

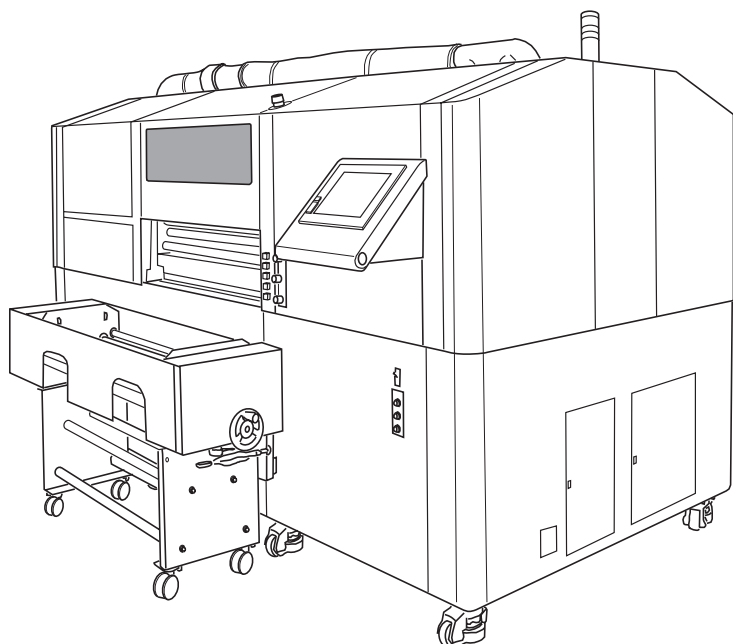
UJF-605RT

UV INKJET PRINTER

Operation Manual



- Never look at the UV lamp being lit with your naked eyes, or it may cause pain in your eyes or visual impairment.



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Category of the Manuals

This printer attaches with the following manuals.

Setup Guide

The above manual describes setting procedure of the printer.

Do not set up the printer by yourself. Setting up should be conducted by your service engineer or the electric contractor.

Operation Manual

The above manual describes operations of the printer and daily maintenance.

Read this operation manual carefully and fully understand it to use the printer.

This manual
you're reading

Daily Care Manual

The above manual describes daily maintenance to keep the printer in good condition.

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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.
-
- Generally, names and designations referred to in this operation manual are trade marks or registered trade marks of the manufacturers or suppliers.

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 instruction manual, may cause harmful interference to radio communications.

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



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

INTERFERENCE TO TELEVISIONS AND RADIOS

The product covered by this Instruction Manual produces 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 radio 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.
- Change the installing direction of the product.
- Move the receiver away from the product.
- Use a power line for the receiver that is not shared with the product.

Introduction

Congratulations on your purchase of a MIMAKI "UJF-605RII" model of UV ink jet printer.

UV Inkjet Printer UJF-605RII uses ultraviolet ray curing ink (UV ink), which has been recently developed.

Read this operation manual carefully and make the most effective use of your printer. Before starting to operate the printer, be sure to read this operation manual carefully .

On this Operation Manual

- This operation manual describes operations and maintenance of Model UJF-605RII Color Ink Jet Printer (hereinafter referred to as the printer).
- Please read and fully understand this operation manual before putting the printer 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 printer.
- 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.

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Features

The features of the printer are described below. Together with the printer operation explained in this manual, they help you understand how to print properly.

Ultraviolet ray curing ink is used

Use of ultraviolet ray curing ink (UV ink), which has been recently developed, enables direct printing onto media.

High-speed interface is used

Use of high-speed interface IEEE1394 allows high-speed data reception from computers.

Curing and fixing of ink are enabled after printing

Use of an ultraviolet curing device (UV lamp) enables curing and fixing of ink after printing.

Wide printable area

The printable area is 600 mm (scan) x 500 mm (feed).

Printing on the film media

It is printable for thin roll film media from with 0.02 to 0.2mm, and for leaf film media from with 0.02 to 2.0mm.

It is printable for a roll film media by automatic transport

This printer comes equipped with the take-up unit to print a roll film media by automatic transport. It is also printable for a leaf film media. For a leaf film media, the take-up unit is attachable.

A vacuum table is equipped

This unit is equipped with a suction-type vacuum table for fixing media.




Safety Precautions during the Operations

Safety Symbols Used in this Manual




Symbols are used in this manual for safe operations of the printer safety and correctly. Read and fully understand the each symbol.

Example of Symbols : 1

These are often used in the caption of this manual.

 WARNING	<ul style="list-style-type: none">• Indicates a potentially hazardous condition which, if not avoided, could result in serious injuries or deaths.
 CAUTION	<ul style="list-style-type: none">• Indicates a potentially hazardous condition which, if not avoided, could result in property damages.
	<ul style="list-style-type: none">• Indicates helpful information for using the printer.

Example of Symbols : 2

	<ul style="list-style-type: none">• The symbol "△" indicates the case where some phenomenon that requires a CAUTION sign (including "DANGER" and "WARNING" signs) exists. A concrete precaution (the precaution against an electric shock in the case of the left symbol) is shown in the illustration.
	<ul style="list-style-type: none">• The symbol "⊘" indicates a prohibited behavior. A concrete content of prohibition (disassembly is prohibited in the case of the left symbol) is shown in or next to the illustration.
	<ul style="list-style-type: none">• The symbol "●" indicates a thing that is forced to be done and instruction that is forced to be followed. A concrete instruction (the removal of a plug from the receptacle is instructed in the case of the left symbol) is drawn in the illustration.

WARNING

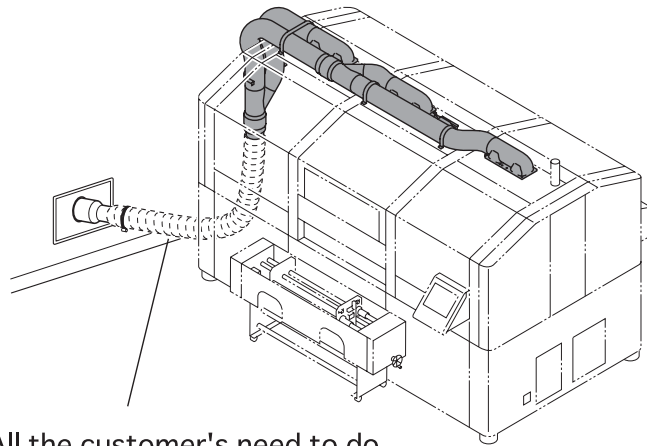


- If the printer is to be installed in a closed room, be sure to install a ventilation system.

* Instructions for installing an exhaust outlet

Please observe the following things to prevent failures the printer.

1. The shape of the exhaust outlet depends on your building environment. The exhaust outlet area must be more than half of the dust entrance area.
2. If you mount a valve on the exhaust outlet, be sure to open the valve when using the printer.



All the customer's need to do



- The ink used for this printer falls into the category of UN no.3082 and UN class 9. Since the ink is flammable, never allow a flame or spark to get near the ink any time.



- When cleaning the ink station and head, be sure to wear the supplied goggle and gloves to prevent getting ink your eyes or on your.



- If anyone drinks ink or the washing liquid in mistake, get the person to vomit immediately and see a doctor. Do not allow him or her to drink vomit. Then, contact the Poison Control Center.


















- If you inhale a lot of vapor and feel bad, immediately move to an area where the air is fresh and then keep yourself warm and quiet. Then, consult a doctor as soon as possible.



- Dispose the waste ink according to the local regulations of the area where this printer is used.

Never do the followings

 WARNING	
<p>Do not disassemble or modify the printer.</p> <p> • Never disassemble or remodel the main unit of the printer and the ink cartridge. Disassembling/remodeling any of them will result in electric shocks or failures of the printer.</p>	<p>Wearing protective devices</p> <p> • When cleaning the suction nozzle and/or cap, which may scatter ink, be sure to wear safety glasses and gloves, or ink or the washing liquid might enter your eyes. If they put on your hands, it might make your hands rough.</p> <p></p>
<p>Do not use the printer in damp places</p> <p> • Avoid using the printer in damp environment. Do not splash water onto the printer. They will result in fire, electric shocks or failures of the printer.</p>	<p>Opening / closing covers</p> <p> • This printer has some covers. When opening or closing the covers, there is a possibility that your fingers, your arms or a part of your body will be pinched. If it occurs, it may cause bruises or, in the worst case, crushing to death. When opening or closing the covers, take care so that your body or a part of it is never pinched.</p>
<p>When an abnormal event occurs</p> <p> • If the printer is used under an abnormal condition where the printer produces smoke or unpleasant smell, it will result in fire or electric shocks. Be sure to turn off the power immediately and detach the plug from the receptacle. Check first to be sure that the printer no longer produces smoke, and then contact a distributor in your district for repair. Never repair the printer by yourself since it is very dangerous for you to do so.</p>	<p>Handling of washing liquid</p> <p> • Store washing liquid in a place that is out of the reach of children.</p> <p> • Store the washing liquid in a cold and dark place.</p>
<p>Handling of the power cable</p> <p> • Take care not to damage, break or convert on the power cable. If a heavy material is placed on the power cable, or it is heated or drawn, the power cable will break and it causes fire or electric shocks.</p> <p></p>	<p>Handling of ink cartridges</p> <p> • Store ink cartridges and waste ink tank in a place that is out of reach of children.</p> <p> • If ink settles on the skin or clothes, immediately wash it off with soap or 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.</p> <p> • Some of the ingredients (UV Curing initiator) have toxic consequences to aquatic life. Avoid leak into natural water system or sewage-containing water.</p>
<p>Grounding work</p> <p> • This printer requires grounding work to prevent electrical shocks.</p> <p>• Carry out the grounding work.</p>	

WARNING

Power supply and voltage



- Hazardous high voltage exists in this printer. Only qualified, trained electricians should be allowed to work inside this enclosure.



- Before carrying out maintenance, be sure to turn OFF the main power circuit breaker and disconnect the plug to prevent electrical shocks. For some printers, the capacitors may take one minute for discharging; therefore, start maintenance work three minutes after turning OFF the main power circuit breaker.



- The main power circuit breaker should be set ON only by personnel with sufficient knowledge about how to safely operate this printer.



- To prevent electric shocks during operation, ground this printer properly.



- Use the printer under the power specifications given.

Be sure to connect the power cable plug to a convenient outlet grounded, or fire or electric shock might occur.

Handling the UV lamp



- Be sure to use only the UV lamp recommended by MIMAKI, or it may cause fire or damages to the printer. Never use UV lamps other than those recommended by Mimaki. We would take no responsibility for any troubles caused through the use of a UV lamp not recommended by MIMAKI.



- As the UV lamp is made of glass, it should not be dropped, hit against anything, subjected to excessive force or scratched, or it may cause damages to the UV lamp.



- Do not use the UV lamp in an atmosphere where it could catch fire (such as contacting gasoline, combustible gas spray, thinner, lacquer, powder dust, etc.). In addition, do not put paper or cloth near or on the UV lamp, or it may cause fires.



- Do not break the used UV lamp; put it in a container and discard likewise ordinary fluorescent lamps according to the local regulations. Breaking a UV lamp will cause glass fragments to be scattered.



- In rare cases, the UV lamp may break. We recommend you to replace the UV lamp with a new one before it reaches its rated life.



- Never look at the UV lamp 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 skin irritations.



- Do not touch the UV lamp when it is on or right after turned off because the lamp gets very hot, or it could cause burns.

When replacing the lamp, carrying out after it has gets cool sufficiently.



- Before installing or replacing lamp, turn power OFF or it may cause electric shocks.

 **WARNING**

Handling the Anti-freezing liquid



- Be sure to wear the goggles and the gloves when handling the antifreezing liquid.



- Use the exclusive antifreezing liquid by Mimaki, or the heater may be damaged.



- If the antifreezing liquid or the mixed soft water with antifreezing liquid gets on the skin or clothes, immediately wash it off with soap.

- If you get the antifreezing liquid or mixed soft water with antifreezing liquid in your eyes, immediately wash your eyes with a lot of clean water.

Then, consult a doctor as soon as possible.

If high temperature antifreezing liquid or mixed soft water with antifreezing liquid gets on the skin, immediately wash it off with soap and cool with iced water.

Then, consult a doctor as soon as possible.

If you swallow the antifreezing liquid or mixed soft water with antifreezing liquid accidentally, try to get to vomit, and then consult a doctor as soon as possible.



- Before using the antifreezing liquid, be sure to read the Material Safety Data Sheet (MSDS).




- When unused the antifreezing liquid or used mixed soft water with antifreezing liquid should discard as followings,

- * Incinerate sawdust or waste cloth which absorbs the antifreezing liquid.



- * Or, provide to your local industrial waste disposal company for proper disposal.
- Avoid static electricity, spark, and open flames as antifreeze is flammable.

Precautions in use

 CAUTION	
<p>Components needing periodic replacement</p> <ul style="list-style-type: none"> • There are some parts which must be replaced by service men. You have to make a contract with distributors or dealers for after-sale service. 	<p>Adjusting the level</p> <ul style="list-style-type: none"> • Adjust the level foot and keep the printer in a horizontal position.
<p>Protection against dust</p> <ul style="list-style-type: none"> • It is strongly recommended to use the printer in a room that is not dusty. Set the Refresh level 2 or 3 when in bad environment. • When leaving the workshop after the working hours, be sure to take off media from the roll hanger. If media is left on the roll hanger, dust can put on it. • Store medium in a bag. Wiping off dust accumulated on medium will adversely affect the medium due to static electricity. • Frequently wipe off the capping station. • Dust in the head may cause drops of ink to fall on the media during printing. If this phenomenon takes place, be sure to clean up the head. (See P.2-29) 	<p>Ink cartridges</p> <ul style="list-style-type: none"> • If the ink cartridge is moved from a cold place to a warm place, then use for three hours. • Open the ink cartridge just before installing it in the printer. If it is opened and not installed for a long time, the printer may not print normally. • Make sure to store ink cartridges in a cold and dark place. • Be sure to thoroughly consume the ink in the ink cartridge after opened. If an extended period of time has passed away after opening the cartridge tank, printing quality would be poor. • Do not use ink not authorized by MIMAKI. MIMAKI will not be responsible for any printer damage caused by use of unauthorized. • The ink cartridge cannot be refilled. • Neither pound the ink cartridge nor shake it violently so as to prevent leakage of ink adhering locations.
<p>Warning labels</p> <ul style="list-style-type: none"> • This printer is adhered with some warning label. Be sure to understand firmly 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. 	<p>Handling the antifreezing liquid</p> <ul style="list-style-type: none"> • Be sure to store the antifreezing liquid in a cold and dark place. • Be sure to store the antifreezing liquid in a place that is out of reach of children.
<p>Front cover</p> <ul style="list-style-type: none"> • Never open the front cover during printing. Opening the cover or lever will abort printing. 	<p>Handling the washing liquid</p> <ul style="list-style-type: none"> • Be sure to store the washing liquid for maintenance in a cold and dark place. Also store it in a place that is out of reach of children.

CAUTION

About UV light



- Some UV light leaks from the openings for media. UV light applied to your skin or your eyes might cause inflammation or skin cancer. Though weak UV light might cause no inflammation, repeated exposure to it may lead to chronic disorders. Avoid minimize getting UV light on your skin or eyes.



- Impairment of eyes caused by UV light may be:
Acute disorders ... Pain in eyes, tearing, etc.
Chronic disorders ... Cataract, etc.
When UV light applies to you, take protective measures such as gloves, long-sleeve cloth, light-resistant mask, attached light-resistant goggles, etc.

About cleaning



- After using the unit for a long time, foreign materials and dust may be gathered on the conductive and insulating parts, causing electric leakage. Periodically clean such parts.



- To clean the printer, use a vacuum cleaner and not compressed air which scatters foreign material and dust which can cause the printer failures.



- Do not use the printer in a place where there is a possibility of being wet, or electrical leakage may occur.



- Electrical leakage, if it occurred, might make workers get electric shocks and cause fire.



- In order to prevent accidents, be sure to carry out periodic inspections and replacements of components needing periodic replacement.

About hot parts



- The UV lamp and the interior of the UV irradiation device will have a very high temperature. When carrying out maintenance, turn off the lamp and wait until it is sufficiently cool.



- Some parts on the outside of the printer get very hot.
These parts have warning labels. Wait until these parts have cooled before touching them.



- When you may touch the printer when it is very hot, wear insulated gloves.

About firing and smoking



- Touching hot parts such as the UV lamp with combustible materials may cause fire or the material to smoke.



- After the printer is used for a long time, screws and other fasteners on the conductive parts may loosen and cause a fire or smoke. Periodically tighten such fasteners.



- After the printer is used for a long time, foreign materials or dust gathered on the stabilizer or other parts and cause electrical leakage or insulation deterioration resulting in a fire or smoking. Periodically clean these parts and measurements of the insulation resistance.



- This printer is not explosion proof. Do not use in an atmosphere where it is exposed to hazardous or flammable materials.



- If the printer is smoking or sparking, or has an abnormal order, turn it OFF immediately and contact MIMAKI.

⚠ CAUTION

Notes on UV lamp



- The UV lamp performance and service life are significantly affected by the UV irradiation and the UV power supply units used. Do not use any UV devices that are not recommended by MIMAKI. MIMAKI is not responsible for any damage or loss caused by the use of unauthorized UV devices.



- When handling the UV lamp or the silica glass on the bottom of the UV irradiation device, be sure to wear the gloves provided and never touch them with bare hands, or the UV ink curing level is significantly lowered. If the UV lamp or silica glass gets dirty, wipe it off with clean gauze moistened with alcohol. (Do not use alcohol for cleaning the exterior cover, or the paint will peel off.)



- Securely mount the UV lamp to the socket, or the lamp may fall out become overheated.

Cautions for Installation

⚠ CAUTION

A place which receives direct sunlight



- Do not install printer in any place where it will be subjected to direct sunlight.

A place that is not horizontal



- Do not install the printer in any place which is not horizontal and stable, or you may not be able to print normally.

A place where the temperature and humidity fluctuate greatly



- Use the device under the following operating environment.
15 to 30 °C (59 to 86°F)
35 to 65% (Rh)

A place that vibrates



- Do not install the printer in any place which shakes, or you may not be able to print normally.

A place which receives direct air blowing from air conditioner, etc.



- Do not install the printer in any place where the wind blow directly from an air conditioner, etc or the ink may get scattered.

A place which is permeated with dust or cigarette smoke

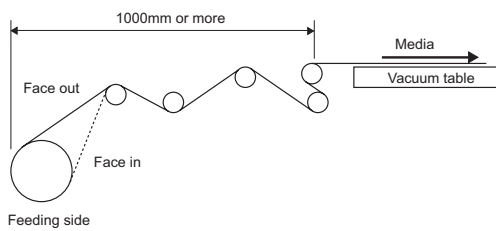


- Do not install the printer in any place which is permeated with dust or cigarette smoke, or the dust may adhere to the printer and cause the deflection phenomena of ink drops.

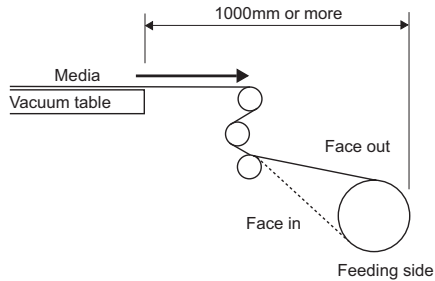
⚠ CAUTION FOR PRINTING

Roll media space

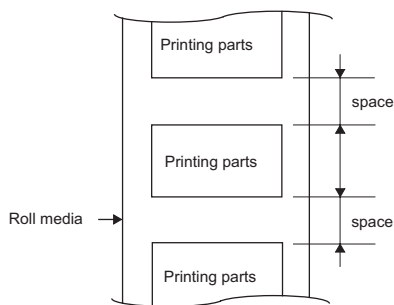
Leave a margin 1000mm or more from the anterior end of the roll media. It may cause wrinkles.



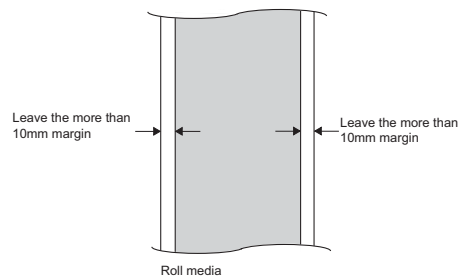
Do not print up to the posterior end of the roll media. Leave a margin 1000mm or more from the end. It may cause wrinkles.



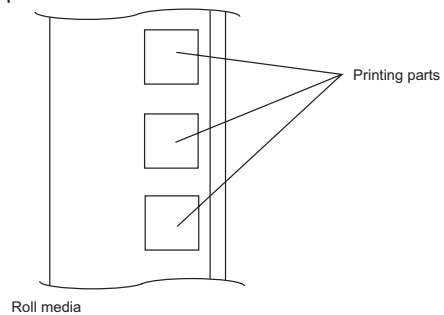
Leave a space in RIP between each printing part not to cause wrinkles. Otherwise the wrinkles in printing parts and space may cause new wrinkle at next printing part.



Place images in RIP on the media which has each 10mm or more margin from the right and left sides. Vacuuming allows the ink to pull forward the table and table height changes according to the amount of the attached ink.



Do not print in the way which the printing part tilts toward at right or left toward according to the media width. It may cause unequal width of the rolled-up media and wrinkles.




About unusable films

Pouched films or tube films are unusable because they cannot be adsorbed to the table.

How to Read this Operation Manual

Display on the Touch Panel

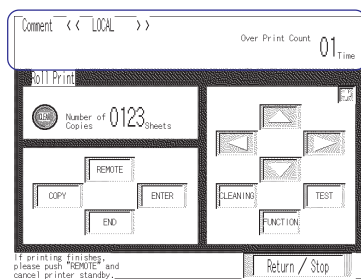
In this manual, the characters displayed on the LCD of the touch panel are explained, together with the STEPS.  P.1-6.

Display on the LCD

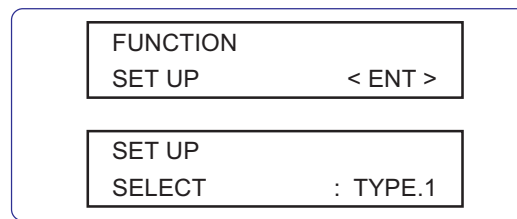
The contents of display are shown by characters in a box as follows.

Operate the printer according to the explanation of the operation procedure and the content of display on the LCD.

In this manual, each setting and messages displayed on the LCD is enclosed in [], like [TYPE.1], [PLEASE WAIT], etc.



LOCAL mode screen



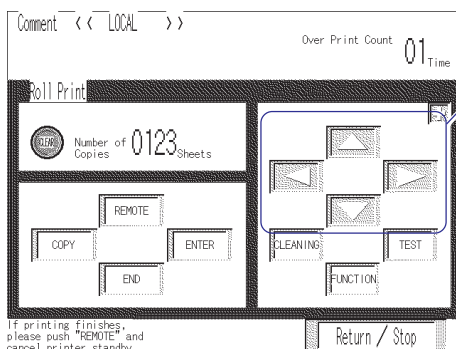
Display on the LCD

Operation

In the text of this operation manual, the operation are explained with [] used.

[▲] and [▼] indicate JOG.

The other operation are explained with brackets enclosed as [FUNCTION].



LOCAL mode screen

JOG [▲] [▼] [◀] [▶]

They are used to shift the carriage and the media under the LOCAL mode. In addition they are used to select a set value.

Structure of this Operation Manual

This manual consists of the following six chapters to describe the handling of the printer.

Chapter 1 Before Use

This chapter describes names and functions of each section of the printer.

Chapter 2 Basic Operations

This chapter describes a series of operations and settings from power-on to end of printing.

Chapter 3 Daily Care

This chapter describes the recovery procedure for ink clogging and the cleaning procedure for each section.

Chapter 4 Various Setting

This chapter describes the setting function.

Chapter 5 Maintenance Functions

This chapter describes maintenance procedures including solving nozzle clogging, replacing the UV lamp, etc.

Chapter 6 Troubleshooting

This chapter describes what to do when an abnormal condition or occurs.

Appendix

This appendix describes the printer specification and a flowchart of the function menu.

Chapter 1

Before use

This chapter describes names and functions of each section of the printer.

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Installing the Ink Cartridges	1-17
Cautions for Handling the Ink Cartridge	1-18
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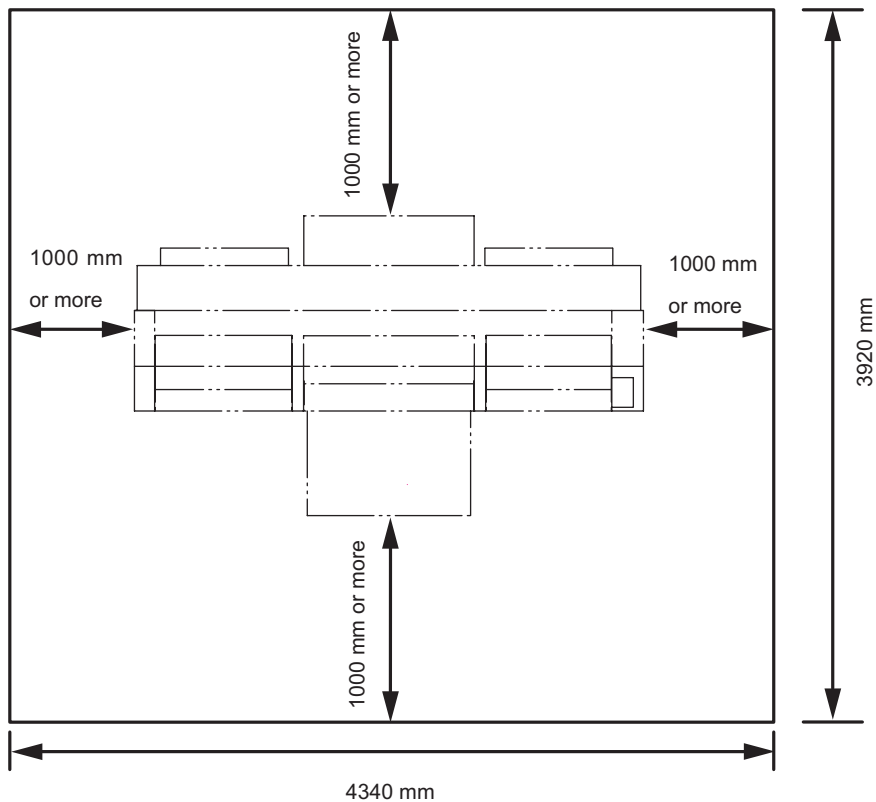
Installing the Printer

About Installation Place

Have a suitable installation space before assembling the printer.

The place of installation must have space required not only for the printer itself but also for printing operation.

Model	Width	Depth	Height	Gross weight
UJF-605RII	2340 mm	1920 mm	1560 mm	Approx. 800 kg



CAUTION

- This unit cannot be installed by customers. Its installation should be entrusted to our service personnel or your electrical contractor.



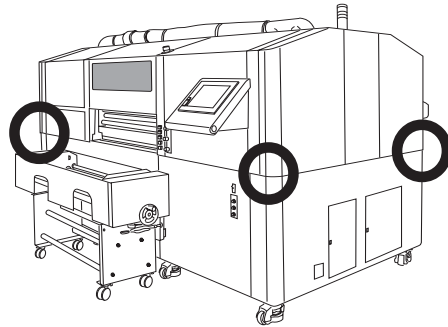
- Be sure to carry out grounding work.



- In order to prevent electrical shocks from occurring, carrying out electrical work by those unauthorized for that work is prohibited.

How to Move Printer

When moving this printer, lift up the level feet and touch the 4 corners of the printer by 4 persons slowly.



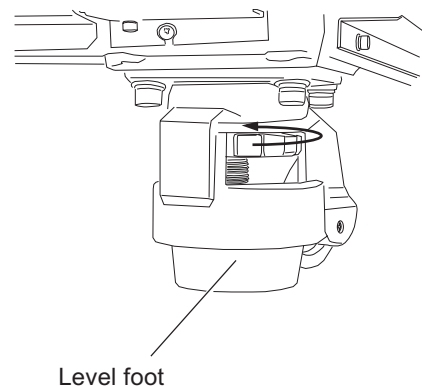
- When moving the printer to the other place, contact a local representative of MIMAKI. If you move it, failures may occur.
Be sure to entrust the specialist to move the printer.
- Be sure to disconnect the interface cable and before moving the printer.
- Before moving the unit, wait until the UV lamp is cooled.
- When moving the printer, take care not to shake it.
- Be sure to adjust the level feet so that the printer is level after moving it.
- Do not hold the table or the ink cartridges, or it may give damage to the printer.

Raising and Lowering Level Feet

Before moving the printer, raise the level feet sufficiently so that the printer easily rolls. When installing the printer, lower the level feet.

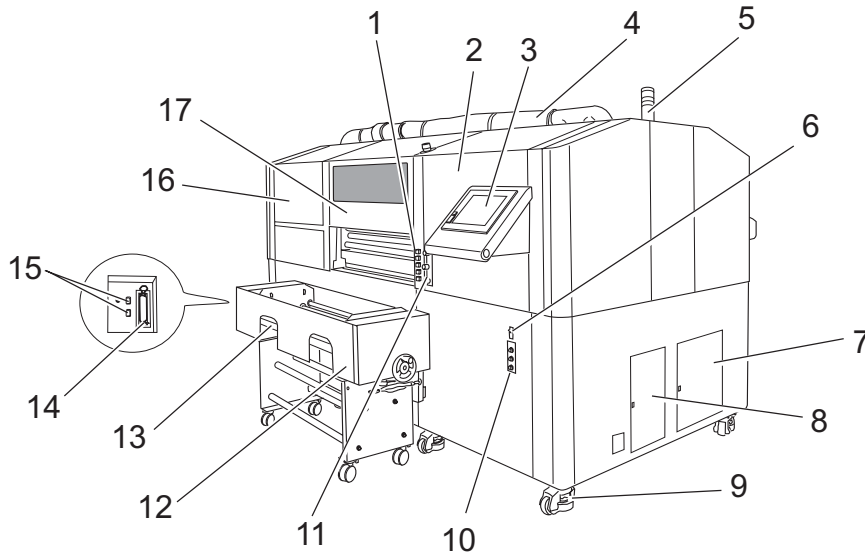


- This printer has eight level feet. Lower them sequentially and slowly so that the gaps between the casters and the floor are nearly even.



