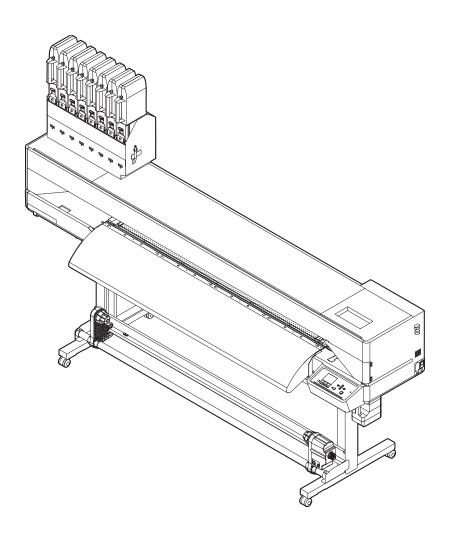
INKJET PRINTER

TS200-1600

Operation Manual



You can also download the latest manual from official website.

MIMAKI ENGINEERING CO., LTD.

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Introduction

Thank you for purchasing the Inkjet printer TS200-1600.

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 REJECTS ALL LIABILITY FOR DAMAGE ARISING DIRECTLY OR INDIRECTLY FROM THE USE OF THE TS200-1600 ("THIS MACHINE" HEREINAFTER), WHETHER OR NOT THE PRODUCT IS FAULTY.
- MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGE, DIRECT OR INDIRECT, TO MATERIALS CREATED WHILE USING THIS MACHINE.
- USING THIS MACHINE 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 DAMAGE, DIRECT OR INDIRECT, ARISING FROM SUCH INCIDENTS.
- USE ONLY GENUINE MIMAKI ENGINEERING INK AND MAINTENANCE LIQUID. 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 DAMAGE, DIRECT OR INDIRECT, ARISING FROM SUCH INCIDENTS.
- DO NOT ATTEMPT TO REFILL THE INK PACKS WITH UNAUTHORIZED INK. SUCH INCIDENTS ARE NOT COVERED BY THE PRODUCT WARRANTY. MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGE, DIRECT OR INDIRECT, ARISING FROM SUCH INCIDENTS.

TV and radio interference



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

If radio or TV interference occurs, check the radio or TV reception after turning off the machine. If the interference disappears when the power is turned off, the machine 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 machine.
- Plug the TV or radio into a power outlet on a power circuit other than the power circuit to which this
 machine is connected.

• FCC (Federal Communications Commission) regulations

The machine 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.

Introduction

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 the machine.
 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.

To Ensure Safe Use

Symbol Marks

This document uses symbol marks to explain precautions when operating the machine. Make sure you fully understand the meaning of each mark to ensure safe and correct use of the machine.

	Explanation			
Warning Indicates a potential hazard that may result in death or seriou if handled improperly or if instructions are disregarded.				
Caution Indicates a potential hazard that may result in minor or mode injury if handled improperly or if instructions are disregarded.				
NOTICE	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 drawn inside the symbol.		Indicates something that requires attention. Warning specifics are drawn inside the symbol.		
0	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 prohate drawn inside the symbol.		Indicates a prohibited action. The specifics of the prohibited action are drawn inside the symbol.		
(Important!)	Important	Indicates important information related to use of this machine.		
	Tip	Indicates useful reference information.		
	Reference information	Indicates the corresponding page for related information.		

Usage Precautions

In the event of abnormal conditions

MARNING



 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 machine 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 machine yourself, which is hazardous.

CAUTION



- Immediately wipe off any ink, maintenance liquid, waste ink, or other liquid used with the
 product that comes into contact with your skin. Then wash using soap, and rinse with plenty of
 water. Failure to wash off ink may result in skin inflammation. If your skin becomes irritated or
 painful, seek medical attention immediately.
- If ink, maintenance 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 also rinse the undersides of your eyelids. Failure to rinse
 off ink may result in blindness or impaired vision. If your eyes become irritated or painful, seek
 medical attention immediately.
- If ink, maintenance 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. Then, contact your local dealer or our service office.

Power supply precautions

↑ WARNING



- Use the power cable provided. Otherwise there is a risk of failure, electric shock, or fire. The
 power cable provided is exclusive for the machine, and must not be used for other electrical
 equipment.
- Always hold the plug when removing the power cable. Pulling out the power cable may damage the cable, leading to failure, electric shock, or fire.
- Do not use the machine with dust accumulated on the power plug. Otherwise there is a risk of failure, electric shock, or fire.
- Take care to prevent metals from touching the power plug blades. Otherwise there is a risk of failure, electric shock, or fire.
- Do not damage or modify the power cable. Do not place heavy objects on, heat or stretch it. Doing so may damage the cable, leading to electric shock or fire.
- Do not use extension cords or power strips. Otherwise there is a risk of failure, electric shock, or fire.
- Do not use the power cable if it is damaged or broken or if the core wire is exposed. Otherwise there is a risk of failure, electric shock, or fire.
- Do not handle the power plug with wet hands. Disregarding this precaution may result in electric shock.

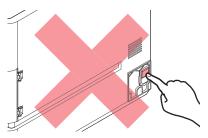


- Plug the power cable plug into a grounded power outlet. Otherwise there is a risk of failure, electric shock, or fire.
- When installing electrical outlets, perform grounding work to prevent electric shock. All electrical work (Class C grounding work; formerly Type 3 grounding work) must be handled by a licensed electrician.

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). This increases the risk of ejection failures (such as nozzle
clogging or deflection).





- Use the machine with a power supply that meets specifications.
- Be sure to plug the power cable into a power outlet close to the machine. 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 will cause the breaker to trip.

Caution regarding moving parts

CAUTION



 Keep parts of the body such as the face and hands away from moving parts. Also keep 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. Failure to do so may result in injury.

Do not disassemble or repair

WARNING



Do not attempt to disassemble or repair this machine. Otherwise there is a risk of failure, electric shock, or fire.

Handling the cutter

♠ CAUTION



- · Avoid touching the cutter blade. Failure to do so may result in injury.
- Do not shake or swing the cutter holder. Doing so may cause the blade to come off.

Other usage precautions

WARNING



· Keep children away from the machine.

NOTICE



• Do not pull the media when the clamp lever is lowered (the media is clamped). Doing so may damage the machine.



 The underside of the media may be soiled depending on how the printed media has been stored (due to weight when laying printed media rolls horizontally, for example) and the media type.
 Perform a test beforehand to check that the media does not transfer ink to the underside of the adjacent media.

Disposing of the product

⚠ CAUTION



- · Please contact your local retailer or service agent.
- When disposing of the product yourself, contact an industrial waste disposal operator or dispose
 of the product in accordance with local laws and regulations.

Notes on Handling Ink or any Other Liquid Used with the Machine

Precautions regarding ink, maintenance liquid, or other liquids used with this machine are included with the containers. Thoroughly read them and make sure you understand the contents.



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

♠ CAUTION



Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when
handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking
ink may adhere to the skin or get into the eyes or mouth.





• Do not subject cases containing ink to strong shock 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 cases containing ink. Leaking ink may adhere to the skin or get into your eyes or mouth.



 Do not store ink, maintenance liquid, or other liquids used with the machine in locations where children may enter.



When disposing of ink, maintenance liquid or other liquid used with the product, or containers or non-woven fabric contaminated with ink or other liquid, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

NOTICE



- Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight.
- Do not store ink, maintenance liquid, or other liquids used with the machine in environments
 where cutting fluid or other volatile substances (such as amines or modified amine alcohol) are
 present in significant quantities. Storage in such places increases the risk of failure or ejection
 failures (e.g., nozzle clogging or deflection).
- Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure.



- Be sure to store them in a low place no higher than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall.
- · Store in tightly sealed containers.
- Store in a cool, dark place.
 - (1) Store ink in a place where ink does not freeze. Using defrosted ink may deteriorate ink constituents and reduce print quality.
 - (2) When ink is moved from a cold place to a warm place, leave it in the environment where the machine is installed for at least three hours before using it.
 - (3) Open the container just before installing it, and use it up as quickly as possible. If it is opened and left for an extended period of time, print quality may be reduced.



• Do not touch the metal parts of the ink IC chip. Static electricity may damage the ink IC chip, and dirt or damage may cause the ink IC chip read error.



• Printing is disabled if a different ink IC chip is used.

Ink Specifications

Item		Details		
Туре		Special sublimation transfer ink (Mimaki Engineering product)		
Color*1		Magenta (M) Blue (B) Yellow (Y) Black (K) Violet (Vi) Orange (Or) Fluorescent yellow (Fy) Fluorescent pink (Fp)		
Form		Aluminum pack		
Ink capacity*1		2L(MBIS)		
Expiration date		As indicated on the ink bottle However, after opening, it should be consumed within three months, even if before the expiration date.		
Storage When stored e		10 to 35 °C (daily mean temperature) • However, not more than 1 month at 30 °C • Ink quality may deteriorate if stored outside these conditions.		
	During transportati on	 1 to 40 °C However, not more than 120 hours at 60 °C, and not more than 1 month at 40 °C Where possible, avoid storing in cold locations below 0 °C and hot locations above 40 °C. Ink quality may deteriorate if stored outside these conditions. 		

^{*1.} Depending on ink type

Restrictions Concerning the Expiration Date of Ink Used in the Machine

Example: When the expiration date is April 20xx

- May 20xx: Replace with new ink or use up as quickly as possible. Printing is possible.
- June 20xx: Replace with new ink or use up as quickly as possible. Printing is possible.
- July 20xx: Printing is not possible.



· The message appears on the display.



• The ink expiration date is indicated on the ink containers. Expired ink may cause ejection failures 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 using up as quickly as possible.

Installation Precautions

MARNING



- Do not install the machine in a place close to fire. Doing so may result in inflammation of solvent ink.
- Do not place flower vases, pots, cups, containers containing cosmetics, chemicals or water, or small metal items on or close to the machine. If they enter the machine, there is a risk of failure, electric shock, or fire.



• Do not install this machine in humid locations or locations where it may be exposed to splashing water. Otherwise there is a risk of failure, electric shock, or fire.



• Do not install the machine in a place where children may enter.

⚠ CAUTION



- A ventilation system must be provided if this machine is installed in a poorly ventilated area or sealed room.
- Be sure to observe 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



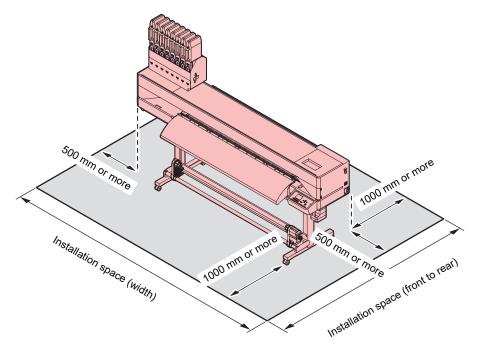
- Do not install this machine in locations where dust or powder is present. Failure or printing defects may result (e.g., nozzle clogging, deflection) if dust gets inside this machine.
- Do not install this machine in locations exposed to drafts (e.g., from air conditioning). Disregarding this precaution may result in dust or powder getting inside this machine.
- Do not install this machine in unstable locations or locations subject to vibration. This will increase the risk of 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. This will increase the risk of failure or printing defects (e.g., nozzle clogging, deflection).
- Do not install this machine in locations exposed to excessive noise from large machinery.
- Do not install this machine in locations where photographic fixing agents generate vapor or acid gas (e.g., acetic acid, hydrochloric acid) or locations filled with metal working fluids or highly volatile substances (e.g., amines, amine-modified alcohols). Malfunctions or printing defects may result (e.g., nozzle clogging, deflection) as print head ink is more likely to harden under such environments.



- Operating environment: 20 to 30 °C (68 to 86 °F), 35 to 65 %RH (no condensation)
- Temperature range in which accuracy is guaranteed: 20 to 25 °C (68 to 77 °F)

Installation Space

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



Size	TS200-1600
Width ^{*1}	At least 3,770 mm (2,770 mm)
Depth ^{*1}	At least 2,748 mm (748 mm)
Height ^{*1}	(1,623 mm) *2
Weight	155 kg

^{*1.} The figures in parentheses indicate machine dimensions.

