], proceed to the Step 20.

- 12** Press **▲▼** to select “USER NAME”, and press the **ENTER** key.
- 13** Press **▲▼◀▶** to set User Name, and press the **ENTER** key.
- Press **▲▼◀▶** to set the user name to use for the authentication.
 - Set it with alphanumeric characters and symbols within 30 characters.
- 14** Press **▲▼** to select “PASSWORD”, and press the **ENTER** key.
- 15** Press **▲▼◀▶** to set Pass Word, and press the **ENTER** key.
- Press **▲▼◀▶** to set the password to use for the authentication.
 - Set it with alphanumeric characters and symbols within 15 characters.
-  • On the password setting screen, you can only check the value that you are currently inputting.
- When you select [POP before SMTP] in the Step 9, set the items in the Step 14 to 17.
- 16** Press **▲▼** to select “POP3 ADDRESS”, and press the **ENTER** key.
- 17** Press **▲▼◀▶** to set POP3 Address, and press the **ENTER** key.
- Press **▲▼◀▶** to set POP server.
 - Input the POP server name.
 - Set it with alphanumeric characters and symbols within 40 characters.
- 18** Press **▲▼** to select “APOP”, and press the **ENTER** key.
- 19** Press **▲▼** to set ON/ OFF, and press the **ENTER** key.
- 20** Press the **END/POWER** key several times to end the setting.

Send a test e-mail

- 1** Press the **FUNC1 (MENU) → FUNC3 (>>)** **ENTER** key in LOCAL.
- MACHINE SETUP MENU will be displayed.
- 2** Press **▲▼** to select “EVENT MAIL”, and press the **ENTER** key.
- 3** Press the **FUNC3 (>>) → ENTER** key.
- “TRANSMIT TEST EXECUTE” will be displayed.
- 4** Press the **ENTER** key.
- The sent result is displayed.
 - If sending test e-mail has failed, an error code is displayed.
Refer to the next page to solve the problem.

```
TRANSMIT TEST
FAILED: 12345 <ent>
```

Error code

- 5** Press the **END/POWER** key several times to end the setting.



- The sent result of the test e-mail is the result of e-mail sending process performed by this machine to the e-mail server. It does not indicate that the e-mail was received at the address.
- If the spam e-mail filter etc. has been set in the terminal in which e-mails are received, even if "Sending has been completed" is displayed, the e-mail cannot be received in some cases.
- If sending test e-mail has failed, the error code below is displayed.
- If the error cannot be solved, try again after a while.
- For the server setting etc., contact with the network administrator or the provider.

Error Code	The expected casus	Remedy
10	Network connection error	<ul style="list-style-type: none"> • Check that the machine is connected with the network. • Check that the machine IP address is correct. • Check that the machine is in the environment where DNS is available.
20	No valid e-mail address.	<ul style="list-style-type: none"> • Enter the correct e-mail address.
11003 11004	The POP server cannot be found. Or cannot access DNS server.	<ul style="list-style-type: none"> • Check the POP server address. • Check that the machine is in the environment where DNS is available.
11021	Cannot connect with the POP server.	<ul style="list-style-type: none"> • Check the POP server setting. • Check the firewall setting.
12010	An error returns from the POP server.	<ul style="list-style-type: none"> • Check the POP server setting.
13000	The POP authentication has failed.	<ul style="list-style-type: none"> • Check the user name and the password. • Check the APOP setting. • Confirm the authentication method.
10013 10014	The SMTP server cannot be found. Or cannot access DNS server.	<ul style="list-style-type: none"> • Check the SMTP server address. • Check that the machine is in the environment where DNS is available.
10021	Cannot connect with the SMTP server.	<ul style="list-style-type: none"> • Check the SMTP server setting. • Check the SMTP port number. • Check the firewall setting.
10*** 11*** 20*** 21***	An error returns from the SMTP server. Or, there was no response.	<ul style="list-style-type: none"> • Check the SMTP server setting. • Cannot communicate with a server that requires mandatory SSL communication. • Check protocol filter settings.
12***	It is invalid sender address.	<ul style="list-style-type: none"> • Check that the e-mail address supporting the account entered in the user name/ the password is set in SENDER ADDRESS.
13***	The e-mail address cannot be found. Or, it is invalid sender address.	<ul style="list-style-type: none"> • Check the e-mail address. • Even if there is a mistake in the e-mail address, this error cannot be detected in some cases. • Check that the e-mail address supporting the account entered in the user name/ the password is set in SENDER ADDRESS.
22000 22008	SMTP authentication error	<ul style="list-style-type: none"> • Confirm the authentication method.
23*** 24*** 25***	The SMTP authentication has failed.	<ul style="list-style-type: none"> • Check the user name and the password.

**** is the error code returned from the e-mail server.

Setting a LANGUAGE

You can change the displayed language.

- 1 Press the **FUNC1 (MENU)** → **FUNC3 (>>)** → **ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2 Press **FUNC1** to select “LANGUAGE”, and press the **ENTER** key.
- 3 Press **▲ ▼** to select language, and press the **ENTER** key.
 - Set Value : 日本語 / English
- 4 Press the **END/POWER** key several times to end the setting.

Setting a Ionizer(Optional)

When the optional ionizer is connected, select ON to remove static electricity.

For safety instructions and precautions, refer to the “Instruction Manual for Ionizer” for UJF-7151plus.

- 1 Press the **FUNC1 (MENU)** → **FUNC3 (>>)** key in LOCAL.
- 2 Press **▲ ▼** to select “MACHINE SETUP”, and press the **ENTER** key.
 - MACHINE SETUP MENU will be displayed.
- 3 Press **▲ ▼** to select “Ionizer”, and press the **ENTER** key.
 - The setting of "Ionizer" is selected.
- 4 Press **▲ ▼** to select set value, and press the **ENTER** key.
 - If you select "ON," the device moves the table in order to remove static electricity from all the printing surfaces according to the printing data before the printing operation starts.
- 5 Press the **END/POWER** key several times to end the setting.

Setting Option Jig set (Option)

Set when installing or removing the optional Kebab MkII L system.



- For safety, please refer to the Kebab MKII / Kebab MKII L System Operation Manual.

- 1 Press the **FUNC1 (MENU)** → **FUNC3 (>>)** key in LOCAL.
- 2 Press **▲ ▼** to select “MACHINE SETUP”, and press the **ENTER** key.
 - MACHINE SETUP MENU will be displayed.
- 3 Press **▲ ▼** to select “SET OPTION JIG”, and press the **ENTER** key.
 - The setting of "Option jig set" is selected.
- 4 Install or remove the Kebab MkII L system , and press the **ENTER** key.
 - When the Kebab MKII L system is installed, printing can be performed while rotating the cylindrical material.
- 5 Press the **END/POWER** key several times to end the setting.

Setting of Work Change Position(MDL command)

If using MDL commands to control the printer, set the table position for receiving and collecting work.



- Settings in this menu are only valid when “MDL commands” are used to control the printer.

• What is “MDL commands”?
 “MDL commands” are commands for enabling control of Mimaki’s printers using the user’s production system and peripheral devices.
 They make it possible to control the position and height of work setting tables and control printer operations such as starting printing.
 It is also possible to acquire the printer remaining ink quantity, error information, etc.
 Concerning “MDL commands”, through utilizing technical information (SDK) provided by Mimaki to develop software, it becomes possible to build the optimum system for the customer.

Information necessary for running “MDL commands” is distributed on the following dedicated site as technical information (SDK).

<https://mimaki.com/download/sdk/>
 User registration (free of charge) is required to download SDK.

- 1 Press the **FUNC1 (MENU)** → **FUNC3 (>>)** key in LOCAL.

- 2 Press **▲▼** to select "MACHINE SETUP", and press the **ENTER** key.
 - MACHINE SETUP MENU will be displayed.
- 3 Press **▲▼** to select "Work Change Position Set", and press the **ENTER** key.
- 4 Press **▲▼** to select "Accept Position", and press the **ENTER** key.
- 5 Press **▲▼** to select set value, and press the **ENTER** key.
 - Set value: FRONT / REAR
 - FRONT: Set the table front/rear position when receiving work at the front-most point.
 - REAR: Set the table front/rear position when receiving work at the rear-most point.
- 6 Press **▲▼** to select "Accept Height", and press the **ENTER** key.
- 7 Press **▲▼** to select set value, and press the **ENTER** key.
 - Set value: Bottom / Top / On Print
 - Bottom: Set the table height when receiving work at the lowest point.
 - Top: Set the table height when receiving work at the highest point.
 - On Print: Set the table height when receiving work at the printing height.
- 8 Press **▲▼** to select "Collect Position", and press the **ENTER** key.
- 9 Press **▲▼** to select set value, and press the **ENTER** key.
 - Set value: FRONT / REAR
 - FRONT: Set the table front/rear position when collecting work at the front-most point.
 - REAR: Set the table front/rear position when collecting work at the rear-most point.
- 10 Press **▲▼** to select "Collect Height", and press the **ENTER** key.
- 11 Press **▲▼** to select set value, and press the **ENTER** key.
 - Set value: Bottom / Top / On Print
 - Bottom: Set the table height when collecting work at the lowest point.
 - Top: Set the table height when collecting work at the highest point.
 - On Print: Set the table height when collecting work at the printing height.
- 12 Press the **END/POWER** key several times to end the setting.

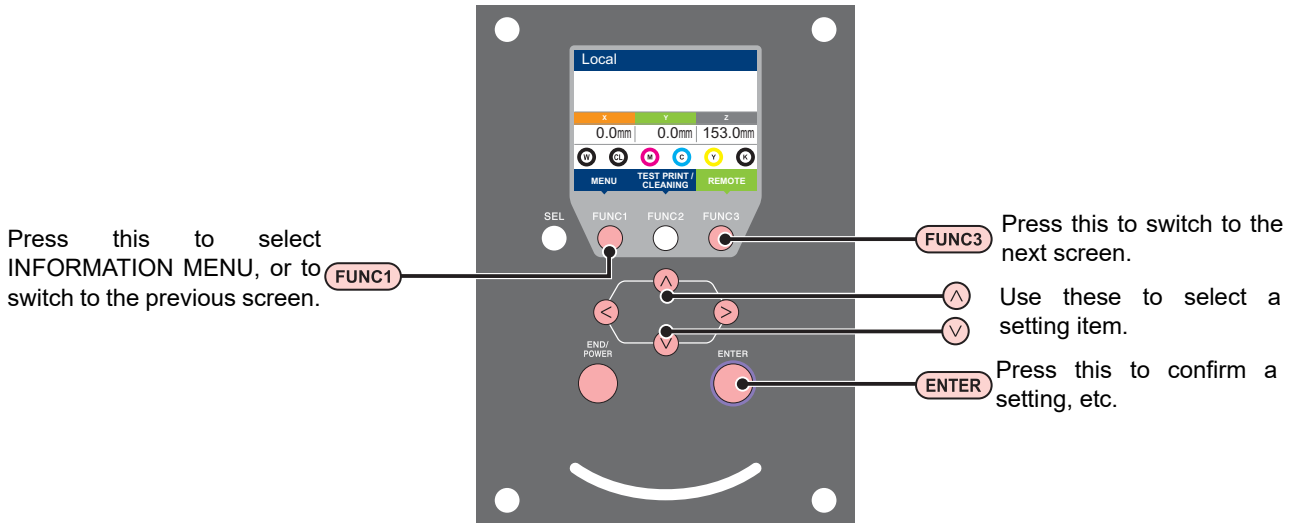
Initializing the Settings

You can return the setting of "SETUP", "MAINTENANCE" and "MACHINE SETUP" to the status before shipment.

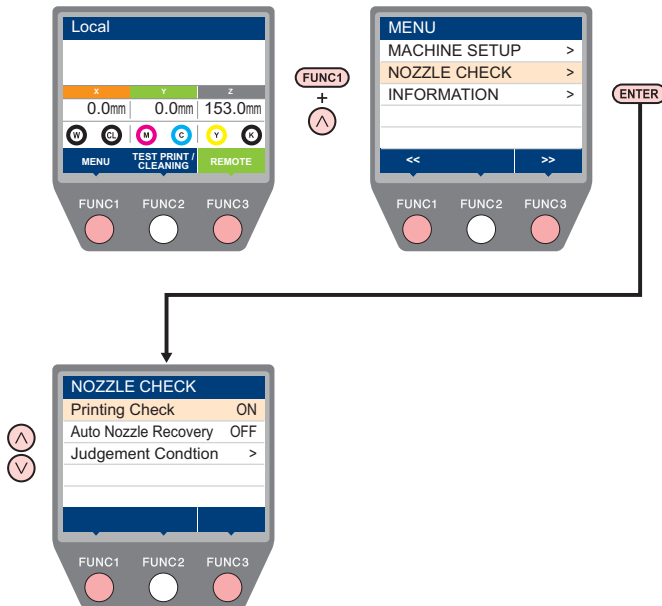
- 1 Press the **FUNC1 (MENU) → FUNC3 (>>) → ENTER** key in LOCAL.
 - MACHINE SETUP MENU will be displayed.
- 2 Press the **FUNC1 (<<)** key.
- 3 Press **▲▼** to select "SETUP RESET", and press the **ENTER** key.
- 4 Press the **ENTER** key.
 - The already configured settings are initialized.
- 5 Press the **END/POWER** key several times to end the setting.