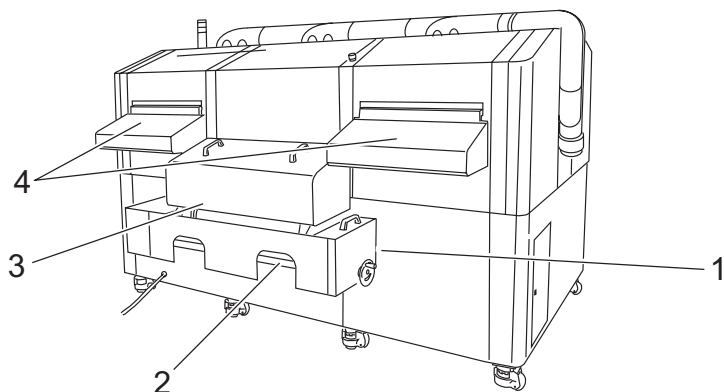
Configurations and Functions

Front



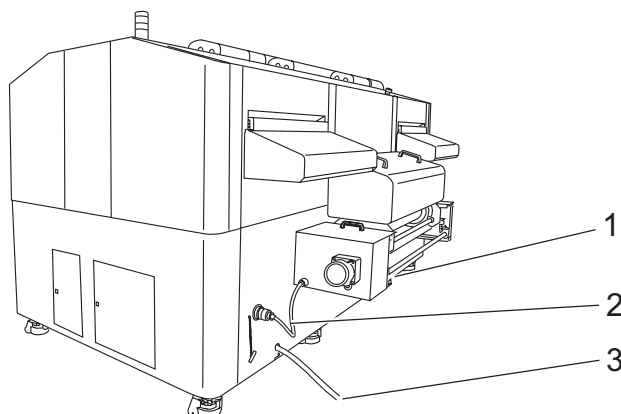
	Name	Function
1	Sub switch	Provides some operations for media setting. (☞ P.1-9)
2	Right maintenance cover	Equipped with a capping station and opened and closed during maintenance.
3	Operation panel (Touch panel type)	Provides operation for setup of the printer or displays operation items by touching the panel. (☞ P.1-6)
4	Exhaust duct	Exhausts the inside air of the printer.
5	Pilot lamp	Lights in green at work and lights in red in emergency.
6	Power switch	Turns on/off the power of the printer.
7	Water heater	Keeps ink at appropriate temperature. (☞ P.3-8)
8	Waste ink tank	Waste ink gathers in this tank. (☞ P.3-7)
9	Level foot	Pressed it down to fix the printer. (☞ P.1-3)
10	UV lamp status indicator	Indicates the UV lamp status. (☞ P.1-15) Error/UV lamp OFF (red); cooling (orange); enabled (green)
11	Adjustment volume	Adjusts the tension for media transport and vacuum/blow for media. (☞ P.1-9)
12	Take-up unit	Rolls up the media.
13	Roll set bar	Set a paper core in the center and lift the lever up to give driving power to the paper core.
14	IEEE1284 connector	Bidirectional parallel interface connector.
15	IEEE1394 connector	A 400 M bps interface connector compatible with -IEEE.
16	Left maintenance cover	Position for standby during printing. Equipped with a flushing tray and opened and closed during maintenance.
17	Front maintenance cover	Opened when setting media or correcting media jams. However, to prevent the nozzles from clogging, keep the front cover closed even if the power switch is OFF.

Rear (right)



	Name	Function
1	Feeding unit	Rolls down the media.
2	Roll set lever	Set the roll media in the center and lift the lever up to give driving power to the roll media.
3	Roll media cover	Covers the carrier path of the roll media.
4	Ink station cover	Opened to insert the ink cartridges.

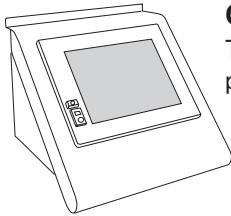
Rear (left)



	Name	Function
1	Feeding unit	Rolls down the media.
2	Connector for feeding	The power connector for the feeding unit.
3	Main unit power cable	Supplies power for the main unit.

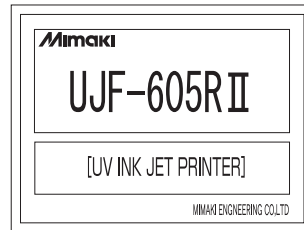
Operation Panel

The operation panel is touch panel type and used for operation procedure of printing and various operations.



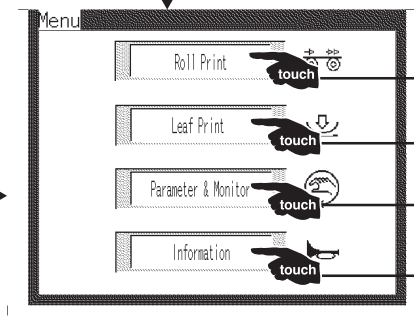
Opening screen

This is displayed when the printer starts.



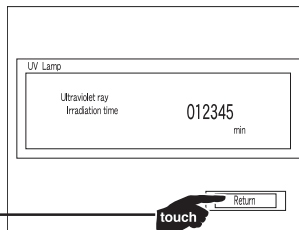
[Menu] screen

The first screens exits and then this is displayed automatically. Touch an item with your finger to move to each screen.



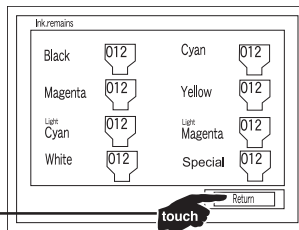
[UV Lamp] screen

This displays continuous irradiation time of the UV lamp.



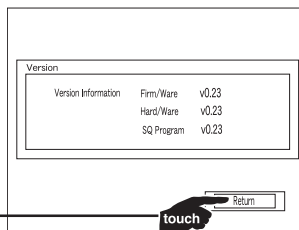
[Ink.remains] screen

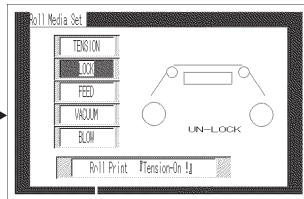
This displays the remaining amount of each color ink.



[Version] screen

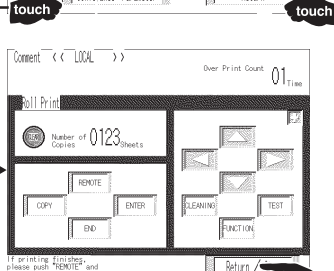
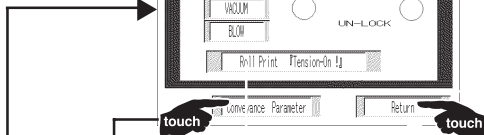
This displays each versions of Firm/Ware Hard/Ware and SQ Program.





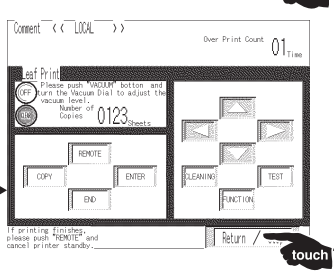
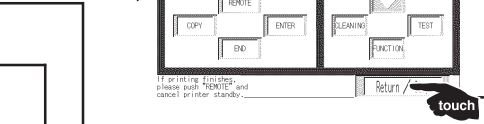
[Roll Media Set] screen

This is the operation screen for setting up roll media. The sub switch in front of the right printer can operate the same functions as well.



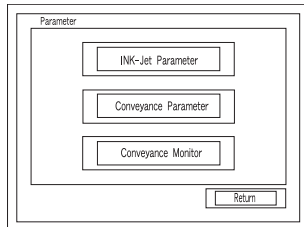
[Roll Print] screen

This is the LOCAL mode screen for printing roll media.



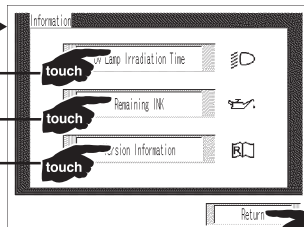
[Leaf Print] screen

This is the LOCAL mode screen for printing leaf media.



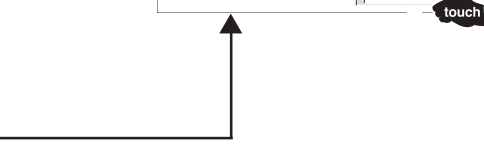
[Parameter] screen

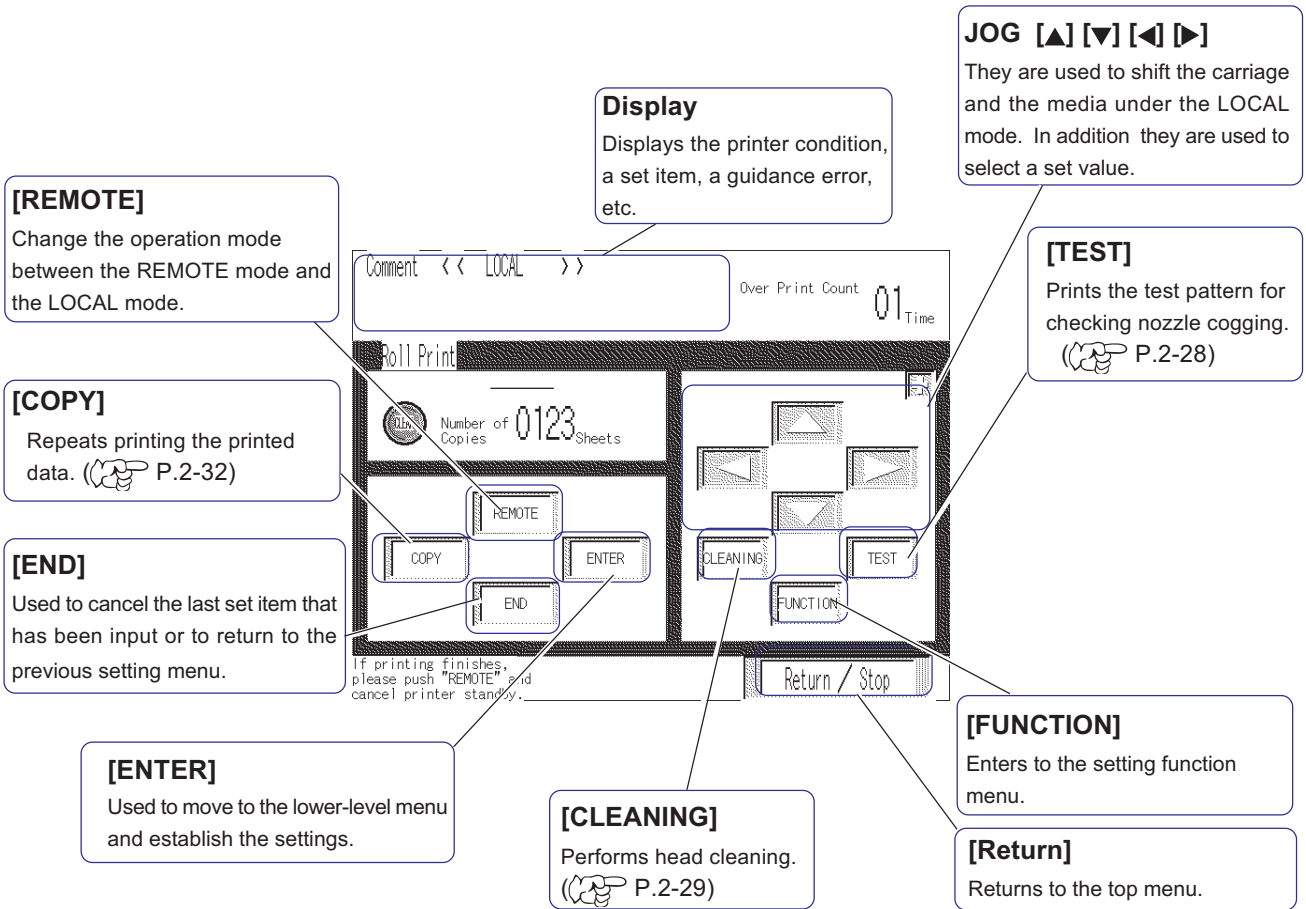
Setting a parameter should be conducted by the service engineer.



[information] screen

The irradiation time of the UV lamp, the remaining ink, and a printer version are displayed by touching each item.





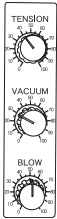
Functions of the JOG

Each of the JOG varies in function according to the time at which it is used.

	When setting a printing origin / printing area	When selecting a function	When selecting a value
◀	Shifts the carriage to the left.	_____	_____
▶	Shifts the carriage to the right.	_____	_____
▲	Shifts the work (carriage) away from you.	Restores the previous function.	Selects the previous value.
▼	Moves the work (carriage) toward you.	Moves to the next function.	Selects the next value.

Adjustment Volume

It adjusts feeding and fixing the media.



- TENSION : Adjusts tension.
- VACUUM : Adjusts adsorbability of media adsorption.
- BLOW : Adjusts the amount for lift of the media during feeding.

Sub Switch

There are switches for setting a media and you can operate the same functions as [Roll Media Set] screen on the touch panel.

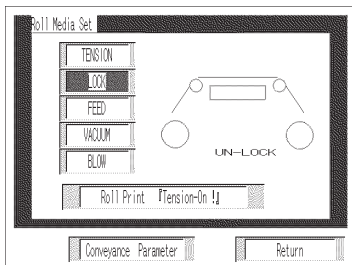
Use the touch panels and the sub switches for setting roll media.

Use the VACUUM switch for setting leaf media.

		Roll / Leaf	Names of switches and contents of operations
	<input type="radio"/>	<input type="checkbox"/>	[TENSION] Drives feeding side motor and operates the tension roller to tense the media toward the feeding motor.
	<input type="radio"/>	<input type="checkbox"/>	[LOCK] Locks the free take-up side motor.
	<input type="radio"/>	<input type="checkbox"/>	[FEED] Drives the take-up side motor to take-up the media.
	<input type="radio"/>	<input type="radio"/>	[VACUUM] Adsorbs media and fixes it on the table.
	<input type="radio"/>	<input type="checkbox"/>	[BLOW] Discharges air and lifts up the media which is absorbed and fixed on the table.

○ : effective ■ : ineffective

[Roll Media Set] Screen of the Touch Panel



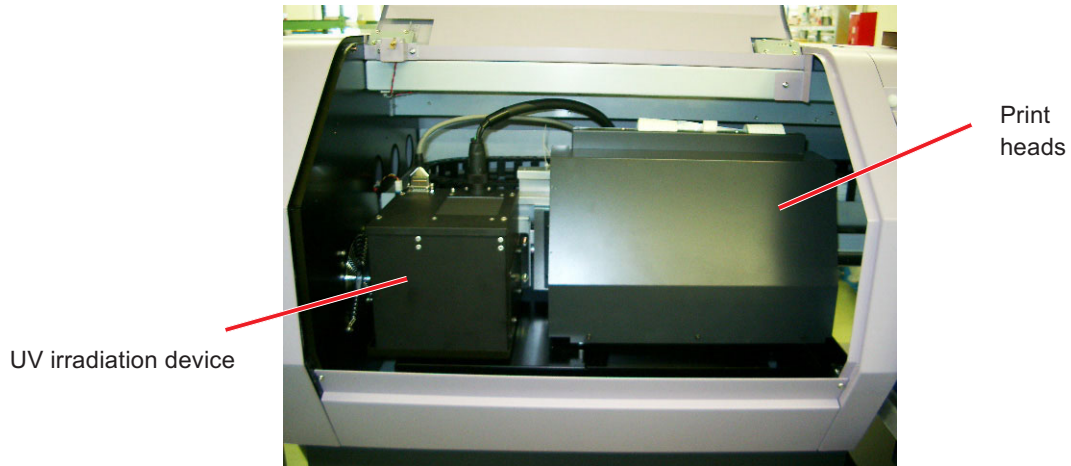
Emergency Stop Switch

Two emergency stop switches are set at the top of the printer.

When pressing one of them in emergency, the power source is shielded. For restarting, turn the switch to cancel lock and turn on the printer.

Carriage

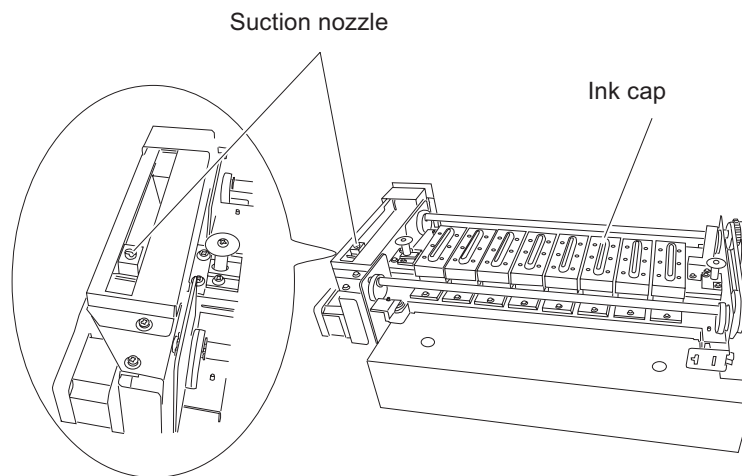
The carriage contains the print heads for printing and the UV irradiation device. The carriage moves inside of the left maintenance cover on standby.



Capping Station

It is placed inside of the right maintenance cover in front of the printer. The capping station consists of ink caps for print head maintenance and a suction nozzle.

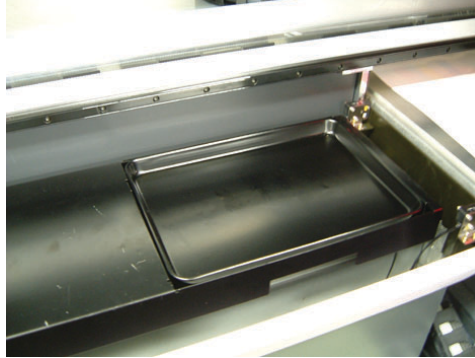
(☞ P.3-3)



Flushing Tray

A flushing tray is inside of the left maintenance cover in front of the printer.

When the printing heads executes flushing operation, waste ink is collected in the flushing tray. Clean the waste ink regularly. (☞ P.3-5)



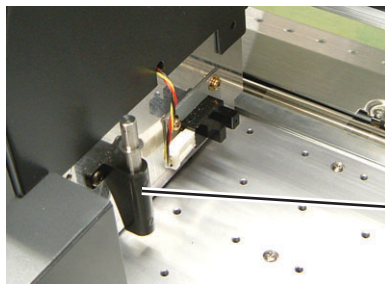
- Do not put any flammable items on the flushing tray to prevent fire danger by heat of the UV lamp.

Head height adjustment rod

When a media is set on the device for the first time or when a media different in thickness from the current media is set on the device, it is necessary to adjust the height of the table.



- If the device is operated without adjusting the head height, the heads may get caught on the media, causing damage to the heads.
- For the method of head height adjustment, see “Setting Media”. (☞ P.2.8)



Print head

Head height adjustment rod
Measures the thickness of the medium to be used as a reference for head height adjustment.

Connecting the Cables

Connecting the Interface Cable

Connect the printer to the computer with an appropriate interface cable.

Two types of interface cables are available. Select an interface cable according to your computer and the output software.



- Turn off the power switch of the printer when connecting the interface cable.

IEEE 1394 Interface is Used

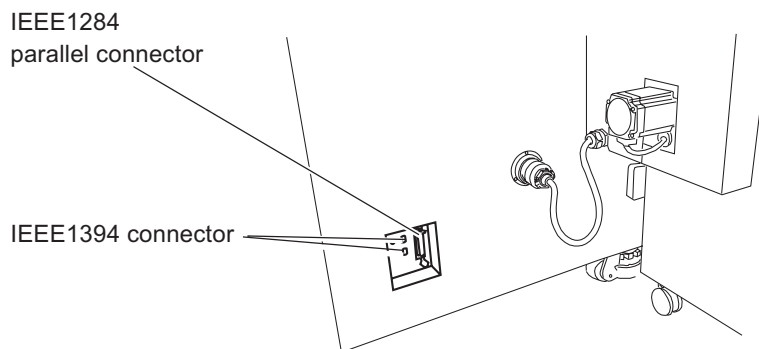
Use an IEEE 1394 interface cable to connect the computer and the printer if your computer has an IEEE1394 interface.



- The RIP used must be applicable to IEEE 1394.
- Both IEEE 1394 connectors are available.
- The computer is not provided with an IEEE 1394 board, contact your nearest RIP provider or MIMAKI sales office.

IEEE 1284 Interface is Used

Use an IEEE 1284 interface cable to connect the computer and the printer. In this case, however, the data transmission speed decreases.



Connecting the Power Cable



- Connecting the power cable

For supplying power to the printer, the power distribution board work are required.

Connecting the power cable by customer is not allowed.

Be sure to contact your local distributor to call for service to connect the power cable as well as moving installation of the device.

We should take no responsibility for any troubles caused through the power cable connection by customers without calling for service.

UV Unit and UV Irradiation Device

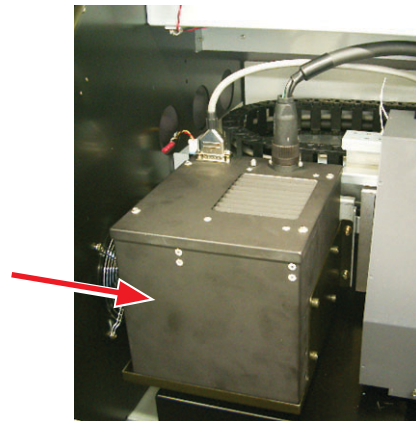
UV Irradiation Device



- Never look at the UV lamp being lit with your naked eyes.
- Do not touch the UV lamp when it is being lit or immediately after it is turned OFF because the UV lamp is hot and dangerous.

In 2 minutes after turning on the printer, this device is enabled to irradiate UV light.

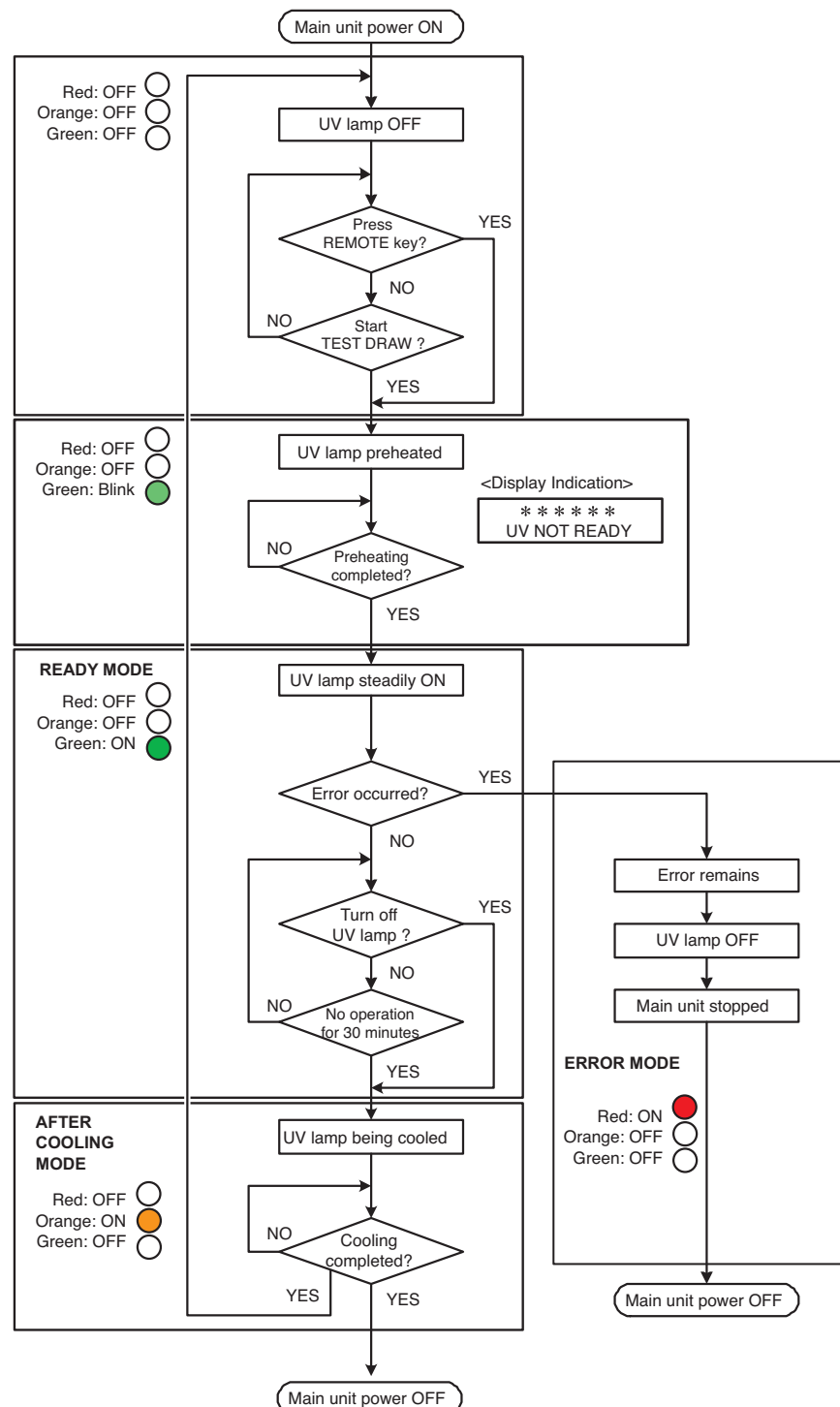
The UV irradiation device is equipped with a shutter mechanism. The shutter is opened automatically only when printing.









About Functions of UV Lamp Status Indicator

This section describes the functions of three UV lamp status indicators which are located under the power switch of the printer. The status indicators represent three modes in combination. The UV lamp automatically goes OFF when there is no printing for more than 30 minutes. If there is no printing for a long time (more than 30 minutes), turn the UV lamp OFF. (☞ P.4-7)

Flowchart for the UV indicator





Mode for the UV Lamp Status Indicator

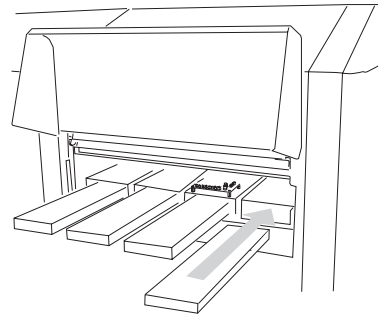
Mode	Description of indicator lamps	Description
Ready mode		
ON/blink (green) 	[Printing enabled] UV lamp being pre-heated (Blink) preheating completed (ON) UV lamp steadily ON (Preheating time: 2 minutes and 30 seconds to 3 minutes)	When touching [REMOTE] or [TEST] and selecting [TESTDRAW], preheating of the UV lamp starts. When preheating is completed, the UV lamp is ready and printing starts.
OFF 	[Printing disabled] UV lamp OFF or the other two modes	The UV lamp is not ready
After Cooling mode		
ON (orange) 	[Printing disabled] UV lamp being cooled (6 minutes)	The UV lamp goes OFF in the following cases: <ul style="list-style-type: none"> • When operation for setting the UV lamp OFF is carried out • When 30 minutes or more have elapsed after printing • When an error has occurred in the printer After the UV lamp has been set OFF, it is cooled. The UV lamp cannot be set ON again and the printer cannot start printing until this light goes off.
OFF 	The other 2 modes	
Error mode		
	[Printing disabled] Error occurred (The UV lamp goes OFF.)	ON (red) <ol style="list-style-type: none"> 1. Error in UV power 2. UV lamp overheated. The UV lamp goes OFF, the lamp cooling fan stops and printing with the printer also stops. 3. When the UV irradiation device shutter does not work normally.
OFF 	Normal	

Installing the Ink Cartridges

Install the ink cartridges to the ink station.

 **CAUTION**

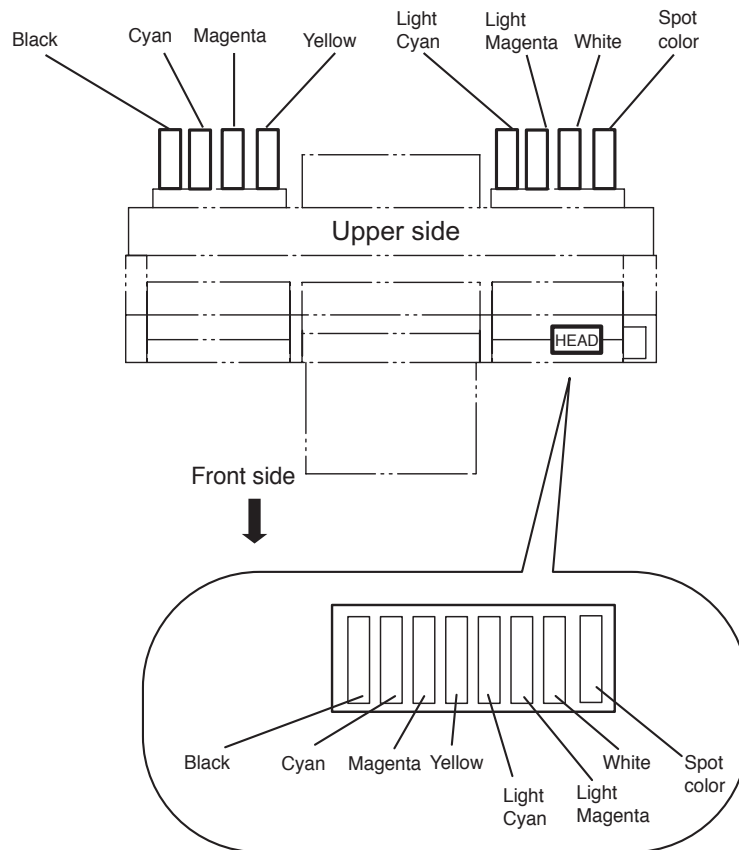
- When installing the ink cartridges, hold it laterally with the side containing the IC chip upward.
- After turning on power, be sure to carry out initial filling.
( P.2-7)



Relationships between the Ink Station and the Head Row

One color ink is applied to one size nozzle.

Remember these relationships when checking clogged nozzles of the heads, replacing an ink cartridge and filling up inks.



Cautions for Handling the Ink Cartridge



- Use the recommended ink cartridges by MIMAKI.
- Do not touch the ink directly. If you get the ink on your skin or your clothes, immediately wash it off with soap and water. If you get the ink in your eyes, immediately wash your eyes with a lot of running water. Then, see a doctor as soon as possible.
- When the ink cartridge is moved from a cold place to a warm place, leave it under the room temperature for three hours or more 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 package, printing quality would be poor.
- Store the ink cartridges in a place that is out of reach of children.
- When discarding unused ink cartridges, entrust them to an industrial waste disposal contractor, clarifying their contents.
- Some components (photo initiator) of the ink is toxic against aquatic organisms. Avoid leakage of it to natural water system or domestic wastewater.
- Do not use any ink cartridges expired the date noted on them.
- Before using the ink cartridges, be sure to read the Material Safety Data Sheet (MSDS).



- Do not shake the ink cartridges violently. Shaking or turning them roughly can cause leakage of ink.
- Never disassemble the ink cartridges.
- Never refill the ink cartridges 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 cartridges refilled with ink.
- Be sure to store the ink cartridges in a cold and dark place.

Regular Maintenance for the White Ink

The white ink precipitate easier than other inks, when not in use the printer for a long time. Make sure to perform regular maintenance to keep the ink in good condition.

Refer to Chapter 3. ( P. 3-14)



- Use the specified ink cartridge.
- Pull out the ink cartridge and shake it well once a week to avoid having the white ink precipitate.

Types of Usable Media

The following describes usable media size and method of handling.






