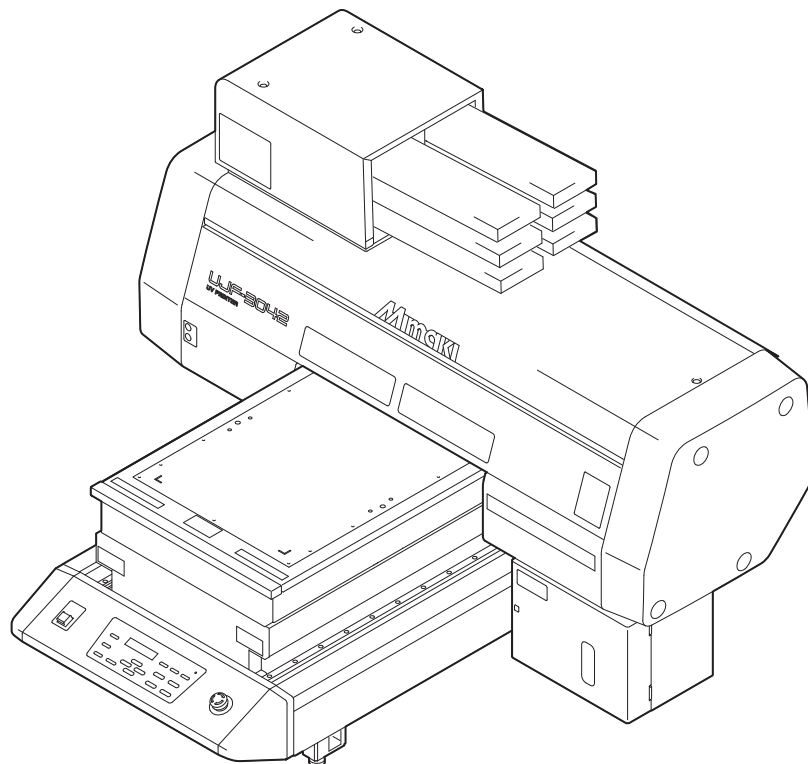


UV PRINTER

UJF-3042

OPERATION MANUAL



MIMAKI ENGINEERING CO., LTD.

TABLE OF CONTENTS

CAUTION	vi
DISCLAIMER OF WARRANTY	vi
Requests	vi
FCC Statement (USA)	vi
Interference to televisions and radios	vi
CDRH REGULATION	vii
Foreword	viii
On this operation manual	viii
For safe operation	ix
Symbols	ix
Position of the warning label	xvi
How to Read This Operation Manual	xviii

CHAPTER 1 Before Use

Installing the machine	1-2
Where to install the machine	1-2
Moving this machine	1-3
Configuration and Function	1-4
Front	1-4
Rear	1-4
Operation Panel	1-5
Carriage	1-6
EMERGENCY SWITCH	1-6
Connecting the cables	1-7
Connecting the USB2.0 interface cable	1-7
Connecting the power cable	1-7
Setting of ink cartridge	1-8
Kinds of ink that can be used	1-8
About Media	1-10
The sizes of media that can be used	1-10
Precautions in handling the media	1-10
Menu mode	1-11

CHAPTER 2 Basic Operations

Operation flow	2-2
Turning the power ON	2-3
Setting the media	2-4
Set the media in another method	2-5
Test drawing	2-6
Execution of head cleaning	2-7
Drawing an image from source data	2-8

Starting the drawing operation	2-8
Interruption of drawing	2-9
When [! WORK High] is displayed	2-9
If you open the cover during drawing	2-10
Turning the power OFF	2-11

CHAPTER 3 Useful Function

Changing origin	3-2
Changing origin with JOG keys	3-2
Changing origin with FUNCTION menu	3-3
Setting the Head Height	3-4
Setting the media thickness	3-4
Setting the head gap	3-5
Setting the table height	3-6
Gap check	3-7
Other useful functions	3-8
Data clear	3-8
Displaying information of this machine	3-8
Proceed with drawing that you suspended	3-9
Alternative nozzles for printing, when nozzles missing can not be improved	3-10
Various settings	3-12
Setting the print method	3-12
Setting the mode of the LED UV	3-13
Setting of priority	3-14
Setting the work change	3-15
Setting the ink weight	3-16
Changing language display on the screen	3-17
Output the setting list	3-18
Displaying machine information	3-19
Other useful settings	3-20
Initializing settings	3-21
Setting time	3-22
Setting mm/ inch	3-23
Setting weight of the empty cartridge	3-24
Setting Key buzzer	3-25

CHAPTER 4 Maintenance

Routine maintenance	4-2
When this machine is left unused for a long time	4-2
Precautions in cleaning	4-2
Cleaning exterior surfaces	4-3
Cleaning the table	4-3
Ink cartridge	4-4
Replacing with a new ink cartridge	4-4
Setting the ink set	4-5
Ink cartridge trouble	4-8
600ml Ink cartridge	4-9
Registering the case weight	4-9
Registering the cartridge weight	4-10
Registering the cartridge weight (After LVL LOW / LVL END)	4-11
Avoiding dripping of ink droplet at printing	4-12
When the waste ink is full	4-14
Disposing of the ink in the waste ink tank	4-14
Disposing of the waste ink in the wiper bottle	4-16
Replacing the Filter	4-18
Washing the Nozzle	4-20
Wash the ink discharge passage	4-22
When the Machine Is Not Used for a Long Time (CUSTODY WASH)	4-24
Washing the Head	4-26
Perform ink filling	4-28
Setting nozzle face cleaning time	4-29
Regular maintenance for white ink	4-30
Cleaning of wiper	4-32
Refilling antifreeze mixed water	4-34
Refilling antifreeze mixed water	4-35

CHAPTER 5 In Case of Trouble

Before taking a phenomenon as a trouble	5-2
The machine cannot be energized	5-2
The machine cannot perform printing	5-2
If image quality declines	5-3
Resolving nozzle clogging	5-3
Troubles for which error messages are given on the LCD	5-4

Warning Message	5-4
Error message	5-6

CHAPTER 6 Appendix

Specifications	6-2
Basic unit specifications	6-2
Specifications for ink	6-3
Function Flowchart	6-5

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 has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Description contained in this Operation Manual are subject to change without notice for improvement.

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 case 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 device, 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.

Foreword

Congratulations on your purchase of a MIMAKI "UJF-3042" model of UV ink jet printer.
UV Inkjet Printer UJF-3042 uses ultraviolet ray curing ink (UV ink).
Read this Operation Manual carefully and make the most effective use of your printer.

On this operation manual

- This Operation Manual describes the operation and maintenance of Model UJF-3042 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 a distributor in your district or our office if you have any inquiry.
- 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 lost by fire or breakage, purchase another copy of the Operation Manual from our office.
- You can also download the latest operation manual from our website.









Reproduction of this manual is strictly prohibited.
All Rights Reserved. Copyright
© 2011 MIMAKI ENGINEERING CO., LTD.

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

	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



- 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.

Cautions for constructing exhaust outlet

Please observe the following cautions to avoid breakdown of this machine.

(1) The opening area of the exhaust outlet requires more than half of the duct entrance area.

(2) If mounting a valve on the exhaust outlet, be sure to open the valve when using the machine.



- 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.








- When cleaning the ink station or the head, be sure to wear the supplied goggle and gloves since you may get ink or cleaning solution in your eyes.



- 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, contact the Poison Control Center.
- If you inhale a lot of vapor and feel bad, immediately move to a location of fresh air and then keep yourself warm and quiet. Then, consult a doctor as soon as possible.
- Discard the waste ink according to the local regulations of the area that this machine is used.

Never do the following

 WARNING	
Do not disassemble or remodel the machine	Handling of ink cartridges
 <ul style="list-style-type: none"> Never disassemble or remodel this machine and the ink cartridge. Disassembling or remodeling any of them will result in electric shocks or breakdown of this machine. 	 <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 cartridges 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.
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. 	
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. 	



WARNING

Wearing protective devices



- When cleaning the suction nozzle, which may scatter ink, be sure to wear 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.

Power supply and voltage



- Use this machine with indicated power specifications.
Be sure to connect the power cable plug to the grounded outlet, or it may cause fire or electric shock.



- 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 safety glasses.
- Do not apply ultraviolet (UV) light directly to your skin, or it may cause irritation on your skin.



- 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.



- 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 the antifreeze liquid



- 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 Material Safety Data Sheet (MSDS).
- 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;
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.
- Be sure to wear goggles and gloves for handling the antifreeze liquid.



Handling of the power cable




- 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



- 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	
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) 	Periodic exchange parts <ul style="list-style-type: none"> There are some parts which must be periodically replaced. Contract with distributors or dealers for maintenance.
	Adjusting the level <ul style="list-style-type: none"> Keep this machine horizontal.
	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.
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 office. 	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.
Ink cartridges	
<ul style="list-style-type: none"> If the ink cartridge 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 cartridge just before installing. Leaving it open for a long time will cause abnormal printing. Be sure to store ink cartridges 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 cartridge 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 cartridge with ink. Do not pound the ink cartridge nor shake it violently. If so, ink may leak out of the cartridge.
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. 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. 	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. When it is unavoidable to touch hot parts, be sure to wear heat-insulating gloves to protect your hands.



CAUTION

Notes on LED UV



- 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.)



- 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



- 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


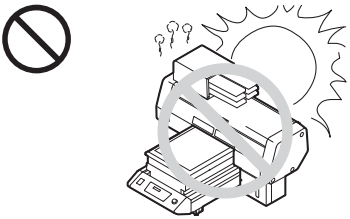
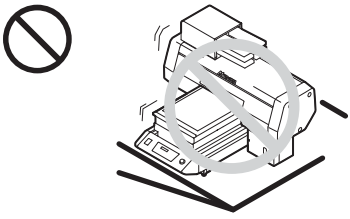

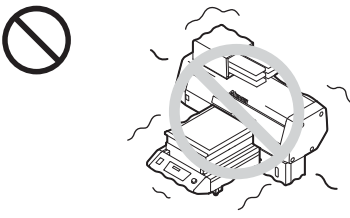
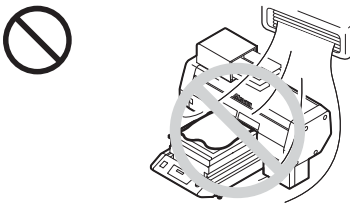
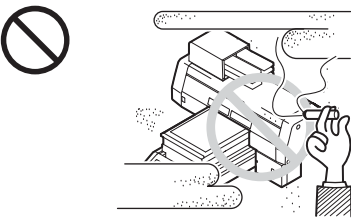


- Touching hot parts such as the LED UV with combustible materials may cause firing and/or smoking. Leaving combustible materials under the LED UV unit for a couple of minutes may also cause firing and/or smoking.



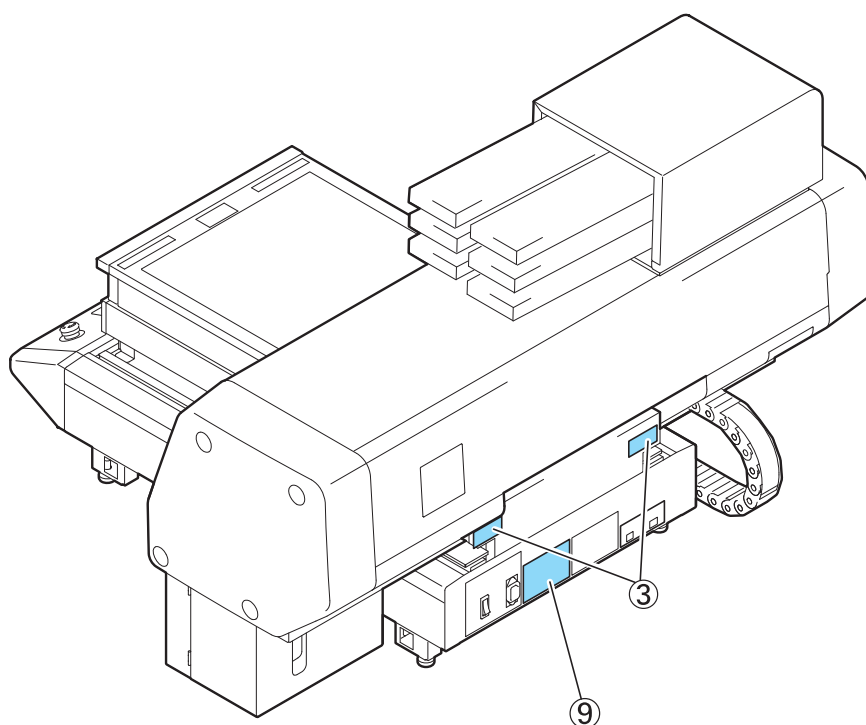
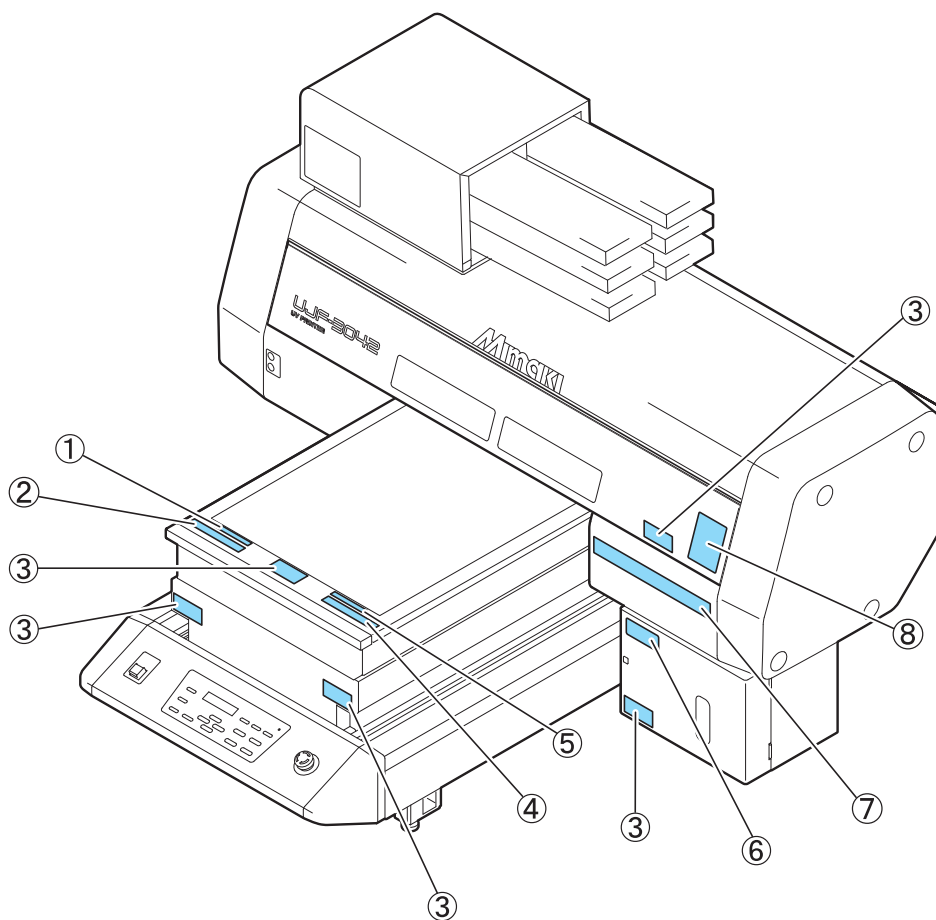
- After this machine is used long time, foreign materials or dust gathered may cause electrical leakage, or insulation deterioration may cause firing and/or smoking. Periodically clean this machine and replace the deteriorated parts after the insulation resistance.
- After this machine is used long time, screws or others on the conductive parts may be loosened, causing firing and/or smoking. Periodically tighten the screws.
- If abnormalities such as a strange odor, a smoking or a spark burn occurred, turn the power off and call our office immediately.






Precautions for installation

<div> CAUTION</div>		
<div>A place exposed to direct sunlight</div> <div></div>	<div>A place that is not horizontal</div> <div></div>	<div>A place where temperature and humidity varies significantly</div> <div><div></div><div>•Use the machine under the following environment. Operating environment : 20 ~ 35 °C (68 to 95 °F) 35 ~ 65% (Rh)</div></div>
<div>A place that vibrates</div> <div></div>	<div>A place exposed to direct air blow from air conditioner, etc.</div> <div></div>	<div>Around a place where fire is used</div> <div></div>

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) M907328	DO NOT PUT OVER 5KG ON THE TABLE	(7) M901549	
(2) 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.	(8) M905980	
(3) M904813			
(4) M903226	このテーブルに座掛けたり、寄り掛かる等の偏荷重をかけないで下さい。 テーブルが変形し、故障の原因や、画質に影響が出る可能性があります。		
(5) M907327	テーブル上に5kg以上のものを 載せないで下さい。	(9) M902535	
(6) M903330			

How to Read This Operation Manual

This manual provides the explanation about the displayed characters and used keys on the “Display Panel” in addition to the operation procedures.
Proceed operations confirming them while using.

These are what we want you to know in advance.

This explains the outline of functions.

Replacing the Filter

To use this machine for a long time, clean the filter periodically (about once a week).



- Put on supplied goggles and gloves. Ink may splash into the eye.



- When a screw is dropped in replacing of the filter, contact a distributor in your district or our office.

Tools

• LED UV unit filter (SPC-0657)	• Mist adsorption filter (SPC-0656)
• Gloves	• Paper towel
	• Goggles

1

Press the **[FUNCTION]** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **[▲]** or **[▼]** key, and press the **[ENTER]** key.

FUNCTION
MAINTENANCE

<ENT>

3

Select the **[STATION]** by pressing the **[▲]** or **[▼]** key, and press the **[ENTER]** key.

MAINTENANCE
STATION

<ent>

4

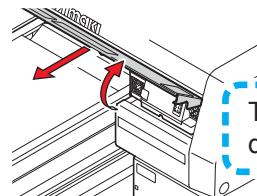
Select the **[MENT:CHECK FILTER]** by pressing the **[▲]** or **[▼]** key, and press the **[ENTER]** key.

STATION
MENT :CHECK FILTER

5

Remove the front cover.

- (1) Push the both ends of the front cover.
- (2) Pull the cover to the front while opening upward.




This shows the display panel.

These are the number of operation procedures.

4-18

Page number

 enclose shows the buttons in a sentence.

CHAPTER 1

Before Use



This chapter describes the parts name and setting procedures before use.

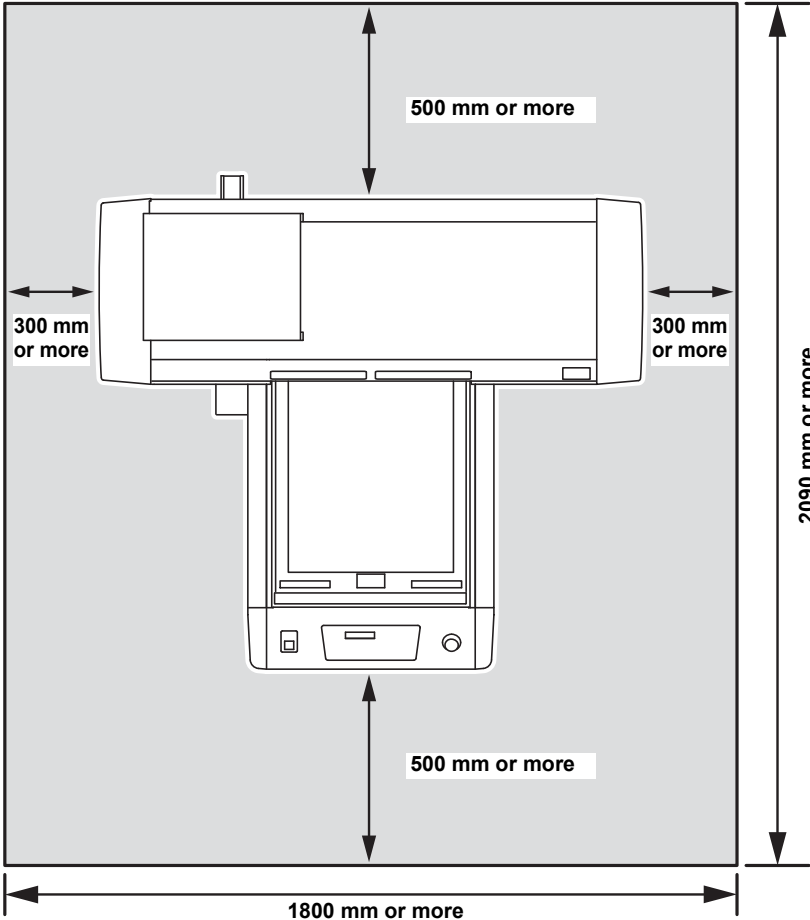
Installing the machine	1-2
Where to install the machine	1-2
Moving this machine	1-3
Configuration and Function	1-4
Front	1-4
Rear	1-4
Operation Panel	1-5
Carriage	1-6
EMERGENCY SWITCH	1-6
Connecting the cables	1-7
Connecting the USB2.0 interface cable	1-7
Connecting the power cable	1-7
Setting of ink cartridge	1-8
Kinds of ink that can be used	1-8
About Media	1-10
The sizes of media that can be used	1-10
Precautions in handling the media	1-10
Menu mode	1-11

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 drawing.