When Relocating This Machine

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

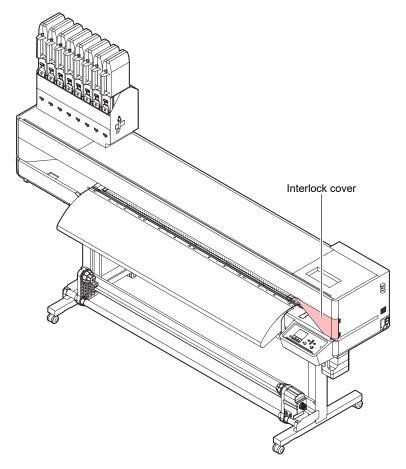
^{*2.} The ink eco-cases are mounted here.

Safety Interlocks

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

Printing will abort if you open the covers while printing is underway. The RIP data will need to be resent.

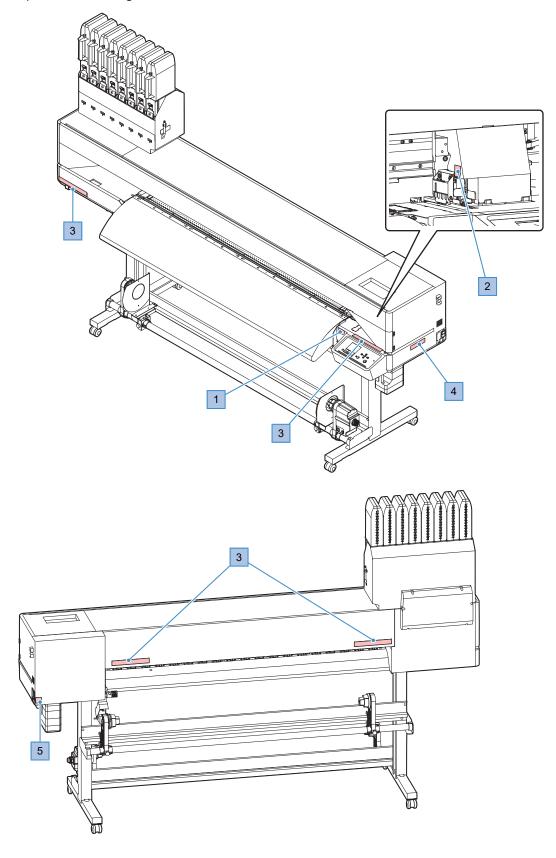
· Safety interlock locations



Warning Label

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	M903330		Wear safety glasses and gloves while working.
2	M903405		Beware of the cutter.
3	M905811	本等告 本等告 AWARNING AWARSCHUMING AWARTISSEMENT - 手指和外補物商品道 微球電報館 機能を開催 HRADAGOOGUS MONING FARTI- を持続していません。	Indicates dangerous moving parts.
4	M916035	There is another power cable in addition to the power cable of this unit. To avoid electric schock etc., in case of poer off, unplug all power cables. If ya un autre cable d' alimentation en plus de cebu de cette de cette unite. electriques etc., pour eteindre le courant, if aut debrancher tous les cables d' alimentation. ** ** ** ** ** ** ** ** **	Describes the power cable.
5	M907935		Indicates dangerous live parts.

Chapter 1 Before Use



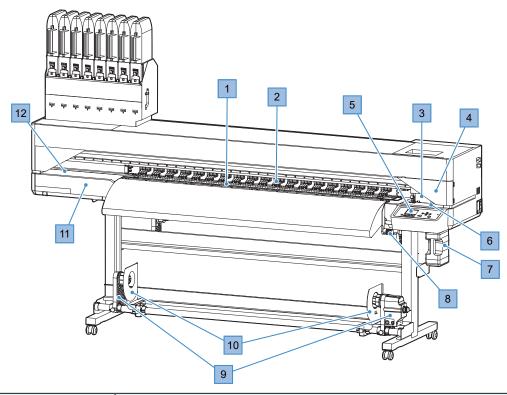
This chapter

This chapter describes information essential before use, such as part names.

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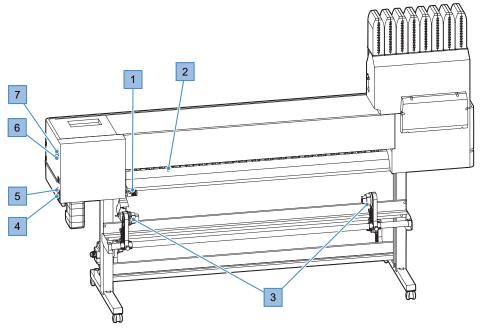
1.1 Part Names and Functions

Front



No.	Name	Overview	
1	Platen	Print area. TPlaten"(P. 24)	
2	Pinch roller Grit roller	The pinch rollers and grit rollers are used to grip and feed the media. Pinch Rollers and Grit Rollers"(P. 25)	
3	Carriage	Consists of a print head, the jam sensor, and the media cutter. © "Carriage"(P. 24)	
4	Maintenance cover (right side)	Open the cover to perform maintenance on the station, etc. Printing and automatic maintenance are not possible while the covers are open.	
5	Operating Panel	Includes operating keys and displays indicating various settings and other items. Toperating Panel"(P. 27)	
6	Station	Includes caps for protecting the print head, wipers, and an NCU (option) for monitoring print head nozzle conditions. The station (P. 24)	
7	Waste Ink Tank	Contains the container for waste ink. "Waste Ink Tank Replacement" (P. 115)	
8	Clamp lever	Lowering the clamp lever secures the media. Raising the clamp lever releases the media. Linked to the clamp lever at the rear.	
9	Take-up unit Rolls up the printed roll media. Take-up unit Rolls up the printed roll media.		
10	Media Edge Guides	In some cases, roll media may shift sideways. Using the media edge guides prevents the roll media from becoming offset.	
11	Maintenance cover (left side)	Open the cover to perform maintenance on locations such as the carriage underside. Keep the cover closed, except during maintenance.	
12	Maintenance cover (upper left side)	Open the cover to perform maintenance on locations such as the carriage underside. Keep the cover closed, except during maintenance.	

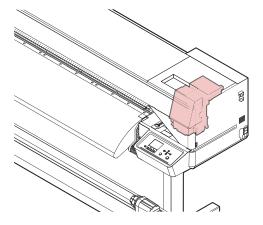
Rear and Right Side View



No.	Name	Overview	
1	Clamp lever	Linked to the clamp lever at the front.	
2	Media Sensor	Detects whether media is present. The Media Sensor"(P. 25)	
3	Feeding unit	Compatible with 2-inch and 3-inch paper cores. The Loading the Roll Media"(P. 56)	
4	AC inlet	For the inlet (INLET1), use the power cable provided. To "Connecting the Power Cable" (P. 30)	
5	Main power switch	The main power supply for the machine. To prevent ejection failures attributable to the print head (e.g., nozzle clogging or deflection), do not turn off the main power supply. ** "Power Supply Switch"(P. 26) ** "Turning On the Power"(P. 30) ** "Turning Off the Power"(P. 31)	
6	LAN port	Connects to PC via a LAN cable. Tusing a LAN Cable (P. 33)	
7	USB port	Connects to PC via a USB interface cable. Tusing a USB Cable (P. 34)	

Carriage

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

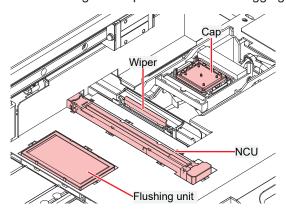


Station

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

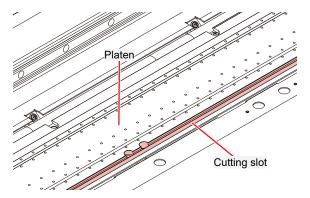
The NCU (Nozzle Check Unit) automatically checks whether the nozzle is clogged. Setting various functions enables automatic print head cleaning or printing using other nozzles.

Also, ink is ejected periodically to the flushing unit to prevent head ink clogging.



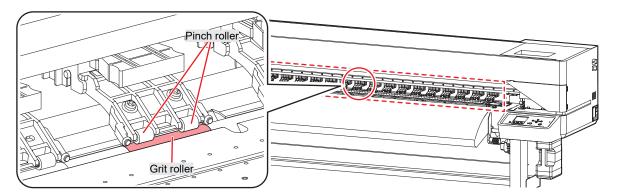
Platen

Print area. The platen secures the media under vacuum pressure. This also features a cutting slot for cutting the media.



Pinch Rollers and Grit Rollers

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



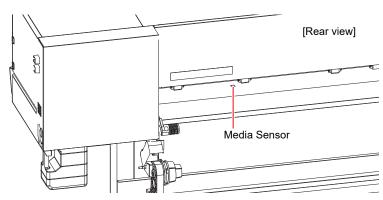


When the machine is not in use, raise the clamp lever to <u>separate the pinch rollers from the grit</u> rollers.

- Leaving the pinch rollers lowered may cause them to become deformed and prevent media from being fed correctly.
- Leaving media loaded will subject it to force from the pinch rollers, which may leave pinch roller marks on it.

Media Sensor

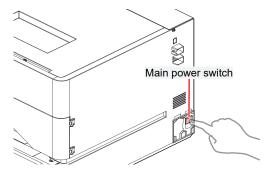
The media sensor detects the presence/absence of media. The sensor must be covered by the media to detect the media width.



Power Supply Switch

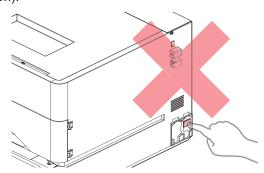
Main power switch

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





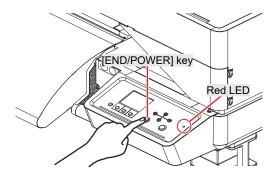
Do not turn off the main power supply. Turning off the main power supply will disable the
automatic maintenance function (including nozzle clogging prevention function and ink
discharge channel cleaning function). This increases the risk of ejection failures (such as nozzle
clogging or deflection).



• [END/POWER] key

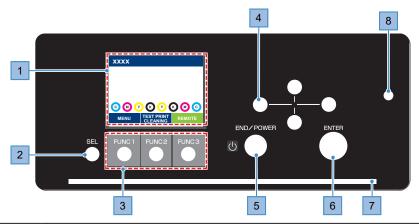
The [END/POWER] key is the key normally used to turn the power on and off.

To turn off the power, hold down the [END/POWER] key. Press the [ENTER] key once the instructions appear on the display.



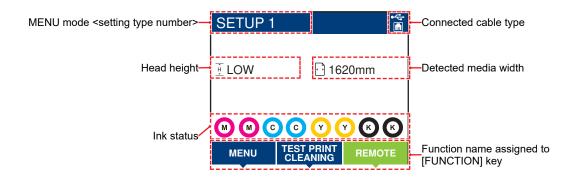
Operating Panel

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



No.	Name	Overview			
1	Display	© "Display"(P. 28)			
2	[SEL] key	Selects t	Selects the function for the corresponding [FUNCTION] key.		
3	[FUNCTION] key	Used for key"(P. 2		head cleaning, and editing settings. 🖙 "[FUNCTION]	
4	[JOG] key ▲♥◆▶	Used to	move the carr	iage, feed media, and select settings	
5	[END/POWER] key	menu, or Illum	Used to cancel the last setting entered, return to the previous level of the setting menu, or to turn power on and off • 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 d	Used to move to the next level menu and to confirm settings. This can also be used to display product information. This can also be used to display product information. Used Tolorium Machine Information (Local Guidance)"(P. 29)		
7	Status lamp	This lam	p indicates the	e machine status.	
		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 that printing is in progress. 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	
		Green	Flashing	Indicates that automatic maintenance is underway. Some functions will be limited until maintenance has ended.	
		Yellow	Flashing	Ink Near End status (very little ink remains). The when Ink Near End is Displayed"(P. 42)	
		Red	Flashing	An error has occurred. Refer to the error code list and take appropriate action. Terror Message"(P. 129)	
			Illuminated	A system error (SYSTEM HALT) has occurred. Contact our service office. ** "SYSTEM HALT"(P. 134)	
8	LED	To turn on power, press the [END/POWER] key until the red LED illuminates, then release the key.			