Usable Media Size

	Roll Media	Leaf Media
Width	Max. 640mm, Min. 180mm	Max. 620mm, Min. 180mm
Max. Length	According to the roll length	520mm
Max. printing width	600mm x 500mm	
Thickness	0.02 to 0.2mm	0.02 to 2.0mm
Roll outside diameter	Ø180 mm or less	–
Roll weight	25kg or less	–
Roll inside diameter	3 inch	–

- Tape up or paste a weak adhesive on the end of the roll media.
- When the media size is small and adsorption holes are free, cover them on the table with the same media or the thinner media and fix them by an adhesive tape so that any printing trouble does not occur.
- When fixing by an adhesive tape, use a kind of drafting tape which does not remain any paste on the adsorption plate.
- Set thickness of both the media and adhesive tape 2.0mm or less.

Cautions in Handling Media

Carefully observe the following when handling media.

- 
 - Expansion and contraction of media
Do not use leaf media immediately after unpacking.
The media can expand and contract due to room temperature and humidity. The media have to be left in the atmosphere in which they are used for 30 minutes or more after unpacking.
- 
 - Curling of media
Leaf media should be flat or curled downward (swelled at the center) with the printing surface facing up. Media curled upward may not be absorbed to the table. When storing media that is easily curled, place them on a base or pallet slightly smaller than the media area so that the media will be curled downward during storage.
- 
 - When using the table
In order to maintain the absorption effect, block the absorption holes on the table, which cannot be covered with media, with other media thinner than those to be used. ( P.2-19)
- 
 - Other notices
 - * Do not put anything on coated paper, or discoloration may occur.
 - * Do not use any leaf media which is curled and unable to adsorb. Fix the media by taping up.

Menu Mode

The printer's three modes are described below.

< LOCAL > mode


Touch [Roll Print] on the [Menu] screen to display the LOCAL mode for roll print.

Touch [Leaf Print & Head check] to display the LOCAL mode for leaf print on the touch panel. The LOCAL mode is in preparation for printing.

All operation switches are enabled.

Date reception from a computer is available except for printing.

The following operations are available.

1. Touching the appropriate JOG to set up an origin and the printing area.
2. Touching the [TEST] to start test printing.
3. Touching the [CLEANING] to start head cleaning.
4. Touching the [COPY] to copy the printing data the printer printed.
5. Touching the [FUNCTION] to set printing conditions. ( [FUNCTION] mode)

< FUNCTION > mode

While the printer is in the LOCAL mode, touch the [FUNCTION] to put the printer into the FUNCTION mode. This is the mode in which printing conditions can be set. Refer to the chapter 4 "Various setting" or chapter 5 "Maintenance Functions".

< REMOTE > mode

The printer prints an image from data it receives.

During the printing operation, touch the [REMOTE] to interrupt the printing operation.

While the printer is in the LOCAL mode, touch the [REMOTE] to put the printer into REMOTE mode.

< MEM. > mode

A Printing information (pass number, resolution, color etc.) can be memorized for copying of multi editions, printing the data which was received.

While the device is in the REMOTE mode, touch the [COPY] to put the device into the MEMORY mode.

Chapter 2

Basic Operations

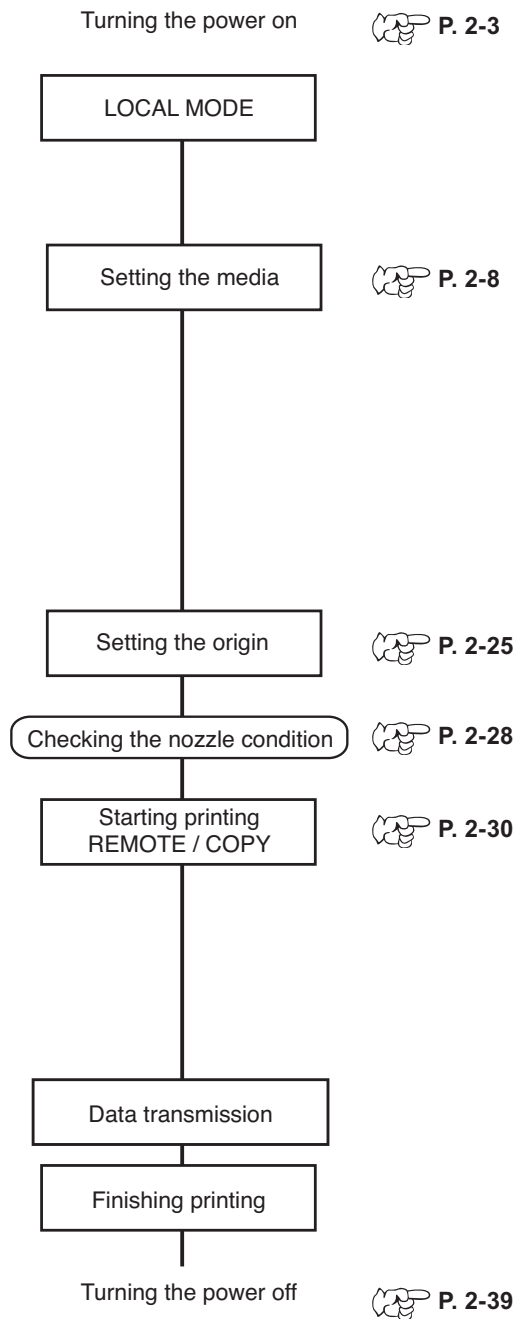
This chapter describes a series operations for printing.

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Flow Chart

The following shows a series of operations from power-on to end of printing. For details on each item, refer to the reference page.



Turning the Power on

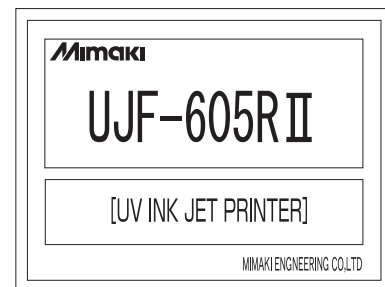
1. Turn on the power to the printer.

Press the power switch to [I].



Turn on the power to display the opening screen on the touch panel.

The initial operation of the printer is performed.



- If the temperature in the water heater has not reached the predetermined value, the message is indicated. In this case, printing is disabled. It is enabled when the error message disappears.

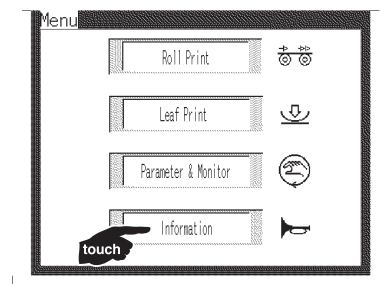
<<LOCAL>>
WATER NOT READY

2. Select a media type on the [Menu] screen on the touch panel.

Touch the [Roll Print] for roll print.

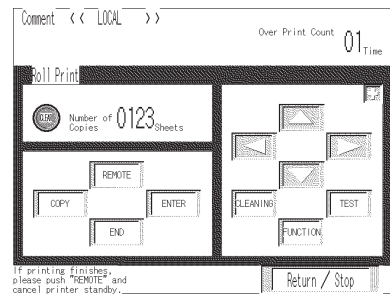
When not setting roll media, touch the [Roll Media Set].

Refer to [Setting Media]. (☞ P.2-8)



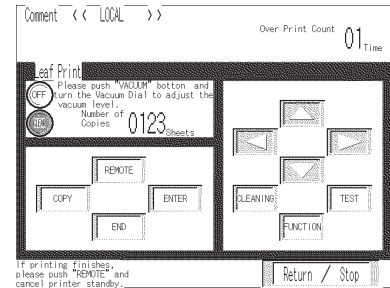
3. The LOCAL mode for roll media is displayed.

The tension for media turns on automatically and the vacuum turns on.



4. For leaf media, touch the [Leaf Print].

The LOCAL mode for leaf media is displayed.



5. Turn on the power to the computer which is connected to the printer.

Displaying the information

Display the printer information by touching [ENTER]. The following explains the procedure for displaying information in LOCAL mode.

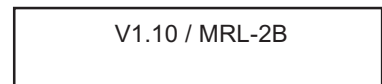


- Even in the REMOTE mode, you can display information by touching the [ENTER].

1. Touch the [ENTER] in the LOCAL mode, and the Ink remaining is displayed.



3. Touch the [ENTER], and the firmware version and command version are displayed.



- Refer to "Information" in the [Maintenance Functions] item for the printer information.

(P.5-32)

4. Touch the [ENTER], and the present UV lamp irradiation duration is displayed.



- Refer to “Replacing UV Lamp” in the [Maintenance Functions] item for displaying UV lamp irradiation duration.

(P.5-17)



UV USED TIME
600 h 00m

5. Touch the [ENTER], the screen returns to the LOCAL mode.



<< LOCAL >>

Opening / Closing Covers



- Keep all the covers closed during printing operation. Opening any of covers during printing interrupt image printing and disable continuous processing.

When the cover is opened during printing, the carriage movement and printing operation stop for safety. In this case, restart the printer and the computer according to the following procedures.

STEPS:

1. **When opening a cover during printing, the message shown on the right is displayed.**

Printing is stopped.

! COVER OPEN
CLOSE A COVER

2. **The data transmission from the computer is stopped.**

3. **Close the cover.**

4. **Touch the [ENTER].**



(COVER OPEN)
PRESS < ENT > KEY

PLEASE WAIT

5. **The carriage starts to move.**

The carriage will carry out a series of action that are the same as those taken after turning on the power to the printer.

6. **Touch the [FUNCTION] to display the data clear.**



<<LOCAL>>

7. **Touch the [ENTER].**

Execute the printing operations again.



FUNCTION
DATA CLEAR <ENT>

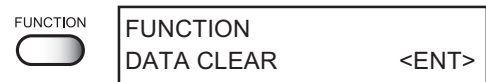
Initial Filling of Inks

When using the printer for the first time, it is necessary to install ink cartridges in the printer. To replace ink cartridges, refer to P.2-37.

STEPS:

1. Check that an ink cartridge has been inserted in the ink station up to the predetermined position and set.

2. Touch the [FUNCTION] in the LOCAL mode.



3. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



4. Touch the [ENTER].



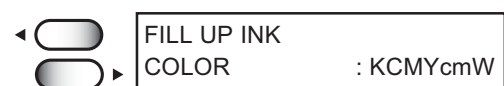
5. Touch the JOG [▲] or [▼] to select the [FILL UP].



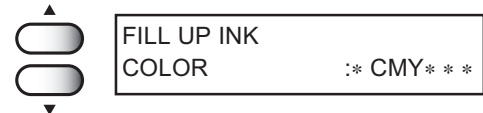
6. Touch the [ENTER].



7. Touch the JOG [◀] or [▶] to select the print head.



8. Touch the JOG [▲] or [▼] to display the print head. Which are not filled with ink. Put symbol [*] for colors to be filled with no ink.



9. Touch the [ENTER].



10. Touch the [ENTER] again.

The print heads are automatically filled with ink.



11. Once the ink-filling procedure is completed, the display shows the right message.

Touch [END] twice, the printer returns to the LOCAL mode.



Setting Media

Types of Usable Media

Only media which meet the following conditions are available:

	Roll Media	Leaf Media
Width	Max. 640mm, Min. 180mm	Max. 620mm, Min. 180mm
Max. Length	According to the roll length	520mm
Max. printing width	600mm x 500mm	
Thickness	0.02 to 0.2mm	0.02 to 2.0mm
Roll outside diameter	Ø180 mm or less	–
Roll weight	25kg or less	–
Roll inside diameter	3 inch	–

- When the media size is small and adsorption holes are free, cover them on the table and fix them by an adhesive tape so that any printing trouble does not occur.
- Tape up or paste a weak adhesive on the end of the roll media.



- The thickness of usable media is for roll film media from 0.02 to 0.2 mm, and for leaf media with 0.02 to 2.0 mm.
- Pouched films or tube films are unusable because they cannot be absorbed to the table.
- Set the media properly not to cause any wrinkles. Otherwise, printing does not work well.
- Do not use media larger than the table area.

Indications of the Tension Volume and the Vacuum Volume

The following describes the tension volume and the vacuum volume for OPP and PET. Finely adjust it not to cause any wrinkles.

Media	Thickness (mm)	Width(mm)	Tension	Vacuum
OPP	0.02	600	50 to 60	25
	0.03		10 to 80	25 to 40
	0.06		10 to 90	
PET	0.025		10 to 30	
	0.05		10 to 90	

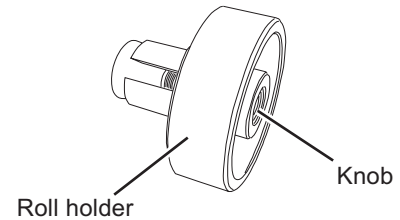
Setting procedure of roll media



- The weight of a roll holder and a roll media is approximately 25kg. Set the roll media by two persons.

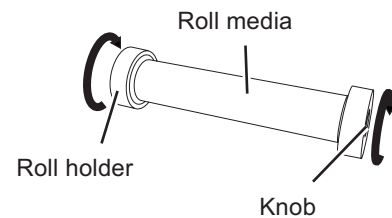
1. Set the roll the holder.

Turn the roll holder knob counterclockwise and clip the edge of the roll holder.



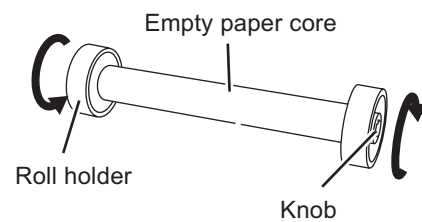
2. Attach the roll holder to the roll media.

Attach the roll holder to the both edges of the paper core of the roll media.
Turn the roll holder knob firmly clockwise to fix.



3. Attach the roll holder to the empty paper core.

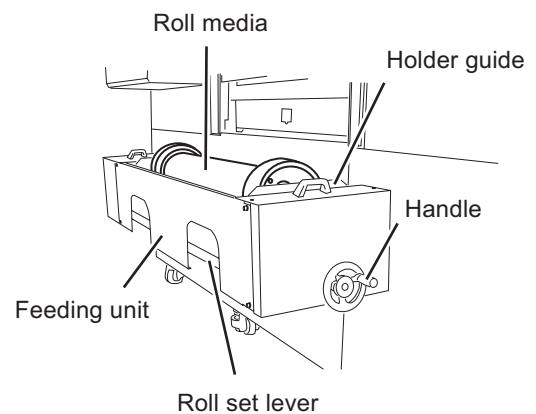
Attach the roll holder to the both edges of the empty paper core of the roll media.
Turn the roll holder knob firmly clockwise to fix.



- Previously turn the handle counterclockwise to open the holder guide widely.
- Put down the roll set lever.

4. Attach the roll media to the feeding unit.

With the roll holder attached to the both edges, attach the roll media to the feeding unit.

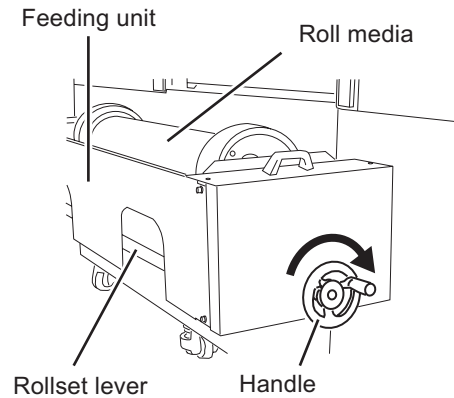


5. Set the roll attached to the feeding unit, to the center.

Turn the handle located at right side of the feeding unit clockwise to set the roll media to the center of the feeding unit.



- Turn the handle back to 1/4 position from the position where the handle is turned firmly.



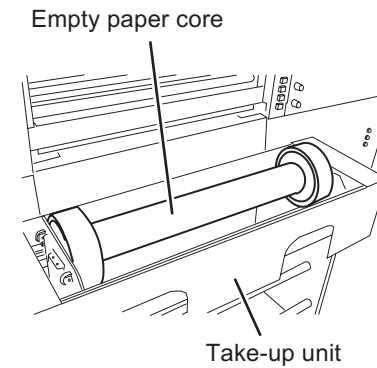
6. Lift up the roll set lever.

7. Attach the empty paper core to the take-up unit.

With the roll holder attached the edges, attach the empty paper core to the take-up unit.



- Previously turn the handle counter-clockwise to open the holder guide widely.
- Put down the roll set lever.

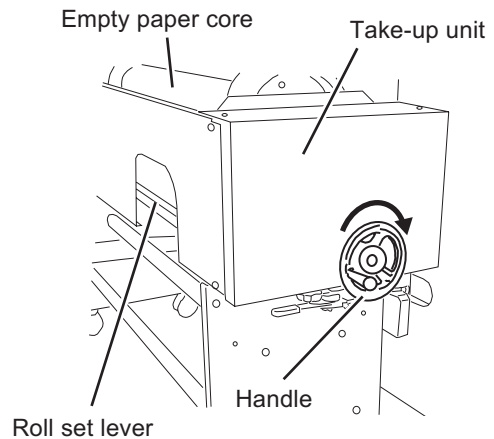


8. Set the empty paper core attached the take-up unit to the center.

Turn the handle located at the right of the take-up unit to set the empty paper core to the center of the take-up unit.



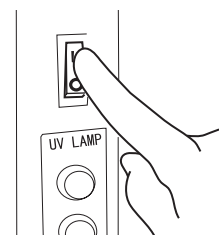
- Turn the handle back to 1/4 position from the position where the handle is turned firmly.




9. Lift up the roll set lever.

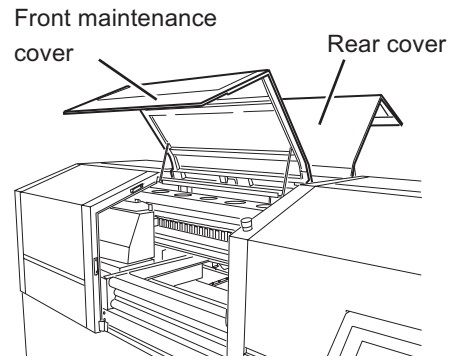
10. Turn on the printer.

Turn on the printer and keep it ready and waiting.



11. Open the front maintenance cover and the rear cover.

 • When opening the cover, make sure to hold the cover with the holding bar. Otherwise the cover fall down and it may cause some injuries.

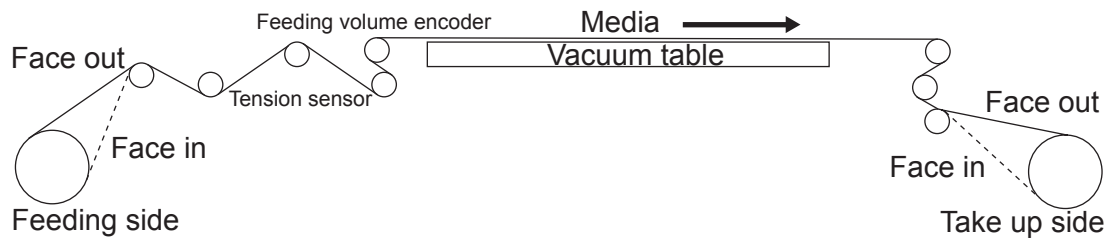


12. Select the feeding and take-up directions of media.

Select either [Face in] or [Face out] when feeding and taking up media by the touch panel.

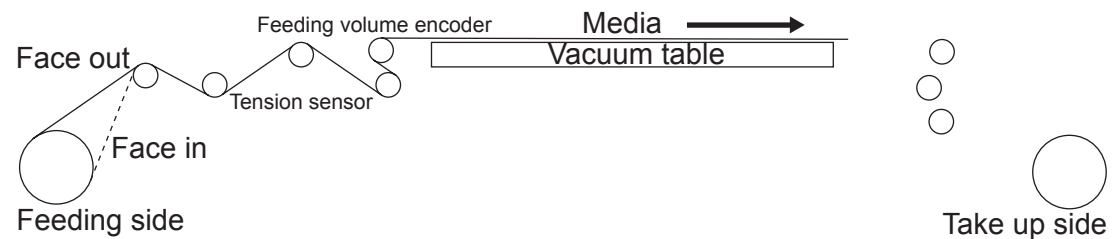
Select each [Face in] or [Face out] for the direction of the feeding and take-up.

Select each of directions separately for the feeding or take-up. Default is set only [Face in] for both the feeding and the take-up directions.



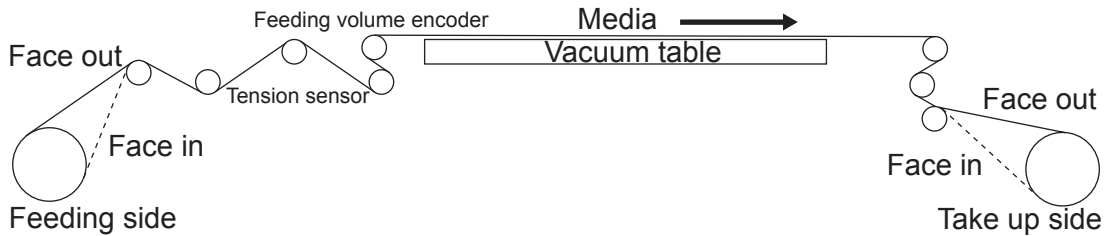
13. Pull out the roll media.

Pull out the roll media forward the table through the roller.



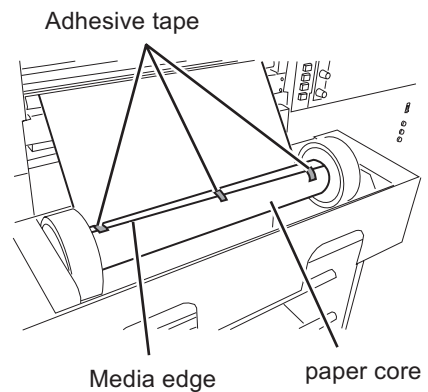
14. Pull out the media toward the empty paper core.

Pull out the media pulled toward the table, toward the empty paper core through the roller.



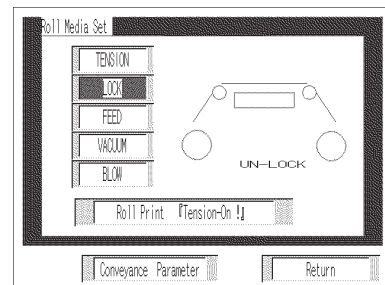
15. Fix the media to the empty paper core.

Fix the center at the edge of the media by the adhesive tape. Then fix the right and left edges of the media by the adhesive tape.



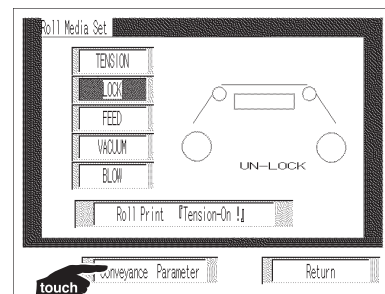
16. Select the [Roll Media Set] screen on the touch panel.

Touch the [Roll Print] on the [Menu] screen to enter the [Roll Media Set] screen.

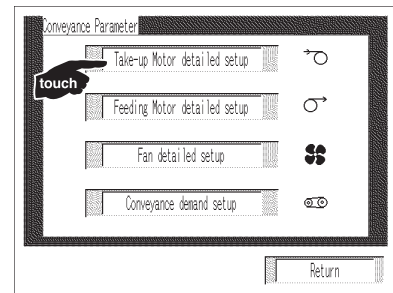


17. Select the directions of the take-up.

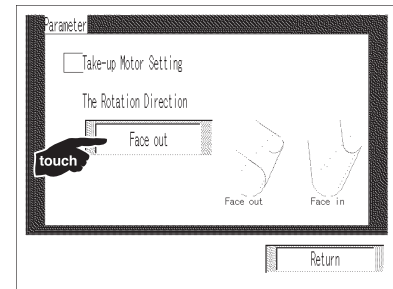
a. Touch the [Conveyance Parameter].



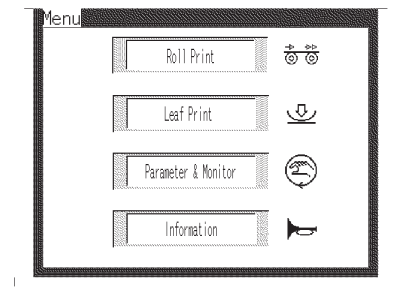
b. Touch the [Take up motor detailed setup].



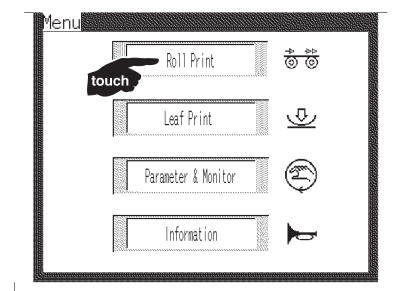
c. Touch the [The rotation direction].
Switch the [Face in] (inner volume) or the [Face out] (outer volume) by touching the panel.



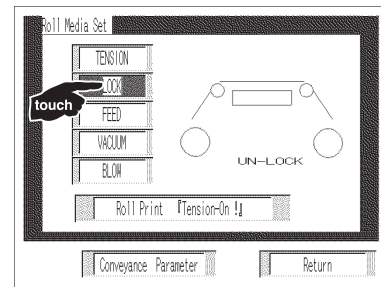
d. Touch the [Return] three times.
Return to the [Menu] screen.



e. Touch the [Roll Print].

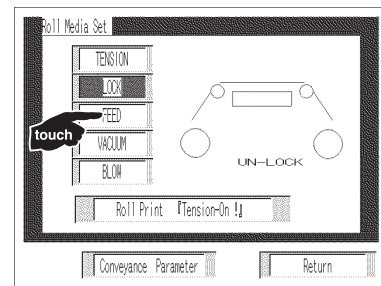


f. Touch the [LOCK].



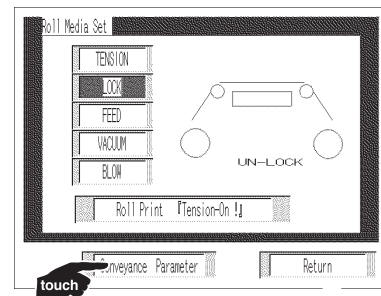
g. Make sure of turning directions by touching the [FEED].

The paper core turns around during touching the [FEED].
If a wrong rotation direction is selected, start from STEP a.

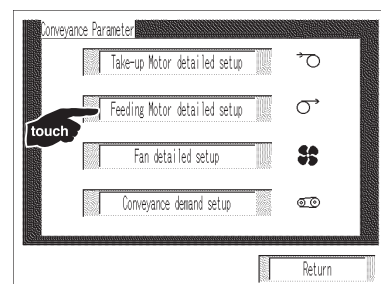


<2.Setup of feeding direction>

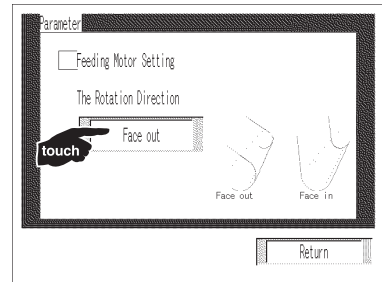
a. Touch the [Conveyance Parameter].



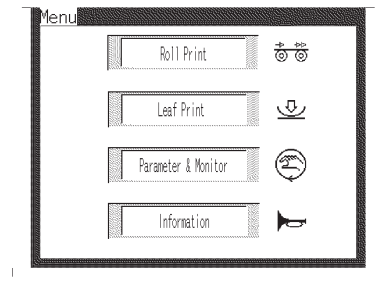
b. Touch the [Feeding motor detailed setup].



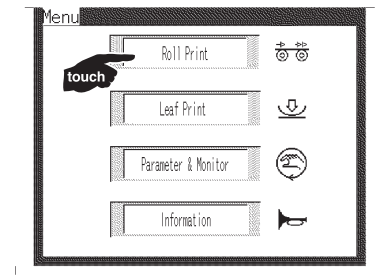
- c. Touch the [The rotation direction].
Switch the [Face in] or [Face out] by touching the panel.



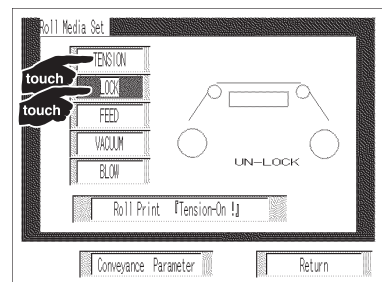
- d. Touch the [Return] three times.
Return to the [Menu] screen.



- e. Touch the [Roll Print].



- f. Touch the [TENSION] and [LOCK].
The roll media turns around.
Make sure of the turning direction.
If a wrong rotation direction is selected, start from STEP a.

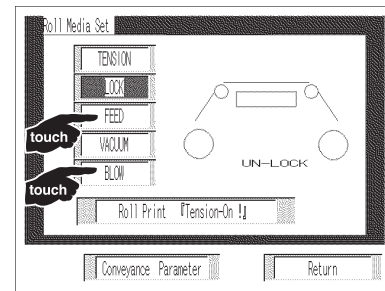


18. Feed the media.

Touch the [BLOW] and [FEED] on the touch panel to feed the media.

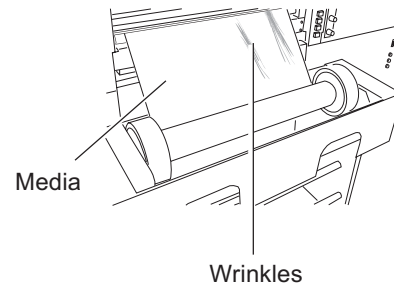
The sub switch works the same operation.

While touching the panel, feeding keeps working.



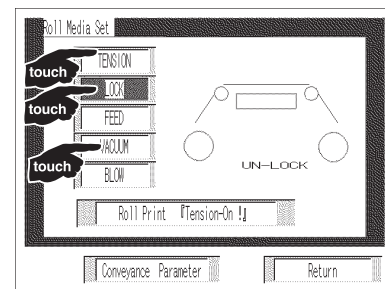
19. Correct some wrinkles and bending.

If wrinkles occur on the feeding media, start from STEP 13 again.



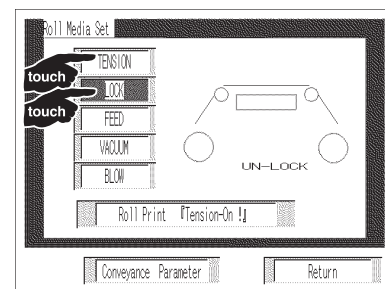
20. Adsorb the media to the table.

Touch the [VACUUM] to adsorb on the touch panel with feeding stopped the media on the table. Touch the [Roll Print].



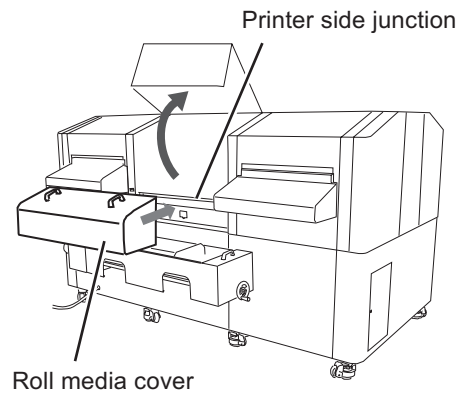
21. Make sure of feeding the media.