Width	Depth	Height	Total Weight
1200 mm	1090 mm	770mm	Approx.113 kg

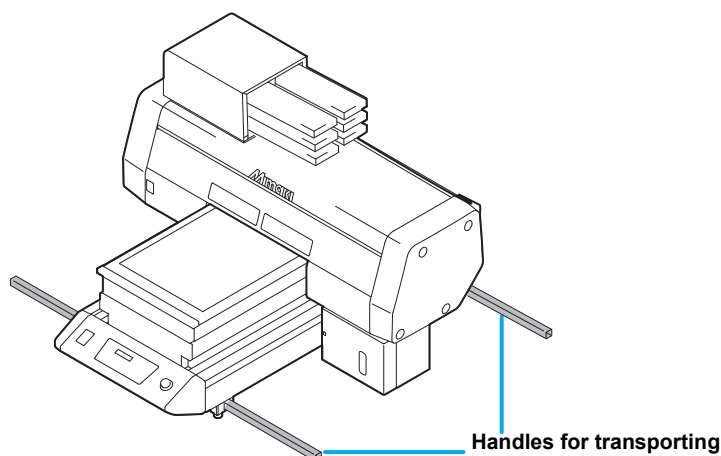


Moving this machine

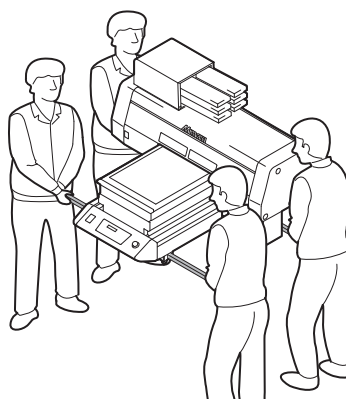
Move this machine as follows when this machine is required to move on the step-free same floor.



- When moving this machine, take care not to give a significant impact on it.
- Before moving this machine, install the handles for transporting. (two places)
Insert the handles into this machine, and fix them tightening screws.

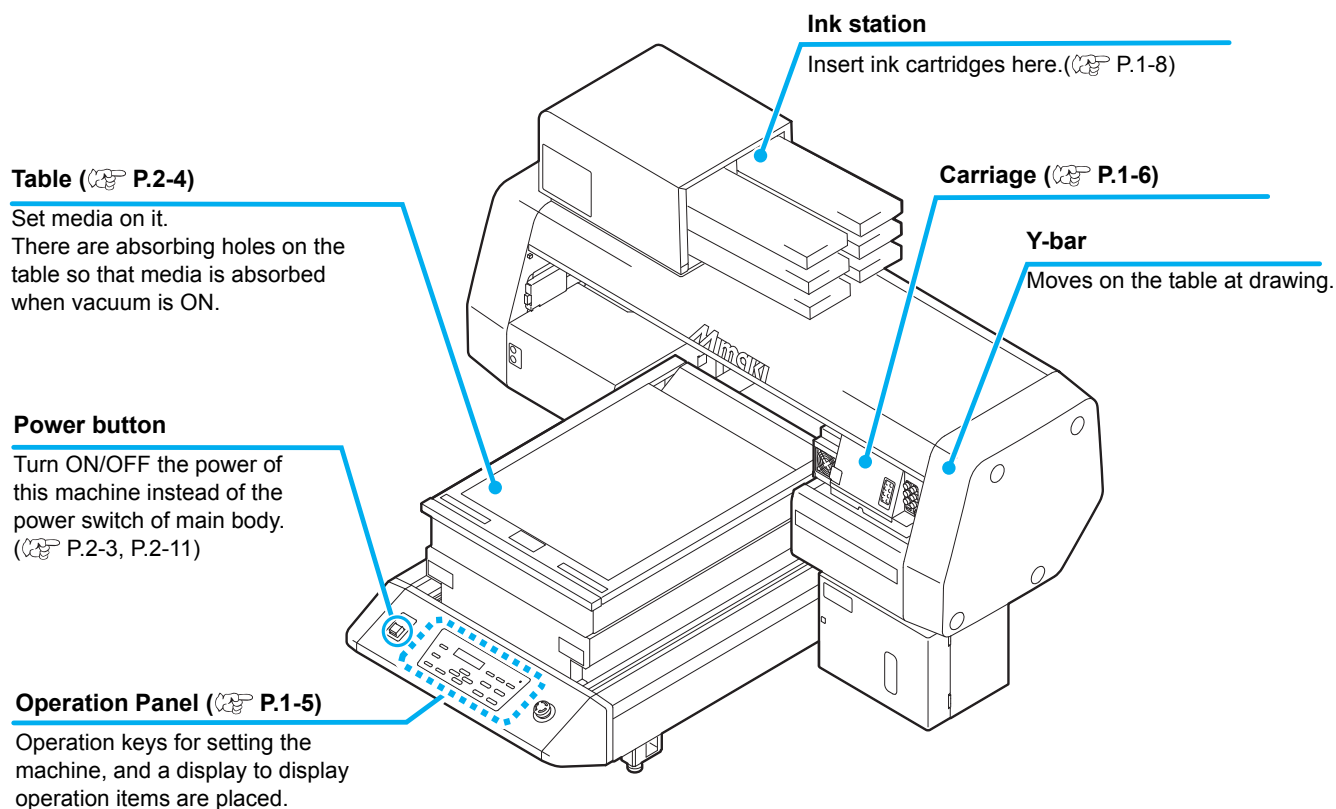


- For safety, be sure to work it with more than 4 people.
- Do not push the cover to move this machine since the cover may be deformed.

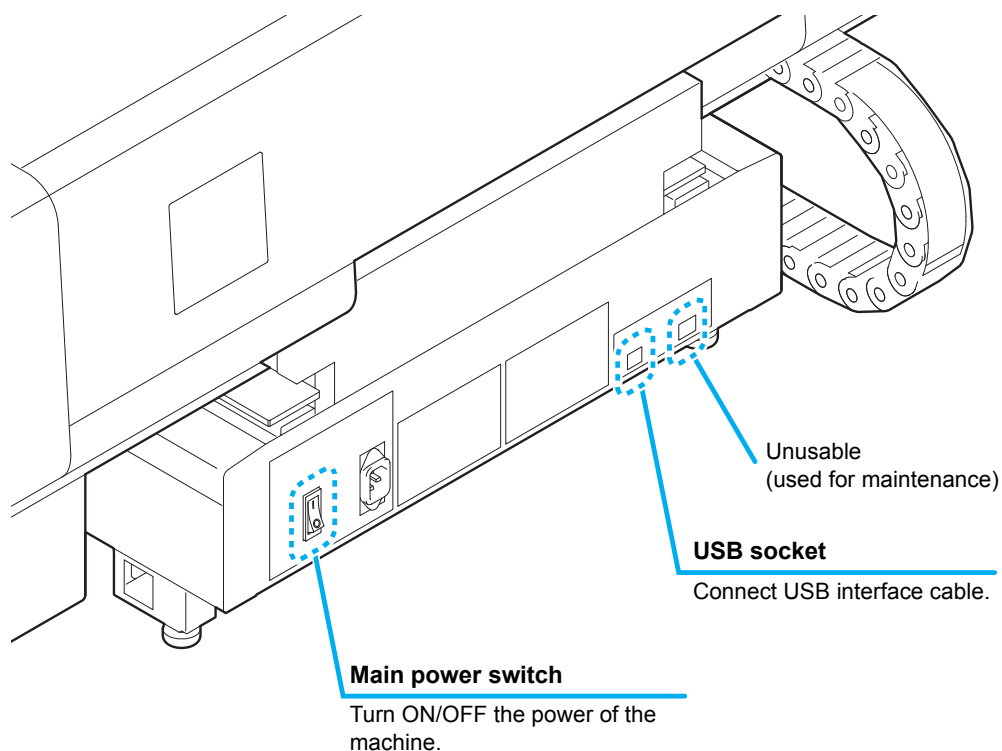


Configuration and Function

Front

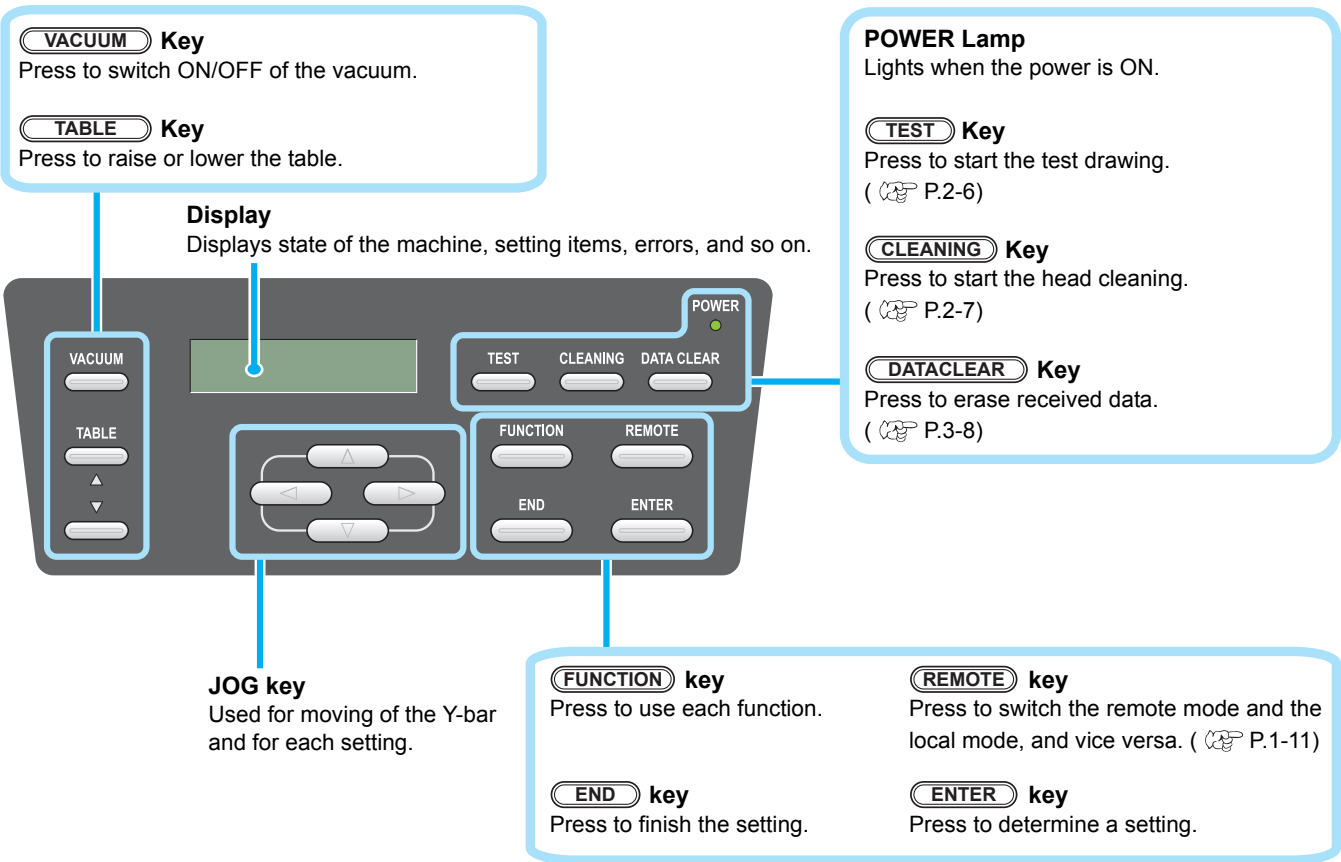


Rear



Operation Panel

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



1
Before Use

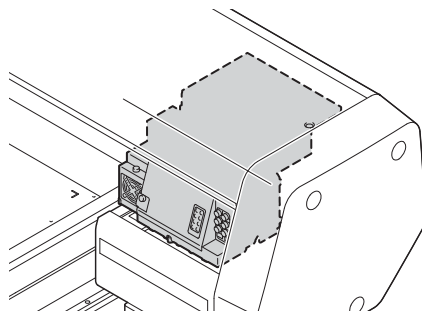
Function of Jog Keys

A function of the Jog key is different by the timing to be used.

	At drawing origin, area setting	At function selection	At setting selection
	Shifts the carriage to the left		
	Shifts the carriage to the right		
	Shifts the carriage to the back	Return to the previous function	Select the previous function
	Shifts the carriage to the front	Move to the next function	Select the next value

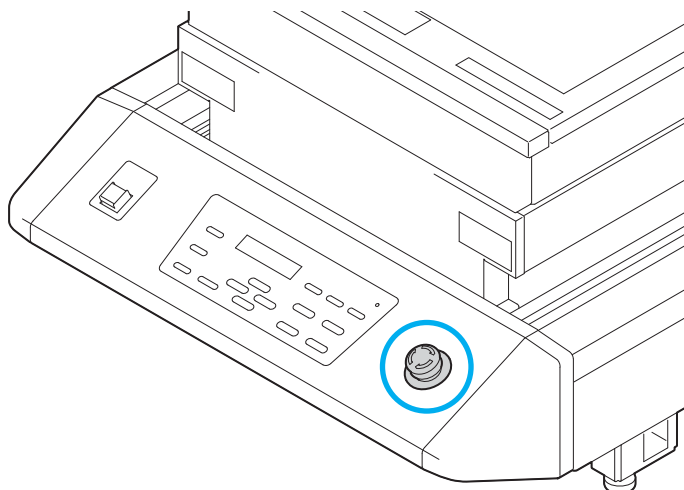
Carriage

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



EMERGENCY SWITCH

When stopping the machine for safety reason, press the switch.
One EMERGENCY switch is placed on the front face of the machine.



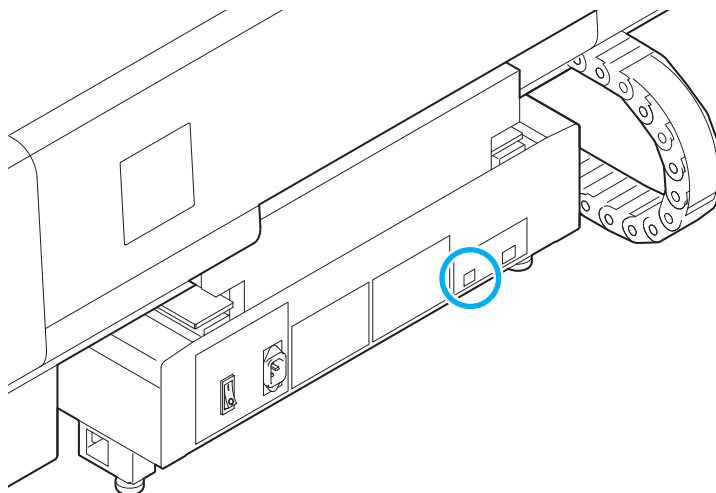
Connecting the cables

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.



1

Before Use

Connecting the power cable



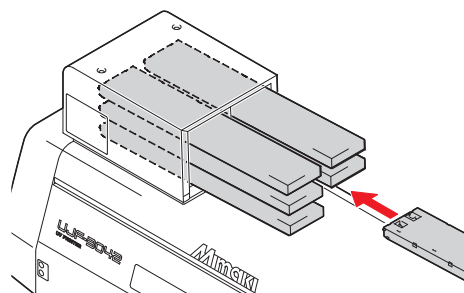
- Use only the supplied power cable.
- Be sure to connect the power cable plug to the grounded outlet, or it may cause fire or electric shock.
- Take care not to damage, break or work upon the power cable. Or if putting a heavy thing on, heating, or pulling the power cable, the power cable can break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

Setting of ink cartridge

Use the ink cartridge inserting it into the ink station.

Kinds of ink that can be used

Ink Type	Color
LH-100 Ink	Magenta
	Cyan
	Yellow
	Black
	White
	Clear
Cleaning cartridge *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	Y	Yellow	W	White
C	Cyan	K	Black	CL	Clear

Precautions at the time of setting the ink cartridge

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



- Confirm the ink slot number and insert the ink cartridge of the correct color.

LH-100 Ink		
Ink slot No.	1	2
Ink color *1	M	C
Ink slot No.	3	4
Ink color	Y	K
Ink slot No.	5	6
Ink color	W	W
	CL	CL
	W	CL
	--	--

*1. M=Magenta, C=Cyan, Y=Yellow, K=Black, W=White, CL=Clear

- Insert the ink cartridge securely all the way in the slot. Moreover, do not insert or pull out the cartridge roughly.
- Insert the cartridge making the IC chip side facing upward.
- For replacing the ink cartridge and the ink type, see the page below.
(P.4-4 "Ink cartridge")
- If the ink near end board comes out even when ink remains, shake the cartridge, check that the ink near end board returns and then set it.

Precautions in handling ink cartridge



- Use the recommended ink cartridge by Mimaki.
- Do not touch the ink directly. If the ink settles on the skin or clothes, immediately wash it off with soap and water. If you get ink in your eyes, immediately wash your eyes with a lot of clean water. Then, consult a doctor as soon as possible.
- Store ink cartridge in a dark and cold place.
- If the ink cartridge is moved from a cold place to a warm place, leave it in the room temperature for more than three hours before using it.
- Be sure to thoroughly consume the ink in the ink cartridge, once it is opened, within six months. If an extended period of time has passed after opening the cartridge, drawing quality would be poor.
- Store ink cartridges in a place that is out of the reach of children.
- When discarding unused ink cartridges, entrust them to an industrial waste disposal contractor, clarifying their contents.
- Some component (photoinitiator) of the ink is toxic against aquatic organisms. Avoid leakage of it to natural water system or domestic waste water.
- Do not use ink cartridges expired the date noted on them.
- Before using an ink cartridge, be sure to read the Material Safety Data Sheet (MSDS).



- Do not shake the ink cartridge violently. Shaking or turning it roughly can cause leakage of ink.
- Never disassemble the ink cartridge.
- Never refill the ink cartridge with ink. Refilling the ink cartridge can cause a trouble. Remember that Mimaki assumes no responsibility for any damage caused by the use of the ink cartridge replenished with ink.

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	300 mm
Maximum length	420 mm
Max. drawing width	300 mm
Max. drawing length	420 mm
Thickness	Less than 50mm
Weight *1	Less than 5 kg

*1. A rough guide is 50 kg 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 drawing surface facing upward.) The media warping upward could not be absorbed in some cases onto the table. Store the media liable to be warped on the slightly smaller platform or palette so that it may warp downward.

- **Adsorption of the media**

To maintain the adsorption effect, cover the suction holes not covered by the media with other media which is thinner than the media.

- **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 Y-bar 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.
- d The suction holes could affect the printed images depending on the thickness and elasticity of the media. Perform printing after confirming that there is no problem by making the test printing in advance.

Menu mode

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

Local Mode

Local mode is a mode in drawing preparation state.

All keys are available.

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

The following operations are allowed in the local mode.

- (1) Setting an origin and the table height by pressing the JOG keys.
- (2) Executing "Test drawing" by pressing the **TEST** key.
- (3) Executing "head cleaning" by pressing the **CLEANING** key.
- (4) Execute setting of each function by pressing the **FUNCTION** key.

Function Mode

Press the **FUNCTION** key during the Local Mode to call the Function Mode.

Function settings on drawing method can be set.

Remote Mode

Remote mode is a mode in drawing received data.

Pressing of the **REMOTE** key suspends the machine.

Press the **REMOTE** during the Local Mode to switch to the Remote Mode.

CHAPTER 2

Basic Operations




The procedure from preparation of ink and media to the execution of drawing, and setting methods are explained.

Operation flow	2-2
Turning the power ON	2-3
Setting the media	2-4
Set the media in another method	2-5
Test drawing	2-6
Execution of head cleaning	2-7
Drawing an image from source data	2-8
Starting the drawing operation	2-8
Interruption of drawing	2-9
When [! WORK High] is displayed	2-9
If you open the cover during drawing	2-10
Turning the power OFF	2-11

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 drawing

See "Test drawing" ( P.2-6)


4

Execution of head cleaning

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


5

Drawing an image from source data

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

6

Turning the power OFF

See "Turning the power OFF"
( P.2-11)

Turning the power ON

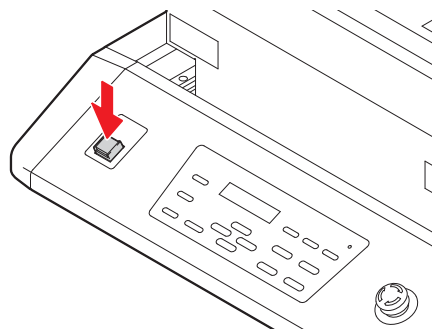


- When the power is turned ON, the Y-bar moves. To avoid injuries, keep your hands away from the table.

1

Press the power button.

- Press the power button on the left side of the operation panel to light.
- When the main power switch is not set to ON, the power is not connected even if the power button is pressed. If the lamp does not light even if the button is pressed, check the main power switch on the rear of this machine.



- When the power is switched on, the LCD displays the firmware version.

UJF-3042 start-up
ver. * . * *

2

Initial operation is started.

- Local Mode starts.

PLEASE WAIT
SEARCHING ORIGIN

<LOCAL>

3

Turn the power of connected computer ON.

2

Basic Operations

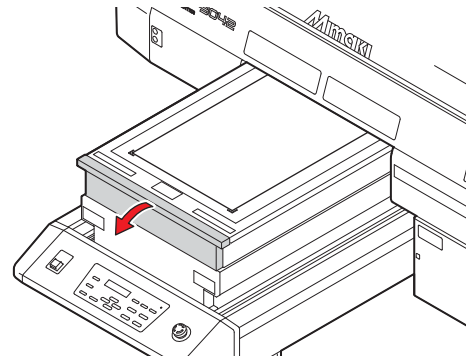
Setting the media

Important!