Display



MENU mode

Four menu modes are available.

Name	Overview
LOCAL mode	Used for test printing, maintenance, and settings
REMOTE mode	Prints the print data received from a PC.
MENU mode	Press the [MENU] on the 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

The ink pack status such as remaining ink levels and ink errors are indicated by icons.

Icon	Overview								
M	Displays remaining ink levels using a 9-stage icon.								
	M	M	M	M´-	M'-	(M/-	M'-	- M -	
	Full	1/8 used	1/4 used	3/8 used	1/2 used	5/8 used	3/4 used	7/8 used	
- M -	Very little ink remains. Prepare fresh ink.								
	Printing is not possible. Displayed when ink is depleted or an ink error has occurred. This error"(P. 128)								

[FUNCTION] key

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

Icon	Overview					
MENU	Displays the various menu screens. Setup"(P. 79)					
TEST PRINT CLEANING	Displays maintenance functions such as test printing and cleaning.					
REMOTE	Switches from LOCAL mode to REMOTE mode.					
ADJUST	Displays adjustment functions such as feed adjustment and drop position adjustment.					
DATA CLEAR	Clears received data.					
LOCAL	Used to switch from REMOTE mode to LOCAL mode					
СИТ	Used to cut media					
<<	Used to move to the previous menu screen					
>>	Used to move to the next menu screen					
ок	Used to close the confirmation screen in response to prompts or other messages					
OFF	Used to disable functions					
$\overline{\psi}$	Indicates that the function is assigned. Displays settings and functions.					
8	Used to enable or disable multiple items					

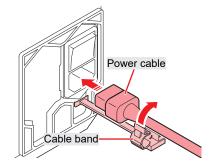
Displaying Machine Information (Local Guidance)

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

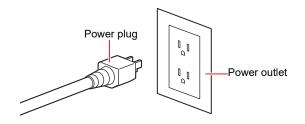
- Ink information: Displays ink type, remaining ink levels, and ink errors.
- Information: Displays information such as media width, head height, product serial number, firmware version, command version, and LAN connection status.
- Nozzle check: Displays the number of nozzles detected as clogged in the nozzle check.

1.2 Connecting the Power Cable

- 1 Check to confirm that the main power supply is turned off.
- **?** Connect the cable band to the machine.
- 3 Connect the power cable to the inlet of the machine.
- **1** 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.

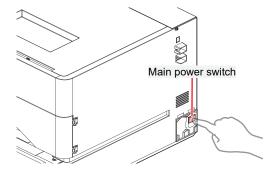




 Do not handle the power plug with wet hands. Disregarding this precaution may result in electric shock.

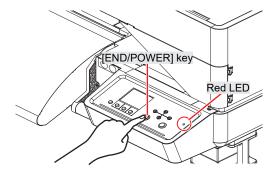
Turning On the Power

- 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".



2 Hold down the [END/POWER] key to turn on power. (Press the key until the red LED on the upper right side illuminates.)

• The firmware version appears on the display, and the initial operation is executed. The machine will then enter the Media Select mode, and is ready for use.



3 Turn on the power for the connected PC.

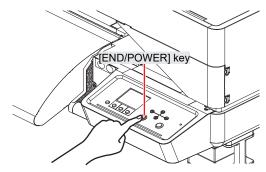


Close the maintenance cover. Leaving any of the covers open will disable the automatic
maintenance function (including nozzle clogging prevention function and waste ink draining
channel cleaning function). This will increase the risk of failure or ejection failures (e.g., nozzle
clogging or deflection).

Turning Off the Power

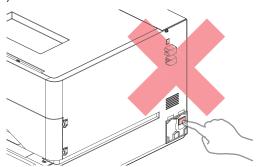


- Check the following when turning off power:
 - (1) The front cover is closed.
 - Leaving any of the covers open will disable the automatic maintenance function (including nozzle clogging prevention function and waste ink draining channel cleaning function).
 - (2) The carriage has returned to the capping station.
 - If not, the print head nozzle may dry out, resulting in ejection failures (such as nozzle clogging or deflection).
 - (3) Data is not being received
 - (4) No errors have occurred.
 - Problems Causing Messages to Appear
- 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). This increases the risk of ejection failures (such as nozzle clogging or deflection).



1.3 Connecting a PC to the Product

Connect the machine to the RIP PC. The following cables can be used:

- 1. "Using a LAN Cable" (P. 33) (Recommended)
- 2. Tusing a USB Cable (P. 34)

(Important!) When using the USB cable

 Data may be transferred to the machine too slowly, causing the carriage to pause at the lefthand or right-hand end during printing.

Using a LAN Cable

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

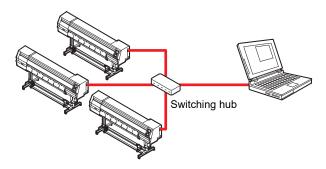


Do not unplug the cable while data is being transferred.

Network Connection Precautions

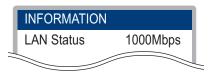
Make sure the network is set up as follows: Printing is not possible if the network is not set up correctly.

- Use a Category 6 or 6A LAN cable.
- 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.
- Use a 1000BASE-T compatible computer or switching hub. Printing requires 1000BASE-T support.



Checking the LAN connection

- Check the display on this product.
 - Local guidance can be used for checking. Tipisplaying Machine Information (Local Guidance)"(P. 29) Printing is not possible if "100Mbps", "10Mbps", or "No Connect" is displayed.



Check the lamp on the LAN connector.

The LAN connector lamp illuminates when the machine is running.



Color	Status	Overview
Green	Illuminated	Connected via 1000BASE-T
	Off	Connected via a network other than 1000BASE-T • 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)

Using a USB Cable

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



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



Use RIP software that supports the USB interface.



• If the computer has no USB port, contact your local dealer or our service office.



(Important!) When using the USB cable

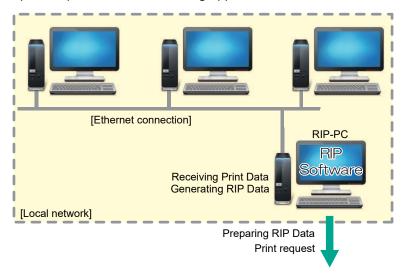
 Data may be transferred to the machine too slowly, causing the carriage to pause at the lefthand or right-hand end during printing.

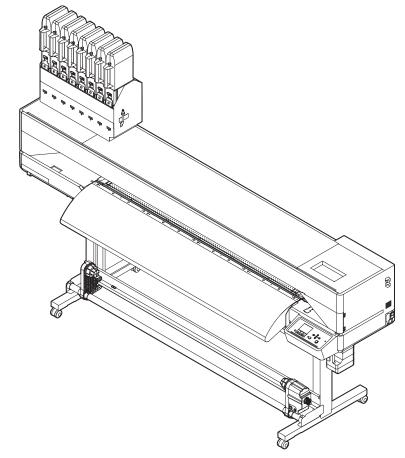
USB Connection Precautions

- When connecting more than one TS200 to one PC
 - 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 active repeater cable.
- · When extending the USB cable
 - Use a commercially-available USB active repeater cable. However, make sure that the combined length of the USB cable and the USB active repeater cable does not exceed 20 m.
 - If the USB cable is extended, this may reduce the data transfer speed to the machine, causing the carriage to pause at the left-hand or right-hand end during printing.
- 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. If external USB hard disk drives or other similar devices are connected, this may reduce the data transfer speed to the machine, causing the carriage to pause 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 201 Command Error] will occur.

1.4 System Configuration

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





Installing the Mimaki Driver

- Download the Mimaki driver from our website.
 - https://mimaki.com/download/inkjet.html [(Example: TS200-1600)] > [Driver/Utility]
- Install the MIMAKI driver.

Installing RIP Software

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

- 1 Install RasterLink.
 - · The following icon appears on the PC desktop once the software has been installed.





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



· Once installed, activate the license for Rasterlink. 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 RasterLink Series includes a function allowing color profiles to be downloaded and installed directly from the Internet. For more information, refer to "Installing Profiles" in the RasterLink Series installation quide.

https://mimaki.com/download/software.html [RasterLink Series used] > [Manuals]

 Color profiles for Mimaki RIP software (RasterLink) are available on the Mimaki website. https://mimaki.com/download/inkjet.html

[(Example: TS200-1600)] > [Profile]

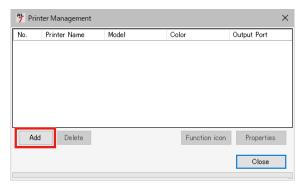
Setting Up RIP Software

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

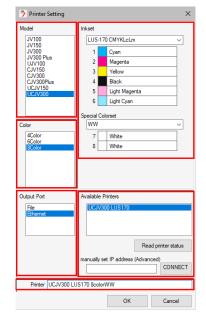
- 1 Launch RasterLink.
 - The [Printer Management] screen appears.
 - To add a new model, launch RasterLink, then select [Environment] > [Printer Management].

? Register the machine name (Example: TS200-1600).

(1) Click [Add].



(2) Set the specifics for the machine.



- Model: Select the model.
- · Color: Select the ink set filled.
- · Output Port: Select the cable connected.
- Available Printers: Select TS200-1600 connected.
- Printer: Enter a name as required.
- (3) Click [OK].
 - · A confirmation screen appears.
- (4) Click [Yes].
 - Printer registration starts.

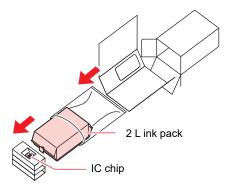


For more information, refer to the RasterLink installation guide. https://mimaki.com/download/software.html

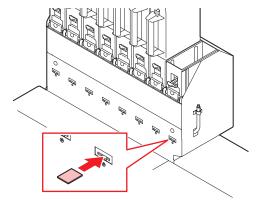
1.5 Mounting the ink

1 Have a 2 L ink pack ready.

· Take out the ink pack and the IC chip from the small cardboard box.



2 Attach the IC chip.





- Be sure to attach the IC chip in the correct orientation.
- If the IC chip is not attached correctly, ink supply will not be normal.
- Insert it with the side with the metal attached to on the left side.
- When attaching the IC chip, be sure not to touch the metal part. (IC chip destruction may occur due to static electricity.)





3 Shake the 2 L ink pack to the left and right, slowly at least 20 times.

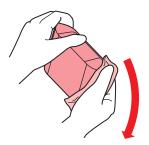
When using a used ink pack, to prevent ink from leaking out when it is shaken, while holding the
connector of the ink pack with a paper towel, shake it to the left and right at least 20 times to
ensure that the ink moves inside slowly.



Always wear gloves when performing this task.



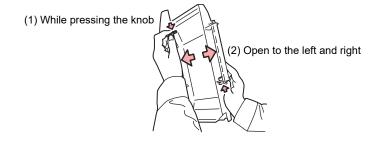
- · Shaking too hard may cause an ink leak, so please do so carefully.
- Since a low ink level may result in insufficient mixing of ink, tilt the ink pack until it is upright.



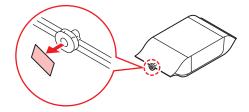




- ▲ Place the 2 L ink pack inside a 2 L eco-case.
 - Open the 2 L eco-case as shown in the figure.



5 Remove the seal from the connector of the 2 L ink pack.



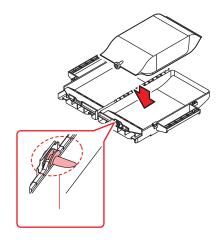


• Remove the seal completely. If any parts of the seal remain, ink may leak when the ink eco-case is removed from the base.





