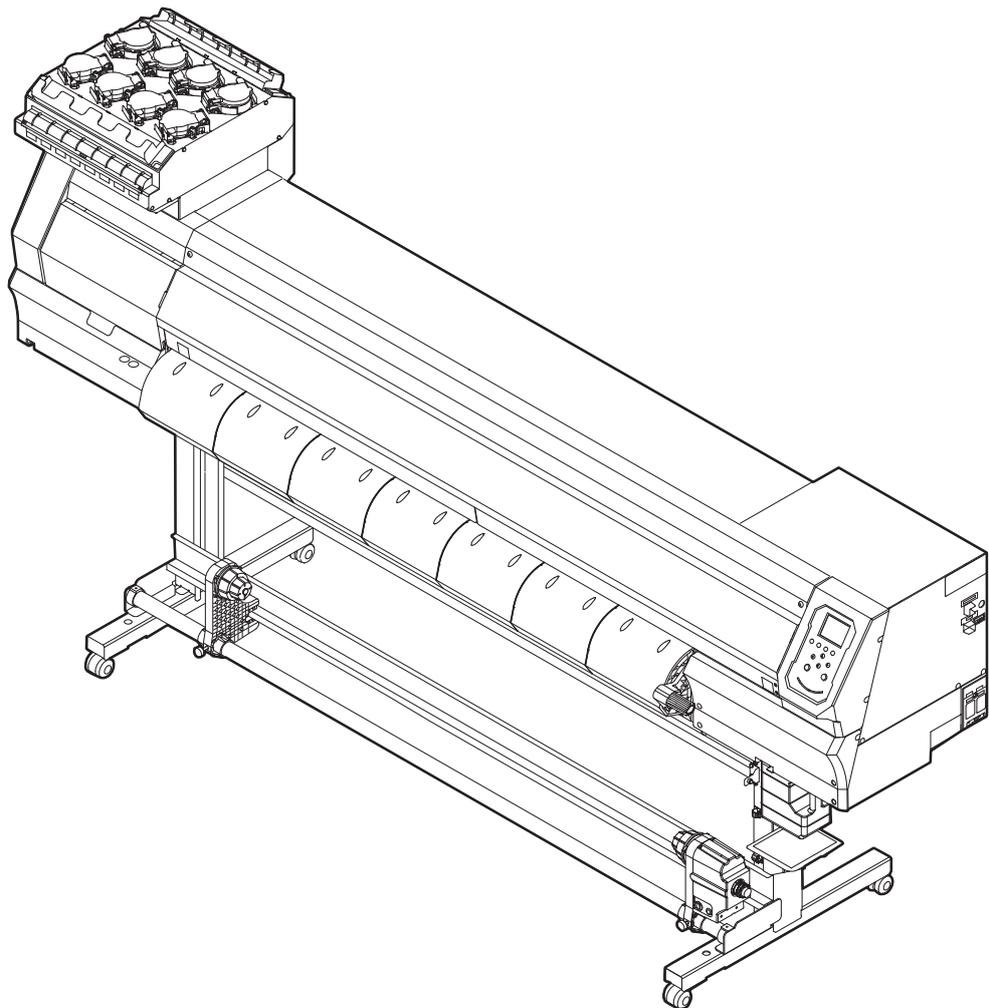


Operation Manual

UV INKJET PRINTER

UJV100-160

Operation Manual



You can also download the latest manual from official website.

MIMAKI ENGINEERING CO., LTD.

<https://mimaki.com/>

D203466-12
Original instructions

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Introduction

Thank you for purchasing the UV-LED curable inkjet printer UJV100-160.

Read this operating manual (“this document” hereinafter) thoroughly and make sure you understand its contents to ensure safe and correct use of the product.

Please note that the illustrations contained in this manual are intended to show functions, procedures, or operations and may sometimes differ slightly from the actual machine.

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● Disclaimers

- Mimaki Engineering accepts no liability for damages arising directly or indirectly from the use of the UJV100-160 (“this product” hereinafter), whether or not the product is faulty. Mimaki Engineering rejects all liability for damages, direct or indirect, resulting from the use of this product.
- Mimaki Engineering rejects all liability for damages, direct or indirect, attributable to materials created while using this product.
- Using this product in conjunction with devices other than those recommended by Mimaki Engineering may result in fire or accidents. Such incidents are not covered by the product warranty. Mimaki Engineering rejects all liability for damages, direct or indirect, arising from such incidents.
- Use only genuine Mimaki Engineering ink and maintenance cleaning solution. Use of other products may result in failures or reduce print quality. Such incidents are not covered by the product warranty. Mimaki Engineering rejects all liability for damages, direct or indirect, arising from such incidents.
- Do not attempt to refill the ink bottles with unauthorized ink. Disregarding this precaution will void the warranty. Mimaki Engineering rejects all liability for damages, direct or indirect, arising from such incidents.
- Avoid using UV-LED units or UV power supply units other than those specified by Mimaki Engineering. Using devices other than genuine Mimaki Engineering devices may result in failure, electric shock, or fire. Such incidents are not covered under the warranty. Mimaki Engineering rejects all liability for damages, direct or indirect, arising from such incidents.

● TV and radio interference



- This product emits high-frequency electromagnetic radiation while operating. Under certain circumstances, this may result in TV or radio interference. We make no guarantee that this product will not affect special radio or TV equipment.

If you suspect that this product is causing radio or TV interference, check by powering off this product. If the interference disappears when the power is turned off, this product is likely to be the cause of the interference.

Try any of the following solutions or combinations of these solutions:

- Change the orientation of the TV or radio antenna to find a position where interference does not occur.
- Move the TV or radio away from this product.
- Plug the TV or radio into a power outlet on a power circuit other than the power circuit to which this product is connected.

● FCC (Federal Communications Commission) regulations

This product has been tested and certified to comply with restrictions applying to Class A digital devices under Part 15 of the FCC regulations. These restrictions are designed to provide suitable protection from harmful interference when the printer is used in commercial environments.

This product may generate, use, or emit radio frequency energy and may cause harmful interference with radio communications if not installed or used in accordance with the operating manual.

Use of this product in residential areas may cause harmful interference. If so, the user is responsible for rectifying such interference.



- Use only the cables recommended by Mimaki Engineering when connecting to this product. Use of other cables may cause the product to exceed the restrictions stipulated by FCC regulations. To maintain compliance with FCC regulations, use the cables recommended by Mimaki Engineering.
-

For safe use

Symbols

In this manual, the symbols indicate and explain precautions. Make sure you fully understand the meaning of each symbol and use the machine safely and correctly.

| Explanation | | |
|---|-----------------------|--|
|  | Warning | Indicates a potential hazard that may result in death or serious injury if handled improperly or if instructions are disregarded. |
|  | Caution | Indicates a potential hazard that may result in minor or moderate injury if handled improperly or if instructions are disregarded. |
|  | Notice | Indicates a potential hazard that may result in property damage if handled improperly or if instructions are disregarded. |
|  | Warning sign | Indicates something that requires attention. Warning specifics are drawn inside the symbol. |
|  | Mandatory action sign | Indicates an action that must be carried out. The specifics of the mandatory action are drawn inside the symbol. |
|  | Prohibition sign | Indicates a prohibited action. The specifics of the prohibited action are drawn inside the symbol. |
|  | Important | Indicates important information related to use of this product. |
|  | Tip | Indicates useful reference information. |
|  | Reference information | Indicates the corresponding page for related information. Click the text to display the corresponding page. |

Usage Precautions

● In the event of abnormal conditions

WARNING



- In the event of abnormal conditions such as smoke or unusual odor, turn off the main power immediately and unplug the power cable. Continuing to use the product under these conditions may result in failure, electric shock, or fire. Once you have confirmed that smoke is no longer being emitted, contact your local dealer or our service office. Never attempt to repair the product yourself. Doing so is hazardous.

CAUTION



- Immediately wipe off any ink, maintenance washing liquid, waste ink, or other liquid used with the product that comes into contact with your skin. Wash using soap. Rinse with plenty of water. Failure to wash off liquid may result in skin inflammation. If your skin becomes irritated or painful, seek medical attention immediately.
- If ink, maintenance washing liquid, waste ink, or any other liquid used in the product comes into contact with your eyes, rinse immediately with plenty of clean water. Rinse for at least 15 minutes. If you wear contact lenses and they can be easily removed, remove after rinsing for at least 15 minutes with clean water. Be sure to rinse the undersides of your eyelids. Failure to rinse off liquid may result in blindness or impaired vision. If your eyes become irritated or painful, seek medical attention immediately.
- If ink, maintenance washing liquid, waste ink, or any other liquid used in the product enters your mouth or is swallowed, gargle with water immediately. Do not induce vomiting. Seek medical attention promptly. Inducing vomiting may cause liquid to enter the airway.
- If a large amount of vapor is inhaled, move to a well-ventilated area, keep warm, and rest in a posture that allows easy breathing. If the condition does not improve, seek medical attention promptly.

NOTICE



- If an ink leak occurs, turn off the main power immediately and unplug the power cable. Contact your local dealer or our service office.

● Power supply precautions

WARNING



- Use the power cable provided. Using other cables may result in failure, electric shock, or fire. Do not use the power cable with other electronic devices.
- Always grasp the plug when unplugging the power cable. Pulling on the power cable itself may damage the cable and result in failure, electric shock, or fire.
- Do not use the power plug with dust on it. Using the power plug under these conditions may result in failure, electric shock, or fire.
- Avoid touching the blade of the power plug with a metal object. Disregarding this precaution may result in machine failure, electric shock, or fire.
- Do not attempt to modify the cable. Avoid damaging the cable. Avoid placing heavy objects on the power cable or pulling on or exposing the cable to heat. Doing so may damage the cable, resulting in fire or electric shocks.
- Do not use extension cords or multi-outlet extension cords. Doing so may result in machine failure, electric shock, or fire.
- Do not use if the power cable appears to be damaged or the core wire has an exposed or broken core. Disregarding this precaution may result in machine failure, electric shock, or fire.



- Do not plug/unplug the power plug with wet hands. Disregarding this precaution may result in electric shock.

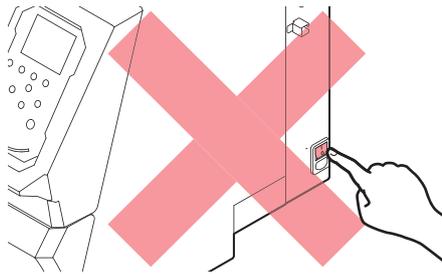


- Plug the power cable plug into a grounded power outlet. Disregarding this precaution may result in machine failure, electric shock, or fire.
- When installing electrical outlets, perform grounding work to prevent electric shock. All electrical work must be done by a licensed electrician.
- Perform grounding work.

NOTICE



- Do not turn off the main power supply. Turning off the main power supply will disable the automatic maintenance function (including nozzle clogging prevention function and ink discharge channel cleaning function) and may result in printing defects (such as nozzle clogging and deflection) or other faults.



- Use this product with a power supply that meets specifications.
- Be sure to plug the power cable into a power outlet close to the product. Insert the power plug blade securely.
- When connecting the power cable, check the input voltage of the power outlet and the capacity of the breaker. Also, connect each cable to a separate power source with an independent breaker. Connecting to power outlets linked with the same breaker may trip the breaker.

● Caution regarding moving parts

⚠ CAUTION



- Keep parts of the body such as the face and hands and clothing (e.g., loose clothing and accessories) that may impede work away from the machine. Failure to do so may result in injury. Long hair should be tied back.

● Do not disassemble or repair

⚠ WARNING



- Do not attempt to disassemble or repair this machine. Disregarding this precaution may result in fire, electric shock, or fire.

● Precautions when handling the cutter

⚠ CAUTION



- Do not touch the cutter blade. Disregarding this precaution may result in injury.

● Precautions for ultraviolet (UV) light and the UV-LED unit

⚠ WARNING



- Do not place combustible materials underneath the UV-LED unit. Disregarding this precaution may result in fire or smoldering.
- Do not cover the UV-LED unit with paper or cloth. Disregarding this precaution may result in fire or smoldering.



- Small amounts of ultraviolet light may leak from around the UV-LED unit. Take precautions to avoid exposing the skin and eyes to ultraviolet light. Wear gloves, long-sleeved clothing, face shields, and UV safety glasses.
 - (1) Exposure to UV light may result in skin inflammation. Even if no inflammation occurs, extended or repeated exposure may lead to chronic problems.
 - Acute problems: Inflammation
 - Chronic problems: Skin cancer, wrinkles, blotches
 - (2) Looking directly at the lamp while the lamp is on may result in eye pain or damage to eyesight. Even if no eye pain occurs, extended or repeated exposure may lead to chronic problems.
 - Acute problems: Ultraviolet keratitis, conjunctivitis, discomfort, pain, watery eyes
 - Chronic problems: Pterygium, cataracts

CAUTION



- The UV-LED unit becomes extremely hot. Turn off the LED and wait for the unit to cool before attempting maintenance work.



- Do not expose the skin or eyes directly or indirectly to light from the UV-LED unit. The UV-LED unit emits ultraviolet (UV) light. Exposure may result in skin or eye inflammation.



- Use only the UV safety glasses provided. Disregarding this precaution may result in eye pain or damage to eyesight.

NOTICE



- Avoid scratching or subjecting the UV-LED unit to excessive force. Disregarding this precaution may result in failure.
- Avoid touching the glass on the underside of the UV-LED unit with bare hands. Disregarding this precaution may impair UV ink curing. If the glass becomes dirty, wipe clean using a soft, clean cloth moistened with ethanol. Be careful to keep ethanol from splashing on the covers while cleaning. Contact with ethanol may damage the covers.

● **Disposing of the product**

CAUTION



- Please contact your local retailer or service agent.
- If you intend to dispose of the product yourself, contact an industrial waste disposal operator or dispose of the product in accordance with local laws and regulations.

Ink or any Other Liquid Used with the Machine

Precautions regarding ink are indicated on the Ink bottle. Thoroughly read them and make sure you understand the contents.

WARNING



- Take steps to prevent leakage into natural water systems or domestic wastewater. Some constituents are toxic to aquatic life.

CAUTION



- Be sure to read the safety data sheet (SDS) before use.
<https://mimaki.com/supply/sds/>



- Wear safety glasses, gloves, and a mask when handling ink, maintenance cleaning solution, waste ink, or other solutions used with this machine. Leaking ink may adhere to the skin or get into your eyes or mouth.



- Do not subject Ink bottle to strong shocks or violent shaking. Do not attempt to refill the ink. Leaking ink may adhere to the skin or get into your eyes or mouth.



- Do not disassemble Ink bottle. Leaking ink may adhere to the skin or get into your eyes or mouth.



- Do not store in places accessible to children.



- When disposing of the product, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

NOTICE



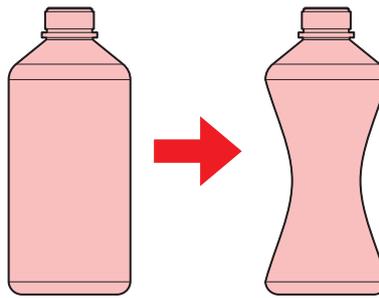
- Do not use ink, maintenance cleaning solution, or other liquids used with this machine with other printers. Disregarding this precaution may result in damage to the printer.
- Avoid touching or soiling the PCB contact area of the ink IC chip. Doing so may damage the PCB.



- Store in a low place no higher than 1 m above the floor. Dropping this machine may result in splashing ink, washing liquid, or other liquid.
- Store in sealed containers.
- Store in a cool and dark place.
 - (1) When moving ink from cold to warm locations, allow to stand for at least three hours in the location where it will be used. Note that using thawed ink will affect printing quality due to ink deterioration. Store ink in an environment where it will not freeze.
 - (2) Open the ink before use and use up as quickly as possible. Print quality may degrade if the bottles are left open for extended periods.



- The device will not work with different types of ink chips.
- Ink bottles may become indented even when they are mounted in the product. This will not affect function.



Ink Specifications

| Item | | Details |
|---------------------|-----------------------|--|
| Type | | UV curing ink (MIMAKI product) |
| Color | | Cyan (C) Magenta (M) Yellow (Y) Black (K) White (W) Clear ink (CL) |
| Form | | Bottle |
| Ink capacity | | 1,000 ml |
| Expiration | | As indicated on the ink bottle However, within three months after opening, even before the expiration date |
| Storage temperature | When stored | 5°C to 30°C (daily mean temperature) However, not more than 1 month at 30°C. • Ink quality may deteriorate if stored outside these conditions. |
| | During transportation | 1°C to 60°C However, not more than 120 hours at 60°C, and not more than 1 month at 40°C. • Where possible, avoid storing in locations below 0 °C and locations above 40 °C. • Ink quality may deteriorate if stored outside these conditions. |

Restrictions concerning the product

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

Example: The expiration date is April 2020

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

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

July: Printing is not possible.



- The message appears on the display.
-

Installation Precautions

WARNING



- Do not install this machine in environments where flammable substances are present (e.g., gasoline, flammable spray, alcohol, thinner, lacquer, powder). This machine is not explosion-proof. The product poses a risk of explosion.



- Do not install this machine in locations where open flames are present. The ink may ignite.
- Do not place vases, pot plants, cups, cosmetics, containers of chemicals or water, or small metal objects on top of this machine. Entry into the machine of liquids or metal objects may result in malfunctions, electric shock, or fire.



- Do not install this machine in humid locations or locations where it may be exposed to splashing water. Disregarding this precaution may result in machine failure, electric shock, or fire.



- Keep children away from this machine.

CAUTION



- A ventilation system must be provided if this machine is installed in a poorly ventilated area or sealed room.
- Note the following points when installing an extractor outlet:
 - (1) The extractor outlet must be installed in accordance with applicable local EHS (environmental, health, and safety) guidelines.
 - (2) If the extractor outlet is fitted with a shutoff valve, the valve must be open when this machine is in use.

NOTICE



- Do not install this machine in locations where dust or powder is present. Failure or printing defects may result (e.g., nozzle clogging, deflection) if dust gets inside this machine.
- Do not install this machine in locations exposed to drafts (e.g., from air conditioning). Disregarding this precaution may result in dust or powder getting inside this machine.
- Do not install this machine in unstable locations or locations subject to vibration. Disregarding this precaution may result in failure or printing defects (e.g., nozzle clogging, deflection).
- Do not install this machine in locations exposed to direct sunlight.
- Do not install this machine in locations subject to sudden temperature changes. Disregarding this precaution may result in printing defects (e.g., nozzle clogging, deflection).
- Do not install this machine in locations exposed to excessive noise from large machinery.



- Permissible operating conditions: 20 °C to 30 °C (68 °F to 86 °F), 35 %RH to 65 %RH (no condensation)
- Guaranteed accuracy temperature range: 20 °C to 25 °C (68 °F to 77 °F)

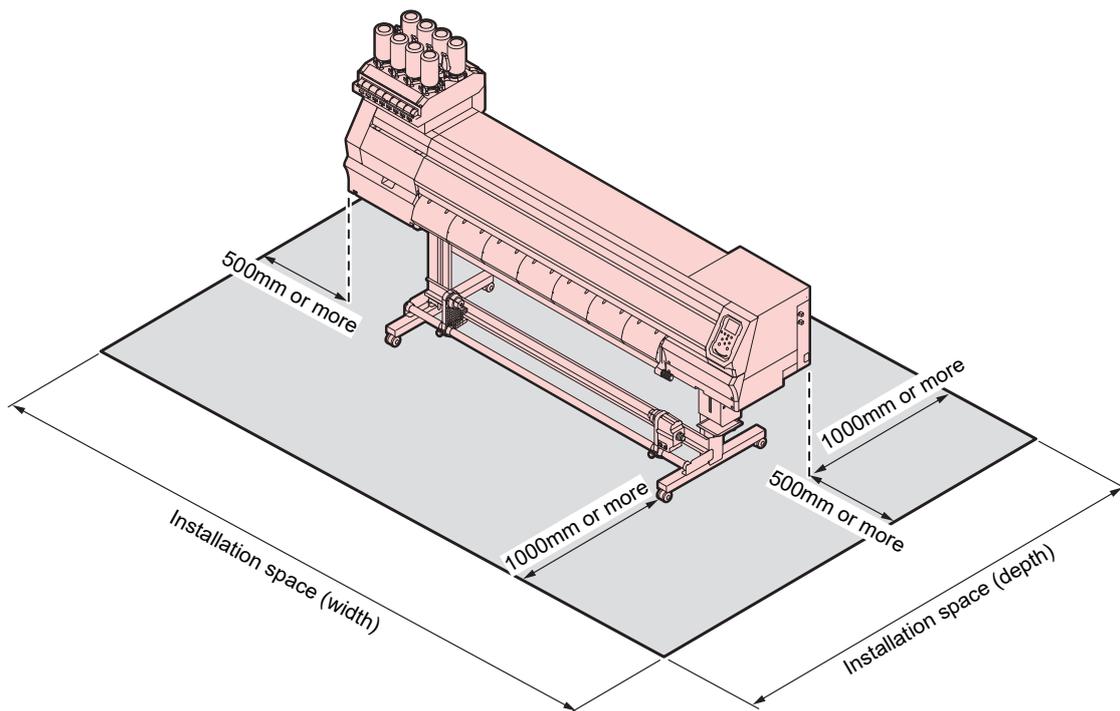
Installation Space

Provide the following space around the machine to allow safe and proper replacement of ink and media:

| Item | UJV100-160 |
|--------------------------|---------------------------------|
| Width ^{*1} | At least 3,775 mm (2,775 mm) |
| Depth ^{*1} | At least 2,700 mm (700 mm) |
| Height ^{*1, *2} | (1,475 mm) |
| Weight | 167 kg |

*1. The figures in parentheses indicate machine dimensions.

*2. Excluding Ink bottle height



When Relocating This Machine

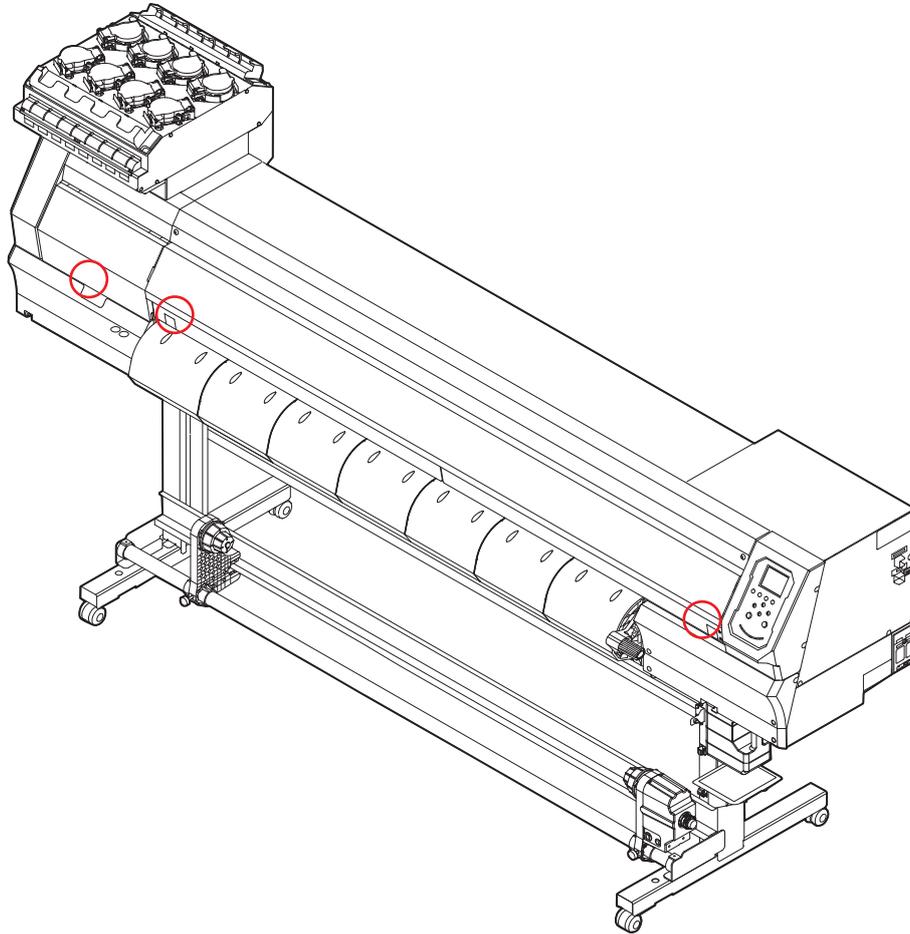
Contact your local dealer or our service office. Attempting to handle relocation yourself may result in failure or damage.

Safety Interlocks

This machine is equipped with interlocks to ensure safety during use.

Printing will abort if you open the covers while printing is underway. If so, you will need to resend the RIP data.

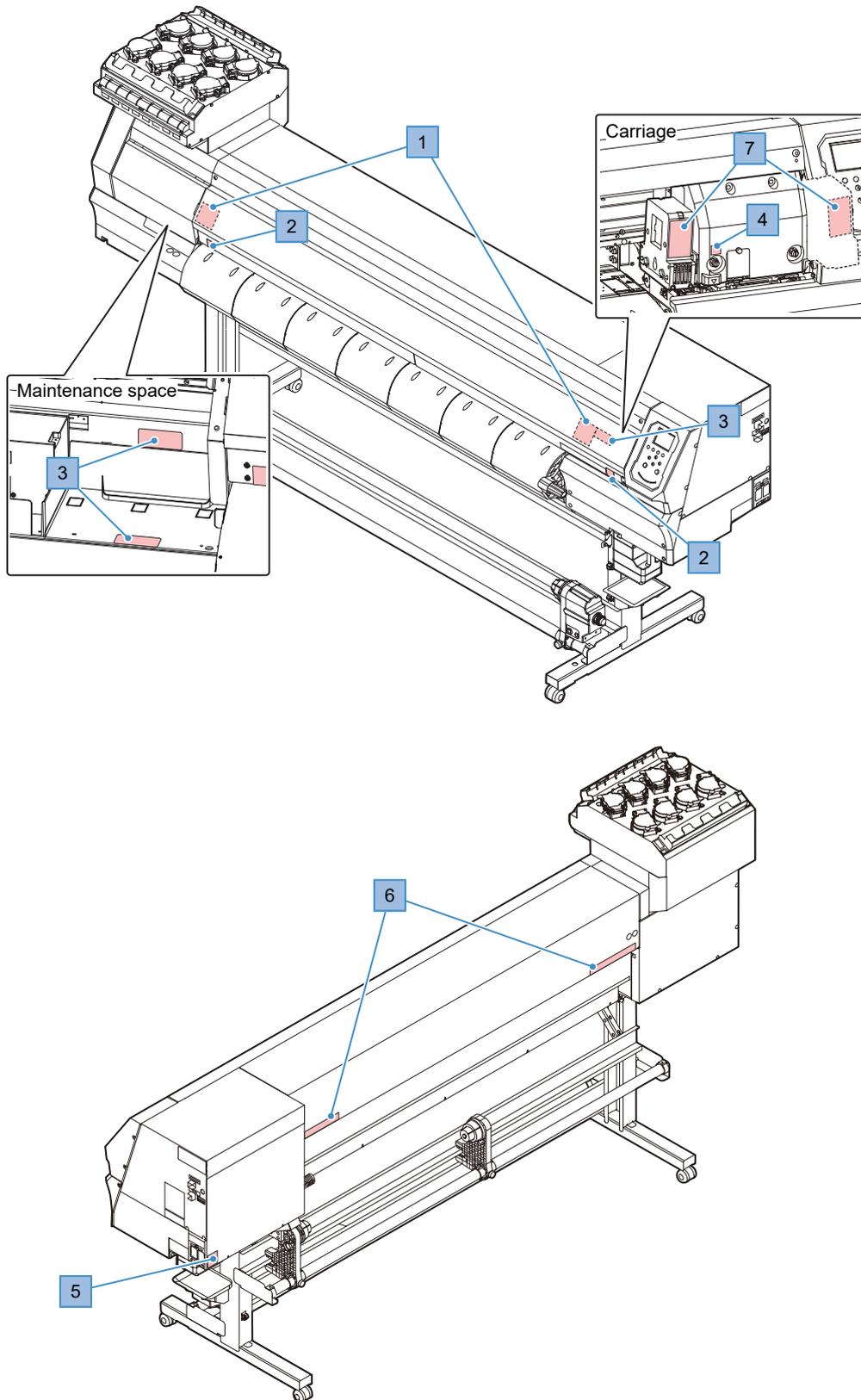
- Safety interlock locations



Warning Labels

Make sure you fully understand the details indicated on the various warning labels.

If any of the warning labels becomes dirty and illegible or peel off, contact your local dealer or our service office to request new warning labels.



| No. | Order code | Label | Details |
|-----|------------|--|---|
| 1 | M910931 |  <p>CAUTION ATTENTION</p> <p>COVER HAZARD May result in severe injury. When open and close the cover, hold a cover until the end.</p> <p>COUVERCLE-DANGER Peut entraîner de graves blessures. Lors de l'ouverture ou de la fermeture du couvercle, tenir le couvercle jusqu'à la fin.</p> <p>カバー急落下あり 指を挟まると、ケガや骨折の恐れあり。 カバーの開閉は、最後まで手を離さず行ってください。</p> <p>M910931</p> | Beware of opening and closing parts. Injury may result if hands become trapped. |
| 2 | M907833 |  | Indicates dangerous moving parts. |
| 3 | M903330 |  | Wear safety glasses and gloves while working. |
| 4 | M903405 |  | Beware of the cutter. |
| 5 | M907935 |  | Indicates dangerous live parts. |
| 6 | M905811 |  <p>警告 警告 警告 警告 警告</p> <p>手指及身体其他部分 被夹伤、被刺伤或 被割伤。以免造成危 害。保持安全距离。</p> <p>指と身体 を挟む危険 があります。</p> <p>WARNING HANDS AND OTHER BODY PARTS AWAY.</p> <p>GEFÄHRLICHE BEWEGLICHE TEILE Finger und andere Körperliche teile halten fern.</p> <p>AVERTISSEMENT PIECES MOBILES DANGEREUSES Danger de parties mobiles. Garder les doigts et autres parties du corps à l'écart des pièces.</p> | Indicates dangerous moving parts. |
| 7 | M913419 |  <p>WARNING AVERTISSEMENT 警告</p> <p>ULTRAVIOLET RADIATION RAYONS ULTRAVIOLETS 紫外线辐射 紫外线照射</p> <p>Ultraviolet Radiation, When exposed to ultraviolet light, there is a risk of skin cancer or burns.</p> <p>Rayonnement UltraViolet. Exposition dangereuse pour l'œil et la peau. Peut provoquer la cataracte et des brûlures.</p> <p>紫外线が照射されています。 紫外線を浴びると失明や皮膚の 炎症や癌の原因です。 紫外線照射注意 紫外線照射が有害な 皮膚癌の原因となります。</p> | Beware of ultraviolet light. |
| 8 | M906144 |  | Indicates hot parts. (This nameplate is attached to the option.) |

Chapter 1 Before Using This Product



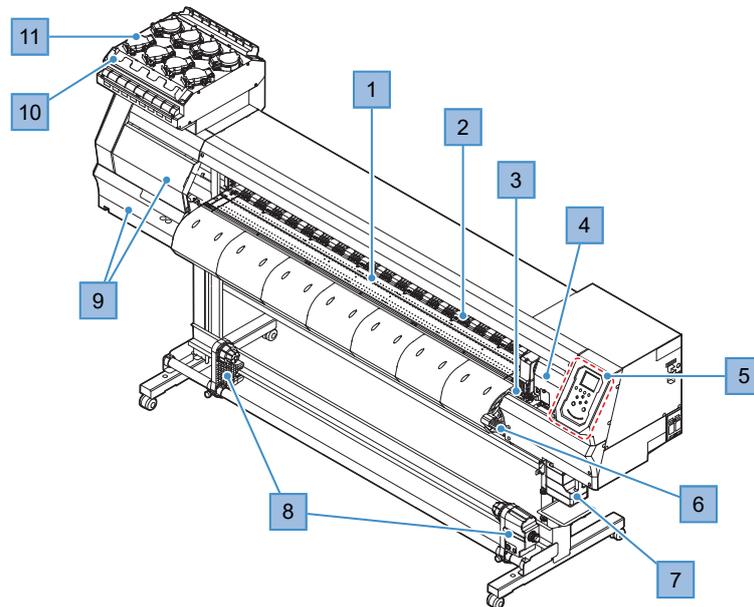
This chapter

This chapter describes various parts and provides important information. Read this chapter before using the product.