About NOZZLE CHECK MENU

Set operations concerning the nozzle missing detection function.



◆ NCU MENUs at-a-glance



INFORMATION MENU table

Function name		Set value	Default	Meaning
Printing Check ((P.3-28))		ON / OFF	OFF	Set this when you want to conduct nozzle check at the beginning of online printing.
(ON)	Check Interval	SET UP	Job	Conducts nozzle check for each file.
		Interval	1 to 100	30 file
	Action	CLEANING	SOFT / NORMAL / HARD	SOFT
RETRY COUNT		0 to 3	0	Repeats the retry operation for the set number of times.
NOZZLE RECOVERY ((P.3-28))		ON / OFF	OFF	Set this when you want to conduct automatic nozzle recovery.
Judgement Condition ((P.3-28))		1 to 100	1	Sets how many missing nozzles are detected for "Nozzle Missing" judgment to be made according to each color. (Maximum 10 per 1 nozzle line)*2

*1. When the set length is reached during printing, nozzle check is conducted at the start of the next printing.
 *2. Depending on the print conditions, nozzle recovery is not applied in some cases.

Printing Check Flow

Nozzle check is conducted according to the following flow at the start of printing.



- Turn the “Printing Check” setting ON to be enabled.
- Only perform RETRY COUNT and Printing Check settings when the settings are enabled.

1 nozzle check → Judgment

Detects missing nozzles.

2 Recovery operation → nozzle check → Judgment

If more missing nozzles than “Judgement Condition” are detected after the nozzle check, cleaning is performed and nozzle check is conducted again.

3 Retry → Judgment

If more missing nozzles than “Judgement Condition” are detected after the recovery operation, the recovery operation is conducted again.

- If the “RETRY COUNT” setting is configured to 1 or more, this becomes effective.

4 Printing Check → Judgment

Nozzle recovery is automatically conducted following nozzle check and recovery operation.

- Turn the “Printing Check” setting ON to be enabled.

5 Nozzle Missing judgment

If more missing nozzles than A are eventually detected, continued printing will be deemed impossible and printing will stop.

3

Printing Operations at “Nozzle Missing” Judgment and Error Occurrence

- When judged to be “Nozzle Missing” → Printing is stopped.
- When error occurs during nozzle check → Printing is stopped and “Printing Check” is automatically turned OFF. After recovering from the error, set “Printing Check” once again.

Setting the Printing Check

Select ON when you want to conduct nozzle check at the start of online printing.

- 1 Press the **FUNC1 (MENU)** → **FUNC3** → **▼** (1 time) → **ENTER** key in LOCAL.
 - NOZZLE CHECK MENU will be displayed.
- 2 Press **▲** **▼** to select “Printing Check”, and then press the **ENTER** key.
- 3 Press **▲** **▼** to select ON, and then press the **ENTER** key.
 - The “Check Interval” setting screen will be displayed.
 - “Select OFF to not set nozzle check. Proceed to Step 11.
- 4 Press the **ENTER** key.
- 5 Press **▲** **▼** to select setting item, and then press the **ENTER** key.

Job: A nozzle check is conducted at the set number of printing jobs.
- 6 Press **▲** **▼** to select setting value, and then press the **ENTER** key.

SET UP: 1 to 100 Job
- 7 Press **▲** **▼** to select “Action”, and then press the **ENTER** key.
 - The “Action” setting screen will be displayed.
- 8 Press the **ENTER** key.
 - “CLEANING” will be selected.
- 9 Press **▲** **▼** to select cleaning type, and then press the **ENTER** key.

Setting value: SOFT/ NORMAL/ HARD
- 10 Press **▲** **▼** to select retry count, and then press the **ENTER** key.

Setting value: 0 to 3
- 11 Press the **END/POWER** key several times to end the setting.

Setting the NOZZLE RECOVERY

Set this if you want to conduct automatic nozzle recovery when nozzle missing is detected.

- 1 Press the **FUNC1 (MENU)** → **▼** (3 times) → **ENTER** key in LOCAL.
 - NOZZLE CHECK MENU will be displayed.
- 2 Press **▲** **▼** to select “NOZZLE RECOVERY”, and then press the **ENTER** key.
- 3 Press **▲** **▼** to select ON/OFF, and then press the **ENTER** key.
- 4 Press the **END/POWER** key several times to end the setting.

Setting the Judgement Condition

Set the conditions for judging nozzle missing.

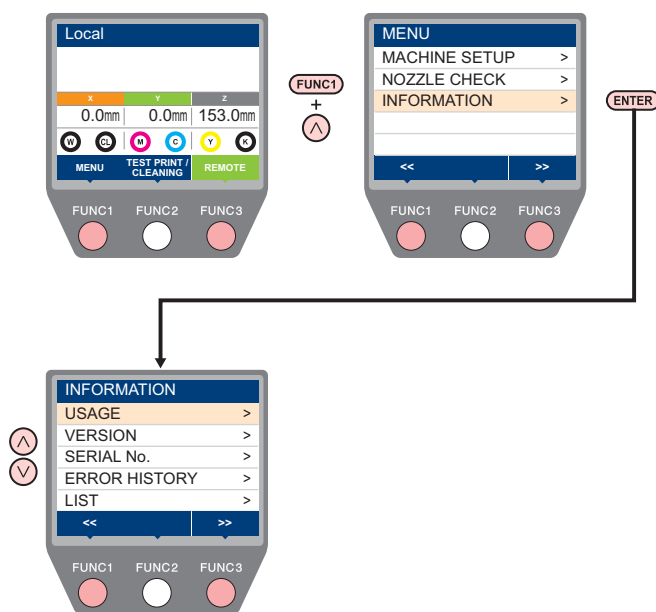
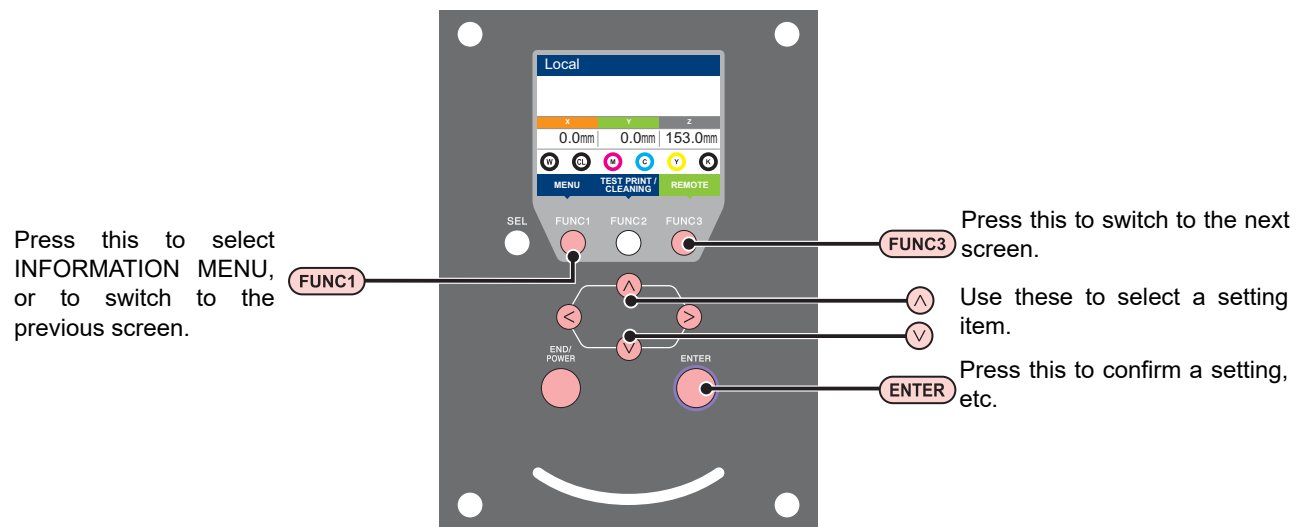
- 1 Press the **FUNC1 (MENU)** → **▼** (3 times) → **ENTER** key in LOCAL.
 - NOZZLE CHECK MENU will be displayed.
- 2 Press **▲** **▼** to select “Judgement Condition”, and then press the **ENTER** key.
- 3 Press **▲** **▼** to select color, and then press the **ENTER** key.
 - The type of color changes depending on the ink set.
- 4 Press **▲** **▼** to set the number of nozzles for judgment, and then press the **ENTER** key.
- 5 Press the **END/POWER** key several times to end the setting.



• The type of color changes depending on the ink set.

About INFORMATION MENU

The information of this machine can be confirmed.
The following items can be confirmed as machine information.



3

INFORMATION MENU table

Item		Description
USAGE	WIPING	This displays how many wipings have been done.
	WASTE TANK	This displays how much waste ink has built up in the waste ink tank, as a rough percentage of the tank capacity.
	PRINT LENGTH	This displays the total length of the printing done to date.
	PRINT AREA	This displays the total area of the printing done to date.
	USE TIME	This displays the total time for which the machine has been used to date.
VERSION		This displays the version information of this machine.
SERIAL NO.		This displays the serial number information of this machine.
ERROR HISTORY		This displays the history of errors and warnings to date. When you press [\blacktriangle][\blacktriangledown], the date of occurrence (year/month/day/hour/minute) and the error/warning information are displayed alternately in the order of occurrence.
LIST		This allows you to print the settings of this machine.

Displaying the Information

- 1** Press the **FUNC1** (MENU) → **FUNC3** → **▼** (2 times) → **ENTER** key in LOCAL.
 - INFORMATION MENU will be displayed.
- 2** Press **▲** **▼** to select a information.
 - Refer to the “INFORMATION MENU”, and select the information to be displayed.
- 3** Press the **ENTER** key.
 - If you selected [LIST] in step 2, the machine's settings will be printed.
- 4** Press the **END/POWER** key several times to end the setting.

Chapter 4

Maintenance



This chapter

describes the items required to use this machine more comfortably, which are the methods for the daily care, the maintenance of the ink bottles etc.

Routine maintenance	4-2	Checking the UV Lamp Usage	4-12
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When to care	4-2	Changing the Time When a Warning about Wiper Cleaning Is Issued.....	4-13
Tools required for maintenance	4-2	Checking the Head Gaps at the Four Corners of the Table.....	4-14
Cleaning exterior surfaces	4-3	Checking Ink Landing Displacement	4-14
Cleaning the table	4-3	Solve ink overflow and supply error problems	4-14
When this machine is left unused for a long time	4-3	Replacing consumables	4-15
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Washing the Ink Discharge Passage	4-7		
Cleaning the Ink Head and the Area around It	4-8		
Nozzle	4-9		
Nozzle Recovery Function	4-11		
Reset the set value	4-12		

Routine maintenance

Be sure to conduct maintenance works for the machine depending on operation frequency or periodically so as to use the machine for a long time while keeping its drawing accuracy.

Precautions in cleaning



- Never disassemble this machine. Disassembling this machine can result in electric shock hazards or damage to this machine.
- Prevent moisture from entering this machine. Moisture inside the machine can result in electric shock hazards or damage to this machine.
- Do not use benzine, thinner, or any chemical agent containing abrasives. Such materials can deteriorate or deform the surface of the covers.
- Do not apply lubricating oil or the like to any part inside this machine. Such materials can cause this machine mechanism to fail.
- This machine uses UV curing ink (UV ink). In case water or alcohol mixed into the UV curing ink (UV ink), flocculation would be occurred. Be sure not to adhere water or alcohol not only on the nozzle and also near the head.
- When handling ink and cleaning solution, pay close attention to ventilation and be sure to wear the Included safety glasses and gloves.