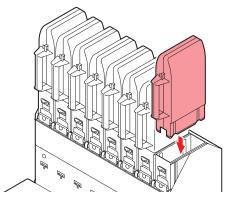
6 Place the 2 L ink pack with the connector facing downward, then close the 2 L eco-case.





- Position the 2 L ink pack as indicated on the label inside the 2 L eco-case. If you place the
 ink pack without adjusting its shape, you may not be able to use up all the ink.
- Before closing the 2 L eco-case, check that the connector of the ink pack is aligned with the 2 L eco-case slot. If the connector is not aligned with the slot, ink may not be supplied.

7 Attach the 2 L eco-case to the pedestal.



- Ink is supplied from the 2 L eco-case to the connected printer.
- · After one to two minutes, the EMPTY lump of the connected printer will turn off.



• Fully push in the 2 L eco-case. If not pushed in far enough, ink may not be supplied.

IC chips



- The IC chip stores information such as the ink color, remaining amount, and expiration date.
- The IC chip has markings on it indicating color information.



Marking location

Ink Color	Marking
Magenta	One red circle)
Blue	(One blue circle/one red circle)
Yellow	One yellow circle)
Black	One black circle)
Violet	(One blue circle/two red circles)
Orange	One orange circle)
Fluorescent yellow	(Two yellow circles)
Fluorescent pink	(Two orange circles)

Replacing a 2 L Ink Pack

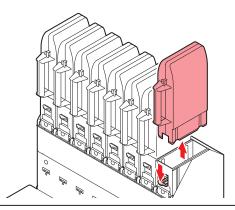


• When replacing a 2 L ink pack, wear safety glasses. Ink may accidentally get into your eyes.



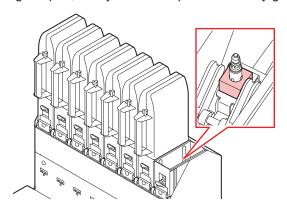
After use, about 10 cc of ink remains in the ink pack, but the ink is filled so that the actual
amount used is 2 liters.

1 Push down the lever on the pedestal, and remove the 2 L ink eco-case.

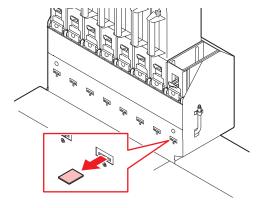




- When replacing the 2 L ink pack, the male connector pad (accessory) can be replaced periodically to prevent contamination of the inside of the pedestal.
- Replace the pad every 5 to 10 replacement of the 2 L ink pack.
- When replacing the pad, always wear the provided safety glasses and gloves.



2 Remove the IC chip.



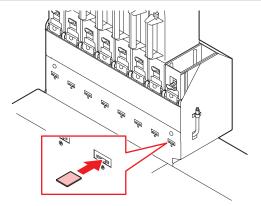
- 3 Open the 2 L eco-case and replace the 2 L ink pack.
 - Keep the IC chip removed in step 2 with the used 2 L ink pack. (To avoid confusion with the IC chip in the new 2 L ink pack)

4

Attach the IC chip provided with the 2 L ink pack to be replaced.

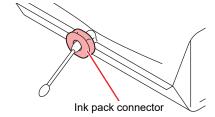


 Be careful not to touch the metal parts of the IC chip. Touching the metal parts may generate static electricity, possibly destroying the IC chip.





- Contact an industrial waste disposal operator to dispose of empty 2 L ink packs.
- When removing a 2 L ink pack with ink remaining, do the following.
 Otherwise, the ink level will no longer be managed accurately.
 - (1) Remove a 2 L ink pack with ink remaining from the 2 L eco-case.
 - (2) Using a cotton swab, wipe off any ink adhering to the inside of the connector of the 2 L ink pack.



- (3) Remove the IC chip and store it with the 2 L ink pack.
- (4) To use it again, place the 2 L ink pack and place the IC chip that was stored together.

When Ink Near End is Displayed

Ink levels are low. We recommend replacing with new ink as soon as possible, because the ink packs are nearly empty. Printing is still possible but continuous printing is not, and some maintenance functions such as cleaning are disabled. Note that ink may run out during printing.

To check which color ink needs to be replaced, press the [ENTER] key on the LOCAL mode screen. © "Displaying Machine Information (Local Guidance)"(P. 29)

When Ink End is Displayed

The ink has run out. Replace with new ink.

Thoroughly read the following and make sure you understand its contents. "Notes on Handling Ink or any Other Liquid Used with the Machine" (P. 11)



• Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking ink may adhere to the skin or get into the eyes or mouth.





Precautions for Handling Ink Packs



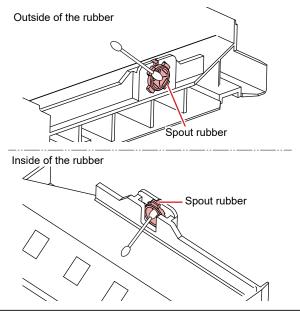
- Use a dedicated ink pack for the machine. The machine recognizes and operates with a
 dedicated ink pack. Failure due to modification of ink packs or other components is not covered
 by the warranty, even within the warranty period.
- When a ink pack is moved from a cold place to a warm place, leave it in a room temperature environment for at least three hours before using it.
- Use up an ink pack within three months after opening. If it is opened and left for an extended period of time, print quality will be reduced.
- · Store ink packs in a cool, dark place.
- · Keep ink packs out of the reach of children.
- Contact an industrial waste disposal operator to dispose of empty ink packs.

Precautions for new installation and replacement of spout rubber



- Thoroughly moisten the spout rubber surface with maintenance liquid before inserting it.

 Inserting the spout rubber into the eco-case without moistening it may damage the rubber.
- At this time, use a maintenance liquid appropriate for the ink type.



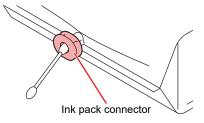
Precautions when using ink packs with ink remaining



Wipe off any ink adhering to the inside of the connector of an ink pack using a cotton swab. Inserting an ink pack with ink remaining inside the connector may cause an ink leak when the ink pack is used again.



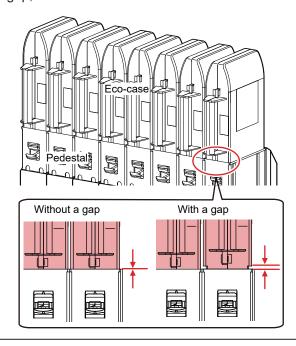
Do not insert a cotton swab too deeply. Ink may leak from the ink pack and not be able to stop.



Precautions when placing the eco-case in the main unit



• Insert the eco-case fully and securely. Check for a gap between the pedestal and the eco-case, and if there is a gap, reinsert the eco-case.



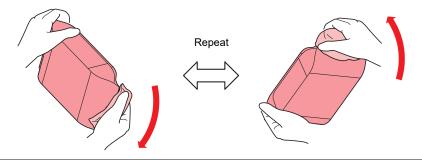
How to shake ink packs in the eco-case

For shaking with the pack removed (recommended method)

- · Wipe the ink pack connector and the ink inside the spout rubber before re-setting.
- Cover the connector of the ink pack with a non-woven fabric (e.g., cloth) before shaking.

For shaking the entire eco-case

• Cover the spout rubber with a non-woven fabric (e.g., cloth) before shaking.





- Do not shake the ink pack strongly. Shaking the ink pack strongly or swinging it around may cause ink to leak from the ink pack.
- DO NOT ATTEMPT TO REFILL THE INK PACKS WITH UNAUTHORIZED INK. Doing so may cause failure. MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR FAULT ARISING FROM THE USE OF THE INK TANKS REFILLED WITH THE WITH UNAUTHORIZED INK.



• Do not disassemble the ink packs.

Chapter 2 Printing



This chapter

This chapter describes printing procedures and settings.

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Feeding unit	
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Registering the Media	61
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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 Cable"(P. 34)
"Using a LAN Cable"(P. 33)

3. Setting Up RIP Software

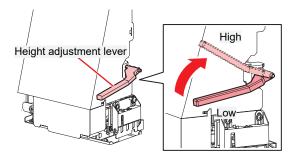
"Installing RIP Software"(P. 36) (required first time only)

"Obtaining Color Profiles"(P. 36)

"Setting Up RIP Software"(P. 36) (required first time only)

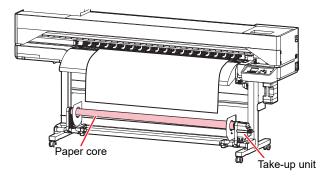
4. Adjusting Print Head Height

Adjust the height adjustment lever to suit the media. ** "Adjusting Print Head Height"(P. 50)



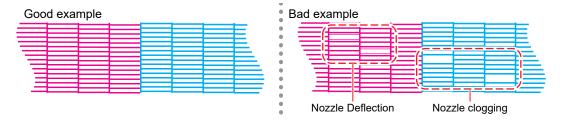
5. Loading the Media

This machine can be used with roll media and leaf media. (P. 51)



6. Check the state of the print head nozzles.

Test Printing"(P. 63)

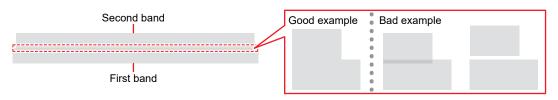


7. Clean the head to clear malfunctioning nozzles.

There are three different head cleaning methods. Choose the head cleaning method based on test print results. ** "Head Cleaning"(P. 65)

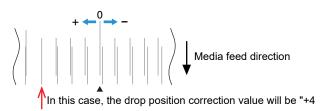
8. Adjust the media feed amount.

Feed Correction"(P. 67)



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

"Correcting the Drop Position"(P. 69)



10 Preparing RIP data

"Preparing RIP data"(P. 71)

11 Printing RIP data

(P. 73)

12. Cutting the media

"Cutting the media"(P. 77)

2.2 Adjusting Print Head Height

Adjust the height of the print head according to the thickness of the media you are using.

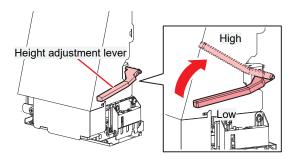
Range	Gap between print head and platen
Low (recommended)	3.0 mm (default setting)
High	3.5 mm



Be sure to correct the dot position after altering the print head height. © "Correcting the Drop Position"(P. 69)



- With inkjet printers, if the gap between the print head and media increases, the ink droplets tend
 to vaporize before they reach the media. Vaporized ink may adhere to the print head nozzle
 surface and media, affecting print quality and causing failure of the print head. Adjust the print
 head height to suit the media.
- - · The Maintenance menu is displayed.
- **9** Select [Station Maint.] > [Head height switching], then press the [ENTER] key.
 - · The carriage moves over the platen.
- 3 Use the height adjustment lever to adjust the height.
 - Adjust the height adjustment lever so that it is at the desired height. If the lever is not set to the
 correct position, problems such as media jamming and misting may occur, resulting in impaired
 print quality.



- 4 Press the [ENTER] key.
- 5 Select [LOW/HIGH] on the screen, 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 the print head coming into contact with the media and being damaged.

Media

Media handling precautions



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

WARNING



 Assign at least two persons to load roll media. Disregarding this precaution may result in low back pain due to the weight of media.

NOTICE



- Protect media from dust when stored. Otherwise print quality may be reduced.
- When storing standard-size media rolled up, store with the coated surface facing out.



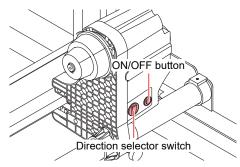
- Do not leave the media in the machine when not in use. Otherwise dust may accumulate on the media. Do not use media that has been wiped free of dust. Wiping media can generate static electricity, possibly affecting print quality.
- Do not use media immediately after removing it from the package. The media may expand or contract depending on the temperature and humidity of the location in which it was stored. Allow the media to stand for at least 30 minutes in the same indoor environment as the machine before loading it.
- Do not use media if it is curled. Curled media may not only damage the print head, but may also affect print quality.