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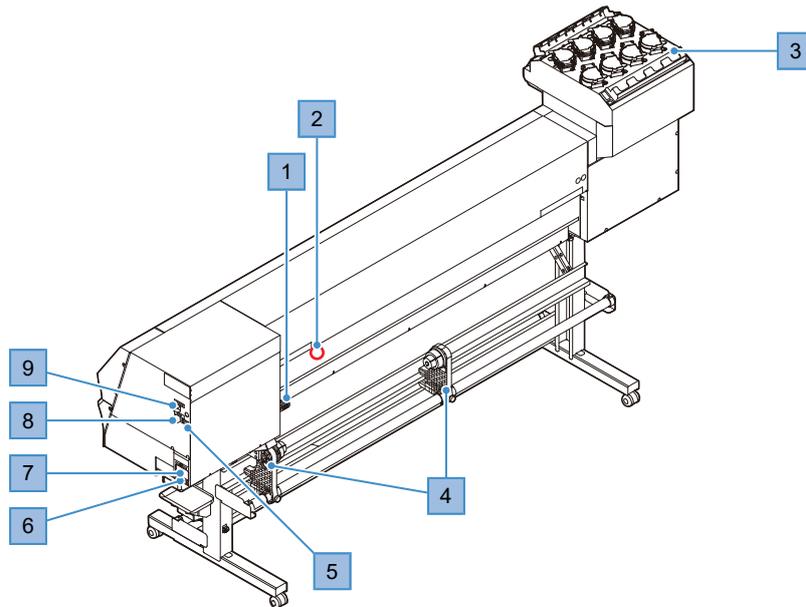
1.1 Part Names and Functions

Front



| No. | Name | Summary |
|-----|-------------------------------|---|
| 1 | Platen | Print area. ☞ "Platen"(P. 22) |
| 2 | Pinch rollers Grid rollers | The pinch rollers and grid rollers are used to grip and feed the media. ☞ "Pinch Rollers and Grid Rollers"(P. 23) |
| 3 | Capping station | Includes caps, wipers, and an NCU for monitoring print head nozzle conditions. ☞ "Capping station"(P. 22) |
| 4 | Carriage | Consists of a print head, a UV-LED lamp, the jam sensor, and the media cutter. ☞ "Carriage"(P. 22) |
| 5 | Operating panel | Includes operating keys and displays indicating various settings and other items. ☞ "Operating panel"(P. 26) |
| 6 | Clamp lever (front) | Lowering the clamp lever secures the media. Raising the clamp lever releases the media. |
| 7 | Waste ink tank | Container for waste ink. ☞ "Waste Ink Tank Replacement"(P. 107) |
| 8 | Take-up unit | Automatically rolls up the roll media after printing. ☞ "Take-up Unit"(P. 24) |
| 9 | Maintenance covers | Open the cover to perform maintenance. Printing and automatic maintenance is not possible while the covers are open. |
| 10 | Ink wipe filter | Filter for soaking up ink droplets from special ink bottle caps |
| 11 | Ink supply unit | The ink bottle is inserted here to supply ink to the print head. ☞ "Ink Replacement Method"(P. 39) |

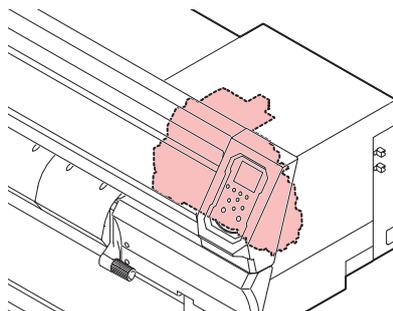
Rear and Right Side View



| No. | Name | Summary |
|-----|--------------------------|---|
| 1 | Clamp lever (rear) | Linked to the clamp lever at the front. |
| 2 | Media sensor | Detects whether media is present. "Media Sensor"(P. 23) |
| 3 | Ink wipe filter | Filter for soaking up ink droplets from special ink bottle caps |
| 4 | Feed unit | Holds the roll media before printing. Compatible with 2-inch and 3-inch paper rolls |
| 5 | Ink IC chip slot | The ink IC chip provided with the Ink bottle is inserted here to register Ink bottle information. Insert Ink IC Chip |
| 6 | AC inlet | Used to connect the power cable (provided). "Connecting the Power Cable"(P. 30) |
| 7 | Main power supply switch | Main power supply for the product To prevent print defects attributable to the print head (e.g., nozzle clogging, deflection), do not turn off the main power supply. "Turning On the Power"(P. 30) "Connecting the Power Cable"(P. 30) |
| 8 | LAN port | Used when using the network function "Using a LAN Cable"(P. 32) |
| 9 | USB port | Connects to PC via a USB interface cable. "Using a USB 2.0 Interface Cable"(P. 32) |

Carriage

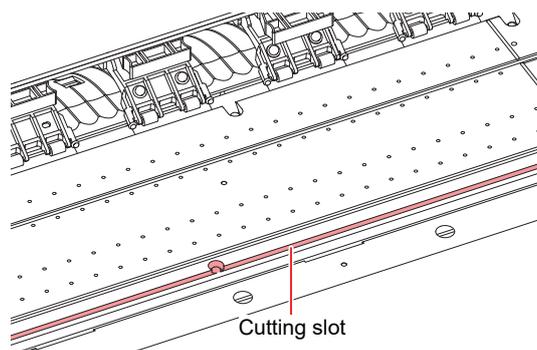
The carriage includes a print head for ejecting ink, a UV-LED lamp for curing UV ink, and a jam sensor for stopping the carriage when media clogs. Printing occurs as ink is ejected while traversing left and right.



- Use only the UV safety glasses provided. Disregarding this precaution may result in eye pain or damage to eyesight.

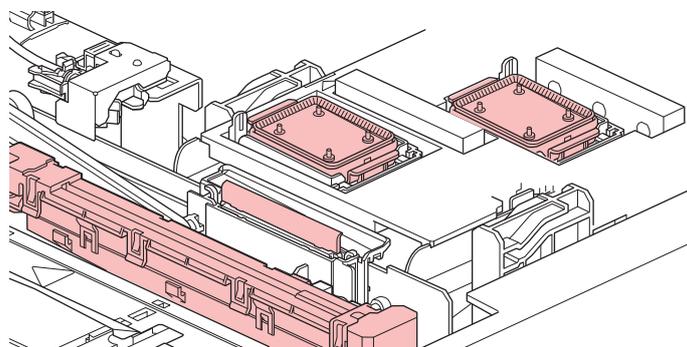
Platen

The platen features a large number of holes used to secure the media under vacuum pressure. This also features a cutting slot for cutting the media.



Capping station

The capping station includes caps for keeping the print head nozzle surface from drying out, a wiper required for print head maintenance, and an NCU for monitoring print head nozzle conditions.



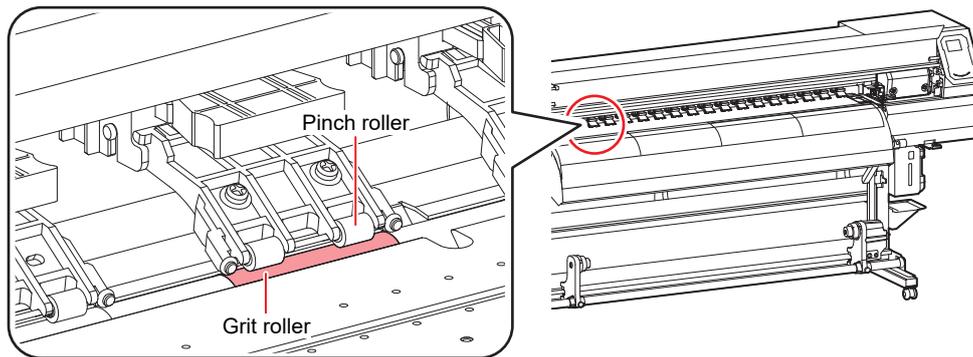
The NCU (Nozzle Check Unit) automatically checks whether the nozzle is clogged. Setting various functions enables automatic print head cleaning or printing using other nozzles.

☞ "Nozzle Check Menu"(P. 85)

☞ "Registering nozzle recovery"(P. 76)

Pinch Rollers and Grid Rollers

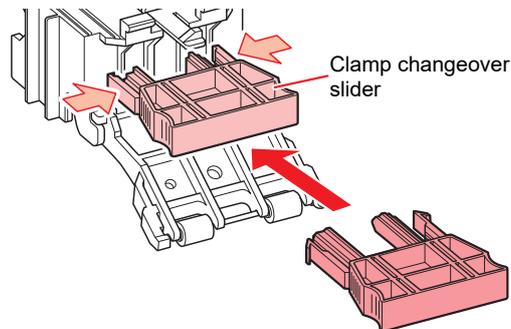
The pinch rollers and grid rollers are used to grip and feed the media.



- When this product is not in use, raise the clamp lever to separate the pinch rollers from the grid rollers. If the pinch rollers are left in the lowered position for an extended period of time, they may become deformed, possibly preventing the media from being fed correctly.

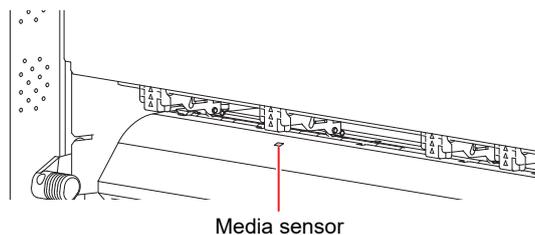


- Attach the clamp changeover sliders to the pinch rollers at the left and right-hand ends of the media. The pinch rollers can be raised by attaching clamp changeover sliders. This prevents gripping the left and right-hand ends of the media for consistent feeding.



Media Sensor

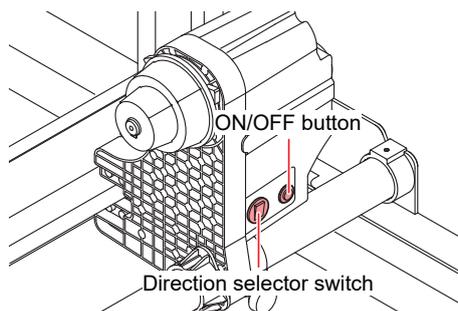
The media sensor detects the presence/absence of media.



- The sensor must be covered by the media to detect the media width.

Take-up Unit

Use the switch on the take-up unit to change the media take-up direction.



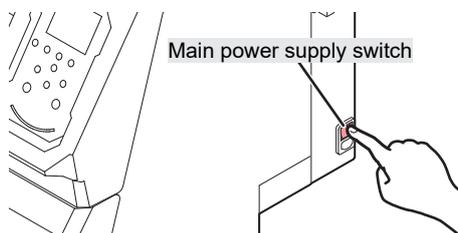
| Name | Summary | |
|---------------------------|---|--|
| Direction selector switch | Up | To take up media with printed surface on the inside |
| | Down | To take up media with printed surface on the outside |
| ON/OFF button | Press the button to start/stop the take-up unit. The setting can be altered so that the take-up unit operates only while the button is depressed. ☞ "Machine Setup Menu List"(P. 79) | |

Power Supply Switch

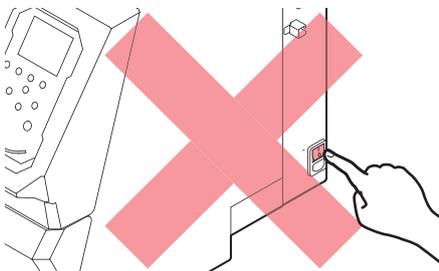
This product has the following power supply switches.

● Main power supply switch

This is located on the right-hand side of the product.

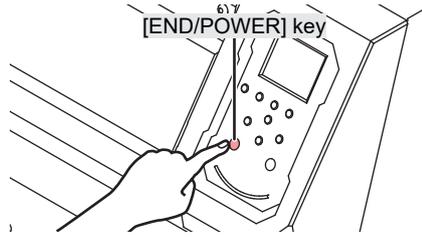


- Do not turn off the main power supply. Turning off the main power supply will disable the automatic maintenance function (including nozzle clogging prevention function and ink discharge channel cleaning function) and may result in printing defects (such as nozzle clogging and deflection) or other faults.



● [END/POWER] key

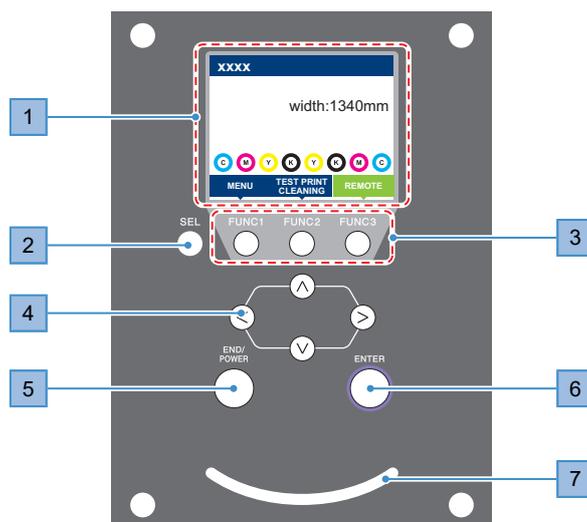
The [END/POWER] key is the key normally used to turn the power on and off.



- Close the front cover and maintenance covers. Leaving any of the covers open will disable the automatic maintenance function (including the nozzle clogging prevention function and ink discharge channel cleaning function) and may result in print defects (e.g., nozzle clogging, deflection) or other problems.

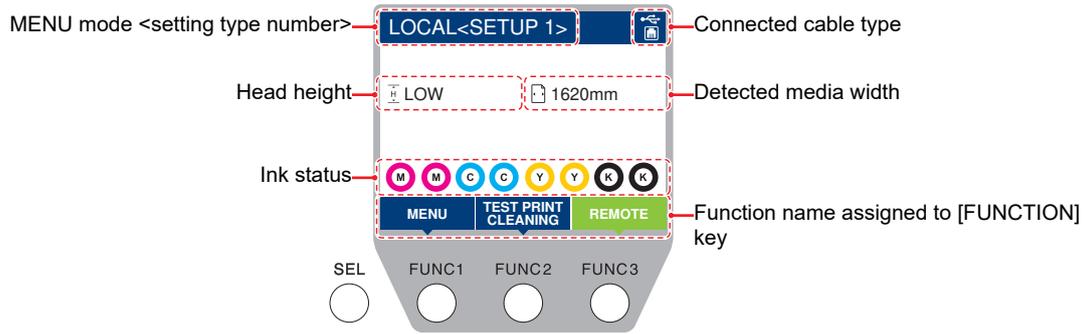
Operating panel

This is used to control the product and make/change settings.



| No. | Name | Summary | | | | | | | | | | | | | | | | |
|------------|-----------------|---|-----|--|---|------------|-------------|---|----------|---|------|-------------|---|-----|----------|---|-------------|--|
| 1 | Display | "Display"(P. 27) | | | | | | | | | | | | | | | | |
| 2 | [SEL] key | Selects the function for the corresponding [FUNCTION] key. | | | | | | | | | | | | | | | | |
| 3 | [FUNCTION] key | Used for test printing, head cleaning, and editing settings "[FUNCTION] Key"(P. 28) | | | | | | | | | | | | | | | | |
| 4 | [JOG] key | Used to move the carriage, feed media, and select settings | | | | | | | | | | | | | | | | |
| 5 | [END/POWER] key | Used to cancel the last setting entered, return to the previous level of the setting menu, or to turn power on and off <ul style="list-style-type: none"> • Illuminates in blue when the power is on. "Turning On the Power"(P. 30) • To turn off the power, hold down the key. "Turning Off the Power"(P. 31) | | | | | | | | | | | | | | | | |
| 6 | [ENTER] key | Used to move to the next level menu and to confirm settings This can also be used to display product information. "Displaying Machine Information (Local Guidance)"(P. 29) | | | | | | | | | | | | | | | | |
| 7 | Status lamp | This lamp indicates the product status. <table border="1" data-bbox="454 1406 1436 1924"> <tbody> <tr> <td>Off</td> <td></td> <td>Indicates LOCAL mode. Used for test printing, maintenance, and settings</td> </tr> <tr> <td rowspan="2">Light blue</td> <td>Illuminated</td> <td>Indicates REMOTE mode. The product is in standby to receive print data.</td> </tr> <tr> <td>Flashing</td> <td>Indicates printing is underway. This also flashes to indicate test printing—for example, when printing built-in patterns.</td> </tr> <tr> <td>Blue</td> <td>Illuminated</td> <td>Indicates that data remains to be printed. Switch to REMOTE mode and start printing</td> </tr> <tr> <td rowspan="2">Red</td> <td>Flashing</td> <td>An error has occurred. Refer to the error code list and take appropriate action. Error messages</td> </tr> <tr> <td>Illuminated</td> <td>An error (SYSTEM HALT) has occurred. Contact our service office. SYSTEM HALT</td> </tr> </tbody> </table> | Off | | Indicates LOCAL mode. Used for test printing, maintenance, and settings | Light blue | Illuminated | Indicates REMOTE mode. The product is in standby to receive print data. | Flashing | Indicates printing is underway. This also flashes to indicate test printing—for example, when printing built-in patterns. | Blue | Illuminated | Indicates that data remains to be printed. Switch to REMOTE mode and start printing | Red | Flashing | An error has occurred. Refer to the error code list and take appropriate action. Error messages | Illuminated | An error (SYSTEM HALT) has occurred. Contact our service office. SYSTEM HALT |
| Off | | Indicates LOCAL mode. Used for test printing, maintenance, and settings | | | | | | | | | | | | | | | | |
| Light blue | Illuminated | Indicates REMOTE mode. The product is in standby to receive print data. | | | | | | | | | | | | | | | | |
| | Flashing | Indicates printing is underway. This also flashes to indicate test printing—for example, when printing built-in patterns. | | | | | | | | | | | | | | | | |
| Blue | Illuminated | Indicates that data remains to be printed. Switch to REMOTE mode and start printing | | | | | | | | | | | | | | | | |
| Red | Flashing | An error has occurred. Refer to the error code list and take appropriate action. Error messages | | | | | | | | | | | | | | | | |
| | Illuminated | An error (SYSTEM HALT) has occurred. Contact our service office. SYSTEM HALT | | | | | | | | | | | | | | | | |

Display



Menu Modes

Four menu modes are available.

| Name | Summary |
|----------------|--|
| LOCAL mode | Used for test printing, maintenance, and settings |
| REMOTE mode | Prints the print data received from a PC. |
| MENU mode | Press the [MENU] in LOCAL mode screen to switch to MENU mode. This is used to set various functions. |
| NOT-READY mode | Status before media is detected |

Ink Status

Ink bottle status such as remaining ink levels and ink errors are indicated by icons.

| Icon | Summary | | | | | | |
|------|--|--|--|--|--|--|--|
| | Displays remaining ink levels using a 9-stage icon. | | | | | | |
| | | | | | | | |
| | Full 1/8 used 1/4 used 3/8 used 1/2 used 5/8 used 3/4 used 7/8 used Near end | | | | | | |
| | Displayed when ink is nearly depleted Very little ink remains. Provide fresh ink. | | | | | | |
| | Displayed when ink is depleted or an ink error has occurred Printing is not possible. Ink errors (local guidance) | | | | | | |
| | Displayed when the ink has passed its expiration date. Replace with new ink or use up as quickly as possible. Printing is possible. "Restrictions concerning the product"(P. 12) | | | | | | |

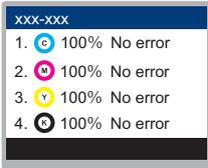
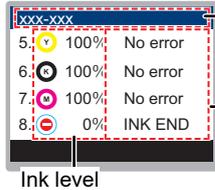
[FUNCTION] Key

This section describes the functions and roles assigned to the [FUNCTION] key.

| Icon | Summary |
|---|---|
|  | Displays the various menu screens. |
|  | Displays maintenance functions such as test printing and cleaning. |
|  | Used to switch from LOCAL mode to REMOTE mode. |
|  | Displays adjustment functions such as feed adjustment and drop position adjustment. |
|  | Clears received data. |
|  | Used to switch from REMOTE mode to LOCAL mode |
|  | Used to cut media |
|  | Used to move to the previous menu screen |
|  | Used to move to the next menu screen |
|  | Used to close the confirmation screen in response to prompts or other messages |
|  | Used to disable functions |
|  | Indicates that the function is assigned. Displays settings and functions. |
|  | Used to enable or disable multiple items |

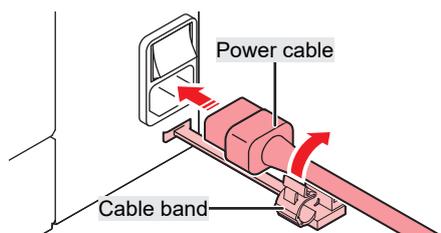
Displaying Machine Information (Local Guidance)

Press the [ENTER] key in LOCAL mode screen to display the following information.

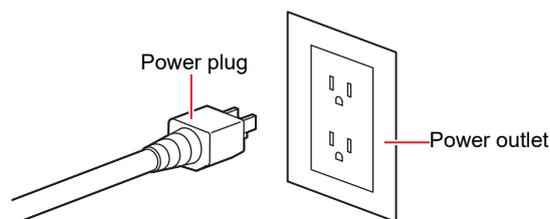
| Item | Outline | Display | |
|--------------------------------------|---|--|--|
| Ink information | Displays ink type, remaining ink levels, and ink errors. |  |  |
| Ink IC chip registration information | Displays the information registered on the ink IC chip. |  | |
| Warning | Displays all warnings issued. |  | |
| Information | Displays information such as media width, head height, product serial number, firmware version, command version, and LAN connection status. |  |  |
| Nozzle check | Displays the number of nozzles detected to be clogged in the nozzle check. |  | |

1.2 Connecting the Power Cable

- 1 Check to confirm that the main power supply is turned off.
- 2 Insert the cable band to the machine.
- 3 Plug the power cable into the inlet of the machine.
- 4 Secure the power cable to the cable band.
 - Pass the power cable through the clamp and clamp until it clicks into place.



- 5 Plug the power plug into the power outlet.



- Do not plug/unplug the power plug with wet hands. Disregarding this precaution may result in electric shock.

Turning On the Power

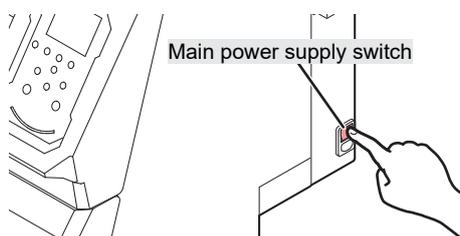


- The ink used in this machine is warmed before printing. The machine is inoperable while the ink is warmed.



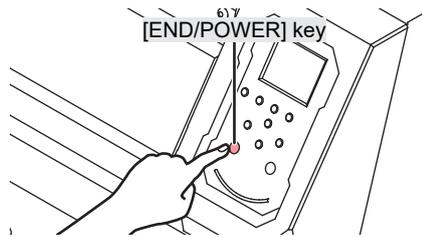
- Close the front cover and maintenance covers. Leaving any of the covers open will disable the automatic maintenance function (including the nozzle clogging prevention function and ink discharge channel cleaning function) and may result in print defects (e.g., nozzle clogging, deflection) or other problems.

- 1 Check to confirm that the main power supply is turned on.
 - If the main power supply switch is not turned on, set to “I”.
 - Once the main power is turned on, the firmware version will appear on the display, and the initial operation will execute.



2 Press the [END/POWER] key to turn on power.

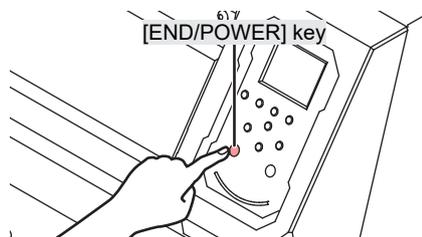
- The local mode is set, and the machine is ready for use.

**3 Turn on the power for the connected PC.****Turning Off the Power**

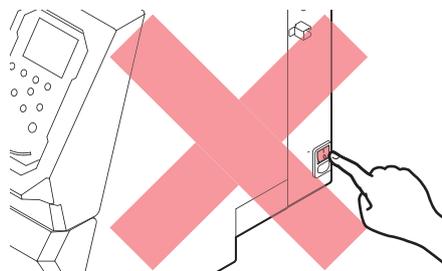
- Check the following when turning off power:
 - (1) The front cover and maintenance covers are closed. If any covers are open, the automatic maintenance function is disabled; this may cause the product to fail.
 - (2) The carriage has returned to the capping station. If not, the print head nozzle may dry out, resulting in printing defects (e.g., nozzle clogging, deflection).
 - (3) No print data or cutting data remains.
 - (4) No errors have occurred.  ["Problems indicated by messages"\(P. 119\)](#)

1 Turn off the power to the PC connected.**2 Hold down the [END/POWER] key.**

- A power off confirmation screen appears. Press the [ENTER] key to turn the power off.



- Do not turn off the main power supply. Turning off the main power supply will disable the automatic maintenance function (including nozzle clogging prevention function and ink discharge channel cleaning function) and may result in printing defects (such as nozzle clogging and deflection) or other faults.



1.3 Connecting a PC to the Product

Using a USB 2.0 Interface Cable

Connect a PC to this product using a USB 2.0 interface cable.



- Do not unplug the cable while data is being transferred.



- Use RIP software that supports the USB 2.0 interface.



- If your PC does not have a USB 2.0 port, contact your local dealer or our service office.

USB 2.0 Interface Precautions

● When connecting more than one UJV100-160 to a PC

The UJV100-160 may not be correctly recognized.

If the PC has more than one USB port, try connecting to a different USB port to check whether the product is correctly recognized. If the product is still unrecognized even when connected to a different USB port, use a commercially-available USB 2.0 active repeater cable.

● USB high-speed mode peripheral devices

It may not be possible to recognize USB peripheral devices if USB high-speed mode peripheral devices (e.g., USB memory, USB HDD devices) are connected to the PC to which the product is connected. Data transfer speeds to this product may be reduced if external USB hard disk drives or similar devices are connected. This may cause the carriage to temporarily stop at the left-hand or right-hand end during printing.

● Unplugging USB memory devices

When unplugging USB memory devices from the PC to which this product is connected, use “Stop” in “Safely removing hardware” before unplugging. Otherwise, an [ERROR 10 command error] will occur.

Using a LAN Cable

Connect a PC to this product using a LAN cable. Insert a LAN cable until it engages with a click.

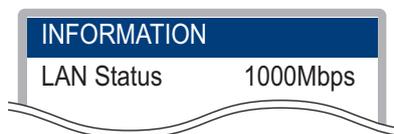


- Do not unplug the cable while data is being transferred.

● Checking the LAN connection

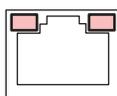
1 Check the display on this product.

- Local guidance can be used for checking.
 "Displaying Machine Information (Local Guidance)"(P. 29)
- Printing is not possible if "100Mbps", "10Mbps", or "No Connect" is displayed. Event email can be used.
 "Event Email Function Settings"(P. 82)



2 Check the lamp on the LAN connector.

- The LAN connector lamp illuminates when this machine is running.



| Color | Status | Summary |
|--------|-------------|---|
| Green | Illuminated | Connected via 1000BASE-T |
| | Off | Connected via a network other than 1000BASE-T <ul style="list-style-type: none"> 1,000 Mbps is not supported if only the orange lamp is illuminated or flashing. Check the specifications for the PC, peripheral devices, and cable. |
| Orange | Illuminated | Linked up (connected). |
| | Flashing | Data being received |
| | Off | Link down (not connected) |

Network Connection Precautions

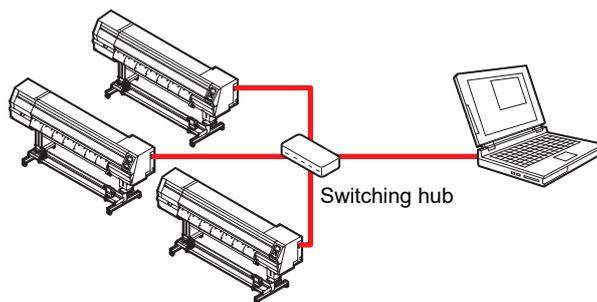
Make sure the network is set up as follows: Printing is not possible if the network is not set up correctly.

- Use a Category 6 or higher LAN cable.
- Use a 1000BASE-T compatible computer or switching hub. Printing requires 1000BASE-T support.
- The PC used to transfer print data must be located on the same network as this product. This product cannot be connected via a router.

● Direct connection to the product

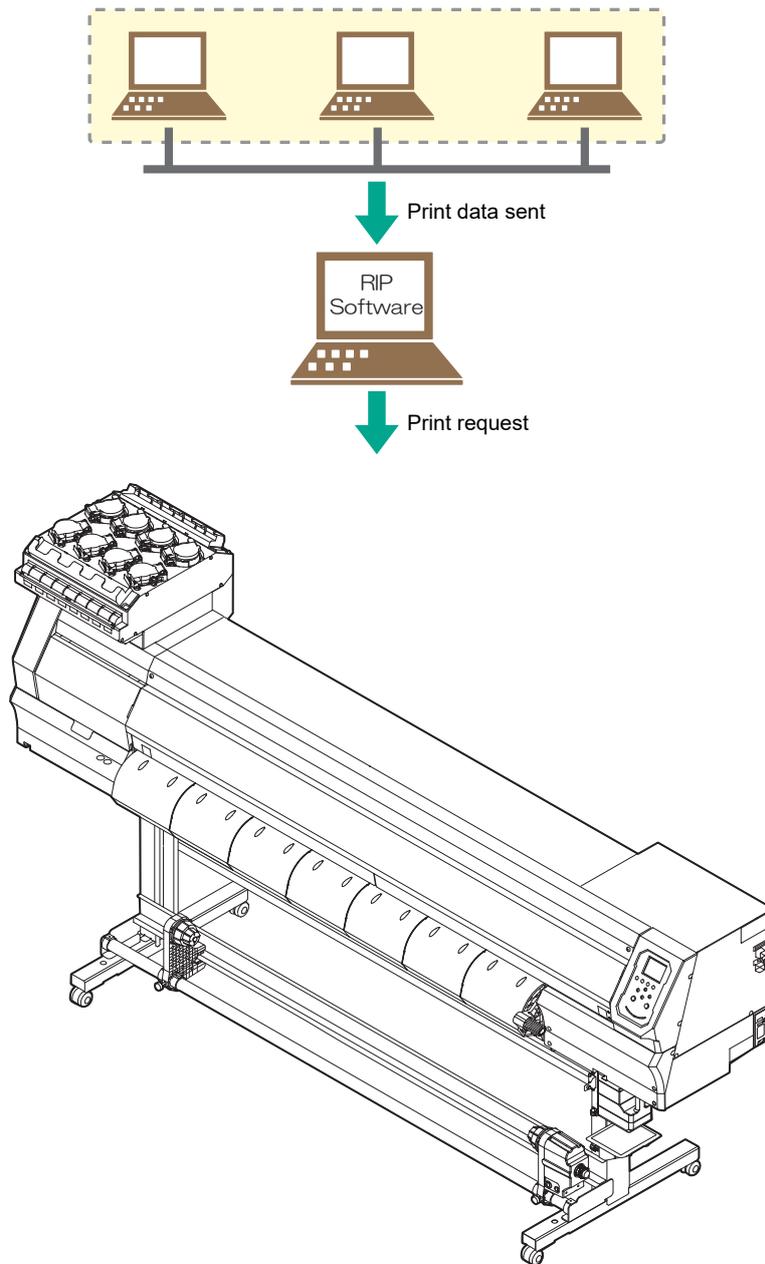


- Connection via a switching hub



1.4 System Configuration

Use RIP software to request to print data created using applications like Illustrator or Photoshop.