- To avoid lifting of media, turn ON the adsorption fan after setting media.
- If, within the adsorption area, there are suction holes not closed by the media, close such suction holes placing thin sheet form material such as paper, film or tape.
- The peripheral parts of the media could roll up due to heat. Fix the media supplementarily using adhesive tapes, etc.

1

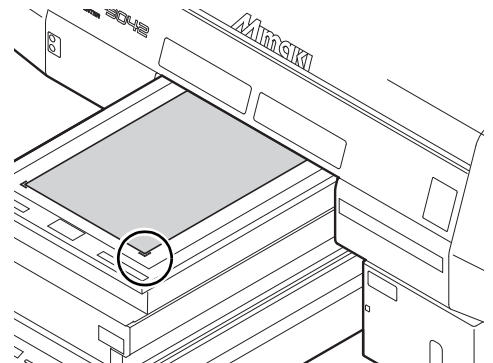
Open the table front cover.



2

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

- To change the drawing origin, see the following page.
(☞ P.3-2 "Changing origin")
- To use tools, set into the shaves (8.0 mm-deep) on the corners of the table.



3

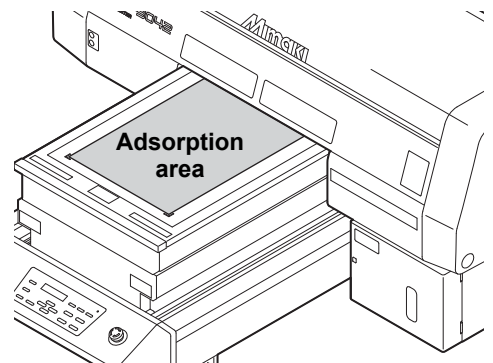
Close the table front cover, and press the **ENTER key.**

- The origin is detected. Please wait until the operation is finished.

4

Press the **VACUUM key depending on the intended use.**

- The media is fixed.
To avoid media lifting, be sure to turn ON the vacuum fan if using thin media.



5

Adjust the table to an appropriate height for drawing by pressing the **TABLE **▲** **▼** keys, and press the **ENTER** key.**



- Adjust the height of the table with the media to 50 mm or less.

Set the media in another method

You can move the Y bar to the rear so that you may set the media easier.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Press the **ENTER** key.

- The table is lowered.

FUNCTION
WORK SET <ENT>

3

To check the height, press the **FUNCTION** key.

- The table height can be checked after the table lifts to the specified height, the obstacle sensor works, and the Y-bar moves to the front.

WORK SET
COMPLETED : e n t

4

Press the **ENTER** key.

- The table is lifted to the specified height.

WORK SET
COMPLETED : e n t

2

Test drawing

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



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

Check before starting test drawing

• Is media set? (☞ P.2-4)

• Is origin point set? (☞ P.3-2)

1

Press the **TEST** key in the local mode.

<LOCAL>

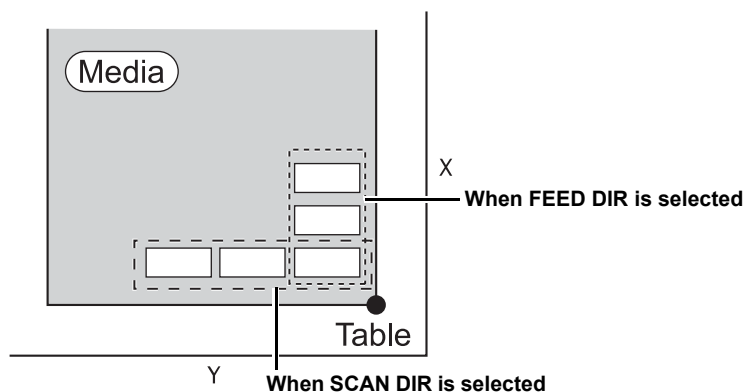
2

Select the drawing direction by pressing the **▲** or **▼** key, and press the **ENTER** key.

TEST DRAW
(SCAN DIR) <ENT>

- Test drawing 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.

TEST DRAW
(FEED DIR) <ENT>



3

Test drawing ends.

- Y-bar evacuates from the table, and then the mode returns to the local.

4

Check result of drawing.

- 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	Nozzle missing	Deflection
	 Many lines are missing.	 The lines are missing as if the teeth are lost.	 The distance between the lines is narrowing or double lines are formed.

Execution of head cleaning

When a correct pattern is not obtained in the test drawing, 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. Suction and 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 **CLEANING** key in the local mode.

<LOCAL>
- 2

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

(1) Select the head with **◀** or **▶** keys.

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

Select execution of cleaning for every head.

Execute Cleaning:Head No. being set is displayed.

Not Execute Cleaning:“ - ” is displayed.

#CLEANING
HEAD [MCYKW^C_L]

#CLEANING
HEAD [_ _ YKW^C_L]
- 3

Select the cleaning type with **▲** or **▼** keys, and press the **ENTER** key.

#CLEANING
TYPE : normal
- 4

Press the **ENTER** key.

- Cleaning is started.
 - When the cleaning is completed, a mode is returned to the local mode.
- 5

Execute test drawing and check the result of the test drawing.

- Repeat cleaning and test drawing until normal result is obtained.

Drawing an image from source data

Starting the drawing operation



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



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

1

Set the media. (☞ P.2-4)

- (1) Press the **VACUUM** key to absorb the media.

2

Press the **REMOTE** key in the local mode.

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

* REMOTE *

49.0 mm

3

Transmit data to be drawn from the computer.

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



- This machine does not have "H" (double speed) and "B" (bi-directional).

Resolution: 720x600DPI

* REMOTE *
HOST / 16 / U / N
720 X 600
49.0 mm

Table height

Scanning speed:
"N" denotes normal.
"H" denotes the double speed.

Direction:
"B" denotes bi-directional.
"U" denotes uni-directional.

Pass

Priority is set to "HOST" :
"HOST" is displayed.
Priority is set to "PLOT" :
Print quality (STD/FINE/FAST) is displayed.

4

Start drawing.

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

5

Taking out the media after completion of drawing.

- (1) Press the **VACUUM** key to turn the adsorption OFF.
(2) Remove the media.



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

Interruption of drawing

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

1

Press the **REMOTE** key while drawing.

- Drawing operation stops.
- When data is transmitted from the computer, the computer stops transmission of data.
- To restart drawing, press the **REMOTE** key again.



< LOCAL >

2

Press the **DATA CLEAR** key.

DATA CLEAR
< ENT >

3

Press the **ENTER** key.

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

** DATA CLEAR **

When [! WORK High] is displayed

When [! WORK High] is displayed on the screen and the drawing operation stops during drawing, restart drawing with the procedures below:

ERROR 505
!WORK High

Important!

- During drawing, the sensor always monitors the media height. When the gap check function (P.3-7) is set to "OFF", if the sensor detects the media, the drawing operation is interrupted automatically, and [! WORK High] is displayed on the screen.

1

Press the **ENTER** key.

- The screen returns to LOCAL.

< LOCAL >

2

Check the media setting status, and press the **REMOTE** key.

- The machine restarts drawing.
- If you do not wish to restart drawing, press the **DATA CLEAR** key to interrupt drawing. (P.2-9 "Interruption of drawing")

2

If you open the cover during drawing

If you open the cover or press the emergency stop switch during drawing, the warning message is displayed on the screen.

Reset a switch

1

Press the **ENTER** key.

PRINTING PAUSE
CONTINUE< >CANCEL

2

Press the **◀** or **▶** key to select “CONTINUE” or “CANCEL” of drawing.

- When you select “CANCEL”, the machine starts initialization.
- When you select “CONTINUE”, the right screen is displayed.
When you continue drawing, press the **ENTER** key.
When you stop drawing, press the **END** key.

Resume Print
PRESS <ENT> KEY

Important!

- When you continue drawing, image missing may occur depending on the timing of the cover opened.



- When you open the cover when the drawing operation is not performed, the right screen is displayed. In this case, press the **ENTER** key

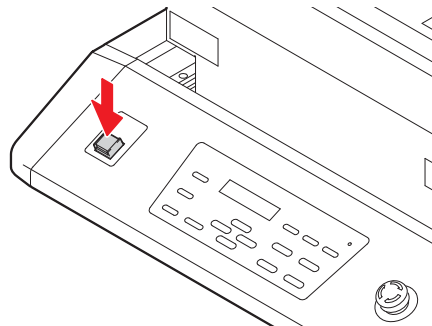
(RESET SWITCH)
PRESS <ENT> KEY

Turning the power OFF

To turn off, check first whether or not there is data received and there remains data that has not yet been output in the machine.

1 Turn the power of the connected computer off.

2 Press the power button to cut the power.



When this machine is not used for a long time, execute the following:

- (1) Press the power button.
- (2) Confirm that the shutdown operation is completed.
- (3) Turn off the main power switch on the rear of this machine. (☞ P.1-4)

CHAPTER 3

Useful Function



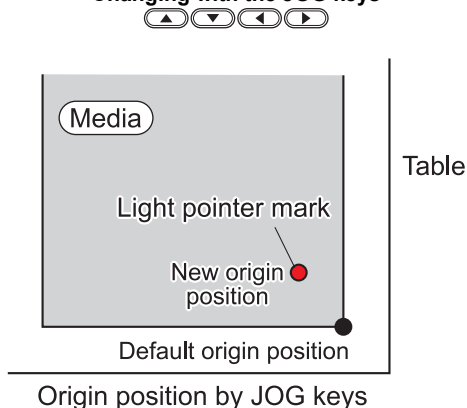
Items required for using this machine conveniently, such as an ink replacing method or a cleaning manner, are described.

Changing origin	3-2	Various settings.....	3-12
Changing origin with JOG keys	3-2	Setting the print method	3-12
Changing origin with FUNCTION menu ...	3-3	Setting the mode of the LED UV	3-13
Setting the Head Height.....	3-4	Setting of priority	3-14
Setting the media thickness	3-4	Setting the work change	3-15
Setting the head gap	3-5	Setting the ink weight	3-16
Setting the table height	3-6	Changing language display on the screen	3-17
Gap check	3-7	Output the setting list	3-18
Other useful functions	3-8	Displaying machine information	3-19
Data clear	3-8	Other useful settings	3-20
Displaying information of this machine	3-8	Initializing settings	3-21
Proceed with drawing that you suspended	3-9	Setting time	3-22
Alternative nozzles for printing, when nozzles missing can not be improved ..	3-10	Setting mm/ inch	3-23
		Setting weight of the empty cartridge	3-24
		Setting Key buzzer	3-25

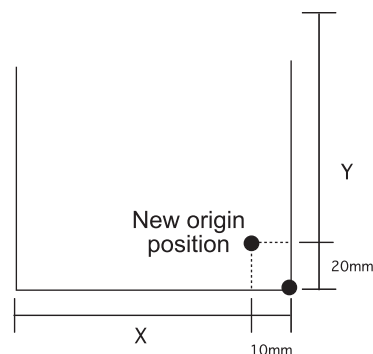
Changing origin

The default origin position can be changed.
There are following 2 changing methods.

Changing with the JOG keys



Changing with the "ORIGIN" in the FUNCTION menu



Changing origin with 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.

ORIGIN SET UP
0 . 0 ---


2

Move the light pointer mark by pressing the  keys.

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


ORIGIN SET UP
420 . 0 300 . 0
Origin position (back and forth) Origin position (right and left)

3

Press the  key when the drawing origin is determined.

- 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  keys in advance.

** ORIGIN **

Important!

- 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.

Changing origin with FUNCTION menu

To precisely set the origin of coordinates, set its X- and Y- coordinates from the FUNCTION menu. This setting value becomes the origin position (0, 0).

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [ORIGIN] by pressing the **▲** or **▼** key, and press the **ENTER** key twice.

- X-axis offset value setting screen is displayed.

FUNCTION
SET ORIGIN <ENT>

3

Input value by pressing the **▲** or **▼** keys, and press the **ENTER** key.

- Setting the origin position of X-axis.
- The value in the parentheses indicates the distance from the origin to the maximum effective area.

ORIGIN 410mm
X OFFS: 10mm

4

Select the [Y OFFS] by pressing the **▲** or **▼** keys, and press the **ENTER** key.

ORIGIN
SELECT :Y OFFS

5

Input value by pressing the **▲** or **▼** keys, and press the **ENTER** key.

- Setting the origin position of Y-axis.
- The value on the first line indicates the distance from the origin to the maximum effective range.

ORIGIN 290mm
Y OFFS: 10mm

6

Press the **END** key several times to end the setting.

Important!

- The set value remains even if turning off the power.

Setting the Head Height

Media thickness, Head gap, and Table height can be changed.

Setting the media thickness

If the media thickness is changed, Table Height is also changed.
(Supported from the firmware ver.1.30)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [HEAD HEIGHT] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [MEDIA THICKNESS] by pressing the **▲** or **▼** keys, and press the **ENTER** key.

HEAD HEIGHT
MEDIA THICKNESS<ent>

4

Set the media thickness by pressing the **▲** or **▼** keys, and press the **ENTER** key.

• Set value: 0.0mm to 50.0mm

HEAD HEIGHT
THICKNESS : 1.0mm

5

Press the **END** key several times to end the setting.

Setting the head gap

If the head gap is changed, Table Height is also changed.
(Supported from the firmware ver.1.30)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [HEAD HEIGHT] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [HEAD GAP] by pressing the **▲** or **▼** keys, and press the **ENTER** key.

HEAD HEIGHT
MEDIA THICKNESS <ent>

4

Set the head gap by pressing the **▲** or **▼** keys, and press the **ENTER** key.

• Set value: 1.5mm to 5.0mm

HEAD HEIGHT
HEAD GAP : 1 . 5mm

5

Press the **END** key several times to end the setting.

Setting the table height

If the table height is changed, Media Thickness is also changed.
(Supported from the firmware ver.1.30)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [HEAD HEIGHT] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [TABLE HEIGHT] by pressing the **▲** or **▼** keys, and press the **ENTER** key.

HEAD HEIGHT
MEDIA THICKNESS<ent>

4

Set the table height by pressing the **▲** or **▼** keys, and press the **ENTER** key.

• Set value: 0.0mm to 50.0mm

HEAD HEIGHT
TBL HGHT : 49.0mm

5

Press the **END** key several times to end the setting.

Gap check

Select operation when obstacles are detected during drawing.
(Supported from the firmware ver.1.30)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [HEAD HEIGHT] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [GAP CHECK] by pressing the **▲** or **▼** keys, and press the **ENTER** key.

HEAD HEIGHT
MEDIA THICKNESS <ent>

4

Select the mode by pressing the **▲** or **▼** keys, and press the **ENTER** key.

HEAD HEIGHT
GAP CHECK : ON

- 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 (table height 0.0mm), 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.

5

Press the **END** 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.

Other useful functions

Data clear

Erase the data not required for this machine with the following operation.

1

Press the **DATA CLEAR** key in the local mode.

< LOCAL >

2

Press the **ENTER** key.

- The data is erased.

DATA CLEAR

< ENT >

Displaying information of this machine

1

The information is displayed sequentially by pressing the **ENTER** key in the local mode.

- The following information are displayed.
Remaining amount of ink / FW version/ Command information

Remaining amount of ink

< LOCAL >	MCYKW ^C _L
REMAIN	99999

FW version/ Command information

UJF - 3042	V1.00
MRL - I I I	V1.20



- For the display of remaining amount of ink, the larger number indicates ink remains lot.
- Remaining amount of ink and the remaining number of printing have a margin of error. Refer the value displayed as a guide.

2

Press the **ENTER** key to return to the local mode.

< LOCAL >



- Information on your machine type can be confirmed in P.3-19 "Displaying machine information".

Proceed with drawing that you suspended

When you open the cover during printing data, drawing is suspended.
In such a case, you can proceed with it continuously by performing the procedures below.
(Supported from the firmware ver.1.60)



Important!

- When you suspended test drawing, you cannot continue it.
- When you proceed with drawing that you suspended, the image quality and the precision may not be guaranteed.
- When you suspended drawing because an error had occurred, you cannot proceed with it.

1

When you open the cover during drawing and close it again, the message is displayed.


```
PRINTING PAUSE
CONTINUE<      >CANCEL
```

- Pressing the  key displays the message to confirm you whether you proceed with drawing or not.
- When pressing the  key, the machine stops drawing and returns to the local mode.

2

Press the  key to proceed with drawing.

```
Resume Print
PRESS <ENT> KEY
```

- When pressing the  key, the screen returns to the one in the Step 1.

Alternative nozzles for printing, when nozzles missing can not be improved

NOZZLE RECOVERY: When nozzles missing can not be improved at specific points, other good nozzles can be used as alternatives for printing. (Supported from the firmware ver.1.60)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the **[NOZZLE RECOVERY]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
NOZZLE RECOVERY<ENT>

4

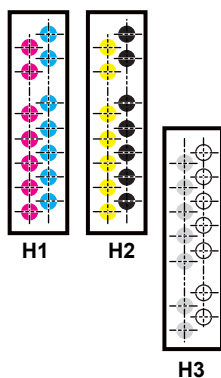
Select the **[DRAW]** by pressing the **▶** key.

NOZZLE RECOVERY
CLEAR< >DRAW

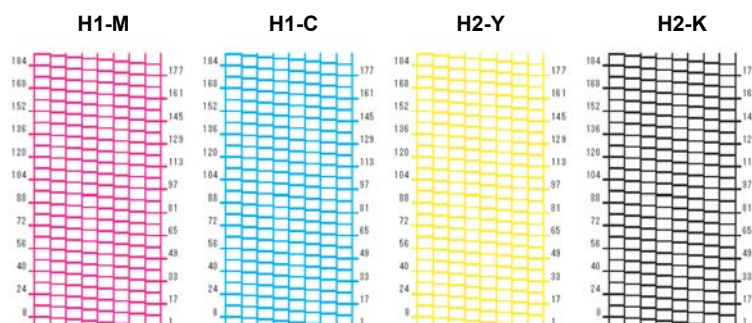
- ◀ : The set value can be cleared by selecting the Nozzle line and then pressing **ENTER** key.
- ▶▶ : Select the Nozzle line
"Move to select of the Nozzle line (Step 5) without drawing a pattern"

PRINTING
PLEASE WAIT

Overhead view



Nozzle pattern



5

Select the Nozzle line that needs **NOZZLE RECOVERY** by pressing **▲** **▲** key. Then press **ENTER** key.

NOZZLE RECOVERY
SELECT: H1-M

Ink color:
M,C,Y,K,W,CL

Head No.: H1 to H3

6

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

- ◀ ▶ : Keys for selecting the registration number from 1 to 5.
- ▲ ▼ : Keys for registering the nozzle number that needs recovery from 1 to 192 or selecting "OFF"; no nozzle registration.

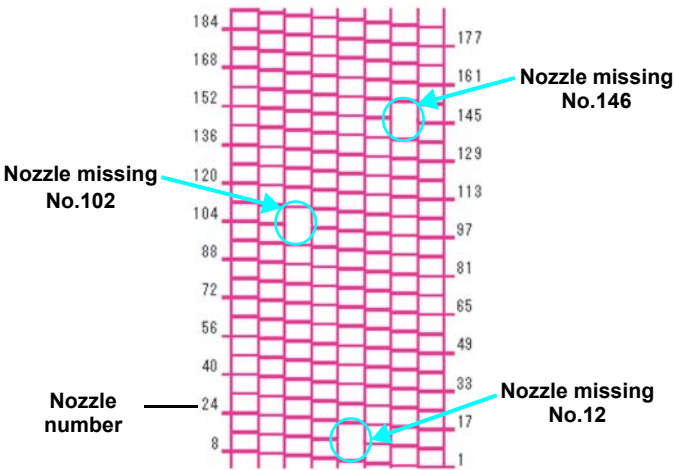
NOZZLE RECOVERY

H1 - M NG3 : 1 4 6

Recovery nozzle No.:
OFF, 1 to192

Registration number:
1 to 5

Example of nozzle to be recovered



Registration number	Recovery Nozzle No.	State
1	12	Target for nozzle recovery
2	102	Target for nozzle recovery
3	146	Target for nozzle recovery
4	OFF	No registration
5	OFF	No registration

Important!

- Up to 5 nozzles can be registered per 1 nozzle line.
- Even if you use this function, time required for drawing does not change.
- For the lowest number of paths of the drawing mode, the NOZZLE RECOVERY function is invalid.



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

Various settings

Setting the print method

Set items for printing.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [SET UP] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [PRINT MODE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
PRINT MODE <ent>

4

Press the **ENTER** key.

SET UP
QUALITY <ent>

5

Select an item to be set by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
QUALITY : STANDARD

• As for setting items, see the next page.

6

Select a value by pressing the **▲** or **▼** key, and press the **ENTER** key.

• As for setting values, see the next page.

7

Press the **END** key several times to end the setting.



• Set value remains even after turning off the power.

Item	Value	Outline
QUALITY	STANDARD	Standard drawing quality
	FINE	High quality drawing (drawing speed is slower)
	FAST	High speed drawing (quality is inferior)
LOGICAL SEEK	ON	The head moves according to the data width to be drawn.
	OFF	The head moves whole table width at drawing.

Setting the mode of the LED UV

The mode of the LED UV may be set in 3 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.
NOPRINT	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. (Normally, this setting will not be made.)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [SET UP] by pressing the **▲** or **▼** key, and press the **ENTER** key.

 FUNCTION
WORK SET <ENT>

3

Select the [UV MODE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

 SET UP
UV MODE <ent>

4

Press **▲** or **▼** keys to select the mode, and press the **ENTER** key.