When to care

Maintenance cycle	Maintenance item
Once a day (At the end of daily work)	Cleaning the Ink Head and the Area around It (P.4-8)
	Cleaning the Wiper and Cap (P.4-6)
Once a week (At the end of the work on weekend)	Cleaning exterior surfaces (P.4-3)
	Cleaning the table (P.4-3)
	Cleaning around the wiper (P.4-7)
	Washing the Ink Discharge Passage (P.4-7)
	Cleaning of the LED UV unit (P.4-11)
Once a month	Refill antifreeze mixed water (P.4-18)
When does not resolve the nozzle clogging after the cleaning	When does not resolve the nozzle clogging (P.4-9)
When not used for a week or more	When this machine is left unused for a long time (P.4-3)

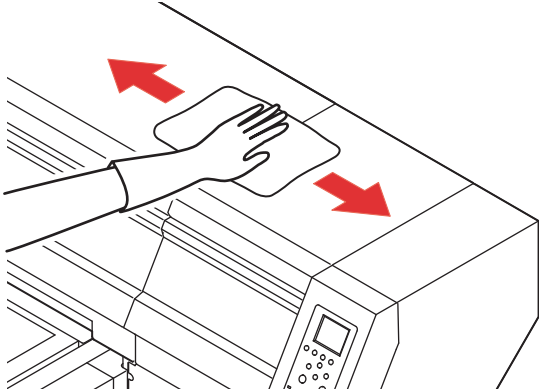
Tools required for maintenance

Purchase consumables from your local distributor or our sales office.

Part name	Part No.
F-200 / LF-200 Washing Liquid	SPC-0568
Cleaning Stick for Head Surrounding	SPC-0527
Nozzle Swab	SPC-0421
UJ Cleaning Swab	SPC-0386
MAINTENANCE CLOTH	SPC-0574
KIM TOWEL	SPC-0499
Handling the antifreeze liquid	SPC-0394
ANTIFREEZE MIXED WATER 35WT%1L	SPC-0783

Cleaning exterior surfaces

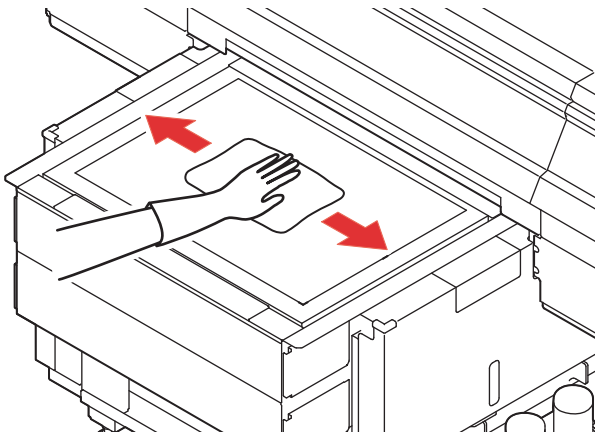
Depending on the using environment, the dusts or sand powder could stick to the exterior of the main unit. If exterior surfaces of the machine is dirty, to avoid the entry of the dusts into the moving part of the head, wipe them off with soft cloth dipped into water or a neutral detergent diluted with water and squeezed tightly.



Cleaning the table

Remove ink attached to the table with an alcohol-impregnated cloth. Be careful not to scratch the table face when removing cured ink.

The vacuum holes on the table can be clogged with ink. Remove the ink in the vacuum holes when needed. Be careful not to leave a part of cured ink on the table.



Important!

- Be sure to clean the slot on the frame of the table, the screw holes for holding tools or the like since dust and dirt are easily accumulated in these parts.

When this machine is left unused for a long time

When the machine is not going to be used for a week or more, use the cleaning function for ink discharge passage. (☞ P.4-7 "Washing the Ink Discharge Passage")

After this, keep the machine in custody. (☞ P.2-3 "Turning the Power OFF")



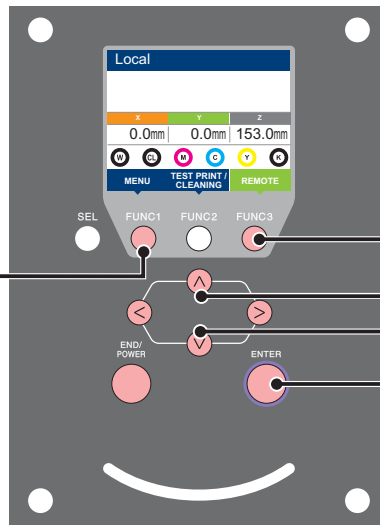
- Use the machine with always turning "ON" the main power.
- Remove the media being set.

About MAINTENANCE MENU

This provides various settings for doing maintenance on the machine.
The following items can be set in Maintenance settings.

Press this to select MAINTENANCE MENU, or to switch to the previous screen.

FUNC1



FUNC3

Press this to use the maintenance function.

▲

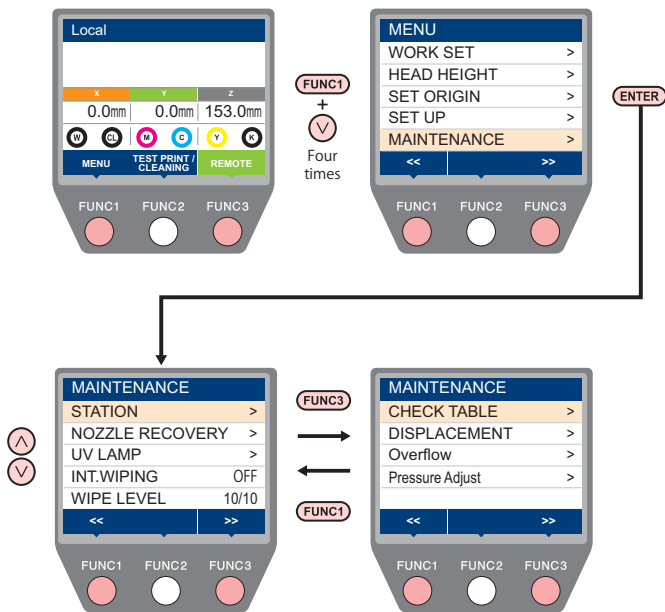
Press this to switch to the next screen.

▼

ENTER

Use these to select a setting item.

◆ MAINTENANCE MENUs at-a-glance



MAINTENANCE MENUS at-a-glance

Item	Set value	Meaning	
STATION MAINTENANCE	For carrying out maintenance on the carriage and station periphery.		
	CARRIAGE OUT (☞ P.4-6)	_____	The carriage moves to the position where "Cleaning the Ink Head and the Area around It" is easy. If not cleaned for a while, "Clean cap" is displayed. In this case, clean it with this menu.
	WIPER CLEANING (Suction type wiper) (☞ P.4-6)		The carriage moves to the position where "Cleaning the Wiper and Cap" is easy. If not cleaned for a while, "WIPER CLEANING" will be displayed. In this case, clean it with this menu.
	WIPER CLEANING (Wiping type wiper (Rubber type wiper)) (☞ P.4-6)		If "Replace Wiper" is displayed, replace the wiper with a new one using this menu. When a rubber wiper is used, the Suction Wiper exclusive use for "Wiper Cleaning" is not displayed. Use "carriage out" to clean.
	WASTE TANK (☞ P.4-15)		Resets or corrects the used count for the waste ink tank.
	DISWAY WASH (☞ P.4-7)	_____	The carriage moves to the position where "Washing the Ink Discharge Passage" is easy.
NOZZLE RECOVERY (☞ P.4-12)	For printing using another nozzle, if nozzle wash and so forth fail to effect recovery from nozzle clogging, etc.		
	PRINT		Prints a pattern, to identify the nozzle that is clogged.
	ENTRY		Registers the faulty nozzle identified by "PRINT".
	RESET		Resets a registered faulty nozzle.
UV LAMP (☞ P.4-13)	UV USED TIME		This displays the total time for which each of the UV lamps has been illuminated.
INT. WIPING(☞ P.4-13)	OFF, 1~255		Sets the wiping operation performed after printing is completed.
WIPE LEVEL(☞ P.4-14)	1/10~10/10		Changing the time when a warning about wiper cleaning is issued.
CHECK TABLE (☞ P.4-14)	For individually moving the head to one of the four table corners to check the head gaps.		
DISPLACEMENT (☞ P.4-14)	For checking if ink landing displacement is present due to unstable installed table or other similar behavior.		
Overflow (☞ P.4-15)	For discharging excessive ink in the sub tank to solve the ink overflow problem. A recovery operation is performed if the ink is supplied insufficiently.		
Pressure adjustment (☞ P.4-15)	Adjust the pressure pump output to improve the hard cleaning operation. Please perform it when the following symptoms occur in hard cleaning. <ul style="list-style-type: none"> • An error occurs during hard cleaning. • Display "Please wait a while" but do not exit. 		

Maintaining the Capping Station

Maintain the ink cap, wiper, etc. located in the capping station. (SATION MAINT.)



- As the machine is used repeatedly, the wiper and ink cap gradually become dirty with ink, dust, etc.
- To keep the nozzle status normal, perform wiper cleaning frequently.

The ink cap and wiper function as follows.

- **Wiper** : It wipes off ink sticking to the head nozzles.
- **Ink cap** : It prevents the head nozzles from clogging due to dryness.

Tools required for Maintenance

• F-200 / LF-200 Washing Liquid (SPC-0568)		
• UJ Cleaning swab (SPC-0386)		
• Clean stick (SPC-0527)		
• Gloves	• Safety glasses	• Dropper



- Be sure to wear the supplied safety glasses and gloves when maintaining the capping station. Otherwise, you may get ink in your eyes.
- Do not move the carriage out of the capping station by hand. When it is desirable to move the carriage, press the [FUNK1] key to execute the carriage-out. (P.4-6Steps 1 to 2)

Cleaning the Wiper and Cap

It is recommended that the wiper and cap be cleaned frequently in order to maintain the high image quality of the machine and keep the machine itself in good working order.



- Even if you cleaned the wiper, when Nozzle out or Ink dropping cannot be solved, try to replace the nozzle.
- If the dirt of the wiper is heavy, replace the wiper (SPC - 0832).

1

Press the **FUNC1 (MENU)** **(4 times)** key in LOCAL.

- MAINTENANCE MENU will be displayed.

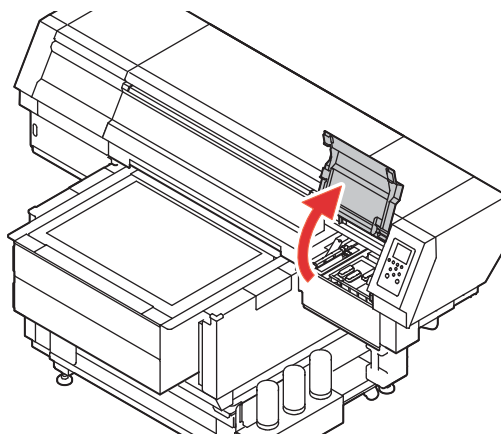
2

Press the **ENTER** key.

- The carriage moves to the left.

3

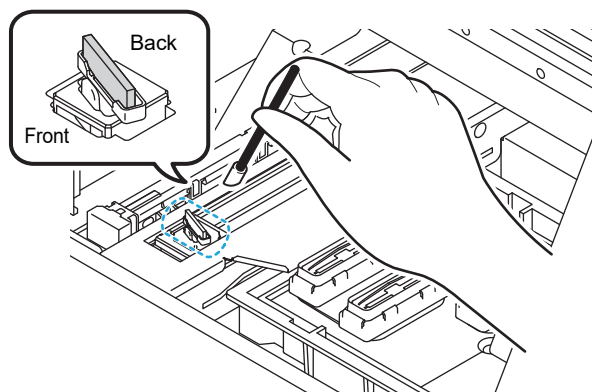
Open the right front cover.



4

Dip the washing liquid into the cleaning swab, and wipe dirt of the wiper nozzle.

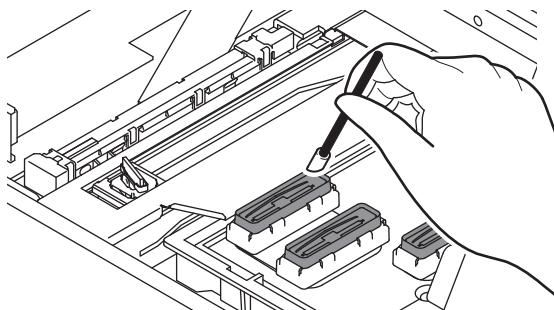
- Wipe the places shown in the right.
- If the wiper is dirty, replace the wiper (SPC - 0832).
When fitting the nozzle, be careful not to put back to front.



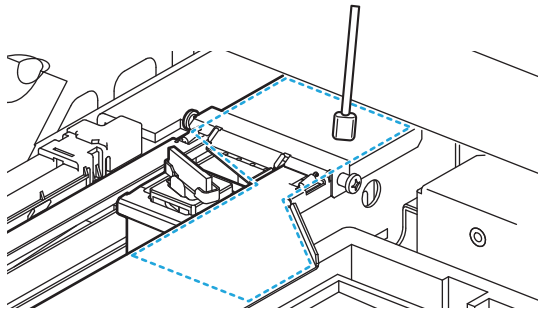
5

Clean the cap rubber.