1

Driver Setup (When Using USB Cable)

1 Install the USB driver.

- Execute [mkcdmenu.exe] contained on the Driver software CD provided.
- The driver can also be downloaded from the following URL:
<https://mimaki.com/download/inkjet.html>
 [UJV100-160] > [Drivers/Utilities]



- The driver installation guide is provided within the installer.

Installing RIP Software

The explanation here applies to MIMAKI RIP software (RasterLink).

1 Install RasterLink.

- The following icon will appear on the PC desktop once the software is installed.



- For more information, refer to the RasterLink installation guide.
<https://mimaki.com/download/software.html>



- Once this is installed, activate the license for . Otherwise, "Profile Update" will not start.

Obtaining Color Profiles

Print quality (e.g., tone, bleeding) will vary depending on the media and ink set. To maintain consistent print quality, select a color profile that suits the media and ink set.

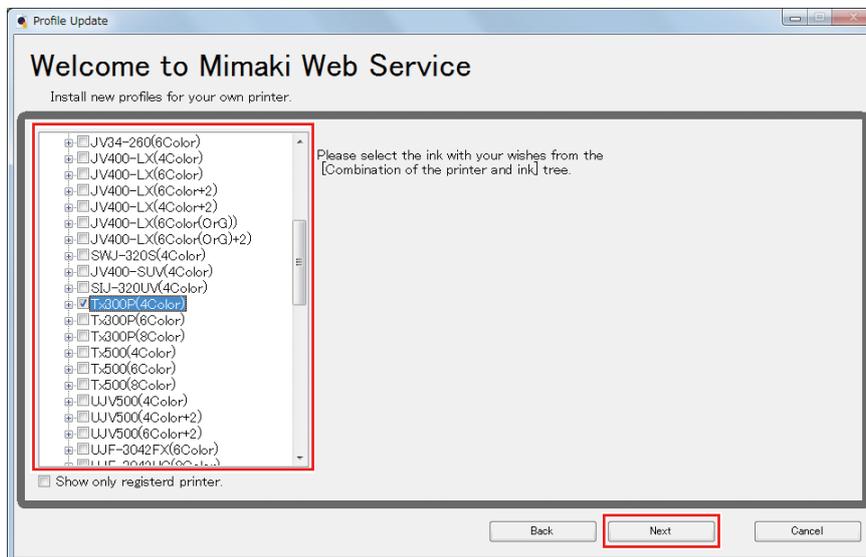
The explanation here applies to MIMAKI RIP software (RasterLink).

1 Launch "Profile Update".

- From the Start menu, select [Mimaki RasterLink6Plus] > [Profile Update].
- Click [Next].

2 Select the UJV100-160 being used.

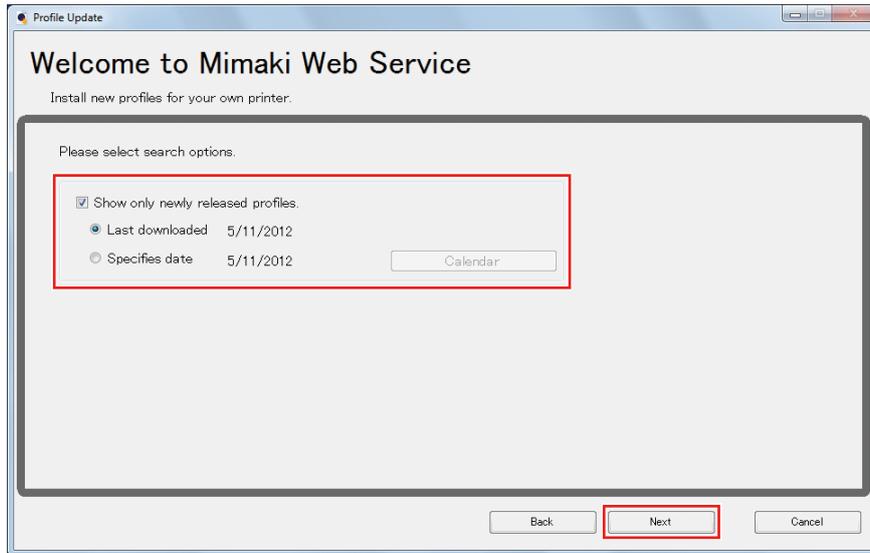
- Select the check box for the ink set and ink type being used, then click [Next].



- Expanding the [+] button allows selection of the ink type.

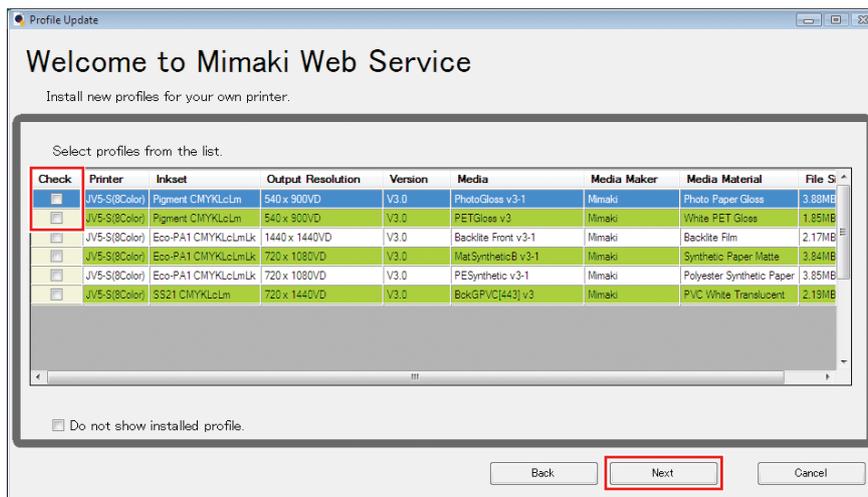
3 Enter the search parameters.

- Enter the search parameters, then click [Next].
- The system looks for the corresponding profile.



4 Download the color profile.

- (1) Select the check box for the color profile corresponding to the media and resolution to be used.



- (2) Click [Next].
 - The profile downloaded here will be installed the next time RasterLink is launched.

5 Click [End].

- “Profile Update” closes.



- For more information, refer to the RasterLink installation guide.
<https://mimaki.com/download/software.html>



- The latest color profiles can also be downloaded from the following URL: The profiles downloaded can be installed using Profile Manager.
<https://mimaki.com/download/inkjet.html>

Setting Up RIP Software

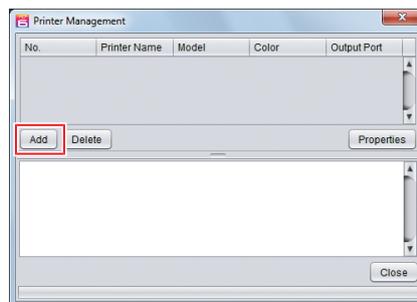
The explanation here applies to MIMAKI RIP software (RasterLink).

1 Launch RasterLink.

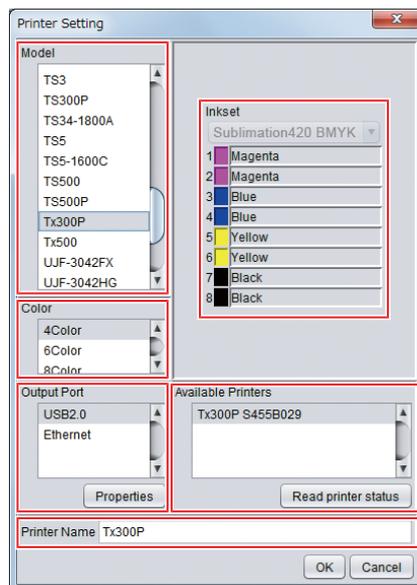
- The [Printer Management] screen appears.
- To add a new model, launch RasterLink, then select [Environment] > [Printer Management].

2 Register UJV100-160.

(1) Click [Add].



(2) Set the specifics for UJV100-160.



- Model: Select the model.
 - Color: Select the ink set filled.
 - Output port: Select the cable connected.
 - Available Printers: Select UJV100-160 connected.
 - Printer name: Enter a name as required.
- (3) Click [OK].
- A confirmation screen appears.
- (4) Click [Yes].
- Printer registration starts.



- For more information, refer to the RasterLink reference guide.
<https://mimaki.com/download/software.html>

1.5 Ink Replacement Method

When Ink Near End is Displayed

Ink levels are low. We recommend replacing with new Ink bottle as soon as possible. Although printing is possible, ink may run out during printing.

To check which Ink bottle needs to be replaced, press the [ENTER] key in LOCAL mode screen.

 ["Displaying Machine Information \(Local Guidance\)"\(P. 29\)](#)

When Ink End is Displayed

The ink has run out. Replace with new Ink bottle.

Thoroughly read the following and make sure you understand its contents.

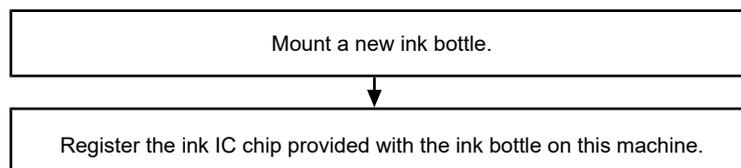
 ["Ink or any Other Liquid Used with the Machine"\(P. 11\)](#)



- Wear safety glasses, gloves, and a mask when handling ink, maintenance cleaning solution, waste ink, or other solutions used with this machine. Leaking ink may adhere to the skin or get into your eyes or mouth.



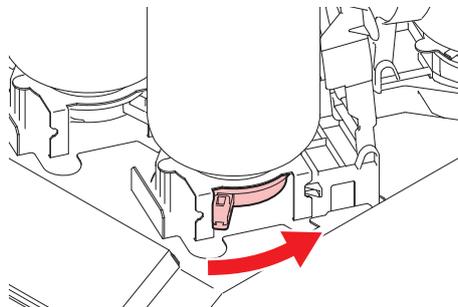
● Ink Replacement Process



* Mount a new ink bottle, clear the error (ink end or ink near-end), and register the ink IC chip.

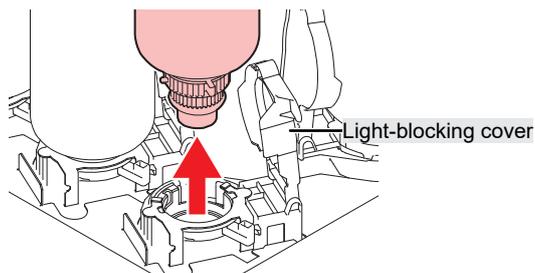
● Removing the Ink bottle

- 1** Rotate the lever on the tank section from left to right.



- Never attempt to rotate the ink bottles. Doing so may result in leaking ink.

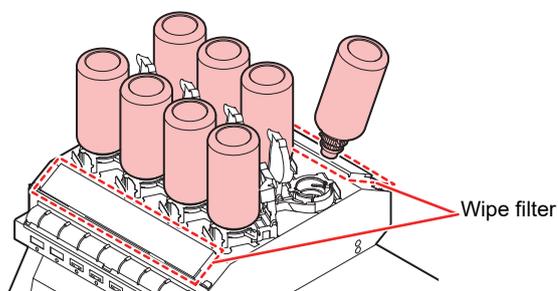
2 Lift the Ink bottle vertically.



- Check to confirm that the light-blocking cover is closed when removing ink bottles. Close the light-blocking cover by hand if it is not closed. If the light-blocking cover is left open, the ink may harden, resulting in printer failure.
- Be careful to prevent ink leaks from the bottles.

3 Soak up any ink droplets on the special caps.

- Use a wipe filter to soak up ink droplets and prevent dripping.



4 Wipe off any ink on the special caps with paper wipes.



5 Remove the special caps from the Ink bottle.

- If the special caps are tight, remove using a tightening tool.



- When disposing of the product, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

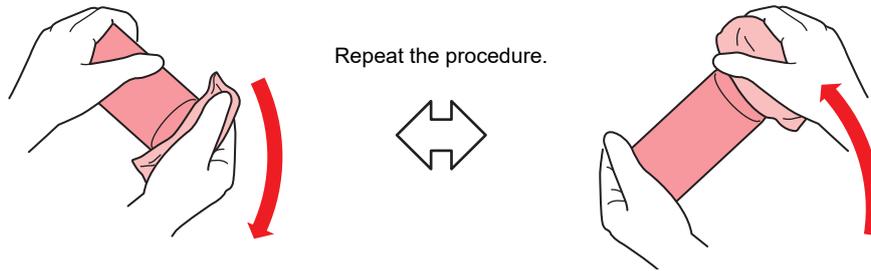
● **Preparing New Ink Bottles**

1 Pull out the ink pack and the ink IC chip from the ink package.

● Shaking the Ink bottle

1 Shake the Ink bottle to the left and right slowly at least 20 times.

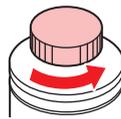
- Tighten the ink bottle lid securely, then shake the bottle slowly from left to right to ensure that the ink moves inside, holding the ink bottle lid with a paper towel.



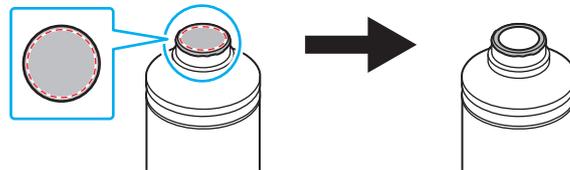
- Shake slowly. If the bottle is shaken too violently, ink may leak out or the air mixed in the ink may cause nozzle clogging.
- If the Ink bottle is partially used, flip the Ink bottle upright and shake slowly at an angle.

● Preparing Ink Bottles

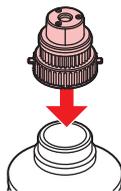
1 Remove the ink bottle lid.



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



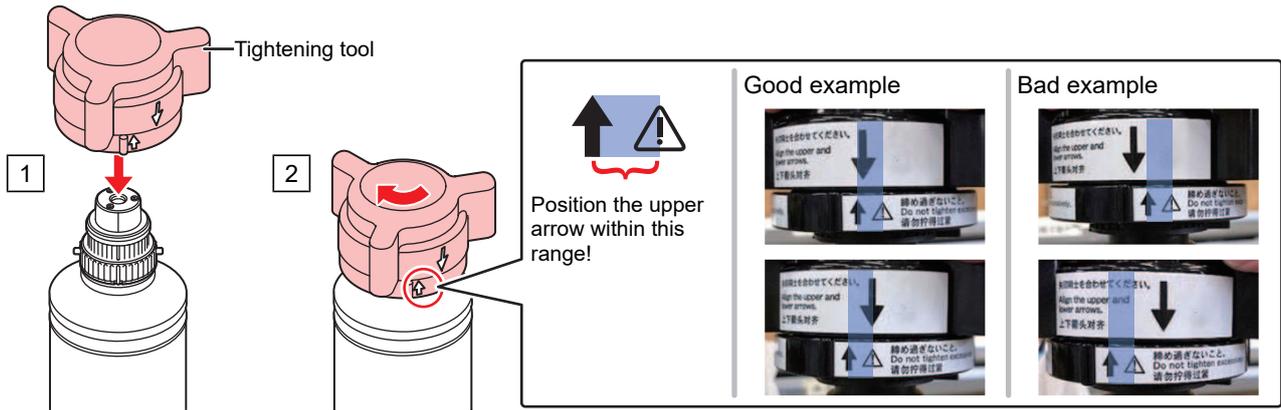
2 Place the special cap on the ink bottle.



- Wipe off any ink or washing liquid if it remains on the ink bottle or special cap. Failure to do so may result in idling of the special cap and ink leakage.

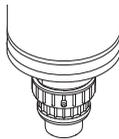


3 Use the tightening tool to tighten the special cap in place.



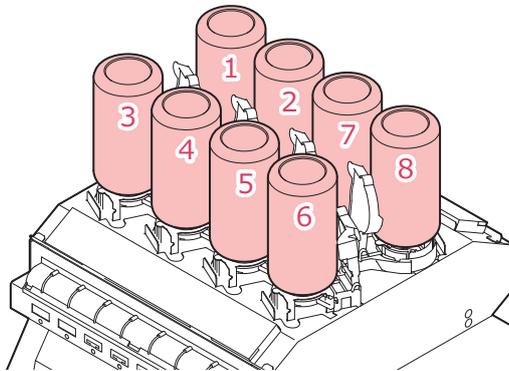
- Do not overtighten the special cap. Disregarding this precaution may result in damage, idling or ink leakage. If the arrow moves beyond the above range, loosen the special cap, and repeat the steps again.
- Do not leave ink bottles with special caps fitted for extended periods. Doing so may result in ink hardening.

4 Turn the ink bottle upside-down to check that no ink leaks occur.



● Mounting Ink Bottles

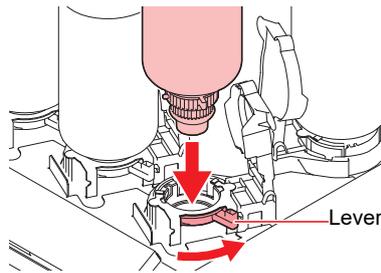
The order of Ink bottle to be set depends on the ink set you are currently using. Check the ink slot numbers, then insert the correct color Ink bottle.



| Ink set | Ink layout | | | | | | | |
|----------------|------------|---|---|---|----|----|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 4-color | M | C | Y | K | M | C | Y | K |
| 4-color, W | M | C | Y | K | - | - | W | W |
| 4-color, W, CL | M | C | Y | K | CL | CL | W | W |

1 Mount ink bottles in the tank.

- Rotate the lever on the tank section from the left to the right end, then mount the ink bottle.



2 Turn the tank lever from right to left to secure the bottle.



- Never attempt to rotate the ink bottles. Doing so may result in leaking ink.



- Once the ink bottle is mounted, use up the ink as quickly as possible.

● Registering the Ink IC chip

Printing is not possible unless the ink IC chip has been registered.



- Do not touch the metal parts of the ink IC chip. Dirt or damage may prevent data transfers or result in damage to the ink IC chip due to static electricity.



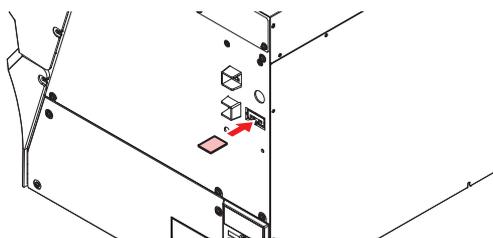
- Insert the ink IC chip with the metal side facing up. Inserting it in the wrong way may cause failure or damage to the ink IC chip.

1 Switch to LOCAL mode.

- Chip registration is possible only in LOCAL mode.

2 Insert a new ink IC chip into the ink IC chip slot on the right-hand side of the product.

- A registration screen appears when the ink IC chip is inserted.



- When replacing two Ink bottle with the same color at the same time, select the slot number to be registered. Be careful to avoid registering a wrong slot number. If a wrong slot number is registered, the ink IC information will be overwritten, and the ink will no longer be usable.

3 Press the OK button.

- The information on the ink IC chip is registered.



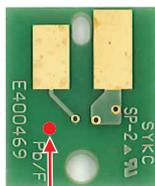
- Do not dispose of the ink IC chip. It is needed to rewrite the ink registration information on the ink IC chip.

- If the warning message appears, take appropriate actions by referring to the following.

| Message | Cause | Corrective action |
|--|--|--|
| Color: Magenta Expiration: 2021/01/01 Caution: XX days until expiration | <ul style="list-style-type: none"> The ink expiration date is approaching. | <ul style="list-style-type: none"> Use the ink before the expiration period. |
| Registered IC chip | <ul style="list-style-type: none"> The ink IC chip inserted is already registered. | <ul style="list-style-type: none"> Replace with a new ink IC chip. Insert Ink IC Chip |
| Unable to register. The registration limit was exceeded. | <ul style="list-style-type: none"> More than one was registered for each slot. | <ul style="list-style-type: none"> Use up the equivalent of one bottle before registering. |
| Unable to register. XXXXXXX (Error name) | <ul style="list-style-type: none"> The ink IC chip could not be registered due to an error. | <ul style="list-style-type: none"> Insert the correct ink IC chip. Insert Ink IC Chip |
| Ink Expiration Over | <ul style="list-style-type: none"> The ink is two months past its expiration date and cannot be used. | <ul style="list-style-type: none"> Replace with new ink. Printing is not possible. ☞ "When Ink End is Displayed"(P. 39) |
| Ink Type | <ul style="list-style-type: none"> A different ink type is registered on the ink IC chip. | <ul style="list-style-type: none"> Insert an ink IC chip for the correct ink type. Insert Ink IC Chip |
| Ink Color | <ul style="list-style-type: none"> A different ink color is registered on the ink IC chip. | <ul style="list-style-type: none"> Insert an ink IC chip for the correct ink color. Insert Ink IC Chip |
| Wrong Ink IC | <ul style="list-style-type: none"> An error occurred with the information on the ink IC chip. | <ol style="list-style-type: none"> Check to confirm the ink IC chip was inserted correctly. Insert Ink IC Chip Turn off the main power and wait a while before turning back on. ☞ "Turning Off the Power"(P. 31) Replace with new ink. ☞ "When Ink End is Displayed"(P. 39) |
| Replace Ink Bottle | <ul style="list-style-type: none"> The ink IC chip was registered when an ink end or ink near-end error occurred. | <ul style="list-style-type: none"> Mount a new ink bottle and register the ink IC chip. |

- Ink IC Chips

Each ink IC chip has a marking indicating color information.



Marking locatio

| Ink color | Marking |
|-----------|------------------------|
| Cyan | ● (One blue circle) |
| Magenta | ● (One red circle) |
| Yellow | ● (One yellow circle) |
| Black | ● (One black circle) |
| White | ○ (One white circle) |
| Clear | ○○ (Two white circles) |



- Insert the ink IC chip contained in the ink package. The ink IC chip stores information such as the ink color, remaining amount, and expiration date. Printing is not possible if a wrong IC chip is inserted.

● Checking Ink IC Chip Registration

To check ink IC chip registration information, press the [ENTER] key in LOCAL mode screen.

☞ "Displaying Machine Information (Local Guidance)"(P. 29)

- The expiration date and total amount of ink registered is displayed.
- "----" will appear if no ink IC chip is registered or if no ink remains. If "----" appears, a new ink IC chip can be registered.



● Rewriting Ink Registration Information on Ink IC Chip

You can replace with a new ink bottle even if ink remains. If circumstances make it unavoidable to replace the ink bottle, rewrite the ink information registered in this machine on the ink IC chip. Doing so makes the ink bottle reusable.

1 Insert the ink IC chip of the bottle to be replaced.



- Use the ink IC chip on which the ink bottle is registered. Other ink IC chips cannot be used.

2 Press the [FUNC3] key.





- The rewritten ink bottle information is reset, and “Ink IC is not registered” appears.
-

Chapter 2 Printing



This chapter

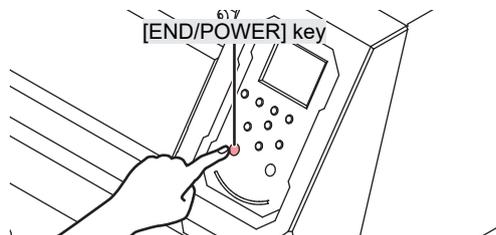
This chapter describes printing procedures and setting methods.

| | | | |
|--|----|--|----|
| Print Process | 48 | Feed Correction..... | 62 |
| Adjusting Print Head Height | 51 | Feed Correction Procedure..... | 62 |
| Loading the Media | 53 | Correcting the Drop Position | 64 |
| Media | 53 | Drop Position Correction Procedure | 64 |
| Loading the Roll Media | 53 | Printing RIP Data..... | 66 |
| Test Printing | 59 | Preparing RIP Data | 66 |
| Changing the Layout Direction for Test | | Changing the Origin | 68 |
| Printing | 59 | Starting Printing | 68 |
| Checking White Ink Ejection | 60 | Stopping Printing (Data Clear) | 69 |
| Printing Defects | 60 | Cut the media. | 70 |
| Head Cleaning..... | 61 | | |

2.1 Print Process

1. Turn on the power.

 ["Turning On the Power"\(P. 30\)](#)



2. Connect a RIP PC to the machine.

 ["Using a USB 2.0 Interface Cable"\(P. 32\)](#)

 ["Using a LAN Cable"\(P. 32\)](#)

3. Setting Up RIP Software

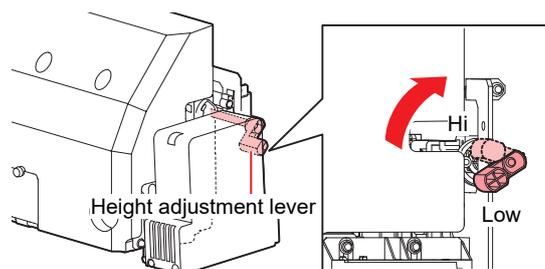
 ["Installing RIP Software"\(P. 36\)](#) (required first time only)

 ["Obtaining Color Profiles"\(P. 36\)](#)

 ["Setting Up RIP Software"\(P. 38\)](#) (required first time only)

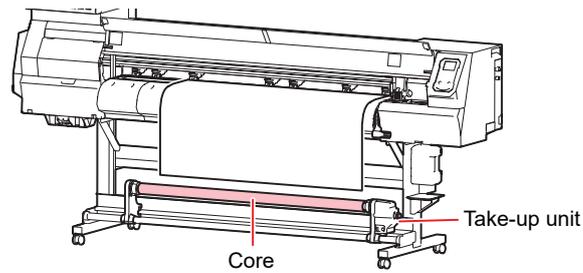
4. Adjust print head height.

Adjust the height adjustment lever to suit the medium.  ["Adjusting Print Head Height"\(P. 51\)](#)



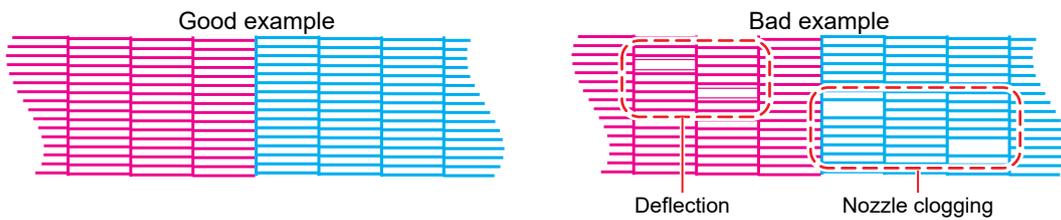
5. Load the media.

This machine can be used with roll media.  "Loading the Media"(P. 53)



6. Check the state of the print head nozzles.

 "Test Printing"(P. 59)

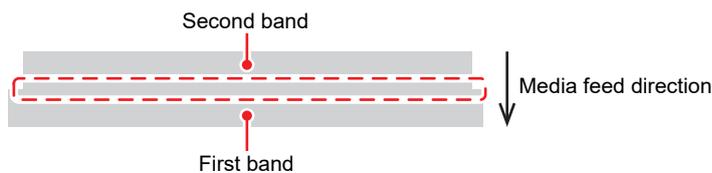


7. Clean the head to clear malfunctioning nozzles.

There are three different head cleaning methods. Choose the head cleaning method based on test print results.  "Head Cleaning"(P. 61)

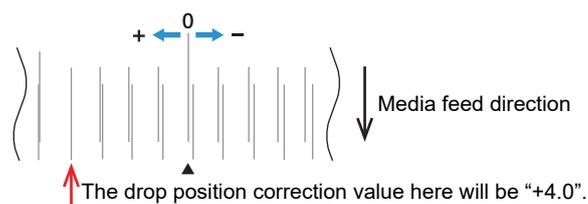
8. Adjust the media feed amount.

 "Feed Correction"(P. 62)



9. Adjust the drop position for bi-directional printing.

 "Correcting the Drop Position"(P. 64)

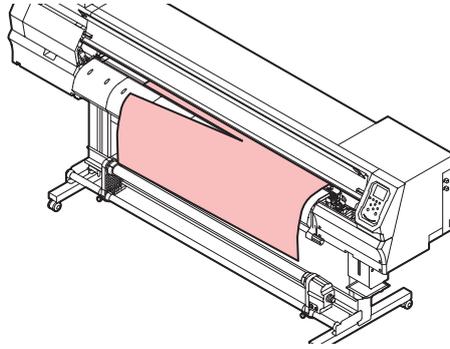


10. Printing RIP Data

☞ "Printing RIP Data"(P. 66)

11. Cut the media.

☞ "Cut the media."(P. 70)



2.2 Adjusting Print Head Height

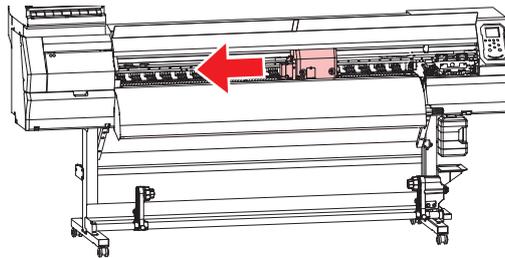
Adjust the print head height to suit media thickness.

| Range | Gap between print head and platen |
|-------|-----------------------------------|
| Low | 2 mm (default setting) |
| High | 2.5 mm |

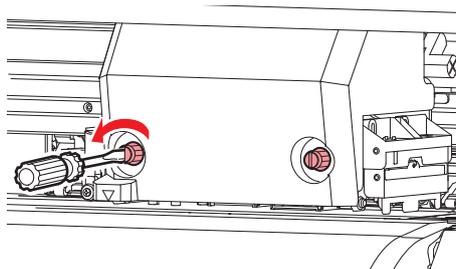


- The print head height should normally be set to 2.0 mm. If the gap exceeds 2.5 mm, the ink droplets may vaporize before reaching the media. Vaporized ink will adhere to the print head nozzle surface and cooling fan filter. The amount of reflected light incident on the print head surface from the UV-LED unit will also increase. Reflected light may cure vaporized ink adhering to the nozzle surface. This will increase viscosity, reduce print quality, and generate print head faults.

- 1** In **LOCAL** mode screen, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 2** Select **[Station] > [Carriage Out] > [Move To Platen Right End]**, then press the **[ENTER]** key.
 - The carriage moves over the platen.

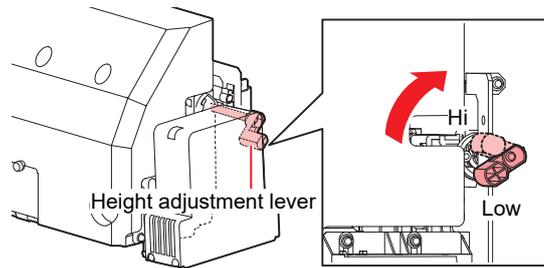


- 3** Open the front cover.
- 4** Unscrew the carriage cover screws.
 - Use a flathead screwdriver to unscrew by approximately one turn.

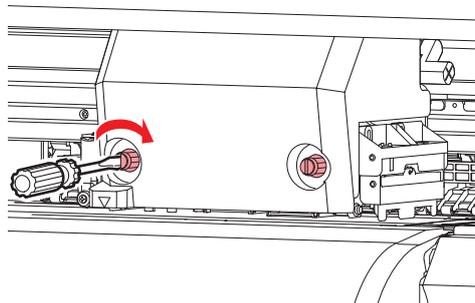


5 Use the height adjustment lever to adjust the height.

- Set the height adjustment lever so that the desired height is at the top. If the lever is not set to the correct position, problems such as media jamming and misting may occur, resulting in impaired print quality.