 The underside of the media may be soiled depending on how the printed media has been stored (due to weight when laying printed media rolls horizontally, for example) and the media type.
 Perform a test beforehand to check that the media does not transfer ink to the underside of the adjacent media.

Take-up unit

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

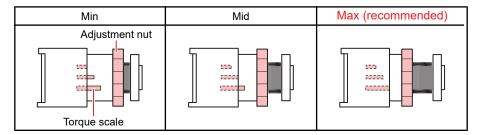


Name	Overview	
Direction selector	Up	To take up media with printed surface on the inside
switch	Down	To take up media with printed surface on the outside
ON/OFF button	Press the button to start/stop the take-up unit. The setting can be altered so that the take-up unit operates only while the button is depressed. Trunction Setting Menu"(P. 87)	

Adjusting the Torque Limiter

The right take-up unit is fitted with a torque limiter.

Turn the torque limiter adjustment nut to adjust take-up tension.





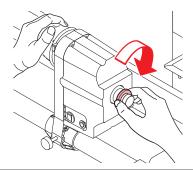
- For normal printing: Adjust the torque to "Max".
- Depending on the media, increasing the torque may cause image defects due to the pinch roller and grit rollers failing to grip the media. Reduce the torque if the media slips.



• Do not tighten beyond the maximum torque memory. The take-up unit may be damaged.

Increase tension (clockwise)

Increase tension when using with heavy or thick media. Perform adjustments manually.

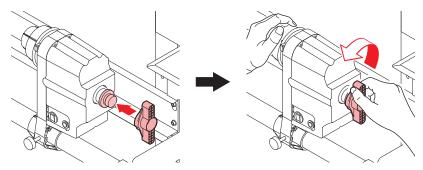




 Do not use the torque adjustment handle. Using the torque adjustment handle will cause overtightening. Overtightening may damage the take-up unit.

Decrease tension (counterclockwise).

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



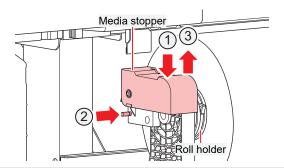
Feeding unit

Using the Media Stopper

When pulling out a fixed length of media by hand, the roll holder locks, stopping the media from being pulled out.

Lock the media stopper

Push the side pin while pressing on the media stopper. Releasing the media stopper in this state locks the roll holder.

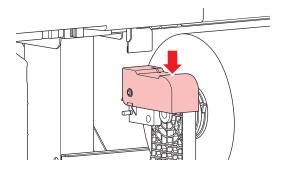




• Be sure to lock the media stopper when loading roll media or printing.

• Release the media stopper

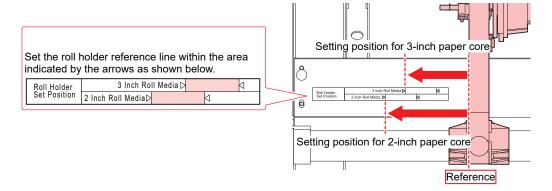
Press the media stopper to release the roll holder.



Roll Holder Setting Position

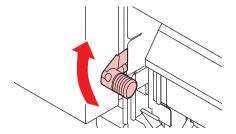
Loosen the knob screw on the rear left roll holder, then move it.

The leg stay has a label showing roll holder mounting positions. Use it as a reference to move the roll holder, then secure using the knob screw.

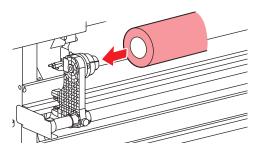


Loading the Roll Media

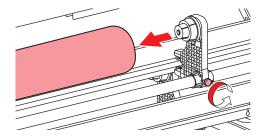
1 Raise the clamp lever.



- **9** Move the rear left roll holder to the roll setting position.
 - Unscrew the roll holder retaining screw, move the roll holder, then retighten the retaining screw. "Roll Holder Setting Position"(P. 55)
- Insert the paper core of the roll media on to the rear left roll holder.
 - · Push in until the paper core moves no farther.



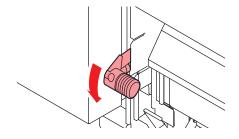
- ⚠ Insert the rear right roll holder into the paper core.
 - Unscrew the roll holder retaining screw, move the roll holder, then retighten the retaining screw.



5 Insert the media between the pinch rollers and the grit rollers.

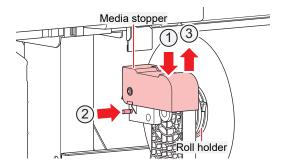


- Inserting the media at an angle allows smooth insertion without catching or sticking.
- 6 Lower the clamp lever.
 - · Hold the media with the pinch roller and grit rollers.



7 Lock the media stopper.

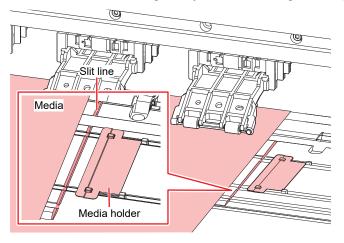
• Push the side pin while pressing on the media stopper. Releasing the media stopper in this state locks the roll holder.



- **R** Move to the front of the machine, raise the clamp lever and pull out the media.
 - · Make sure the media does not fall to the rear.

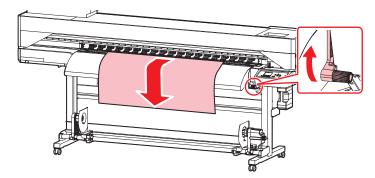


• Adjust the rear roll holder position so that the media does not cover the right-hand slit line on the platen. Movement at an angle may result in damage to the print head.





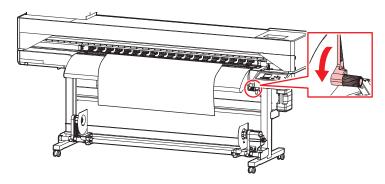
- The areas extending 5 mm from both sides of the media are margins.
- **9** Gently pull out the media to the front of the machine and stop at the position where it is gently locked in place.



1 Check how far the media was pulled out.

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

11 Lower the clamp lever.





 After lowering the clamp lever, check for any imbalance in the tension of the media on the feed side.



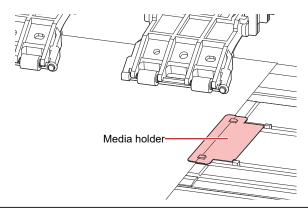
 Do not pull the media when the clamp lever is lowered (the media is clamped). Doing so may damage the machine.



When the machine is not in use, raise the clamp lever to **separate the pinch rollers from the grit rollers**.

- Leaving the pinch rollers lowered may cause them to become deformed and prevent media from being fed correctly.
- Leaving media loaded will subject it to force from the pinch rollers, which may leave pinch roller marks on it.

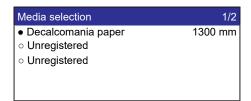
19 Secure the media in the media holder.





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

13 Select the media to be used.





• To use unregistered media, select [Unregistered] to register the media. The Media" (P. 61)

11 Detect the media width.

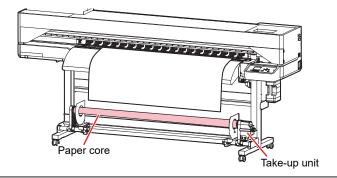
- · No change: Only the right side of the media holder is detected.
- Media width re-detection: The media width is detected.

Transfer paper	
Media Width	1300 mm
	No change
	Media width



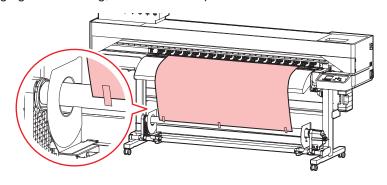
- Media width may not be detected correctly for certain colors or types of media. When
 media width cannot be detected correctly, set the media width detection method to
 "MANUAL".
- If the media width detection method is set to "MANUAL", set the media width manually ([MENU] > [Media Setting] > [Media Information] > [Media Width] > [Detection Type]
 Media Setting Menu).
- A notification reading "Media Set Position R" will appear after media width detection if the media is too far to the right of the specified position. Reload media in the specified position.
- If Media Remain Manage is set to "ON", the Input Media Length screen will be displayed.
 ([MENU] > [Media Setting] > [Media Information] > [Media Remain] > [Media Remain Manage] Media Setting Menu).

15 Load an empty paper core on the take-up unit.





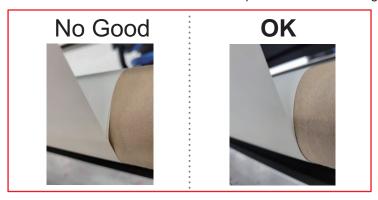
- Use the take-up unit for media with low stiffness. If not, the media may rise up on the platen and damage a print head.
- Do not use paper cores that are deformed, worn, or otherwise damaged as they may not be taken up properly.
- 16 Press v to feed the media until it reaches the paper core on the take-up unit, then press the [ENTER] key.
- 17 Secure the middle of the media to the paper core with adhesive tape, then secure the left and right sides of the media.
 - Pull the lower edge of the media evenly on both the left and right sides, check to confirm that it is free of sagging and creasing, then affix the tape.



18 Press \odot to wind the media around the paper core about three times.



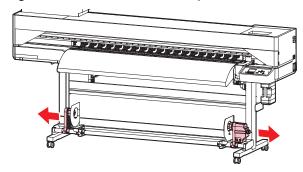
• Check to confirm that the media does not lift up. If the media is lifting up, rewind it.



19 Press the [ENTER] key.



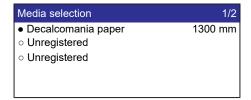
• Move the take-up unit to the left or right when it is not in use. Print quality may be affected if the front edge of the media hits the take-up unit.



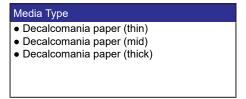
Registering the Media

When the clamp lever is lowered with media being loaded, the Select Use Media screen is displayed. Registration is required to use media that is not registered on the machine.

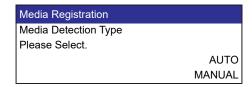
1 Select [Unregistered].



? Select the media type.



- 3 Select the media width detection type.
 - AUTO: The media width is automatically detected.
 - · MANUAL: The media width is manually set.



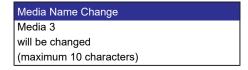


Media width may not be detected correctly for certain colors or types of media. When
media width cannot be detected correctly, set the media width detection method to
"MANUAL".

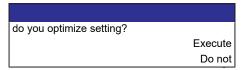
- **▲** Select the method for managing the media remaining amount.
 - Select whether or not to manage the media remaining amount with the machine.



- 5 Enter the name to be displayed.
 - · If you do not register the name, press the [ENTER] key.



6 Select whether or not to register the set information.

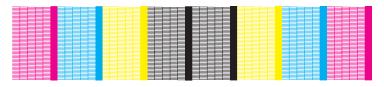




• You can change the settings later. The Media Setting Menu" (P. 80)

2.4 Test Printing

Print a test pattern to confirm that the ink prints correctly. Perform head cleaning if you observe any ejection failures (e.g., nozzle clogging or deflection). ** "Head Cleaning"(P. 65)



Check beforehand

- Was the print head adjusted? The "Adjusting Print Head Height" (P. 50)
- Is media loaded? The Media (P. 51)



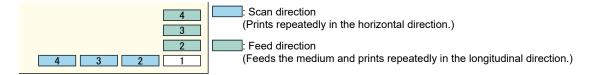
Load media at least 500 mm wide. You cannot print the entire pattern if media less than 300 mm wide is used.



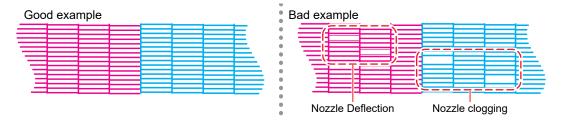
 Select [Maintenance] > [Nozzle Recovery] > [Test Print], then select "ON" to perform nozzle recovery and test printing.
 Registration is required to perform nozzle recovery. "Registering Nozzle Recovery Manually" (P. 85)

Changing the Layout Direction for Test Printing

You can change the layout direction for test printing.