• Set values :ON , OFF , NOPRINT

 SET UP
UV MODE : ON

5

Press the **END** key several times to end the setting.



- The mode of the LED UV may be set on the RIP side, when performing the remote drawing. For details, please refer to the Instruction Manual of your RIP.

Setting of priority

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

Items to be selected : Print mode / Feed compensation / Ink layers / Logical seek / Refresh

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Press the **[SET UP]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the **[PRIORITY]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
PRIORITY <ent>

4

Select the set value by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
PRIORITY : ALL HOST

- Set value: ALL HOST / ALL PLOT / INDIVIDUAL
- If you select [INDIVIDUAL], go to the Step 5, and if you select others, go to the Step 7.

5

Select the “HOST” or the “PLOT” by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
PRINT MODE : PLOT

- Although the item can be selected by pressing the **◀** or **▶** key, be sure to press the **ENTER** key to save the setting.

6

Set other items with the same manner as 4, 5.

7

Press the **END** key several times to end the setting.



- If there is no indication from the host when Host has priority, the setting of PLOT is effective.

Setting the work change

Set whether to return to the local mode or keep the remote mode after online drawing.
(Supported from the firmware ver.1.20)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Press the [SET UP] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [WORK CHANGE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
WORK CHANGE <ent>

4

Select "OFF" or "ON" by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
WORK CHANGE : OFF

- OFF: Keeps the remote mode after online drawing.
(draws next drawing data over a drawn face while receiving)
- ON: Returns to the local mode after online drawing.

5

Press the **END** key several times to end the setting.

3

Setting the ink weight



- 600ml ink cartridge can be used on firmware Ver.1.20 or later.

If weight of the cartridge is not entered when filling ink, enter the weight when INK LVL LOW or INK LVL END is detected. This machine recalculates remaining amount of ink and writes the value into the IC chip. (600ml ink only)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Press the [SET UP] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [CART WEIGHT] by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
CART WEIGHT <ent>

4

Select cartridges by pressing the **▲** or **▼** key.

SET UP
CARTRIDGE :M

- The ink colors of the cartridges displaying "INK LVL LOW" or "INK LVL END" are displayed as "MCYKW^C_L".
- When two cartridges of the same color are set as WW or ^C_L^C_L, they are displayed as W1W2 or ^C_L1^C_L2.

5

Enter weight of the cartridge by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
WEIGHT = 850g

- The number changes by 1 g.

6

Fix or change the setting.

- Press the **ENTER** key to fix the setting.
- Press the **END** key to change the weight (back to Step 5).

SET UP
850g OK? :ent

7

Press the **END** key several times to end the setting.

Changing language display on the screen

Display language can be selected between Japanese and English.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [DISPLAY] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
DISPLAY <ENT>

3

Select a language by pressing the **▲** or **▼** key, and press the **ENTER** key.

DISPLAY
English <ent>

• Default is "English."

4

Press the **END** key to finish.



• Set value remains even after turning off the power.

Output the setting list

Keep the list for customer's record or send it by the fax at inquiry on the maintenance.

1

Set a larger media than the legal size. (☞ P.2-4)

2

Press the **FUNCTION** key in the local mode.

<LOCAL>

3

Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

4

Select the [LIST] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
LIST <ent>

• Output of the setting list starts.

5

Press the **END** key to finish.

Displaying machine information

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the [INFORMATION] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
INFORMATION <ent>

4

Select information to be displayed by pressing the **▲** or **▼** key, and press the **ENTER** key.

- The following 2 information can be displayed.
FW version of this machine
Serial No.

Version information

MAINTENANCE
MAIN Ver 1.00

Serial No. information

MAINTENANCE
S/N 00000000

5

Press the **END** key several times to end the setting.

3

Other useful settings

Change settings according to need.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [SET UP] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select an item to be set by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
INK LAYERS <ent>

• Select with reference to the Table of Setting below.

4

Select a value to be set by pressing the **▲** or **▼** key, and press the **ENTER** key.

• Select with reference to the Table of Setting below.

5

Press the **END** key several times to end the setting.



• Set value remains even after turning off the power.

Table of Setting

Item	Value	Outline
INK LAYERS	1 to 9 times	Set the number of times for over painting. Finer drawing can be obtained by over painting.
REFRESH	Level 0 to 3	Set the refreshing revel for preventing the head from clogging in a dusty environment. The larger level number indicates more frequent refreshing times.
UV AddScan	OFF, 1 to 9 times	Designates the number of times of additional scanning of UV to cure the edge parts of the image with UV irradiation after completion of the drawing.
AUTO CLEANING	ON, OFF	Set whether auto-head cleaning is executed or not at the following intervals before drawing. <ul style="list-style-type: none"> After the proper drawing for the refresh level after the previous cleaning and before drawing next data

Initializing settings

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [SET UP] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
WORK SET <ENT>

3

Select the [SETUP RESET] by pressing the **▲** or **▼** key, and press the **ENTER** key.

SET UP
SETUP RESET <ent>

4

Press the **ENTER** key.

- Resets the setup.

SET UP
INITIAL . OK? :ent

5

Press the **END** key several times to end the setting.

Important!

- In the [SETUP RESET], resetting is allowed only on contents changed in the settings.

Setting time

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [MACHINE SET] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MACHINE SET <ENT>

3

Press the **ENTER** key twice.

MACHINE SET
SET TIME <ent>

4

Set time by pressing the **▲** **▼** **◀** **▶** key.

- Selecting date (year/month/date/hour/minute): use **◀** **▶**.
- Entering date (year/month/date/hour/minute): use **▲** **▼**.

SET TIME
DATE=20**09**.01.05

SET TIME
TIME= **10**:20:00

5

Press the **ENTER** key.

- The entered date is displayed.
- "0" is displayed on the field of second.

SET TIME
DATE=20**09**.01.05

6

Press the **END** key several times to end the setting.

Setting mm/ inch

Set the unit to be used on this machine.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [MACHINE SET] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MACHINE SET <ENT>

3

Select the [MM/INCH] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MACHINE SET
MM / INCH <ent>

4

Select the unit by pressing the **▲** or **▼** key, and press the **ENTER** key.

MACHINE SET
MM / INCH : **MM**

• Setting of the unit : use **▲** **▼** .

5

Press the **END** key several times to end the setting.

Setting weight of the empty cartridge

Enter weight of the empty cartridge. It is used for recalculating remaining amount of ink. (600ml ink only)
(Supported from the firmware ver.1.20)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Press the **[MACHINE SET]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MACHINE SET <ENT>

3

Select the **[600ml CARTRIDGE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MACHINE SET
600ml CARTRIDGE<ent>

4

Select cartridges by pressing the **▲** or **▼** key.

MACHINE SET
CARTRIDGE :M

- The ink colors set in the cartridges are displayed as "MCYKW^C_L".
- When two cartridges of the same color are set as WW or ^C_L^C_L, they are displayed as W1W2 or ^C_L1^C_L2.

5

Enter weight of the cartridge by pressing the **▲** or **▼** key, and press the **ENTER** key.

MACHINE SET
CASE WEIGHT =300g

- The number changes by 1 g.

6

Press the **END** key several times to end the setting.

Setting Key buzzer

Set the buzzer sound when keys are pressed.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [MACHINE SET] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MACHINE SET <ENT>

3

Select the [KEY BUZZER] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MACHINE SET
KEY BUZZER <ent>

4

Select ON/OFF by pressing the **▲** or **▼** key, and press the **ENTER** key.

MACHINE SET
KEY BUZZER : **OFF**

5

Press the **END** key several times to end the setting.

Important!

- The sound of Error /Warning /Operation completed cannot be set off even if the setting above is "OFF".

CHAPTER 4

Maintenance



Items required for using this machine conveniently, such as an ink replacing method or a cleaning manner, are described.

Routine maintenance	4-2	When the waste ink is full.....	4-14
When this machine is left		Disposing of the ink in the waste ink tank	4-14
unused for a long time	4-2	Disposing of the waste ink in the wiper bottle	4-16
Precautions in cleaning	4-2	Replacing the Filter	4-18
Cleaning exterior surfaces	4-3	Washing the Nozzle.....	4-20
Cleaning the table	4-3	Wash the ink discharge passage	4-22
Ink cartridge	4-4	When the Machine Is Not Used	
Replacing with a new ink cartridge	4-4	for a Long Time (CUSTODY WASH)..	4-24
Setting the ink set	4-5	Washing the Head	4-26
Ink cartridge trouble	4-8	Perform ink filling	4-28
600ml Ink cartridge.....	4-9	Setting nozzle face cleaning time	4-29
Registering the case weight	4-9	Regular maintenance for white ink...	4-30
Registering the cartridge weight	4-10	Cleaning of wiper.....	4-32
Registering the cartridge weight		Refilling antifreeze mixed water.....	4-34
(After LVL LOW / LVL END)	4-11	Refilling antifreeze mixed water	4-35
Avoiding dripping of ink droplet			
at printing.....	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.

When this machine is left unused for a long time



- Be sure to turn off the main power switch on the side of this machine. (☞ P.1-4)
- Remove the media being set.

Precautions in cleaning

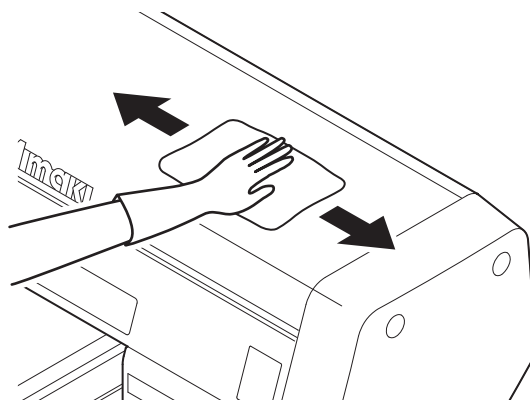


- Never disassemble this machine. Disassembling this machine can result in electric shock hazards or damage to this machine.
- Prevent moisture from entering this machine. Moisture inside the machine can result in electric shock hazards or damage to this machine.
- Before starting maintenance work, be sure to turn off the main power switch and unplug the power cable; otherwise, an unexpected accident may occur.
- 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.
- 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.
- This machine uses UV curing ink (UV ink). When in daily care, be sure to put on the supplied goggles and gloves.



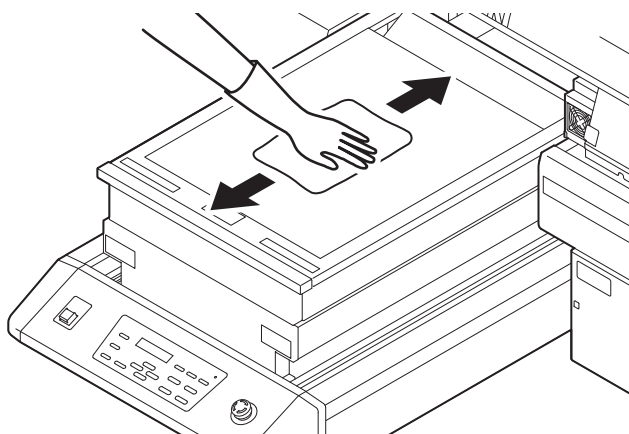
Cleaning exterior surfaces

If exterior surfaces of the machine is dirty, dampen a soft cloth with water or a neutral detergent diluted with water, squeeze it and wipe the surfaces.



Cleaning the table

The table is easy to become dirt with lint, paper dust or the like after cutting media. For a conspicuous stain, wipe it off with a soft-hair brush, a dry cloth, a paper towel or the like.



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.
- If it is stained with ink, wipe it off with a paper towel containing a little amount of the cleaning solution.

Ink cartridge

Replacing with a new ink cartridge

Replacing of ink cartridges is required in the following cases.

Display	Outline
<div><LOCAL> INK NEND M_-----</div>	The ink in the ink cartridge is low. ?Drawing can be continued, but the ink may end during the drawing. Early replacement is recommended. ?The display shown in the left indicates that magenta ink is low.
<div><LOCAL> INK END M_-----</div>	The ink in the ink cartridge ended. ?Unable to continue drawing. Replace with a new one immediately. ?The display shown in the left indicates that magenta ink ended.

- 1

Press the **FUNCTION** key in the local mode.

<LOCAL>
- 2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>
- 3

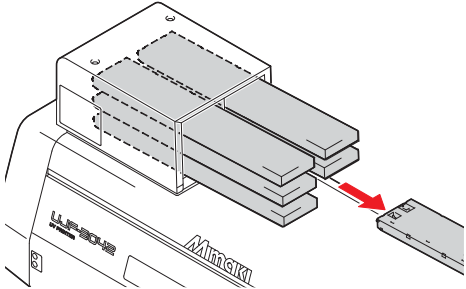
Select the **[STATION]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>
- 4

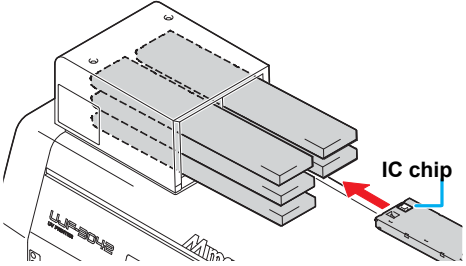
Select the **[EXCH CARTRIDGE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.
• Y-bar moves to the front.

STATION
MENT : EXCH CARTRIDGE
- 5

Remove an ink cartridge to be replaced.


- 6

Set a new ink cartridge
• As shown in the drawing, set an ink cartridge turning up a side containing the IC chip.


- 7

After replacing, press the **ENTER** key.
• Y-bar returns to the back.

STATION
COMPLETED :ent
- 8

Press the **END** key to finish.

Setting the ink set

Set the ink set when ink type is changed.
(Supported from the firmware ver.1.20)

As shown in the table, procedure (washing and filling) depends on the condition before or after changing the ink set.

Ink set before replacement	Ink set after replacement	Procedure
MCYKW ^C _L	MCYK_ _	Washing only
MCYKWW		
MCYK ^C _L ^C _L		
MCYKW ^C _L	MCYKWW	Fill up after washing
	MCYK ^C _L ^C _L	
MCYKWW	MCYKW ^C _L	
	MCYK ^C _L ^C _L	
MCYK ^C _L ^C _L	MCYKW ^C _L	
	MCYKWW	Filling only
MCYK_ _	MCYKW ^C _L	
	MCYKWW	
	MCYK ^C _L ^C _L	

1 Press the **FUNCTION** key in the local mode.

<LOCAL>

2 Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3 Select the [INK SET] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
INK SET <ent>

4 Select the ink set by pressing the **▲** or **▼** key, and press the **ENTER** key.

INK SET [LH-100]
SELECT : MCYKW^C_L

- Select from the following sets of ink.
MCYKW^C_L / MCYKWW / MCYK^C_L ^C_L / MCYK_ _
- When the ink set is changed, go to the next step.



- The step 5 to 10 is displayed when washing is required.

5

Pull out the ink cartridges from the ink station.

- When the ink cartridges are pulled out, ink discharge operation starts.

WASH
REMOVE CARTRIDGE



WASHING
PLEASE WAIT

6

Select washing the head or not for each head, and press the **ENTER key.**

- (1) Select the head with the key.
- (2) Select washing (displays the head No.) or not (displays “_”) with the key.

Important!

- When a color set on the head or the ink type is changed, be sure to perform Head Washing.

WASHING
HEAD [MCYKW^C_L]

7

When a screen shown on the right is displayed, set the washing liquid cartridge (SPC-0516FS) to the ink station.

- Head washing starts.
- Repeat the Step 7 to 8 for each head to wash.

WASH _ _ _ _ W^C_L
SET WASHING LIQUID



WASHING
PLEASE WAIT

8

Remove the washing liquid cartridge.

WASH _ _ _ _ W^C_L
REMOVE CARTRIDGE



WASHING
PLEASE WAIT

9

Set the washing liquid cartridge to the ink station again.

WASH _ _ _ _ W^C_L
SET WASHING LIQUID



WASHING
PLEASE WAIT

10

Remove the washing liquid cartridge.

WASH _ _ _ _ W^C_L
REMOVE CARTRIDGE



WASHING
PLEASE WAIT

11

When a screen shown on the right appears, put 5 cc of the washing liquid into the air vent tube to wash.

- When washing is complete, press the **ENTER** key.

TUBE CLEANING
COMPLETED :ent

12

Press the **ENTER key.**

WASH
COMPLETED :ent



- The step 13 to 14 is displayed when filling is required.

13

Set the ink cartridge to be filled.

- When the proper cartridge is set, ink filling automatically starts.

FILL UP INK ____WW
SET CARTRIDGE



FILL UP
***-----

14

Remove air from the ink port of the filled cartridge.

- Remove air with syringe until ink comes out of the ink port. When all air is removed, press the **ENTER** key.

FILL UP INK
Please deflate :ent



FILL UP
***-----

Ink cartridge trouble

When an ink cartridge trouble is detected, a warning message appears and printing, cleaning and all other activities that use ink are deactivated. In this case, replace the ink cartridge in question immediately.



- Do not leave the ink cartridge without replacing for a long time as this will cause the nozzle clogging and the printer must be repaired by a service person.

1

Display the trouble messages on the LCD.

- See P.5-4 "Troubles for which error messages are given on the LCD".

<LOCAL> INK END	MCYKW ^C _L
--------------------	---------------------------------

2

Press the **ENTER** key.

<LOCAL> REMAIN	MCYKW ^C _L 999999
-------------------	---

3

Press the **ENTER** key again.

- The menu will return to the LOCAL mode when there is no trouble.
- If two or more cartridges have a problem, press the **ENTER** key again to display the second cartridge.
- When the problems of all cartridges are displayed, the menu returns to the LOCAL mode automatically.

<LOCAL> INK END	MCYKW ^C _L
--------------------	---------------------------------

<LOCAL> NO CARTRDGE	MCYKW ^C _L
------------------------	---------------------------------

<LOCAL> WRNG INK IC	MCYKW ^C _L
------------------------	---------------------------------

<LOCAL> INK NEND	MCYKW ^C _L
---------------------	---------------------------------

<LOCAL> Expiration	MCYKW ^C _L
-----------------------	---------------------------------

<LOCAL> Color of INK	MCYKW ^C _L
-------------------------	---------------------------------

<LOCAL> INK TYPE	MCYKW ^C _L
---------------------	---------------------------------

<LOCAL> CARTRIDGE	MCYKW ^C _L
----------------------	---------------------------------

600ml Ink cartridge



- 600ml ink cartridge can be used on firmware Ver.1.20 or later.

To use the 600ml ink cartridges, register the case weight (this page) and the cartridge weight (next page). Please prepare your scale (which can weigh up to 1200g in 1g).

Registering the case weight

Firstly register the case weight in the following procedures.
For the 600ml cartridges, this machine recalculates remaining amount of ink from a registered case weight.

- 1

Weigh the case of an empty cartridge on the scale.
 - Do not attach the IC chip and the ink pack when weighing.
- 2

Prepare the 600ml cartridge.
 - Load the IC chip and the ink pack into an empty cartridge.
- 3

Set the 600ml cartridge in the local mode.

<LOCAL>
- 4

Enter the weight checked at the Step 1 by pressing the or key, and press the key.
 - If other 600ml cartridges are found, an entry screen is displayed. Repeat the Step 1 to 4.
 - When all weights of the 600ml cartridge cases are entered, this machine returns to the local mode to enable drawing or cleaning.

CART. Slot M_-----
CASE WEIGHT = 325g

<LOCAL>
- Press the key to cancel the weight entry, but a screen shown on the right appears in the local mode, and the 600ml cartridge is invalid until the weight is entered.
 - If the weight entry is canceled, remove and reinsert the cartridge to display the weight entry screen again, and enter the weight.
 - If the case is replaced, register the case weight again from [MACHINE SET]. (P.3-24)

<LOCAL>
Case Weight M_-----

Registering the cartridge weight

After filling ink into the 600ml cartridge, register the cartridge weight.

1

After filling ink, press the **END** key several times.

2

Press the **◀** key.

- An entry screen of the weight is displayed.

```
InkLevelSet M_-----
Exec <      > Cancel
```

3

Remove the target cartridge, and weigh it on the scale.

4

Set the 600ml cartridge, enter the weight by pressing the **▲** or **▼** key, and press the **ENTER** key.

```
InkLevelSet M_-----
WEIGHT = 789g
```

5

Press the **ENTER** key again.

- If other 600ml cartridges are found, the entry screen is displayed. Repeat the Step 2 to 5.
- When all weights of the 600ml cartridges are entered, this machine returns to the local mode to enable drawing or cleaning.

```
InkLevelSet M_-----
789g OK?      :ent
```

```
<LOCAL>
```



- Press the **▶** key to cancel the weight entry, but a screen shown on the right appears in the local mode, and the canceled cartridge is invalid until the weight is entered.
- If the weight entry is canceled, remove and reinsert the cartridge to display the weight entry screen again, and enter the weight.

```
<LOCAL>
Ink Weight M_-----
```


Registering the cartridge weight (After LVL LOW / LVL END)

The 600ml cartridge becomes level low when ink remains 60ml or less, and level end when ink remains 25ml or less.

In this case, register the cartridge weight on the entry screen that is displayed.

The level low or level end cartridge cannot be used until the weight is entered.

1

When a screen shown on the right appears, press the  key.




- This screen appears when returning to the local after LVL LOW or LVL END is detected.

```
InkLevelSet M_-----
Exec <          > Cancel
```

2

Remove the target cartridge, and weigh it on the scale.

3

Set the 600ml cartridge, enter the weight by pressing the  or  key, and press the  key.

```
InkLevelSet M_-----
WEIGHT = 450g
```

4

Press the  key again.