6 Retighten the carriage cover screws.



- Do not touch the height adjustment lever.

7 Once adjustment is complete, close the front cover, then press the [ENTER] key.

2.3 Loading the Media



- Adjust the head height before loading media. Moving the carriage after the media has been loaded may result in jammed media or damage to the print head.

Media

● Media handling precautions



- Use Mimaki-approved media to ensure consistent high-quality printing.

⚠ WARNING



- Assign at least two people to load roll media. This will reduce the risk of back injury due to the weight of the roll media.

NOTICE



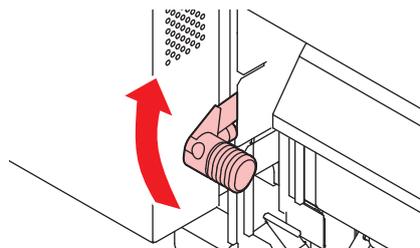
- Protect media from dust when stored. This will help preserve print quality.
- When storing standard-size media rolled up, store with the coated surface facing out.
- Take precautions to prevent static electricity buildup on media. (e.g., ionizers, discharging bars, water mist humidification, or alcohol-based anti-static solutions. *Ionizers can be fitted to models equipped as standard or models for which the option is available. * Do not use anti-static solutions that contain detergent.)



- Do not leave media loaded in the machine. This may cause dust to collect on media.
- Do not use media immediately after removing from the packaging. The media may expand or shrink depending on the ambient temperature and humidity at the storage location. Allow to sit for at least 30 minutes in the same room with the machine before loading.
- Do not use curled media. Doing so may result in jammed media and impaired print quality.
- Do not use media after wiping off dust. The static electricity generated by wiping may impair print quality.
- Do not use mirrors, polished stainless steel plate, or gold or silver foil media. Light reflected from the media surface may result in print head ink hardening and damage to the head. Such damage is not covered by the warranty.

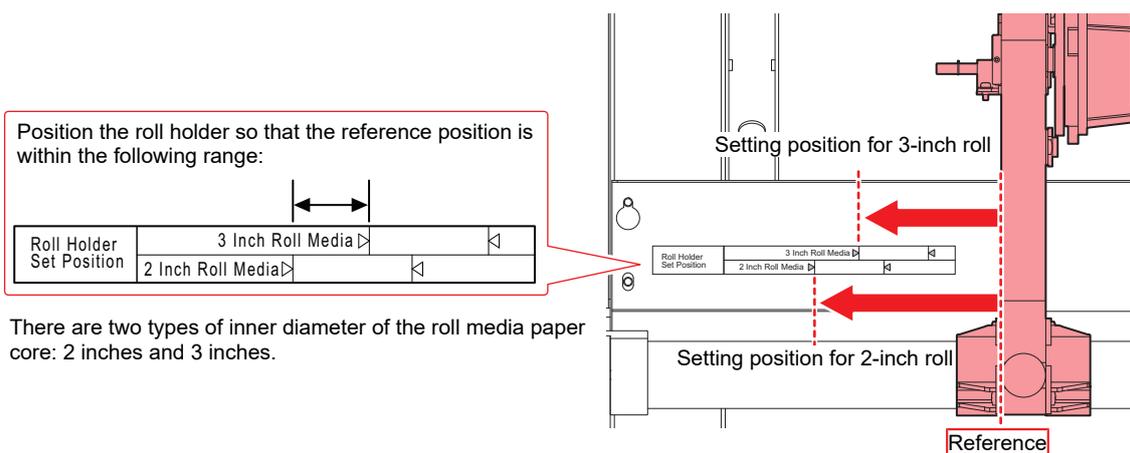
Loading the Roll Media

- 1 Raise the clamp lever.



2 Move the rear left roll holder to the roll setting position.

- Unscrew the roll holder retaining screw before moving.

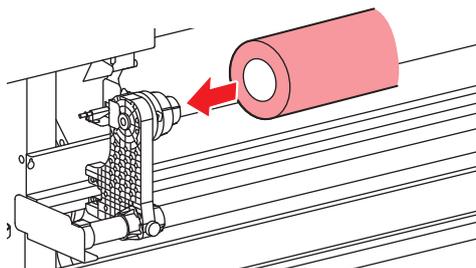


3 Tighten the retaining screw on the rear left roll holder.

4 Place roll media on the roll media hanger.

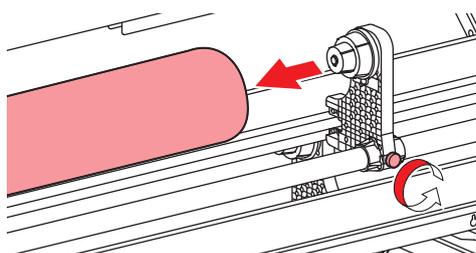
5 Attach the core of the roll medium to the rear left roll holder.

- Push until the core moves no farther.



6 Insert the rear right roll holder into the core.

- Unscrew the roll holder retaining screw before moving.



7 Tighten the retaining screw on the rear right roll holder.

8 Insert the medium.

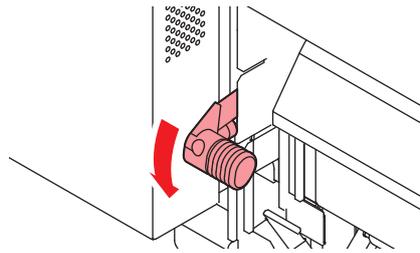
- Insert into the gap between the pinch roller and the grit roller.



- Inserting media at an angle allows smooth insertion without catching or sticking.

9 Lower the clamp lever.

- Hold the media with the pinch roller and grid roller.



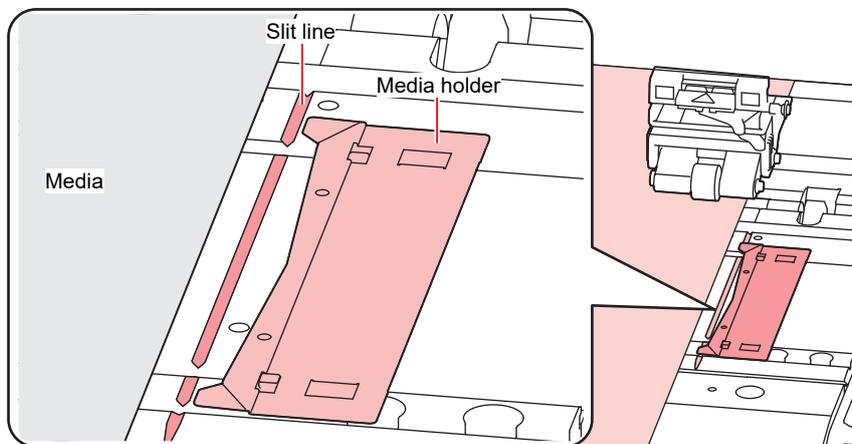
10 Move to the front of the machine and open the front cover.

11 Raise the clamp lever and pull out the medium.

- Make sure the medium does not fall to the rear.

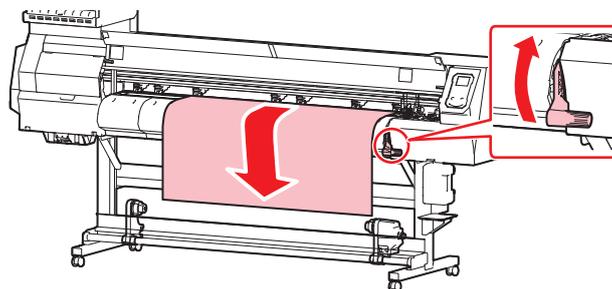


- Adjust the rear roll holder position so that the medium does not cover the right-hand slit line on the platen. Movement at an angle may result in damage to the print head.



- The areas extending 5 mm from both sides of the media are margins.

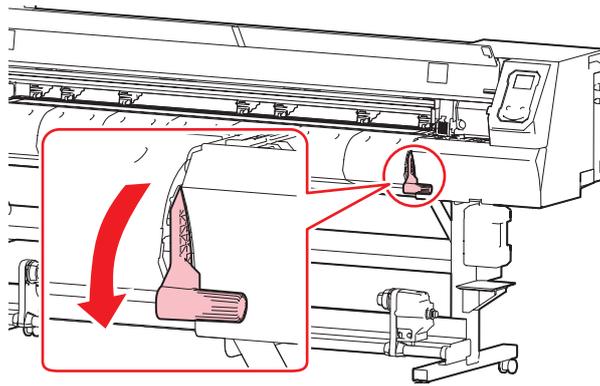
12 Gently pull out the medium and stop at the position where it is gently locked in place.



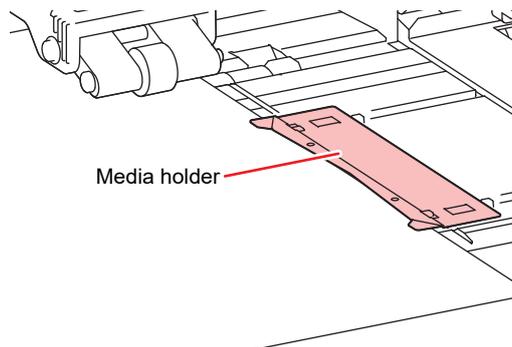
13 Check how far the medium was pulled out.

- Pull the front edge of the medium gently at several points to confirm that the medium was pulled out by the same amount.

14 Lower the clamp lever.



15 Secure the medium in the media holder.



- Do not use the media holder when printing on thicker media.

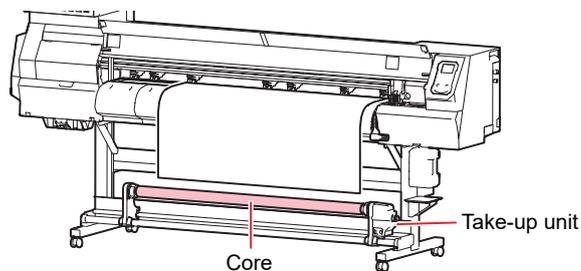
16 Press , then select "Roll".

- This starts media width detection.
- If the setting for [Machine Setup] > [Media Detect] > [Detection Type] is "MANUAL", the area for printing must be determined manually.
- If the setting for [Machine Setup] > [Media Detect] > [Media Remain] is "ON", the media length input screen will be displayed.



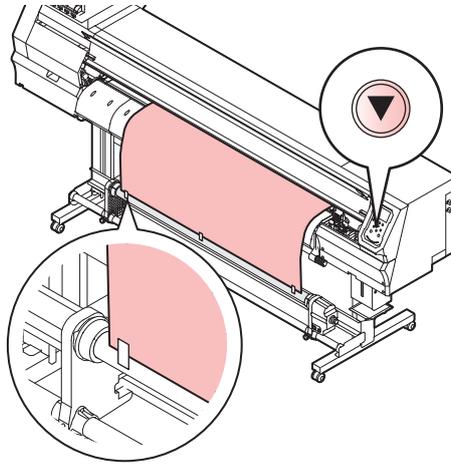
- A notification reading "Media Set Position R" will appear if the medium is too far to the right of the specified position. Reload the media.

17 Load an empty core on the take-up unit.

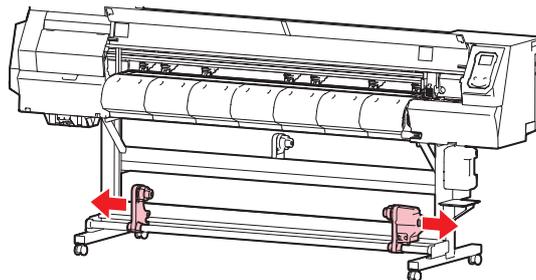


18 Secure the medium to the take-up unit.

- (1) Press  to feed the medium until it reaches the core on the take-up unit.
- (2) Secure the middle of the medium with adhesive tape.
- (3) Secure the medium on the right and left in the same way.
 - Pull the lower edge of the medium evenly on both the left and right sides, check to confirm that it is free of sagging and creasing, then affix the tape.

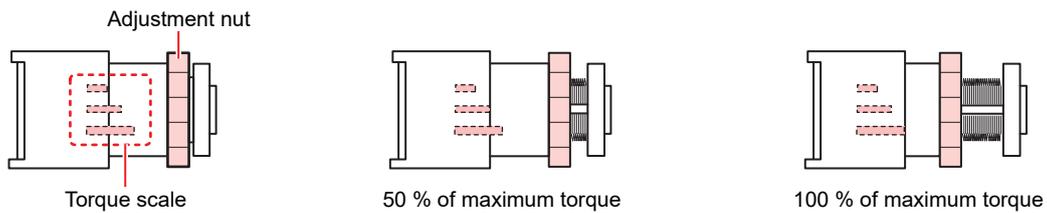


- Move the take-up unit to the left or right if not in use. Print quality may be affected if the front edge of the medium hits the take-up unit during printing.



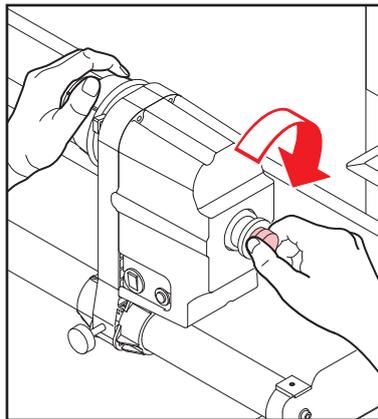
Adjusting the Torque Limiter

The take-up unit is fitted with a torque limiter. Turn the torque limiter adjustment nut to adjust take-up tension. The torque limiter is initially set to “Medium” when shipped.



● Increase tension (clockwise)

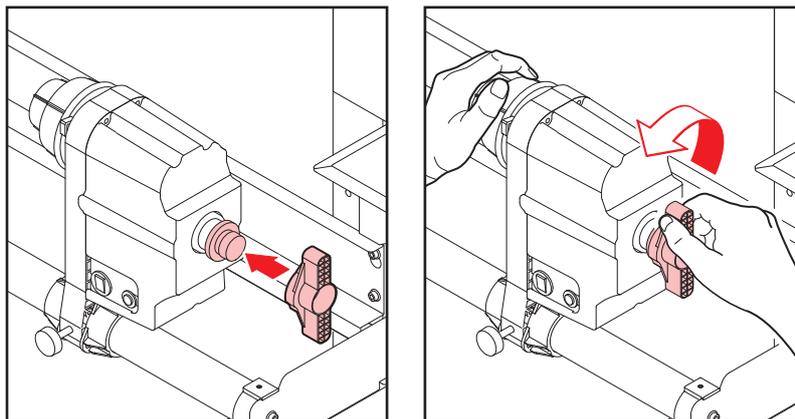
Increase tension when using with heavy or thick media, such as tarpaulin. Perform adjustments manually.



- Do not use the torque adjustment handle. Overtightening with the torque adjustment handle may damage the take-up unit.

● Decrease tension (counterclockwise).

Decrease tension when using lightweight media. Use the “torque adjustment handle” provided.

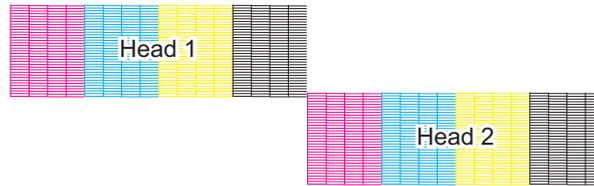


2.4 Test Printing

Print a test pattern to confirm that the ink prints correctly.

Perform head cleaning if you observe any print defects (e.g., nozzle clogging, deflection).

 "Head Cleaning"(P. 61)



Check beforehand

- Was the print head adjusted?  "Adjusting Print Head Height"(P. 51)
- Is media loaded?  "Loading the Media"(P. 53)



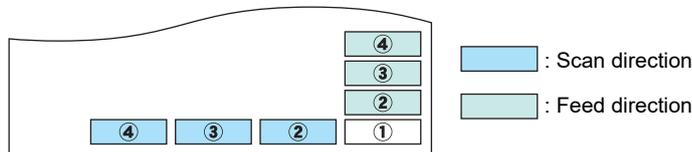
- Load media at least 500 mm wide. You cannot print the entire pattern if media less than 500 mm wide is used.



- Select [Maintenance] > [Nozzle Recovery] > [Test Print], then select "ON" to perform nozzle recovery and test printing.
Registration is required to perform nozzle recovery.  "Registering nozzle recovery"(P. 76)
- The ink used in this machine is warmed before printing. Printing is disabled while the ink is warmed.

Changing the Layout Direction for Test Printing

You can change the layout direction for test printing.



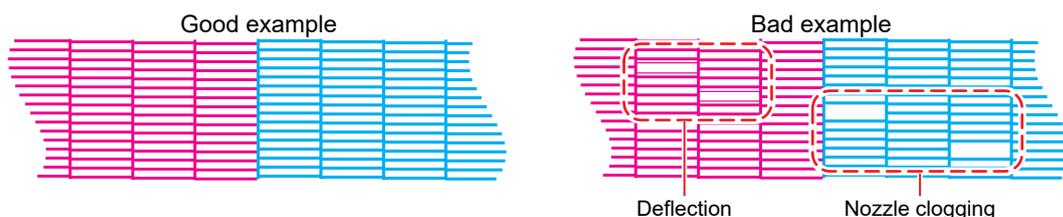
| | |
|----------------|---|
| Scan direction | Prints repeatedly in the horizontal direction. |
| Feed direction | Feeds the medium and prints repeatedly in the longitudinal direction. |

1 In LOCAL mode screen, select [TEST PRINT/CLEANING] > [Test Print], then press the [ENTER] key.

- The Test Print menu is displayed.

2 Select "Scan direction" or "Feed direction", then press the [ENTER] key.

- Test printing starts.



3 Check the print results.

Checking White Ink Ejection

The following two methods are available for checking white ink:

- Print on clear film.
- Print the background for the test pattern using black ink.

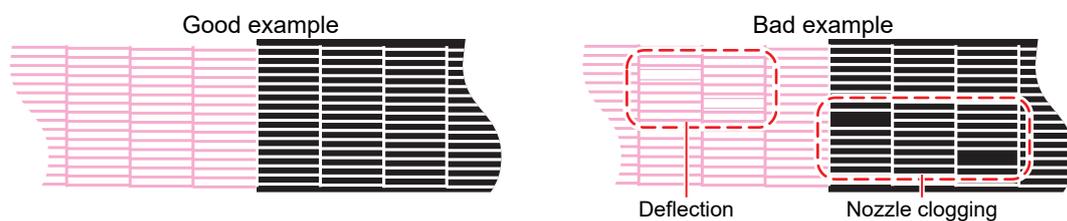
● White Ink Confirmation Test Pattern

1 In LOCAL mode screen, select [TEST PRINT/CLEANING] > [Test Print], then press the [ENTER] key.

- The Test Print menu is displayed.

2 Select [SpotColor Check], then press the [ENTER] key.

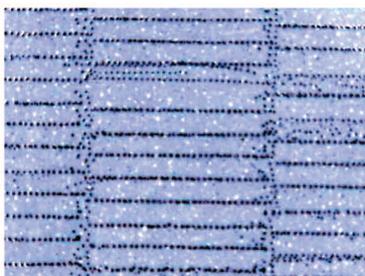
- Test printing starts.
- The layout direction is fixed at “Scan direction”.



3 Check the print results.

Printing Defects

Typical examples of print defects (e.g., nozzle clogging, deflection) are as shown below. In order to prevent printing in such a state, check whether the ink has been properly ejected regularly before printing.



Deflection



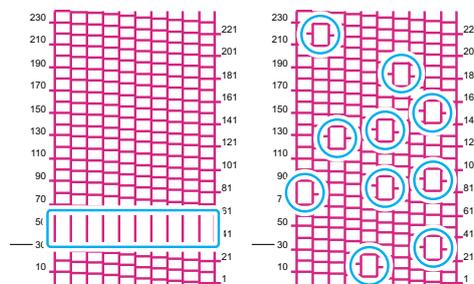
Nozzle clogging



Ink drooping



Mist



Mixing in air

2.5 Head Cleaning

The following head cleaning methods are available: Choose the method based on test results.

| Item | Details |
|--------|--|
| Soft | If the print shows a bent line (deflection) |
| Normal | If the print shows a missing line (nozzle clogging) |
| Hard | If soft cleaning and normal cleaning fail to resolve print defects (e.g., nozzle clogging, deflection) |



- The ink used in this machine is warmed before printing. The machine is inoperable while the ink is warmed.

- 1** In **LOCAL** mode screen, select **[TEST PRINT/CLEANING] > [Cleaning]**, then press the **[ENTER]** key.
 - The Cleaning menu is displayed.
- 2** Select the cleaning type, then press the **[ENTER]** key.
- 3** Select the Head to clean and press the **[ENTER]** key.
 - Check the check box. Heads with checked check boxes will be cleaned.
- 4** Run another test print and check the print results.
 - Repeat the cleaning and test printing process until the print results appear normal.



- Do the following if head cleaning fails to resolve the print defects (e.g., nozzle clogging, deflection).
 -  ["Wiper Cleaning"\(P. 91\)](#)
 -  ["Cap Cleaning"\(P. 92\)](#)
 -  ["Print Head Nozzle Washing"\(P. 96\)](#)

2.6 Feed Correction

Changing the media may affect the feed amount due to various factors, including the weight and thickness of the media and whether the take-up unit is used. Correct the drop position to suit the type of media used.

Image defects (e.g., dark or light streaks) will result if the feed is not properly corrected.

Check beforehand

- Is media loaded? 🖱️ "Loading the Media"(P. 53)
- For roll media, is the rear roll media free of sagging?
- When using the take-up unit, was the medium mounted on the core of the take-up unit? 🖱️ "Loading the Roll Media"(P. 53)



- The ink used in this machine is warmed before printing. Printing is disabled while the ink is warmed.

Feed Correction Procedure

Print a correction pattern, then enter the correction value. The value corrected here will also be updated on the settings menu.



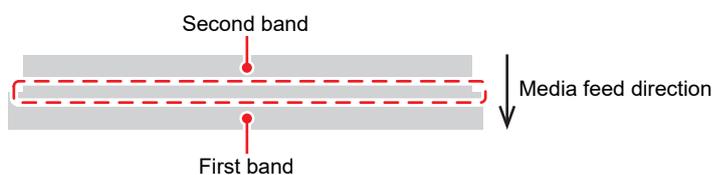
- When using the take-up unit, load media on the take-up unit before correcting.

1 In LOCAL mode screen, select [ADJUST].



2 Select [Feed Comp.], then press the [ENTER] key.

- Correction pattern printing starts.



3 Check the print results.

- A correction value input screen appears.
- Adjust the bands so that the region between them is evenly colored.

4 Enter the correction value, then press the [ENTER] key.

- Enter "+" to increase the separation between bands.
- Enter "-" to reduce the separation between bands.
- Increment the correction value by "30" to move the bands by approximately 0.1 mm.

5 Press the [ENTER] key.

- Print another correction pattern to check.



- Once adjustment is complete, the medium will be fed to the print origin. Sagging may occur in the rear roll medium. Rewind roll media by hand to eliminate any sagging.
-

Correcting the Media Feed During Printing

You can also correct the media feed amount in REMOTE mode or while printing.

1 Press [ADJUST] in REMOTE mode or while printing.**2 Enter the correction value, then press the [ENTER] key.**

- Correction value: -9999 to 9999
- The value entered here will be updated immediately.

2.7 Correcting the Drop Position

Changing the media and print head height will also alter the drop positions. Correct the drop position to suit the type of media used.

Image defects (e.g., overlaid lines or blurred images) will result if the drop position is not properly corrected.

Check beforehand

- Was the print head adjusted?  ["Adjusting Print Head Height"\(P. 51\)](#)
- Is media loaded?  ["Loading the Media"\(P. 53\)](#)



- Load media at least 500 mm wide. You cannot print the entire pattern if media less than 500 mm wide is used.

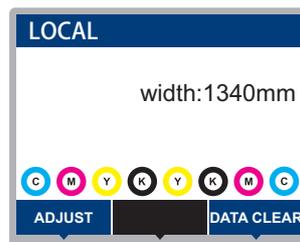


- The ink used in this machine is warmed before printing. Printing is disabled while the ink is warmed.

Drop Position Correction Procedure

Print a correction pattern, then enter the correction value. The value corrected here will also be updated on the settings menu.

- 1** In **LOCAL** mode screen, select **[ADJUST]**.



- 2** Select **[Drop.PosCorrect]**, then press the **[ENTER]** key.

- 3** Select the resolution and press the **[ENTER]** key.

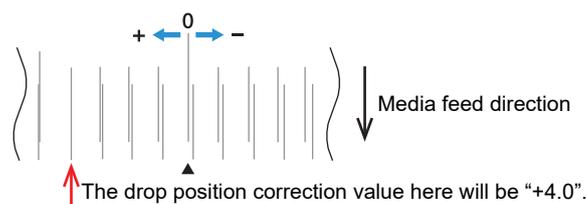
- Select the resolution to be adjusted. When "All" is selected, correction patterns for all resolutions will be printed.  ["Setup Menu List"\(P. 72\)](#)



- The indicated resolutions are those in the scan direction.
(Supported from FW ver3.0)

- 4** Check the print results.

- A correction value input screen appears.
- Enter the position where the two upper and lower lines coincide.



- 5** Enter the correction value, then press the **[ENTER]** key.

- Correction value: -40 to 40



- If the lines do not coincide when the correction value is within the range -40 to 40, the print head height may have been improperly adjusted. Adjust the print head height.
 ["Adjusting Print Head Height"\(P. 51\)](#)
-

6 Enter the correction value in the same way for pattern 2 and subsequent patterns.

2.8 Printing RIP Data

Check beforehand

- Was the print head adjusted? 🛠️ "Adjusting Print Head Height"(P. 51)
- Is media loaded? 🛠️ "Loading the Media"(P. 53)
- For roll media, is the rear roll media free of sagging?
- When using the take-up unit, was the medium mounted on the core of the take-up unit? 🛠️ "Loading the Roll Media"(P. 53)

Preparing RIP Data

The explanation here applies to MIMAKI RIP software (RasterLink).



- Prepare suitable image data for printing.

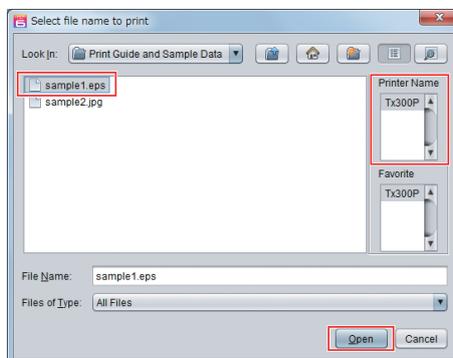
1 Launch RasterLink.

- Click the icon on the PC desktop.



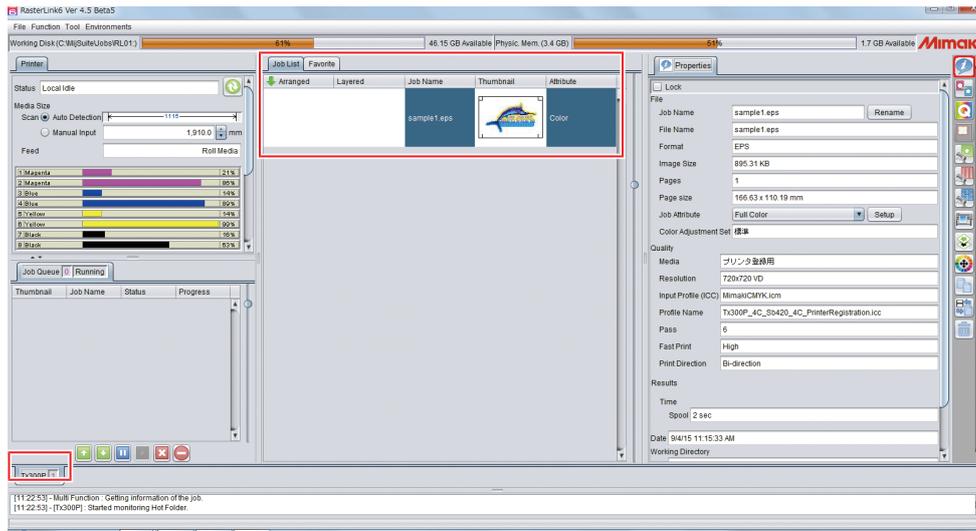
2 Select the image data to print.

- (1) Select [File] > [Open].
- (2) Select the desired image data, then click [Open].
 - If multiple printers are registered, select UJV100-160 in "Printer name".



3 Select the image data imported.

- The image is displayed in the tab for UJV100-160 selected in “Printer name”.



4 Check the settings and alter as necessary.

- Specify the following settings by clicking the function icons shown on the right-hand side of the screen:



(normal printing): Specifies settings like enlargement/reduction and number of copies.



(print conditions): Selects a color profile for the media and ink set loaded in this machine.



- For more information, refer to the RasterLink reference guide.

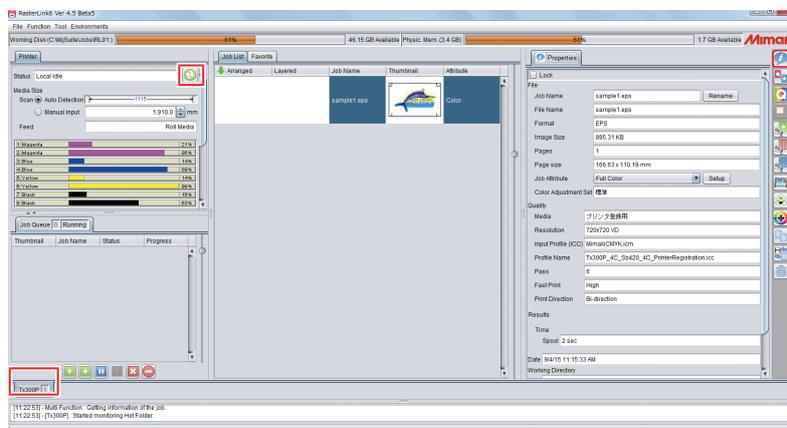
<https://mimaki.com/download/software.html>

5 Print image data.

- Click  (execute) from the function icons on the right-hand side of the screen. Select “Immediate Print” or “RIP and Print”, then click [Start].



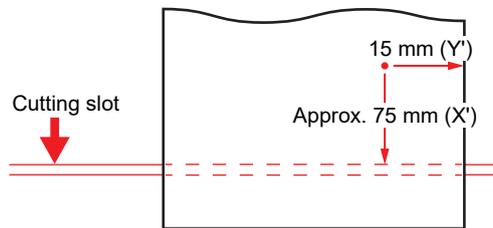
- Media width must be reacquired after replacing media.
 - Select the tab for UJV100-160 in the main window.
 - Click  (display latest printer status) in the Printer tab.



Changing the Origin

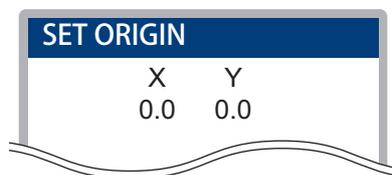
The print start position can be altered. Use the LED pointer to set the origin.

- Print origin default value
 - Feed (longitudinal, X') direction: Approx. 75 mm to rear from platen cutting slot
 - Scan (lateral, Y') direction: 15 mm from right edge of media



1 In LOCAL mode, press ▲▼◀▶.

- The Origin Setup screen appears.



2 Press ▲▼◀▶ to move the origin to the desired position.

- The carriage moves left and right and feeds the medium.

3 Press the [ENTER] key.

- The origin is updated.