- Wipe off the ink sticking to the cap rubber with a cleaning swab dipped in maintenance solution for maintenance.
Wipe off so that maintenance solution for maintenance will not remain.



- 6 Clean the surroundings of the wiper.**
- Clean the area with the clean stick.
 - If it is dirty, wipe it with a clean stick containing cleaning solution.



- 7 Press the **ENTER** key after the cleaning.**

- 8 Close the front cover then press the **ENTER** key.**
- After its initial operation, the machine returns to step1.

Cleaning around the wiper



Clean around the wiper frequently to prevent the wiper tube from clogging.

- 1 Press the **FUNC1** (MENU) \rightarrow ∇ (4 times) \rightarrow **ENTER** key in LOCAL.**
- MAINTENANCE MENU will be displayed.




- 2 Press the **ENTER** key.**
- "STATION" will be selected.

- 3 Press the **ENTER** key.**
- "CARRIAGE OUT" will be selected.

- 4 Remove the wiper.**

Suction type wiper	Wiping type wiper
	

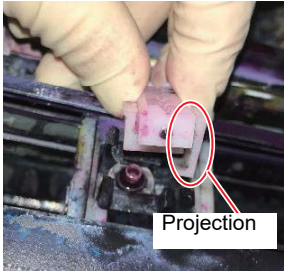
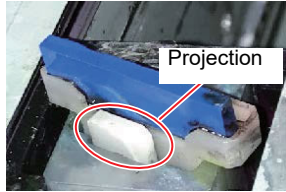
- 5 Fill the maintenance cleaning solution.**
- Take 3cc of the maintenance cleaning solution into the dropper and add the cleaning solution as shown in the picture.
 - Refer to the dropper scale for the solution volume.
 - Estimated speed of pouring: 1cc / sec

Suction type wiper	Wiping type wiper
	
Place the tip of the dropper to the red circle.	
	



• Note for the splash of maintenance cleaning solution.

- 6 Attach the wiper.**

Suction type wiper	Wiping type wiper
	
Install so that the projection face the back side of the machine.	Install so that the projection face the front side of the machine.



• Note for the installation position of the wiper.

- 7 Close the front cover and press the **ENTER** key.**

Washing the Ink Discharge Passage

Wash the ink discharge passage regularly (about once a week) to prevent the head nozzles from clogging due to ink coagulation inside the passage.

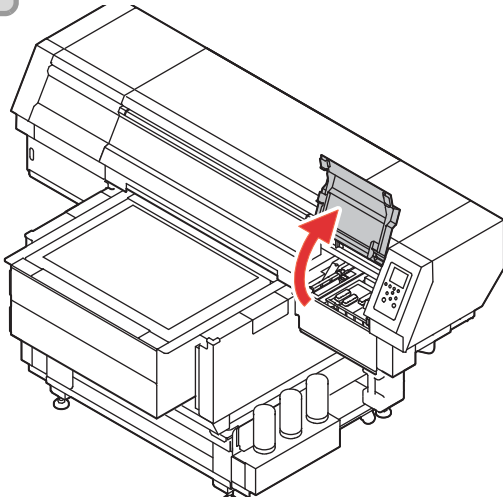
- 1 Press the **FUNC1** (MENU) \rightarrow ∇ (4 times) \rightarrow **ENTER** key in LOCAL.**
- MAINTENANCE MENU will be displayed.

2 Press the **ENTER** key.

- “STATION” will be selected.

3 Press **▼** twice, and press the **ENTER** key.

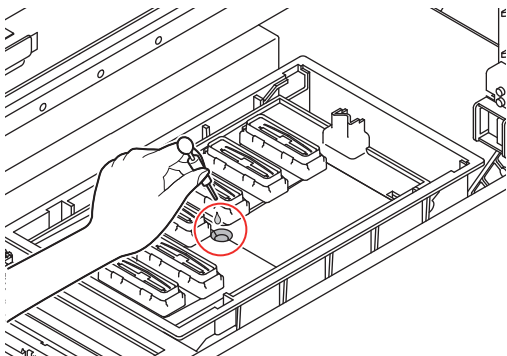
- “DISWAY WASH” will be selected and the carriage will move to the center.
- Dry suction operation is performed repeatedly until the washing work is completed.

4 Open the right front cover.**5** Press the **ENTER** key.

- Dry suction operation is performed repeatedly until the washing work is completed.

6 Put a maintenance cleaning liquid into the ink discharge passage.

- Using a pipette, put 20 cc of a maintenance cleaning liquid into the passage through the hole in the center of the cap slider.

**7** Close the front cover and press the **ENTER** key.

Cleaning the Ink Head and the Area around It

The heads and their surroundings are the parts most liable to be tainted in this machine and if tainted, it could cause adverse effects to the functions of the machine and the results of the printings. Moreover, as the head itself uses very fine mechanisms, sufficient precautions are required for the care and maintenances.



- Use the cleaning stick (SPC-0527) or nozzle swab (SPC-0421) for cleaning around the ink head. Using the other cotton bud may attach lint, then it may damage the machine.
- Also clean the underside of the carriage so that it will not get dirty due to ink or dust. If you leave it dirty, dirt may adhere to the nozzle surface, or, dust and dry ink may be rubbed against the nozzle.
- Also perform maintenance on the ink caps and wipers at the capping station. If you leave it dirty, dust and dry ink may be rubbed against the nozzle at wiping operation when performing head cleaning.
- Using a cleaning swab, etc., rub off gelatinous ink or dust that may stick to the lower part of the slider and the area around the ink head. In doing so, never rub the nozzles of the head.
- If you use LUS-120 ink, you cannot use the UJ cleaning swab.

Tools required for cleaning

• F-200 / LF-200 Washing Liquid (SPC-0568)	
• Clean stick (SPC-0527)	
• Nozzle swab (SCP-0421)	
• UJ Cleaning swab (SPC-0386)	
• MAINTENANCE CLOTH (SPC-0574)	
• Gloves	• Safety glasses



- Be sure to wear the attached safety glasses and gloves when cleaning the area around the ink head. Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

1 Press the **FUNC1** (MENU) **▶** **▼** (4 times) **▶** **ENTER** key in LOCAL.

- MAINTENANCE MENU will be displayed.

2 Press the **ENTER** key.

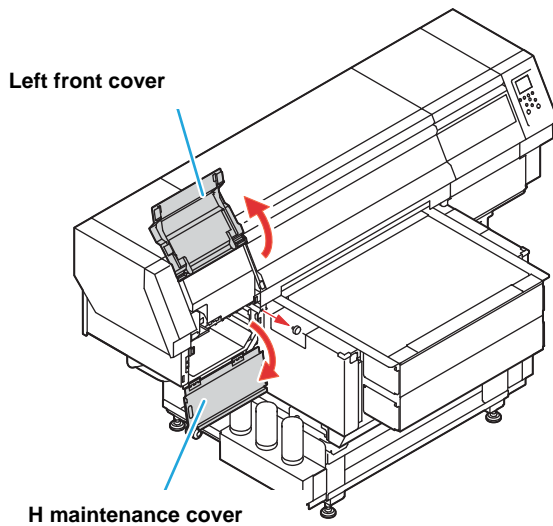
- “CARRIAGE OUT” will be selected.

3 Press **▼**, and press the **ENTER** key.

- Carriage will move to the left end of this machine.

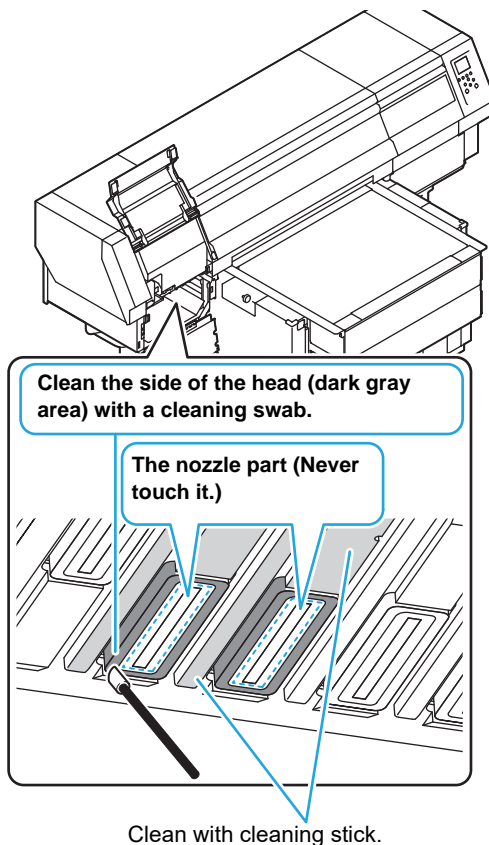
4 Open the left front cover.

5 Open the H maintenance cover.

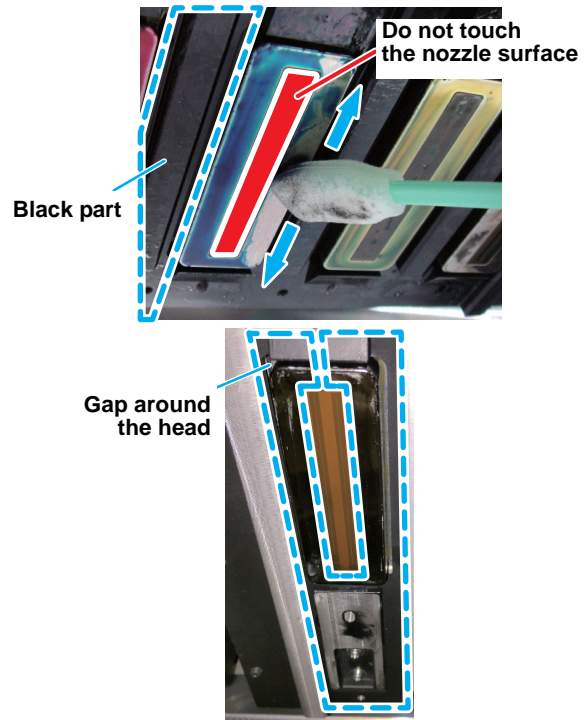


6 Wipe ink sticking to the side of the head off with a cleaning stick.

- Soak the cleaning stick in the maintenance cleaning liquid and wipe off an accumulated ink on the around of the nozzle surface, on the side of the head and on the bottom surface of the slider.
- Never rub the nozzles.



- Wipe off the ink which attached to the black part and the gap around the head.



7 Press the **ENTER** key after the cleaning.

8 Close the maintenance cover, and press the **ENTER** key.

- After its initial operation, the machine returns to LOCAL.

If does not resolve the nozzle clogging

Only if the normal cleaning or a hard cleaning does not resolve the inferior image quality, perform the maintenance of the head nozzle surface according to the following procedure.



- Before performing the maintenance, please make sure to attend the training by our engineers. Maintenance without training may cause failure of the head.
- During maintenance, never rub the nozzles of the head. If rub the nozzle part, the water-repellent surface is degraded and the head might need to be replaced.

Tools required for cleaning

- | | |
|--|------------------|
| • F-200 / LF-200 Washing Liquid (SPC-0568) | |
| • Clean stick (SPC-0527) | |
| • Gloves | • Safety glasses |



- Use the Clean stick (SPC-0527) for maintenance of the nozzle surface. Do not use any other tools.
- UJ Cleaning swab (SPC-0386) and cotton swabs cannot be used.
- Be sure to wear the attached safety glasses and gloves when cleaning the area around the ink head. Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

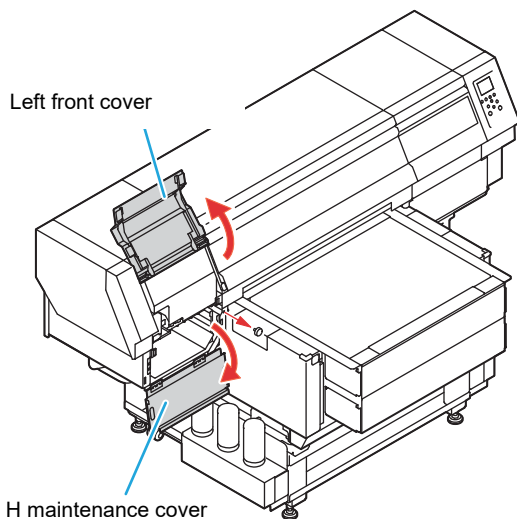
1 Press the **FUNC1 (MENU)** \rightarrow **ENTER** key in LOCAL.
 • MAINTENANCE MENU will be displayed.