- If other 600ml cartridges are found, an entry screen is displayed. Repeat the Step 1 to 4.

```
InkLevelSet M_-----
450g OK?          :ent
```




(Supported from the firmware ver.1.40)

- After LVL LOW and after you enter the cartridge weight, if ink remains 31ml and more, you can print as usual. Then, when ink is used and ink remains 30ml and less, the status becomes INK NEAR END.
- LAter LVL LOW and after you enter the cartridge weight, if ink remains 30ml and less, the status becomes INK NEAR END.
- If the status becomes INK NEAR END, you can draw, however, you cannot perform cleaning nor ink filling of the relevant head.
- LAter LVL LOW and after you enter the cartridge weight, if ink remains 26ml and less, the status becomes INK NEAR END.
- After LVL LOW and after you enter the cartridge weight, if ink remains 25ml and less, the status of LVL END is not eliminated. Set a new ink cartridge.

```
<LOCAL>
INK NEAR ENDMC_-----
```



- Press the  key to cancel the weight entry, but a screen shown on the right appears in the local mode, and the canceled cartridge is invalid until the weight is entered.

```
<LOCAL>
INK LVL LOW M_-----
```

```
<LOCAL>
INK LVL END M_-----
```

- If the weight entry is canceled, remove and reinsert the cartridge to display the weight entry screen again, and enter the weight.
- When total entered weight of ink exceeds 1000ml, "Save Failure" error occurs again and entry becomes invalid. (Supported from the firmware ver.1.40)

4

Maintenance

Avoiding dripping of ink droplet at printing

Ink droplets from the mist at drawing may arise on the bottom of the carriage. As the ink droplets may drip and stain the media or cause blur or dot missing, clean the bottom of the carriage periodically.

Tools	• UJ Cleaning swab (SPC-0386)	• Gloves	• Goggles
	• F-200 / LF-200 Washing Liquid (SPC-0568)		

1

Turn the power on.

- After initializing, <LOCAL> is displayed.

2

Press the **FUNCTION** key in the local mode.

<LOCAL>

3

Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

4

Select the [STATION] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

5

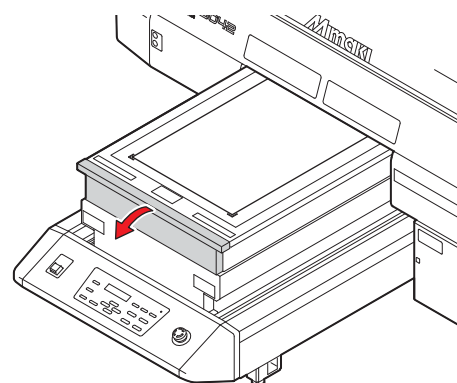
Select the [HEAD MENT] by pressing the **▲** or **▼** key, and press the **ENTER** key.

- The carriage automatically moves to the center of the front end.

STATION
MENT : HEAD MENT

6

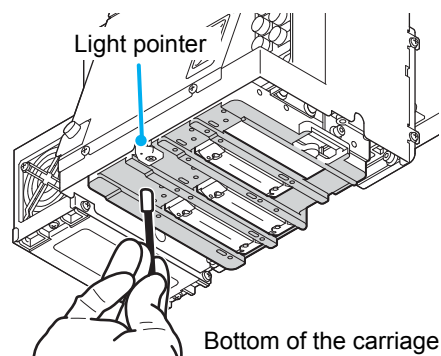
Open the table front cover.



7

Dip the cleaning swab into the cleaning solution, and clean the side surface of the head.

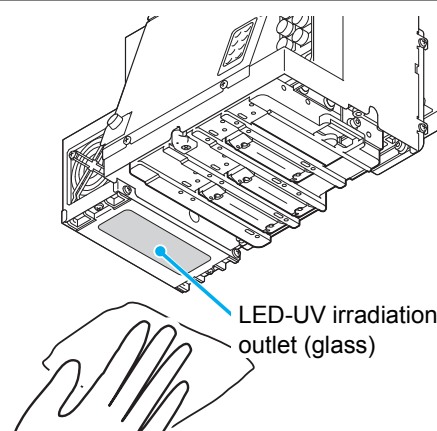
- Do not wipe the nozzle face of the head. It may cause nozzle clogging.
- To buy special cleaning swabs, contact a distributor in your district or our office.



- Be careful not to put the cleaning solution on the light pointer.

8

Dip the TechnoWipe (attached) into alcohol, and clean the LED-UV irradiation outlet.



9

After cleaning, close the table front cover, and press the **ENTER key.**

- Initializing starts.

STATION
COMPLETED : e n t

When the waste ink is full

Waste ink used for head cleaning gathers in the waste ink tank and the wiper bottle.

Periodically check the waste ink tank and the wiper bottle and when they are full, dispose of the ink.

If warning message such as “!WS INKTANK CHK” or “WIPER BOTTLE” appears, check the waste ink tank and the wiper bottle in the same way.



- If you need a spare waste ink tank, contact a distributor in your district or our office.
- Prepare a polyethylene tank to put in the waste ink.



- When ink is discharging such as for head cleaning, conduct the operation after the discharging is completed.
- Handle the waste ink tank with care not to spill the waste ink.
- Dispose of the waste ink when it has gathered about half of the waste ink tank.

Tools

• Gloves

• Goggles

Disposing of the ink in the waste ink tank

1

Turn the power on.

- After initializing, <LOCAL> is displayed.

2

Press the **FUNCTION** key in the local mode.

<LOCAL>

3

Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

4

Select the [STATION] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

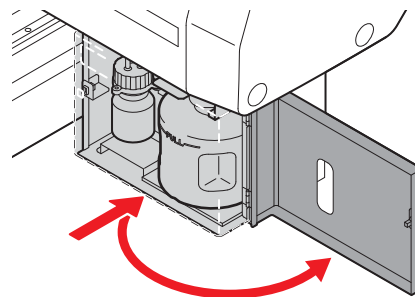
5

Select the [MENT:WASTE TANK] by pressing the **▲** or **▼** key, and press the **ENTER** key.

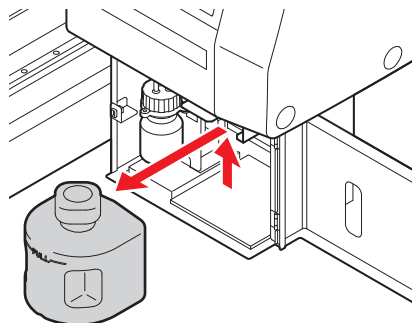
STATION
MENT :WASTE TANK

6**Open the waste ink box cover.**

- By pressing the cover lightly, the cover opens to the front.

**7****Remove the waste ink tank.**

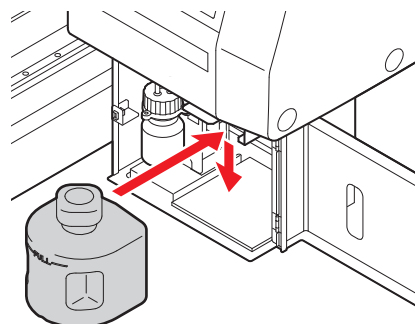
- Lifting the tank slightly up, pull it to the front.

**8****Put the waste ink into a tank with a cover.**

- Before putting the ink into the tank, put paper on the floor. (Not to stain the floor with ink)
- Dispose of the waste ink pursuant to the regulations of your district.

9**Set the empty waste ink tank, and close the cover.**

- (1) Set the waste ink tank in the reverse order of removing.
- (2) Close the waste ink box cover.



Disposing of the waste ink in the wiper bottle

1

Turn the power on.

- After initializing, <LOCAL> is displayed.

2

Press the **FUNCTION** key in the local mode.

<LOCAL>

3

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

4

Select the **[STATION]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

5

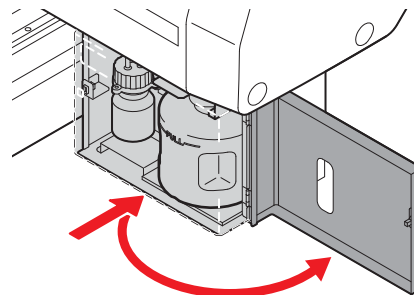
Select the **[MENT:WIPER BOTTLE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

STATION
MENT :WIPER BOTTLE

6

Open the waste ink box cover.

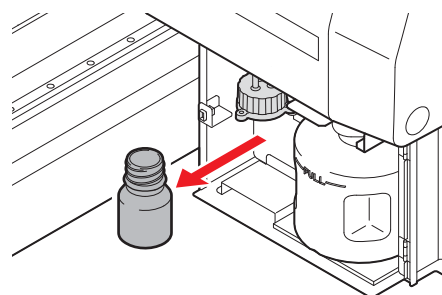
- By pressing the cover lightly, the cover opens to the front.



7

Take the wiper bottle out, and dispose of the waste ink.

- Turn the bottle holding the cover, take out the bottle, and then dispose of the ink in the bottle.
- Dispose of the waste ink pursuant to the regulations of your district.



8

Set the wiper bottle.

- (1) Turn the bottle holding the cover, and close the cover.
- (2) Close the waste ink box cover.

9

Press the **ENTER** key.

STATION
COMPLETED : e n t

10

Press the **END** key to finish.

Replacing the Filter

To use this machine for a long time, clean the filter periodically (about once a week).



- Put on supplied goggles and gloves. Ink may splash into the eye.



- When a screw is dropped in replacing of the filter, contact a distributor in your district or our office.

Tools	• LED UV unit filter (SPC-0657)		• Mist adsorption filter (SPC-0656)
	• Gloves	• Paper towel	• Goggles

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the **[STATION]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

4

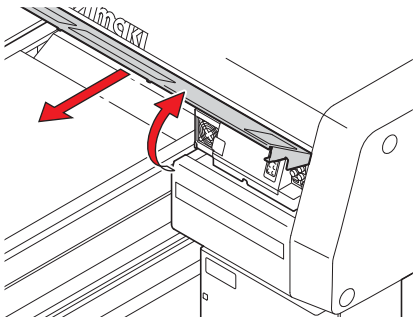
Select the **[MENT:CHECK FILTER]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

STATION
MENT :CHECK FILTER

5

Remove the front cover.

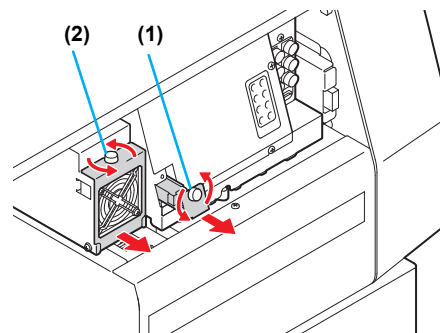
- (1) Push the both ends of the front cover.
- (2) Pull the cover to the front while opening upward.



6

Remove the filter retainer (2 places).

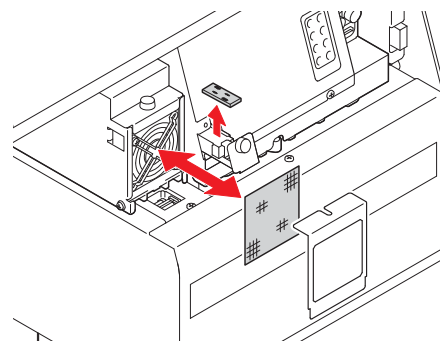
- (1) Turn and pull the right white knob.
- (2) Turn the left white knob and pull the frame of the filter.



7

Replace the filters (2 places).

- Replace two filters.



8

Attach the covers.

- Attach in reverse order of step 5, 6.

9

Press the **ENTER** key.

- Initializing starts.

STATION
COMPLETED : e n t

Washing the Nozzle

To prevent nozzle clogging, execute nozzle washing at the end of the daily work.



- Put on supplied goggles and gloves.

Tools	• UJ Cleaning swab (SPC-0386)	• Gloves	• Goggles
	• F-200 / LF-200 Washing Liquid (SPC-0568)		

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the **[STATION]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

4

Select the **[MENT:NOZZLE WASH]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

- The carriage moves to the left, and the Y-bar moves to the front.

STATION
MENT : NOZZLE WASH

5

Set all the heads to execute washing, and press the **ENTER** key.

- (1) Select the head with the **◀ ▶** key.
- (2) Select executing (displays the head No.) or not executing (displays “_”) of the nozzle washing with the **▲ ▼** key.

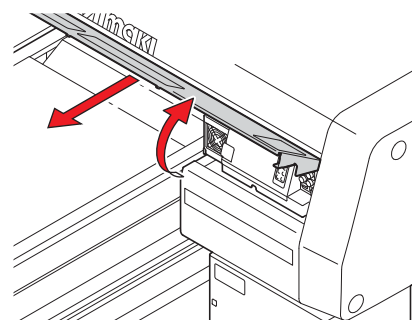
STATION
HEAD [1 2 3]

6

Remove the front cover.

- (1) Push the both ends of the front cover.
- (2) Pull the cover to the front while opening upward.

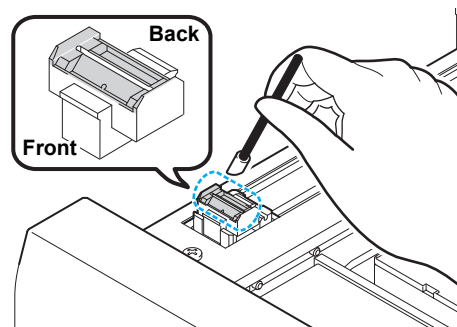
- The wiper moves to the front.



7

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

- Wipe the places shown in the right.



8

Put washing liquid into the dropper, and drop on the caps to fill them.

- Fill the washing liquid into the three caps.



9

Replace the front cover, and press the **ENTER** key.

- Capping is performed.

Fill the liquid.
COMPLETED : ent

10

Set leaving time by pressing the **▲** or **▼** key, and press the **ENTER** key.

- Usually set 10 min.
(Set value: 1 to 99 min)
- After the leaving time, cleaning is performed.

STATION
LEAVING : 1min



CLEANING ACTIVE
* * * - - - - -



- Adjust the leaving time depending on frequency of use or dirt of the nozzle.

11

Press the **END** key to finish.

4

Maintenance

Wash the ink discharge passage

Wash the ink discharge passage regularly to prevent the head nozzles from clogging due to ink coagulation inside the passage.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key.

FUNCTION
MAINTENANCE <ENT>

3

Press the **ENTER** key.

4

Select the **[STATION]** by pressing the **▲** or **▼** key.

MAINTENANCE
STATION <ent>

5

Press the **ENTER** key.

6

Select the **[MENT:DISWAY WASH]** by pressing the **▲** or **▼** key.

STATION
MENT : DISWAY WASH

• The carriage moves to the left, and the Y-bar moves to the front.

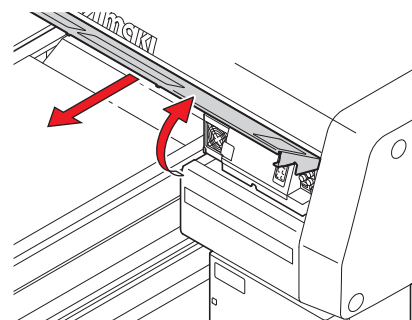
7

Press the **ENTER** key.

8

Remove the front cover.

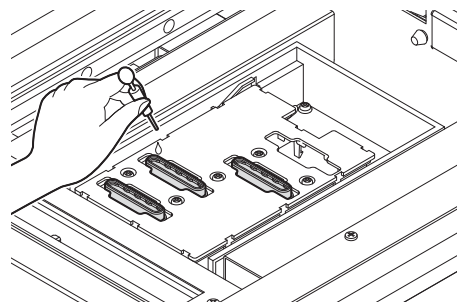
- (1) Push the both ends of the front cover.
- (2) Pull the cover to the front while opening upward.



9

Put washing liquid into the dropper, and drop on the caps to fill them.

- Fill the washing liquid into the three caps.



10

Replace the front cover, and press the **ENTER** key.

- Capping is performed.

Fill the liquid.
COMPLETED :ent

When the Machine Is Not Used for a Long Time (CUSTODY WASH)

When the machine is not going to be used for a week or more, use the cleaning function for custody to clean the head nozzles and ink discharge passage. After this, keep the machine in custody.



- Put on supplied goggles and gloves.

Tools	• UJ Cleaning swab (SPC-0386)	• Gloves	• Goggles
	• F-200 / LF-200 Washing Liquid (SPC-0568)		

1 Press the **FUNCTION** key in the local mode.

<LOCAL>

2 Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3 Select the **[STATION]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

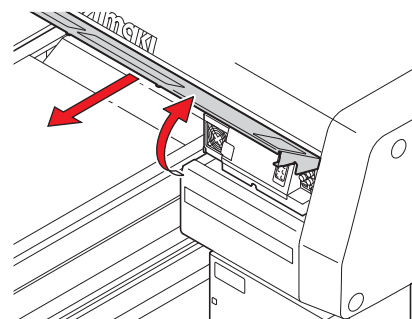
4 Select the **[MENT:CUSTODY WASH]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

STATION
MENT : CUSTODY WASH

- The carriage moves to the left, and the Y-bar moves to the front.
- The wiper moves to the front.

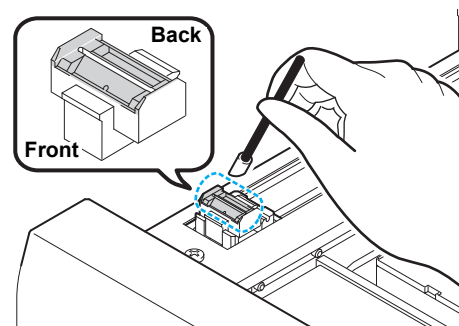
5 Remove the front cover.

- (1) Push the both ends of the front cover.
- (2) Pull the cover to the front while opening upward.



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

- Wipe the places shown in the right.



7

Put washing liquid into the dropper, and drop on the caps to fill them.

- Fill the washing liquid into the three caps.



8

Replace the front cover, and press the **ENTER** key.

- Capping is performed.

Fill the liquid.
COMPLETED : ent

9

Set leaving time by pressing the **▲** or **▼** key, and press the **ENTER** key.

- Usually set 10 min.
(Set value: 1 to 99 min)
- After the leaving time, cleaning is performed.

STATION
LEAVING : 1min



CLEANING ACTIVE
* * * - - - - -

10

Press the **END** key to finish.

Washing the Head

When you move the machine or you do not use the machine for a long time (for one month and more), wash the head and the ink discharge passage by the procedures below:

Important!

- This machine is equipped with three heads.
- To wash one head, two washing liquid cartridges (SPC-0516FS) are required at the minimum. Before performing the work, prepare new washing liquid cartridge.
- When you wash all heads at the same time, prepare six washing liquid cartridges with third part of them remains.
- To restart drawing after washing the head, ink filling is required. (☞ P.4-28)

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the **[HEAD WASH]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
HEAD WASH <ENT>

4

Press the **▲**, **▼**, **◀** or **▶** key to select the head to wash.

MAINTENANCE
HEAD [_ _ YK _ _]

- (1) Select the head with **◀ ▶** or keys.
- (2) Select execution/non-execution of the head cleaning with **▲ ▼** or keys.
 - Select execution of cleaning for every head.
 - **Wash** : :Head No. being set is displayed.
 - **Do not wash** : i _ ↑ is displayed.
 - When you wash all heads, display all head numbers.
 - When you wash the head one by one, display one head number (two).

5

Press the **ENTER** key.

WASH
REMOVE CARTRIDGE

WASHING
PLEASE WAIT

6

Remove the ink cartridge.

- Remove all ink cartridges corresponding to the head selected in the Step 4.
- When the ink cartridge is removed, ink discharge starts.
- When ink discharge has been completed, the right screen is displayed.

WASH
SET WASHING LIQUID

7

Set the washing liquid cartridge to the ink station.

- Set the washing liquid cartridge in the cartridge slot corresponding to the head to wash. The machine starts absorption of washing liquid.
- When absorption of washing liquid has been completed, the right screen is displayed.

WASH
REMOVE CARTRIDGE

8

Remove the washing liquid cartridge.

- Remove all set washing liquid cartridges.
- When removing the washing liquid cartridge, the machine starts discharge of washing liquid.
- When discharge of washing liquid has been completed, the right screen is displayed.

WASH
SET WASHING LIQUID

9

Repeat the procedures in the Step 7 and 8.

- Again, set/remove the washing liquid cartridge, and wash ink remaining in the ink discharge passage.
- When discharge of washing liquid has been completed, the right screen is displayed.

TUBE CLEANING
COMPLETED : e n t

10

Press the **ENTER** key.

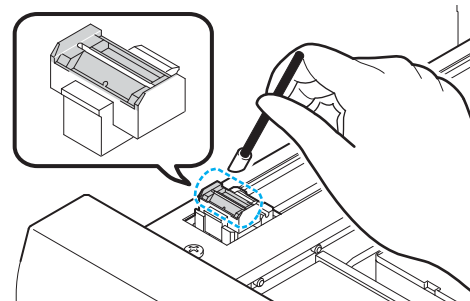
- Here, tube cleaning work is not required. Do nothing and press the **ENTER** key. Then, perform the works from the Step 12.

TUBE CLEANING
COMPLETED : e n t

11

Clean the wiper.

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



12

When cleaning of the wiper has been completed, press the **ENTER** key.

- When you wash another head continuously, press the **ENTER** key and perform the works from the Step 4.
- When you terminate the operation, press the **END** key several times.