Starting Printing

1 Send the RIP data from the PC.

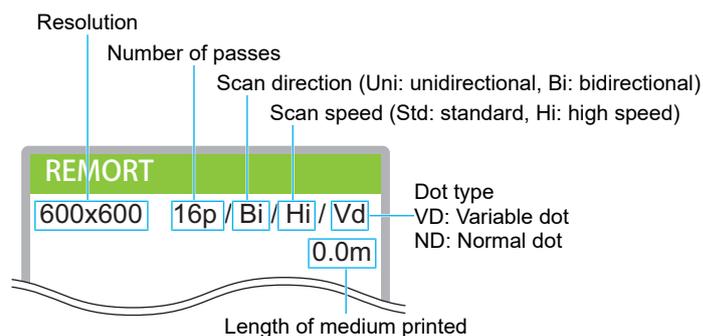
- "Preparing RIP Data"(P. 66)



- When the message "Attention20A Driver version" appears, install the latest Mimaki driver available from:
<https://mimaki.com/download/inkjet.html>

2 Start printing.

- Printing starts once RIP data is received.





- Print speeds may differ for the same image data, depending on the width of the medium loaded, print origin position, and resolution.
- If an error occurs, the machine switches to LOCAL mode once printing is completed. Further printing is not possible.
- The ink used in this machine is warmed before printing. Printing is disabled while the ink is warmed.

Pausing Printing

1 Press [LOCAL] while printing is in progress.

- Printing is paused.
- If data is being sent from a PC, data transmission is paused at the PC.

2 Press [REMOTE].

- Printing resumes.



- No other functions can be used when printing is paused.

Stopping Printing (Data Clear)

1 In LOCAL mode screen, select [DATA CLEAR].

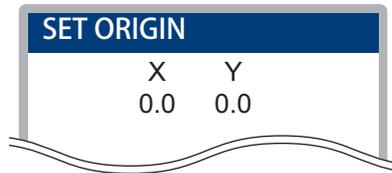


2 Press the [ENTER] key to clear the received data.

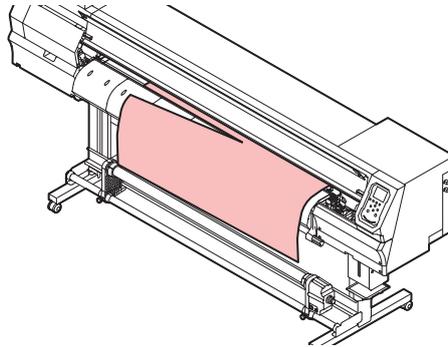
- The receive buffer is cleared.

2.9 Cut the media.

- 1 In LOCAL mode, press    .
 - The Origin Setup screen appears.



- 2 Press   to feed the media to the position required for cutting.
- 3 Select [CUT], then press the [ENTER] key.
 - The medium is cut.



Chapter 3 Settings



This chapter

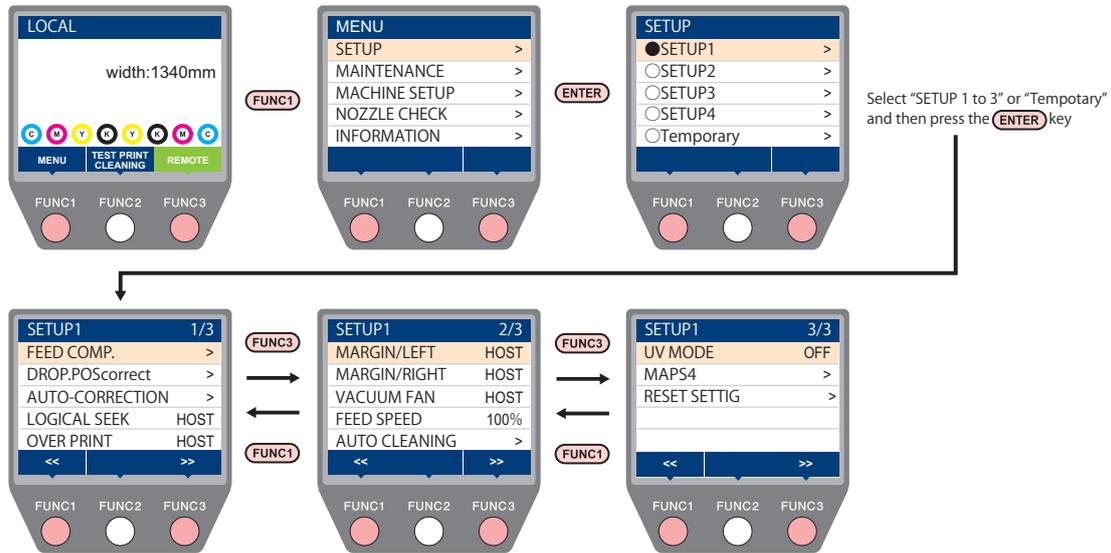
This chapter describes the various setting procedures.

| | | | |
|-------------------------------|----|------------------------------|----|
| Setup menu | 72 | Nozzle Check Menu | 85 |
| Setup Menu List | 72 | Nozzle Check Menu List | 85 |
| Maintenance Menu | 75 | Information Menu | 86 |
| Maintenance Menu List | 75 | Information Menu List | 86 |
| Machine Setup Menu | 79 | | |
| Machine Setup Menu List | 79 | | |

3.1 Setup menu

Print conditions (settings 1 to 4) can be saved in advance for specific media.

● Setup menu screen



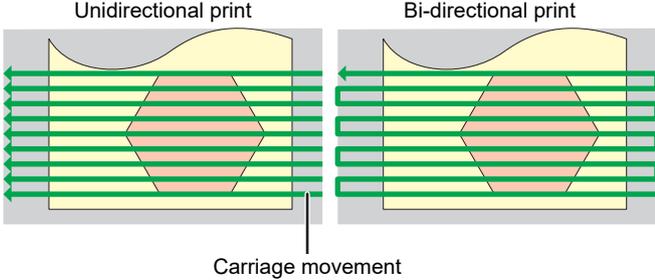
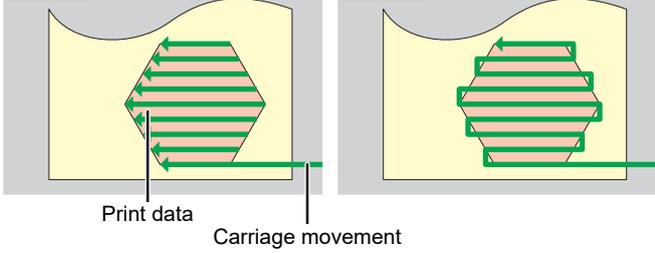
Setup Menu List

The user can select to prioritize the settings on the machine or the settings on the PC. Setting individual menus to “HOST” prioritizes PC settings. To prioritize settings for this machine, select a setting other than “HOST”.



- For more information on how to specify RIP software, refer to the RIP software operating manual.

| Item | Setting | | Details |
|--------------------|----------------------------------|----|---|
| | *1 | *2 | |
| Feed Comp. | -9999 to <u>0</u> to 9999 | - | Corrects the media feed amount. <ul style="list-style-type: none"> • Print a pattern and enter the correction amount. |
| Drop.PosCorrect | - | - | Corrects the drop position for bi-directional printing. |
| (Resolution) | All/720std/720 hi/1200std/1200hi | - | Select the resolution to be corrected. When “All” is selected, correction patterns for all resolutions will be printed. (Supported from FW ver3.0) |
| (Correction value) | -40.0 to <u>0</u> to 40.0 | - | Check the pattern and enter correction values. |
| Auto Correct | - | - | Detects a correction pattern with the sensor and automatically corrects the drop position (automatic correction function). <ul style="list-style-type: none"> • Check to confirm that the media does not lift up. • Load white and clean media. • Synthetic paper or cloth media may not be detected. • Do not send the RIP data from the PC during pattern printing. • If automatic correction is unsuccessful, correct the position manually. [MENU] > [SETUP] > [Feed Comp.] or [Drop.PosCorrect] |
| Feed Comp. | - | - | |
| Drop.PosCorrect | - | - | |

| Item | | Setting | | Details |
|---------------|--------------------|---------------------------------|--------|--|
| | | *1 | *2 | |
| | (Resolution) | All/720std/720hi/1200std/1200hi | - | Select the resolution to be corrected. When "All" is selected, correction patterns for all resolutions will be printed. (Supported from FW ver3.0) |
| | (Correction value) | -40.0 to 0 to 40.0 | - | Check the pattern and enter correction values. |
| Logical Seek | | HOST/OFF/ON | OFF | <p>Sets the range of carriage movement.</p> <ul style="list-style-type: none"> OFF: Machine size area  <p>Carriage movement</p> <ul style="list-style-type: none"> ON: Print data area  <p>Print data Carriage movement</p> |
| OVER PRINT | | HOST/1 to 2 times | 1 | Sets the number of overprinting. |
| Margin/Left | Margin/Right | HOST/-10 to 85 mm | 0 mm | <p>Sets the offset value from the media left and right standard margins (15 mm).</p> <ul style="list-style-type: none"> The left and right margins should be set to at least -5 mm when using the media holder. This eliminates the risk of printing on top of the media holder. The Mimaki RIP software (RasterLink) does not allow the user to specify margins. If the machine is set to "HOST", the offset value will be "0 mm" for the left and right margins. |
| | | | | |
| Vacuum | | HOST/Weak/Standard/Strong | Strong | <p>Sets the force with which the medium is held down.</p> <ul style="list-style-type: none"> This can be used to prevent media jamming and print head damage caused by the media lifting up. |
| Feed Speed | | HOST/10 to 100 to 200 % | 100 % | <p>Sets the media feed speed.</p> <ul style="list-style-type: none"> Depending on print conditions, the speed may not vary for certain settings. Setting to 100 % or more reduces the time required to complete printing but may affect print quality due to insufficient drying time. |
| Auto Cleaning | | - | - | Sets the conditions to perform auto head cleaning after the preset number of files are printed. |
| | SETUP | File/Length/Time/OFF | - | Sets the conditions to perform auto head cleaning. |
| | Interval | - | - | Sets auto head cleaning intervals. |

| Item | | Setting | | Details |
|-------------|-----------------|-----------------------------|----|---|
| | | *1 | *2 | |
| | (File) | 1 to 1,000 | - | Sets the interval at which the number of files is selected. |
| | (Length) | 0.1 to 100.0 m | - | Sets the interval at which the print length is selected. |
| | (Time) | 10 to 240 min | - | Sets the interval at which the print time is selected. |
| | Type | Normal/Soft/ Hard | - | Sets the head cleaning type. |
| | Cleaning Check | ON/OFF | - | Sets whether nozzle checking is performed after auto head cleaning is completed. |
| UV mode | | <u>ON</u> /OFF/ NoPrint | ON | Sets whether to turn on or off the UV-LED lamp. <ul style="list-style-type: none"> • ON: Turns on the UV-LED lamp. • OFF: Turns off the UV-LED lamp. • NoPrint: Turns on the UV-LED lamp without printing. (Not used under ordinary conditions) |
| MAPS4 | | - | - | MAPS: Mimaki Advanced Pass System <ul style="list-style-type: none"> • This function disperses the boundaries between passes to make feed streaks between passes less visible. • Altering MAPS may alter the color. This function may be less effective with certain types of images. |
| | MAPS4 | <u>AUTO</u> / MANUAL/OFF | - | This should normally be set to "AUTO". When set to "MANUAL", the following items are displayed: |
| | Smoothing Level | 0 to 100 % | - | Increasing smoothing makes streaks less visible. |
| | Speed | 50 to 100 % | - | Reducing speed will make streaks less visible. However, printing will be slower. |
| | Expansion | ON/OFF | - | Selecting "ON" will make streaks less visible. However, it may increase visible grain. |
| Ionizer | | ON/OFF | - | Sets the ionizer (optional). For more information, refer to the operating manual for the ionizer. <ul style="list-style-type: none"> • Displayed when an option is connected. |
| Setup Reset | | - | - | Initializes the details set. |

*1. The default settings are shown underlined.

*2. Settings applied if no settings can be made in the RIP software (host) or if this machine is prioritized.

Changing the name of a setting type

You can change the name of a setting type. The name can include alphanumeric characters or symbols.

- 1** In **LOCAL** mode, select **[MENU] > [Setup]**, then press the **[ENTER]** key.
 - The setting types are displayed.
- 2** Select **Settings 1 to 4** and press the **[FUNC2]** key.
 - The rename screen appears.
- 3** Enter the desired name, then press the **[ENTER]** key.
 - The setting type is renamed.

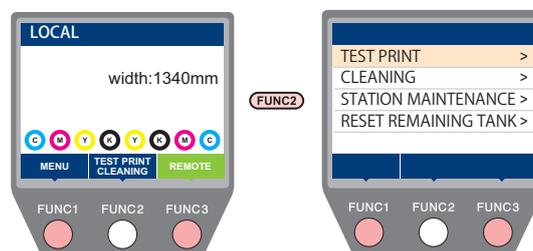
3.2 Maintenance Menu

This menu is used for maintenance actions. It also lets the user perform nozzle recovery if nozzle clogging persists even after cleaning and nozzle washing.

● Maintenance Menu Screen



● Pressing the [TEST PRINT/CLEANING] key



Maintenance Menu List

| Item | Setting *1 | Details |
|--------------------------|-------------|---|
| Station | - | This moves the carriage to allow station and print head maintenance. |
| Carriage Out | - | |
| Move To Platen Right End | - | Cleans around the station, including the cap, wiper, and NCU. "Wiper Cleaning"(P. 91) "Cap Cleaning"(P. 92) "NCU Cleaning"(P. 93) |
| Move To Maint. Space | - | Cleans around the print head. "Carriage Underside Cleaning"(P. 94) "Media Sensor Cleaning"(P. 97) |
| Nozzle Wash | 1 to 99 min | Washes the print head nozzle surface with washing liquid to resolve print defects (e.g., nozzle clogging, deflection). "Print Head Nozzle Washing"(P. 96) |
| Pump tube cleaning | - | Washes the suction pump tube (below the cap). "Ink Discharge Channel Cleaning"(P. 97) |
| Custody Wash | 1 to 99 min | Perform this step if the machine will not be used for extended periods. The function washes nozzles and drainage channels to maintain the machine in optimal condition. "When Not in Use for Extended Periods"(P. 100) |
| Replace Wiper | - | Use this function when replacing the wiper. Replacing the wiper resets the wiper usage counter. "Wiper Replacement"(P. 103) |

| Item | Setting ^{*1} | Details |
|------------------------|-------------------------------|--|
| Nozzle Recovery | - | Allows other nozzles to be used for printing if maintenance actions like nozzle washing fail to resolve print defects (e.g., nozzle clogging, deflection). |
| Print | - | Prints a pattern to check nozzle condition and register the nozzle.  "Registering nozzle recovery"(P. 76) |
| Entry | - | Registers the nozzle without printing a pattern. |
| Reset | - | Initializes the details set. |
| Check | - | Checks if nozzle recovery is successful for the registered nozzle.  "Checking whether nozzle recovery is set correctly"(P. 77) |
| Test printing | ON/OFF | Sets whether to perform nozzle recovery before test printing. |
| Auto Maint. | - | Sets various maintenance actions to be performed automatically. Set the interval between individual maintenance actions. If the warning message "Replace Wasteinktank" appears, the automatic maintenance function is disabled.  "Waste Ink Tank Replacement"(P. 107) |
| Refresh | 0.5 to <u>4.0</u> h | Sets the refresh interval. • Ejects a small amount of ink from the print head nozzles. This will help prevent nozzle clogging. |
| Cleaning Interval | 1 to <u>12</u> h | Sets head cleaning intervals. • Cleans the print head. This will help prevent nozzle clogging. |
| Cleaning Type | Normal/ <u>Soft</u> / Hard | Sets the cleaning type for head cleaning. |
| Replace Waste ink tank | - | Resets or corrects the waste ink tank usage count.  "Waste Ink Tank Replacement"(P. 107) |

*1. The default settings are shown underlined.

Registering nozzle recovery

Allows other nozzles to be used for printing if maintenance actions like nozzle washing fail to resolve print defects (e.g., nozzle clogging, deflection).



- Nozzle recovery can be specified for up to ten nozzles per row.
- The time taken for printing remains unchanged even when nozzle recovery is set.

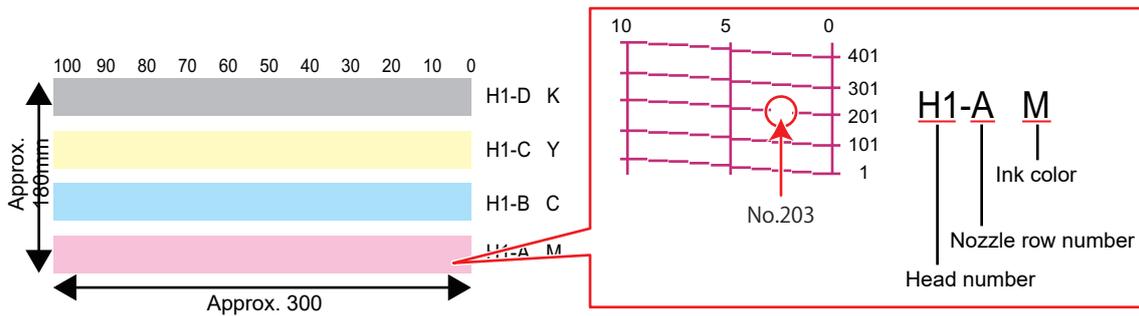


- Load media at least 500 mm wide. You cannot print the entire pattern if media less than 500 mm wide is used.

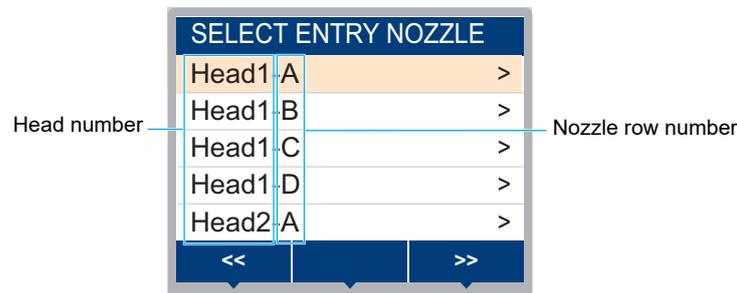
- 1 Load the media.**
- 2 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.**
 - The Maintenance menu is displayed.
- 3 Select [Nozzle Recovery] > [Print], then press the [ENTER] key.**
- 4 Select the head for nozzle recovery, then press the [ENTER] key.**

5 Select "Print Start", then press the [ENTER].

- Print a nozzle recovery pattern.
- The Select Entry Nozzle screen appears once printing is complete.

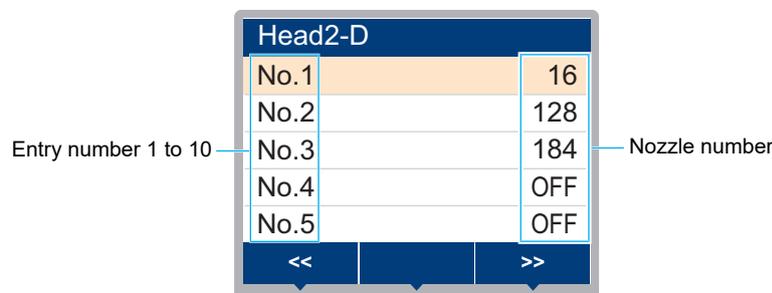


6 Select the "head number and nozzle row" for nozzle recovery, then press the [ENTER] key.



7 Enter the "nozzle number" for nozzle recovery, then press the [ENTER] key.

- Select the entry number before entering the nozzle number.
- Nozzle recovery is set.



8 Press the [ENTER] key once entry is complete.



- Select [Maintenance] > [Nozzle Recovery] > [Test Print], then select "ON" to perform nozzle recovery and test printing.
👉 "Test Printing"(P. 59)

Checking whether nozzle recovery is set correctly

1 Load the media.

2 In LOCAL mode, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

3 Select [Nozzle Recovery] > [Check], then press the [ENTER] key.

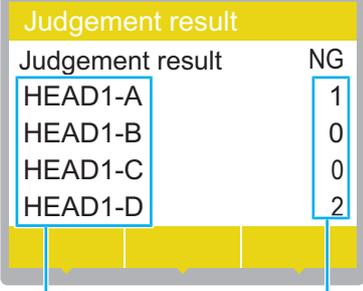
- The Judgement screen will be displayed.

4 Enter the desired printing conditions.

| Judgement Condition | |
|---------------------|-----------|
| Resolution | 720 x 720 |
| PASS | 8 |
| Scan Speed | NORMAL |
| MAPS 4 | > |
| OVER PRINT | 1 |

5 Press the [FUNC2] key.

- The judgment result is displayed.

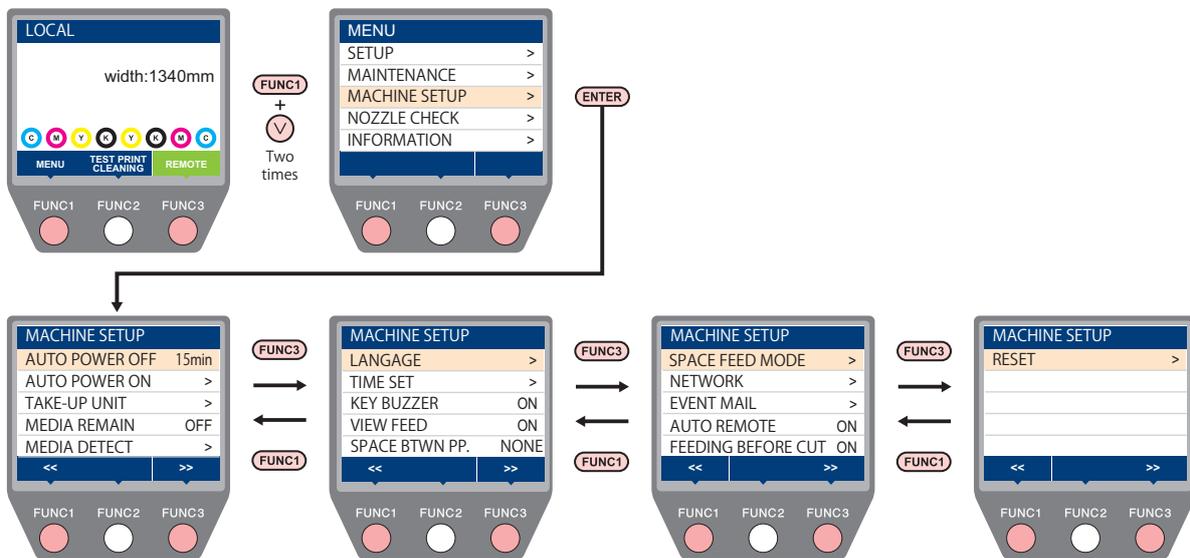
| OK | No good |
|--|--|
|  <p>Judgement result Judgement result OK</p> |  <p>Judgement result Judgement result NG HEAD1-A 1 HEAD1-B 0 HEAD1-C 0 HEAD1-D 2</p> <p>Head number - nozzle row Number of nozzles that cannot be</p> |

6 Press the [ENTER] key once entry is complete.

3.3 Machine Setup Menu

This is used to set various operations to ensure optimal machine performance.

● Machine Setup Menu Screen



Machine Setup Menu List

| Item | Setting *1 | Details |
|----------------|--|---|
| Auto Power-off | None/5 min to <u>15 min</u> to 600 min | Sets the time until the power is automatically turned off. |
| Auto Power-on | - | Sets the time to automatically turn on the power and start warming the ink. Printing is disabled while the ink is warmed. Enabling auto power-on can reduce the time until the ink is warmed to the preset value. The machine goes to standby when no operation is performed for 20 minutes after the ink is warmed to the preset value. (Supported from FW ver3.0) |
| SETUP | <u>ON/OFF</u> | Sets whether to turn on or off the power. |
| Time | <u>0:00</u> to 23:59 | Sets the time to turn on the power. |
| Day of week | - | Sets whether to turn on or off the power on each day of the week. |
| Nozzle check | <u>ON/OFF</u> | Automatically executes the nozzle check function when the machine is started with auto power-on. Performs nozzle recovery (cleaning followed by nozzle checking) if "nozzle clogging" is detected. |
| Cleaning | <u>Soft/Normal/</u> Hard | Sets the cleaning type. |
| Retry Count | <u>0</u> to 3 times | Performs nozzle recovery (cleaning followed by nozzle checking) for the specified number of times. |
| Take-up Unit | - | Sets the take-up unit operation. |
| Take-up Unit | <u>ON/OFF</u> | Set to "OFF" if the take-up unit is not used. |
| Take-up SW | <u>Continuous/</u> Temporary | Sets the function performed by the ON/OFF button on the take-up unit in LOCAL mode. <ul style="list-style-type: none"> Continuous: Press the button to start/stop the take-up unit. |

| Item | Setting ^{*1} | Details |
|-------------------|----------------------------------|--|
| | | <ul style="list-style-type: none"> Temporary: The take-up unit operates only while the button is pressed. The unit stops when the button is released. |
| Media Remain | ON/OFF | <p>The remaining roll media amount can be displayed and printed out in REMOTE mode.</p> <ul style="list-style-type: none"> ON: An input screen appears once the media width is detected. <ul style="list-style-type: none"> Press  Press  to set the media length. Press the [FUNC3] key on the "Origin Setup" screen to print the date and remaining media amount. OFF: The remaining media amount is not displayed. |
| Media Detect | - | Sets the media width detection method. |
| At Startup | ON/OFF | The medium is detected automatically when the clamp lever is lowered after the machine starts up. Set to "OFF" if auto detection is not required. |
| Detect Speed | Fast/Standard | <ul style="list-style-type: none"> Fast: Clear or reflective media may not be detected. If detection is unsuccessful, select "Standard". Standard: Select "Standard" if the medium is not detected successfully. |
| LANGUAGE | English/ Japanese/ Chinese | Sets the display language. |
| Time Set | +4 h to 0 to -20 h | Sets the current time and date. (With respect to JST) <ul style="list-style-type: none"> This can be set within the range of -20 to +4 hours. |
| Key Buzzer | ON/OFF | Sets an audible tone when keys are pressed. <ul style="list-style-type: none"> Audible signals indicating errors, warnings, and operation end cannot be muted, even if "OFF" is selected for this setting. |
| View Feed | ON/OFF | Sets whether or not to feed the media forward to view the print results—for example, during test printing. |
| Space Btwn PP. | None/10 to 500 mm | Setting the distance of the reverse feed (spaces between prints) during continuous printing can eliminate spaces between prints. <ul style="list-style-type: none"> The reverse feed may cause sagging media, resulting in discrepancies in the distance the media is fed. If this occurs, rewind the media by hand to eliminate sagging before printing. |
| Space Feed Mode | Intermittent/ Continuous | Alters the feed method for blank space included in the image data. <ul style="list-style-type: none"> Intermittent: Uses intermittent feeding based on the timing of a fraction of the pass. Continuous: Feeds forward by skipping blank parts. |
| Network | - | Sets the network address. The machine must be restarted to enable this setting. |
| Check IP Address | - | Displays the machine's current IP address. <ul style="list-style-type: none"> It may take some time to determine the IP address. If the IP address cannot be determined, the display will indicate "0.0.0.0". |
| Check MAC Address | - | Displays the machine's current MAC address. |
| DHCP | ON/OFF | Select "ON" to use the IP address assigned by the DHCP server. |
| AutoIP | ON/OFF | Select "ON" to use the IP address set by the AutoIP protocol. Note that DHCP takes priority if DHCP is set to "ON". |
| IP Address | - | Sets the machine's IP address. <ul style="list-style-type: none"> This can be set when both [DHCP] and [AutoIP] are set to "OFF". |

| Item | Setting ^{*1} | Details |
|-------------------|---|---|
| Default Gateway | - | Sets the machine's default gateway. • This can be set when both [DHCP] and [AutoIP] are set to "OFF". |
| DNS Address | - | Sets the machine's DNS server address. • This can be set when both [DHCP] and [AutoIP] are set to "OFF". |
| Sub Net Mask | - | Sets the number of subnet mask digits used by this machine. • This can be set when both [DHCP] and [AutoIP] are set to "OFF". |
| Event Mail | - | An email can be sent to a specified email address when an event (e.g., print start, print end, and abort) occurs. The machine must be restarted to enable this setting.  "Event Email Function Settings"(P. 82) |
| Mail Delivery | ON/OFF | Sets whether event emails are sent. |
| Select Event | - | |
| Print Start Event | ON/OFF | Sets whether an email is sent when printing starts. |
| Print End Event | ON/OFF | Sets whether an email is sent when printing ends. |
| Plot Start Event | ON/OFF | Sets whether an email is sent when cutting starts. |
| Plot End Event | ON/OFF | Sets whether an email is sent when cutting ends. |
| Error | ON/OFF | Sets whether an email is sent when an error occurs. |
| Warning | ON/OFF | Sets whether an email is sent when a warning occurs. |
| Other Event | ON/OFF | Set to send or not send an email when an event other than those listed above occurs. |
| Mail Address | - | Sets the email address to which emails will be sent (not to exceed 96 alphanumeric characters or symbols). |
| Message Subject | - | Sets the characters contained in a message subject (not to exceed 8 alphanumeric characters or symbols). |
| Server Setup | - | |
| SMTP Address | - | Sets the SMTP server. |
| SMTP Port No. | - | Sets the SMTP port number. |
| Sender Address | - | Sets the sender address (not to exceed 64 alphanumeric characters or symbols). • Setting an email address corresponding to the server account allows emails to be sent. |
| Authentication | OFF/POP before SMTP/SMTP authentication | Sets the SMTP server authentication method. |
| User Name | - | Sets the user name used for authentication (not to exceed 30 alphanumeric characters or symbols). • This can be set when [Authentication] is not set to "OFF". |
| Pass Word | - | Sets the password used for authentication (not to exceed 15 alphanumeric characters or symbols). |

| Item | Setting ^{*1} | Details |
|--------------------|-----------------------|--|
| | | <ul style="list-style-type: none"> This can be set when [Authentication] is not set to "OFF". |
| POP3 Address | - | Sets the POP server. <ul style="list-style-type: none"> This can be set when [Authentication] is set to "POP before SMTP". |
| APOP | - | Enables or disables APOP. <ul style="list-style-type: none"> This can be set when [Authentication] is set to "POP before SMTP". |
| Transmit Test | - | Sends a test email. --- リンクがありません --- |
| Auto Remote | <u>ON</u> /OFF | Sets whether to automatically switch to REMOTE mode and start printing if data is received locally. |
| Feeding Before Cut | <u>ON</u> /OFF | Sets whether to feed media before cutting the media. |
| Reset | - | Initializes the details set. |

*1. The default settings are shown underlined.

Event Email Function Settings

An email can be sent to a specified email address when an event (e.g., print start, print end, and abort) occurs.



- SSL (Secure Socket Layer) encoding is not supported.



- Connect the LAN cable to use the event mail function.
 ["Network Connection Precautions"\(P. 33\)](#)

Disclaimers

- Internet communication charges for email notifications, etc. are the responsibility of the customer.
- Event emails may not be delivered if problems arise with the Internet setup or equipment. Mimaki rejects all liability for damages resulting from delivery failure or delay.

Sending Test Email

- 1** In LOCAL mode, select [MENU] > [Setup], then press the [ENTER] key.
 - The Machine Setup menu is displayed.
- 2** Select [Event Mail] > [Transmit Test], then press the [ENTER] key.
- 3** Press the [ENTER] key.
 - The transmission results are displayed.
 - An error code will be displayed if the test email transmission is unsuccessful. Refer to the error code list and take appropriate action.

```
Transmit Test
Failed : 1 2 3 4 5
```

Error code



- Emails may not necessarily be delivered even if they have been sent. Check the terminal receiving the email for spam email filters.
- For more information on server settings or other topics, contact your network administrator or service provider.