2 Press the **ENTER** key.
 • "CARRIAGE OUT" will be selected.

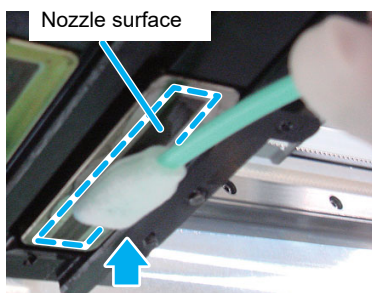
3 Press **ENTER**, and press the **ENTER** key.
 • Carriage will move to the left end of this machine.

4 Open the left front cover.

5 Open the H maintenance cover.



6 Clean the nozzle surface.
 (1) Lightly press a clean stick dipped in the cleaning solution on the nozzle surface for about 10 seconds to clean.
 (2) Perform the work (1) to the entire nozzle surface.



Lightly press for about 10 seconds



- Please do not rub the nozzle surface and press down strongly sponge part with your fingers. Nozzle surface is damaged, and it may cause the discharging defects.
- Please do not re-use the clean stick which was used once. Always use a new clean stick.
- When cleaning multiple heads, use a new clean stick for each head.

7 Press the **ENTER** key after the cleaning.

8 Close the maintenance cover, and press the **ENTER** key.
 • After its initial operation, the machine returns to LOCAL.



- After cleaning the nozzle surface of the head, perform the "Normal" head cleaning immediately.

9 Press the **FUNC2 (TEST PRINT/CLEANING)** in the local.

10 Select the head, set execution/non-execution of cleaning, and press the **ENTER** key.

- (1) Select the head with [**LEFT**][**RIGHT**].
- (2) Select execution/non-execution of the head cleaning with [**UP**][**DOWN**].
 - Select execution of cleaning for every head.
Execute Cleaning : Head color being set is displayed.
 - Not Execute Cleaning : "-" is displayed.

11 Press **UP** **DOWN** to select "normal", and press the **ENTER** key.

12 Press the **ENTER** key.
 • Cleaning is started.
 • When the cleaning is completed, a mode is returned to the local mode.

13 Execute test printing and check the result of the test printing.
 • Repeat cleaning and test printing until normal result is obtained.

Cleaning of the LED UV unit

Remove ink or dust attached to the LED UV periodically.



- Clean the LED UV with care in order not to scratch an irradiation part on the bottom of the unit. If there is a certain amount of dirt or a light shielding object on the irradiation part, ink may not cure well and it may cause banding.

Tools required for cleaning

- | | |
|--------------------------|------------------|
| • Clean stick (SPC-0527) | |
| • Gloves | • Safety glasses |



- Be sure to wear the attached safety glasses and gloves when cleaning the area around the ink head. Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

1 Press the **FUNC1 (MENU)** **▼** (4 times) **▶ENTER** key in LOCAL.

- MAINTENANCE MENU will be displayed.

2 Press the **ENTER** key.

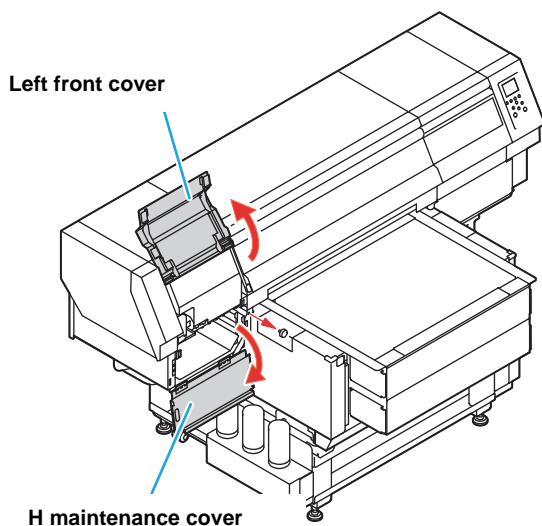
- "CARRIAGE OUT" will be selected.

3 Press **▼**, and press the **ENTER** key.

- Carriage will move to the left end of this machine.

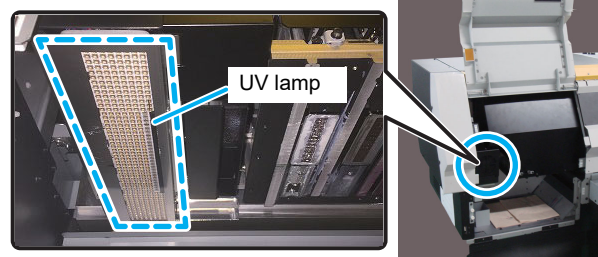
4 Open the left front cover.

5 Open the H maintenance cover.



6 Clean the underside of the UV lamp.

- If the ink is attached to the underside of UV lamp, wipe off with a clean stick or a soft cloth containing alcohol.



- Wipe off so that alcohol will not remain. If alcohol remains, it may cause ink drops and curing failure.

7 Press the **ENTER** key after the cleaning.

8 Close the maintenance cover, and press the **ENTER** key.

- After its initial operation, the machine returns to LOCAL.

Nozzle Recovery Function

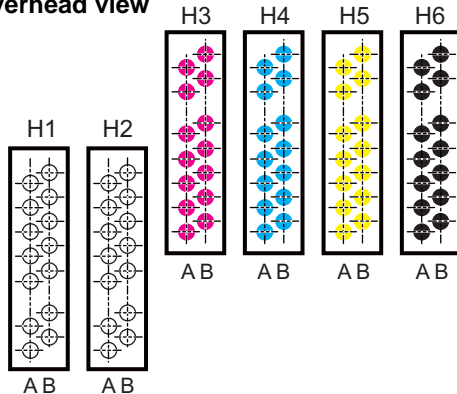
NOZZLE RECOVERY: When nozzles missing can not be improved at specific points, other good nozzles can be used as alternatives for printing.

1 Press the **FUNC1 (MENU)** (4 times) → **ENTER** key in **LOCAL**.
 • MAINTENANCE MENU will be displayed.

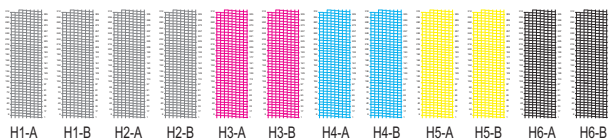
2 Press **▲▼** to select “RECOVERY”, and press the **ENTER** key.

3 Press **▲▼** to select “PRINT” and press the **ENTER** key twice.
 • Printing of the nozzle pattern will start.
 • Select “ENTRY” then “Move to select of the Nozzle line (Step 4) without drawing a pattern”

Overhead view

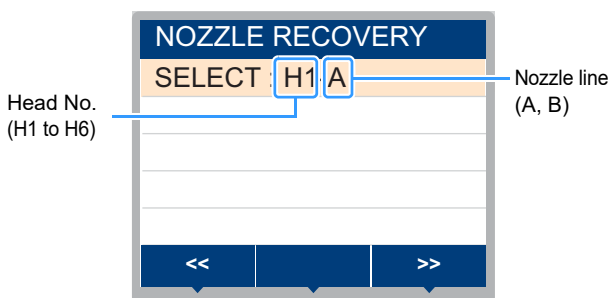


Nozzle pattern



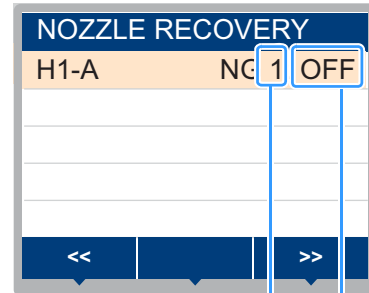
4 Press **▲▼** to select “Entry” and press the **ENTER** key twice.

5 Select the Nozzle line that needs **NOZZLE RECOVERY** by pressing **▲▼**, and press key.



6 Register the Nozzle number that needs **NOZZLE RECOVERY** and press **ENTER** key.

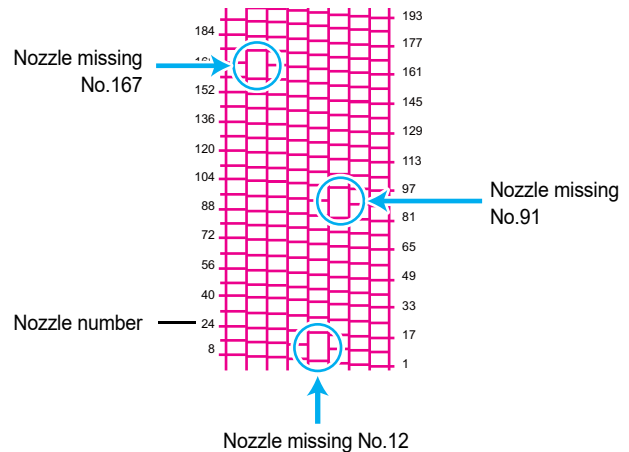
- (1) Select the registration number from 1 to 10 by pressing **▲▼** key and press the **ENTER** key.
- (2) Register the nozzle number that needs recovery by pressing **▲▼** key and press the **ENTER** key.



Registration number : 1 to 10

Recovery nozzle No.: 1 to 318, OFF

Example of nozzle to be recovered



Registration number	Recovery Nozzle No.	State
1	12	Target for nozzle recovery
2	91	Target for nozzle recovery
3	167	Target for nozzle recovery
4	OFF	No registration
5	OFF	No registration

7 Press the **END/POWER** key several times to end the setting.



- Up to 10 nozzles can be registered per 1 nozzle line.
- Even if you use this function, time required for drawing does not change.
- When printing has been done with the lowest path, nozzle recovery is not reflected. Perform test printing to confirm.



- If the special ink is not clearly visible, print on the clear film to check.

Other maintenance functions

Reset the set value

- 1 Press the **FUNC1** (MENU) \rightarrow **▼** (4 times) \rightarrow **ENTER** key in LOCAL.
 - MAINTENANCE MENU will be displayed.
- 2 Press **▲** **▼** to select “NOZZLE RECOVERY”, and press the **ENTER** key.
- 3 Press **▲** **▼** to select “Reset”, and press the **ENTER** key.
- 4 Press **▲** **▼** and **FUNC1** (\rightarrow) **FUNC3** (\leftarrow) to select the Nozzle line that need reset, and press the **ENTER** key.
 - A reset confirmation message will be displayed.
- 5 Press the **END/POWER** key several times to end the setting.

Checking the UV Lamp Usage

Checking UV Lamp Use Time

- 1 Press the **FUNC1** (MENU) \rightarrow **▼** (4 times) \rightarrow **ENTER** key in LOCAL.
 - MAINTENANCE MENU will be displayed.
- 2 Select “UV USED TIME”, and press the **ENTER** key.
- 3 Press the **END/POWER** key several times to end the setting.

Setting Interval wiping

When a set time has elapsed, the machine automatically wipes the nozzle surfaces of the head to remove any ink droplets attached to the surfaces.

In case that deflection, nozzle missing, or symptom which ink droplets fall down occurred, set the interval between each operation shorter.

- 1 Press the **FUNC1** (MENU) \rightarrow **▼** (4 times) \rightarrow **ENTER** key in LOCAL.
 - MAINTENANCE MENU will be displayed.
- 2 Press **▲** **▼** to select “Interval Wiping”, and press the **ENTER** key.
- 3 Press **▲** **▼** to set intervals.
 - Set Value : 1 to 255 Times, OFF
 - When [OFF] is set, periodical wiping is not executed.
- 4 Press the **ENTER** key.
- 5 Press the **END/POWER** key several times to end the setting.

Important!

- The color tone may change, depending on the timing when periodic wiping is performed. Check in advance that the color tone is not affected.

Changing the Time When a Warning about Wiper Cleaning Is Issued

Wiper levels can be set so that a warning about wiper replacement is issued earlier than the standard according to the operating environment.

10/10	Displays the wiper cleaning warning when wiping has been performed the standard number of times. (Initial value)
9/10	Displays the wiper cleaning warning when wiping has been performed nine tenths of the standard number of times.
8/10	Displays the wiper cleaning warning when wiping has been performed eight tenths of the standard number of times.
	⋮
1/10	Displays the wiper cleaning warning when wiping has been performed one tenth of the standard number of times.

1 Press the **FUNC1** (MENU) **⇨** **⇩** **⇨** **ENTER** key in LOCAL.

• MAINTENANCE MENU will be displayed.