MAINTENANCE
HEAD WASH <ENT>

4

Maintenance

Perform ink filling

When head washing has been completed, "NOT FILLUP" is displayed on the screen and drawing cannot be performed as it is.

Perform ink filling so that you may restart drawing after head washing.



- Ink filling consumes much ink than that for the head cleaning (☞ P.2-7). Before performing ink filling, check that ink remains enough in the cartridge.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the [FILL UP INK] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
FILL UP INK <ENT>

4

Select the [TYPE:fillup] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FILL UP INK
TYPE:fillup

5

Press the **▲**, **▼**, **◀** or **▶** key to select the head to fill up ink.

FILL UP INK
HEAD [__YK__]

- (1) Select the head with **◀** or **▶** keys.
- (2) Select execution/non-execution of the ink filling with **▲** or **▼** keys.
 - Select execution of ink filling for every head.
 - **Fill up** : :Head No. being set is displayed.
 - **Not fill up** : " _ " is displayed.
 - When you fill up all heads, display all head numbers.

6

Press the **ENTER** key.

- The machine starts ink filling.

FILL UP INK

- When ink filling has been completed, the Y bar moves to the front and the right screen is displayed.
- Here, deflating work is not required. Proceed to the Step 7 as it is.

FILL UP INK
Please deflate :ent

7

Press the **ENTER** key.

- The screen returns to LOCAL.

8

When ink filling has been completed, perform test drawing (☞ P.2-6) to check the drawing result.

- If there is nozzle missing, perform head cleaning (☞ P.2-7) and test drawing repeatedly.



- When you perform ink filling with 600ml cartridge set, it is necessary to enter the cartridge weight after ink filling. (☞ P.4-10)

Setting nozzle face cleaning time

When set times of drawing are completed, nozzle face of the head is cleaned automatically to remove ink droplets on the nozzle face.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the [MAINTENANCE] by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the [INT.WIPING] by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
INT.WIPING <ent>

4

Set the number of scanning times (OFF / 1 to 255) by pressing the **▲** or **▼** key, and press the **ENTER** key.

INT.WIPING
SCAN COUNT = OFF

• When [OFF] is set, periodical wiping is not executed.

5

Press the **END** key to finish.

4

Maintenance

Regular maintenance for white ink

White ink is easier precipitate than other inks.

- In case without printing more than two weeks, white ink may cause precipitate in ink cartridge or inside of the machine.
- When the ink is precipitated, nozzle clogging occurs and normal drawing can not be obtained.
- Make sure to perform periodical maintenance to avoid precipitation and to keep white ink good condition.



- Be sure to perform the following operation at least once a week.
- Use the specified ink cartridge.

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the  or  key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the **[WHITE MAINTENANCE]** by pressing the  or  key, and press the **ENTER** key.



MAINTENANCE
WHITE MAINTAIN <ent>

4

Select executing white maintenance or not for each head, and press the **ENTER** key.

WHITE MAINTAIN
HEAD [MCYKW_L]

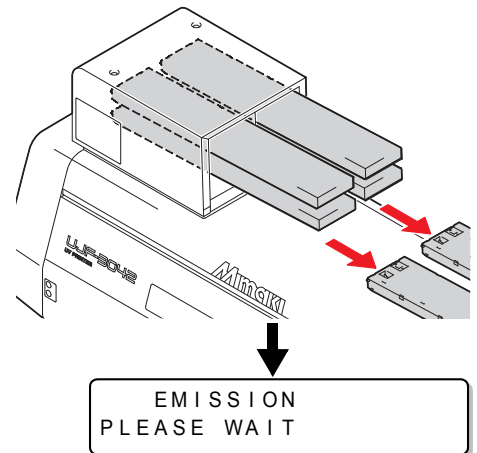
(1) Select the head with the   key.

(2) Select executing (displays the head No.) or not executing (displays “_”) of white maintenance with the   key.

5**Pull out the two white ink cartridges from the ink station.**

- When the two white ink cartridges are pulled out, white ink discharge operation starts.

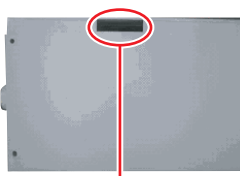
WHITE MAINTAIN
REMOVE CARTRIDGE

**6****Shake the white ink cartridge up and down about 10 times slowly.**

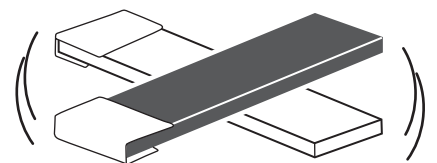
- To avoid the spill of the ink when shaking the ink cartridge, cover the part A on the upper surface of the cartridge and the part B on the bottom surface of the cartridge with paper towel, etc. and slowly shake the ink up and down.



Part A
(Insertion hole of the needle)



Part B
(Gap on the bottom surface)

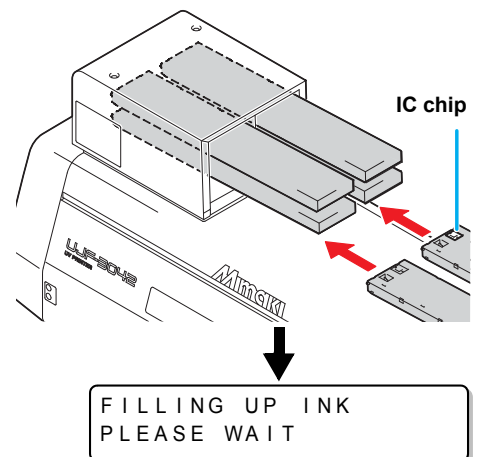


Press firmly with paper towel and
shake slowly.

7**When a screen shown in the right is displayed, return the two white ink cartridges to the ink station.**

- As shown in the drawing, set an ink cartridge turning up a side containing the IC chip.
- When the two white ink cartridges are set, white ink filling starts.

WHITE MAINTAIN
SET CARTRIDGE

**8****When a message shown in the right is displayed after completion of white ink filling, press the **END** key to finish.**

MAINTENANCE
WHITE MAINTAIN <ent>

4

Maintenance

Cleaning of wiper

The wiper sweeps ink stuck on the nozzle of the head.
The wiper becomes tainted with ink or dusts during the operation of this machine.
In order to keep the head in good condition, clean the wiper frequently.



- When cleaning, be sure to put on the supplied goggles and gloves since you may get ink in your eyes.

Tools	• UJ Cleaning swab (SPC-0386)	• Gloves	• Goggles
	• F-200 / LF-200 Washing Liquid (SPC-0568)		

1

Press the **FUNCTION** key in the local mode.

<LOCAL>

2

Select the **[MAINTENANCE]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

FUNCTION
MAINTENANCE <ENT>

3

Select the **[STATION]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

MAINTENANCE
STATION <ent>

4

Select the **[MENT:WIPER EXCHG]** by pressing the **▲** or **▼** key, and press the **ENTER** key.

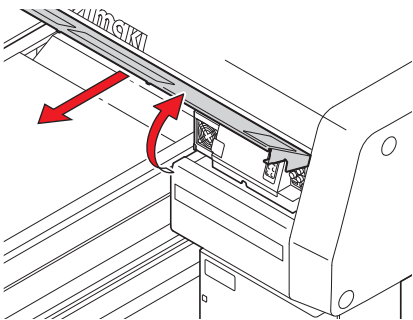
STATION
MENT :WIPER EXCHG

- The carriage moves to the left.
- The wiper moves to the front.

5

Remove the front cover.

- (1) Push the both ends of the front cover.
- (2) Pull the cover to the front while opening upward.

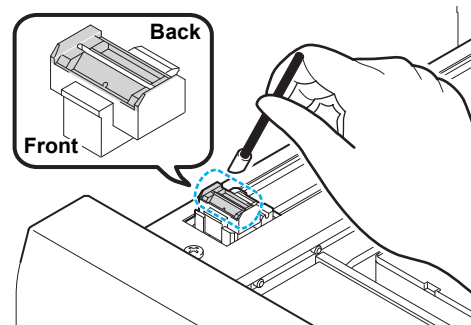


6

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

- Wipe the places shown in the right.
- If the dirt of the wiper is heavy, replace the nozzle (SPA-174).

When fitting the nozzle, be careful not to put back to front.



7

After cleaning, replace the front cover, and press the **ENTER** key.

- Initializing starts.

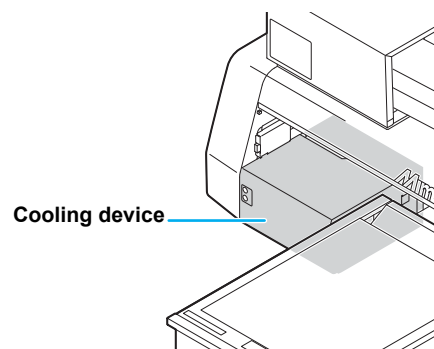
STATION
COMPLETED : e n t

8

Press the **END** key to finish.

Refilling antifreeze mixed water

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



Precautions for refilling



- Water and antifreeze liquid compound ratio should be 2(water) to 1(Antifreeze liquid).
- 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.



Precautions in handling the antifreeze liquid



- Be sure to wear goggle and gloves for handling the antifreeze liquid.



- Use the recommended antifreeze liquid by Mimaki. If not, the cooling device may be broken. (Supplied antifreeze liquid : SPC-0394 [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 (MSDS).



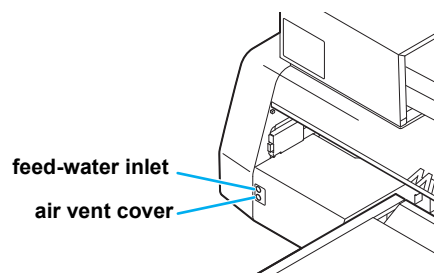
- When purchasing a spare cooling water tank, contact a distributor in your district or our office.
- Prepare a tank with a cap to put in the waste water from cooling water tank.
- When water in the cooling water tank is low, an error message is displayed. In this case, replace water in the same way shown as the next page.

ERROR 705
WATER LACK

Refilling antifreeze mixed water

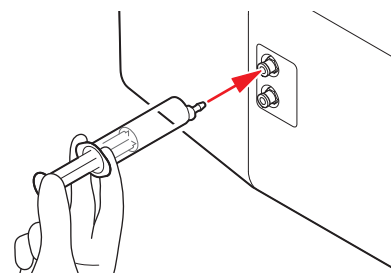
If water lack error is displayed, refill antifreeze mixed water.

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



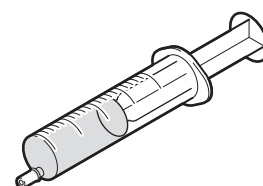
2 Remove all remaining water in the tank.

- (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.



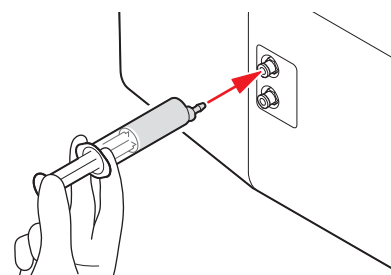
3 Mix antifreeze liquid with water.

- (1) Mix 1 part antifreeze liquid with 2 parts water.
- (2) Put the mixed water into a provided syringe.

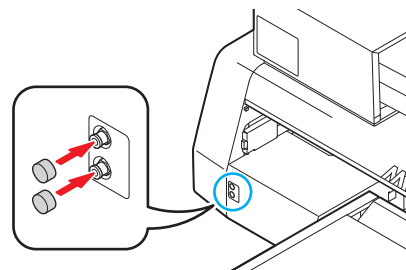


4 Refill antifreeze liquid.

- Fill the antifreeze liquid from the feed-water inlet.
- Put the liquid of 50ml into the syringe, and put it into the device. Repeat this 9 times to fill up (450ml).



5 Cover the feed-water inlet and the air vent.



CHAPTER 5

In Case of Trouble



This chapter describes the actions to be taken when this machine develops any trouble or displays an error message.

Before taking a phenomenon as a trouble	5-2
The machine cannot be energized	5-2
The machine cannot perform printing	5-2
If image quality declines	5-3
Resolving nozzle clogging	5-3
Troubles for which error messages are given on the LCD	5-4
Warning Message	5-4
Error message	5-6

Before taking a phenomenon as a trouble

If something is wrong with the machine, the buzzer sounds and a corresponding error message is given on the LCD. Take an appropriate corrective measure in accordance with the message.

The machine cannot be energized

More often than not, this is due to improper connection of the power cable. Check that the power cable has been properly connected to the power outlet and the computer.

Has the power cable been connected to the machine and the receptacle?

No

Securely connect the power cable to them.

The machine cannot perform printing

This occurs when the data is not being transmitted to the machine properly. It can also occur when any of the machine functions fails or the media has been set improperly.

Is the correct interface cable used?

No

Use the USB2.0 interface cable.

Has the interface cable been securely connected in position?


No

Securely connect the interface cable in position.

Yes

Is the message telling that ink has run out shown on the display?




Yes

Replace the ink cartridge with a new one.
 P.4-4

If image quality declines

Take measures as follows in accordance with the problem.

If the problem does not improve, contact your local MIMAKI distributor or MIMAKI office to call for service.

Development	Corrective measure
Lines/blur	(1) Execute the head cleaning. ( P.2-7) (2) If slip of paper is attached in the head path, remove it.
Large ink drop on media	(1) Execute the head cleaning. ( P.2-7) (2) Remove the dust of the media. (3) Clean the dust on the table. (4) Clean the bottom surface of the carriage. ( P.4-12)
Media is raised during printing and printing stops.	(1) Set new media and start printing. (2) Check ON/OFF of the vacuum. (3) Fix the media with adhesive tape.

Resolving nozzle clogging











If nozzle clogging is not resolved even the head cleaning operation of P.2-7 has been executed, check the following.

Replace ink with the operation of P.4-4.

Troubles for which error messages are given on the LCD

If something is wrong with the machine, the buzzer sounds and a corresponding error message is given on the LCD. Take an appropriate corrective measure in accordance with the message.

Warning Message

Message	Solution
<LOCAL> NO CARTRIDGE	• Attach the ink cartridge(s) shown on the display. ( P.4-4)
<LOCAL> INK NEAR END	• Replace the ink cartridge shown on the display as soon as possible. ( P.4-4)
<LOCAL> INK END	• Replace the ink cartridge shown on the display. ( P.4-4)
<LOCAL> Expiration	• The ink has expired. Replace the ink cartridge shown on the display with a new one. ( P.4-4)
<LOCAL> INK TYPE	• Check the type of the loaded ink cartridge is correct.
<LOCAL> Color of INK	• Check the color shown on the display and the color of the loaded ink cartridge are the same.
<LOCAL> NON-ORIGINAL	• Use the MIMAKI ink.
<LOCAL> WRONG INK IC	• Insert the ink cartridge shown on the display again. If the error is still displayed after this, call a distributor in your district or our office.
<LOCAL> !WORK High	• An obstacle was detected. Lower the table so that this warning disappears. ( P.3-4)
<LOCAL> WATER LACK	• Check the amount of water in the cooling water tank, and fill as needed. ( P.4-34)
<LOCAL> !WS INKTANK CHK	• Execute the station maintenance and dispose of the ink in the waste ink tank. ( P.4-14)
<LOCAL> WIPER BOTTLE	• Execute the station maintenance and dispose of the ink in the wiper bottle. ( P.4-16)
<LOCAL> !REPLACE WIPER	• Execute the station maintenance and clean the wiper. ( P.4-32)
<LOCAL> !CHECK FILTER	• Execute the station maintenance and replace the filter. ( P.4-18)
<LOCAL> CAP CLEANING	• Execute the carriage out of the station maintenance, and clean the cap.
<LOCAL> Case Weight	• A case weight of 600 ml cartridge is not set. Set the case weight on “600 ml CARTRIDGE” of “MACHINE SET”.
<LOCAL> INK LVL LOW	• Enter weight of the cartridge on “CART WEIGHT” of “SET UP”.

Message	Solution
<LOCAL> INK LVL END	<ul style="list-style-type: none"> • If ink remains, enter weight of the cartridge on "CART WEIGHT" of "SET UP". • If ink does not remain, replace with a new cartridge.
<LOCAL> !CHECK LED UV LEVEL	<ul style="list-style-type: none"> • Check illuminance of the LED UV lamp. If it is lower than the set value, replace the lamp.
<LOCAL> Preservation Failure	<ul style="list-style-type: none"> • Writing of the setting of remaining amount of ink has failed. Remove and set the cartridge again to rewrite. If the error does not disappear, replace with a new cartridge.
<LOCAL> Cartridge Weight	<ul style="list-style-type: none"> • The cartridge weight is not entered. Enter the weight of the cartridge.





Error message

When an error message is displayed, follow the table below and solve the problem.

If the same error message is displayed again, contact a distributor in your district or our office.

Message	Solution
ERROR 108 HD CONNECT[12345678]	<ul style="list-style-type: none"> • Turn the power of this machine off and turn it on after a while. • If the same error message appears again, contact a distributor in your district or our office to call for service.
ERROR 108 HD THERMIS[12345678]	
ERROR 12e Head Failed[xxxx]	
ERROR 122 CHECK:SDRAM	
ERROR 128 HDC FIFO OVER	
ERROR 128 HDC FIFO UNDER	
ERROR 129 BATTERY EXCHANGE	<ul style="list-style-type: none"> • Call a distributor in your district or our office.
ERROR 130 HD DATA SEQ	
ERROR 201 COMMAND	<ul style="list-style-type: none"> • Securely connect the interface cable in position. • Use an interface cable in conformance with the standard.
ERROR 202 PARAMETER	<ul style="list-style-type: none"> • Turn the power of this machine off and turn it on after a while. • If the same error message appears again, contact a distributor in your district or our office to call for service.
ERROR 203 Ment Command	
ERROR 304 USB INIT ERR	
ERROR 305 USB TIME OUT	

Message	Solution
ERROR 401 MOTOR X	<ul style="list-style-type: none"> • Turn the power of this machine off and turn it on after a while. • If the same error message appears again, contact a distributor in your district or our office to call for service.
ERROR 403 X CURRENT	
ERROR 402 MOTOR Y	
ERROR 404 Y CURRENT	
ERROR 420 Z POSITION	<ul style="list-style-type: none"> • Check the weight of media (tools included) on the table is 5kg or less. • Turn the power of this machine off and turn it on after a while.
ERROR 421 !CHECK FILTER	<ul style="list-style-type: none"> • Execute the station maintenance and replace the filter. (☞ P.4-18)
ERROR 505 !WORK High	<ul style="list-style-type: none"> • An obstacle is detected. Lower the table so that this warning disappears. (☞ P.3-4)
ERROR 509 HDC POSCNT	<ul style="list-style-type: none"> • Turn the power of this machine off and turn it on after a while. • If the same error message appears again, contact a distributor in your district or our office to call for service.
ERROR 50a Y ORIGIN	
ERROR 50f L - SCALE BLACK	
ERROR 510 X ORIGIN	
ERROR 511 Z ORIGIN	
ERROR 601 INK NEAR END	<ul style="list-style-type: none"> • Replace the ink cartridge shown on the display as soon as possible. (☞ P.4-4)
ERROR 602 INK END	<ul style="list-style-type: none"> • Replace the ink cartridge shown on the display. (☞ P.4-4)
ERROR 603 NO CARTRIDGE	<ul style="list-style-type: none"> • Attach the ink cartridge(s) shown on the display. (☞ P.4-4)
ERROR 605 !REPLACE WIPER	<ul style="list-style-type: none"> • Execute the station maintenance and clean or replace the wiper. (☞ P.4-32)
ERROR 606 WRONG CARTRIDGE	<ul style="list-style-type: none"> • Insert the ink cartridge shown on the display again. If the error is still displayed after this, call a distributor in your district or our office.

Message	Solution
ERROR 607 CAP CLEANING	• Execute the carriage out of the station maintenance, and clean the cap.
ERROR 60b WIPER BOTTLE	• Execute the station maintenance and dispose of the ink in the wiper bottle. ( P.4-16)
ERROR 60c INK TYPE	• Check the type of the loaded ink cartridge is correct.
ERROR 60d REMAIN INK	• The remaining ink is low. Load a new ink cartridge. ( P.4-4)
ERROR 60e NOT COMPLETE FUP	• Fill ink.
ERROR 60f Expiration	• The ink has expired. Replace the ink cartridge shown on the display with a new one. ( P.4-4)
ERROR 610 NOT FILLUP	• Fill ink into all the heads.
ERROR 611 Case Weight	• A case weight of 600 ml cartridge is not set. Set the case weight on “600 ml CARTRIDGE” of “MACHINE SET”.
ERROR 612 INK LVL LOW	• Enter weight of the cartridge on “CART WEIGHT” of “SET UP”.
ERROR 613 INK LVL END	• If ink remains, enter weight of the cartridge on “CART WEIGHT” of “SET UP”. • If ink does not remain, replace with a new cartridge.
ERROR 614 Preservation Failure	• Writing of the setting of remaining amount of ink has failed. Remove and set the cartridge again to rewrite. If the error does not disappear, replace with a new cartridge.
ERROR 615 Cartridge Weight	• The cartridge weight is not entered. Enter the weight of the cartridge.
ERROR 701 THERMISTOR	• Turn the power of this machine off and turn it on after a while. • If the same error message appears again, contact a distributor in your district or our office to call for service.
ERROR 705 WATER LACK	• Check the amount of water in the cooling water tank, and fill as needed. ( P.4-34)
ERROR 706 UV UNIT OVER HEAT	• Turn the power of this machine off and turn it on after a while. • If the same error message appears again, contact a distributor in your district or our office to call for service.
ERROR 707 !HD HEATER BRK	
ERROR 708 UV THERMISTOR BRK	
ERROR 709 !CHECK LED UV LEVEL	• Check illuminance of the LED UV lamp. If it is lower than the set value, replace the lamp.