4 Press the [ENTER] key once the test is complete.

● Error Code List

| Error code | Likely cause | Corrective action |
|----------------------------------|--|--|
| 10 | Network connection error | <ul style="list-style-type: none"> • Check to confirm that this machine is connected to a network. • Check the IP address for this machine. • Check if the network setup allows this machine to use DNS. |
| 20 | No valid email address | <ul style="list-style-type: none"> • Enter a valid email address. |
| 11003 11004 | No POP server was found or the DNS server could not be accessed. | <ul style="list-style-type: none"> • Check the POP server address. • Check if the network setup allows this machine to use DNS. |
| 11021 | Unable to connect to POP server | <ul style="list-style-type: none"> • Check the POP server settings. • Check the firewall settings. |
| 12010 | An error was returned from the POP server. | <ul style="list-style-type: none"> • Check the POP server settings. |
| 13000 | POP authentication failed | <ul style="list-style-type: none"> • Check the user name and password. • Check the APOP settings. • Check the authentication method. |
| 10013 10014 | No SMTP server could be found or the DNS server could not be accessed. | <ul style="list-style-type: none"> • Check the SMTP server address. • Check if the network setup allows this machine to use DNS. |
| 10021 | Unable to connect to SMTP server | <ul style="list-style-type: none"> • Check the SMTP server settings. • Check the SMTP port number. • Check the firewall settings. |
| 10*** 11*** 20*** 21*** | An error was returned from the SMTP server or there was no response. | <ul style="list-style-type: none"> • Check the SMTP server settings. • Communication is not possible with a server that requires SSL communication. • Check the protocol filter settings. |
| 12*** | The sender email address is invalid. | <ul style="list-style-type: none"> • Set an email address corresponding to the server account. |
| 13*** | The email recipient could be found or the email address is invalid. | <ul style="list-style-type: none"> • Check the email address. • This error may not always be detected even if the email address is incorrect. • Set an email address corresponding to the server account. |
| 22000 22008 | SMTP authentication error | <ul style="list-style-type: none"> • Check the authentication method. |
| 23*** 24*** 25*** | SMTP authentication failed. | <ul style="list-style-type: none"> • Check the user name and password. |

1. *** is the error code received from the mail server



- If the error persists, wait a while before retrying.
-

3.4 Nozzle Check Menu

This is used to check if the nozzles are clogged before printing starts. Sets whether to perform maintenance automatically if nozzle clogging is detected.

● Nozzle Check Menu Screen



Nozzle Check Menu List

| Item | Setting ^{*1} | Details |
|---|----------------------------------|---|
| Printing Check | <u>ON/OFF</u> | Performs nozzle clogging detection before printing starts. |
| <ul style="list-style-type: none"> Check Interval <ul style="list-style-type: none"> Length File Action <ul style="list-style-type: none"> Cleaning Retry Count | - | Sets the nozzle clogging detection timing. |
| | 0.1 m to <u>30.0</u> m to 100.0m | Performs nozzle clogging detection after the length set is reached and before the next print starts. |
| | 1 to <u>30</u> to 1,000 files | Performs nozzle clogging detection for each number of files set. |
| | - | Performs nozzle recovery (cleaning followed by nozzle checking) if "nozzle clogging" is detected. |
| | <u>Soft</u> /Normal/ Hard | Sets the cleaning type. |
| | <u>0</u> to 3 times | Performs nozzle recovery (cleaning followed by nozzle checking) for the specified number of times. |
| Auto Nozzle Recovery | <u>ON/OFF</u> | Performs nozzle recovery automatically if "nozzle clogging" is detected. See below if you wish to perform nozzle recovery manually. "Registering nozzle recovery"(P. 76) |
| Judgment Condition ^{*2} | <u>1</u> to 100 nozzles | Set the number of nozzles to be detected as clogged before "nozzle clogging" is detected. Up to 16 nozzles per row can be set. The next print will not start if "nozzle clogging" is detected during continuous printing. |

*1. The default settings are shown underlined.

*2. Nozzle recovery is not available for certain print conditions.

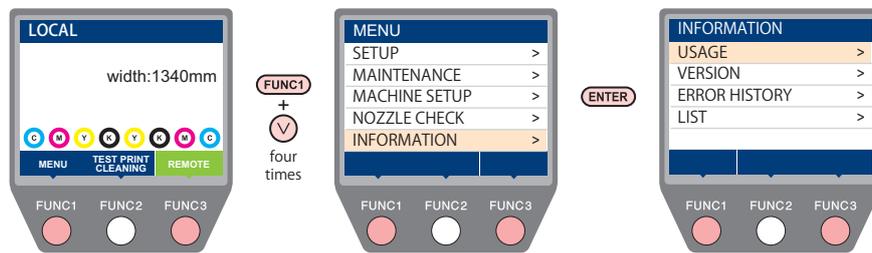


- If an error occurs during the nozzle check operation, the next print will be automatically stopped, and [Printing Check] will be set to "OFF". Clear the error, then set [Printing Check] to "ON" manually.

3.5 Information Menu

This is used to check machine information.

● Information Menu Screen



Information Menu List

| Item | | Details |
|---------------|----------------|--|
| Usage | Wiping | Displays the wiping count. <ul style="list-style-type: none"> To reset this count, press the [FUNC2] key while the count is displayed. |
| | Waste ink tank | Displays the approximate level of waste ink in the waste ink tank as a percentage. <ul style="list-style-type: none"> To reset waste ink levels, press the [FUNC1] key while the level is displayed. |
| | Print Length | Displays the total length printed. |
| | Print Area | Displays the total area printed. |
| | Use Time | Displays the total time the power has been turned on. |
| | UV Lamp | Displays the total time the UV lamp has been used. |
| Version | | Displays the machine firmware and other versions. |
| Error History | | Displays the error and warning history. <ul style="list-style-type: none"> These are listed in chronological order. Use the keys to cycle through occurrence time/date and error/warning information. |
| List | | This is used to print machine information. |

Chapter 4 Maintenance



This chapter

To ensure years of precise performance, maintain this product periodically or based on frequency of use.

Read the maintenance precautions thoroughly before maintaining this product.

| | | | |
|--|-----|-----------------------------------|-----|
| Maintenance Precautions | 88 | Consumable Item Replacement | 103 |
| Daily Maintenance | 89 | Wiper Replacement | 103 |
| Maintenance Items and Timing | 89 | Cap Replacement | 104 |
| Items Required for Maintenance | 89 | Cap Absorber Replacement..... | 105 |
| Ink Maintenance | 90 | Waste Ink Tank Replacement..... | 107 |
| White Ink Maintenance..... | 90 | Pinch Roller Replacement | 109 |
| Wiper Cleaning..... | 91 | Media Holder Replacement | 110 |
| Cap Cleaning | 92 | Media Cutter Replacement | 112 |
| NCU Cleaning | 93 | LED Glass Replacement..... | 113 |
| Carriage Underside Cleaning..... | 94 | | |
| Print Head Nozzle Washing | 96 | | |
| Ink Discharge Channel Cleaning..... | 97 | | |
| Media Sensor Cleaning..... | 97 | | |
| Automatic Correction Sensor (DAS) Cleaning | 98 | | |
| Media Holder Cleaning..... | 99 | | |
| Platen Cleaning..... | 99 | | |
| Cover (Exterior) Cleaning..... | 100 | | |
| When Not in Use for Extended Periods ... | 100 | | |

4.1 Maintenance Precautions



- This product contains components that must be replaced periodically. We recommend concluding a maintenance contract.
- Maintain this product and replace consumable items to prevent quality defects and accidents.

WARNING



- Clean periodically. Debris and dust will accumulate on electrical components when this product is used for extended periods. Current leaks may result in failure, electric shock, or fire.
- Do not clean by blowing—e.g., avoid using air blowers. Doing so may lead to failure, electric shock, or fire involving the product if airborne debris or dust gets inside electrical components. Wipe away debris or dust using a soft cloth soaked in water and thoroughly wrung out. A vacuum cleaner may also be used for cleaning.



- Do not allow liquids to get inside the product. Ingress of liquids into the product may lead to failure, electric shock, or fire.

CAUTION



- For heavy soiling, wipe using a soft cloth soaked in dilute detergent and thoroughly wrung out.



- Wear safety glasses, gloves, and a mask when handling ink, maintenance cleaning solution, waste ink, or other solutions used with this machine. Leaking ink may adhere to the skin or get into your eyes or mouth.



NOTICE



- Avoid touching the print nozzle surface. Do not allow water or alcohol to come into contact with the print nozzle surface. Contact with water or alcohol may lead to failure or print defects (e.g., nozzle clogging, deflection).
- Avoid using cotton swabs to clean around the head or carriage. Fibers from cotton swabs may adhere to the head nozzle surface and lead to print defects (e.g., nozzle clogging, deflection).
- Be careful to avoid splashing ink or washing liquid on the covers. Exposure to splashing ink or washing liquid may damage or deform the cover.
- Avoid using chemical products containing benzene, thinner, or abrasives. Use of these chemicals may result in damage to or deformation of parts.
- Do not move the carriage by hand. To move the carriage, use the carriage out function on the menu.

4.2 Daily Maintenance

Maintenance Items and Timing

| Timing | Item |
|------------------------------------|--|
| Before starting the week's work | Perform white ink maintenance. "White Ink Maintenance"(P. 90) |
| At the end of the work week | Clean the wiper and wiper bracket. "Wiper Cleaning"(P. 91) |
| | Clean the cap rubber. "Cap Cleaning"(P. 92) |
| | Clean the NCU. "NCU Cleaning"(P. 93) |
| | Clean the underside of the UV-LED lamp. "Carriage Underside Cleaning"(P. 94) |
| | Clean the underside of the carriage. "Carriage Underside Cleaning"(P. 94) |
| | Clean the media sensor. "Media Sensor Cleaning"(P. 97) |
| | Clean the DAS sensor. "Automatic Correction Sensor (DAS) Cleaning"(P. 98) |
| | Clean the media holder. "Media Holder Cleaning"(P. 99) |
| | Clean the ink discharge channel. "Ink Discharge Channel Cleaning"(P. 97) |
| | Clean the platen. "Platen Cleaning"(P. 99) |
| | Clean the cover (exterior). "Cover (Exterior) Cleaning"(P. 100) |
| | Check the waste ink levels in the waste ink tank. |
| When not used for more than a week | Clean the wiper and cap and wash the ink discharge channels. After cleaning, store without turning off the main power supply. "When Not in Use for Extended Periods"(P. 100) |
| Periodically | Shake the Ink bottle. "Ink Maintenance"(P. 90) |

Items Required for Maintenance

To order replacement consumable items, contact your local dealer or our service office.

| Item | Code |
|-------------------------------------|----------|
| F-200/LF-200 Washing Liquid Kit | SPC-0569 |
| F-200/LF-200 Washing Liquid | SPC-0568 |
| UJ Cleaning Swab | SPC-0386 |
| Cleaning Stick for Head Surrounding | SPC-0527 |
| Nozzle Swab | SPC-0421 |
| Swab 6-axis "S" | A101438 |
| Paper towel (KIM TOWEL) | SPC-0499 |
| KIMWIPE S-200 | SPA-0207 |
| Maintenance cloth | SPC-0574 |
| UV goggles | SPC-0387 |
| Safety glasses | |
| Gloves | |

For more information on other consumable items, refer to our website.

<https://mimaki.com/supply/inkjet.html>



- Do not store in places accessible to children.

Ink Maintenance

If ink constituents are sedimented, the ink density may become uneven. We recommend shaking the Ink bottle periodically to keep printing consistent.

UV ink: once a month.

White ink: once a day.

● White Ink

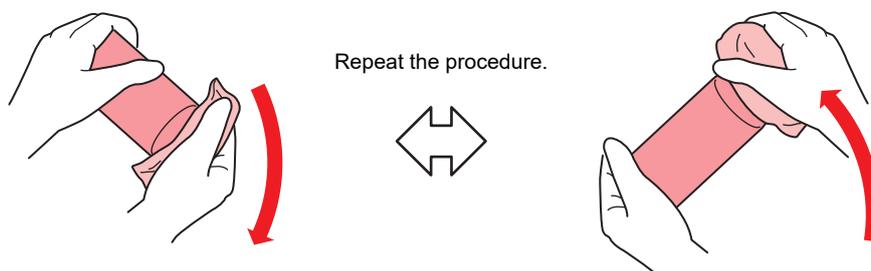
This product counts the time elapsed after stirring the white ink Ink bottle. The “Shake White Ink Bottle” message appears when a preset count is reached. If the message appears, shake the Ink bottle by following the instructions below:

- Timing when the message appears
 - Every 24 hours (or when the power is turned on if the power was turned off).

● Shaking the Ink bottle

1 Shake the Ink bottle to the left and right slowly at least 20 times.

- Tighten the ink bottle lid securely, then shake the bottle slowly from left to right to ensure that the ink moves inside, holding the ink bottle lid with a paper towel.



- Shake slowly. If the bottle is shaken too violently, ink may leak out or the air mixed in the ink may cause nozzle clogging.
- If the Ink bottle is partially used, flip the Ink bottle upright and shake slowly at an angle.

White Ink Maintenance

White ink constituents are more easily sedimented than other ink colors. If ink constituents are sedimented, the ink density may become uneven. Perform maintenance once a week as follows before using the machine.

1 Shake the white ink Ink bottle.

-  "Ink Maintenance"(P. 90)

2 Close the front cover.



- Be sure to close the front cover. Ink stirring starts.

- 3** In **LOCAL** mode screen, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 4** Select **[White Maintenance]**, then press the **[ENTER]** key.
- 5** Remove the media, then press the **[ENTER]** key.
- 6** Press the **[ENTER]** key.
 - Discharging/filling/cleaning starts automatically.
 - The elapsed time is displayed.

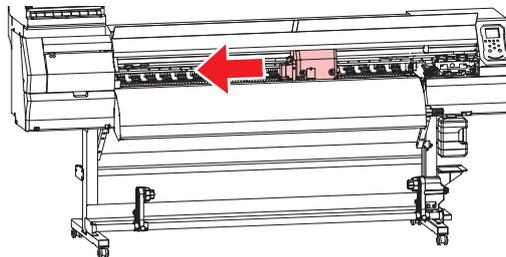
Wiper Cleaning

The wiper wipes off ink adhering to the print head nozzle surface. Continuing to use the dirty wiper may cause the wiper to which dried ink and dust are attached to rub against the nozzle surface, leading to print defects (e.g., nozzle clogging, deflection).

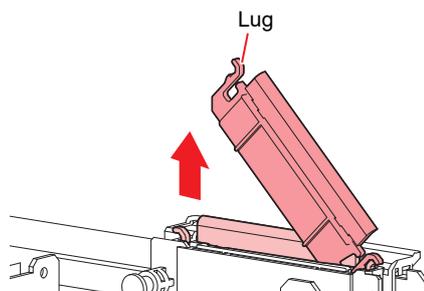


- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of print defects (e.g., nozzle clogging, deflection).

- 1** In **LOCAL** mode screen, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 2** Select **[Station] > [Carriage Out] > [Move To Platen Right End]**, then press the **[ENTER]** key.
 - The carriage moves over the platen.

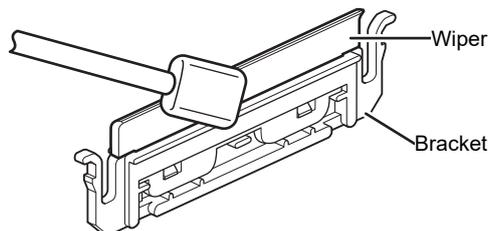


- 3** Open the front cover.
- 4** Pull out the wiper.
 - Hold the lug at the rear of the wiper, then tilt forward to pull out the wiper.



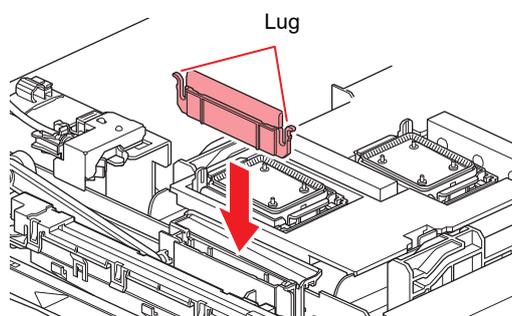
5 Clean the wiper and bracket.

- Wipe off any ink adhering to the wiper and bracket using a cleaning stick moistened with washing liquid.
- Wipe off the washing liquid. Make sure none remains.



- Replace dirty or warped wipers with new ones.
 ["Wiper Replacement"\(P. 103\)](#)

6 Reattach the wiper at the original position.



- Do not remove the absorbent material in the absorbent material case. Doing so may result in leaking ink.

7 Once cleaning is complete, close the front cover, then press the [ENTER] key.

Cap Cleaning

The cap prevents the print head nozzle surface from drying out. Continuing to use a dirty cap may affect ink take-up and lead to print defects (e.g., nozzle clogging, deflection).

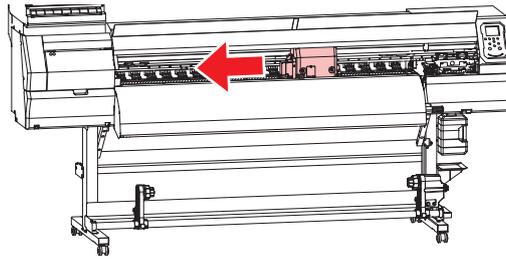


- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of print defects (e.g., nozzle clogging, deflection).

1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

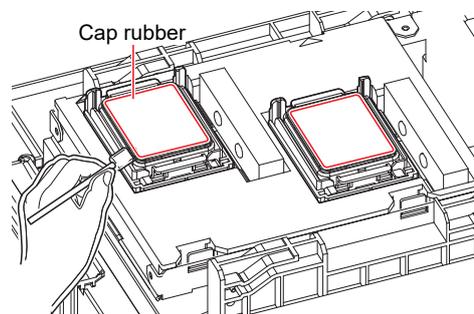
- 2** Select [Station] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
- The carriage moves over the platen.



- 3** Open the front cover.

- 4** Clean the cap rubber.

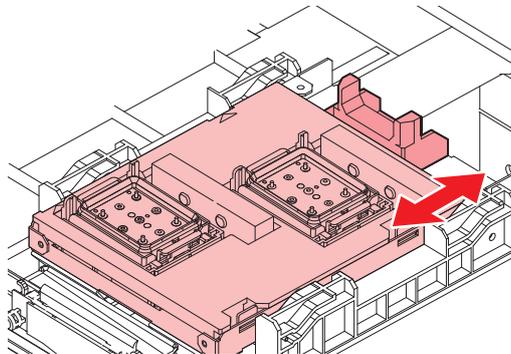
- Wipe off any ink adhering to the cap rubber using a cleaning stick moistened with washing liquid.
- Wipe off the washing liquid. Make sure none remains.



- 5** Check to confirm that the cap slider is not tilted once cleaning is complete.



- If the cap slider is tilted, move the slider block to the left or right to correct the tilt.



- 6** Once cleaning is complete, close the front cover, then press the [ENTER] key.

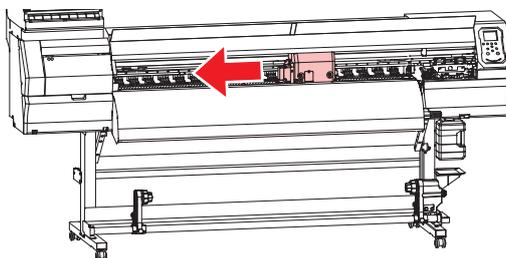
NCU Cleaning

The NCU uses a sensor to monitor the ink droplets ejected from the print head nozzles. Continuing to use the dirty NCU may prevent the nozzle recovery function from operating correctly.

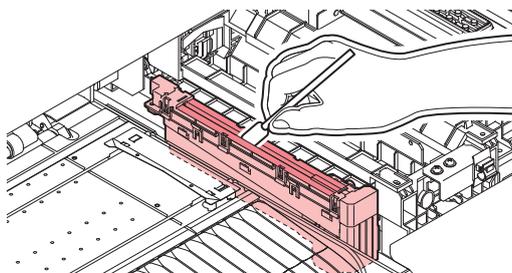


- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of print defects (e.g., nozzle clogging, deflection).

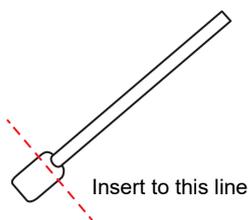
- 1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- 2 Select [Station] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
 - The carriage moves over the platen.



- 3 Open the front cover.
- 4 Wipe away any ink or dust adhering to the NCU.
 - Wipe off any ink adhering to the NCU using a cleaning stick moistened with washing liquid.
 - Wipe off the washing liquid. Make sure none remains.



- Insert the cleaning stick as far as the line shown in the figure.



- 5 Once cleaning is complete, close the front cover, then press the [ENTER] key.

Carriage Underside Cleaning

The underside of the carriage becomes coated with ink wiped off by the wiper. Continuing to use the dirty carriage underside will rub dried ink and attached dust on to the media, resulting in contaminated prints.

The print head uses an extremely delicate mechanism. Take great care when handling it.



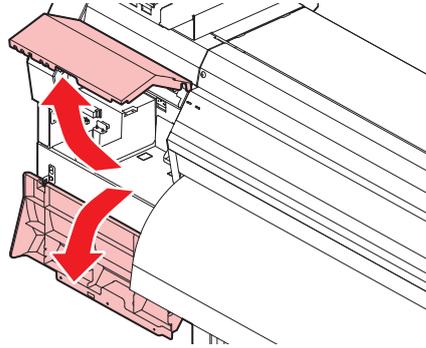
- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of print defects (e.g., nozzle clogging, deflection).

- 1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.

2 Select [Station] > [Carriage Out] > [Move To Maint. Space], then press the [ENTER] key.

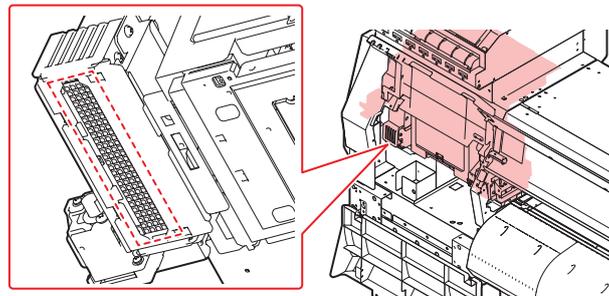
- The carriage moves to the maintenance space.

3 Open the maintenance covers.



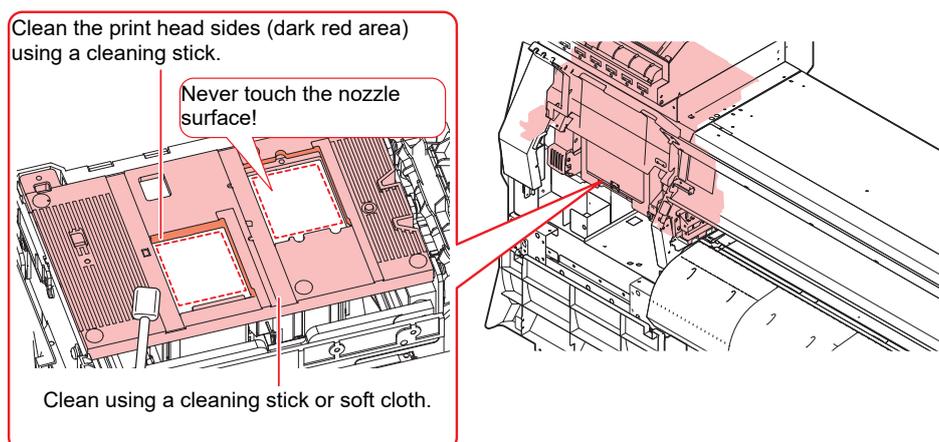
4 Clean the underside of the UV-LED lamp.

- Wipe off any ink adhering to the UV-LED lamp underside using a cleaning stick moistened with washing liquid.
- Wipe off the washing liquid. Make sure none remains.



5 Clean around the print head on the underside of the carriage.

- Wipe off any ink adhering to the carriage underside using a cleaning stick moistened with washing liquid.
- Wipe off the washing liquid. Make sure none remains.



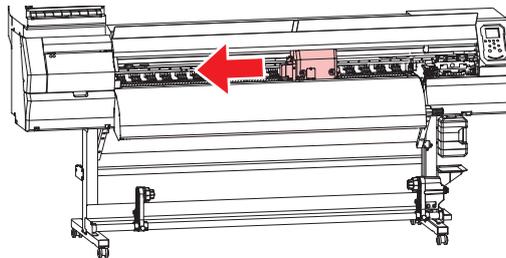
- Never touch the print head nozzle surface.

6 Once cleaning is complete, close the maintenance covers, then press the [ENTER] key.

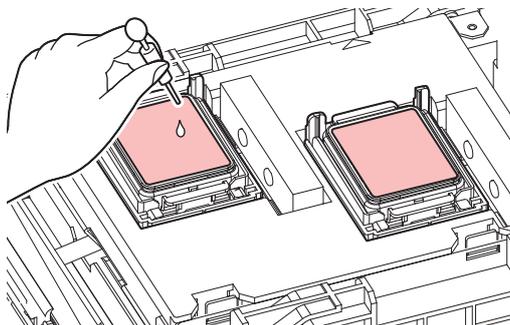
Print Head Nozzle Washing

If print defects (e.g., nozzle clogging, deflection) remain unresolved even after head cleaning (☞ "Head Cleaning"(P. 61)), apply nozzle washing to the print head.

- 1** In **LOCAL** mode screen, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 2** Select **[Station] > [Nozzle Wash]**, then press the **[ENTER]** key.
 - The carriage moves over the platen.



- 3** Open the front cover.
- 4** Clean the wiper and bracket. ☞ "Wiper Cleaning"(P. 91)
- 5** Press the **[ENTER]** key once cleaning is complete.
 - "Cap Cleaning Completed (Next)[ENT]" appears on the display.
- 6** Clean the cap rubber. ☞ "Cap Cleaning"(P. 92)
- 7** Press the **[ENTER]** key once cleaning is complete.
 - "Fill the Liquid. Exit Next [ENT]" appears on the display.
- 8** Fill the cap with washing liquid.
 - Use a syringe to draw up some washing liquid and fill until it almost overflows from the cap.



- 9** Close the front cover, then press the **[ENTER]** key.
 - Print nozzle washing starts. The elapsed time is displayed on the display. Nozzle washing takes approximately one minute.
 - Cleaning is performed automatically once print nozzle washing has ended.

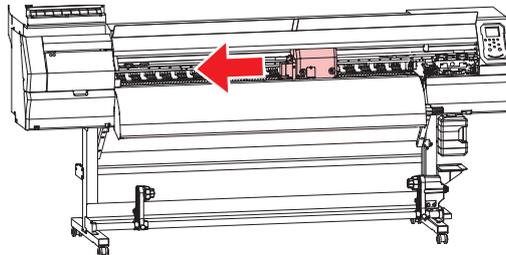


- If print defects (e.g., nozzle clogging, deflection) remain unresolved even after washing the nozzles several times, contact your local dealer or our service office.

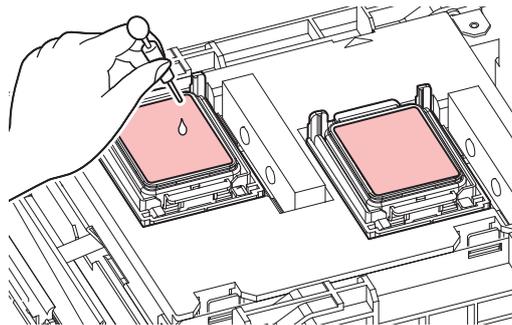
Ink Discharge Channel Cleaning

Clean the ink discharge channel regularly to prevent clogging of the ink discharge channel below the cap.

- 1** In **LOCAL** mode screen, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 2** Select **[Station] > [DISWAY WASH]**, then press the **[ENTER]** key.
 - The carriage moves over the platen.



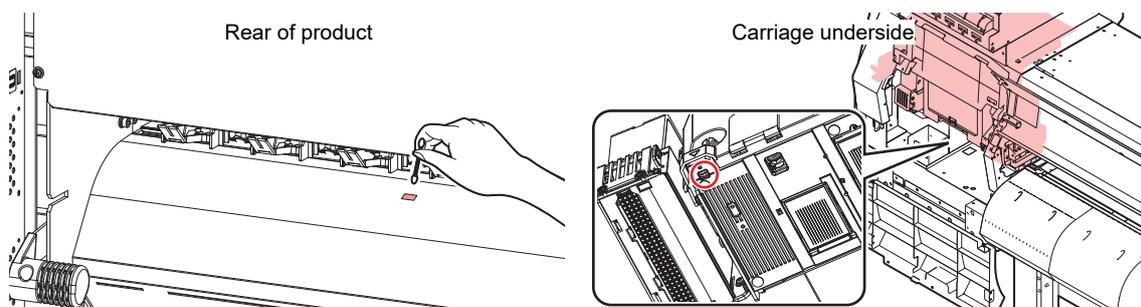
- 3** Open the front cover.
- 4** Fill the cap with washing liquid.
 - Use a syringe to draw up some washing liquid and fill until it almost overflows from the cap.



- 5** Close the front cover, then press the **[ENTER]** key.
 - Pump tube (ink discharge channel below the cap) washing starts.

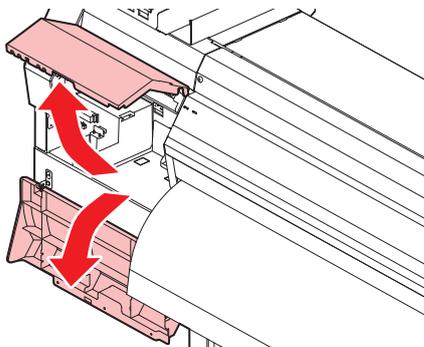
Media Sensor Cleaning

Media sensors are located on the rear cover and carriage underside. The media cannot be detected correctly if dust or debris accumulates on the sensors. Remove any debris using cotton swabs or a soft cloth.



● Cleaning the carriage underside sensor

- 1** In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- 2** Select [Station] > [Carriage Out] > [Move To Maint. Space], then press the [ENTER] key.
 - The carriage moves to the maintenance space.
- 3** Open the maintenance covers.

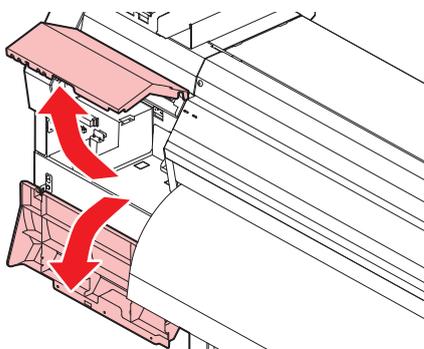


- 4** Clean the media sensor.
- 5** Once cleaning is complete, close the maintenance covers, then press the [ENTER] key.

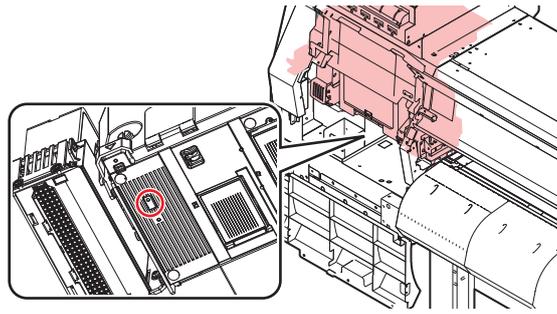
Automatic Correction Sensor (DAS) Cleaning

The DAS sensor is located on the carriage underside. If dust or debris accumulates on the sensor, an error may occur in the automatic correction function (Automatic correction of dot landing position). Remove any debris using cotton swabs or a soft cloth.

- 1** In LOCAL mode, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- 2** Select [Station] > [Carriage Out] > [Move To Maint. Space], then press the [ENTER] key.
 - The carriage moves to the maintenance space.
- 3** Open the maintenance covers.