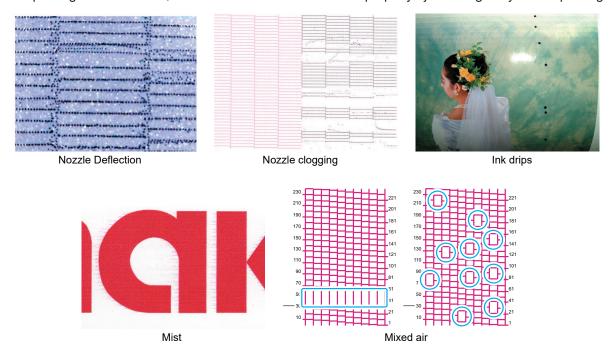
- 1 On the LOCAL mode screen, select [TEST PRINT/CLEANING] > [Test Print], then press the [ENTER] key.
 - The Test Print menu is displayed.
- **9** Select [Scan Dir.] or [Feed Dir.], then press the [ENTER] key.
 - · Test printing starts.



3 Check the print results.

Ejection Failures

Typical examples of ejection failures (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.



2.5 Head Cleaning

The following head cleaning methods are available. Choose the method based on test results. Cleaning is not possible when the [Ink Near End] or [Ink End] errors are displayed. Replace with new ink. ** "Replacing a 2 L Ink Pack"(P. 41)

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

- 1 On the 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 Run another test print and check the print results.
 - Repeat the cleaning and test printing process until the print results appear normal.

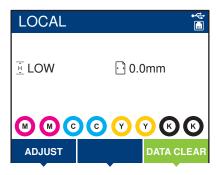


- Do the following if head cleaning fails to resolve the ejection failures (e.g., nozzle clogging or deflection).
 - "Cap Rubber Cleaning"(P. 94)
 - "Print Head Nozzle Washing"(P. 124)
- "Wiper Cleaning"(P. 96)
- Filling Up Ink"(P. 86)

2.6 Auto Correction

The auto-correction function (DAS: Dot Adjustment System) detects a correction pattern with the sensor and automatically corrects the drop position.

On the LOCAL mode screen, select [ADJUST].



- **?** Select [Auto-correction], then press the [ENTER] key.
- 3 Select a setting item, then press the [ENTER] key.
 - The following three items can be configured:
 [All]: Automatically performs feed and dot position correction.
 [Feed Comp.]: Automatically performs feed correction.
 [Drop.PosCorrect]: Automatically performs dot position correction.



Dot position correction can also be performed for each printing condition. In this case, select [Media Setting] > [Auto-correction] > [Drop.PosCorrect] > [Printing conditions], then press the [ENTER] key.



- · Check to confirm that the media does not lift up.
- · Load white and clean media.
- · Do not send RIP data from the PC during pattern printing.
- If automatic correction is unsuccessful, correct the position manually. [MENU] > [Media Setting] > [Feed Comp.] or [Drop.PosCorrect] * "Feed Correction"(P. 67)* "Correcting the Drop Position"(P. 69)

2.7 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

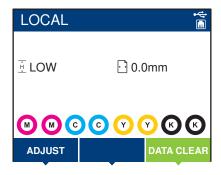
- Is media loaded? The Media"(P. 51)
- · For roll media, is the rear roll media free of sagging?
- When using the take-up unit, is the media mounted on the paper core of the take-up unit? The Loading the Roll Media"(P. 56)

Feed Correction Procedure

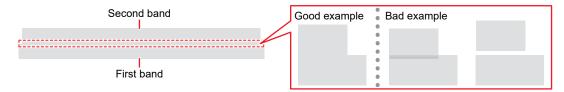
Print a correction pattern, then enter the correction value. The value corrected here will also be updated on the Media Setting menu.



- · When using the take-up unit, load media on the take-up unit before correcting.
- 1 On the LOCAL mode screen, select [ADJUST].



- **9** 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.
 - "+" input: Increases the separation between bands.
 - "-" input: Reduces 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 during printing.

- 1 Press [ADJUST] in REMOTE mode or during printing.
- **2** Enter the correction value, then press the [ENTER] key.
 - Correction value: -9999 to 9999
 - The value entered here will be updated immediately.

2.8 Correcting the Drop Position

Changing the media and print head height and temperature changes around the print head 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? The "Adjusting Print Head Height" (P. 50)
- Is media loaded? The Media (P. 51)



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

Drop Position Correction Procedure

Print a correction pattern, then enter the correction value. The value corrected here will also be updated on the Media Setting menu. This must be adjusted for each print resolution.

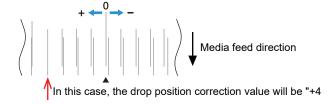
On the LOCAL mode screen, select [ADJUST].



- **9** Select [Drop.PosCorrect], then press the [ENTER] key.
- 3 Select the resolution, then press the [ENTER] key.
 - Select the resolution to be adjusted. When "All" is selected, correction patterns for all resolutions will be printed. "Media Setting Menu"(P. 80)



- The indicated resolutions are those in the scan direction.
- 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. 50)

2.9 Preparing RIP data

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



Prepare suitable image data for printing.

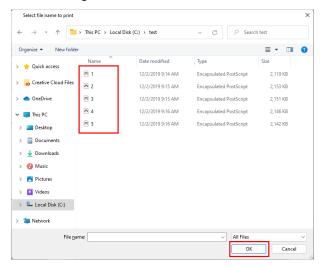
1 Launch RasterLink.

· Click the icon on the PC desktop.



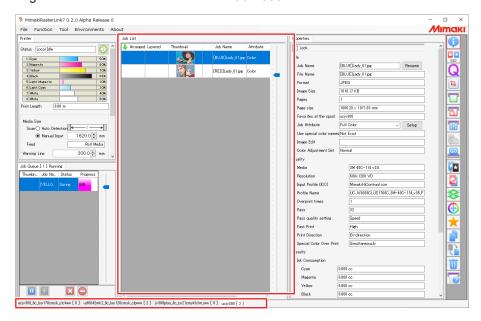
? Select the image data to print.

- (1) Select [File] > [Open].
- (2) Select the desired image data, then click [Open].
 - If multiple printers are registered, select TS200-1600 from "Printer Name".



3 Select the image data imported.

• The image data is added in the tab for TS200-1600 selected in "Printer Name".



▲ Edit the image.

- Specify the following settings by clicking the function icons shown on the right-hand side of the screen:
 - [7] (General Print): Specifies settings like enlargement/reduction and rotation.
 - Q (Quality): 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.

- @ "Starting Printing"(P. 75)
 - (1) Click (Execution) from the function icons on the right-hand side of the screen.
 - (2) Select "Immediate Print" or "RIP and Print", then click [Start].



- Media width must be reacquired after replacing media.
 - (1) Select the tab for, for example, TS200-1600 in the main window.
 - (2) Click (Update the printer status) in the Printer tab.

2.10 Printing

Check beforehand

- Was the print head adjusted? "Adjusting Print Head Height" (P. 50)
- Is media loaded? The Media (P. 51)
- · For roll media, is the rear roll media free of sagging?
- When using the take-up unit, was the media mounted on the paper core of the take-up unit? (P. 56)



 Condensation may form on the print head nozzle surface depending on the ambient temperature and humidity. The formation of condensation may cause ejection failures (e.g., nozzle clogging or deflection). Perform head cleaning if any ejection failures (e.g., nozzle clogging or deflection) occur during printing. Thead Cleaning (P. 65)

Print a test pattern to confirm that the ink prints correctly. Perform head cleaning if you observe any ejection failures (e.g., nozzle clogging or deflection). The "Head Cleaning" (P. 65)



Check beforehand

- Was the print head adjusted? The "Adjusting Print Head Height" (P. 50)
- Is media loaded? The Media (P. 51)



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

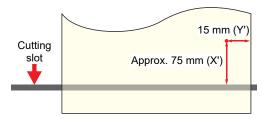


 Select [Maintenance] > [Nozzle Recovery] > [Test Print], then select "ON" to perform nozzle recovery and test printing.
 Registration is required to perform nozzle recovery. "Registering Nozzle Recovery Manually"(P. 85)

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** On the LOCAL mode screen, press **▲ ♥ ●**.
 - · The Origin Setup screen appears.
- **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

Send the RIP data from the PC.

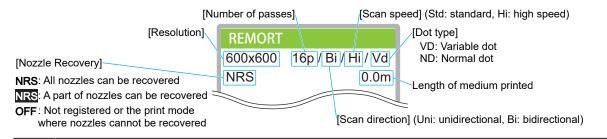
• Preparing RIP data"(P. 71)



 If the message "Attention20A Driver version" appears, install the latest Mimaki driver. https://mimaki.com/download/inkjet.html

9 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.
- If there are nozzles that cannot be recovered, "Nozzle recovery not possible" will be
 displayed at the start of printing. If nozzle clogging is noticeable, try increasing the number
 of passes or changing the resolution.

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.

? Press [REMOTE].

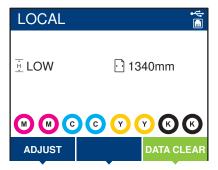
· Printing resumes.



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

Stopping Printing (Data Clear)

1 On the LOCAL mode screen, select [DATA CLEAR].



- **2** Press the [ENTER] key to clear the received data.
 - The receive buffer is cleared.

2.11 Cutting the media

- **1** On the LOCAL mode screen, press **▲ ▼ ◆ .**
 - The Origin Setup screen appears.
- **2** Press (a) (v) to feed the media to the position required for cutting.
- 3 Select [CUT].
- 4 Press the [ENTER] key.
 - The media is cut.

Chapter 3 Setup



This chapter

This chapter describes the [MENU] functions.

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3.1 Media Setting Menu

When you use the machine for the first time, the Select Use Media screen is displayed. Registering the Media The media Information and correction value can be saved in advance for specific media.

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.

Menu List

Item		Setting		Details
		*1	*2	
Fe	eed Comp.	-9999 to <u>0</u> to 9999	-	Corrects the media feed amount. Print a pattern and enter the correction amount. Teed Correction (P. 67)
Dr	op.PosCorrect	-	-	Corrects the drop position for bi-directional printing. © "Correcting the Drop Position"(P. 69)
	(Resolution)	*	-	Select the resolution to be corrected. When "All" is selected, correction patterns will be printed for all resolutions.
				* The available resolutions vary according to the model.
	(Correction Value)	-40.0 to <u>0</u> to 40.0	-	Check the pattern and enter correction values.
Αι	ito-correction	-	-	The auto-correction function (DAS: Dot Adjustment System)
	All	-		detects a correction pattern with the sensor and automatically corrects the drop position.
	Feed Comp.	-	-	When "All" is selected, "Feed Comp." and "Drop.PosCorrect"
	Drop.PosCorrect	-	-	 are corrected. Check to confirm that the media does not lift up. Load white and clean media. Do not send RIP data from the PC during pattern printing. If automatic correction is unsuccessful, correct the position manually. [MENU] > [Media Setting] > [Feed Comp.] or [Drop.PosCorrect]
	(Resolution)	*	-	Select the resolution to be corrected. When "All" is selected, correction patterns will be printed for all resolutions, and the drop position is corrected automatically. * The available resolutions vary according to the model.
M	APS4 [*]	-	-	MAPS4: Mimaki Advanced Pass System This function disperses the boundaries between passes to make feed streaks between passes less visible. Altering MAPS4 may alter the color. This function may be less effective with certain types of images.
	MAPS4 *	AUTO/ MANUAL	-	This should normally be set to "AUTO". When set to "MANUAL", the following items are displayed:
	Speed	50 to 100 %	-	Reducing speed will make streaks less visible. However, printing will be slower.