Message	Solution
ERROR 901 OPERATION	• Operate this machine correctly.
ERROR 902 DATA REMAIN	• Draw the all received data or clear the data. Then, change the settings. (☞ P.2-8 , P.3-8)
ERROR 90d NO HEAD SELECT	• Head is not selected. Select a head to be cleaned or to be filled.

CHAPTER 6

Appendix



Tables of specifications and functions of this unit are described.

Specifications.....	6-2
Basic unit specifications	6-2
Specifications for ink	6-3
Function Flowchart.....	6-5

Specifications

Basic unit specifications

Item		Specification
Drawing head	Method	On demand piezo-head
	Specification	3-heads (6 nozzles row)
Resolution		x-dpi: 300, 600, 900, 1200 y-dpi: 360, 540, 720, 1080, 1440
Drawing mode	x-dpi: 300	2, 4, 6, 8, 12, 16 pass
	x-dpi: 600	4, 8, 12, 16, 24, 32 pass
	x-dpi: 900	6, 12, 18, 24 pass
	x-dpi: 1200	8, 16, 24, 32 pass
Ink		Exclusive UV curing ink (Genuine ink) LH-100 Bk, C, M, Y + W, CL
Ink supply		Supplies ink through a tube from ink cartridge Remaining ink display function Ink end detection function (220 cc cartridge only)
Ink capacity		220 cc or 600 cc (1 for each color)
Media	Size	300 x 420 mm
	Thickness	Less than 50mm
	Weight	Less than 5 kg
Media adsorption		Blower vacuum adsorption
Maximum drawing area		W 300 x L 420 mm
Distance accuracy	Absolute accuracy	± 0.3 mm or ± 0.3 % of the designated, whichever is larger
	Reproducibility	± 0.2 mm or ± 0.1 % of the designated, whichever is larger
Squareness		± 0.3 mm/400mm
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		Genuine waste ink tank (1600cc/ no tank full sensor)
Interface		USB2.0 compliant
Command		MRL-III (variable dot-compliant) <MIMAKI original command, YMCK bitmap type>
Noise	Stand-by	Less than 55dB (FAST-A, 1m in all direction)
	In continuous operation	Less than 65 dB
	In discontinuous operation	Less than 75dB
Safety standards		FCC-Class A, CE Marking, CB Report, UL60950-1
Ink safety		MSDS
Power requirements		Single phase AC 100 to 240V $\pm 10\%$ 50 / 60 Hz ± 1 Hz
Power consumption		Less than 350 VA
Environment	Temperature	20 to 35 °C (68 to 95 °F)
	Humidity	35 to 65%Rh (No condensation)
	Guaranteed temperature	20 to 25 °C (68 to 77 °F)
	Temperature gradient	± 10 °C (50 °F) or less
	Dust	Equivalent to normal office level
Weight		Approx. 113 kg
External dimensions		1200 (W) x 1090 (D) x 770 (H) mm

Specifications for ink

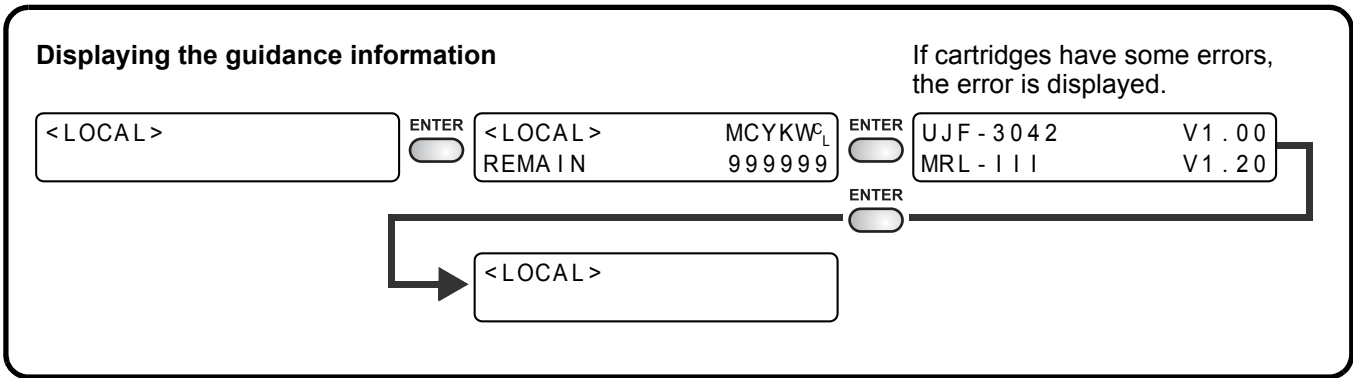
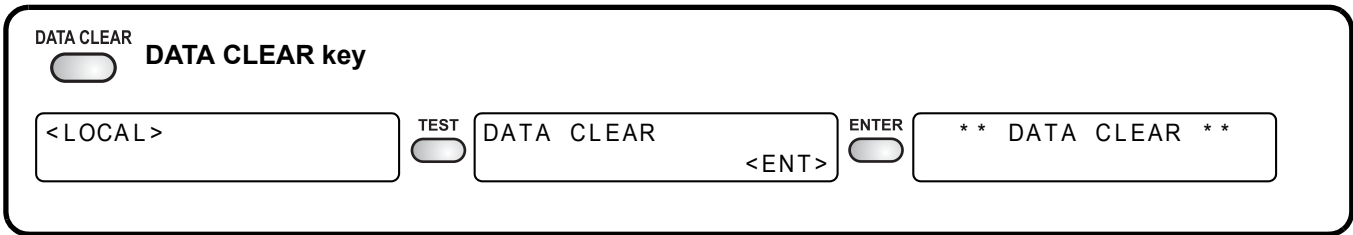
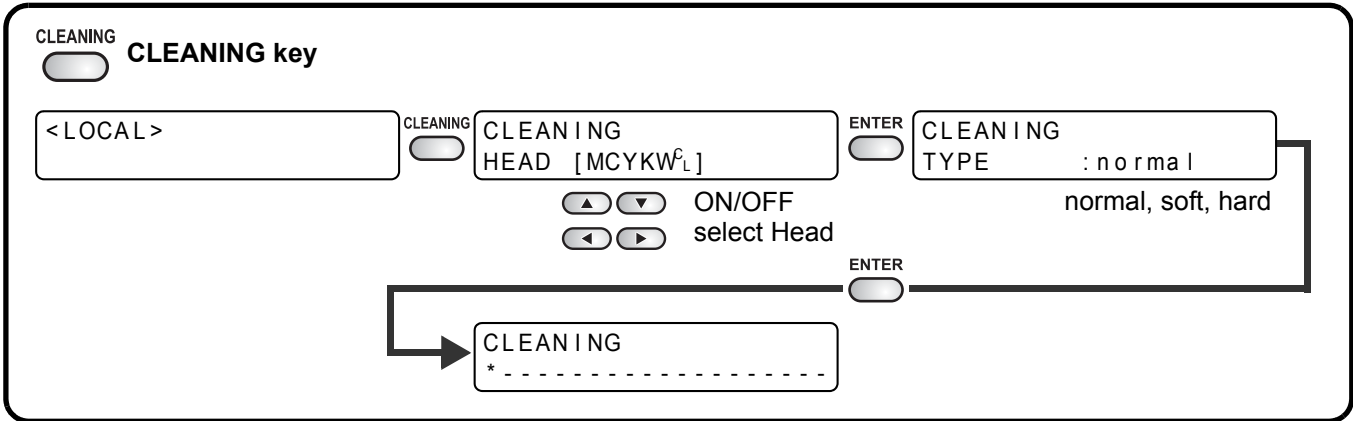
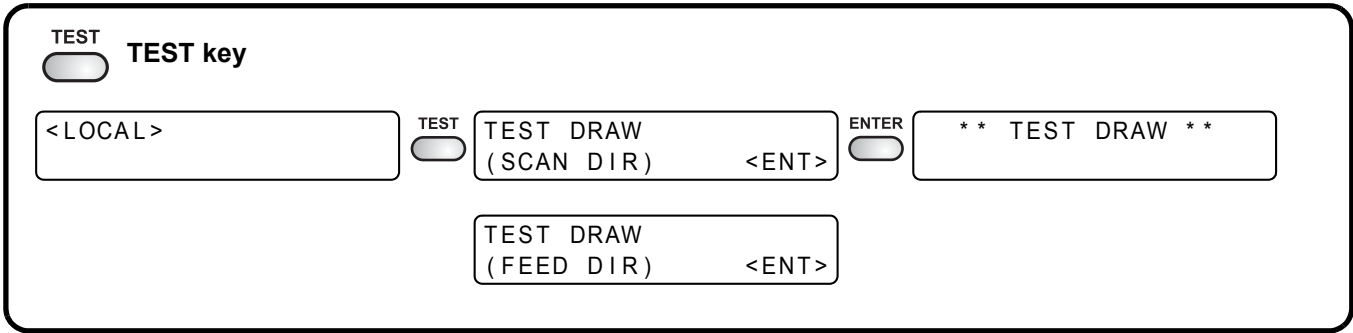
As for the detail, ask the dealer or our branch.

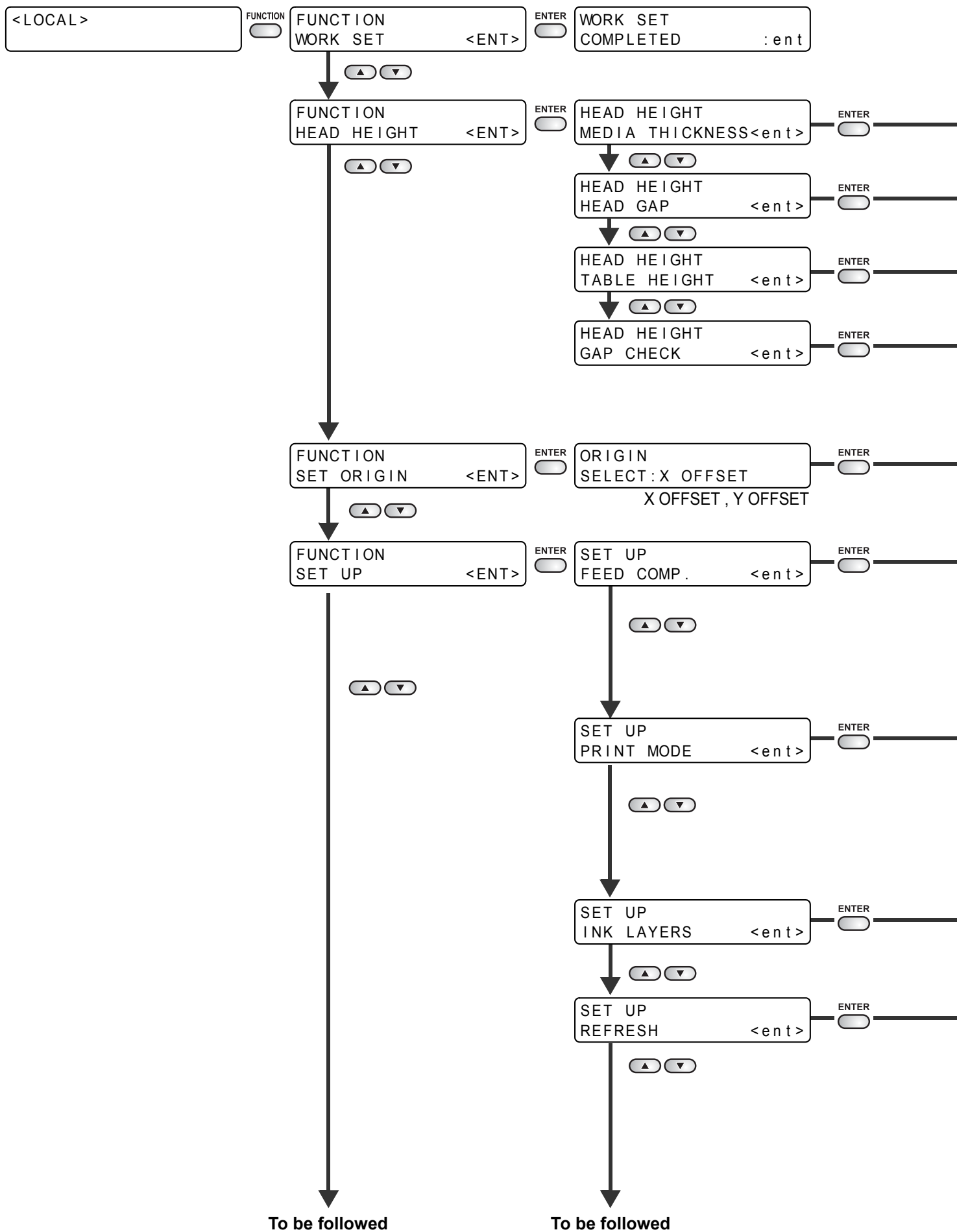
Item		Parts No./ Specification
Feature		Exclusive UV ink cartridge
Ink type		Black, magenta, cyan, yellow, white, clear coat
Capacity of ink cartridge		220 cc or 600 cc
Shelf life		One year from the date of manufacture
Storage temperature	During storage	15 °C to 35 °C (59 to 95 °F)
	During shipping	0 °C to 60 °C (32 to 140 °F) within 2 weeks permitted.

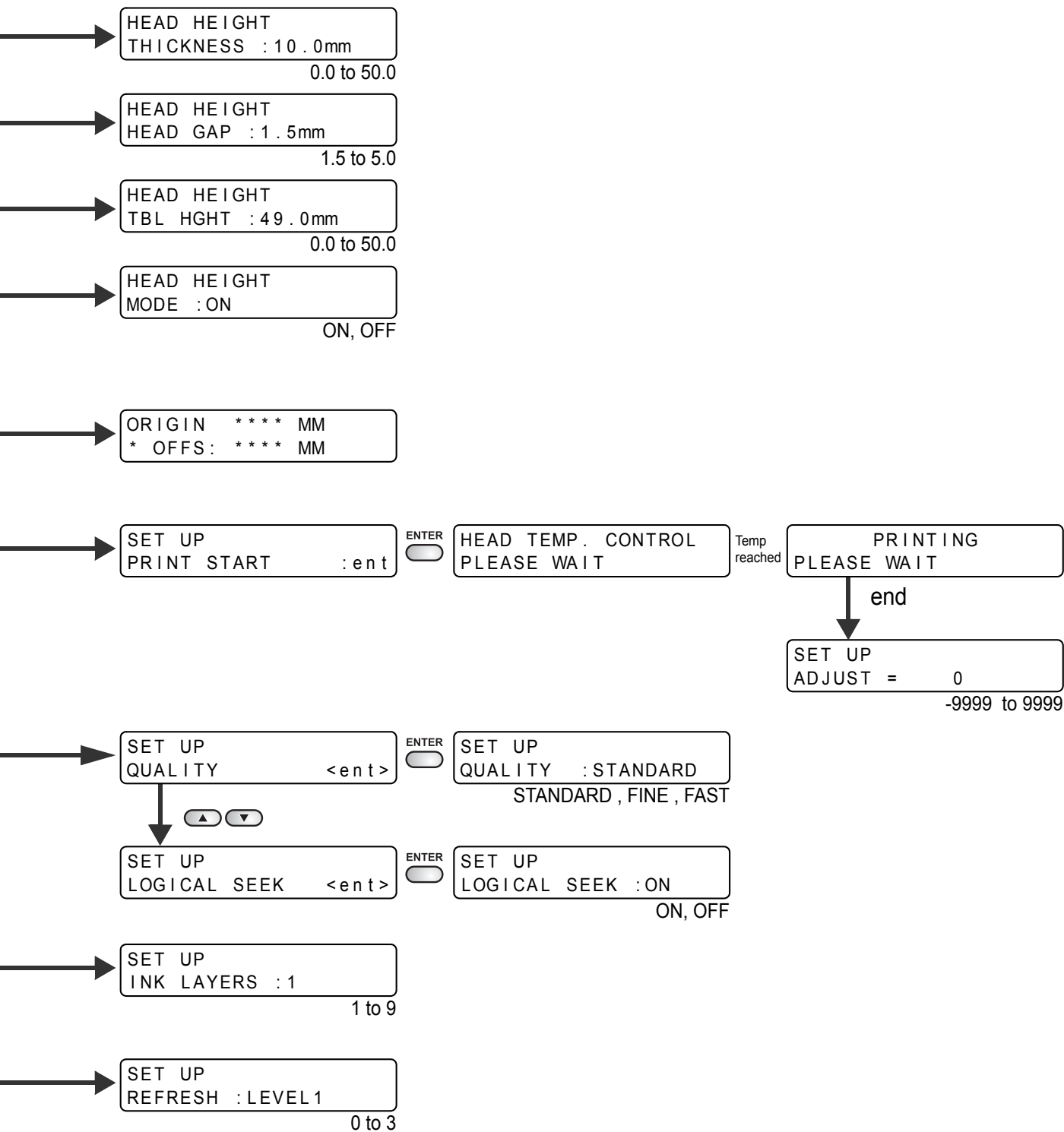


- The ink freezes up if it is left in an environment of under -4 °C (24.8 °F) for a long time. If the ink has frozen up, use it after unfreezing it with leaving in the room temperature (25 °C (77 °F)) for more than 3 hours.
- Do not disassemble an ink cartridge or refill ink in it. That can cause a trouble.