4 Clean the DAS sensor.



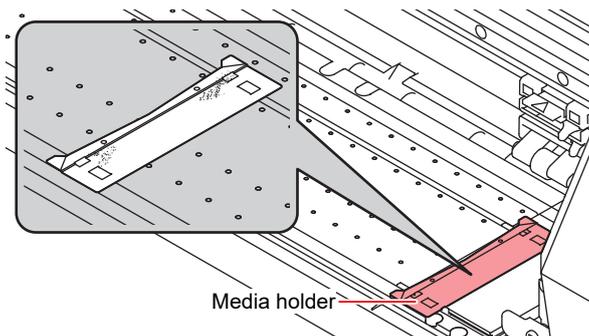
5 Once cleaning is complete, close the maintenance covers, then press the [ENTER] key.

Media Holder Cleaning



- Turn off the main power and unplug the power cable before carrying out maintenance.

Continuing to use the dirty platen will prevent proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to print defects (e.g., nozzle clogging, deflection).



- Do not allow liquids to get inside the product. Ingress of liquids into the product may lead to failure, electric shock, or fire.



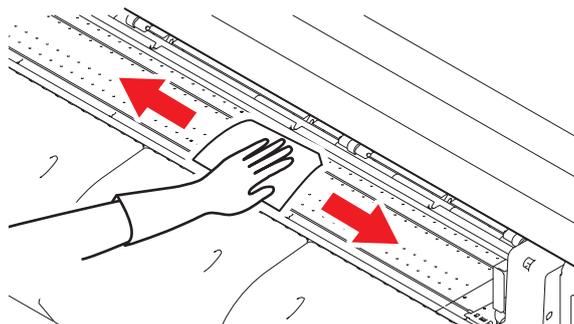
- For heavy soiling, wipe using a soft cloth soaked in dilute detergent and thoroughly wrung out.

Platen Cleaning



- Turn off the main power and unplug the power cable before carrying out maintenance.

Continuing to use the dirty platen will prevent proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to print defects (e.g., nozzle clogging, deflection).



- Do not allow liquids to get inside the product. Ingress of liquids into the product may lead to failure, electric shock, or fire.

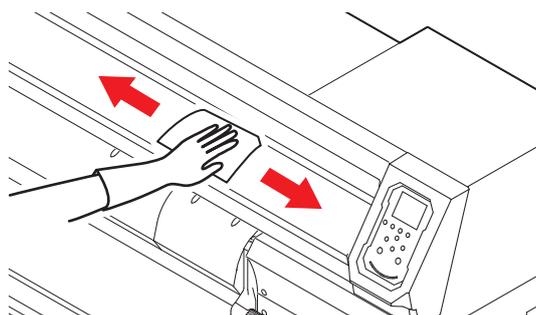


- For heavy soiling, wipe using a soft cloth soaked in dilute detergent and thoroughly wrung out.



- The grooves in which the media holder slides and the media is cut are especially susceptible to dust accumulation. Remove any debris carefully.

Cover (Exterior) Cleaning



- Do not allow liquids to get inside the product. Ingress of liquids into the product may lead to failure, electric shock, or fire.



- For heavy soiling, wipe using a soft cloth soaked in dilute detergent and thoroughly wrung out.

When Not in Use for Extended Periods

Clean as follows if the product is not used for one week or longer:

Check beforehand

Is [NEAR END] or [INK END] displayed?

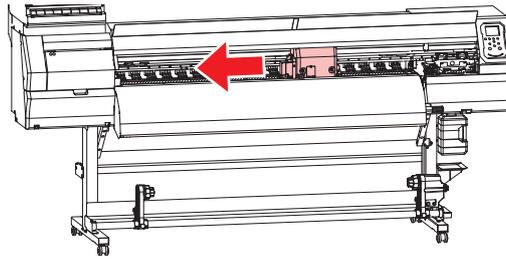
- Washing liquid and ink is aspirated during the washing operation. Washing is not possible if an error occurs during this process. Replace with new ink.

1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

2 Select [Station] > [Custody Wash], then press the [ENTER] key.

- The carriage moves over the platen.



3 Open the front cover.

4 Clean the wiper and bracket.

 ["Wiper Cleaning"\(P. 91\)](#)

5 Press the [ENTER] key once cleaning is complete.

- "Cap Cleaning Completed (Next)[ENT]" appears on the display.

6 Clean the cap rubber.

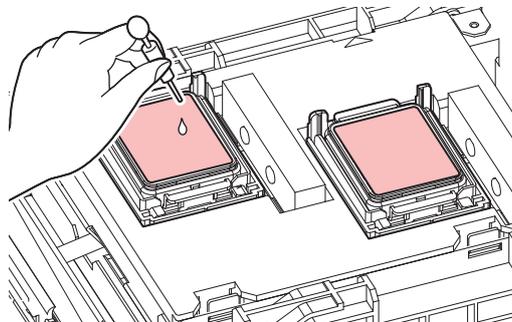
 ["Cap Cleaning"\(P. 92\)](#)

7 Press the [ENTER] key once cleaning is complete.

- "Fill the Liquid. Exit Next [ENT]" appears on the display.

8 Fill the cap with washing liquid.

- Use a syringe to draw up some washing liquid and fill until it almost overflows from the cap.

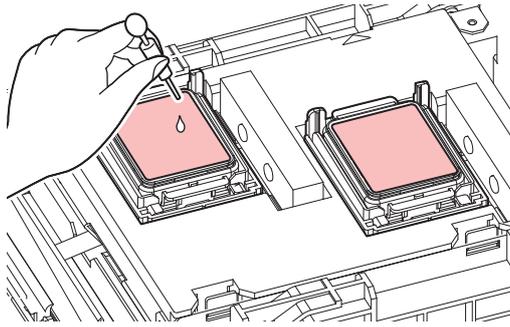


9 Close the front cover, then press the [ENTER] key.

- Print nozzle washing starts. The elapsed time is displayed on the display. Nozzle washing takes approximately one minute.
- Cleaning is performed automatically once print nozzle washing has ended.
- "Fill the Liquid. Exit Next [ENT]" appears on the display when print nozzle washing is complete.

10 Fill the cap with washing liquid.

- Use a syringe to draw up some washing liquid and fill until it almost overflows from the cap.

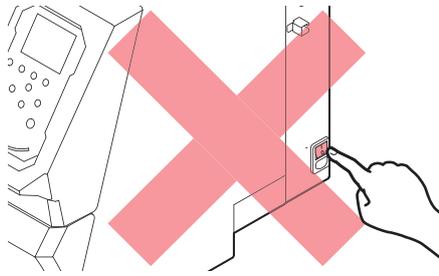


11 Close the front cover, then press the [ENTER] key.

- Pump tube (ink discharge channel below the cap) washing starts.



- Do not turn off the main power supply. Turning off the main power supply will disable the automatic maintenance function (including nozzle clogging prevention function and ink discharge channel cleaning function) and may result in printing defects (such as nozzle clogging and deflection) or other faults.



- Do not leave media loaded on the platen. This may leave irregularities or ripples in the media.



- When this product is not in use, raise the clamp lever to separate the pinch rollers from the grid rollers. If the pinch rollers are left in the lowered position for an extended period of time, they may become deformed, possibly preventing the media from being fed correctly.



- Perform the following if the "Check Waste Ink Tank" message appears on the display.
 ☞ ["Waste Ink Tank Replacement"\(P. 107\)](#)

4.3 Consumable Item Replacement

To order replacement consumable items, contact your local dealer or our service office.

For more information on consumable items, refer to our website.

<https://mimaki.com/supply/inkjet.html>



- When disposing of the product, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

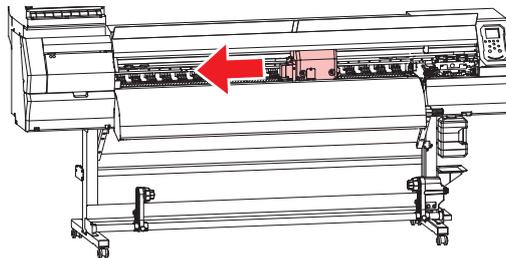


- Do not store in places accessible to children.

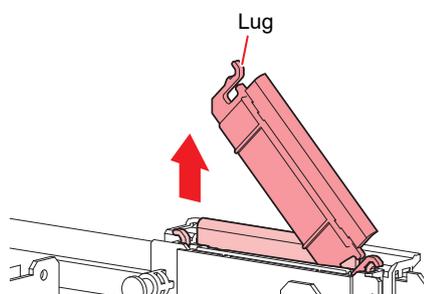
Wiper Replacement

This product maintains a count of the number of wiping cycles. The “Replace Wiper” message appears when a preset count is reached. Replace dirty or warped wipers with new ones.

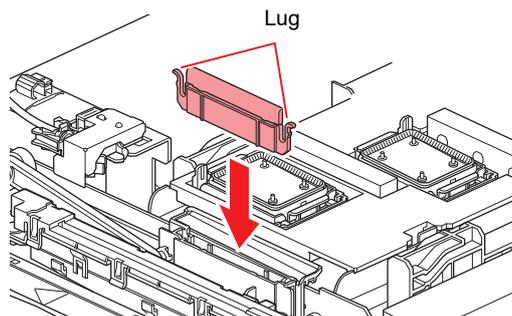
- 1 “Replace Wiper” appears on the display.
- 2 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- 3 Select [Station] > [Replace Wiper], then press the [ENTER] key.
 - The carriage moves over the platen.



- 4 Open the front cover.
- 5 Pull out the wiper.
 - Hold the lug at the rear of the wiper, then tilt forward to pull out the wiper.



6 Insert a new wiper.



7 Once replacement is complete, close the front cover, then press the [ENTER] key.

- The wiper usage count is reset.

Cap Replacement

If print defects (e.g., nozzle clogging, deflection) remain unresolved even after cleaning, replace with a new cap.



- Be sure to replace the cap if you observe any scratches or other damage on the rim.

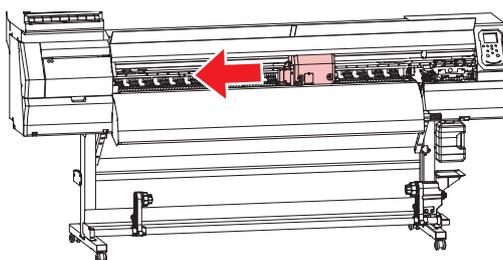


1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

2 Select [Station] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.

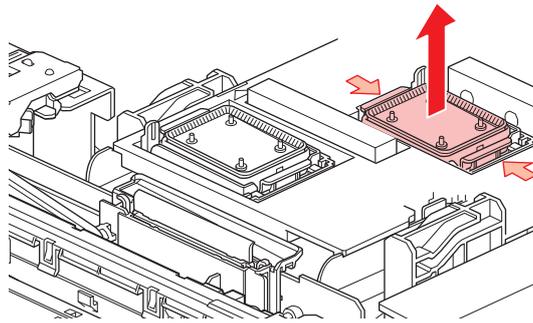
- The carriage moves over the platen.



3 Open the front cover.

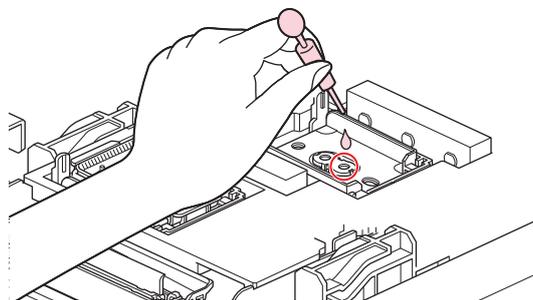
4 Remove the cap.

- Squeeze the lugs on either side of the cap and pull off.



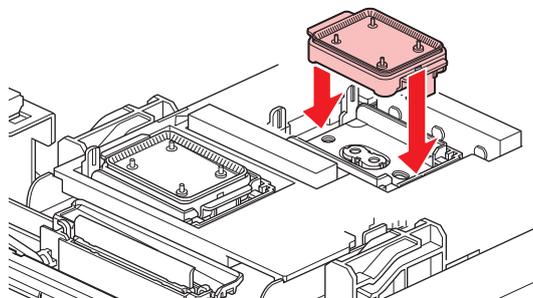
5 Apply a maintenance cleaning solution.

- Take a dropper and apply 1 to 2 drops of cleaning solution to the hole in front of it.



6 Attach a new cap.

- Position with the slot at the front and push in until it clicks.



7 Once replacement is complete, close the front cover, then press the [ENTER] key.

Cap Absorber Replacement

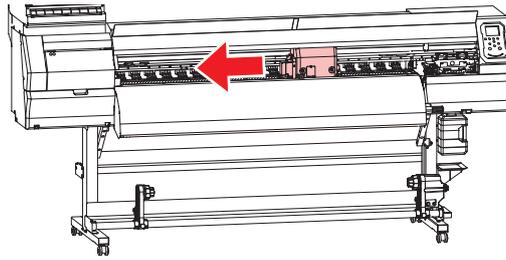
If the cap absorber is very dirty or if ink drips on to the media, replace with a new cap absorber.

1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

2 Select [Station] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.

- The carriage moves over the platen.

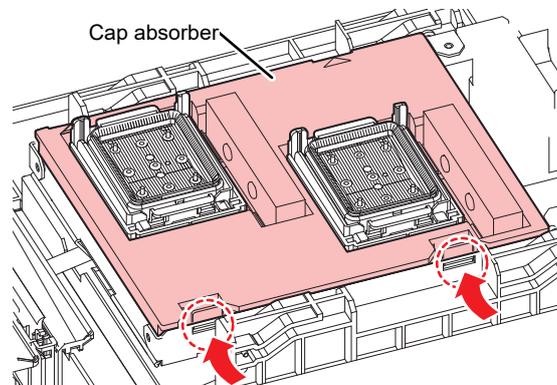


3 Turn off the power.

4 Open the front cover.

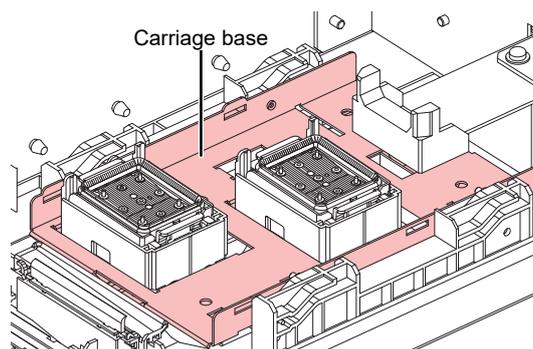
5 Remove the cap absorber.

- Push up the two tabs at the front to remove the cap absorber.



- Avoid ink dripping when removing the cap absorber.

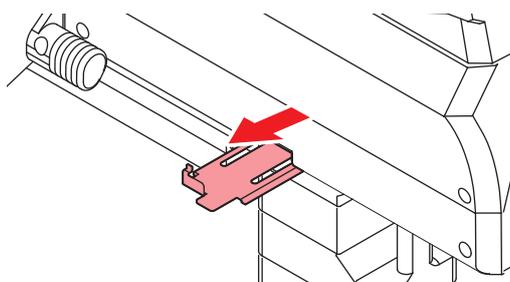
6 Clean the carriage base.



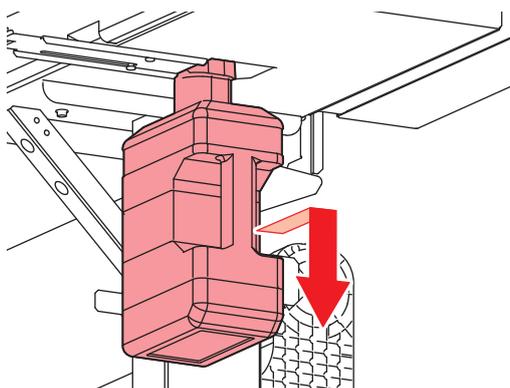
- 3** In **LOCAL** mode, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 4** Select **[Replace Wasteinktank]**, then press the **[ENTER]** key.
 - “Replace Wasteinktank Level: 80% (1.6L)” appears on the display.
- 5** Press **▼** to adjust the level.
- 6** Press the **[ENTER]** key once adjustment is complete.

Replace the waste ink tank.

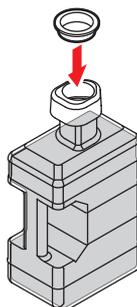
- 1** In **LOCAL** mode screen, select **[MENU] > [Maintenance]**, then press the **[ENTER]** key.
 - The Maintenance menu is displayed.
- 2** Select **[Replace Wasteinktank]**, then press the **[ENTER]** key.
 - “Replace Wasteinktank Level: 80% (1.6L)” appears on the display.
- 3** Pull the waste ink tank stopper forward.



- 4** Hold the handle on the waste ink tank and slide out.



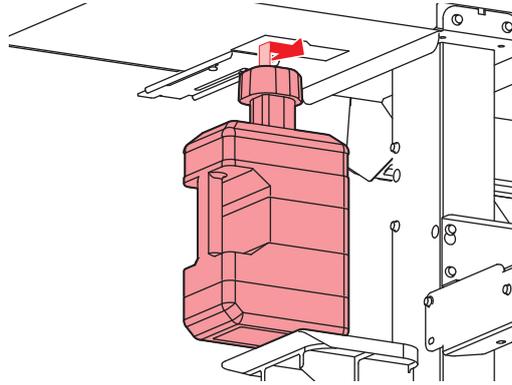
- 5** Attach the cap to the removed waste ink tank, and use tape to prevent leakage of waste ink.



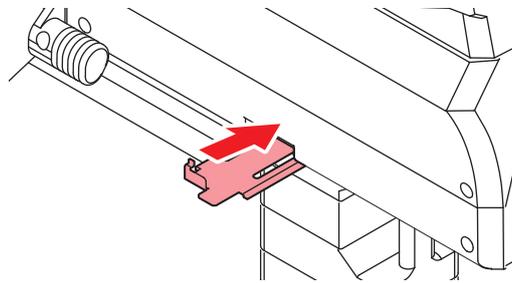


- When disposing of the product, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

6 Insert a new waste ink tank.



7 Close the waste ink tank stopper.



8 Press the [ENTER] key.

- The waste ink level will be reset.

Pinch Roller Replacement

Replace worn or dirty pinch rollers with new ones.



- The pinch rollers are small. Be careful to avoid dropping them into the product interior.

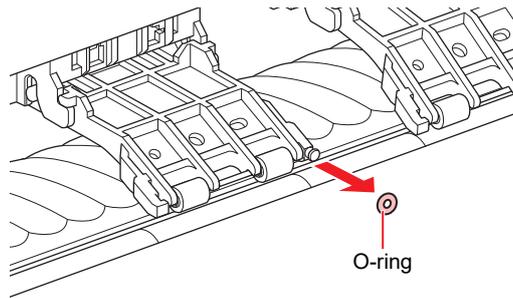


- Turn off the main power and unplug the power cable before replacing the pinch rollers.

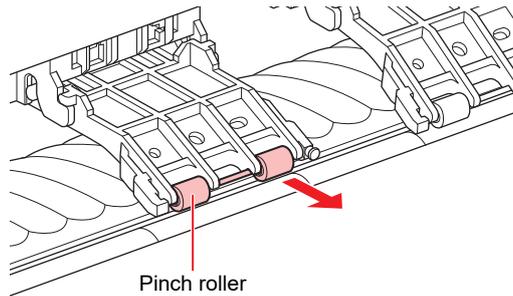
1 Open the front cover.

2 Raise the clamp lever.

3 Remove the O-ring retaining the pinch rollers.



4 Remove the pinch rollers.



5 Attach new pinch rollers, and secure them using the O-ring.

6 Close the front cover.

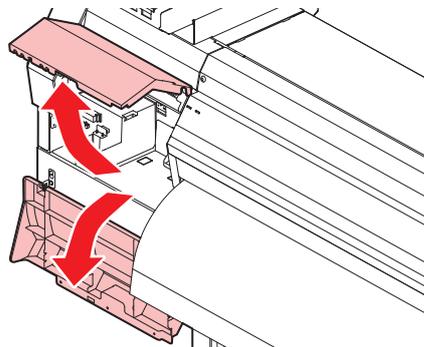
Media Holder Replacement

If the media holder becomes deformed and touches the carriage or print head, replace with a new media holder.

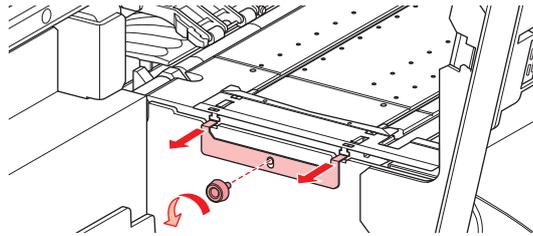


- Turn off the main power and unplug the power cable before replacing the pinch rollers.

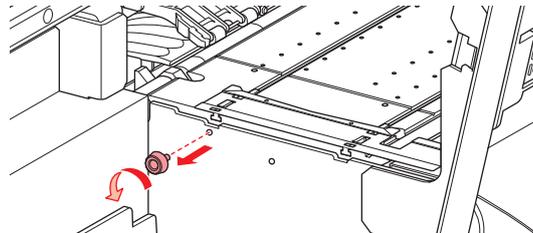
1 Open the maintenance covers.



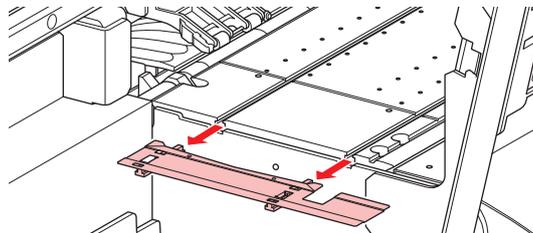
2 Remove the side screw, and detach the media holder stopper.



- If there is no media stopper, remove the screws on the illustration.

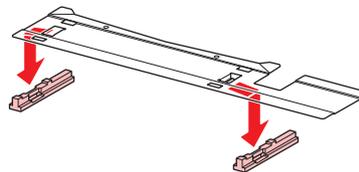


3 Remove the media holder.



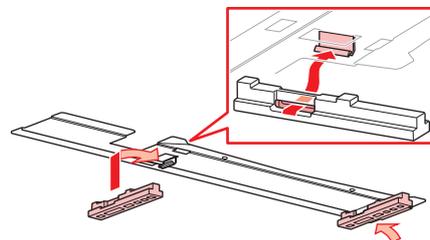
4 Remove the sliders from the media holder.

- Be careful to avoid misplacing the sliders.

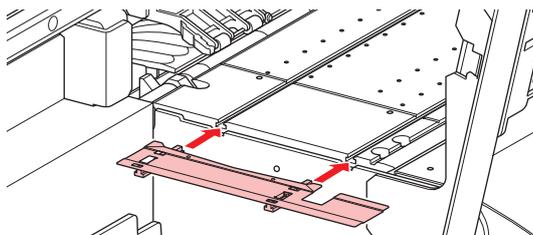


5 Attach the sliders to the new media holder.

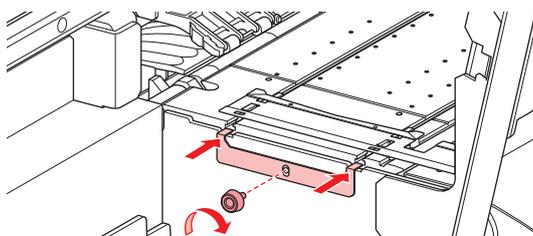
- Engage the holes in the sliders on to the lugs on the media holder.



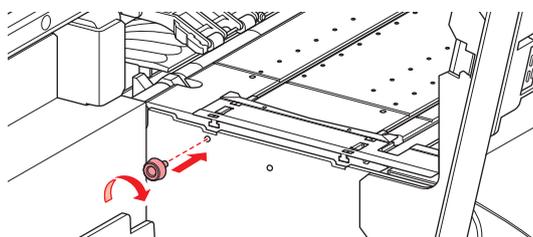
6 Insert the new media holder into the platen.



7 Attach the media holder stopper, and tighten the screw.



- If there is no media stopper, secure the screws in the screw holes on the illustration.



8 Close the maintenance covers.

Media Cutter Replacement

Replace cutters when blades are chipped or blunt.



- Do not touch the cutter blade. Disregarding this precaution may result in injury.



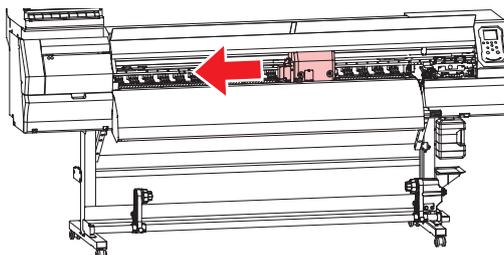
- Do not store in places accessible to children.

1 In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

2 Select [Station] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.

- The carriage moves over the platen.

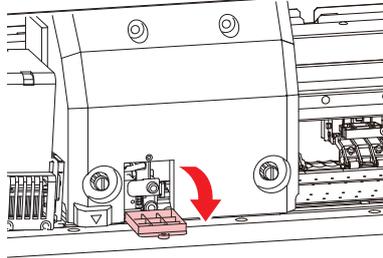


3 Open the front cover.



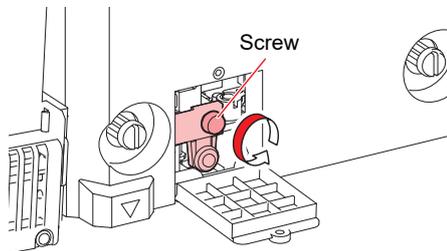
- The carriage can be moved by hand. Move the carriage slowly to a position allowing easy access for replacing the cutter.

4 Unscrew and open the carriage cover hatch.

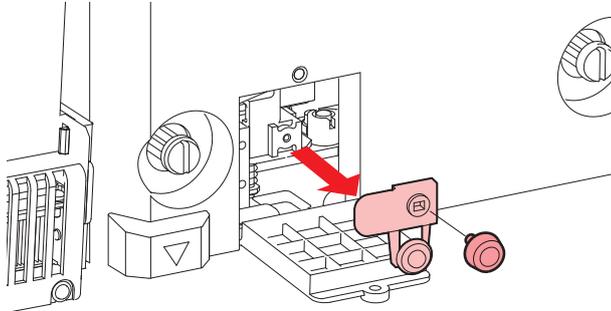


5 Replace the media cutter.

- (1) Unscrew the cutter screw.



- (2) Remove the cutter.



- (3) Attach a new cutter.
 (4) Tighten the screw to clamp the cutter.

6 Close the carriage cover hatch and tighten the screws.

7 Once replacement is complete, close the front cover, then press the [ENTER] key.

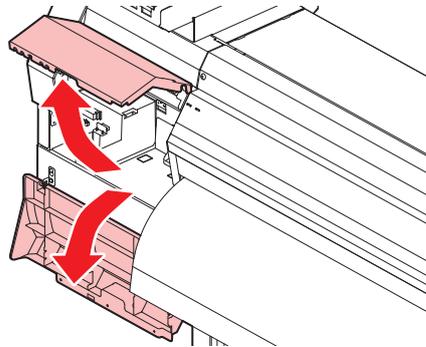


- When disposing of the product, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

LED Glass Replacement

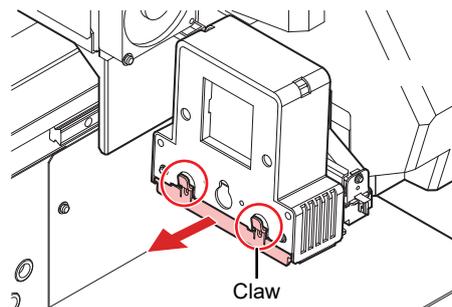
Replace with new LED glass if the ink hardens and the existing LED glass becomes dirty.

- 1** In LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- 2** Select [Station] > [Carriage Out] > [Move To Maint. Space], then press the [ENTER] key.
 - The carriage moves to the maintenance space.
- 3** Open the maintenance cover.



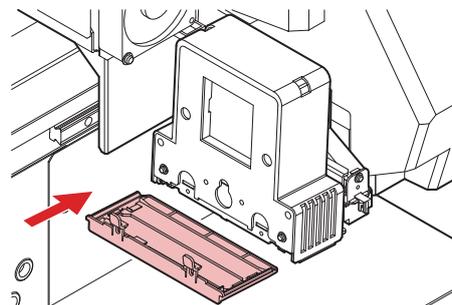
4 Remove the LED glass.

- Unclip the tabs and slide to the side to remove.
- Be careful not to apply too much force when unclipping the tabs. Disregarding this precaution may result in breakage of the tabs.



5 Insert new LED glass.

- Insert until it clicks into place. Confirm that the tabs is engaged.



6 Once replacement is complete, close the maintenance covers, then press the [ENTER] key.

Chapter 5 Dealing with Problems



This chapter

This chapter explains procedures for troubleshooting and addressing messages on the display.

| | | | |
|--|-----|---------------------------------------|-----|
| Troubleshooting..... | 116 | Problems indicated by messages..... | 119 |
| The power does not turn on. | 116 | Warning messages | 119 |
| Printing is not possible. | 116 | Ink errors (local guidance) | 121 |
| The media jams or the media is dirty. | 116 | Messages displayed on the ink IC chip | |
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5.1 Troubleshooting

For information on troubleshooting, refer to this chapter. Refer to the following URL for frequently asked questions (FAQs) about this product and customer support videos.

<https://mimaki.com/support/>

If the recommended corrective action does not resolve the problem, contact your local dealer or our service office.

The power does not turn on.

| Points to check | Corrective action |
|--|--|
| Is the machine connected to the power outlet by the power cable? | Connect the power plug securely to the power outlet.  "Connecting the Power Cable"(P. 30) |
| Are you using the power cable provided? | Use the power cable provided. |
| Is the main power supply turned on? | Turn on the main power.  "Turning On the Power"(P. 30) |
| Is the [END/POWER] key on the operating panel turned on? | Turn the power on.  "Turning On the Power"(P. 30) |

Printing is not possible.

| Points to check | Corrective action |
|--|--|
| Is a USB 2.0 interface cable connected? | Connect the cable securely to the USB 2.0 port.  "Using a USB 2.0 Interface Cable"(P. 32) |
| Is a LAN cable connected? | Connect the cable securely to the LAN port.  "Using a LAN Cable"(P. 32) |
| Are you using a LAN cable approved by Mimaki? | Check the LAN cable type.  "Network Connection Precautions"(P. 33) |
| Is the status lamp on the operating panel illuminated or flashing red? | An error has occurred. Check the message on the display.  "Operating panel"(P. 26) |

The media jams or the media is dirty.

| Points to check | Corrective action |
|--|--|
| Are you using the recommended media? | Make sure you are using the recommended media. https://mimaki.com/supply/inkjet.html |
| Are you using curled media? | Do not use curled media or media with folded ends.  "Loading the Media"(P. 53) |
| Is the media skewed? | Use the take-up unit to adjust the media or reload the media.  "Loading the Media"(P. 53) |
| Does the media have ripples/surface irregularities or lift up? | If you are using roll media, use a smooth section of the media for initial feeding.  "Loading the Media"(P. 53) |

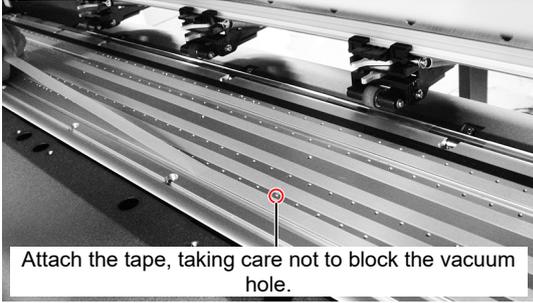
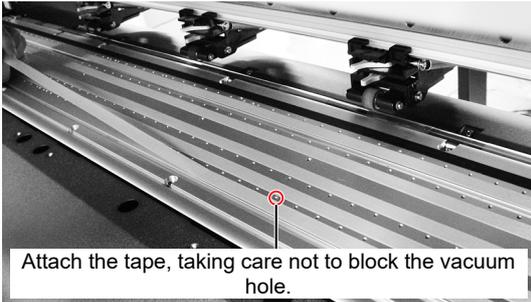
| Points to check | Corrective action |
|-----------------|--|
| | <p>You can also improve this problem by attaching the NITOFロン® tape provided on the platen.</p>  <p>Attach the tape, taking care not to block the vacuum hole.</p> <p>For more information, refer to the description on transporting media on the platen. https://mimaki.com/download/inkjet.html</p> |

Image defects occur.

| Symptom | Corrective action |
|---|---|
| <p>White streaks, blurriness, and dark streaks occur. (Carriage scan direction)</p> | <ol style="list-style-type: none"> 1. Remove any paper scraps or other debris adhering to areas over which the head passes (e.g., media holders). ☞ "Media Holder Cleaning"(P. 99) ☞ "Platen Cleaning"(P. 99) 2. Perform the procedure described in ☞ "Head Cleaning"(P. 61). 3. Perform the procedure described in ☞ "Feed Correction"(P. 62). 4. Perform the procedure described in ☞ "Wiper Cleaning"(P. 91). 5. Perform the procedure described in ☞ "Cap Cleaning"(P. 92). 6. Perform the procedure described in ☞ "Carriage Underside Cleaning"(P. 94). |
| <p>Text is double- or triple-printed in the media feed direction.</p> | <ol style="list-style-type: none"> 1. Perform the procedure described in ☞ "Feed Correction"(P. 62). |
| <p>Offsetting occurs during bidirectional printing.</p> | <ol style="list-style-type: none"> 1. Perform the procedure described in ☞ "Correcting the Drop Position"(P. 64). |
| <p>Ink droplets drip during printing.</p> | <ol style="list-style-type: none"> 1. Perform the procedure described in ☞ "Wiper Cleaning"(P. 91). 2. Perform the procedure described in ☞ "Cap Cleaning"(P. 92). 3. Clean around the head. ☞ "Carriage Underside Cleaning"(P. 94) 4. Perform the procedure described in ☞ "Head Cleaning"(P. 61). 5. ☞ "Maintenance Menu"(P. 75) |
| <p>Clear clogged nozzles.</p> | <ol style="list-style-type: none"> 1. Perform the procedure described in ☞ "Head Cleaning"(P. 61). 2. Perform the procedure described in ☞ "Print Head Nozzle Washing"(P. 96). 3. Perform [MENU] > [Maintenance] > [INK FILL]. 4. Perform the procedure described in ☞ "Wiper Replacement"(P. 103). 5. Perform the procedure described in ☞ "Registering nozzle recovery"(P. 76). |

| Symptom | Corrective action |
|--|--|
| Vertically uneven color | <p>You can improve this problem by attaching the NITOFLO[®] tape provided on the platen.</p>  <p>Attach the tape, taking care not to block the vacuum hole.</p> <p>For more information, refer to the description on transporting media on the platen. https://mimaki.com/download/inkjet.html</p> |
| The white image is offset in the media feed direction. | <p>1. Perform the procedure described in  "Feed Correction"(P. 62).</p> |

Ink leakage occurs.