While touching the [TENSION] and [LOCK] of the touch panel, make sure of feeding media without any wrinkles under circumstance of cycle, such as [FEED] - [VACUUM] - [BLOW] - [FEED] and setting media will be completed.



22. The roll media set is completed.

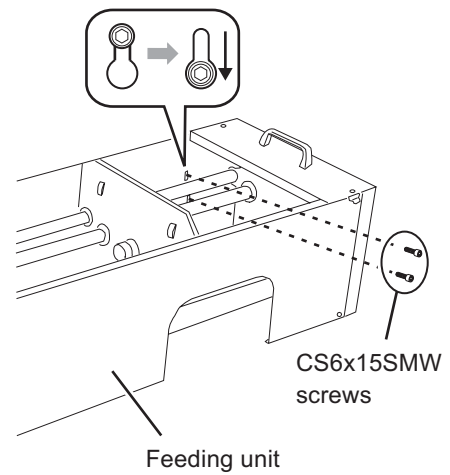
Complete the roll media setting with the roll media cover attached.



If wrinkles and bending on the media are not solved.

The roll holder tilts against the printing panel roller.
Correct the tilt of the roll holder.

- a. Loosen up the right and left two CS6x15SMW screws located at the holder block, which fixes the feeding unit to the printer in order to correct the tilt of the roll holder.

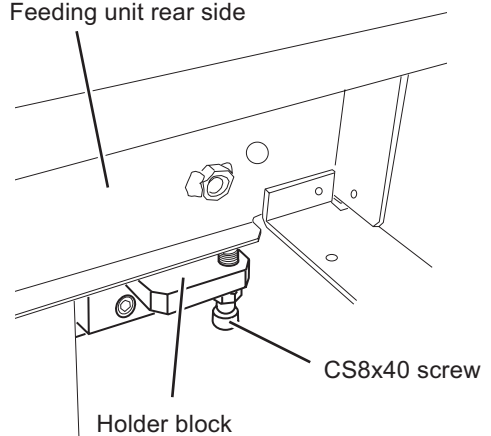


- b. Adjust the feeding unit up and down.
Adjust the tilt with a CS8x40 hexagon wrench.
After correcting the tilt with the screw, tighten the right and left two CS6x15SMW which fix the feeding unit.



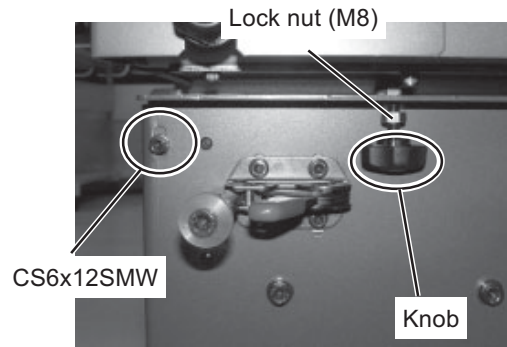
- When the media size is small and adsorption holes are free, cover them with the same media and fix it with an adhesive tape like a drafting tape which does not remain any paste on the table.

Feeding unit rear side



c. Loosen 4 screws (CS6x12SMW for height adjustment) attaching both side of the machine and then loosen 2 hexagon nuts (M8).

d. After adjusting the right-abd-left height with using the knob, tighten the hexagon nuts (M8) and screws (CS6x12SMW).



Setting procedure of leaf media

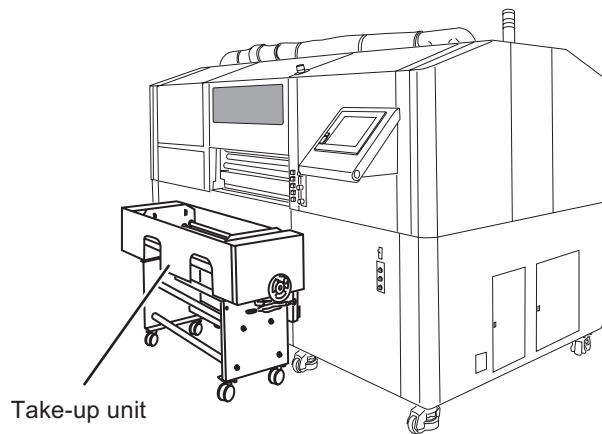
When printing leaf media, the take-up unit is detachable. (You can also print with the take-up unit.)



- Make sure to turn off the printer before attaching or removing the take-up unit.

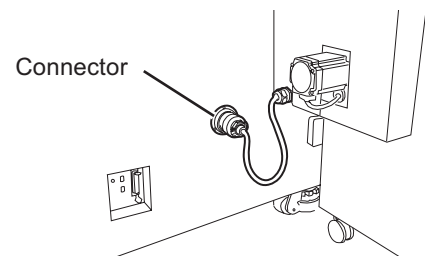
Attaching / removing the take-up unit procedures

Fix the take-up unit in opposite procedure about removing.



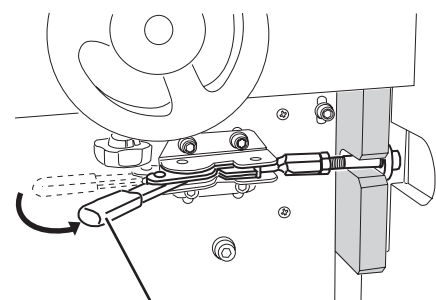
1. Remove the power connector.

Take off the power cable of the take-up unit from the connector of the printer.



2. Loosen up the clamp levers.

Push out the right and left clamp levers from the take-up unit and loosen up the clamp levers.

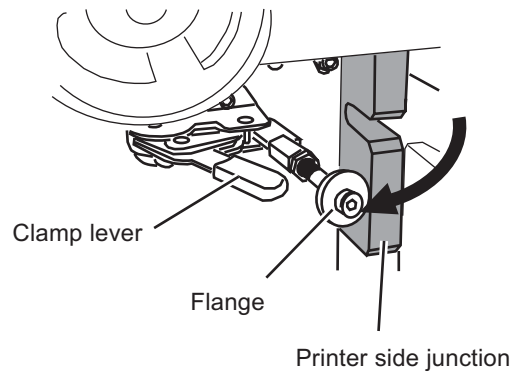


3. Remove the clamp levers.

Then insert the clamp levers to take off the flanges of the clamp lever from the groove on the connection of the right and left of the printer. This allows for taking off the take-up unit from the printer.

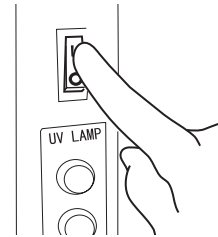


- Fix the take-up unit in opposite procedure about removing.



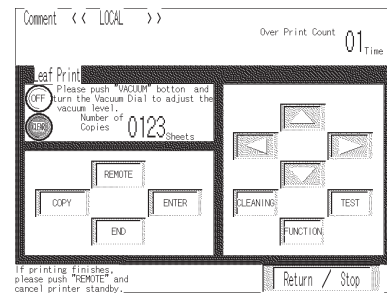
4. Turn on the printer.

Turn on the printer and keep ready and waiting.



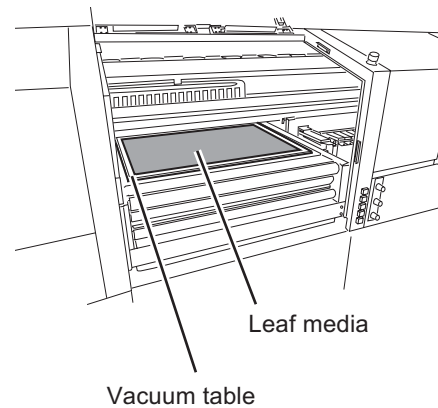
5. Select the [Leaf Print] screen on the touch panel.

Touch the [Leaf Print] on the [Menu] screen to enter the [Leaf Print] screen.



6. Set a leaf media.

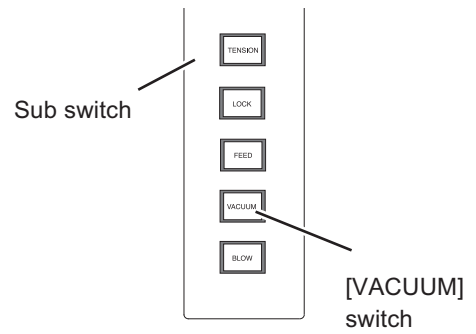
Set a leaf media to the table.



8. Adsorb and fix the leaf media.

Touch the sub switch [VACUUM] to adsorb the leaf media to the table and fix it.

When the media size is small and adsorption holes are free, cover them with the thinner media then the media and fix it by an adhesive tape not to cause any printing trouble.



9. The leaf media set is completed.

Adjustment of the Table Height [TBL HEIGHT]

According to an used media, you need to adjust height of the table. If the height is not proper, you can not print images properly.

Also, if the height is not adjusted, print quality may deteriorate, or media or the printer may be damaged, which is very dangerous. When a media which is not the same as the last one, make sure to adjust height of the table.

Gap adjustment between table surface and head undersurface is adaptable from 1.2 mm to 3.2mm. As for recommendation value of gap is 1.2mm. Therefore media thickness is acceptable up to 2.0mm.

STEPS:

1. Set a media.

Roll media: Tension and vacuum are turned on automatically.

Leaf media: Turn on the [Vacuum] of the sub switch by hand.



- To avoid interference of the head and the media, lower the table sufficiently before adjusting height.

2. Touch the [FUNCTION] in the LOCAL mode.



FUNCTION DATA CLEAR	< ENT >
------------------------	---------

3. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



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

4. Touch the [ENTER].



MAINTENANCE LIST	< ent >
---------------------	---------

5. Touch the JOG [▲] or [▼] to select the [TBL HEIGHT].



MAINTENANCE TBL HEIGHT	< ent >
---------------------------	---------

6. Touch the [ENTER].

When the UV lamp is turned on, a message which ask you to turn it off is displayed. Follow the message and turn off the UV lamp.



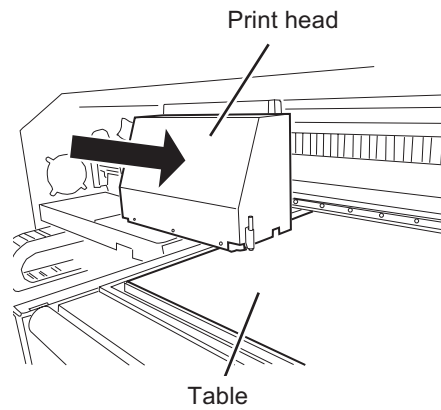
TABLE HEIGHT ADJ SET MEDIA	: ent
-------------------------------	-------

7. Touch the [ENTER].



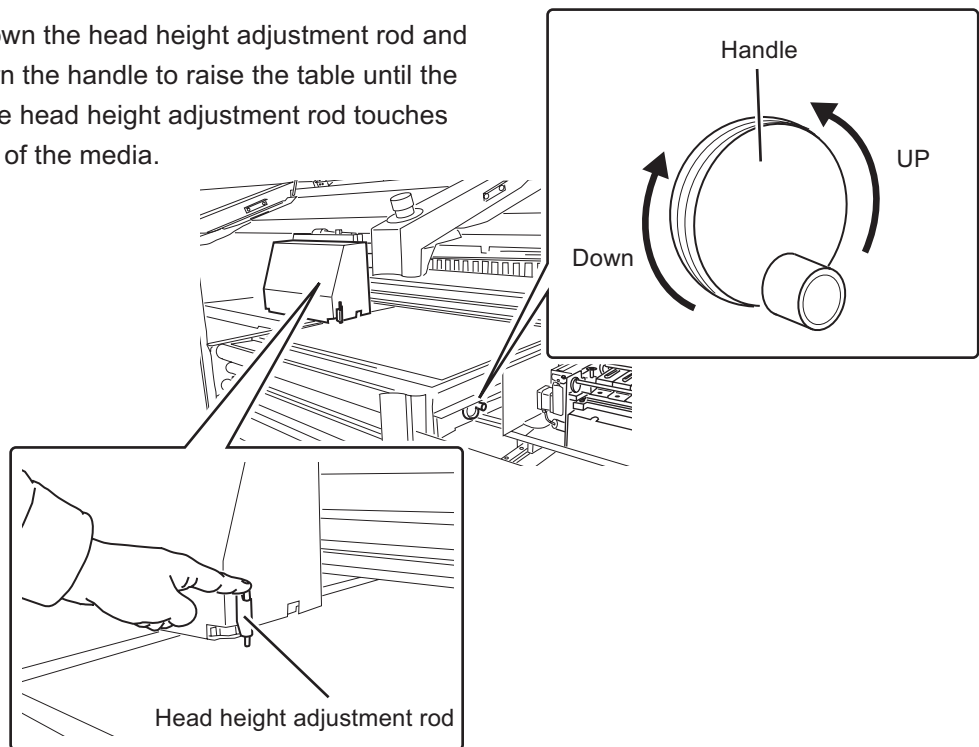
TABLE HEIGHT ADJ COMPLETED	: ent
-------------------------------	-------

8. Move the head on the table by hand.



9. Adjust height of the table.

- a. Hold down the head height adjustment rod.
- b. Hold down the head height adjustment rod and then turn the handle to raise the table until the tip of the head height adjustment rod touches surface of the media.



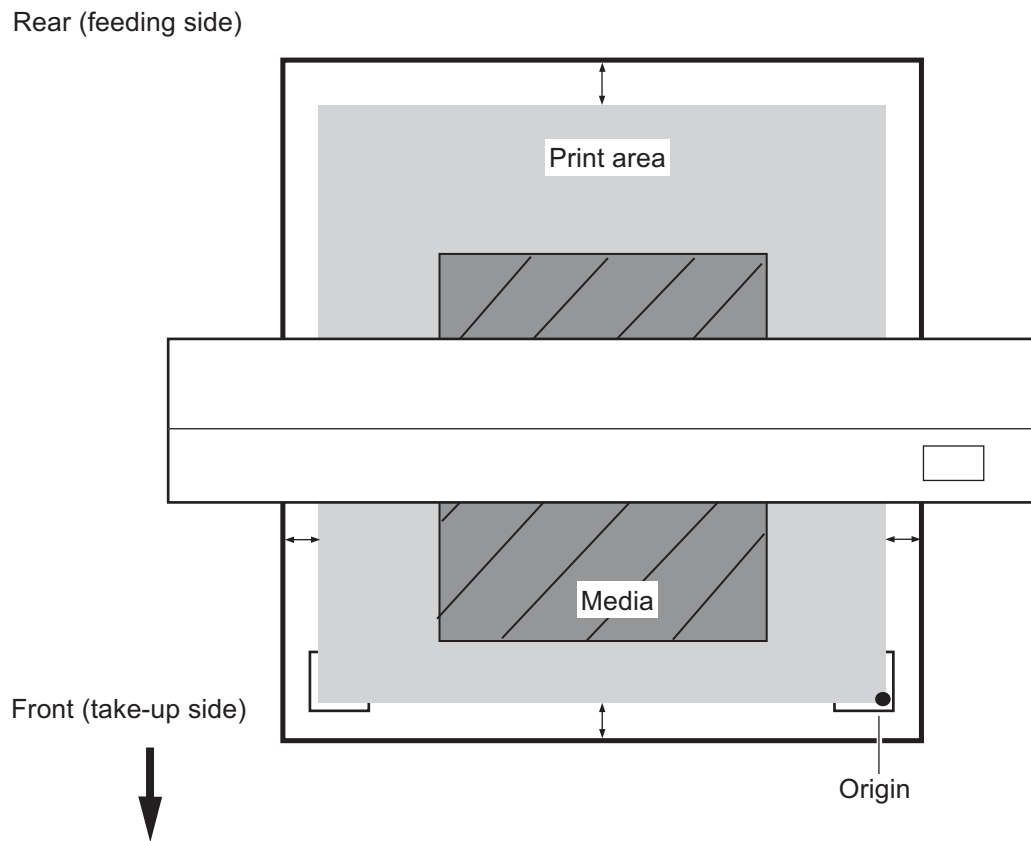
10. After adjusting height of the table, touch the [ENTER].



Setting the Origin and the Print Area

Initial Value

The origin and the print area are set as follows by default until they are changed:



Setting the Printing Origin

When printing in an area not initially set, change the printing origin.

The printing origin can be set in two ways:

- Setting the printing origin using the JOG
- Setting the printing origin using [ORIGIN] setting from the [FUNCTION] menu.

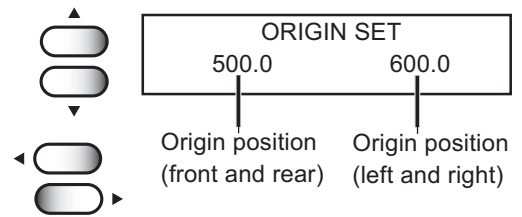
Setting the printing origin using the JOG

STEPS:

1. Touch the JOG [▲], [▼], [◀] or [▶] in the LOCAL mode to move the carriage to the position where you set an origin.



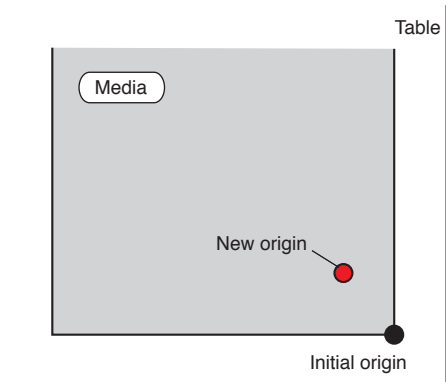
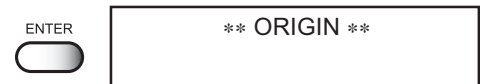
- The corner of right front side of the carriage is the origin.



2. After deciding the origin, touch the [ENTER].



- The new setting is saved until the origin or the print area is changed.
- To precisely set the origin, use [ORIGIN] in [FUNCTION] menu.
- Setting the origin by the JOG is cleared when turning the printer off.



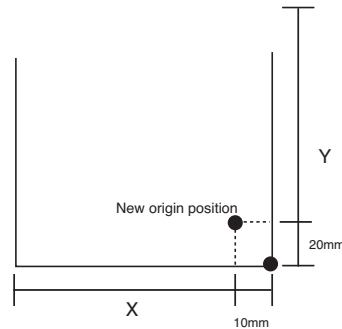
Setting origin position using JOG

Setting Precisely the Origin ([FUNCTION] - [ORIGIN])

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



- After setting the origin position (0, 0), it is not cleared when the power is turned off. However, if the origin position is changed by JOG operation, the setting value is cleared. (P. 2-25)



STEPS:

1. Touch the [FUNCTION] in the LOCAL mode.



FUNCTION	DATA CLEAR	<ENT>
----------	------------	-------

2. Touch the JOG [▲] or [▼] to select [ORIGIN].



FUNCTION	ORIGIN	<ENT>
----------	--------	-------

3. Touch the [ENTER].



ORIGIN	X OFFSET	<ent>
--------	----------	-------

4. Touch the [ENTER] again to select [X OFFSET].

Set the X origin.



ORIGIN	(500mm)
X OFFSET	0mm

5. Touch the JOG [▲] or [▼] to enter the setting value.

The number above the offset is indicated as the distance from the origin to the maximum printing width.



ORIGIN	(490mm)
X OFFSET	10mm

6. Touch the [ENTER].

Display enters the STEP 3.



ORIGIN	X OFFSET	<ent>
--------	----------	-------

7. Touch the JOG [▲] or [▼] to select [Y OFFSET].

Set the Y origin.



8. Touch the [ENTER].



9. Touch the JOG [▲] or [▼] to enter the setting value.

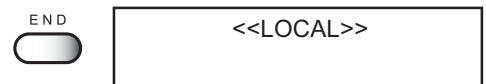


10. Touch the [ENTER] key, and set the Y-origin.

Display enters the STEP 7. The origin of coordinates has been set.



11. Touch the [END] twice to return to the LOCAL mode.

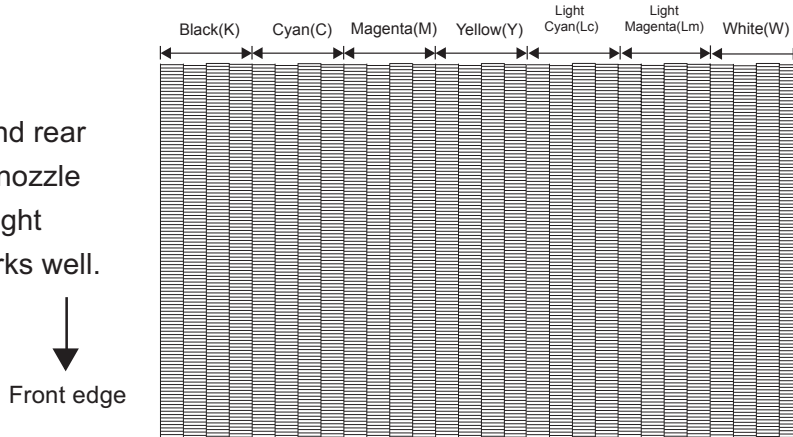


Checking and Solving Nozzle Clogging

Make test printing to check whether nozzle clogging or other printing failures occurs. If the finished test pattern shows any sign of abnormal conditions, carry out the cleaning function.

Normal Pattern

The front edge and rear edge are seen to be nozzle clogging on the right pattern, but it works well.



Print the test pattern



- If the temperature in the water heater or in the UV indication device has not reached the predetermined value, the following message is indicated. In this case, printing is disabled. It is enabled when the error indication has disappeared.

UV NOT READY

WATER NOT READY

STEPS:

Make sure to set media and the origin.

1. Touch the [TEST] in the LOCAL mode.



2. Touch the [ENTER] to start test printing.



3. After the printing the test pattern, and then the printer enters the LOCAL mode.

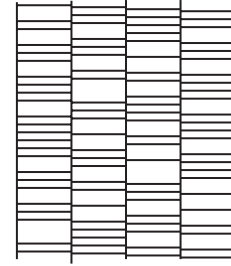


4. Check the test patterns.

If any failure occurs, proceed with the next step; otherwise, terminate the operation.

Abnormal Pattern

If an abnormal pattern like the one shown on the right is printed, clean the heads. There are two types of cleaning. Select one of them according to the result of the test pattern.

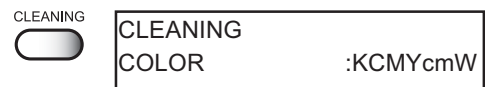


- Normal : Select this if any line is disappears.
- Hard : Select this if the abnormal pattern is not recovered.

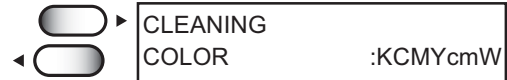
If the printing quality is not improved, clean the suction nozzle and the caps. Refer to "Chapter3 Daily Care"

STEPS:

1. Touch the [CLEANING].

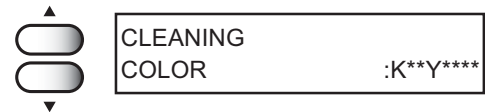


2. Touch the JOG [◀] or [▶] to select the print heads to be cleaned.



3. Touch the JOG [▲] or [▼] to display the print heads to be cleaned.

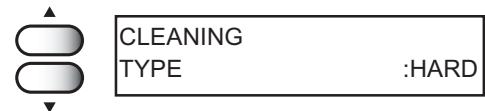
Select [*] for the heads not to be cleaned.



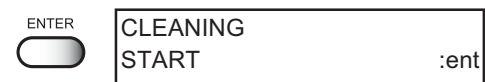
4. Touch the [ENTER].



5. Touch the JOG [▲] or [▼] to select a type of cleaning.



6. Touch the [ENTER].



7. Touch the [ENTER] to start the cleaning.

Cleaning is started.



8. After the cleaning, the printer returns to the LOCAL mode.



9. Origin has been setting automatically.


Therefore repeat printing the test pattern, and check the result.

Printing an Image from Data

Starting the Printing Operation

The following describes the procedures printing.

For various function settings, refer to “Chapter4 Various Setting”.



- If the temperature in the water heater or in the UV irradiation device has not reached the predetermined value, a message is indicated. In this case, printing is disabled. It is enabled when the error indication is disappeared.

< REMOTE >
UV NOT READY

< REMOTE >
WATER NOT READY



- Data can be transmitted even when either of these message are indicated. Printing is started after the indication is disappeared.

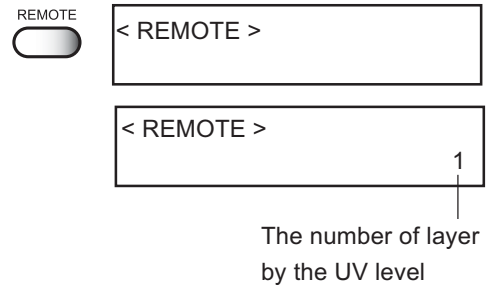
STEPS:

1. Set the media.

2. Touch the [REMOTE]. in the LOCAL mode.



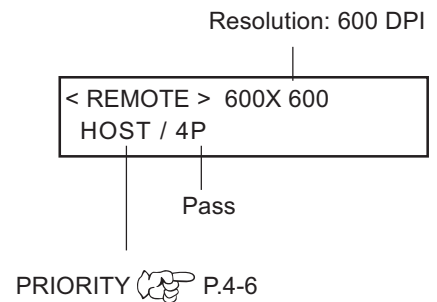
- When setting the [LAYER] by the UV level, indicate the number of layer at the right bottom of the remote display to confirm the intensity of the light level. Press the jog key [▲] or [▼] in this mode to change a layer and that allows the change of the UV level.



3. Transmit the data from the computer.

The printing conditions that are displayed.

For the method of data transmission, see the manual for the output software.



4. Printing is started printing.



- The origin remain unchanged after printing.
- When printing the same data repeatedly, use the copy function. (☞ P. 2-30)



- During printing, media may be heated by the UV lamp and become raised and it may cause printing to be interrupted. In this case, set new media and restart printing.

5. After printing, turn the vacuum switch off, and then remove the media from the table.

[In case of Leaf Media]

Press the sub switch [VACUUM] to stop adsorbing and remove the media.


[In case of Roll Media]

1. Select the [Roll Media Set] screen on the touch panel.
2. Touch the [VACUUM] to stop adsorbing.
3. Touch the [FEED] to feed the media to out of the table.

Printing Repeatedly (COPY)

Print the last transmitted data again.

This operation can be carried out from the operation panel or sub-panel in the same way.



- If the temperature in the water heater or in the UV device has not reached the predetermined value, a message is indicated. In this case, printing is disabled. It is enabled when the error indication has disappeared.

< COPY >
UV NOT READY

< COPY >
WATER NOT READY

STEPS:

1. After printing data, enter the LOCAL mode.

Set the media.

<<LOCAL>>

2. Touch the [COPY].

COPY




COPY

<ENT>

3. Touch the [ENTER].


ENTER



< COPY > 600X 600
HOST / 32P

4. The LOCAL mode is displayed after printing is completed.

<<LOCAL>>



- When the previous data does not exist, the message shown below appears and the LOCAL mode is displayed.

< COPY >
NO DATA

Canceling Printing

If you cancel during printing, stop the carriage and erase the received data from the printer.

STEPS:

1. Touch the [REMOTE] to stop the printing operation.

REMOTE



<< LOCAL >>

2. If data is being transmitted from the computer to the printer, stop the data transmission of the printer.

3. Touch the [FUNCTION] .
The [DATA CLEAR] is displayed.

FUNCTION



FUNCTION

DATA CLEAR

< ENT >

4. Touch the [ENTER].
The received data is erased, and the printer returns to the LOCAL mode.

ENTER



DATE CLEAR

<< LOCAL >>

Printing multi editions repeatedly (multi editions copy)

Data printing at most 4 editions of multi editions can be printed and the procedure for data copying is following. Also pressing the [FUNCTION] key in COPY mode allows at most 4 editions, 4 times at most.

STEP

1. When the device is in the LOCAL mode, touch the [REMOTE] to put the device into the REMOTE mode.



< REM. >

2. During waiting for printing in the REMOTE mode, touch the [COPY] to put the device into the MEMORY mode.



< MEM. >

The MEMORY mode can print the receiving data as well as the REMOTE mode.

As the MEMORY mode can copy multi editions, printing information of each edition can be memorized.

3. Some data (at most 4 times) sending from the computer can be printed.

But when each edition has different resolution or there is the same color in another edition, multi editions copying can not be performed.

In this case, display the right error messages and complete the memory mode after printing.

< MEM. > 600 x 600
HOST / 4P

ERROR 13
MEMORY DATA

4. After printing all editions data, touch the [COPY] and complete the MEMORY mode.



< REM. >

Perform the change of the MEMORY mode before printing or after printing and do not change during printing.

5. Touch the [REMOTE] to put the device into the LOCAL mode.



<< LOCAL >>

6. Touch the [COPY].



COPY < ENT >

7. **When setting overprinting editions in turn and counting them, touch the [FUNCTION] key.**

The copy edit mode is ready.

When not setting any overprinting editions in turn and counting, follow the procedure from STEP 10.



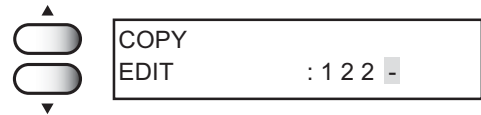
8. **Touch the JOG [◀] or [▶] to select the printing order of the overprinting edition.**

The first one and second one from the left.



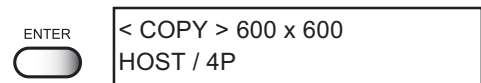
9. **Touch the JOG [▲] or [▼] to select the overprinting edition.**

The following display indicates the second edition two times after printing the first edition. [-] indicates no printing.



10. **Touch the [ENTER] to execute copying.**

When the right error message is displayed under the condition that multi editions copying can not be performed, errors are displayed and copying can not be performed.



11. **Data of each edition recorded is printed in order and the device reverts to the LOCAL mode.**



12. **In case of copying again, replace media and perform copying from the STEP 5.**

Cycle Stop

The "Cycle Stop" means that the operation stops after completing printing the data which is currently printed.

STEPS:

1. Touch the [END] during printing.



2. The [CYCLE STOP] on the LCD blinks.

< REMOTE > CYCLE STOP
HiST1***

3. After printing, the LOCAL mode is displayed.

<< LOCAL >>
CYCLE STOP



- Touch the [REMOTE] when starting printing again.
- Delete the received data as well as [Canceling Printing] when stopping printing.

P.2-33

Setting a New Ink Cartridge in the Ink Station

If ink in the cartridge is close to being empty, a message appears. Printing can be continued but ink may run out during printing. Immediately replace to a new ink cartridge.



- When [NEAR END] is indicated on the LCD, replace the ink cartridge immediately.
- When inserting the ink cartridges, hold it laterally with the side containing the IC chip upward.

< When the amount of ink gets low during printing >

The colors of the ink whose amount gets low are indicated.

The display on the right indicates that black ink comes to an end.

```
<<LOCAL>> NEAR END  
COLOR      :K
```

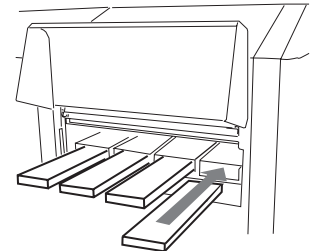
STEPS:

1. **The message shown on the right is displayed on the LCD during printing.**

```
<<LOCAL>> NEAR END  
COLOR      :K
```

2. **Replace to a new ink cartridge.**

Pull out the ink cartridge of the indicated color and then insert a new ink cartridge.