2 Press **⇧** **⇩** to select “WIPE LEVEL”, and press the **ENTER** key.

3 Press **⇧** **⇩** to set a wiper level, and press the **ENTER** key.

• Set value : 1/10 to 10/10

4 Press the **ENTER** key.

5 Press the **ENTER** key several times to end the setting.

Checking the Head Gaps at the Four Corners of the Table

1 Press the **FUNC1** (MENU) **⇨** **⇩** (4 times) **⇨** **ENTER** key in LOCAL.

• MAINTENANCE MENU will be displayed.

2 Press the **FUNC1** (<<).

3 Press **⇧** **⇩** to select “CHECK TABLE”, and press the **ENTER** key.

4 Press **⇧** **⇩** to select the checking positions.

• RIGHT & REAR, RIGHT & FRONT, LEFT & FRONT, LEFT & REAR

5 Press the **ENTER** key.

• The table or carriage moves to the measuring position.

6 Press the **END/POWER** key several times to end the setting.

Checking Ink Landing Displacement

You can check for ink landing displacement from causes such as the equipment table shaking.

1 Press the **FUNC1** (MENU) **⇨** **⇩** (4 times) **⇨** **ENTER** key in LOCAL.

• MAINTENANCE MENU will be displayed.

2 Press the **FUNC1** (<<).

3 Press **⇧** **⇩** to select “DISPLACEMENT”, and press the **ENTER** key.

4 Press the **ENTER** key.

• Printing starts.

5 Press the **END/POWER** key several times to end the setting.

Important!

• Ink landing displacement will result in a striped pattern.

Check that the table does not shake and that there is not a large head gap. If there is a large ink landing displacement, request service to readjust the device.

Solve ink overflow and supply error problems

- 1** Press the **FUNC1** (MENU) \Rightarrow **▼** (4 times) \Rightarrow **ENTER** key in LOCAL.
 - MAINTENANCE MENU will be displayed.
- 2** Press the **FUNC1** (<<).
- 3** Press **▲** **▼** to select "Overflow", and press the **ENTER** key.
- 4** Press **▲** **▼** to select head.
- 5** Press the **ENTER** key.
 - Maintenance operation starts.
- 6** Press the **END/POWER** key several times to end the setting.

Important! • Repeat this procedure if you cannot solve the problem after performing it once. If you still cannot solve the problem even after performing this procedure three times, contact your local distributor, our sales office, or service center.

Improve the Movement of Hard Cleaning

Please perform this function when the following symptoms occur.

- An error occurs during hard cleaning.
- Hard cleaning does not end.

- 1** Press the **FUNC1** (MENU) \Rightarrow **▼** (4 times) \Rightarrow **ENTER** key in LOCAL.
 - MAINTENANCE MENU will be displayed.
- 2** Press the **FUNC1** (<<).
- 3** Press **▲** **▼** to select "Pressure adjustment", and press the **ENTER** key.
- 4** Press the **ENTER** key.
- 5** Wait 5 to 15 minutes to finish adjustment (Press the **END/POWER** key to cancel the adjustment)
- 6** Press the **END/POWER** key several times to end the setting.

Replacing consumables

If a Waste Ink Tank Confirmation Message Appears

Ink used in head cleaning, etc. is stored in the waste ink tank on the lower right side of the machine. This machine counts the accumulated amount of discharged ink. When that reaches a specified amount, the machine displays a confirmation message. (When this message is displayed, consider the replacement of the waste ink tank.)



- The message is displayed when it reaches 80% (1.6L) of the 2L tank.

Confirmation Message in LOCAL

- 1** The warning message "Check waste ink" is displayed.
- 2** Follow "Replace the waste ink tank with another" (P.4-16) replace the waste ink tank.

Replace the waste ink tank with another

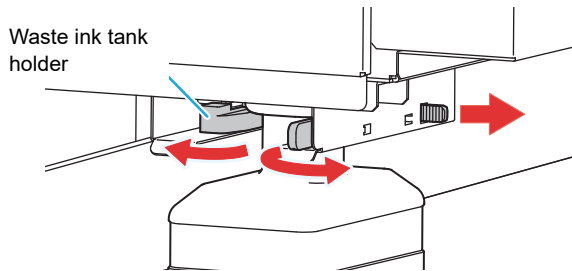
1 The warning message "Check waste ink" is displayed.

2 Press the **FUNC1** (MENU) \blacktriangledown (4 times) \rightarrow **ENTER** key in LOCAL.
 • MAINTENANCE MENU will be displayed.

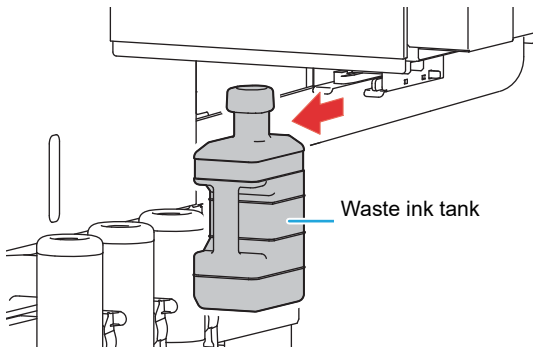
3 Press the **ENTER** key.
 • "STATION" will be selected.

4 Press \blacktriangledown three times, and press the **ENTER** key.
 • "WASTE TANK" will be selected.

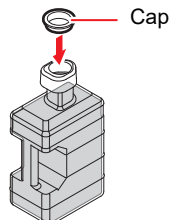
5 Remove the waste ink tank.
 (1) Pull the projection of the waste ink tank holder to open the holder.



(2) Pull it frontward to remove by holding the waste ink tank handle.

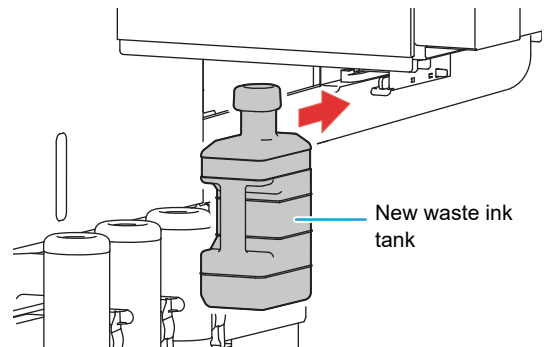


• Put a cap on the waste ink tank removed.



6 Replace the waste ink tank .

- (1) Prepare a new waste ink tank (SPA-0277).
- (2) Insert the waste ink tank by holding a handle of the tank.



• Waste ink is equivalent to waste oil of industrial waste. Request an industrial waste disposal company for disposal of waste ink.

7 Press the **ENTER** key.

- The ink discharging amount that is controlled by the machine is reset and the message is cancelled.

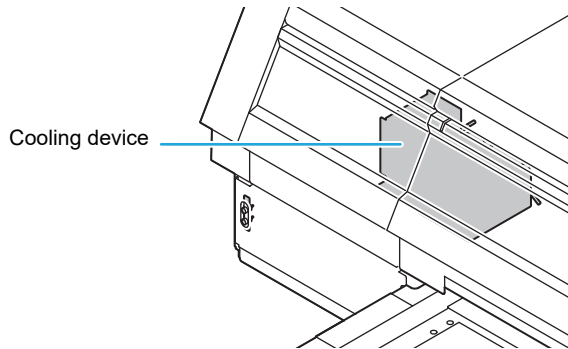
Replacing the waste ink tank before the waste ink tank confirmation message is displayed

If you replace the waste ink tank before the waste ink tank confirmation message is displayed (before the 2L tank is 80% (1.6L) full) follow the same procedure as described in the previous section.

1 Perform steps 2 through 7 in "Replace the waste ink tank with another" (P.4-16) to empty the waste ink tank.

Refilling antifreeze mixed water

To cool the LED UV unit, put antifreeze mixed water into the cooling water tank in the cooling device.



Note on refill



- When only water is supplied to the cooling water tank without antifreeze liquid, it may damage the UV unit by freeze.
- When only antifreeze liquid is supplied to the cooling water tank without water, the machine does not work properly, and may cause an error.
- If water in the cooling water tank frequently becomes insufficient, contact a distributor in your district or our office.



- Dispose of the waste water mixed with antifreeze liquid pursuant to the regulations of your district.

Note on antifreeze mixed water



To make mixed water, be sure to use the potable water meeting one of the following conditions:

- Calcium content:
1 mg/100 ml (10 mg/L) or less
- Hardness : 60 mg/L or less
- Distilled water (Purified water)
- Water and antifreeze liquid compound ratio should be 2(water) to 1(Antifreeze liquid).
Or use our specialized antifreeze mixed water (SPC-0783).
- Use it within one week when you make mixed water. The mixed water that one week or more passed after it makes it is never used for this machine regardless of use/unused. Moreover, do not add to the mixed water newly made.

Precautions in handling the antifreeze liquid



- Be sure to wear the included safety glasses and gloves for handling the antifreeze liquid.



- Use the recommended antifreeze liquid (SPC-0394) by Mimaki. If not, the cooling device may be broken. (Supplied antifreeze liquid : 1000cc x 2 bottles)
- Do not touch the antifreeze liquid directly. If the antifreeze liquid settles on your skin or clothes, immediately wash it off with soap and water. If you get antifreeze liquid in your eyes, immediately wash your eyes with a lot of clean water. Then, consult a doctor as soon as possible.
- Store antifreeze liquid in a dark and cold place.
- Store antifreeze liquid in a place that is out of the reach of children.
- When discarding antifreeze liquid which is no longer needed, entrust them to an industrial waste disposal contractor, clarifying their contents.
- Before using antifreeze liquid, be sure to read the Material Safety Data Sheet (SDS).

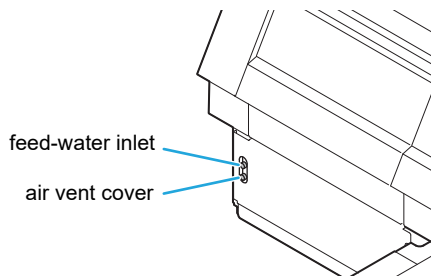


- Prepare a tank with a cap to put in the waste water from cooling water tank.
- When water in the cooling water tank is low, a warning message "WATER LACK" is displayed. In this case, refill antifreeze water in the way shown as the next page.

Refill antifreeze mixed water

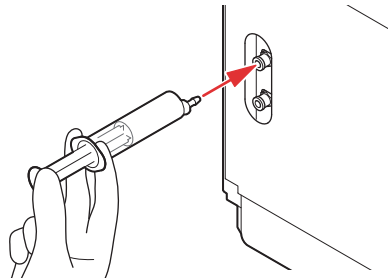
If an error of lack of water, refill antifreeze mixed water.

1 Uncover the feed-water inlet and the air vent.



2 Remove all remaining water in the tank.

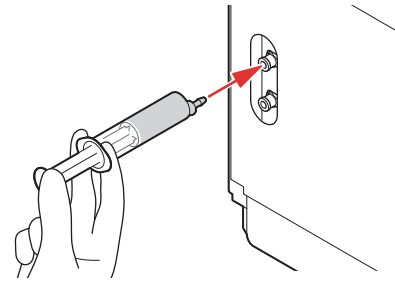
- (1) Remove all water in the tank with a provided syringe from the feed-water inlet.
- (2) Put the removed water into the tank with a cap, and discard it.



3 Made mixed water (antifreeze liquid: 1, water: 2) in the attached reservoir and move it to the attached syringe.



4 Refill antifreeze mixed water.

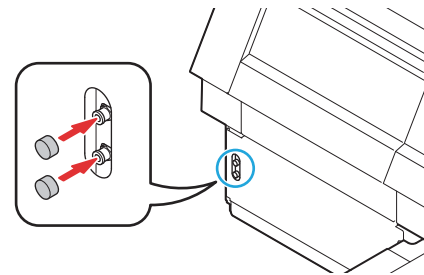


- Fill the antifreeze mixed water from the feed-water inlet.
- Put the liquid of 50ml into the syringe, and put it into the device. Repeat this 13 times to fill up (650ml).

Important!

- Be aware that if you put in too much antifreeze mixed water, it may leak from the cooling water tank.

5 Close the feed-water inlet and the air purge cover.



Chapter 5

Troubleshooting



This chapter

describes the corrective measures to be taken for a phenomenon suspected to be trouble and the procedures to clear the error number displayed on the LCD.