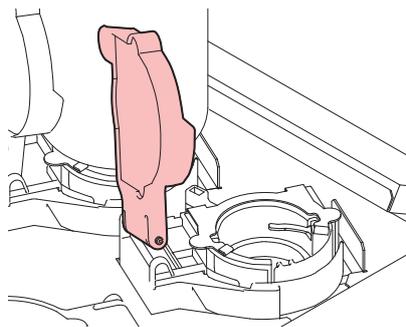


- If an ink leak occurs, turn off the main power immediately and unplug the power cable. Contact your local dealer or our service office.

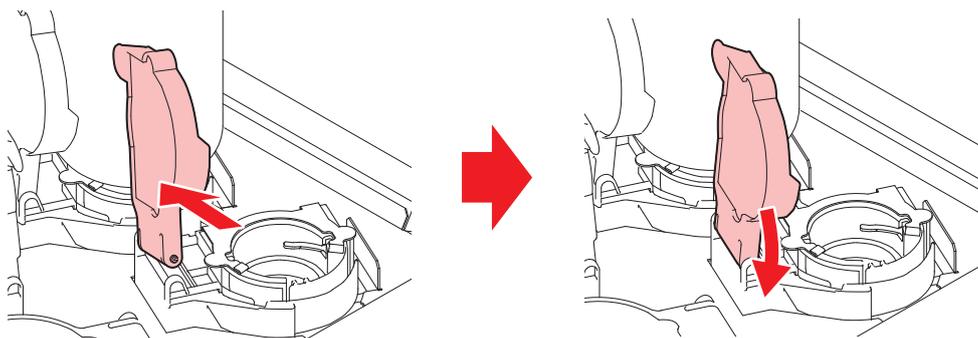
The light-blocking cover comes off.

If the light-blocking cover comes loose, the ink inside the tank may be exposed to light and begin to harden. If the light-blocking cover comes loose, reattach as follows:

- 1 Insert the lug on one side of the light-blocking cover into the corresponding hole in the tank.



- 2 Insert the lug on the other side while pushing in toward the first hole in Step 1.



5.2 Problems indicated by messages

If a problem occurs, the buzzer will sound, and a message will appear on the display. You can also use local guidance when checking.  ["Displaying Machine Information \(Local Guidance\)"\(P. 29\)](#)

Take appropriate measures based on the message. If a message is displayed again even after you take the recommended corrective action, contact your local dealer or our service office.

Warning messages

| Message | Cause | Corrective action |
|------------------------------|---|--|
| MOTOR POWER OFF | <ul style="list-style-type: none"> The motor stops due to some action causing initialization—for example, opening the cover. | <ul style="list-style-type: none"> Wait until the initialization operation is complete. |
| Replace NCU Ink Pad | <ul style="list-style-type: none"> The ink absorber needs to be replaced. | <ul style="list-style-type: none"> The NCU ink absorber must be replaced. Contact your local distributor, our sales office, or service center. |
| Replace NCU | <ul style="list-style-type: none"> A problem was detected with the nozzle clogging assessment. | <ul style="list-style-type: none"> The NCU must be replaced. Contact your local distributor, our sales office, or service center. |
| NCU Sensor Lv Low | <ul style="list-style-type: none"> The sensor's sensitivity is impaired. | <ul style="list-style-type: none"> Clean the NCU.  "NCU Cleaning"(P. 93) |
| NCU Sens Adj Err H | <ul style="list-style-type: none"> Sensor sensitivity adjustment failed. | <ul style="list-style-type: none"> Replace the NCU if the error does not clear. Contact your local distributor, our sales office, or service center. |
| NCU Sens Adj Err L | | |
| NCU CONNECT | <ul style="list-style-type: none"> A problem was detected with the NCU connection. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while.  "Turning Off the Power"(P. 31) |
| Ink IC is not registered | <ul style="list-style-type: none"> The ink IC chip is not registered. The registered remaining ink level indicates the ink has run out. | <ul style="list-style-type: none"> Replace with new ink.  "When Ink End is Displayed"(P. 39) |
| Ink End M _ _ _ _ _ | <ul style="list-style-type: none"> The ink has run out. | <ul style="list-style-type: none"> Replace with new ink.  "When Ink End is Displayed"(P. 39) |
| Ink Near End M _ _ _ _ _ | <ul style="list-style-type: none"> Ink levels are low. | <ul style="list-style-type: none"> The ink will run out soon. Have new ink ready. |
| Ink Error | <ul style="list-style-type: none"> An ink error occurred. | <ul style="list-style-type: none"> Check the ink error details. Ink errors (local guidance) |
| COVER OPEN | <ul style="list-style-type: none"> The cover is open. | <ul style="list-style-type: none"> Close the cover. |
| Lower the clamp lever | <ul style="list-style-type: none"> The clamp lever is raised. | <ul style="list-style-type: none"> Lower the clamp lever.  "Front"(P. 20) |
| Data Remain | <ul style="list-style-type: none"> Print (RIP) data was received. | <ul style="list-style-type: none"> Switch to REMOTE mode and start printing or clear the data and abort printing. |
| Temporary Suspension | <ul style="list-style-type: none"> Printing has been paused. | <ul style="list-style-type: none"> Switch to REMOTE mode and resume printing or clear the data and abort printing. |
| Printing not possible/ink IC | <ul style="list-style-type: none"> An unusable ink IC chip is used. | <ul style="list-style-type: none"> Replace with new ink and a new ink IC chip. |

| Message | Cause | Corrective action |
|----------------------------|--|---|
| Shake the white ink bottle | <ul style="list-style-type: none"> White ink is more easily sedimented than other ink colors. The message is displayed every 24 hours. | <ul style="list-style-type: none"> Remove and shake the Ink bottle. "Ink Maintenance"(P. 90) |
| NO MEDIA | <ul style="list-style-type: none"> No media is loaded, or the sensors are faulty. | <ul style="list-style-type: none"> Load the media. "Loading the Media"(P. 53) Clean the media sensor. "Media Sensor Cleaning"(P. 97) |
| Please load media. | <ul style="list-style-type: none"> No media is loaded, or the sensors are faulty. | <ul style="list-style-type: none"> Load the media. "Loading the Media"(P. 53) |
| No media detected | <ul style="list-style-type: none"> The media width has not been detected. | <ul style="list-style-type: none"> Detect the media width. "Loading the Media"(P. 53) |
| Replace Wiper | <ul style="list-style-type: none"> The wiping count exceeded the preset value. | <ul style="list-style-type: none"> Replace the wiper, then reset the count. "Wiper Replacement"(P. 103) |
| Wiper Move Failure | <ul style="list-style-type: none"> The wiper is not operating correctly. | <ol style="list-style-type: none"> Clean the wiper and around the wiper. "Wiper Cleaning"(P. 91) Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| Replace Waste ink tank | <ul style="list-style-type: none"> The waste ink tank count exceeded the preset value (90%). | <p>Automatic maintenance is not possible while the covers are open. Perform the following steps:</p> <ol style="list-style-type: none"> Check the waste ink levels in the waste ink tank. "When "Check Waste Ink Tank" message appears"(P. 107) Replace the waste ink tank, then reset the waste ink level. "Replace the waste ink tank."(P. 108) |
| Check Waste Ink Tank | <ul style="list-style-type: none"> The waste ink tank count exceeded the preset value (80%). | <ol style="list-style-type: none"> Check the waste ink levels in the waste ink tank. "When "Check Waste Ink Tank" message appears"(P. 107) Replace the waste ink tank, then reset the waste ink level. "Replace the waste ink tank."(P. 108) |
| High ambient temp. ** ° C | <ul style="list-style-type: none"> Ambient temperatures are too high. | <ul style="list-style-type: none"> Adjust ambient temperatures to temperatures within the specified range. Optimum print quality may not be possible unless ambient conditions are within the specified range. Specifications |
| Low ambient temp. ** ° C | <ul style="list-style-type: none"> Ambient temperatures are too low. | |
| Auto-correction failed | <ul style="list-style-type: none"> White media is not used. The media is dirty. The media lifts up. There is dirt around the sensor. | <ul style="list-style-type: none"> Load white and clean media. Load media so it does not lift up. Clean the area around the sensor. "Automatic Correction Sensor (DAS) Cleaning"(P. 98) If automatic correction fails repeatedly, correct the position manually. [MENU] > [SETUP] > [Feed Comp.] or [Drop.PosCorrect] |

Ink errors (local guidance)

| Message | Cause | Corrective action |
|-------------------|--|---|
| Ink end | <ul style="list-style-type: none"> The ink has run out. | <ul style="list-style-type: none"> Replace with new ink. 🗨️ "When Ink End is Displayed"(P. 39) |
| INK NEAR END | <ul style="list-style-type: none"> Ink levels are low. | <ul style="list-style-type: none"> The ink will run out soon. Have new ink ready. |
| Wrong Ink IC | <ul style="list-style-type: none"> An error occurred with the information on the ink IC chip. | <ol style="list-style-type: none"> Check to confirm the ink IC chip was inserted correctly. Insert Ink IC Chip Turn off the power on the machine and turn it on after a while. 🗨️ "Turning Off the Power"(P. 31) Replace with new ink. 🗨️ "When Ink End is Displayed"(P. 39) |
| Ink Color | <ul style="list-style-type: none"> A different ink color is registered on the ink IC chip. | <ul style="list-style-type: none"> Insert an ink IC chip for the correct ink color. Insert Ink IC Chip |
| Ink Type | <ul style="list-style-type: none"> A different ink type is registered on the ink IC chip. | <ul style="list-style-type: none"> Insert an ink IC chip for the correct ink type. Insert Ink IC Chip |
| Expiration | <ul style="list-style-type: none"> The ink has expired. | <ul style="list-style-type: none"> Replace with new ink or use up as quickly as possible. Printing is possible. 🗨️ "When Ink End is Displayed"(P. 39) |
| Expiration:1MONTH | <ul style="list-style-type: none"> The ink is one month past its expiration date and cannot be used. | <ul style="list-style-type: none"> Replace with new ink or use up as quickly as possible. Printing is possible. 🗨️ "When Ink End is Displayed"(P. 39) |
| Expiration:2MONTH | <ul style="list-style-type: none"> The ink is two months past its expiration date and cannot be used. | <ul style="list-style-type: none"> Replace with new ink. Printing is not possible. 🗨️ "When Ink End is Displayed"(P. 39) |

Messages displayed on the ink IC chip registration screen

| Message | Cause | Corrective action |
|--|--|---|
| Color: Magenta Expiration: 2021/01/01 Caution: XX days until expiration | <ul style="list-style-type: none"> The ink expiration date is approaching. | <ul style="list-style-type: none"> Use the ink before the expiration period. |
| Registered IC chip | <ul style="list-style-type: none"> The ink IC chip inserted is already registered. | <ul style="list-style-type: none"> Replace with a new ink IC chip. Insert Ink IC Chip |
| Unable to register. The registration limit was exceeded. | <ul style="list-style-type: none"> More than one was registered for each slot. | <ul style="list-style-type: none"> Use up the equivalent of one bottle before registering. |
| Unable to register. XXXXXXX (Error name) | <ul style="list-style-type: none"> The ink IC chip could not be registered due to an error. | <ul style="list-style-type: none"> Insert the correct ink IC chip. Insert Ink IC Chip |
| Ink Expiration Over | <ul style="list-style-type: none"> The ink is two months past its expiration date and cannot be used. | <ul style="list-style-type: none"> Replace with new ink. Printing is not possible. 🗨️ "When Ink End is Displayed"(P. 39) |
| Ink Type | <ul style="list-style-type: none"> A different ink type is registered on the ink IC chip. | <ul style="list-style-type: none"> Insert an ink IC chip for the correct ink type. Insert Ink IC Chip |

| Message | Cause | Corrective action |
|--------------------|--|--|
| Ink Color | <ul style="list-style-type: none"> A different ink color is registered on the ink IC chip. | <ul style="list-style-type: none"> Insert an ink IC chip for the correct ink color. Insert Ink IC Chip |
| Wrong Ink IC | <ul style="list-style-type: none"> An error occurred with the information on the ink IC chip. | <ol style="list-style-type: none"> Check to confirm the ink IC chip was inserted correctly. Insert Ink IC Chip Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31) Replace with new ink. "When Ink End is Displayed"(P. 39) |
| Replace Ink Bottle | <ul style="list-style-type: none"> The ink IC chip was registered when an ink end or ink near-end error occurred. | <ul style="list-style-type: none"> Mount a new ink bottle and register the ink IC chip. |

Error messages

| Error number | Message | Cause | Corrective action |
|--------------|-------------------|--|---|
| 04 | PARAM ROM | <ul style="list-style-type: none"> A problem was detected with the main PCB. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 108 | HD THERMIS [1234] | <ul style="list-style-type: none"> A problem was detected with print head temperature control. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 108 | HD CONNECT [1234] | <ul style="list-style-type: none"> A problem was detected with the print head connection. | |
| 122 | CHECK:SDRAM | <ul style="list-style-type: none"> A problem was detected with the SDRAM. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 128 | HDC FIFO OVER | <ul style="list-style-type: none"> A problem was detected with the print head control PCB. | |
| 128 | HDC FIFO UNDER | | |
| 129 | Battery Exchange | <ul style="list-style-type: none"> The internal clock battery is spent and must be replaced. | <ul style="list-style-type: none"> Contact your local distributor, our sales office, or service center. |
| 12a | HDC SPEED | <ul style="list-style-type: none"> A problem was detected with the print head control. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 130 | HD DATA SEQ | | |
| 148 | E-LOG SEQ | <ul style="list-style-type: none"> A problem was detected with log control. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 151 | Main PCB V1R2 | <ul style="list-style-type: none"> A problem was detected with the main PCB power supply circuit. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 152 | Main PCB V2R5 | | |
| 153 | Main PCB V3R3 | | |
| 154 | Main PCB V05 | | |
| 157 | Main PCB VTT | | |
| 158 | Main PCB V36-2 | | |

| Error number | Message | Cause | Corrective action |
|--------------|--------------------|--|--|
| 15f | HEAD DRIVE HOT | <ul style="list-style-type: none"> The COM drive has overheated. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 16e | Main PCB V3R3B | <ul style="list-style-type: none"> A problem was detected with the main PCB power supply circuit. | |
| 171 | NEW HEAD CONNECT | <ul style="list-style-type: none"> A new print head connection was detected. | |
| 18a | Main PCB V_CORE | <ul style="list-style-type: none"> A problem was detected with the main PCB power supply. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 18b | Main PCB V1R5B | | |
| 18c | Main PCB V12 | | |
| 18e | FLS NOT COMP | <ul style="list-style-type: none"> A problem was detected with the print head control. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 18f | OFSET START | | |
| 18f | OFSET END | | |
| 19f | LED CONNECT | <ul style="list-style-type: none"> The UV-LED PCB could not be detected. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 1d9 | Main PCB V48-1 | <ul style="list-style-type: none"> A problem was detected with the main PCB power supply. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 1e6 | PRAM Size Shortage | <ul style="list-style-type: none"> Insufficient memory | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 201 | Command Error | <ul style="list-style-type: none"> Data other than print (RIP) data was received, or a problem was detected with the print (RIP) data received. | <ol style="list-style-type: none"> Clear the data and resend. Check the USB cable connection. "Using a USB 2.0 Interface Cable"(P. 32) Use a compliant USB cable. "USB 2.0 Interface Precautions"(P. 32) Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 202 | Parameter Error | | |
| 206 | Printing Mode | <ul style="list-style-type: none"> Print (RIP) data was received with print parameters that do not allow printing. | <ul style="list-style-type: none"> Change the output parameters and profile using RIP software. |
| 20A | Driver version | <ul style="list-style-type: none"> Printing is not possible because the Mimaki driver version is old. | <ul style="list-style-type: none"> Install the latest Mimaki driver available from: https://mimaki.com/download/inkjet.html |
| 304 | USB INIT ERR | <ul style="list-style-type: none"> A problem was detected with the USB cable connection. | <ol style="list-style-type: none"> Check the USB cable connection. "Using a USB 2.0 Interface Cable"(P. 32) Use a compliant USB cable. "USB 2.0 Interface Precautions"(P. 32) Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 305 | USB TIME OUT | | |

| Error number | Message | Cause | Corrective action |
|--------------|------------------------|--|---|
| 307 | MCFD File IF Error | <ul style="list-style-type: none"> A problem was detected while accessing print parameter data. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 401 | Motor X | <ul style="list-style-type: none"> The X motor was overloaded. | <ol style="list-style-type: none"> Check to confirm the media is loaded correctly. "Loading the Media"(P. 53) Open the front cover and check for anything that may obstruct carriage movement. Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 402 | Motor Y | <ul style="list-style-type: none"> The Y motor was overloaded. | |
| 403 | X Current | <ul style="list-style-type: none"> An overcurrent was detected in the X motor. | |
| 404 | Y Current | <ul style="list-style-type: none"> An overcurrent was detected in the Y motor. | |
| 44e | UV Unit Fan Error | <ul style="list-style-type: none"> A problem was detected with the UV-LED unit fan. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 44f | Take-up Roll Sns Err | <ul style="list-style-type: none"> A problem was detected with the take-up unit sensor spindle. | <ol style="list-style-type: none"> Check to confirm the [Machine Setup] > [Feeding/Take-up] > [Take-up Unit] setting is "ON". Check to confirm the media is loaded correctly. "Loading the Roll Media"(P. 53) Check to confirm the take-up unit switch functions properly. "Take-up Unit"(P. 24) |
| 48a | Detect winding failure | <ul style="list-style-type: none"> The take-up unit is unable to take up media. | <ul style="list-style-type: none"> Check to confirm the media is loaded correctly. "Loading the Roll Media"(P. 53) |
| 504 | CLAMP UP | <ul style="list-style-type: none"> The clamp lever is lifted. | <ul style="list-style-type: none"> Lower the clamp lever. |
| 505 | Media Jam | <ul style="list-style-type: none"> The media jam sensor was triggered. | <ol style="list-style-type: none"> Remove the media in contact with the carriage and reload with fresh media. "Loading the Media"(P. 53) Open the front cover and check for anything that may obstruct carriage movement. |
| 509 | HDC POSCNT | <ul style="list-style-type: none"> A problem was detected with position control. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 50a | Y Org Detect Error | <ul style="list-style-type: none"> A problem was detected with Y origin detection (initialization). | |
| 50c | Media Width Sensor | <ul style="list-style-type: none"> A problem was detected with media width detection. | <ol style="list-style-type: none"> Check the media loading position. "Loading the Media"(P. 53) Clean the media width sensor. "Media Sensor Cleaning"(P. 97) |
| 50f | L-SCALE BLACK | <ul style="list-style-type: none"> A problem was detected with the linear scale. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. "Turning Off the Power"(P. 31) |
| 516 | Media Set Position R | <ul style="list-style-type: none"> The media was loaded outside the range of valid positions. | <ol style="list-style-type: none"> Check the media loading position. "Loading the Media"(P. 53) Clean the media width sensor. "Media Sensor Cleaning"(P. 97) |

| Error number | Message | Cause | Corrective action |
|--------------|---------------------|---|---|
| 525 | Wrong Ionizer | <ul style="list-style-type: none"> The ionizer internal circuit is defective, or an abnormal discharge occurred. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🧠 "Turning Off the Power"(P. 31) |
| 526 | Ionizer Ion Level | <ul style="list-style-type: none"> The amount of generated ions was reduced by fouling and abrasion of the electrode needle. | <ul style="list-style-type: none"> Refer to the instruction manual for the ionizer and clean the electrodes. |
| 527 | Ionizer Condition | <ul style="list-style-type: none"> Ambient conditions may cause ions to be absorbed by metals in the vicinity and affect discharge capability. | <ul style="list-style-type: none"> Remove any conductors or discharge devices close to the ionizer. |
| 528 | Pump Motor Sensor | <ul style="list-style-type: none"> A problem was detected with the pump motor. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🧠 "Turning Off the Power"(P. 31) |
| 549 | LEnc. Count DIO | <ul style="list-style-type: none"> A problem was detected with the linear scale wiring to the DIO PCB. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🧠 "Turning Off the Power"(P. 31) |
| 608 | Wrong Ink IC | <ul style="list-style-type: none"> An error occurred with the information on the ink IC chip. | <ol style="list-style-type: none"> Check to confirm the ink IC chip was inserted correctly. Turn off the power on the machine and turn it on after a while. 🧠 "Turning Off the Power"(P. 31) Replace with new ink. |
| 64C | NCU Error | <ul style="list-style-type: none"> The function is disabled due to an error. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🧠 "Turning Off the Power"(P. 31) |
| 650 | NCU CONNECT | <ul style="list-style-type: none"> A problem was detected with the NCU connection. | |
| 651 | Replace NCU | <ul style="list-style-type: none"> A problem was detected with the nozzle clogging assessment. | <ul style="list-style-type: none"> The NCU must be replaced. Contact your local distributor, our sales office, or service center. |
| 652 | NCU NZK CHK (HW) | <ul style="list-style-type: none"> A problem was detected with the nozzle clogging assessment. | <ul style="list-style-type: none"> Clean the NCU. 🧠 "NCU Cleaning"(P. 93) |
| 653 | NCU NZK CHK (Mark) | | |
| 654 | NCU CENTER POS | <ul style="list-style-type: none"> Printing position adjustment failed. | |
| 655 | NCU FLUSH POS | | |
| 656 | NCU SN Adjst | <ul style="list-style-type: none"> Sensor sensitivity adjustment failed. | |
| 657 | Replace NCU Ink Pad | <ul style="list-style-type: none"> The NCU ink absorber is full. | <ul style="list-style-type: none"> The NCU ink absorber must be replaced. Contact your local distributor, our sales office, or service center. |
| 658 | NCU Sensor Lv Low | <ul style="list-style-type: none"> The sensor's sensitivity is impaired. | <ul style="list-style-type: none"> Clean the NCU. 🧠 "NCU Cleaning"(P. 93) Replace the NCU if the error does not clear. Contact your local distributor, our sales office, or service center. |
| 65b | NCU Sens Adj Err H | <ul style="list-style-type: none"> Sensor sensitivity adjustment failed. | |
| 65c | NCU Sens Adj Err L | | |

| Error number | Message | Cause | Corrective action |
|--------------|-------------------|--|---|
| 715 | InkHeater Thr | <ul style="list-style-type: none"> A problem was detected with the ink heater thermistor. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |
| 716 | InkHeater Tmp | | |
| 717 | InkHeater Brk | | |
| 71a | UV-DRV Fuse | <ul style="list-style-type: none"> A UV-DRV PCB fuse blew. | |
| 901 | INVALID OPERATE | <ul style="list-style-type: none"> The function is disabled due to an error. | <ul style="list-style-type: none"> Check the error details. |
| 902 | Data Remain | <ul style="list-style-type: none"> Print (RIP) data was received. | <ul style="list-style-type: none"> Switch to REMOTE mode and start printing or clear the data and abort printing. |
| 90d | No Head Select | <ul style="list-style-type: none"> A problem was detected with the print head. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |
| 90f | Print Area Short | <ul style="list-style-type: none"> The media is too small for the print. | <ul style="list-style-type: none"> Replace with wider or longer media. If the printable area is reduced due to a shift in the origin, move the origin to increase the size of the printable area. |
| b0f | DIO PCB Uvpow | <ul style="list-style-type: none"> A problem was detected with the UV-DRV PCB power supply voltage. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |
| b1b | BaseIO PCB Vpow-s | <ul style="list-style-type: none"> A problem was detected with the Base IO PCB power supply. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |
| b1c | BaseIO PCB V24 | | |
| b1d | BaseIO PCB V24-A | | |
| b21 | SLIDER1 PCB V3R3 | <ul style="list-style-type: none"> A problem was detected with the slider PCB power supply. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31)🖱️ "Turning Off the Power"(P. 31) |
| b22 | SLIDER1 PCB V2R5 | | |
| b23 | SLIDER1 PCB V1R8 | | |
| b24 | SLIDER1 PCB V1R2 | | |
| d09 | HD MEMORY [1234] | <ul style="list-style-type: none"> A problem was detected with head internal memory. | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |

SYSTEM HALT

| Error number | Message | Corrective action |
|--------------|-----------|---|
| 000 | Message | <ul style="list-style-type: none"> Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |
| 406 | WIPER ORG | <ol style="list-style-type: none"> Clean the wiper and around the wiper. 🖱️ "Wiper Cleaning"(P. 91) Turn off the power on the machine and turn it on after a while. 🖱️ "Turning Off the Power"(P. 31) |

Chapter 6 Appendix



This chapter

This chapter explains the specifications of this machine.

6.1 Specifications

| Item | | Details |
|---------------------------------|--------------------------------------|--|
| Print head | Type | Drop-on-demand piezoelectric print heads |
| | Specifications | Two staggered heads with 420 nozzles × 4 rows each |
| | Resolution | Y: 360 dpi, 720 dpi, 1,200 dpi X: 900 dpi, 1,200 dpi |
| Ink set | 4-color | C, M, Y, K |
| | 4-color, W | C, M, Y, K, W |
| | 4-color, W, CL | C, M, Y, K, W, CL |
| Media | Type | Label paper (paper base), PVC sheet (not more than 0.25 mm in thickness, including laminating layer), fluorescent sheet, reflective sheet (excluding high-luminosity reflective sheet) |
| | Maximum printing width ^{*1} | 1,610 mm |
| | Maximum width | 1,620 mm |
| | Minimum width | 210 mm |
| | Thickness | Max. 1.0 mm |
| | Roll external diameter ^{*2} | Max. 250 mm (paper media), max. 210 mm (other media) |
| | Roll weight ^{*2, *3} | Max. 45 kg |
| | Core internal diameter ^{*4} | 2 inches or 3 inches |
| | Printing face | Exterior/interior |
| Print margins | Left/right | 15.0 mm (default), minimum: Left/right 5 mm |
| | Top end | 120 mm |
| | Bottom end | 150 mm |
| Distance accuracy ^{*5} | Absolute accuracy | ±0.3 mm or ±0.3 % of specified distance, whichever is greater |
| | Duplicability | ±0.2 mm or ±0.1 % of specified distance, whichever is greater |
| Perpendicularity | | ±0.5 mm/1,000 mm |
| Media skew | | Not more than 5 mm/10 m |
| Printing gap | | Manual, two settings (2.0, 2.5 mm) |
| Media cutting | | Cutting precision (steps): Not more than 0.5 mm |
| Origin alignment | | LED pointer |
| Ink supply | | Ink bottle |
| Washing liquid feed | | N/A |
| Waste ink tank | | Bottle type (2,000 ml) |
| Take-up units | | Selectable inside/outside winding |
| Media heater | | N/A |
| NCU (Nozzle clogging detection) | | Provided |
| UV unit | | Air-cooled LED UV emitters x2 |

| Item | | Details |
|---|---|--|
| Image buffer | | SD-RAM: 1 GB |
| Interface | Data transfer function | USB 2.0 Hi-speed, Ethernet 1000BASE-T |
| | Email function | Ethernet 10BASE-T/100BASE-TX/1000BASE-T |
| Commands | | MRL-V |
| Languages | | English, Japanese, Chinese |
| Noise levels | At standby | Not more than 58 dB (FAST-A, 1 m on all sides) |
| | Continuous operation | Not more than 65 dB |
| | Non-continuous operation | Not more than 75 dB |
| Compliance with standards | | VCCI Class A, FCC Class A, IEC 62368-1 ETL compliance, CE marking (EMC Directive, Low Voltage Directive, Machinery Directive), CB certified, RoHS, REACH, EnergyStar, EAC marking, RCM marking |
| Power supply specifications ^{*6} | | Single-phase 100 to 120 V AC $\pm 10\%$ /12 A, single-phase 200 to 240 V AC $\pm 10\%$ /8 A, 50/60 Hz ± 1 Hz |
| Power consumption | Normal | Max. 500 W [*] May vary depending on print mode |
| | Max. | ---- W (100 to 120 V AC), ---- W (200 to 240 V AC) |
| | Min. | Not more than 4.5 W [*] In sleep |
| Installation environment ^{*7} | Permissible ambient temperature | 20 to 30 °C |
| | Relative humidity | 35 to 65 %RH (no condensation) |
| | Temperature range in which accuracy is guaranteed | 20 to 25°C |
| | Temperature gradient | Not more than ± 10 °C/h |
| | Dust | 0.15 mg/m ³ (typical office) |
| | Maximum operating altitude | 2,000 m |
| External dimensions ^{*8} | Width | 2,775 mm (2,912 mm) |
| | Depth | 700 mm (750 mm) |
| | Height ^{*Excluding ink bottle} | 1,475 mm (1,041 mm) |
| Weight ^{*8} | | 167 kg (214 kg) |

*1. Setup menu margins set to the minimum (5 mm) on either side

*2. External diameter and weight after winding media

*3. Free of sagging due to weight

*4. 3 inch only for high-speed printing

*5. Excluding media size variation and fluctuations at initial loading

*6. Excluding options

*7. Ink printing consistency will decrease in conditions outside this range.

*8. The figures in parentheses indicate package dimensions.

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MEMO

Operation manual

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MIMAKI ENGINEERING CO.,LTD.

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

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