3. **Touch the [REMOTE] to enter the REMOTE mode.**

Continuous printing is available.



Ink Cartridge Trouble

When an ink cartridge trouble is detected, a warning message appears and printing, cleaning and all other operations that use ink are disabled. In this case, replace the ink cartridge to a new one immediately.



- Do not leave the ink cartridge unreplaced for a long time as this will cause nozzle clogging and the printer must be repaired by a service person.

1. Display the detail of the ink cartridge trouble.

The contents of the cartridge trouble can be checked. For details, refer to “Troubles for which Error Messages are Given on the LCD” in Chapter 6 [Trouble Shooting].

! INK CARTRIDGE COLOR :KCMYcmWS

2. Touch the [ENTER] in the LOCAL mode.



<< LOCAL >>

3. Touch the [ENTER].

The menu will return to the LOCAL mode automatically when no trouble exists.

If the cartridges have two or more trouble, touch the [ENTER] again to display the next trouble.

When all troubles are displayed, the menu returns to the LOCAL mode.



! WRONG INK IC COLOR :KCMYcmWS

! NonORIGINAL INK COLOR :KCMYcmWS

! Kind Of INK COLOR :KCMYcmWS

! Color Of INK COLOR :KCMYcmWS

! Expiration : 2MON COLOR :KCMYcmWS

Turning the Power off

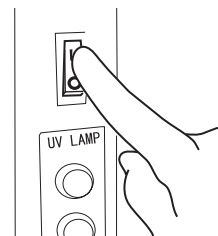
When turning the power off, check first whether the printer receives any data and the data which is not printed out remains.



- Leave all the covers closed.
- Perform the operation for the turning off of UV irradiation device, and turn the device off when Orange Cooling lamp has been gone dark.

STEPS:

1. Turn off the UV irradiation device.
2. Make sure that the orange cooling lamp is off.
3. Turn off the computer which is connected to the printer.
4. Turn off the printer.
Press the power switch to [O] side.



Chapter 3

Daily Care

This chapter describes daily care.

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Daily Care

Be sure to care for the printer according to frequency in use or periodically so as to use the printer for a long time with high accuracy.

When the Printer is not Used for a Long Time



- Be sure to turn off the power. (☞ P. 2-39)
- Remove media set on the table.

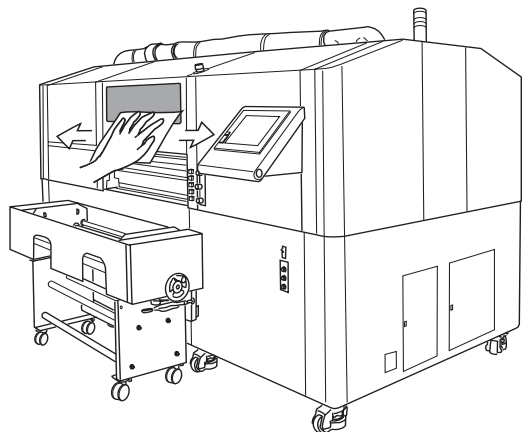
Cautions during Maintenance



- Never disassemble the printer. Disassembling the printer can result in electric shocks and failures of the printer.
- To prevent electric shocks and failures of the printer, keep out water.
- Turn off power and detach the power cable before maintenance, or an unexpected accident may occur.
- Cool the UV lamp before maintenance, or it may cause a burn injury.
- Do not use benzene, thinner and chemical agents containing abrasives, or they can deteriorate or deform the surface of the cover.
- Do not apply lubricating oil or the like inside the printer. Such materials can cause failures or the printer.

Care for the Table and the Exterior


If the exterior of the printer gets dirty, wipe it off with soft cloth moistended water or natural detergent diluted with water and squeezed. Also clean dust on the table.




In Case Defective Printing is not Recovered [STATION]

When the station interior is severely contaminated or defective printing is not recovered after operating the head cleaning function (☞ P. 2-29), clean the suction nozzle and the caps using the cleaning kit as follows,

Washing liquid (SPC-0385), Gloves, Cleaning swab (SPC-0386), Goggles



- Be sure to wear the supplied goggles and the gloves during cleaning, or you may get the ink in your eyes.



- Do not move the carriage out of the capping station by hand. Use the appropriate operation key to move the carriage.

CAUTION

Cleaning the interior of the station

1. Touch the [FUNCTION] in the LOCAL mode.



FUNCTION DATA CLEAR	< ENT >
------------------------	---------

2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



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

3. Touch the [ENTER].



MAINTENANCE LIST	< ent >
---------------------	---------

4. Touch the JOG [▲] or [▼] to select the [STATION].



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

5. Touch the [ENTER].



STATION CARRIAGE OUT	: ent
-------------------------	-------

6. Touch the [ENTER].

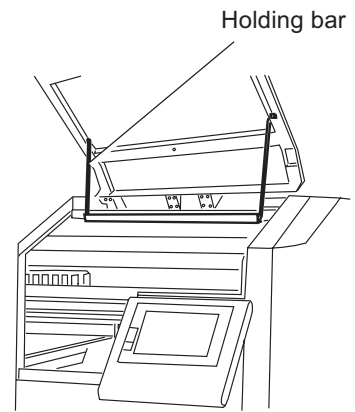
The carriage moves on the table.



7. Open the right maintenance cover.



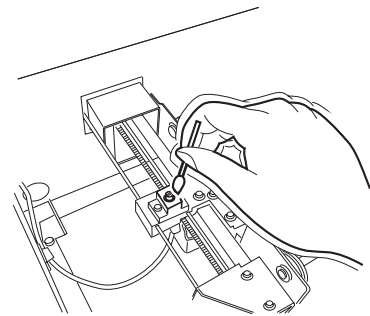
- When opening the cover, make sure to hold the cover with a holding bar. Otherwise the cover may fall down and it may cause some injuries.



8. Clean the suction nozzle using the exclusive cleaning swab moistened with the washing liquid.



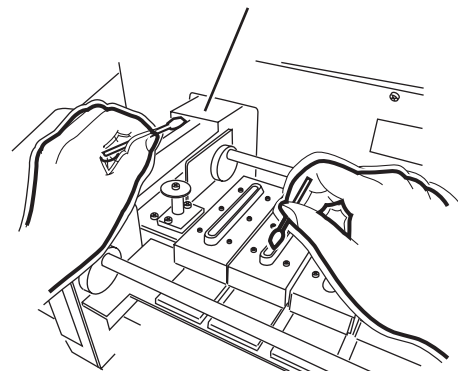
- Carefully clean the suction nozzle.



- Replace the suction nozzle that is severely contaminated or bent. Contact your nearest sales agency or MIMAKI sales office.
- Contact your nearest sales agency or MIMAKI sales office to order additional cleaning swab.

9. Wipe off the adherent ink which got on the cap rubber or inside the suction nozzle cover with the exclusive cleaning swab.

Suction nozzle cover



10. Close the right maintenance cover and then touch the [ENTER].

The initial operation is performed, then the printer returns to the LOCAL mode.



STATION
COMPLETED : ent


PLEASE WAIT

<< LOCAL >>


Cleaning Flushing Tray

Wipe off waste ink from the flushing tray.

Cleaning Tools : Washing liquid (SPC-0385), Gloves, Goggles, Paper towel



- Be sure to wear the supplied goggles and the gloves during cleaning, or you may get the ink in your eyes.



CAUTION

- Do not move the carriage out of the capping station by hand. Use the appropriate operation key to move the carriage.
- Make sure to remove the waste ink from the flushing tray frequently. Otherwise the waste ink gets hard under the UV light and may not be able to be removed.

STEPS:

1. Touch the [FUNCTION] in the LOCAL mode.



FUNCTION	FUNCTION
	DATA CLEAR < ENT >

2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



FUNCTION	FUNCTION
	MAINTENANCE < ENT >

3. Touch the [ENTER].



ENTER	MAINTENANCE
	LIST < ent >

4. Touch the JOG [▲] or [▼] to select the [STATION].



MAINTENANCE	MAINTENANCE
	STATION < ent >

5. Touch the [ENTER].



ENTER	STATION
	CARRIAGE OUT : ent

6. Touch the [ENTER].

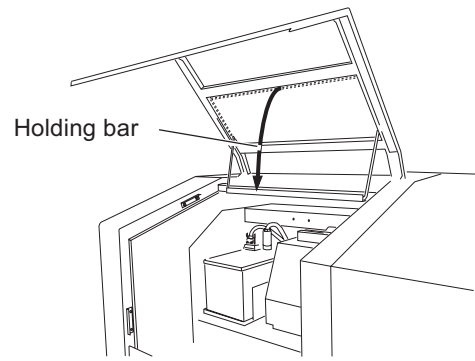


The carriage moves on the table.

7. Open the left maintenance cover.



- When opening the cover, make sure to hold the cover with a holding bar. Otherwise the cover may fall down and it may cause some injuries.



8. Wipe off the waste ink from the flushing tray with the paper towel moistened with the washing liquid. Also, remove the caked ink by patting the tray with the paper towel.



- If the UV ink is dried out under the UV light and can not be removed, it may cause head damages and the flushing tray must be replaced to new one. Contact your local dealer for a replacement.



9. Close the left maintenance cover and then touch the [ENTER].

The initial operation is performed, then the printer returns to the LOCAL mode.



STATION
COMPLETED : ent

PLEASE WAIT

<< LOCAL >>

When the Waste Ink Tank Becomes Full

Waste ink used for cleaning the heads gathers in the waste ink tank.



- Contact your local MIMAKI distributor or call a local MIMAKI office if you need a spare waste ink tank.
- Prepare a polyethylene tank in which to empty the waste ink.



- Ink drips during cleaning, so wait until it stops dripping.

When the waste ink tank is filled with waste ink, the following error message is indicated:

! INK TANK
WASTE TANK FULL

STEPS:

1. **Open the waste ink tank cover.**

2. **Pull down the waste ink tank and pull it out.**



- When pulling out the waste ink tank, pull it out slowly with paper over the tank opening to prevent ink from spattering.
- Before replacing the waste ink tank, put paper on the floor to prevent it from staining with ink.



3. **Dump waste ink into another polyethylene tank.**



- Discard the waste ink by the local regulations of the area in which this unit is used.

4. **Put the empty waste ink tank back into the printer.**

Close the Waste ink cover.



- To avoid hurt hands at the corner of the tank cover, be careful to set the tank.



5. **Touch the [ENTER] to complete the procedure.**

The printer returns to the LOCAL mode.



WASTE TANK
TANK READY :ent

<< LOCAL >>

Replacing the Water for the Water Heater Tank [WATER CHANG]

In order to keep the ink at an appropriate temperature, operate the water heater. Put the antifreezing liquid and water in the water heater tank in the water heater.

Cautions for Replacing



- Do not add water.
- Ratio of soft water to the antifreezing liquid should be 2 (Soft water) : 1 (Antifreezing liquid).
- When only soft water is put in the water heater tank without the antifreezing liquid, it may damage the heads.
- Check the water heater every six months to be sure the water heater tank is sufficiently clean and has the appropriate water.
- The water in the water heater tank frequently becomes insufficient, contact your nearest sales agency or MIMAKI sales office.
- Discard the water/antifreezing liquid mixture by the disposal regulations of the area where the printer is used.



Cautions for Handling the Antifreezing Liquid



- Be sure to wear the goggles and the gloves during handling the antifreezing liquid.



- Use the exclusive antifreezing liquid by MIMAKI , or the water heater may be damaged.
- Do not touch the antifreezing liquid directly. If the it gets on the skin or clothes, immediately wash it off with soap. If you gets the antifreezing liquid in your eyes, immediately wash your eyes with a lot of running water. Then, contact a doctor as soon as possible.
- Be sure to store the antifreezing liquid in a cold and dark place.
- Store the antifreezing liquid in a place that is out of reach of children.
- Have an industrial waste disposal contractor discard the waste antifreezing liquid, clarifying its contents.
- Before using the antifreezing liquid, be sure to read the Material Safety Data Sheet (MSDS).



- To purchase a space tank, contact your nearest sales agency or MIMAKI sales office.
- Prepare a polyethylene tank to move the waste water heater tank water.
- When the water in the water heater tank is insufficient, an error message is displayed as below. In this case, replace the water by the following steps.

ERROR 70 WATER LACK

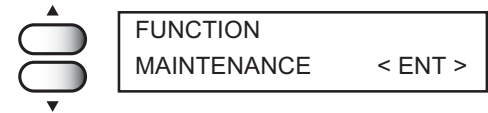
Replacing the antifreezing liquid

STEPS:

1. Touch the [FUNCTION] on the LOCAL mode.



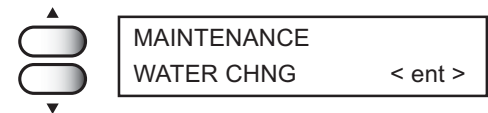
2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



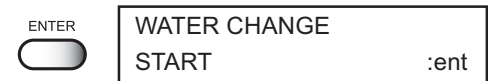
3. Touch the [ENTER].



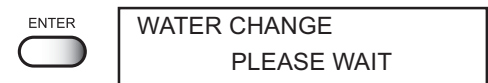
4. Touch the JOG [▲] or [▼] to select the [WATER CHNG].




5. Touch the [ENTER].



6. Touch the [ENTER] to start cooling down the water heater.





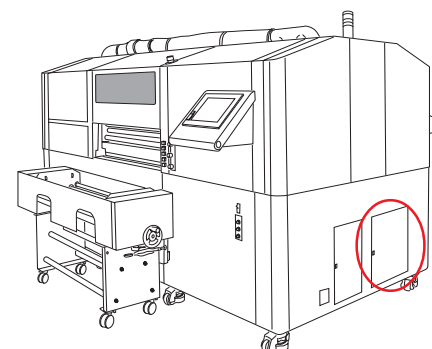
CAUTION

- Do not touch the water heater until [WASTE AF] is displayed to avoid a burn injury. It may take 20 minutes for the [WASTE AF] to be display if the printer has been in use.

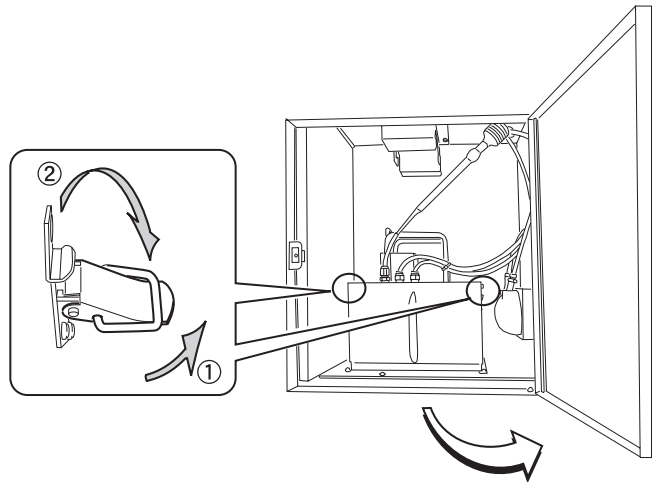
7. Touch the [ENTER] when the [WASTE AF] is displayed.



8. Open the water heater cover.



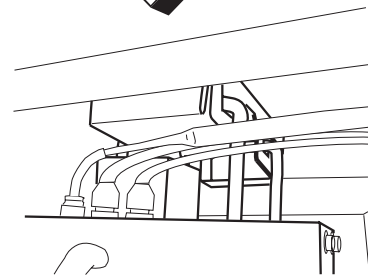
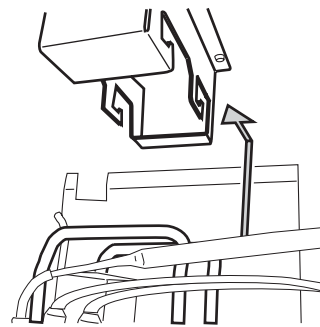
9. Unlock the catch clips on both sides of the water heater tank cover.




10. Hold up the water heater tank cover and engage its handle with the hook.



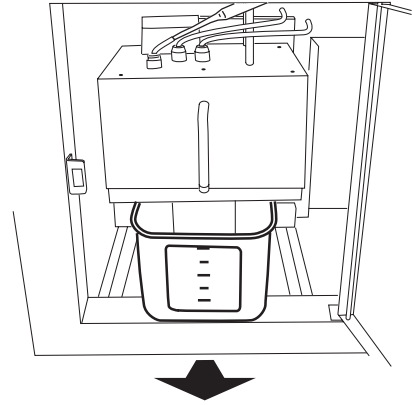
- When engaging the handle with the hook, take care to avoid bending the cables or tubes or pulling them with excessive force, or it may cause failures of the water heater.




11. Remove the water heater tank.

 CAUTION


- When moving the tank, take care not to spill the water. If spilling it, be sure to wipe it off.



12. Move the waste water in the water heater tank to another polyethylene tank.

 CAUTION

- When moving the water, take care not to spill it. If spilling it, be sure to wipe it off.



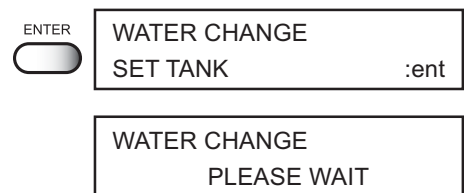
- Discard the waste water by the local regulations of the area where this printer is used.

13. Set the empty water heater tank into the water heater.

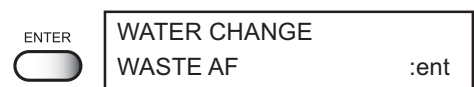
14. Lock the catch clips and close the cover.

15. Touch the [ENTER].

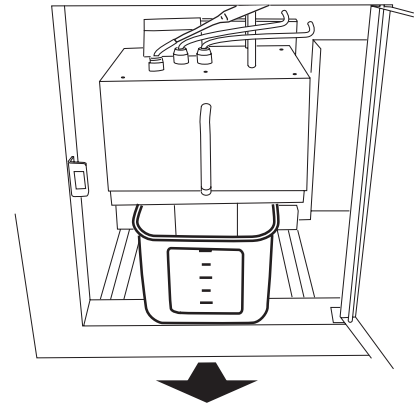
Discharge of the antifreezing liquid in the printer is started.




16. Touch the [ENTER] when the [WASTE AF] is displayed.



17. Open the water heater cover again and then remove the water heater tank.




18. Move the waste water in the water heater tank to the polyethylene tank again.




CAUTION

- When moving the water, take care not to spill it. If spilling it, be sure to wipe it off.



- Discard the waste water by the local regulations of the area where this unit is used.

19. Wash the water heater tank.



CAUTION

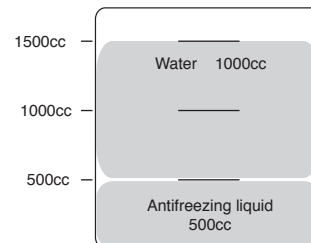
- If neutral detergent is used for washing the tank, sufficiently rinse the tank with water.



20. Put soft water and the antifreezing liquid in the water heater tank.

Put 500 cc of the antifreezing liquid, and then add 1000 cc of soft water.

Ratio of soft water with antifreezing liquid

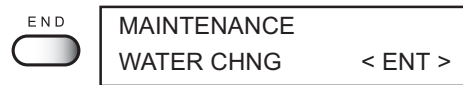


21. Return the water heater tank to its original position, lock the catch clips and close the cover.

22. Touch the [ENTER].



23. Touch the [END] to complete the [WATER CHG].



Periodic Maintenance for the White Ink [WHITE MAINT.]

It is easy for the white ink to precipitate compared with the other inks.

If you don't print for more than two weeks, the white ink may precipitate in the ink cartridge or the inside of the printer.

If so, this results in nozzle clogging and defective printing.

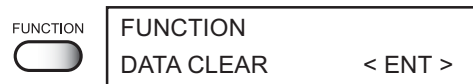
To avoid the precipitation and to keep the white ink in good condition, perform the following maintenance a least once two days.



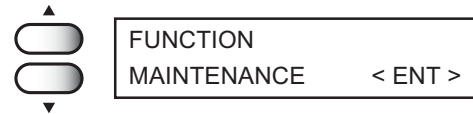
- Use the specified ink cartridge.
- To keep the white ink in good condition, remove the ink cartridge and shake it up and down about 10 times slowly once two days.

STEPS:

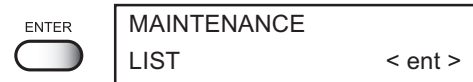
1. Touch the [FUNCTION] on the LOCAL mode.



2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



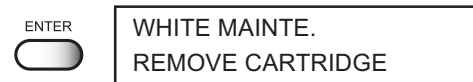
3. Touch the [ENTER].



4. Touch the JOG [▲] or [▼] to select the [WHITE MANT].



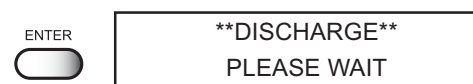
5. Touch the [ENTER].



6. Remove the white ink cartridge from the ink station.

7. Touch the [ENTER].

The white ink is discharged.



8. Shake the ink cartridge up and down about 10 times slowly.



9. Put the ink cartridge back to the ink station.

10. Touch the [ENTER] to start ink filling.

When ink filling is completed, the message shown on the right is displayed.



WHITE MAINT.
SET CARTRIDGE

INK FILL UP
PLEASE WAIT

MAINTENANCE
WHITE MANT < ent >

To prevent Ink Drop from Dripping during Printing [CARIG.CLEAN]

Ink drops may appear on the head guard plate of the undersurface of the carriage, which causes defective printing or ink bolts on the media. Make sure to regularly clean the undersurface of the carriage.

Cleaning Kit : Washing liquid (SPC-0385), Cleaning swab (SPC-0386),
Gloves, Goggles



- Make sure to turn off the printer before cleaning.
- To avoid burn, clean the undersurface of the carriage after the UV irradiation device cools down completely.

STEPS :

1. Touch the [FUNCTION] on the LOCAL mode screen for leaf print.



FUNCTION	
DATA CLEAR	< ENT >

2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



FUNCTION	
MAINTENANCE	< ENT >

3. Touch the [ENTER].



MAINTENANCE	
LIST	< ent >

4. Touch the JOG [▲] or [▼] to select the [CALIG. CLEAN].



MAINTENANCE	
CARIG. CLEAN	< ent >

5. Touch the [ENTER].
The carriage moves to the maintenance station.




CARRIAGE CLEAN	
HEAD MOVE	:ent



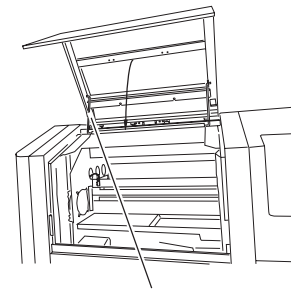
- If UV lamp is lighted, the message which ask you to turn off the UV lamp appears on the LCD. Follow the message.

6. Open the left maintenance cover.

 **CAUTION**

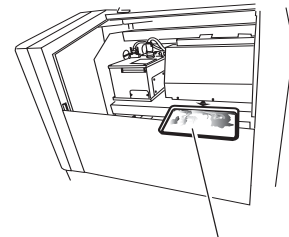
- When opening the cover, make sure to hold the cover with the holding bar. Otherwise the cover may fall down and it may cause some injuries.

PLEASE OPEN
THE LEFT COVER



Holding bar

7. Take off the flushing tray.



Flushing tray

8. Touch the [ENTER].



CARRIAGE CLEAN
REMOVE TRAY : ent

9. Close the left maintenance cover.

PLEASE CLOSE
THE LEFT COVER

10. Touch the [ENTER].

The carriage moves on the flushing tray.

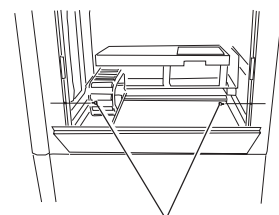


CARRIAGE CLEAN
HEAD MOVE : ent

11. Open the left maintenance cover.


PLEASE OPEN
THE LEFT COVER

12. Remove two white decorated screws which are inside of the left front cover, and then open the left front cover.



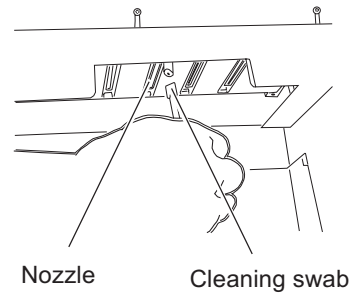
Left front cover fixing
decorated screw 2 pcs (inside)

13. Clean the under surface of the carriage by the side surface of the exclusive cleaning swab moistened by the washing liquid.


 Do not touch the head and the nozzle part to avoid the damage.



• Contact your nearest sales agency or MIMAKI sales office to order the additional cleaning swabs.

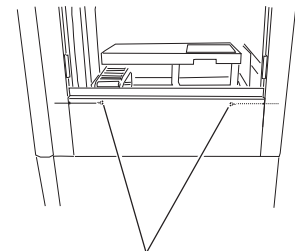


14. After cleaning, touch the [ENTER].

 CARRIAGE CLEAN COMPLETED : ent


15. Tighten the screws which is removed in STEP 12, and close the left maintenance cover.

PLEASE CLOSE THE LEFT COVER



Left front cover fixing decorated screw 2 pcs (inside)

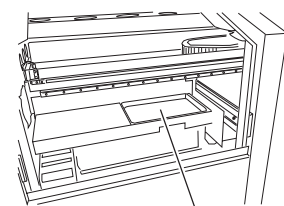
16. Touch the [ENTER].

 CARRIAGE CLEAN CLEAN FINISH : ent

17. Open the left maintenance cover.

PLEASE OPEN THE LEFT COVER

18. Mount the flushing tray.



Flushing tray

19. Touch the [ENTER].

CARRIAGE CLEAN SET A TRAY : ent

20. Close the left maintenance cover.

PLEASE CLOSE THE LEFT COVER

21. After detecting the origin, the LOCAL mode is displayed.

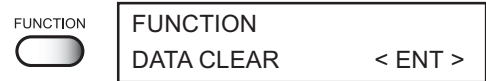
MAINTENANCE CARIG. CLEAN < ent >

Cleaning of the Nozzle Side

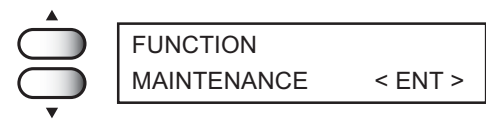
Perform the following thing when ink drops by printing are generated on the nozzle side of the head or media is stained by dropping ink drops.

STEPS:

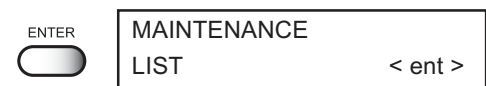
1. Touch the [FUNCTION] on the LOCAL mode.



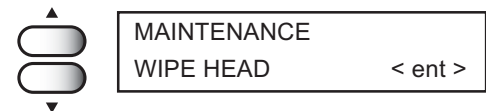
2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE] .



3. Touch the [ENTER].



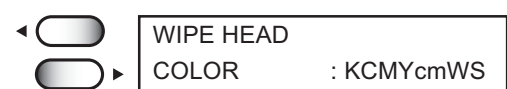
4. Touch the JOG [▲] or [▼] to select the [WIPE HEAD].



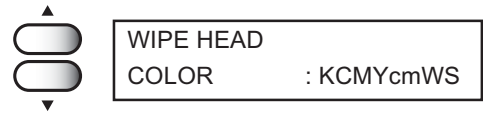
5. Touch the [ENTER].



6. Touch the JOG [◀] or [▶] to select the head stuck ink drops.



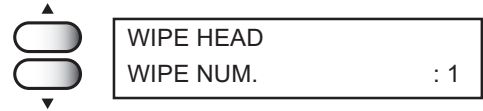
7. Touch the JOG [▲] or [▼] to display ON / OFF of the wipe.
 OFF is displayed as [-].



8. Touch the [ENTER].



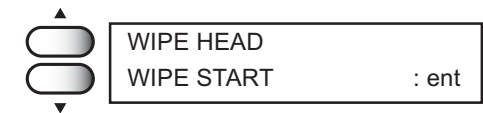
9. Touch the JOG [▲] or [▼] to select the number of wiping (1 to 9).



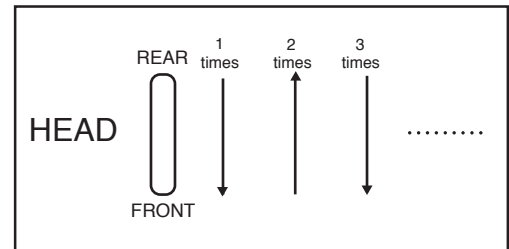
10. Touch the [ENTER].



11. Touch the [ENTER].



12. Wiping is started.



Action of suction

Chapter 4

Various Setting

This chapter describes various functions.

Table of Contents

About the Function Menu	4-2
Registering Two or More Printing Conditions at a Time (Selecting a type)	4-4
Registering the Various Setting	4-5
Turning off the UV Irradiation Device [UV LAMP OFF]	4-8
Changing the Display Language [DISPLAY]	4-9

About the Function Menu

The function menu is used to set up the printer functions. The menu for setting up the printer functions is called the function menu. In order to set printing conditions properly, it is necessary to understand the structure and the operations of the function menu. (For "MAINTENANCE" of the function menu, see Chapter 5 "Maintenance Functions")
After selecting the printing may from [Type 1] through [Type 4] which is set at first, set each printing conditions to enable to set a sequence of the functions.

Before Setting

The basic operations of the function menu are explained below before setting each printing conditions. Set each printing conditions in the function menu after checking the following three items.

- 1. Check that the menu mode is the LOCAL mode.**
- 2. Check that the language in which to display characters on the LCD has been selected.**
- 3. Select a [Type] to register the sequence of the printing conditions.**

Before setting the printing conditions in the function menu, confirm the basic operations.

Checking the Menu Mode

Check the menu mode before setting the printing conditions.

The menu mode must be started in either the LOCAL mode or the FUNCTION mode.