Troubleshooting	5-2	Warning / Error Messages	5-4
Power does not turn on	5-2	Warning messages	5-4
The machine does not start printing	5-2	Error messages	5-6
Image quality is poor	5-2		
Nozzle is clogged	5-3		
Ink bottle warning appears	5-3		
When the ink leakage occurs	5-3		

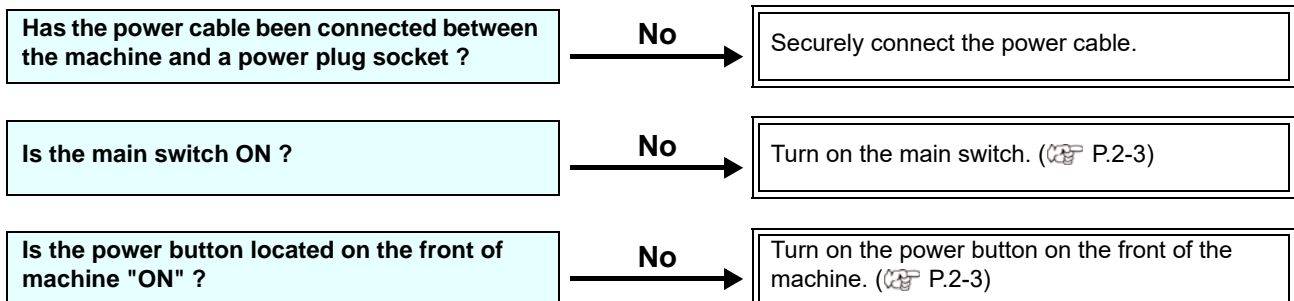
Troubleshooting

Take appropriate actions as described below before taking the trouble as a failure.

If still the problem is not solved after troubleshooting, contact your local distributor, our sales office, or service center.

Power does not turn on

In most cases, this is due to improper connection of the power cable for the machine or computer. Check that the power cable is connected properly.



The machine does not start printing

This occurs when the data is not being transmitted to the machine properly.

It can also occur when the printing function does not work properly or the media is not set correctly.

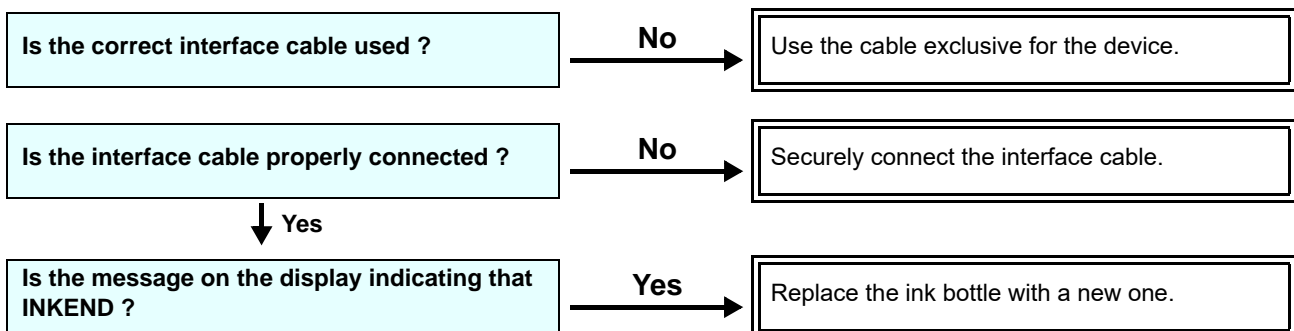


Image quality is poor

This section describes the corrective actions to be taken in case the image quality is not satisfactory.

Take remedy for particular problems with image quality. If the remedy does not work, contact your local distributor, our sales office, or service center.

Phenomenon	Measures
White lines / blur / dark stripes (in the direction of travel of the heads)	(1) Execute the head cleaning. (☞ P.2-7) (2) Perform maintenance of the inside of the station. (☞ P.4-6) (3) Execute the [FEED COMP.] function. (☞ P.3-8)
Characters are double- or triple-printed in the media feed direction	(1) Execute the [FEED COMP.] function. (☞ P.3-8)
Ink drops falling on media during printing	(1) Execute the wiper cleaning. (☞ P.4-6) (2) Execute the ink cap cleaning. (☞ P.4-6) (3) Clean around the head. (☞ P.4-8) (4) Execute the head cleaning [Normal]. (☞ P.2-7) (5) Set a shorter interval of Interval Wiping operation. (☞ P.4-13)

Nozzle is clogged

When nozzle missing is not dissolved even after the head cleaning referring to P.2-7, make sure the following operations.

- **Recovery the nozzle by the operations of P.4-12.**

Ink bottle warning appears

If an ink bottle trouble is detected, a warning message appears.

None of printing, cleaning and all the other operations that use ink is available.

If an abnormality occurs, perform the following procedures:

- Check the ink amount in the ink bottle and if the ink amount is not enough, add ink.



- Once ink tank trouble is displayed, do not leave the ink bottle without replacing it for a long time; otherwise, the machine will lose the nozzle missing prevention function.

If nozzles are clogged, the machine must be repaired by MIMAKI's service engineer.

When the ink leakage occurs

In case of ink leakage, please turn off the main power, unplug the power cable and contact your local distributor, our sales office, or service center.

Warning / Error Messages

If some trouble occurs, the buzzer sounds and the display shows a corresponding error message. Take an appropriate remedy for the displayed error.

Warning messages

Errors when performing operations

Message	Cause	Solution
OPERATION	Incorrect operation is performed on the operation panel.	<ul style="list-style-type: none"> Operate this machine correctly.
!DATA REMAIN	Unfinished printing data still remains.	<ul style="list-style-type: none"> Clear the data.

Message displayed in LOCAL

Message	Cause	Solution
INK NEAR END	There is little ink in the supply unit.	<ul style="list-style-type: none"> Check the ink bottle for the displayed color. The ink in the bottle will end soon.
INK END	No ink remains in the ink bottle for the displayed color.	<ul style="list-style-type: none"> Replace the ink bottle and the ink IC chip for the displayed color with new ones.
Expiration	The expiration date of an ink bottle has passed. (From the first day to the end of the month following the expiration)	
Expiration (1M)	The expiration date of an ink bottle has passed. (From the first day to the end of the month following the month following the expiration)	
Expiration (2M)	The expiration date of an ink bottle has passed. (3 months or more after expiration)	
INK TYPE	The types of the installed ink bottle and the ink IC chip are different.	<ul style="list-style-type: none"> Check the types of the installed ink bottle and the installed ink IC chip for the displayed color. Install the ink bottle and the ink IC chip of the same type.
Color of INK	The color of the installed ink IC chip is incorrect.	<ul style="list-style-type: none"> Check if the displayed color matches the colors of the installed ink bottle and installed ink IC chip.
WRONG INK IC	The data error in the ink IC.	<ul style="list-style-type: none"> Insert the ink IC chip for the displayed color. When displaying again, contact your local distributor, our sales office, or service center.
NON INK IC	Cannot check the ink IC chip.	
!WORK High	An obstacle is detected.	<ul style="list-style-type: none"> An obstacle was detected. Lower the table so that this warning disappears
WATER LACK	The level of water in the cooling water tank is low.	<ul style="list-style-type: none"> Refer to "Refill antifreeze mixed water" to refill the cooling water.
!WS INKTANK CHK	The waste ink tank is full.	<ul style="list-style-type: none"> Execute the station maintenance and dispose of the ink in the waste ink tank.
CLEANING WIPER	It is time to clean the wiper or replace it with a new one.	<ul style="list-style-type: none"> Execute the station maintenance and clean the wiper.

Message	Cause	Solution
CAP CLEANING	The cap is not clean.	<ul style="list-style-type: none"> Execute the carriage out of the station maintenance, and clean the cap.
!CHECK LED UV LEVEL	The LED lamp has been used for a certain period.	<ul style="list-style-type: none"> Check illuminance of the LED UV lamp. If it is lower than the set value, replace the lamp.
NOT FILLUP	The ink bottle has not been filled with ink.	<ul style="list-style-type: none"> Fill up ink of the displayed color. Contact your local distributor, our sales office, or service center.
NCU CONNECT	The NCU unit is not connected. The nozzle check function cannot be used.	<ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. If displaying again, contact your local distributor, our sales office, or service center.
REPLACE NCU	The NCU sensor sensitivity is too low to correctly judge nozzle missing. The nozzle check function cannot be used.	<ul style="list-style-type: none"> NCU replacement is necessary. Contact your local distributor, our sales office, or service center.
REPLACE NCU INK PAD	The NCU ink pad is full.	<ul style="list-style-type: none"> It is necessary to replace the NCU ink pad. Contact your local distributor, our sales office, or service center.
NCU SENSOR LEVEL LOW	The NCU sensor sensitivity is falling.	<ul style="list-style-type: none"> Replacement of the NCU is recommended. Contact your local distributor, our sales office, or service center.
NCU Sensitivity Error H	Cannot adjust the sensor sensitivity.	
NCU Sensitivity Error L		
!Ink Circulation System	The ink circulation has stopped.	<ul style="list-style-type: none"> Move to a screen other than the local screen, and then return to the local screen. Also, check the remaining amount of ink inside the ink bottle. When displaying again, contact your local distributor, our sales office, or service center.
UV MODE OFF	The UV MODE is set to a particular setting.	<ul style="list-style-type: none"> Select ON for the setting of the UV MODE. (☞ P.3-10)
NO PRINT		
CALIBRATION(LOW ADHESION)		
SubtankSens	An error is detected in the fluid level sensor of the sub tank.	<ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. In case of displaying again, contact your local distributor, our sales office, or service center.
InkOverflow	Overflow is detected in the sub-tank.	<ul style="list-style-type: none"> Perform [Overflow] in the [Maintenance] tab. In case of displaying again, contact your local distributor, our sales office, or service center.
SUPPLY INK	Supplying ink to the sub tank has failed.	
WRONG INK BOTTLE	An error occurred in the IC chip information of the ink bottle. The used count has exceeded the prescribed value.	<ul style="list-style-type: none"> Replace the ink bottle and the ink IC chip for the displayed color with new ones.

Error messages

When an error message is displayed, eliminate the error according to the chart below.

If the same error message appears again, contact your local distributor, our sales office, or service center.

Message	Cause	Solution
ERROR 108 HD CONNECT [123456]	Abnormal connection of the print head	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 108 HD THERMIS [123456]	Abnormal temperature of the print head	
ERROR 108 HD TYPE [123456]	The print head has been broken.	
ERROR 122 CHECK :SDRAM	The capacity of the PRAM is insufficient when updating the FW version (fw_updmsg).	
ERROR 128 HDC FIFO OVER	Control circuit board is defective.	
ERROR 128 HDC FIFO UNDER		
ERROR 129 BATTERY EXCHANGE	The battery life end of the internal clock is detected.	<ul style="list-style-type: none"> • contact your local distributor, our sales office, or service center.

Message	Cause	Solution
ERROR 12a HDC SPEED	Ink discharge control error	
ERROR 12e P-Head INIT	The print head has been broken.	
ERROR 12f HDC I/F xxxxxxxx		
ERROR 130 HD DATA SEQ	Control circuit board is defective.	
ERROR 146 E-LOG SEQ		
ERROR 151 Main PCB V1R2		
ERROR 152 Main PCB V2R5		
ERROR 153 Main PCB V3R3		
ERROR 154 Main PCB V05		
ERROR 155 Main PCB V35-1		
ERROR 156 Main PCB V5B		
ERROR 157 Main PCB VTT		
ERROR 158 Main PCB V352	An error occurred in the main power.	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 16e Main PCB V3R3B		
ERROR 18a Main PCB V_CORE		
ERROR 18b Main PCB V1R5B		
ERROR 18c Main PCB V12		
ERROR 190 Main PCB V-1		
ERROR 191 Main PCB V-2		
ERROR 201 COMMAND		
ERROR 202 PARAMETER		<ul style="list-style-type: none"> • Check the USB cable connection. Use a USB cable conforming to the standard.
ERROR 203 Ment Command	Abnormal communication between PC and printer	
ERROR 206 PRINTING MODE		<ul style="list-style-type: none"> • Check the USB cable connection. Use a USB cable conforming to the standard. • Check output conditions.