Function Flowchart



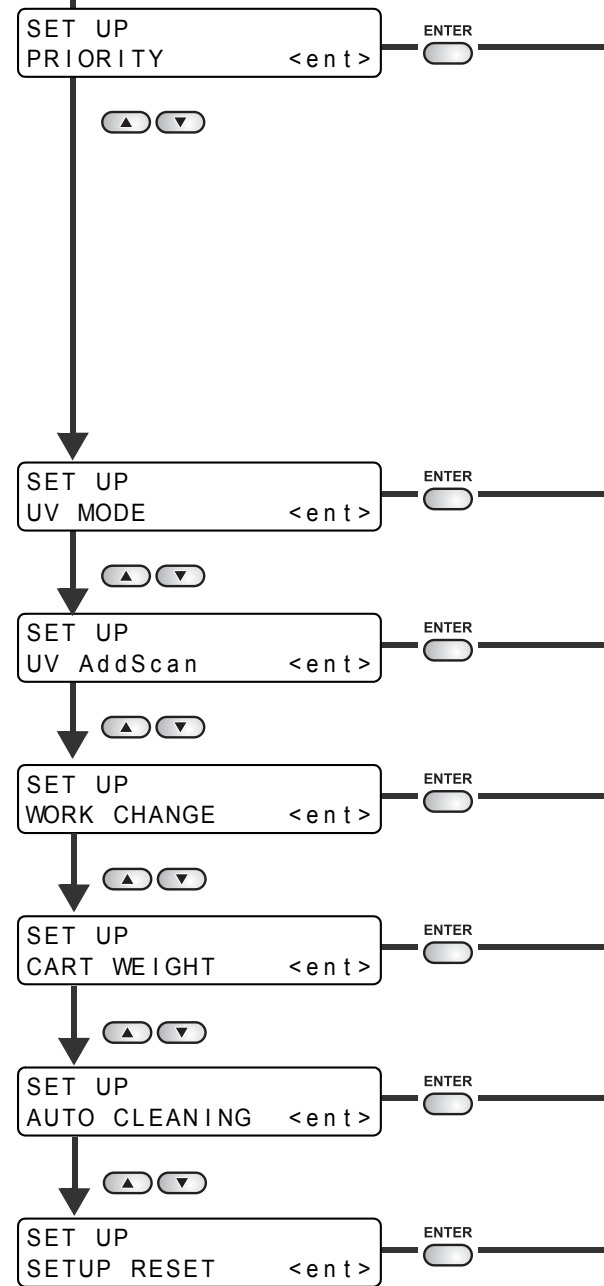




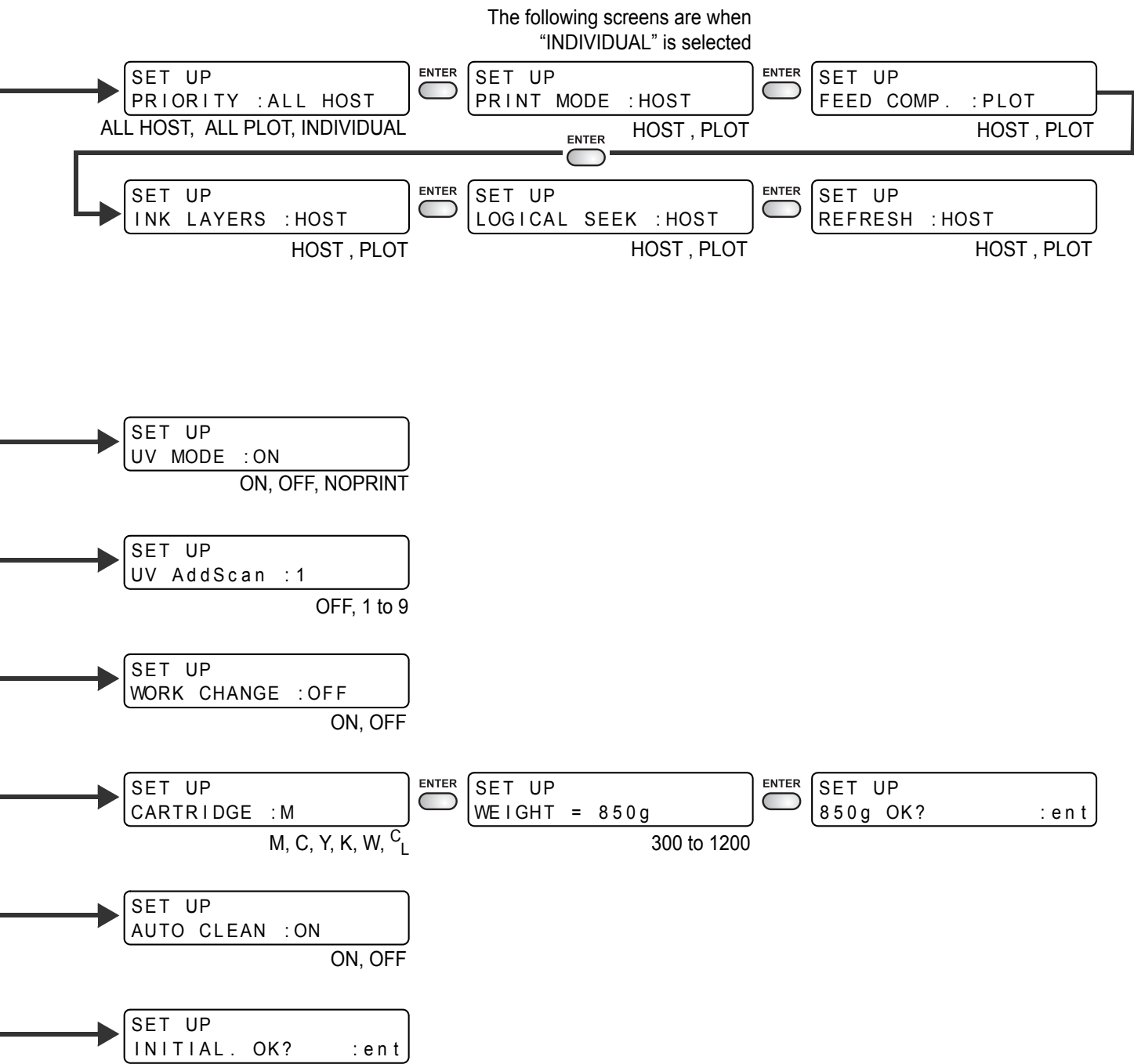
Followed



Followed



To be followed



Followed

FUNCTION MAINTENANCE	<ENT>
-------------------------	-------

ENTER

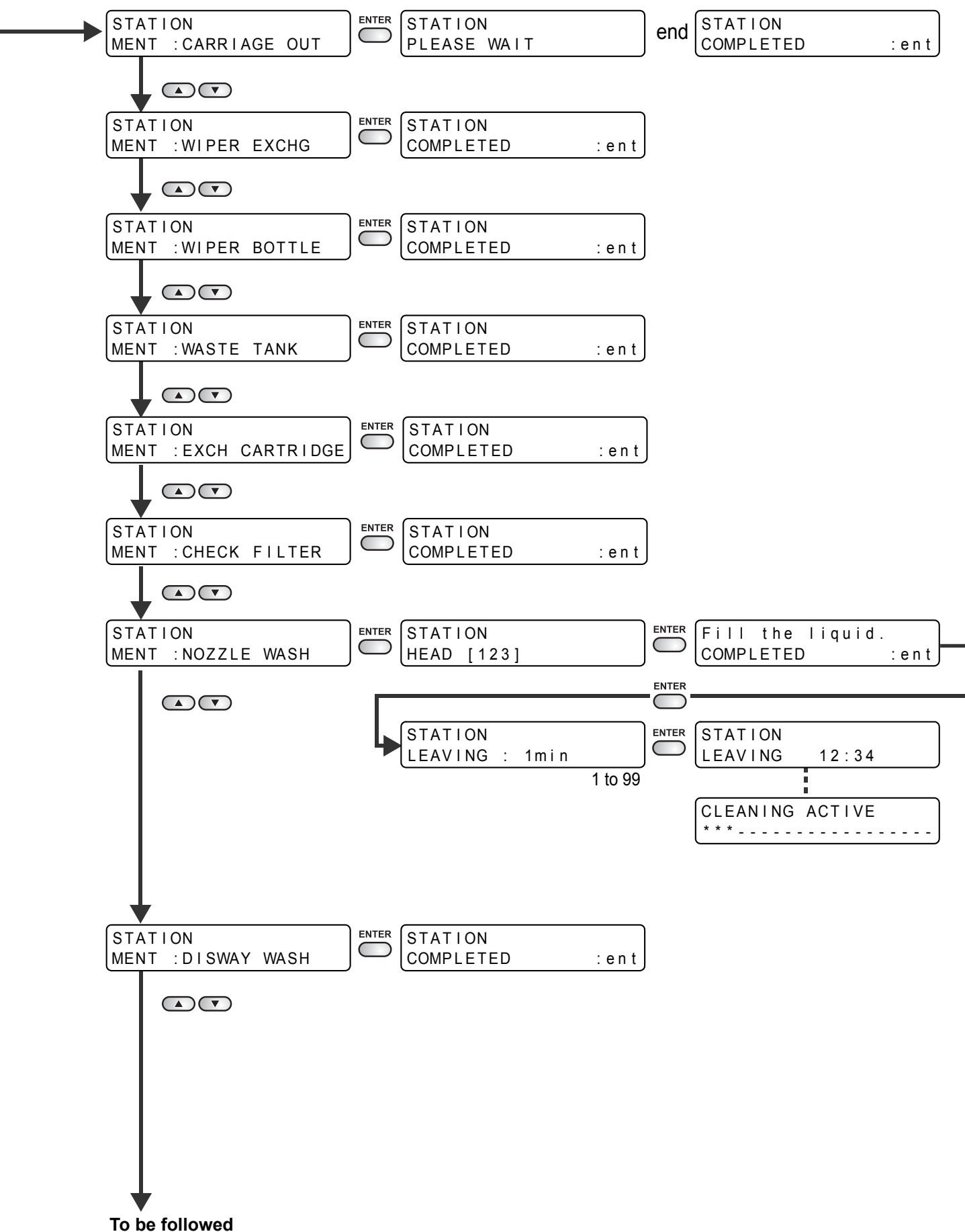
MAINTENANCE STATION	<ent>
------------------------	-------

ENTER



To be followed

To be followed



Followed

To be followed



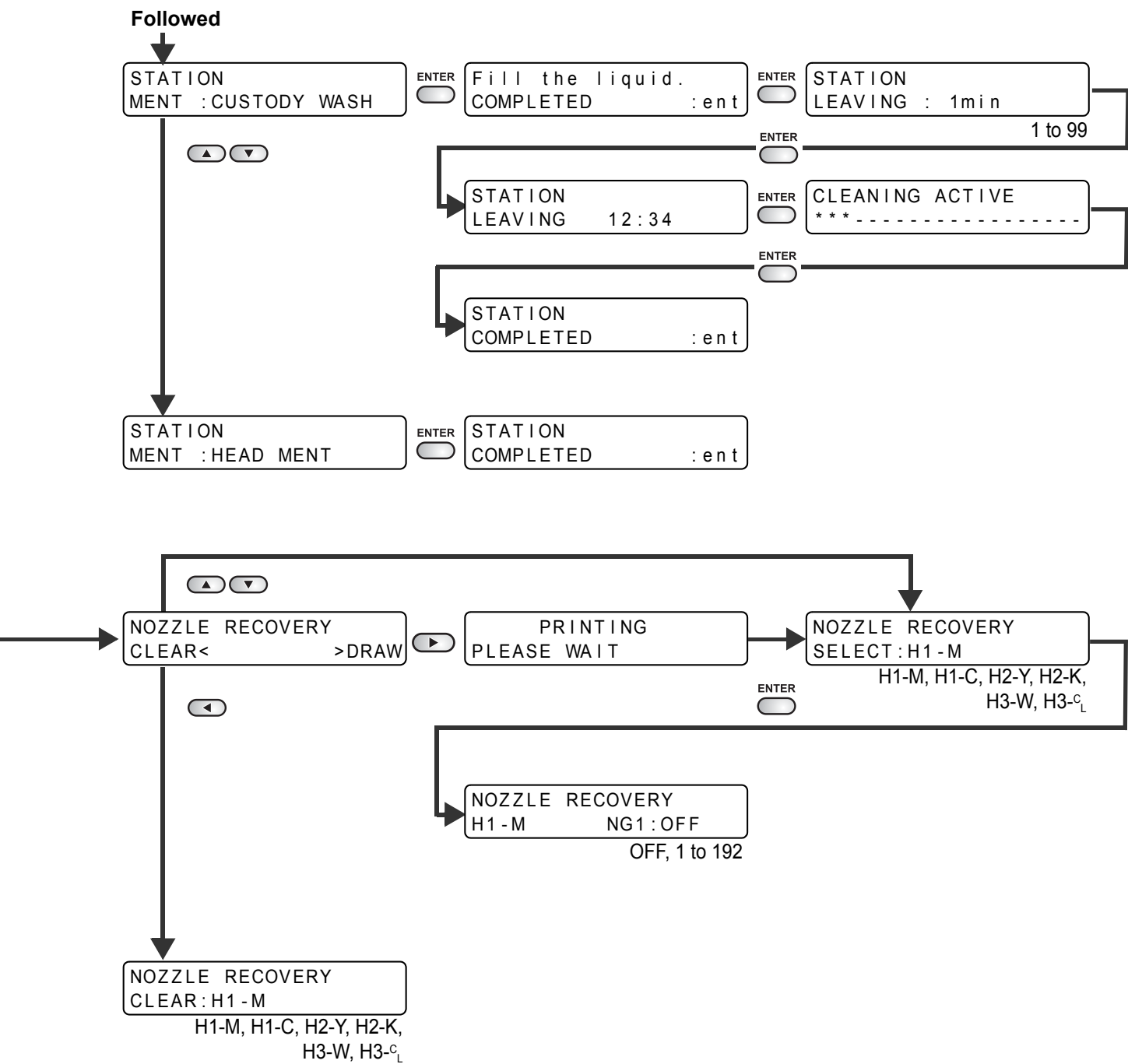
Followed

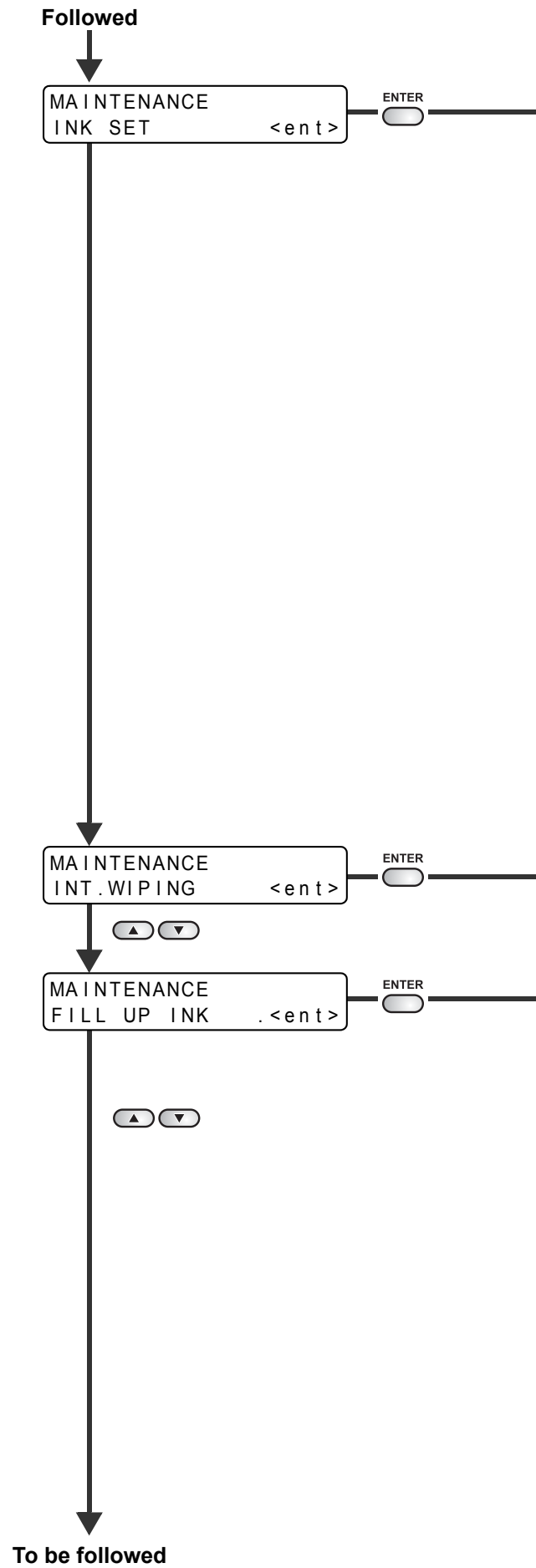
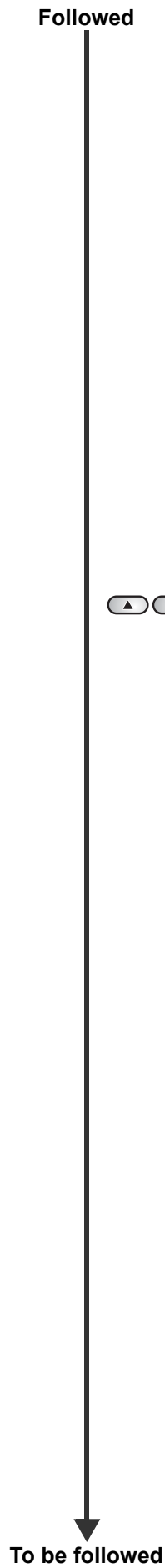
To be followed

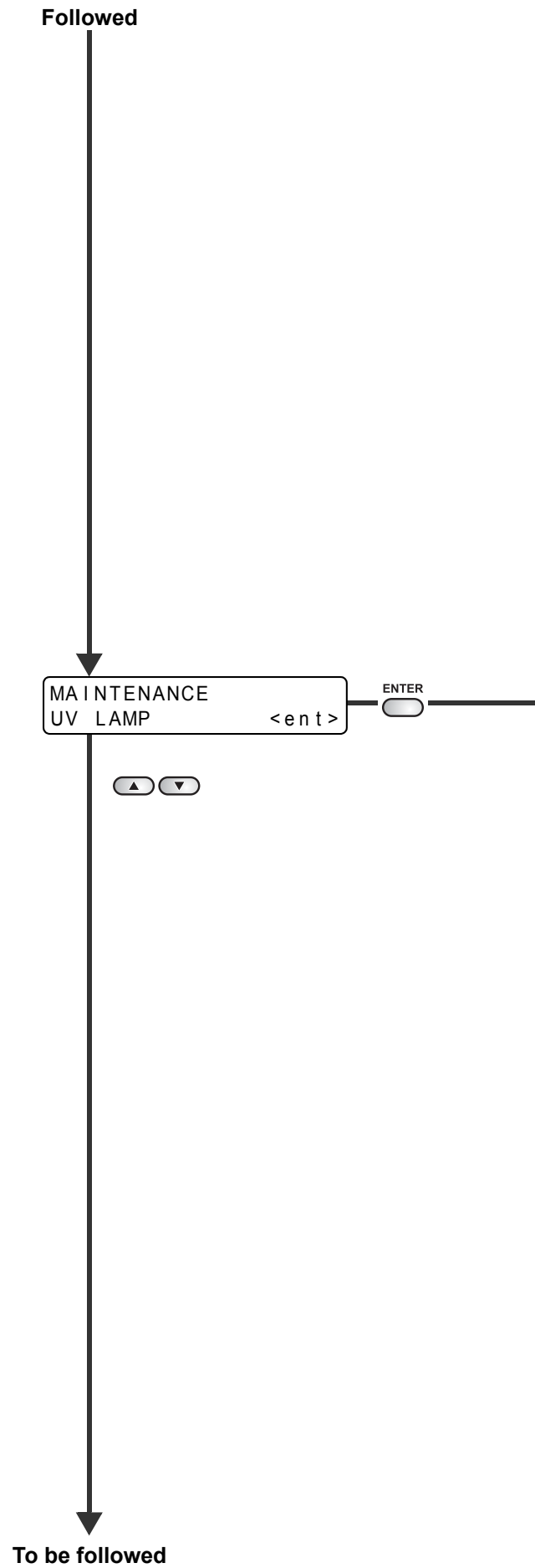
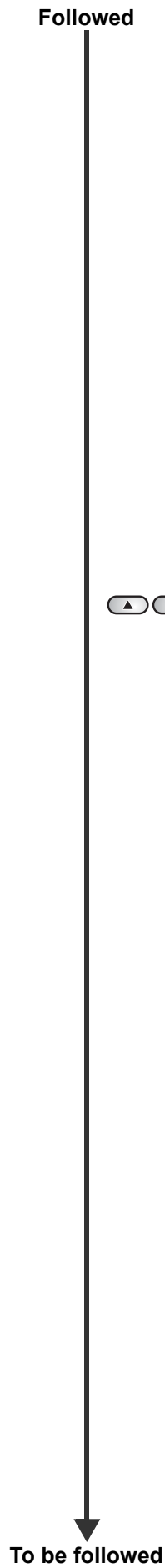
MAINTENANCE
NOZZLE RECOVERY<ENT>

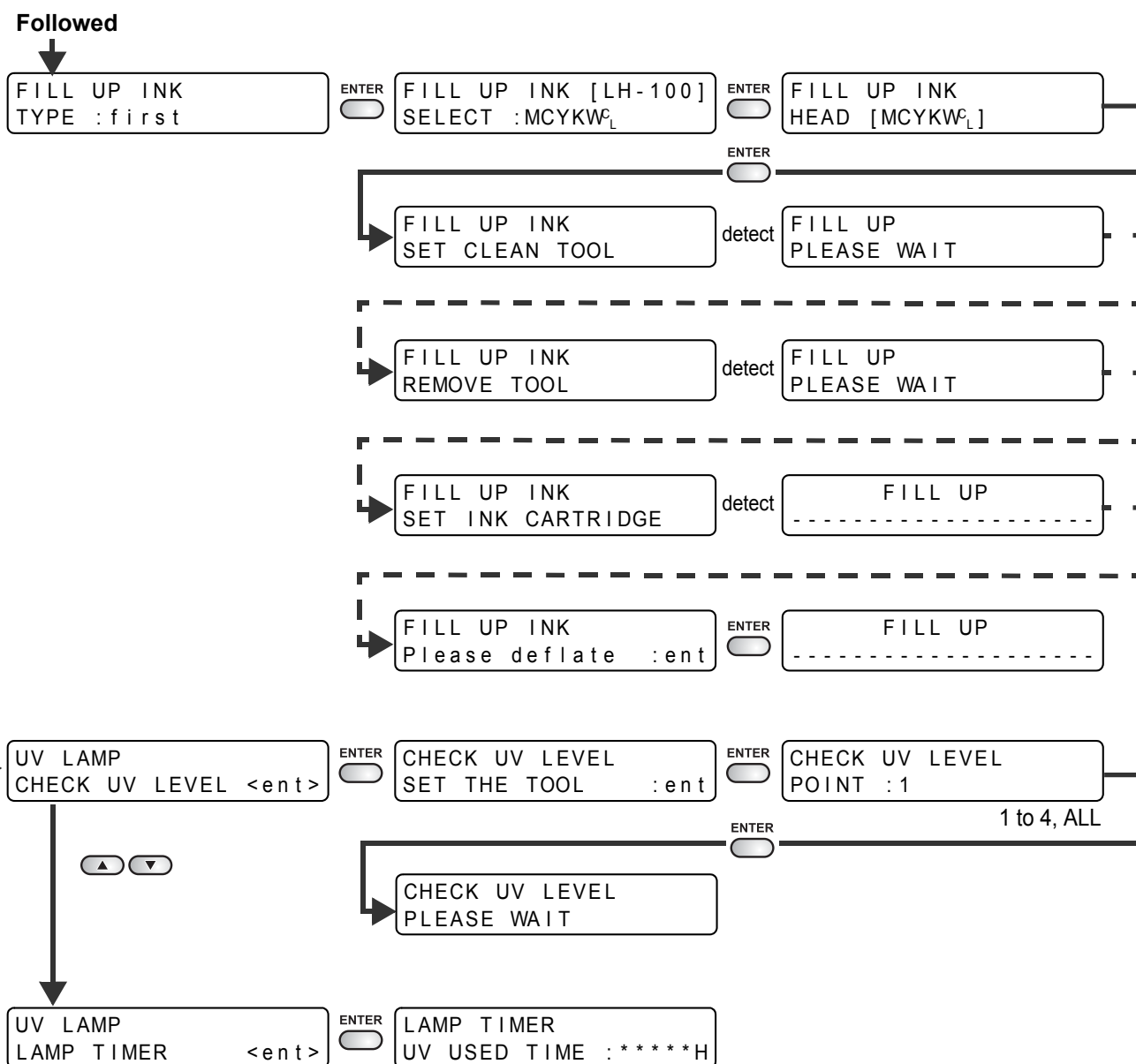
ENTER











Followed



To be followed

Followed

MAINTENANCE
HEAD WASH <ent>

ENTER



MAINTENANCE
WHITE MAINTAIN <ent>

ENTER



MAINTENANCE
LIST <ent>

ENTER



MAINTENANCE
WIPE LEVEL <ent>

ENTER



MAINTENANCE
INFORMATION <ent>

ENTER