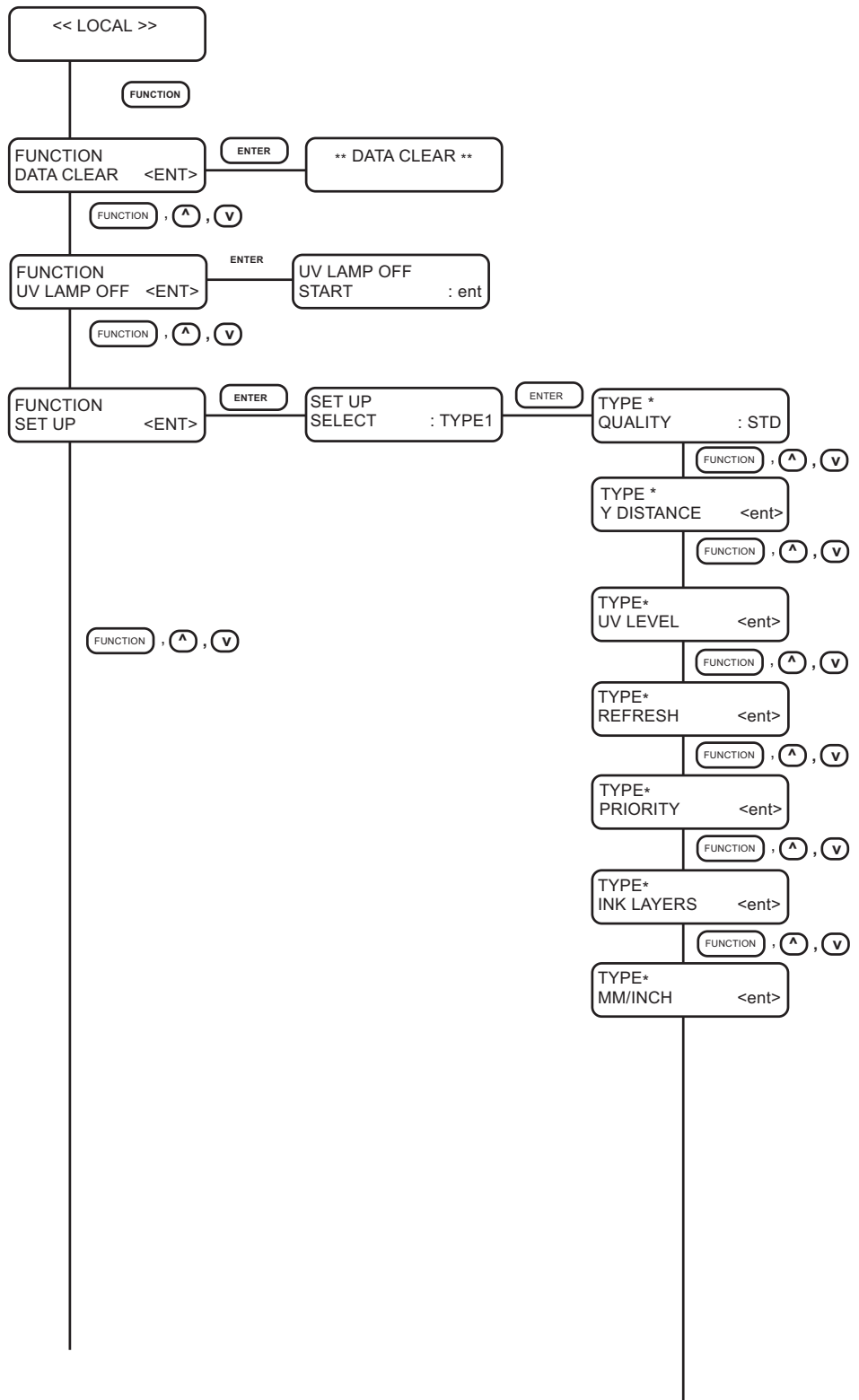
Check that the mode displayed on the LCD is either <<LOCAL>> or <<FUNCTION>>.

Basic Operations of Menus

This section describes how to change over the operation modes and how to operate the menus.

The following gives the key operation flow of each menus.

For the detailed menu configuration, refer to the Appendix.



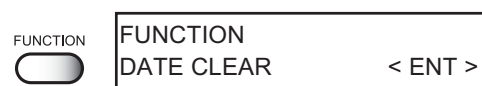
Registering Two or More Printing Conditions at a Time (Selecting a type)

Register a sequence of printing conditions set in the FUNCTION mode in the printer. By allocating the sequence of printing conditions to any of [Type 1] through [Type 4], it is possible to reuse the same printing conditions registered by type. It is, therefore, convenient to allocate different printing conditions to different types according to the media and printing method used. The procedures for allocating a specific sequence of printing conditions to a type are described below. Here, the method of registration by allocating printing conditions to a particular type is explained.

4 kind of selectable types are available. [Type1] [Type 2] [Type 3] [Type 4]

STEPS:

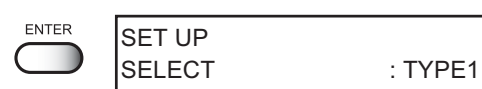
1. Touch the [FUNCTION] in the LOCAL mode.



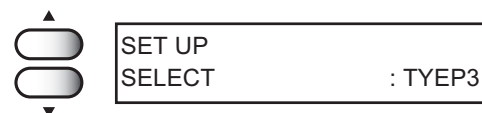
2. Touch the JOG [▼] to select the [SET UP].



3. Touch the [ENTER].



4. Select any of [Type 1] through [Type 4] by touching the JOG[▲] or [▼].



5. Touch the [ENTER].

Now set each printing conditions.
(Refer to page 4-5)

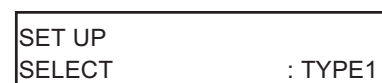


Changing the type

If printing conditions have already been registered as [Type 1] through [Type 4], printing conditions can be set simply by selecting a type.

1. Perform the above STEP 1 through 5.

Select a type.



2. Touch the [END].

Printing by the selected type is enabled.



Registering the Various Setting

The FUNCTION mode has 6 kind of setting functions and the [SET UP] has 10 kind of setting functions. The set functions are outlined below.

Function Names		Summary
DATA CLEAR		Deletes received data. P.2-33
UV LAMPOFF		Turns the UV lamp off. P.4-8
SET UP	TYPE	Registers a sequence of printing conditions. P.4-4
	QUALITY	Sets the print quality. P.4-5
	Y DISTANCE	Adjusts scale of printing data. P.4-5
	UV LEVEL	Adjusts the UV lamp volume. P.4-5
	REFRESH	Refreshes the print head. P.4-6
	PRIORITY	Specifies which the values are set by, the printer or the computer. P.4-6
	INK LAYER	Sets the number of overprinting. P.4-6
	COLOR PTN.	Print a color pattern on the left edge of media to check the nozzle out. P.4-6
	UV SCAN ADD	Performs UV irradiation near the completion of drawing. P.4-6
	MM/INCH	Sets a unit of set values displayed. P.4-7
SETUP RESET		Resets the current printing conditions. P.4-7
MAINTENANCE		Operates maintenance. P.5-1~
ORIGIN		Sets the origin for printing. P.2-24
DISPLAY		Sets the language displayed. P.4-9

[QUALITY]

Sets the printing quality.

- [STD]** : Standard image quality
- [Fine]** : High image quality and low printing speed
- [HIGHspd]** : High printing speed and slightly inferior image quality

[Y DISTANCE]

Adjusts scale of printing data.

Adjusted Value : $\pm 0.39\%$

[UV LEVEL]

Adjusts the light intensity. Normally, set [NORMAL]. Also setting [LAYER] allows the setup the UV level for at most 4 layers according to each layer.

- [NORMAL]** : Standard light intensity
- [HIGH]** : Strong light intensity
- [LOW]** : Weak light intensity
- [NONE]** : Close the shutter of the UV lamp to print.
- [NOPRINT]** : Set amount of UV light is irradiated without performing the printing.
- [LAYER]** : Select the UV level according to each edition (layer).
Setting is available for at most 4 editions.

[REFRESH]

Refreshes the print head to avoid nozzle clogging in a dusty place or dry place.
Select a refreshing time during printing or stand by.
A larger level results in more number of refreshes.

Number of refreshes : Level 0 ~ 3

(When Level 0 is selected, the head is not refreshed.)

[PRIORITY]

Specifies which the values of the [QUALITY] and the [INK LAYER] is set by the printer or the computer.

[HOST] : The printing operation is performed with priority given to the printing conditions set on the computer.

[PLOT] : The printing operation is performed with priority given to the printing conditions set on the printer.

[INK LAYER]

Sets the number of overprinting.

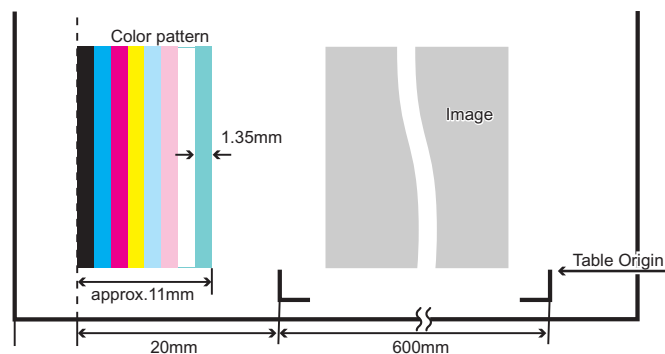
Number of overprinting : 1 ~ 9

[COLOR PTN.]

Print a color pattern on the left edge of media to check the nozzle out while plotting.

[ON] : Color pattern is printed at +20mm from left edge of maximum printable area.

[OFF] : Color pattern is not printed.



[UV SCAN ADD]

In the area where the drawing has just completed, sometimes the UV ink is not hardened due to insufficient UV irradiation. In this case, a setting is made for performing the scanning while irradiating UV in the vicinity of drawing completion.

[UV SCAN ADD] : 0-9 (No scanning at 0)

[MM/INCH]

Set a unit of setting values displayed.

When the printer is shipped from the factory, the unit of display is set to “mm” (millimeter).

[MM] : The unit is set to millimeters.

[INCH] : The unit is set to inches.

[SETUP RESET]

This function resets the current printing conditions to the factory-set printing conditions.

Execute this function for each of the types of set printing conditions.

[ENTER] : The setup is reset.

[END] : The setup is not reset.

Turning off the UV Irradiation Device [UV LAMP OFF]

The UV irradiation device automatically goes OFF when no printing takes place for more than 30 minutes. To make the UV lamp last longer, turn it OFF if you do not print for a long time. When printing is restarted, the UV irradiation device automatically restarted and the UV lamp is turned ON.



- You can set the time for which the UV lamp is on. Refer to “Setting the UV Lamp timer” (☞ P.5-19). Initial setting value is 30 minutes
- When the setting value is the [ON] in the [OFF TIMER] or no printing is to be carried out for 30 minutes or more, set the UV lamp OFF.
- Once the UV lamp is set to OFF, it takes approximately 10 minutes to turn the UV lamp ON and enable to print.

STEPS:

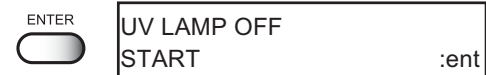
1. Touch the [FUNCTION] in the LOCAL mode.



2. Touch the JOG [▼] to select the [UV LAMP OFF].



3. Touch the [ENTER].



4. Touch the [ENTER].
The UV lamp starts going out.



5. When the UV lamp is set to OFF and a completion message appears, the same message as STEP 2 is displayed.



Changing the Display Language [DISPLAY]

You can select between Japanese and English for the display language. The default is [JAPANESE]. This procedures explain how to change the display language [ENGLISH].

STEPS:

- 1. Touch the [FUNCTION] in the LOCAL mode.



- 2. Touch the JOG [▲] to select the [DISPLAY].



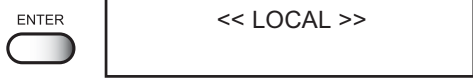
- 3. Touch the [ENTER].



- 4. Touch the JOG [▲] or [▼] to select a language.



- 5. touch the [ENTER].
The printer returns to the LOCAL mode.



Chapter 5

Maintenance Functions

This chapter describes maintenance procedures including how to resolve deteriorated printing quality and how to replace the UV lamp.

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About Maintenance	5-2
Printing out the Printing Conditions [LIST]	5-3
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Changing the Ink [INK CHANGE]	5-14
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Resetting UV Lamp Irradiation Time	5-18
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Checking UV Ink Curing Level [HARDEN CHK]	5-20
Checking the UV Illumination Level	5-26
Displaying the Printer Information [INFORMATION]	5-32
Prevent the nozzle clogging of spot color [SP.REFRESH]	5-33

About Maintenance

Maintenance are operations to keep the printer in good condition.

To carry out maintenance of the printer, select [MAINTENANCE] from the function menu and set each necessary details.

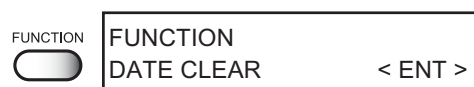
Introduction of the Maintenance Functions

In order to execute any of the maintenance functions, it is necessary to perform the following operation on the touch panel.

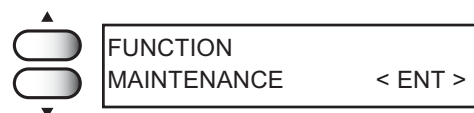
You have to understand introduction of the maintenance functions to carry out maintenance.

STEPS:

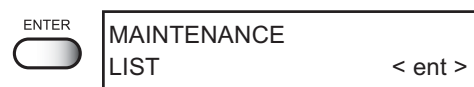
1. Touch the [FUNCTION] in the LOCAL mode.



2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



3. Touch the [ENTER].



4. Select the next operation.

List of Maintenance Functions

Name	Function	Page
LIST	Printing conditions.	P.5-3
TBL HEIGHT	Adjusts the table height in accordance with the media thickness.	P.2-22
PRINT ADJUST	Adjusts the dot position after changing the head gap.	P.5-4
STATION	Cleans the inside of the station.	P.5-6
FILL UP INK	Performed when nozzle clogging is not recovered.	P.5-7
WIPE HEAD	Cleans ink drops on the surface of the nozzles.	P.3-20
INT. WIPING	Sets the interval of the wiping.	P.5-8
CARIG. CLEAN	Cleans the under surface of the carriage.	P.3-16
INK SET	Changes the combination of ink.	P.5-9
INK CHANGE	Changes the ink.	P.5-14
WATER CHANGE	Replaces the water for the water heater tank.	P.3-8
WHITE MANT	Performs periodic maintenance for the white ink.	P.3-14
HEAD MAINTENANCE	Select a head for small amount cleaning when power on.	P.5-16
UV LAMP	Performs confirmation and setting, etc. of the irradiation intensity of UV lamp.	P.5-17
INFORMATION	Displays the firmware version and the serial number of the printer.	P.5-32
SP.REFRESH	When white ink is set, it changes the setting to perform refresh operation for white ink.	P.5-33

Printing out the Printing Conditions [LIST]

The current printing conditions of the printer are printed.
This is useful in carrying out maintenance of the printer.

1. Information about [SET UP] of the functions.
2. Information about [PRINT ADJUST] of the functions.
3. Information about the firmware version in use.
4. [PARAMETER] is a setting value needed for maintenance (by service engineers)



- Use 297mm x 210mm or larger size sheet with the long side set horizontally.

```

LIST (System Ver1.04) (1/F Ver . ) S/N :

(1) SET UP < TYPE 1 >
PRINT METHOD STD :HOST STD TYPE 2 STD TYPE 3 STD TYPE 4
UV LEVEL HIGH HIGH HIGH HIGH
REFRESH
DRAWING LEVEL1 LEVEL1 LEVEL1 LEVEL1
WAITING LEVEL1 LEVEL1 LEVEL1 LEVEL1
INK LAYERS 1 :HOST 1 :HOST 1 :HOST 1 :HOST
AUTO CLEAN OFF OFF OFF OFF
MM/INCH MM MM MM MM
(2) ORIGIN
X OFFSET 0mm
Y OFFSET 0mm
(3) DISPLAY ENGLISH
(4) PRINT ADJUST
PATTERN 1 PATTERN 2 PATTERN 3 PATTERN 4
0.0 0.0 0.0 0.0
PATTERN 5 PATTERN 6 PATTERN 7
0.0 0.0 0.0
(5) REPLACE CNT
UV USED TIME 36h6m
GAP CHECK mm
INK REMAIN K: % C: % M: % Y: % c: % m: % W: % S: %
SHOT COUNT K: 50817 C: 2692632 M: 0 Y: 0
c: 0 m: 0 W: 0 S: 0
SCAN COUNT 10 (x1000)
DRAW LENGTH m ft
DRAW AREA m2 sq.ft
USE TIME h
  
```

STEPS:

1. Set a sheet of paper, use 297mm x 210mm or larger size with the long side set horizontally, and set the Origin.
2. Select the [LIST] from the [MAINTENANCE].
3. Touch the [ENTER].
The list will be printed automatically.
4. Touch the [END] twice, and the device returns to the LOCAL mode.

MAINTENANCE
LIST < ent >



** LIST **



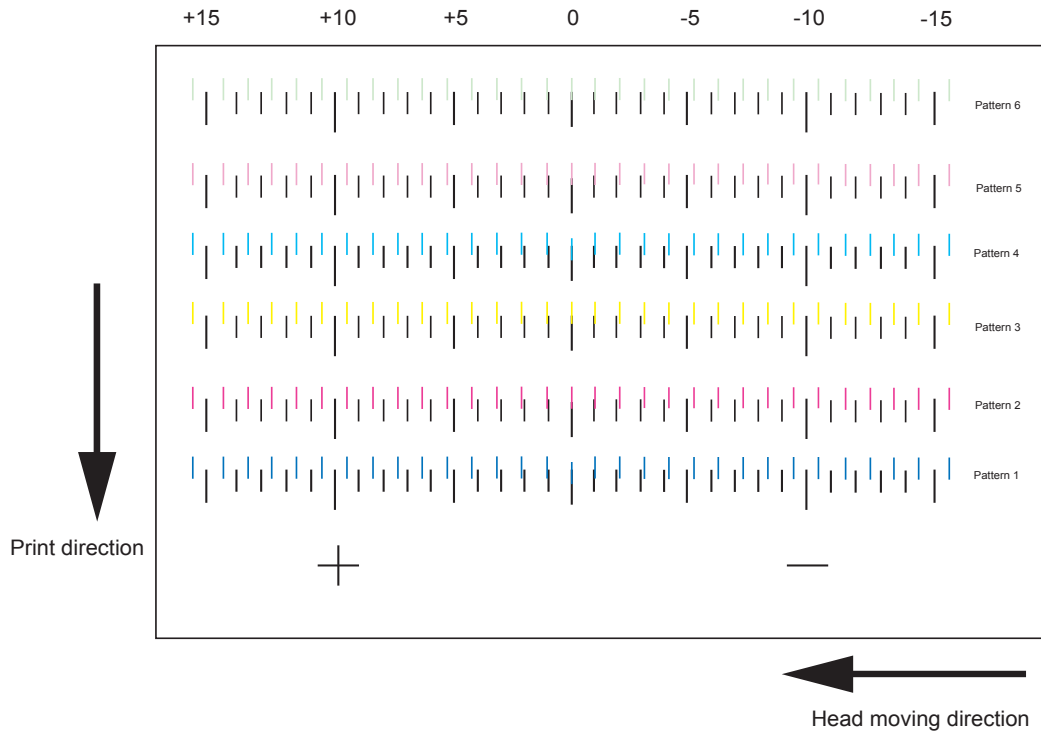
<< LOCAL >>

When Media Thickness is Changed [PRINT ADJUST]

Make sure to correct the dot position to print properly.

The dot position is corrected by comparing the ink dropping positions on each of the six test patterns.

After adjusting the head height, be sure to adjust the dot position.



STEPS:

1. Place a piece of paper whose size is 297 x 210 mm or larger with the long size set horizontally on the table, and set the origin.

2. Select the [MAINTENANCE] from the [FUNCTION] mode.

3. Select the [PRINT ADJ].

MAINTENANCE	
PRINT ADJ	< ent >

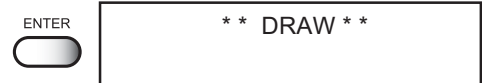
4. Touch the [ENTER].



PRINT ADJUST	
PRINT START	: ent

5. Touch the [ENTER].

Printing of the test patterns for adjusting the dot position is started. Six types of test patterns are printed.

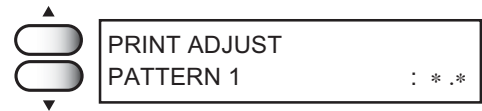


6. Touch the JOG [▲] or [▼] to adjust the dot position of [PATTERN 1].

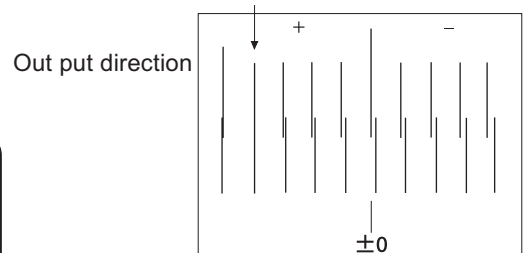
The six test patterns are sequentially named [PATTERN 1] to [PATTERN 6].


Select the correct dot position on [PATTERN 1] with the JOG.

Select the dot position that make a straight line on the test pattern.



The 4th line from zero position is printed straight. In this case, the adjustment value is 4.0

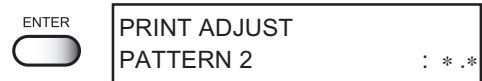




CAUTION

- If the adjustment value for straight lines is not within -15 through +15, adjust the head height and then adjust it again with [PRINT ADJUST].

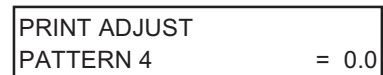
7. Touch the [ENTER].



8. Repeat STEP 5 and 6 to adjust the dot position on [PATTERN 2] to [PATTERN 6].

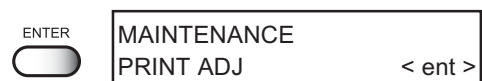
Select the correct dot position on each of the patterns.

The [PRINT ADJ] is displayed.



9. Touch the [ENTER] to finish this dot position adjustment.

Touch the [END] and the printer returns to the LOCAL mode.



Cleaning the Ink Station Interior [STATION]-[CARRIAGE OUT]

Move the carriage when cleaning the station interior.



- Do not move the carriage out of the capping station by hand.
Use the JOG to move the carriage.

STEPS:

1. Touch the JOG [▲] or [▼] to select the [STATION].



MAINTENANCE
STATION < ent>

2. Touch the [ENTER].
Move the head on the table.



STATION
CARRIAGE OUT :ent

3. Touch the [ENTER].



STATION
COMPLETED : ent

4. Open the right maintenance cover, then perform the maintenance for the station interior.

Refer to Chapter 3 for cleaning the caps, the suction nozzle, and the carriage.

5. Close the right maintenance cover, then touch the [ENTER].




PLEASE WAIT

6. The printer returns to the LOCAL mode.

<< LOCAL >>

If Nozzles are Clogged even after the Cleaning Function is Executed [FILL UP INK]

If nozzle clogging is not recovered after cleaning head ( P 2-29), perform the following function.

STEPS:

1. Touch the JOG [▲] or [▼] to select the [FILL UP INK].

```
MAINTENANCE
FILL UP INK      < ent >
```

2. Touch the [ENTER].

ENTER

```
FILL UP INK
COLOR      :KCMYcmW
```

3. Touch the JOG [◀] or [▶] to select a head.

◀ [ENTER] ▶

```
FILL UP INK
COLOR      :KCMYcmW
```

4. Touch the JOG [▲] or [▼] to display the print head colors that must be filled.
Put symbol [*] for colors not to be filled with no ink.

▲ [ENTER] ▼

```
FILL UP INK
COLOR      :* CMY * * *
```

5. Touch the [ENTER].

ENTER

```
FILL UP INK
FILL UP INK START  :ent
```

6. Touch the [ENTER] to start ink filling.

ENTER

```
** INK FILL UP **
* * * * - - - - -
```

7. When the ink filling is completed, the message on the right is displayed.

```
MAINTENANCE
FILL UP INK      < ent >
```

8. Touch the [END] twice, and the printer returns to the LOCAL mode.

END

```
<< LOCAL >>
```

Regular Wiping Function [INT. WIPING]

Use this function to prevent the ink spray on the print head surface.

This function enables to wipe off the condensed ink as wiping the nozzle at intervals after specified number of printing.



STEPS:



1. Select the [INT. WIPING] from the maintenance functions. ( P.5-2)

MAINTENANCE INT. WIPING	< ent >
----------------------------	---------

2. Touch the [ENTER].

ENTER	INT. WIPING PRINT COUNT	:OFF
-------	----------------------------	------

3. Touch the JOG [] or [] to select the number of wiping. (OFF, 0 to 99 times)

 	INT. WIPING PRINT COUNT	:10
------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------	-----





- Default of [PRINT COUNT] is OFF. Change the value if necessary.
- If not operate wiping, select OFF.

4. Touch the [ENTER].



ENTER





- When selecting OFF, go to STEP 8.

5. Touch the JOG [] or [] to select the print head colors to be wiped.

 	INT. WIPING COLOR	:KCMYcmWS
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------	-----------

6. Touch the JOG [] or [] to display ON/OFF of the wipe.

Put symbol [*] for colors not to be wiped.

 	INT. WIPING COLOR	:*CMYcmWS
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------	-----------

7. Touch the [ENTER].

ENTER	MAINTENANCE INT. WIPING	< ent >
-------	----------------------------	---------

8. Touch the [END] twice, and the printer returns to the LOCAL mode.

END	<< LOCAL >>
-----	-------------

Changing the Ink Set [INK SET]

The standard ink set for this printer has 7 colors (black, cyan, magenta, yellow, light cyan, light magenta and white). You can change it to the following ink sets:

- *Changing to 6-color ink set (only 6 colors, white ink is not used)
- *Changing to 8-color ink set including a spot color
- *Changing to a spot color instead of white ink



- Don't open the cover or turn the power OFF while changing the ink set, otherwise changing of the ink set could not be performed.
- Set the ink cartridge containing sufficient quantity of ink. If it does not contain sufficient quantity of ink, changing of the ink set could not be performed properly because of the ink fill up abnormality.
- Check the capacity of waste ink tank. If the tank is filled with the waste ink, dispose it before performing this procedure. (☞ P.3-7)

Changing to 6-color Ink Set

The following procedures explain about changing from 7-color ink set to 6-color ink set.

STEPS:

1. Touch the [▲] or [▼] to select the [INK SET].

2. Touch the [ENTER].



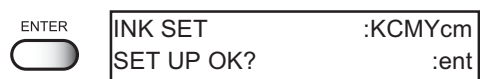
3. Select 6-color ink set.

Touch the JOG [▲] or [▼] to select the [Uv-6 [KCMYcm].



4. Touch the [ENTER].

5. Touch the [ENTER].



6. Remove the white ink cartridge.



7. Touch the [ENTER].

Clean the waste ink in the printer.

8. When the message on the right is displayed, set the washing liquid cartridge.



WASHING
PLEASE WAIT

9. Touch the [ENTER].

The washing liquid is suctioned and the waste ink is cleaned.

INK SET :*****W
SET CLEAN TOOL

10. When the message on the right is displayed, remove the washing liquid cartridge.



WASHING
PLEASE WAIT

11. Touch the [ENTER].

The washing liquid is discharged to the waste ink tank.

INK SET :*****W
REMOVE TOOL

After the washing liquid is discharged, the printer returns to the local mode.



WASHING
PLEASE WAIT



- When setting 7-color ink set, go back to STEP3 and select [Uv-7 [KCMYcmW]].

INK SET
PLEASE WAIT

<<LOCAL>>

Changing to 8-color Ink Set Including Spot Color

There are two kinds of ink set in 8-color ink set.

1. Uv-8 [KCMYcmWS] : A spot ink is added to 7-color ink set.
2. Uv-8 [KCMYcmSs] : The which white ink of the 7-color ink set is changed to a spot color and one more spot ink is added as 8th color.


The following procedures explain about changing from 7-color ink set to 8-color ink set including a spot color.

STEPS:

1. Touch the JOG [▲] or [▼] to select the [INK SET].


MAINTENANCE INK SET	< ent >
------------------------	---------

2. Touch the [ENTER].

ENTER 	INK SET Uv-7	[KCMYcmS]
---------------------------------------------------------------------------------------------	-----------------	-----------

3. Make sure that 8-color ink set is displayed and touch [ENTER].


Select [Uv-8 [KCMYcmWS]] .

ENTER 	INK SET	:KCMYcmWS
	SET UP OK?	:ent

4. Touch the [ENTER].

ENTER 	INK SET	:*****S
	SET CARTRIDGE	

5. Set a spot color cartridge.

 CAUTION	<ul style="list-style-type: none"> Set the ink cartridge containing sufficient quantity of ink. If it does not contain sufficient quantity of ink, changing of the ink set could not be performed properly.
-------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6. Touch the [ENTER].

The ink filling is started.

ENTER 	**INK FILLUP** PLEASE WAIT
-----------------------------------------------------------------------------------------------	--------------------------------------

When the ink filling is completed, the printer returns to the local mode.

INK SET	:KCMYcmWS
PLEASE WAIT	



- When setting the 7-color ink set, go back to STEP3 and select [Uv-7 [KCMYcmW]].

<<LOCAL>>

Changing the White Ink to a Spot Color Ink

The following procedures explain about changing from 7-color ink set to 7-color ink set using a spot ink instead of the white ink.

STEPS:


1. Touch the JOG [▲] or [▼] to select the [INK SET].

MAINTENANCE INK SET	< ent >
------------------------	---------

2. Touch the [ENTER].

ENTER 	INK SET Uv-8	[KCMYcmWS]
---------------------------------------------------------------------------------------------	-----------------	------------

3. Select the 7-color ink set.
Touch the JOG [▲] or [▼] to select the [Uv-8 [KCMYcmS].

ENTER 	INK SET Uv-7	[KCMYcmS]
---------------------------------------------------------------------------------------------	-----------------	------------

4. Touch the [ENTER].


ENTER 	INK SET SET UP OK?	:KCMYcmS :ent
---------------------------------------------------------------------------------------------	-----------------------	------------------

5. Touch the [ENTER].

ENTER 	INK SET REMOVE CARTRIDGE	:*****W
-----------------------------------------------------------------------------------------------	-----------------------------	---------

6. Remove the white ink cartridge.


7. Touch the [ENTER].
Clean the waste ink in the printer.

ENTER 	**WASHING** PLEASE WAIT
-----------------------------------------------------------------------------------------------	----------------------------

8. When the message on the right is displayed, insert the washing liquid cartridge.

INK SET SET CLEAN TOOL	:*****W
---------------------------	---------

9. Touch the [ENTER].
The washing liquid is suctioned and the waste ink is cleaned.

ENTER 	**WASHING** PLEASE WAIT
-----------------------------------------------------------------------------------------------	----------------------------

10. When the message on the right is displayed, remove the washing liquid cartridge.

INK SET :*****W
REMOVE TOOL

11. Touch the [ENTER].

The washing liquid is discharged to the waste ink tank.

ENTER
 **WASHING**
PLEASE WAIT

12. When the message on the right is displayed, set a spot ink cartridge.

INK SET :*****S
SET CARTRIDGE

13. Touch the [ENTER].

New ink is started to fill up. The LOCAL mode is displayed after filling up with ink.

ENTER
 **INK FILLUP**
PLEASE WAIT

INK SET :KCMYcmS
PLEASE WAIT

<<LOCAL>>

Changing the Ink [INK CHANGE]

Ink exchanging is performed as follows:

Used tool: Washing liquid (SPC-0371FS)

STEPS:

1. Touch the JOG [▲] or [▼] to select the [INK CHANGE].

MAINTENANCE INK CHANGE	< ent >
---------------------------	---------



2. Touch the [ENTER].

ENTER 	INK CHANGE COLOR :KCMYcmW
---------------------------------------------------------------------------------------------	------------------------------

3. Touch the JOG [◀] or [▶] to select a color of ink which is changed.

◀   ▶	INK CHANGE COLOR :KCMYcmW
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------

4. Touch the JOG [▲] or [▼] to display the print head colors must be changed.
Put symbol [*] for colors not to be changed.