	Item	Setting		Details
		*1	*2	
	Smoothing Level (Color) Smoothing	0 to 100 %	-	Increasing smoothing makes streaks less visible. Make separate settings for color and spot color (white).
	Level (Spot)			
Exte	rnal Heater	ON/OFF	-	Turns an external heater on and off. When turned on, the external heater is automatically activated during drawing.
Medi	a Information	-	-	Enter the media information.
M	edia Type	-	-	Select the media type to be used. The available media types vary depending on the model.
M	edia Width	-	-	Sets the media width detection method.
	Detection Type	<u>AUTO</u> / MANUAL		 AUTO: The media width is automatically detected with the sensor. MANUAL: Press to set the media width manually. When media width cannot be detected correctly, set the media width detection method to "MANUAL".
M	edia Remain	-	-	The remaining roll media amount can be displayed and printed out in REMOTE mode.
	Media Remain Manage	ON/ <u>OFF</u>	-	 ON: An input screen appears once the media width is detected. 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.
	Length	0 to 500 m	-	Enter the roll media length.
Deta	il Setting	-	-	This is used to set various functions.
V	acuum Fan	Host/Weak/ Standard/ Strong	Stro ng	Sets the force with which the medium is held down. This can be used to prevent media jamming and print head damage caused by the media lifting up.
	Continuous Running	ON/OFF		 ON: The media is constantly held down under vacuum. OFF: The media is held down by vacuum only when required, such as during printing and feeding.
F	eed Speed	Host/10 to 100 to 200 %	100	 Sets the media feed speed. 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.
Pre F	Pre Feed OFF		-	Sets the feed length of the feed to be performed before drawing.
1	Media Name Change		-	You can change the name of a setting type. The name can include alphanumeric characters or symbols.
Dele	te MediaInfo	-	-	Delete the set media information.

^{*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.

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.

Menu List

Item		Setting ^{*1}	Details
Statio	n Maint.	-	This moves the carriage to allow station and print head
Ca	rriage Out	-	maintenance.
	Move To Platen Right End	-	Cleans around the station, including the cap, wiper, and NCU. "Cap Rubber Cleaning"(P. 94) "Cleaning the NCU (Option)"(P. 98)
	Move To Maint. Space	1	Cleans around the print head. "Carriage Underside Cleaning"(P. 95) "Media Sensor Cleaning"(P. 101) "DAS (automatic correction function) / Sheet width sensor cleaning"(P. 99)
1 1	ead height ritching	-	Adjusts the height of the print head according to the thickness of the media. ** "Adjusting Print Head Height"(P. 50)
No	zzle Wash	1 to 99 min	Washes the print head nozzle surface with maintenance liquid to resolve ejection failures (e.g., nozzle clogging or deflection). Print Head Nozzle Washing"(P. 124)
1 1	mp Tube eaning	OFF / 1 to 168 h	Sets the interval for washing the suction pump tube (below the cap). This Discharge Channel Cleaning"(P. 100)
Cu	stody 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 this Printer is Left Unused for a Long Time" (P. 104)
Re	place Wiper	-	Use this function when replacing the wiper. Replacing the wiper resets the wiper usage counter. Wiper Replacement"(P. 108)
Са	p Replacement	-	Use this function when replacing the cap. Replacing the cap resets the cap usage time stored in the machine. Teap Replacement (P. 109)
Test F	Printing	-	Print a test pattern to confirm that the ink prints correctly. Perform head cleaning if you observe any ejection failures (e.g., nozzle clogging or deflection). Test Printing"(P. 63)
Clean	ing	-	Several head cleaning methods are available. Choose the head cleaning method based on test print results. Thead Cleaning"(P. 65)
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).
Pri	nt	-	Prints a pattern to check nozzle condition and register the nozzle. "Registering Nozzle Recovery Manually"(P. 85)
En	try	-	Registers the nozzle without printing a pattern.
Re	eset	-	Initializes the details set.
Те	st Printing	ON/ <u>OFF</u>	Sets whether to perform nozzle recovery before test printing.
Nozzl	e Check (Option)	-	"Nozzle Check (Option)"(P. 85)

	Item		Item	Setting ^{*1}	Details
	Printing Check		ng Check	ON/ <u>OFF</u>	Performs nozzle clogging detection before printing starts.
		Cr	neck Interval	-	Sets the nozzle clogging detection timing.
			Length	0.1 to <u>30.0</u> to 100.0 m	Performs nozzle clogging detection after the length set is reached and before the next print starts.
			File	1 to <u>30</u> to 1,000 files	Performs nozzle clogging detection after the preset number of files has been printed and before the next print starts.
		l	ontinuation int	<u>Stop</u> / Continuous	Select whether to stop or continue printing if "Nozzle clogging" is detected.
		Ac	tion	Off/1 to <u>10</u> to 100	Performs nozzle recovery (cleaning followed by nozzle checking) if "nozzle clogging" is detected.
			Cleaning	Soft/Normal/ Hard	Sets the cleaning type.
			Retry Count	0 to 3 times	Performs nozzle recovery (cleaning followed by nozzle checking) for the specified number of times.
			Nozzle very ²	ON/ <u>OFF</u>	Performs nozzle recovery automatically if "nozzle clogging" is detected. See below if you wish to perform nozzle recovery manually. "Registering Nozzle Recovery Manually"(P. 85)
		Judgment Condition ²		OFF / 1 to 32 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.
Αι	uto Maint.		int.	-	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. 115)
	Re	efre	sh	0.5/ <u>1.0</u> h	Sets the refresh interval (when a small amount of ink is ejected from the print head nozzles).
	CI	ear	ning Interval	1 to <u>48</u> h	Sets print head cleaning intervals. This will help prevent nozzle clogging.
	Туре			Normal/Soft/ Hard	Sets the cleaning type for head cleaning.
Pr	rint Maint.		int.	-	Sets the maintenance to be performed automatically midway during printing.
	Αι	Auto Cleaning		-	Sets the conditions to perform head cleaning after the preset number of files are printed.
		Se	etup	File/Length/ Time/ OFF	Sets the conditions to perform head cleaning.
		Int	erval	-	Sets head cleaning intervals.
			(File)	1 to 1,000	Cleaning starts when the set number of files is exceeded.
			(Length)	0.1 to 100.0 m	Cleaning starts after the length set is reached and before the next print starts.
			(Time)	10 to 240 min	Cleaning starts after the print time set is reached and before the next print starts.

		Item	Setting ^{*1}	Details
		Туре	Normal/Soft/ Hard	Sets the cleaning type for head cleaning.
		Cleaning Check	ON/ <u>OFF</u>	Sets whether nozzle checking is performed after head cleaning is completed.
	Int	erval Wiping	OFF/3 to 255 min	Wiping starts when the set print time is exceeded.
	Refresh		Weak/ Standard/ <u>Strong</u>	Select the refresh (flushing) time during printing.
W	Waste Ink Tank		-	Resets or corrects the waste ink tank usage count. Tank Replacement (P. 115)
	Reset Waste Ink Volume		-	Resets the waste ink tank usage count. Two "Waste Ink Tank Replacement" (P. 115)
		ljust Waste Ink olume	•	Corrects the waste ink tank usage count. Tank "When "Check Waste Ink Tank" message appears" (P. 115)
	Tank Capacity		-	Displays the waste ink tank capacity.
Fi	Fill Up Ink		-	Used to resolve ejection failures that are not restored by cleaning. "Filling Up Ink"(P. 86)

^{*1.} The default settings are shown underlined.

^{*2.} Displayed only when an optional NCU is installed.

Registering Nozzle Recovery Manually

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



• Nozzle recovery can be specified for up to 20 nozzles per row. The time taken for printing remains unchanged even when nozzle recovery is set.



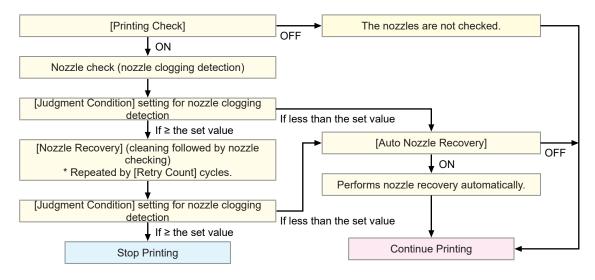
- Load media at least 500 mm wide. You cannot print the entire pattern if media less than 500 mm wide is used.
- 1 Position the media.
- **9** On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- 3 Select [Nozzle Recovery] > [Print], then press the [ENTER] key.
 - Print a nozzle recovery pattern.
 - The Select Entry Nozzle screen appears once printing is complete.
- ▲ Select the "head number and nozzle row" for nozzle recovery, then press the [ENTER] key.
- 5 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.
- 6 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. 63)

Nozzle Check (Option)

This is used to check for nozzle clogging before printing starts. Sets whether to perform maintenance functions automatically if nozzle clogging is detected.



Filling Up Ink

This is used when nozzle clogging or nozzle deflection that cannot be recovered by cleaning occurs.



• This cannot be performed depending on the ink level and waste ink level. Replace the ink pack and reset the waste ink tank according to the error message.

3.3 Function Setting Menu

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

Menu List

Item	Setting ^{*1}	Details
Logical Seek	Host/OFF/ON	Sets the range of carriage movement. • OFF: Machine size area Unidirectional printing Carriage movement • ON: Print data area Unidirectional printing Bi-directional printing Bi-directional printing Carriage movement
Take-up Unit	-	Sets the take-up unit operation.
Take-up Unit	<u>ON</u> /OFF	Set to "OFF" if the take-up unit is not used.
Take-up SW	Continuous/ Temporary	Sets the function performed by the ON/OFF button on the take-up unit. Take-up unit Continuous: Press the button to start/stop the take-up unit. Temporary: The take-up unit operates only while the button is pressed. The unit stops when the button is released.
Drying Time	-	Sets the time for ink to dry.
Scan	Host/0.0 to 9.9 sec	Sets the stop time of the carriage after each scan. • The MIMAKI RIP software (RasterLink) indicates this as "Pause Time per Scan".
Print End	Host/0 to 120 min	Sets the stop time after printing. The next data is printed once the set time has elapsed. • The Mimaki RIP software (RasterLink) does not allow the user to specify Print End. If the machine is set to "HOST", the time will be "0".
Power Setting	-	Sets the times to turn the power on and off automatically.
Auto Power-off	5 to <u>15</u> to 60 min	Sets the time until the power is automatically turned off.
Auto Power-on	-	Sets the time to automatically turn on the power.
Setup	ON/ <u>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.

	Item		Setting ^{*1}	Details
		Day	Monday to Sunday	Sets whether to turn on or off the power on each day of the week.
		Nozzle Check	<u>ON</u> /OFF	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</u> /Normal/ Hard	Sets the cleaning type.
		Retry Count	0 to 3 times	Performs nozzle recovery (cleaning followed by nozzle checking) for the specified number of times.
W	hite	Space Setting	-	Sets the offset value from the media left and right standard
	Margin		-	 margins (15 mm). The left and right margins should be set to at least -5 mm when using the media holder. This eliminates the risk of
		Margin/Left	Host/-10 to 85	printing on top of the media holder.
		Margin/Right	mm	 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.
	Sp	ace Btwn PP.	<u>None</u> /10 to 500 mm	The space between prints can be eliminated for continuous printing. Reducing the space length may cause media sagging, resulting in discrepancies in the distance the media is fed. The actual space may be wider than set, depending on the size of image data and number of passes in the feed direction.
	Sp	ace Feed Mode	Intermittent/ Continuous	Alters the feed method for blank space included in the image data. Intermittent: Uses intermittent feeding based on the timing of a fraction of the pass. Continuous: Feeds forward by skipping blank parts.
Vie	ew	Feed	<u>ON</u> /OFF	Sets whether or not to feed the media forward to view the print results—for example, during test printing.
Fe	edi	ng Before Cut	<u>ON</u> /OFF	Sets whether to feed media before cutting the media.
Αι	Auto Remote		<u>ON</u> /OFF	Sets whether to automatically switch to REMOTE mode and start printing if data is received locally.

^{*1.} The default settings are shown underlined.