Message	Cause	Solution
ERROR 304 USB INIT ERR	USB device error.	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 305 USB TIME OUT		
ERROR 401 MOTOR X	An excessive load was applied to the X motor.	
ERROR 402 MOTOR Y	An excessive load was applied to the Y motor.	
ERROR 403 X CURRENT	An error due to an excessive current of the X motor was detected.	
ERROR 404 Y CURRENT	An error due to an excessive current of the Y motor was detected.	
ERROR 509 HDC POSCNT	An error occurred in the control board position.	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 50a Y ORIGIN	Y-origin could not be detected.	
ERROR 50e HEAD TEMP [123456]	The print head has been broken.	
ERROR 50f L-SCALE BLACK	Abnormal linear scale.	
ERROR 510 X ORIGIN	X-axis origin error	
ERROR 511 Z ORIGIN	Z-axis origin error	
ERROR 601 INK BOTTLE NEAR END	"INK NEAR END" (very little ink remains in the bottle)	<ul style="list-style-type: none"> • Replace the ink bottle and the ink IC chip with new ones.
ERROR 602 INK BOTTLE END	"INK END" (no ink remains in the bottle)	
ERROR 603 NON INK IC	Ink IC reading error.	<ul style="list-style-type: none"> • Remove and set the ink IC chip and try again.
ERROR 607 CAP CLEANING	Time to clean the cap	<ul style="list-style-type: none"> • Perform the station maintenance, and clean the cap.
ERROR 617 Subtank Sens :123456	The subtank sensor has detected an error.	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 60c INK TYPE	The ink type in the ink bottle differs from the ink that has been refilled.	<ul style="list-style-type: none"> • Check the ink type in the ink bottle with the warning message.
ERROR 61a InkOverflow :123456	The surface level of the subtank rose abnormally.	<ul style="list-style-type: none"> • Perform "Overflow" of the maintenance. (☞ P.4-15) • Also make sure the ink remaining in the ink bottle. • Even if you perform, If displaying again, contact your local distributor, our sales office, or service center.
ERROR 61b SUPPLY INK :123456	Supplying ink to the sub tank has failed.	
ERROR 61d NEGATIVE P. Not Enough :12	The negative pressure cannot be kept properly. (On the positive side)	<ul style="list-style-type: none"> • If this error occurs during hard cleaning, perform "pressure adjustment" maintenance. • Turn off the power on the machine and turn it on after a while. • Make sure the ink remaining in the ink bottle. • If the same error message appears again, contact your local distributor, our sales office, or service center.

Message	Cause	Solution
ERROR 61e NEGATIVE P. OVER :12	The negative pressure cannot be kept properly. (On the negative side)	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 620 POSITIVE P. No t Enough :12	The positive pressure cannot be kept properly. (On the positive side)	
ERROR 621 POSITIV P. OVER :12	The positive pressure cannot be kept properly. (On the negative side)	
ERROR 628 WRONG INK BOTTLE	A problem has occurred in the ink bottle IC chip information. The used count has exceeded the prescribed value.	<ul style="list-style-type: none"> • Replace the ink bottle and ink IC chip for the displayed color with new ones.
ERROR 62a Expiration:2MONTH	The expiration date of an ink bottle has passed. (3 months or more after expiration.)	
ERROR 631 Color of INK	The ink color in the ink bottle differs from the ink that has been refilled.	<ul style="list-style-type: none"> • Check the ink color in the ink bottle with the warning message.
ERROR 64b Nozzle Missing	Printing stopped because nozzle missing was detected during the nozzle check.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-7) • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 64c NCU ERROR	Printing stopped because an error occurred during the nozzle check.	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 64d NCU Y ADJUST ERROR	An error occurred during the Y-direction adjustment of the NCU.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-7) • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 650 NCU CONNECT	The NCU unit is not connected.?	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 651 REPLACE NCU	The NCU sensor sensitivity is too low to correctly judge nozzle missing. The nozzle check function cannot be used.	
ERROR 652 NCU NZL CHK (HW)	The hardware cannot perform sampling of the discharge patterns of the NCU.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-7) • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 653 NCU NZL CHK (MARK)	The discharge patterns of the NCU are analyzed and abnormal discharge is identified that does not meet the pattern criteria.	
ERROR 654 NCU CENTER POS	Detecting the center position of the NCU failed.	
ERROR 655 NCU FLUSH POS	Detecting the optimal position of the NCU for the sensor sensitivity failed.	
ERROR 656 NCU SN ADJST	Sensor sensitivity adjustment has failed.	
ERROR 657 REPLACE NCU INK PAD	The NCU ink pat is full.	<ul style="list-style-type: none"> • Contact your local distributor, our sales office, or service center.
ERROR 658 NCU SENSOR LV LOW	The NCU sensor sensitivity is falling.	<ul style="list-style-type: none"> • Replacement of the NCU is recommended. • Contact your local distributor, our sales office, or service center.

Message	Cause	Solution
ERROR 659 NCU Sensitivity Error H	The light intensity adjustment for obtaining the optimal sensitivity level failed.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-7) • If displaying again, contact your local distributor, our sales office, or service center.
ERROR 65a NCU Sensitivity Error L		
ERROR 65b UNSOLVED OVERFLOW:123456	Solving overflow in the subtank failed.	<ul style="list-style-type: none"> • Perform "Overflow" of the maintenance several times. (☞ P.4-15) • Make sure the ink remaining in the ink bottle. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 702 THERMISTOR	The thermistor sensor of a heater is defective.	<ul style="list-style-type: none"> • Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 708 UV THERMISTOR BRK	The thermistor (thermal sensor) in the UV unit is disconnected.	
ERROR 70a LED UV Current	The LED UV unit is broken or abnormal current is detected.	
ERROR 70c UV UNIT BRK	The LED UV unit is disconnected.	
ERROR 70d UV UNIT TMP ERROR	The thermistor (thermal sensor) in the UV unit is disconnected.	<ul style="list-style-type: none"> • Operate this machine correctly.
ERROR 901 OPERATION	Incorrect operation is performed on the operation panel.	
ERROR 90d NO HEAD SELECT	No head is specified.	<ul style="list-style-type: none"> • Specify a head and try again.

SYSTEM HALT

Message	Solution
SYSTEM HALT (*) 000 :MESSAGE	Turn off the power on the machine and turn it on after a while. Check the number and contact your local distributor, our sales office, or service center. ("000" is the error No.)

Chapter 6

Appendix



This chapter

contains the lists of the specifications and functions of this machine.

Specifications.....	6-2	Setting orders of ink bottles.....	6-4
Machine specifications.....	6-2	Sheet for inquiry.....	6-5
Ink specifications.....	6-3		

Specifications

Machine specifications

Item		UJF-7151 plus
Print head	Method	Drop-on-demand piezoelectric print heads
	Specification	6 head staggered
Resolution		x-dpi: 600, 900, 1200 y-dpi: 600, 1200
Drawing mode	600 x 600	6, 8, 10 pass
	600 x 900	12, 16 pass
	1200x1200	12, 16 pass
Usable inks		Exclusive UV curing ink (Genuine ink) Bk, C, M, Y, W, P, CL
Ink supply		Supplying 1L x 6 bottles
Usable media	Size	730 x 530mm (28.7x20.8 in)
	Thickness	153 mm (6.0 in)
	Weight	10 kg (22.0 lb)
Max. printing area		710x510 mm (28.0x20.1 in)
Distance accuracy	Absolute accuracy	Whichever the larger one of ± 0.3 mm or ± 0.3 % of the designated (Whichever the larger one of ± 0.011 in or ± 0.3 % of the designated)
	Reproducibility	Whichever the larger one of ± 0.2 mm or ± 0.1 % of the designated (Whichever the larger one of ± 0.008 in or ± 0.1 % of the designated)
Perpendicularity		± 0.3 mm/500mm (± 0.011 in/500mm)
Print gap adjustment		Table up/down mechanism by key
Head anticollision device		Head anticollision by obstacle sensor
UV unit		Water-cooling LED UV device x 1 (equipped with the head slider)
Waste ink tank		Bottle type (2,000 cc)
Interface		USB 2.0 (Ethernet 10 BASE/ 100 BASE/ 1000 BASE E-mail function, only "1000 BASE" connection is applicable for drawing.)
Command		MRL- V
Noise	during standby	Less than 55 dB (A) (FAST-A, Front & Rear & Left & Right 1 m)
	during continuous printing ^{*1}	Less than 70 dB (A)
Safety Standard		VCCI-Class A, FCC-Class A, UL 60950, CE Marking (EMC, Low Voltage Directive, Machinery Directive, RoHS Directive), CB Report, RoHS
Power		Single phase AC100 - 240 V +6% / -10% 50 / 60 Hz ± 1 Hz
Power consumption		1300W or less
Recommended Environment	Available temp.	15 °C to 30 °C (59 °F to 86 °F)
	Humidity	35 to 65% Rh (No condensation)
	Guaranteed temp.	20 °C to 25 °C (68 °F to 77 °F)
	Temperature change	± 10 °C / h or less (± 50 °F / h or less)
	Dust	Equivalent to normal office level
	Highest operation height	2000 m (6561.7ft)
Weight		310 kg (683.4 lb)
Outside dimensions	Width	2200mm (86.6 in)
	Depth	1580mm (62.2 in)
	Height	1280mm (50.4 in)

*1. Operating Condition: Full load Measuring Method: According to clause 1.7.4.2 of Machinery Directive 2006/42/EC

Ink specifications

Item		Specifications
Supply		1L Ink bottle 250mL Ink bottle (LH-100, LUS-120, PR-200)
Color		Black ink Cyan ink Magenta ink Yellow ink White ink Clear ink Primer ink (PR-200)
Ink capacity		1 L / 250 mL
Shelf life		The period is printed on the ink bottle. Within three months after opening the package even in the available period.
Storage temperature	Storage	5 to 30°C (Storage at temperature of 30°C is permitted within a month.) (41 to 86°F (Storage at temperature of 86°F is permitted within a month.)) Be sure to keep a vessel in the airtight condition. Be sure to keep a vessel in a dry, well-ventilated, cool and dark location.
	Transportation	1 to 60°C (Storage at temperature of 60°C is only permitted within 120 hours, and at temperature of 40°C is permitted within a month.) (33.8 to 140°F (Storage at temperature of 140°F is only permitted within 120 hours, and at temperature of 104°F is permitted within a month.)) Avoid the condition lower than -0 °C and higher than 40 °C. (Avoid the condition lower than 32°F and higher than 104 °F.)

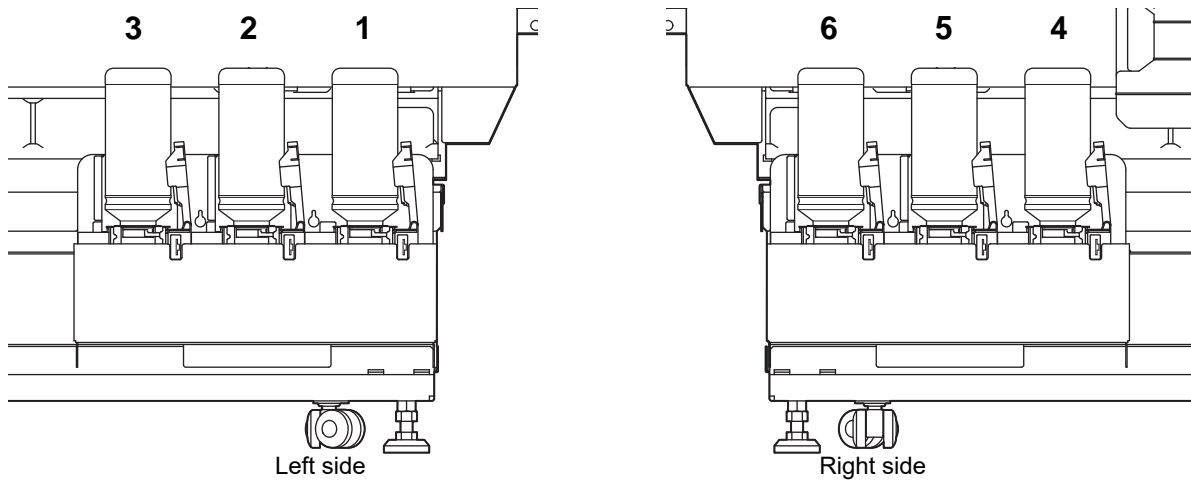


- Do not disassemble ink bottles and do not refill them with ink.
- Ink could freeze if kept in a cold place for an extended period.
If the ink freezes, thaw it at room temperature (25°C) spending more than three hours before use.
However, when you use the frozen ink, the printing quality becomes degraded due to altered ink. Store ink in the environment where ink may not freeze.

Setting orders of ink bottles



- The order of the ink bottles that are set differs depending on the ink set that is used.



Ink set	Ink arrangement					
	1	2	3	4	5	6
4 -color + Clear + White	W	CL	M	C	Y	K
4 -color + White+ Primer	W	P	M	C	Y	K
4-color+Clear+Primer	CL	P	M	C	Y	K

Sheet for inquiry

Use this sheet for troubles and abnormal functions of the machine.
Fill in the following necessary items, and then fax the sheet to our sales office.

Company name	
Person in charge	
Telephone number	
machine model	
Operating OS	
Machine information *1	
Error message	
Contents of inquiry	

*1. Refer to "Confirming Machine information" of "Convenient using" then fill in necessary information. (P.3-30)

UJF-7151 plus Operation Manual

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MIMAKI ENGINEERING CO.,LTD.

2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN

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