▲   ▼	INK CHANGE COLOR :* CMY * * *
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------

5. Touch the [ENTER].

ENTER



6. Remove the ink cartridges.
Discharge the filled ink to the waste ink tank.

INK CHANGE REMOVE CARTRIDGE

7. When the display shown on the right appears, set the washing liquid cartridges.

** WASHING ** PLEASE WAIT

8. Touch the [ENTER].
The washing liquid is suctioned up.

ENTER 	INK CHANGE SET CLEAN TOOL
-----------------------------------------------------------------------------------------------	------------------------------



- The washing liquid cartridge is separately available from your local distributor.

** WASHING ** PLEASE WAIT

- 9. When the display shown on the right appears, remove the washing liquid cartridges.**

Discharge the suctioned washing liquid to the waste ink tank.

ENTER



INK CHANGE
REMOVE TOOL

** WASHING **
PLEASE WAIT

- 10. Insert the ink cartridges to the ink station after discharging.**

INK CHANGE
SET CARTRIDGE

- 11 Touch the [ENTER].**

Ink filling is started.

ENTER



** INK FILL UP **
PLEASE WAIT

- 12. When the ink changing is completed, the [INK CHANGE] is displayed.**

MAINTENANCE
INK CHANGE

< ent >

Select a head for small amount cleaning [HEAD MAINTE]

Select a head to execute small amount cleaning when turned on power.

STEPS:

1. Select the [HEAD MAINTE] from the [MAINTENANCE]. (☞ P.5-2)

MAINTENANCE HEAD MAINTE	< ent >
----------------------------	---------

2. Touch the [ENTER].



HEAD MAINTE. COLOR	:KCMYcmW
-----------------------	----------

3. Select a ink cartridge to execute a small amount cleaning by touching the JOG [◀] and [▶].



HEAD MAINTE. COLOR	:KCMYcmW
-----------------------	----------

4. Select ON or OFF of small amount cleaning execution by touching the JOG [▲] and [▼].



HEAD MAINTE. COLOR	:***YcmW
-----------------------	----------

5. Touch the [END] twice to return to Local mode.



<<LOCAL>>

Replacing the UV Lamp [UV LAMP]

The UV lamp is a consumable component.

This printer counts how long the UV lamp is on and notifies you when it has to be replaced.

Checking the UV Lamp Irradiation Time

STEPS:

1. Touch the [ENTER] a few times in the LOCAL mode.

The irradiation time appears. The display on the right shows that the irradiation time is 130 hours and 5 minutes.



- Refer to "Displaying the Information" .
((P 2-4)



UV USED TIME
130h 05m

2. Touch the [ENTER] to return to the local mode.



<< LOCAL >>

Replacing the UV Lamp

When the irradiation time exceeds the predetermined period of time, a message appears for asking you to replace the UV lamp. When this message appears, contact your nearest sales agency or MIMAKI sales office to replace the UV lamp as soon as possible.

Touch the [ENTER] to replace the UV lamp.



! UV LAMP
! UV LAMP CHANGE :ent



- When the warning message appears, UV lamp has to be replaced with a new one. Contact your nearest sales agency or Mimaki sales office.

Resetting UV Lamp Irradiation Time

After replacing the UV lamp, reset the irradiation time stored in this printer.


STEPS:

1. **Select the [UV LAMP] from the maintenance functions.**



Enter the [MAINTENANCE] from the FUNCTION menu.

MAINTENANCE UV LAMP	<ENT>
------------------------	-------

2. **Touch the [ENTER].**

 UV LAMP LEVEL CHECK	<ent>
-----------------------------------------------------------------------------------------------------------	-------

3. **Touch the JOG [▲] or [▼] to select the [INIT TIMER].**

  UV LAMP INIT TIMER	<ent>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------

4. **Touch the [ENTER].**

 INIT UV TIMER INIT START	:ent
-----------------------------------------------------------------------------------------------------------------	------

5. **Touch the [ENTER] again.**

The irradiation time is initialized.



6. **When the operation completes, the message shown on the right is displayed.**

UV LAMP INIT TIMER	<ent>
-----------------------	-------

7. **Touch the [END] twice, to return to the LOCAL mode.**

 <<LOCAL>>

Setting the UV Lamp Timer [OFF TIMER]

Set the UV lamp timer.

CONT. IRR. [OFF] The UV lamp is turned off automatically according to setting the time. The initial setting time is 30 minutes.

CONT. IRR [ON] UV lamp is always lighting on. When turning the lamp off, refer to the “Turning off the UV Irradiation Device” to turn the lamp off. (☞ P.4-7)


STEPS:

1. **Select the [UV LAMP] from the maintenance functions.**


Enter the [MAINTENANCE] from the FUNCTION menu.

MAINTENANCE UV LAMP	<ent>
------------------------	-------


2. **Touch the [ENTER].**

ENTER 	UV LAMP LEVEL CHECK	<ent>
---------------------------------------------------------------------------------------------	------------------------	-------


3. **Touch the JOG [▲] or [▼] to select the [OFF TIMER].**

▲  ▼	UV LAMP OFF TIMER	<ent>
-----------------------------------------------------------------------------------------------	----------------------	-------

4. **Touch the [ENTER].**

ENTER 	UV OFF TIMER CONT. IRR.	: OFF
-----------------------------------------------------------------------------------------------	----------------------------	-------

5. **Touch the JOG [▲] or [▼] to set the [CONT. IRR.] to “OFF”.**

▲  ▼	UV OFF TIMER CONT. IRR.	: ON
	UV OFF TIMER CONT. IRR.	: OFF

6. **Touch the [ENTER].**

ENTER 	OFF TIMER	00h 00m
-----------------------------------------------------------------------------------------------	-----------	---------


7. **Enter the time by the minutes by touching the [▲] or [▼] to**

▲  ▼	OFF TIMER	01h 30m
------------------------------------------------------------------------------------------------	-----------	---------

8. **Touch the [ENTER].**

ENTER 	UV LAMP OFF TIMER	<ent>
-----------------------------------------------------------------------------------------------	----------------------	-------

9. **Touch the [END] to return to the LOCAL mode.**

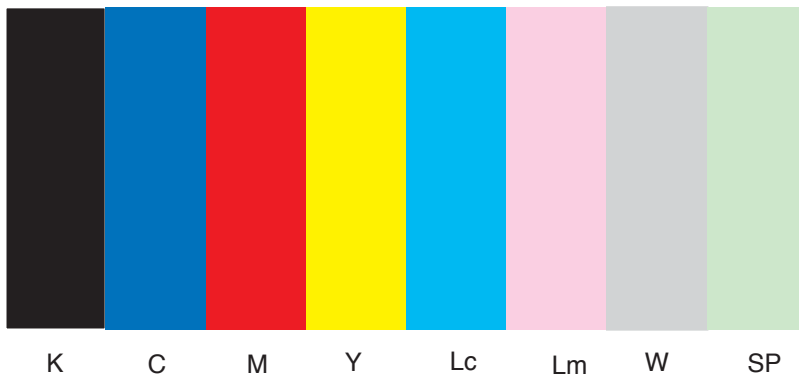
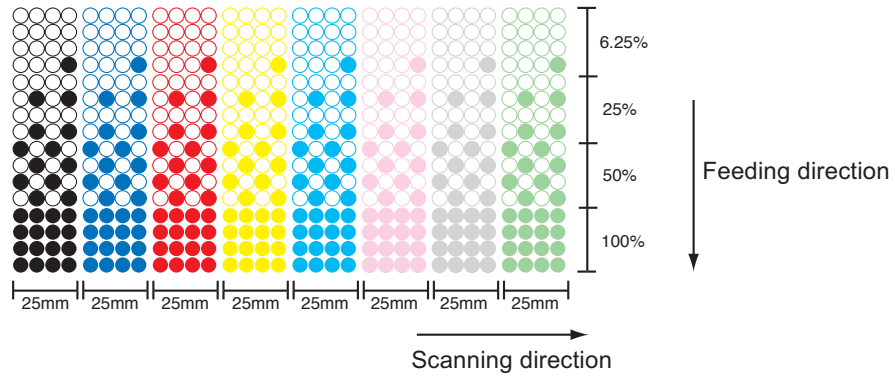
E N D 	<<LOCAL>>
-----------------------------------------------------------------------------------------------	-----------

Checking UV Ink Curing Level [HARDEN CHK]

As the UV lamp deteriorates, the ink curing level may be lowered.

Check the UV ink curing level and adjust the UV lamp light intensity, if necessary.

UV ink curing check test pattern



STEPS:

1. **Set media for the test pattern on the table.**

Turn on the vacuum switch and then, then set the printing origin.

2. **Touch the [TEST] in the LOCAL mode.**



3. **Touch the JOG [▲] or [▼] to select the [HARDEN CHK].**



4. **Touch the [ENTER].**



5. Touch the JOG [▲] or [▼] to select the resolution for the test pattern.



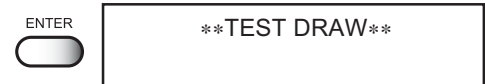
6. Touch the [ENTER].




7. Touch the JOG [▲] or [▼] to select the printing quality for the test pattern.



8. Touch the [ENTER] to start the test drawing.





- If the temperature in the water heater or in the UV device has not reached the predetermined value, a message is indicated. In this case, printing is disabled. It is enabled when the error indication disappears.

UV NOT READY

WATER NOT READY

9. After the test drawing is completed, check the test pattern.

If the UV lamp intensity goes lower, a good printing pattern cannot be obtained. Go to the following steps.

Adjusting UV light level [Switching-over of HIGH, NORMAL and LOW]

STEPS:

1. Touch the [FUNCTION] in the LOCAL mode.



2. Touch the JOG [▼] to select the [SETUP] .



3. Touch the [ENTER] twice.



4. Touch the JOG [▼] to select the [UV LEVEL].



5. Touch the [ENTER].



6. Select the light level by touching the JOG [▲] or [▼].

This display at the right indicates the [LAYER].
When selecting the other one except for the [LAYER], follow the procedure from STEP10.



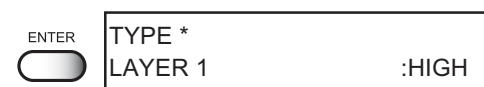
When [NO PRINT] is selected:

Select the light level by touching the JOG [▲] or [▼].

Select from [HIGH], [NORMAL] and [LOW].



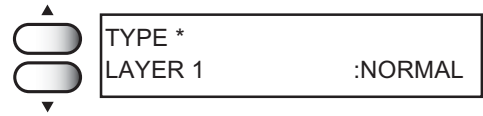
7. Touch the [ENTER].



8. Select the [UV LEVEL] by touching the JOG [▲] or [▼].

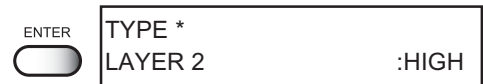
When selecting the [INVALID], the layer is printed by the light level of the previous layer after that.

Ex.: For 4 layers, select the [INVALID] of the layer 3 and the light level of the layer 1 and 2 become effective. That allows the repeatability of the layer by effective light level. This means the layer 3 is printed by the light level of the layer 1, and the layer 4 is printed by the light level of the layer 2.



9. Select the next layer by touching the [ENTER].

When LAYER 4 or [INVALID] is selected, the setting will be terminated.



10. Touch the [ENTER] key.



11. Touch the [END] three times, the device returns to the LOCAL mode.



Changing UV Level [16 step change]

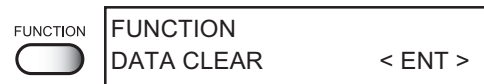
Intensity of the light at [HIGH], [NORMAL] and [LOW] may be changeable in 16 steps between 50% and 100%.

This is the measurement table between UV setting level from LU.1 to 16 and 50 to 100% UV light intensity.

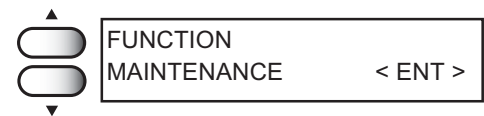
UJF-605RII Setting LV.	LV.1	LV.2	...	LV.7	LV.8	LV.9	...	LV.15	LV.16
UV light intensity	50%	54%	...	70%	74%	77%	...	97%	100%

STEPS:

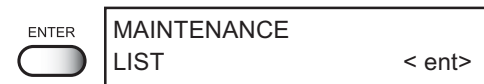
1. Touch the [FUNCTION] in the LOCAL mode.



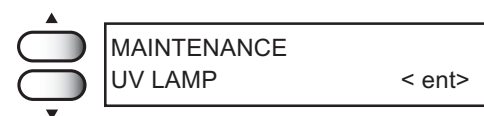
2. Select the [MAINTENANCE] by touching the JOG [▲] or [▼].



3. Touch the [ENTER].



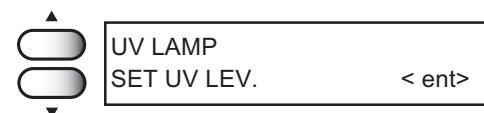
4. Select the [UV LAMP] by touching the JOG [▲] or [▼].



5. Touch the [ENTER].



6. Select the [SET UV LV.] by touching the JOG [▲] or [▼].



7. Touch the [ENTER].
Set the LEVEL [HIGH].



8. Select the UV level by touching the JOG [▲] or [▼].

Level may be set in 16 steps between 1 and 16.



9. Touch the [ENTER].

Touching [ENTER] key sets the level of light intensity [NORMAL].



10. Select the UV level by touching the JOG [▲] or [▼].

Level may be set in 16 steps between 1 and 16.



11. Touch the [ENTER].

Touching [ENTER] key sets the level of light intensity [LOW].

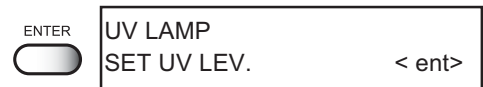


12. Select the UV level by touching the JOG [▲] or [▼].

Level may be set in 16 steps between 1 and 16.



13. When touching the [ENTER], the menu returns.



Checking the UV Illumination Level

As the UV lamp deteriorates, the ink curing level may be lowered. Check UV illumination level with the supplied UV illuminometer kit. Refer to the illuminometer manual, check the UV illumination level.

When the UV lamp exceeds the predetermined amounts of time, the following message is displayed for asking you to check the UV lamp level.

Touch the [ENTER] and then check the UV illumination level with the supplied UV illuminometer.



About checking UV Illumination Level

Changing the level of the UV lamp may not improve the UV curing after printing. In this case, it indicates that the lamp does not have enough illumination for curing. Because the UV lamp is deteriorated.

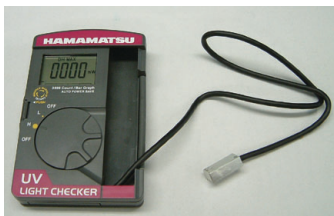
Touchstone of UV illumination level check

Indicator value for the changing UV lamp at factory setting and the value after used 1000 hours are described inside of the UV illuminometer. Check the illumination with it.



- The UV lamp illumination level goes down as time goes by. After 1000 hours of use, the level goes down approximately 30%.
In case the illumination level goes down more than 30% or goes down suddenly, contact your nearest sales agency or Mimaki sales office. The UV lamp could be broken.
- UV illumination level goes down gradually, not suddenly, without flickers of light after 1000 hours of use. Check UV ink curing level or the UV illumination level frequently. (👉 P.5-20)

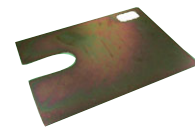
Attachement : UV illuminometer kits



UV illuminometer



UV illuminometer BKT1



UV illuminometer BKT2



• When checking the UV illumination level, be sure to wear the supplied goggles and the gloves to avoid the UV light.



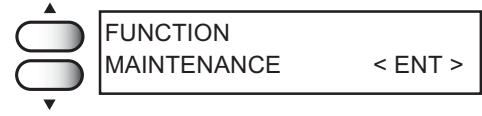
• Be sure to wear the long sleeve to protect your skin from the UV light.

STEPS:

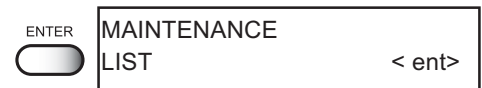
1. Touch the [FUNCTION] in the LOCAL mode.



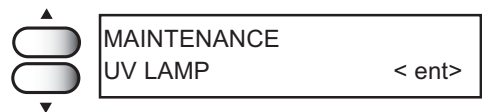
2. Touch the JOG [▲] or [▼] to select the [MAINTENANCE].



3. Touch the [ENTER].



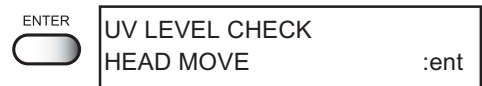
4. Touch the JOG [▲] or [▼] to select the [UV LAMP].



5. Touch the [ENTER].



6. Select the [LEVEL CHECK] and then, touch the [ENTER].



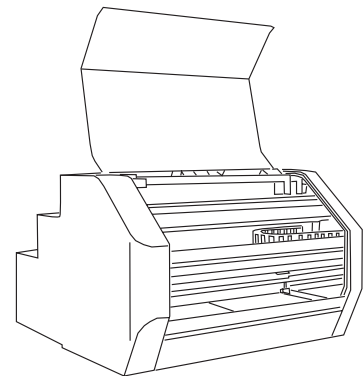
7. Touch the [ENTER] to move the carriage to the capping station.
The carriage is moved.



8. Open the left maintenance cover.

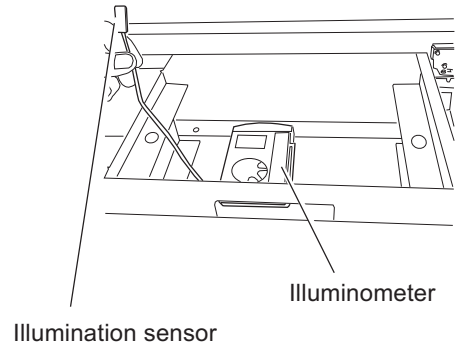


9. Remove the flushing tray and then, set the UV illuminometer.

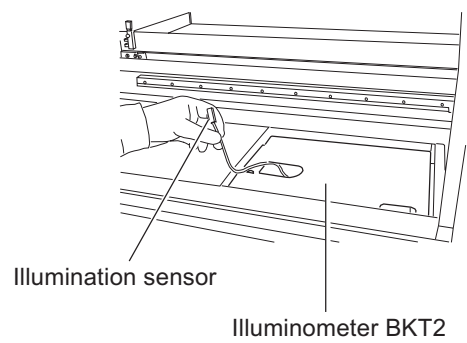


Setting the UV illuminometer

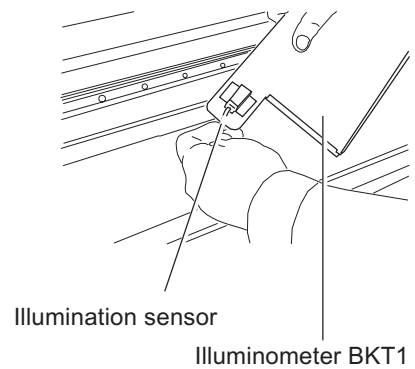
- A. Set the illuminometer.



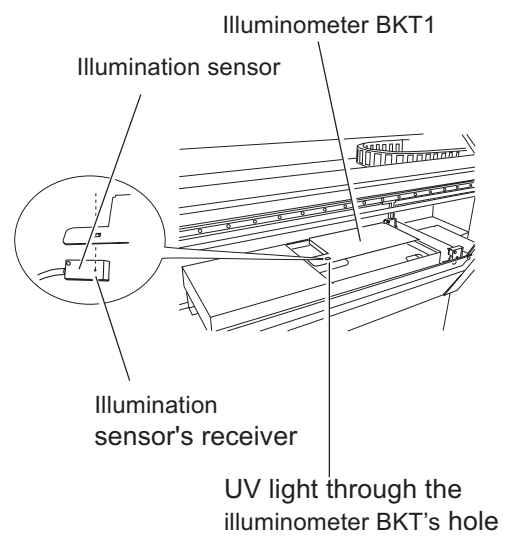
- B. Set the illuminometer BKT2 over the illuminometer.



- C. Set the illumination sensor to the illuminometer BKT1.



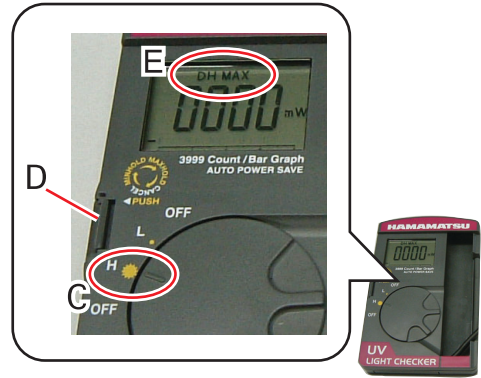
- D. Set light receiver up so that the illumination sensor's receiver can detect UV light through it's hole.



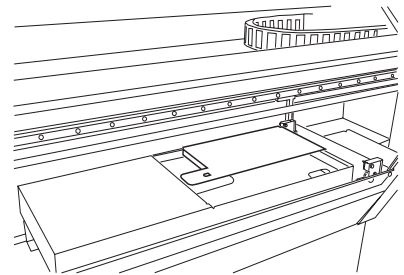
E. Set the illuminometer switch to the [H] position.

F. Press the left side button a few times.

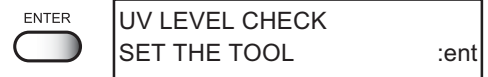
G. Indicate the [DH MAX] above the number.



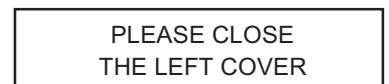
H. Cover the illuminometer BKT 1 by matching the upper left corner and positioning the handle on the upper right.



10. Touch the [ENTER] after setting the UV illuminometer.



11. Close the left maintenance cover.



12. Select the intensity of UV level.

Touching the [FUNCTION] key changes the intensity of UV level. The selected intensity of UV level is indicated at upper right of the display.
H:HIGH, N: NORMAL, L:LOW



13. Touch the [ENTER] and then the checking is started.



- When the UV lamp lights off, it takes time to light.



UV LEVEL CHECK
CHECK START :ent

** CHECKING **
PLEASE WAIT

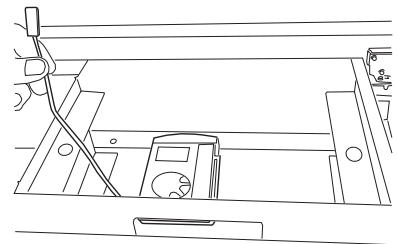
14. After checking, open the left maintenance cover.

PLEASE OPEN
THE LEFT COVER

15. Remove the UV illuminometer BKT 2 and then verify the level on the indicator.



- Refer to the indicator value inside of the UV illuminometer.



- To avoid a burn injury ,do not touch the left side of the BKT 2 after checking the level.

16. After verifying the level, touch the [ENTER].



UV LEVEL CHECK
CHK THE TOOL :ent

17. Touch the JOG [▶] to complete the illumination check.



UV LEVEL CHECK
CHECK< >FINISH

When checking the illumination again, touch the JOG [◀] and do the step E of the “Setting the UV illuminometer”.




- Make sure to check the level again after the lamp cools down. An accurate result can not be obtained by UV lamp heat.

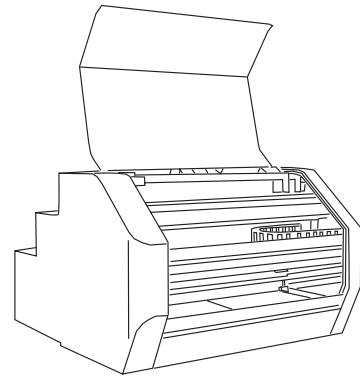
UV LEVEL CHECK
CHECK START :ent

PLEASE CLOSE
THE LEFT COVER

18. Remove the UV illuminometer and BKT1.


CAUTION

- Do not touch the BKT1 and sensor parts of the UV illuminometer because they are very hot by the UV lamp. Wait until they cool down completely, or it may cause a burn injury.



19. Attach the flushing tray and then touch the [ENTER].

ENTER  UV LEVEL CHECK
SET A TRAY :ent

20. Close the left maintenance cover.
After the origin is displayed, the printer returns to the LOCAL mode.

PLEASE CLOSE
THE LEFT COVER

<< LOCAL >>

Displaying the Printer Information [INFORMATION]

The firmware version and the serial number of this printer can be displayed.

If some troubles occur, please inform the dealer or MIMAKI sales office of the details of the troubles as well as this information.


STEPS:

1. **Select the [INFORMATION] in the maintenance functions.**

Enter the maintenance function from the FUNCTION mode.


MAINTENANCE INFORMATION	< ent >
----------------------------	---------

2. **Touch the [ENTER].**

ENTER 	INFORMATION VERSION	< ent >
---------------------------------------------------------------------------------------------	------------------------	---------

3. **Touch the [ENTER] again, then select [VERSION].**



The firmware version is displayed.

ENTER 	MAIN I / F	Ver 1.50 Ver 1.50
---------------------------------------------------------------------------------------------	---------------	----------------------

4. **Touch the [ENTER] to return to the [VERSION].**


ENTER 	INFORMATION VERSION	< ent >
-----------------------------------------------------------------------------------------------	------------------------	---------

5. **Touch the JOG [] or [] to select the [SERIAL No.].**


 	INFORMATION SERIAL No.	< ent >
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------	---------

6. **Touch the [ENTER].**


The serial number is displayed.

ENTER 	SERIAL NUMBER S / N *****
-----------------------------------------------------------------------------------------------	------------------------------

7. **Touch the [ENTER] to return to the [SERIAL No.].**

ENTER 	INFORMATION SERIAL No.	< ent >
-----------------------------------------------------------------------------------------------	---------------------------	---------

8. **Touch the [END] three times, to return to the LOCAL mode.**

END 	<< LOCAL >>
---------------------------------------------------------------------------------------------	-------------

Prevent the nozzle clogging of spot color [SP.REFRESH]

To prevent the head nozzle clog, this unit performs refresh while printer is turned on. However the characteristic of white ink is different from other inks, therefore nozzle out occurs even performing the refresh. In this case change the head refresh operation, where white ink is installed, so as to suitable for the white ink. This will prevent the nozzle out.

STEPS:

1. Select the [SP.REFRESH] from the [MAINTENANCE]. (☞ P.5-2)

MAINTENANCE SP.REFRESH	< ent >
---------------------------	---------

2. Press the [ENTER] key.



- All the initial value of SP. REFRESH is set to ON.



SPECIAL REFRESH COLOR	:KCMYcmWS
--------------------------	-----------

3. Select a head to spot color refresh by pressing the [◀] and [▶] keys.



SPECIAL REFRESH COLOR	: KCMYcmWS
--------------------------	------------

4. Select ON or OFF of spot color refresh execution by pressing the [◌] and [◌] keys.



- Set the head where install the white ink to ON. Indication shows "W".
- In the case if white color is installed onto spot color, due to the ink set change, set the head to ON. Indication shows "S".



SPECIAL REFRESH COLOR	: * * * * * W S
--------------------------	-----------------

5. Press [ENTER] to make effective the setting.



MAINTENANCE SP.REFRESH	< ent >
---------------------------	---------

Chapter 6

Trouble shooting

This chapter describes troubleshooting in the case where an error message is displayed and the printer is in abnormal conditions.

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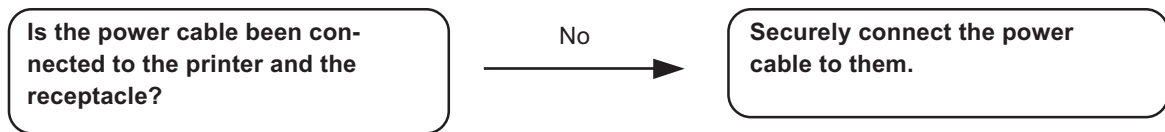
Before Thinking the Printer is in Failure	6-2
When the Printing Quality is Defective	6-3
Troubles for Which Error Messages are Given on the LCD	6-4

Before Thinking the Printer is in Failure

When any error messages are not displayed on the LCD, check the followings again. If you deal with the trouble properly and the printer is still in failure, contact your local MIMAKI distributor or MIMAKI office for service.

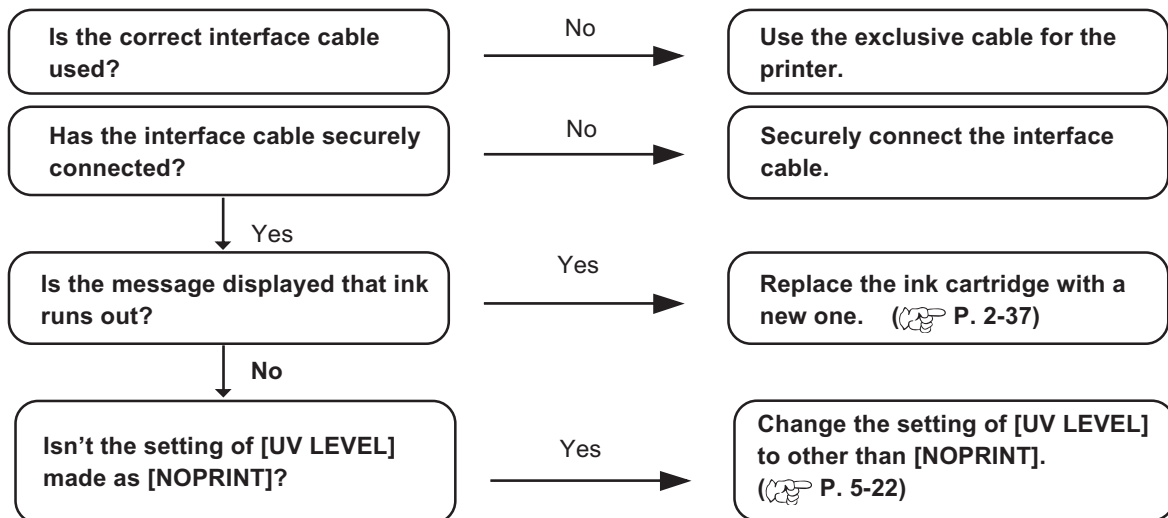
The Printer cannot be Turned on

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



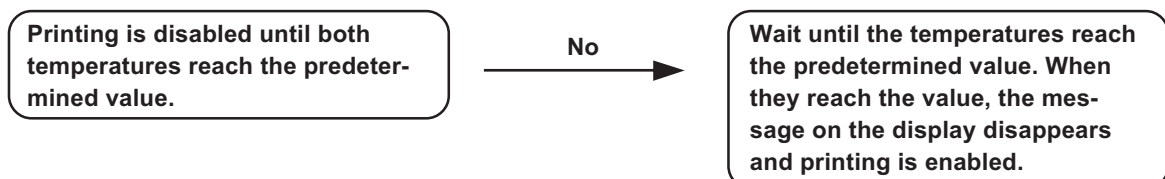
The Printer cannot Perform Printing

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



[WATER NOT READY] or [UV NOT READY] is displayed

When [WATER NOT READY] appears on the display, the water temperature in the water heater has not reached the predetermined value. When [UV NOT READY] appears, the temperature of the UV lamp has not reached the predetermined value; it means the UV lamp is unavailable and printing is disabled.



When the Printing Quality is Defective

This section describes ways of dealing with defective printing quality.

Deal with it according to the situation.

If the problem is not solved, contact your local MIMAKI distributor or MIMAKI office call for service.

Lines/thin spots occur

- Corrective measures :
1. Perform the head cleaning. (☞ P.2-29)
 2. Clean the interior of the station. (☞ P.3-3, 5-6)
 3. If dust adhere on the head path, remove it.

Large ink drop on media during printing

- Corrective measures :
1. Clean the caps. (☞ P.3-3)
 2. Clean the head. (☞ P.2-29)
 3. Remove dust on the media.
 4. Remove dust on the table.
 5. Clean undersurface of the carriage.
(☞ P.3-16)
 6. Enable Regular wiping function. (☞ P.5-5)

Media is lifted during printing and printing is interrupted.


During printing, media may be lifted due to the heat of the UV lamp, and printing may be interrupted.

- Corrective measures :Set new media and start printing.

Troubles for Which Error Messages are Given on the LCD

If a trouble occurs, the buzzer sounds and an error message is displayed on the LCD. Deal with the trouble according to the message.

Warning Messages

Warning message	Cause	Corrective measures
! UV LAMP UV LAMP CHANGE :ent	The UV lamp has to be replaced.	Contact your local distributor or call for service to replace the UV lamp.
! UV LAMP UV LEVEL CHK :ent	The UV lamp level has to be check.	Check the UV lamp light level. ( P.5-22)
<<LOC.>> NEAR END COLOR :KCMYcmWS	The amount of ink remaining in the ink cartridge is insufficient.	One file is printed by touching the [REMOTE] once. However, it is recommended to replace the ink cartridge whose color is shown on the LCD with a new one.
! INK END COLOR :KCMYcmWS	The ink cartridge has run out of ink.	Replace the ink cartridge whose color is shown on the LCD with a new one.
! INK CARTRIDGE COLOR :KCMYcmWS	The ink cartridge is not inserted to the ink station.	Insert the ink cartridge(s) whose color are shown on the display.
! INK TANK WASTE TANK FULL	The waste ink tank is full.	Remove the waste ink tank and set an empty waste ink tank.
! WRONG CARTRIDGE COLOR :KCMYcmWS	The loaded ink cartridge is defective.	Check the loaded ink cartridge. If the same error message appears again, contact your local distributor to call for service.
! Expiration : 2MON COLOR :KCMYcmW	The ink has already expired.	Replace the ink cartridge of whose color is shown on the LCD with a new one.
! COVER OPEN CLOSE A COVER	The cover is opened.	Close the cover.

Warning message	Cause	Corrective measures
! Color of INK COLOR :KCMYcmWS	The color of the loaded ink cartridge is different from the previous one.	Check the color of the loaded ink cartridge.
! Kind of INK COLOR :KCMYcmWS	The type of the loaded ink cartridge is different from the previous one.	Check the type of the loaded ink cartridge.
! NonORIGINAL INK COLOR :KCMYcmWS	The loaded ink cartridge is not MIMAKI genuine.	Use the ink specified by MIMAKI.
! WRONG INK IC COLOR :KCMYcmWS	The IC chip of the ink cartridge cannot be read normally.	Attach the ink cartridge(s) whose color is shown on the display. If the same error message appears again on the LCD, contact your local distributor to call for service.

Error Messages

Error messages indicates error numbers.

If any error message is given on the LCD, turn off the power to the printer and turn it on after a while.

If the same error message appears again on the LCD, contact your local MIMAKI distributor or MIMAKI office to call for service.

Error message	Cause	Corrective measures
<div style="border: 1px solid black; padding: 2px;">ERROR 01 MAIN ROM</div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">ERROR 02 MAIN RAM</div>	The control circuit board is defective.	Turn off the power to and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
<div style="border: 1px solid black; padding: 2px;">ERROR 03 POWER +5V</div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">ERROR 03 POWER +35V</div>	The control circuit board is defective. POWER+5V POWER+35V	
<div style="border: 1px solid black; padding: 2px;">ERROR 04 FLASH SAVE</div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">ERROR 05 FPGA-ss</div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">ERROR 06 UHC ss nnnn</div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">ERROR 07 DFC ss</div>	The control circuit board is defective.	
<div style="border: 1px solid black; padding: 2px;">ERROR 10 COMMAND</div>	The printer has received data other than the command data.	
	The interface cable used is not in conformance with this printer.	Securely connect the interface cable in position. Use an interface cable in conformance with the standard.
<div style="border: 1px solid black; padding: 2px;">ERROR 11 PARAMETER</div>	A parameter outside the range of acceptable numeric values is received.	Check the host computer output setting.
<div style="border: 1px solid black; padding: 2px;">ERROR 12 OFF SCALE</div>	The data is printed out of the printing area.	Check the printing area.
<div style="border: 1px solid black; padding: 2px;">ERROR 13 MEMORY DATA</div>	When each edition has different resolution or there is the same color during receiving data in the MEMORY mode, it is displayed.	In case of copying multi editions, use the data which has the same resolution and which there is not the same color in each edition.

Error message	Cause	Corrective measures
ERROR 20 I / F BOARD	An error occurs on the interface of the I/F board and the control circuit board.	Turn off the power and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 23 HOST I / F	A timeout error occurs during communication between the host computer and the interface board.	Check that the cable is securely connected. Also, check an error does not occur in the computer.
ERROR 24 I / F INITIAL	An initial operation failure of the I/F board and the control circuit board.	Turn off the power and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 30 OPERATION	A wrong operation is performed on the touch panel.	Perform a proper operation.
ERROR 34 DATA REMAIN	Settings for functions is tried to be changed though received data that has not been printed yet remains.	Print all of received data or perform the data clear function. Then, change the settings.
ERROR 40 MOTOR X	The X motor has been overload.	Turn off the power and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 41 MOTOR Y	The Y motor has been overload.	
ERROR 42 X CURRENT	The overcurrent error on the X motor has been detected.	
ERROR 43 Y CURRENT	The overcurrent error on the Y motor has been detected.	
ERROR 44 SCAN RANGE	Out of scanning is occurred.	
ERROR 50 X ORIGIN	The X origin could not be detected.	
ERROR 51 Y ORIGIN	The Y origin could not be detected.	
ERROR 53 STEP MOTOR ORIGIN	The step motor origin can not be detected.	

Error message	Cause	Corrective measures
ERROR 60 FLASHING nnnn	The flashing action time out error has been occurred.	Turn off the power and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 61 TEMP ss	The head temperature is abnormal.	
ERROR 70 WATER LACK	The amount of the water is shortage.	Make sure to check the amount of the water in the waste heater tank. (☞ P.3-8)
ERROR 71 WATER DEVICE ss	The water heater error has been occurred.	Turn off the power and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 72 UV POWER OFF	The UV device power is off when the printer is started.	
ERROR 73 UV DEVICE SS	The UV device error has been occurred.	
ERROR 74 UV DEVICE	The UV device outputs abnormal signals.	
ERROR 90 F/W ss	The firmware is defective.	

Appendix

This appendix describes the specifications of the printer and its components and the structure of the function menu.

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Function Flowchart	A-7

Basic Specifications

Item		UJF-605RII			
Print head	Method	Piezo-electric drop-on demand			
	Specification	Max 8-heads Inlines			
Resolution		300, 600, 1200 and 2400dpi			
Printing mode	300 x 300 dpi	2 passes:Unidirection, 4 / 8 passes : Unidirection and high speed			
	600 x 600 dpi	4 passes:Unidirection, 8 /16 passes : Unidirection and high speed			
	1200 x 1200 dpi	8 passes:Unidirection, 16 passes : Unidirection and high speed			
	1200 x 2400 dpi	16 passes:Unidirection, 32 passes : Unidirection and high speed			
Usable inks		UV curing inks (MIMAKI original ink) Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, White and Spot color			
Delivery system of ink		Supplies ink through a tube from ink cartridge Remaining ink display function Ink end detecting function			
Capacity of ink cartridge		440 cc per cartridge			
Usable media	Width	Roll	Max.640mm, Min.180mm	Leaf	Max.620mm, Min.180mm
	Thickness	Media	0.02 to 0.2mm	Media	0.02 to 2.0mm
		Roll inside diameter 3 inch			
Max. printing area		Width:600mm Media feeding direction:500mm			
Distance accuracy	Absolute accuracy	± 0.1 mm or less			
	Reoroducibility	± 0.2 mm or less			
Perpendicularity		± 0.5 mm / 500 mm			
Media vacuum		Absorption of media by blower vacuum			
UV unit		UV irradiation device incorporated, UV power			
Waste ink tank		Bottle type (2,000 cc [1pcs.], with full tank sensor)			
Interface	Host	IEEE1394 compliant, IEEE1284 compliant			
	Table	Bi-direction port x 4			
Command		MRL-II B (ESC/P Lv2 base, MIMAKI original command)			
Noise		during standby : 55 dB or less (FAST-A, Front & Rear & Left & Right 1 m) during continuous printing : 65 dB or less during discontinuous printing : 70 dB or less			
Safety Standard		VCCI-classA, ETL, FCC-ClassA, CE Marking, CB Report			
Ink safety		MSDS			
Power (Main and Uv unit)		AC 200V to 240V Single phase			
Power consumption		4.0k VA or less (During printing: 16.6A/200V)			
Recommended Environment	Available temp.	15 °C to 30 °C (59 to 86°F)			
	Humidity	35 to 65 % Rh (No condensation)			
	Guaranteed temp.	18 °C to 25 °C (64 to 77°F)			
	Temperature change	± 10 °C (50°F) / h or less			
Dust		Equivalent to normal office level			

Item		UJF-605RII
Weight	Packing box	Approx. 800 kg
Outside dimensions	Width	2340 mm or less
	Depth	1920 mm or less
	Height	1530 mm or less

Ink Specifications

Item	Specifications
From	UV ink cartridges
Color	Black ink cartridge
	Cyan ink cartridge
	Magenta ink cartridge
	Yellow ink cartridge
	Light cyan ink cartridge
	Light magenta ink cartridge
	White ink cartridge
	Spot color ink cartridge
Contents of ink	440 cc per cartridge
Shelf life	One year from the data of manufacture
Storage temperature	During storage : 15 to 35°C (59 – 95°F)
	During shipping: 0 to 60°C (0 to 140°F) within 2 weeks permitted



CAUTION

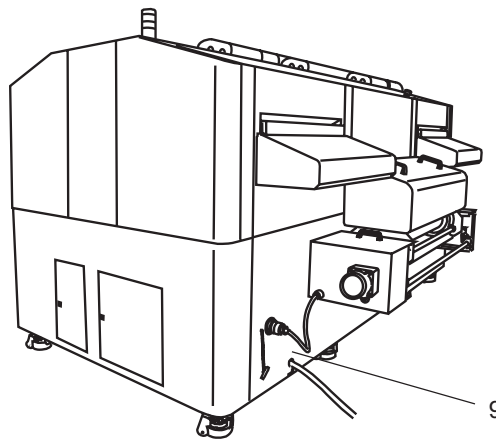
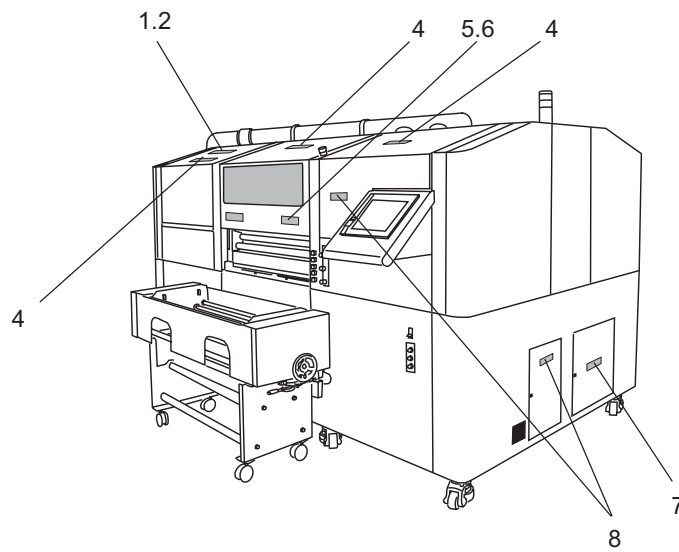
- The ink freezes when it is left in a cold place which is under -4 °C for a long time. Should it freeze, leave the ink cartridge at room temperature (at 25°C [77°F]) for three hours or more to unfreeze it.
- Do not disassemble or refill the ink cartridge, or it causes failures.

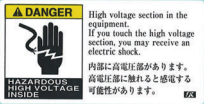






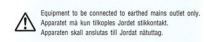

About of Safety Labels

The following safety labels are attached to this printer.

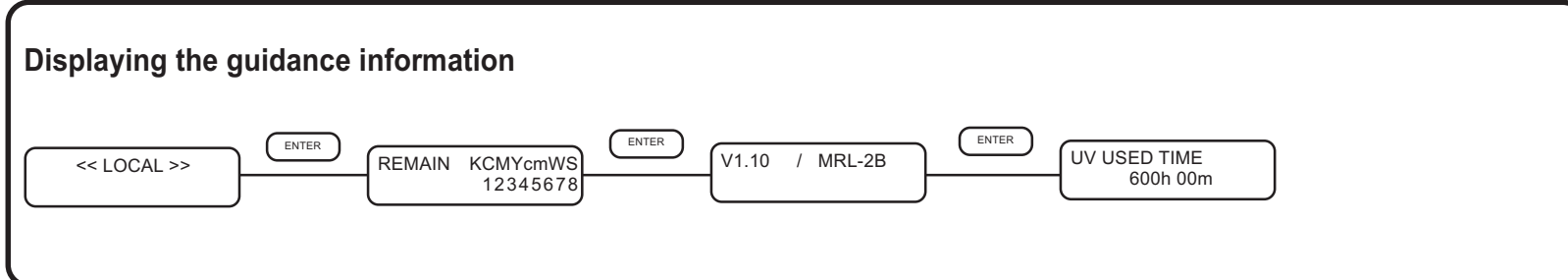
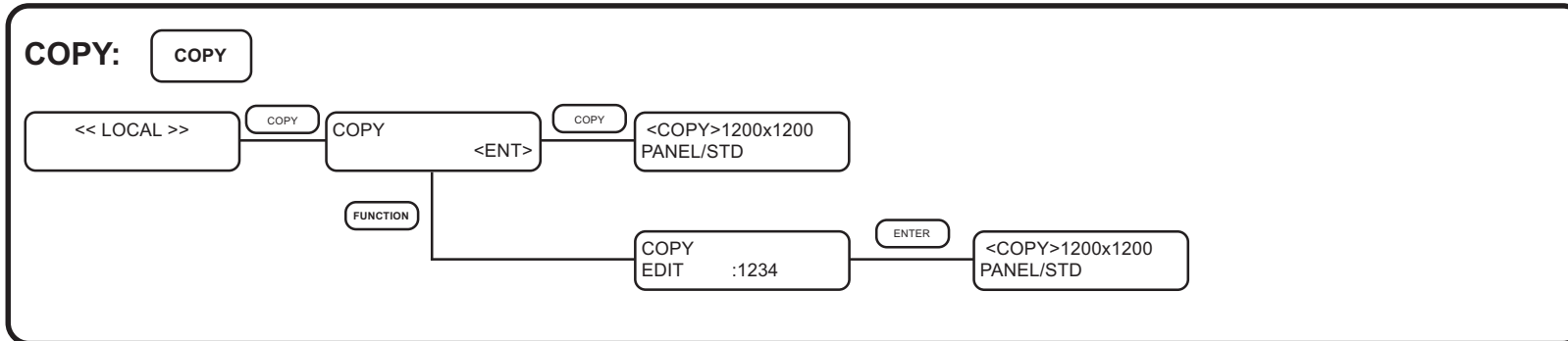
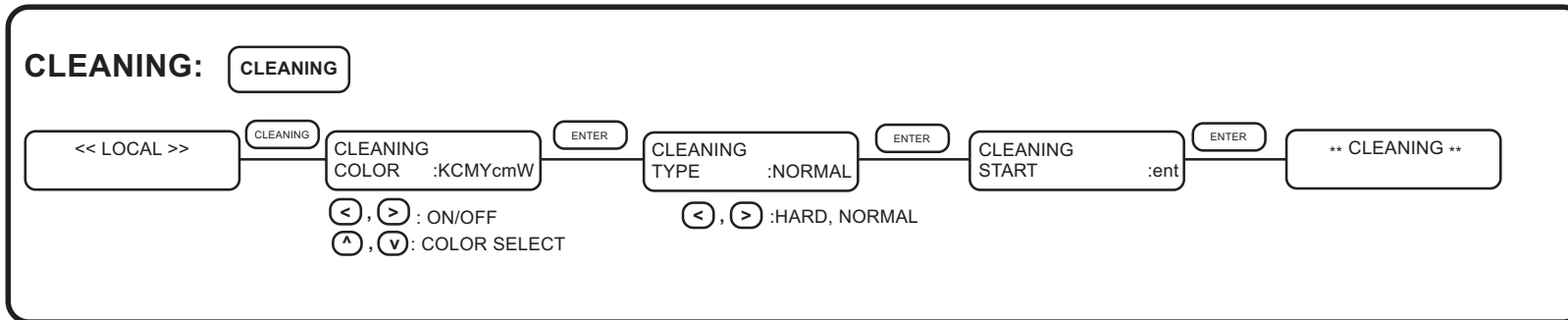
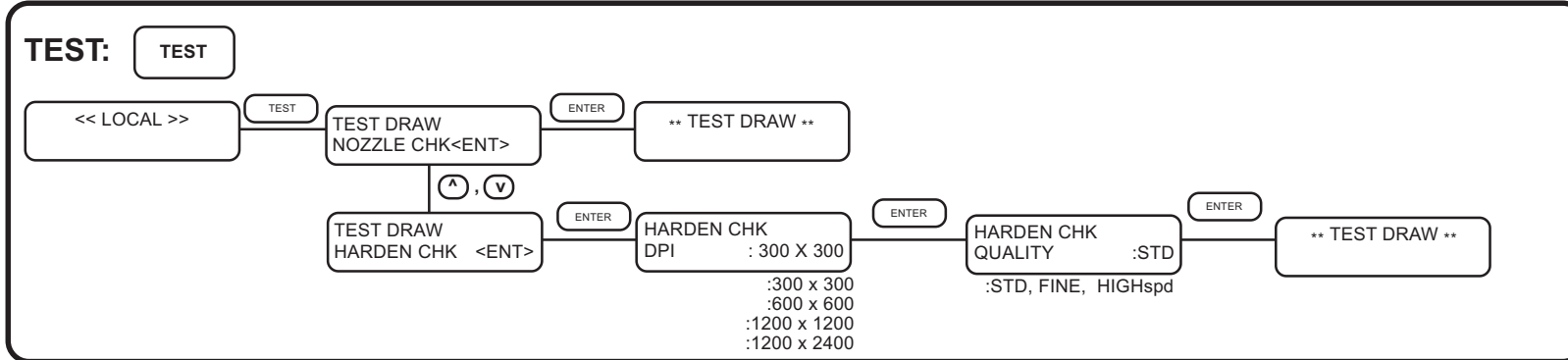
Read and understand their meaning.

If any of them fall off or become illegible, contact MIMAKI local distributor for a replacement.

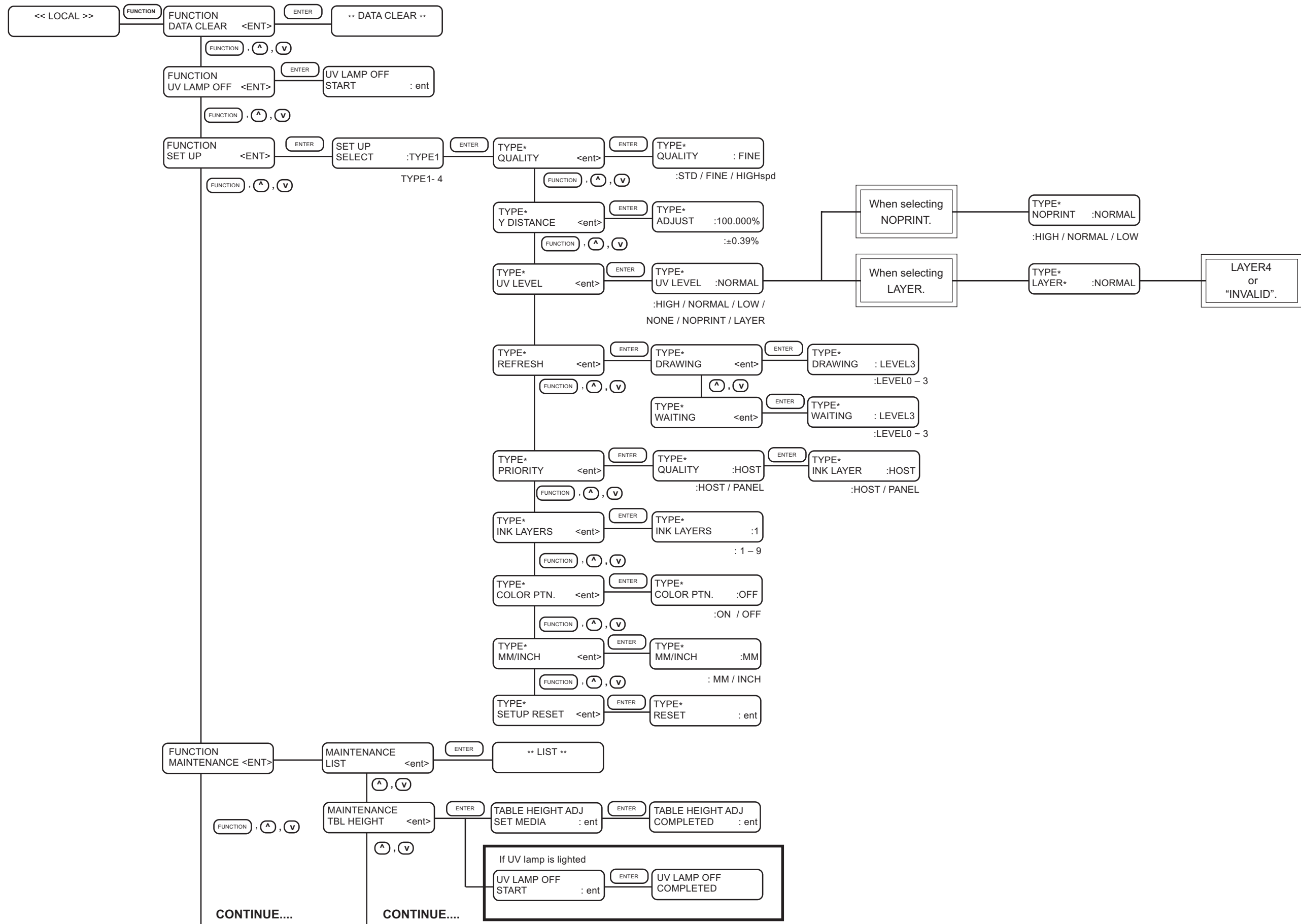


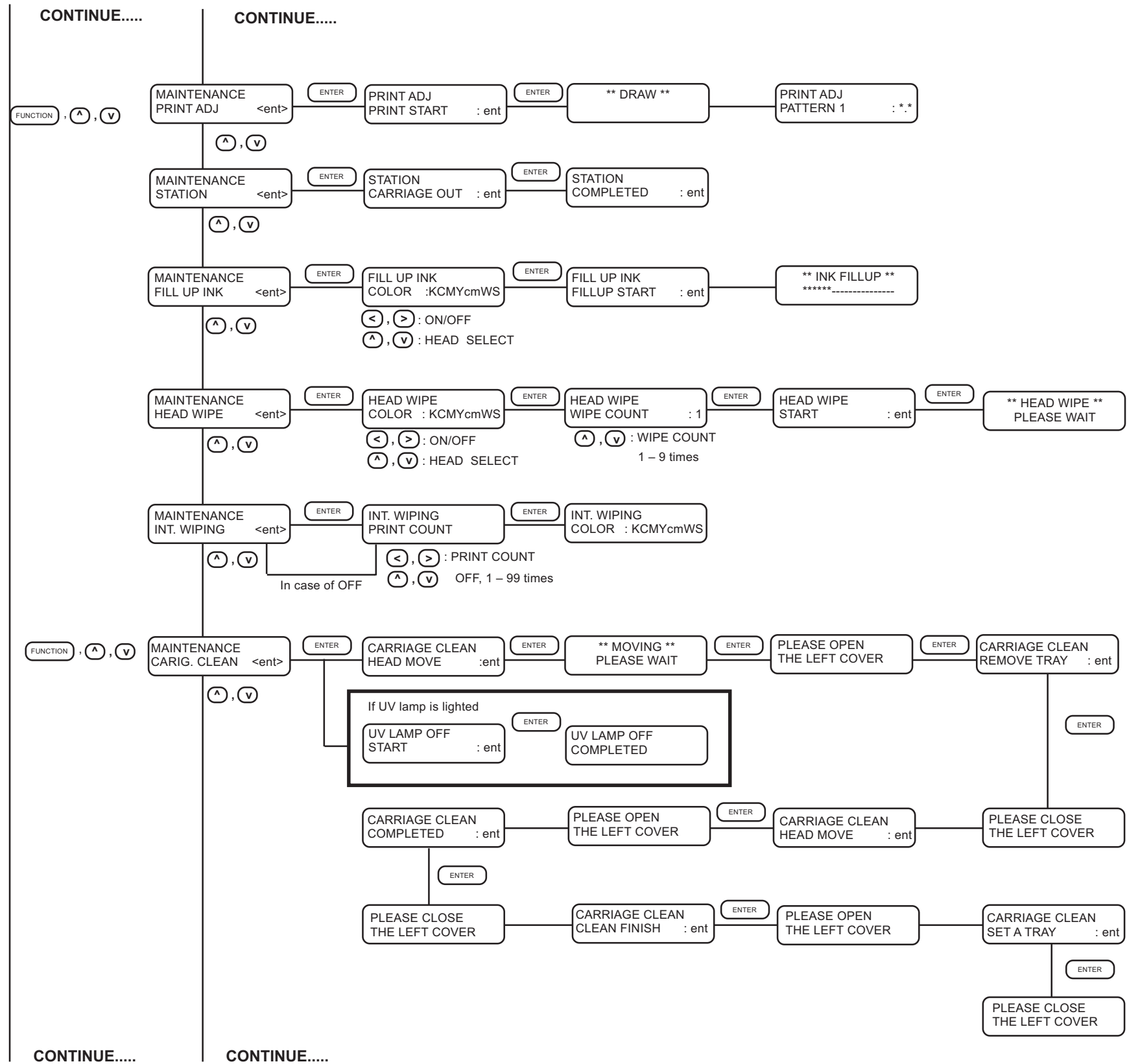
No.	Reorder No.	Reorder No.	No.	Reorder No.	Reorder No.
1	M903764		6	M901607	
2	M903763		7	M963239	
3	M903747		8	M903330	
4	M903946		9	M902396	
5	M901549				

Function Flowchart



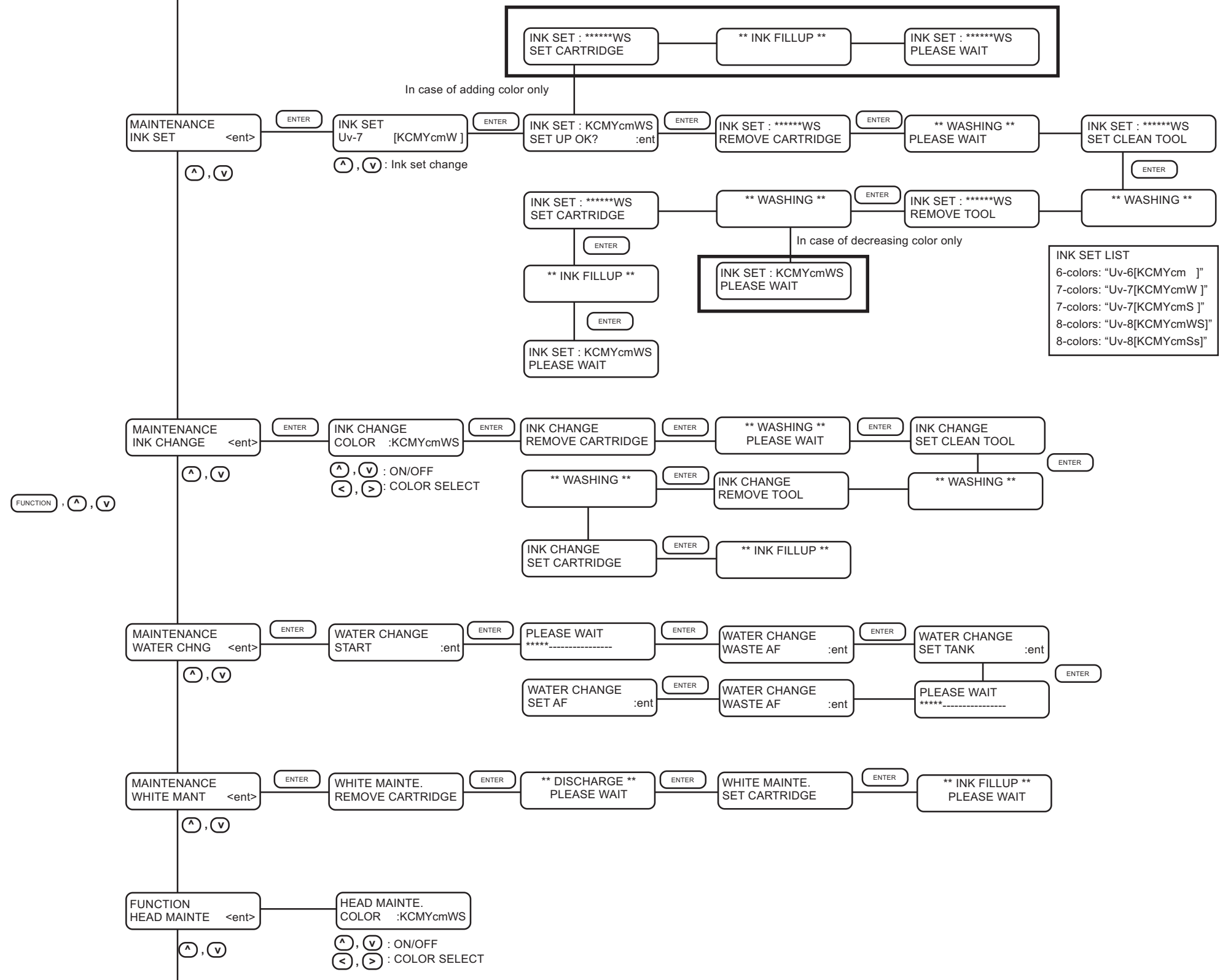
FUNCTION: FUNCTION





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