3.4 Machine Status Menu

This is used to check machine information.

Menu List

Item		Details
Usage WIPING		The number of wiping cycles is displayed.
Waste Ink Tank		Displays the approximate level of waste ink in the waste ink tank as a percentage. • 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.
	Capping Use Days	Displays the number of days since the cap was replaced.
Version		Displays the machine firmware and other versions.
Error History		Displays the error and warning history. • 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 the machine periodically based on frequency of use.

Read the maintenance precautions thoroughly before maintaining this product.

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4.1 Maintenance Precautions



This machine includes parts that must be replaced periodically. We therefore recommend taking
out a maintenance contract. Carry out maintenance periodically and replace consumable items
to prevent quality defects and accidents.

MARNING



- Clean periodically. Debris and dust will accumulate on electrical components when the machine
 is used for extended periods. There is a risk of failure, electric shock, or fire due to current
 leakage.
- Do not clean by blowing—e.g., avoid using air blowers. Doing so may lead to failure, electric shock, or fire involving the machine if airborne debris or dust gets inside electrical components. Wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out. A vacuum cleaner may also be used for cleaning.



 Be careful to prevent liquids from getting inside the machine. Otherwise there is a risk of failure, electric shock, or fire.

CAUTION



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



Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when
handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking
ink may adhere to the skin or get into the eyes or mouth.





NOTICE



- Never touch the print head nozzle surface. Do not allow water or alcohol to come into contact
 with the print nozzle surface. This will increase the risk of machine failure or ejection failures
 (e.g., nozzle clogging or deflection).
- Do not use cotton swabs to clean around the head or carriage. Fibers from cotton swabs may adhere to the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).
- Do not splash ink or maintenance liquid on the covers. Exposure to splashing ink or maintenance liquid may damage or deform the cover.
- Do not use benzine, thinner, or any chemical agent containing 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 Maintenance Methods

Maintenance Items and Timing

Timing	Item
Every week, at the start of the work	Shake the ink. 🕾 "Ink Maintenance"(P. 94)
At the end of the week's	Clean the cap rubber. 🕾 "Cap Rubber Cleaning"(P. 94)
work	Clean the underside of the carriage. Tarriage Underside Cleaning"(P. 95)
	Check the waste ink levels in the waste ink tank. Tank" message appears"(P. 115)
	Clean around the wiper. Twiper Cleaning"(P. 96)
Every month	Clean the NCU. (NCU is optional.) 😂 "Cleaning the NCU (Option)"(P. 98)
	Clean the DAS sensor. TDAS (automatic correction function) / Sheet width sensor cleaning"(P. 99)
	Clean the ink discharge channel. 😂 "Ink Discharge Channel Cleaning"(P. 100)
	Clean the media sensor. The media Sensor Cleaning (P. 101)
	Clean the media cutter. 🎏 "Media Cutter Cleaning"(P. 101)
	Clean the media holder. The media Holder Cleaning (P. 102)
	Clean the jam sensor detecting plate. "Jam Sensor Detecting Plate Cleaning"(P. 103)
	Clean the platen. Telaten Cleaning"(P. 103)
	Clean the cover (exterior). Tover (Exterior) Cleaning (P. 104)
When not used for more than a week	Clean the cap and wash the ink discharge channels. After cleaning, store without turning off the main power supply. The whole turning off the main power supply. The whole the printer is Left Unused for a Long Time"(P. 104)

Items Required for Maintenance

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).



· Do not store consumable items in locations where children may enter.

Ink Maintenance

If ink constituents are sedimented, the ink density may become uneven. We recommend shaking the lnk eco-case periodically to keep printing consistent.

Sublimation transfer ink: once a week

Orange ink: once a week

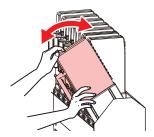
Orange ink

"Shake the orange ink cartridge" appears on the display every 24 hours. When the message appears, shake the orange ink cartridge.

Shake the lnk eco-case



- Shake taking care that the ink eco-cases do not become detached from the ink supply unit. Ink may leak out if the ink eco-cases become detached.
- **◆** Shake the ink eco-cases slowly approximately 10 times.
 - Shake the ink eco-cases back and forth while holding the top.





• Be sure to shake the ink eco-case back and forth by holding its top. Ink may leak out if the top is not held and the ink eco-cases become detached.

Cap Rubber Cleaning

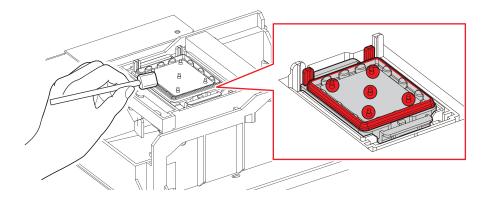
The cap prevents the print head nozzle surface from drying out. Continuing to use a dirty cap may affect ink take-up and lead to ejection failures (such as nozzle clogging or deflection).



- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).
- On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- 2 Select [Station Maint.] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
 - · The carriage moves over the platen.
- 3 Open the maintenance cover (right side).

✓ Clean the cap rubber.

- Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.
- Clean the areas indicated in red (the entire interior and exterior of the cap rubber and the tabs) in the diagram.



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

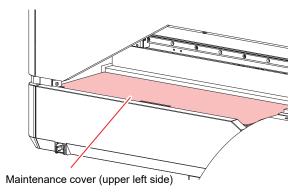
Carriage Underside Cleaning

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.

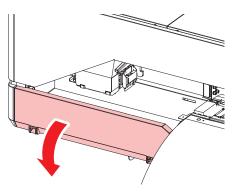


- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).
- 1 Remove the maintenance cover (upper left side).



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

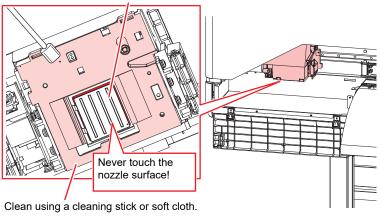
▲ Open the maintenance cover (left side).



5 Clean around the print head.

Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe
off the maintenance liquid. Make sure none remains.

Clean the print head sides using a cleaning stick.





- · Never touch the print head nozzle surface.
- 6 Once cleaning is complete, press the [ENTER] key.
 - The carriage moves back to its original position.
- **7** Close the maintenance cover (left side), then attach the maintenance cover (upper left side).

Wiper Cleaning

The wiper wipes off ink adhering to the print head nozzle surface. Continuing to use with a dirty wiper may cause dried ink and attached dust to damage the head nozzle surface, and could lead to ejection failures (e.g., nozzle clogging or deflection).

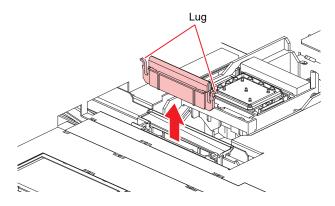


- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).
- On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is 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 maintenance cover (right side).

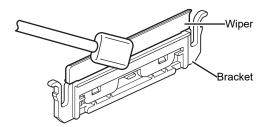
A Remove the wiper.

• Hold the lug at the rear of the wiper bracket, then pull out the wiper.



5 Clean the wiper and bracket.

• Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.

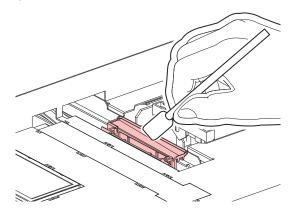




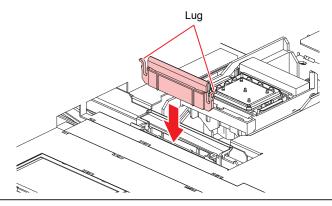
• Replace dirty or warped wipers with new ones. Twiper Replacement (P. 108)

6 Clean the wiper slider.

• Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.



7 Reattach the wiper at the original position.





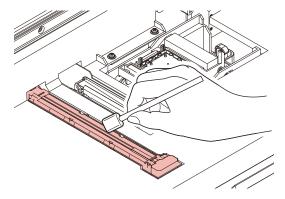
- · Do not remove the absorber pad in the pad case. Doing so may result in leaking ink.
- Once cleaning is complete, close the cover, then press the [ENTER] key.

Cleaning the NCU (Option)

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 check function from operating correctly.

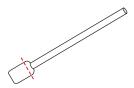


- Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).
- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- 2 Select [Station Maint.] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
 - The carriage moves over the platen.
- 3 Open the maintenance cover (right side).
- ▲ Clean the NCU.
 - Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe
 off the maintenance liquid. Make sure none remains.





• Insert the cleaning stick as far as the line shown in the illustration.

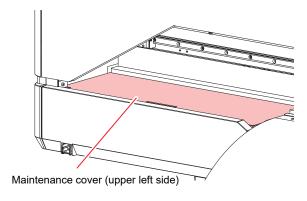


5 Once cleaning is complete, close the cover, then press the [ENTER] key.

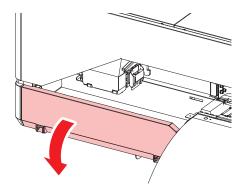
DAS (automatic correction function) / Sheet width sensor cleaning

The DAS sensor is located on the carriage underside. If dust or debris accumulates on the sensor, DAS (Media Setting Menu) may not function.

Remove the maintenance cover (upper left side).

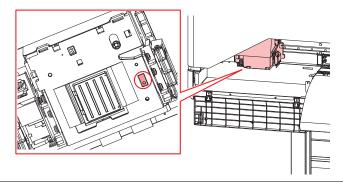


- **9** On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- Select [Station Maint.] > [Carriage Out] > [Move To Maint. Space], then press the [ENTER] key.
 - The carriage moves to the maintenance space.
- ▲ Open the maintenance cover (left).



5 Clean the DAS sensor.

· Wipe clean using cotton swabs or a soft cloth.





- For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.
- 6 Once cleaning is complete, press the [ENTER] key.
- **7** Close the maintenance cover (left side), then attach the maintenance cover (upper left side).

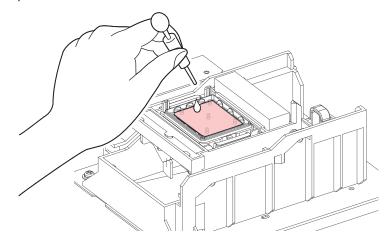
Ink Discharge Channel Cleaning

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

- - The Maintenance menu is displayed.
- **2** Select [Station Maint.] > [Pump tube cleaning], then press the [ENTER] key.
- 3 Open the maintenance cover (right side).
- 4 Fill the cap with maintenance liquid.



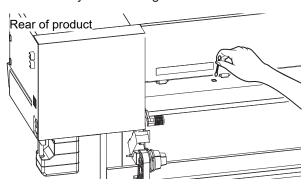
 Use a syringe to draw up some maintenance liquid and fill until it almost overflows from the cap.



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

Media Sensor Cleaning

There is a media sensor located on the rear cover. The media cannot be detected correctly if dust or debris accumulates on the sensors. Remove any debris using cotton swabs or a soft cloth.



Media Cutter Cleaning

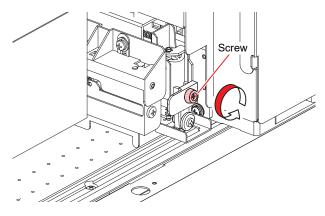
Continuing to use a dirty media cutter may cause dust to collect on the head nozzle surface or the cutter blade to grow dull.



- Avoid touching the cutter blade. Failure to do so may result in injury.
- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- 2 Select [Station Maint.] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
 - · The carriage moves over the platen.
- **3** Open the maintenance cover (right side).

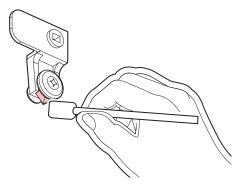


- The carriage can be moved by hand. Move the carriage slowly to a position allowing easy access while working.
- 4 Remove the media cutter.



5 Clean both sides of the media cutter.

 Wipe off any adhesive paste, ink and dust adhering using a cleaning stick moistened with industrial alcohol. Wipe off any industrial alcohol so that none remains.



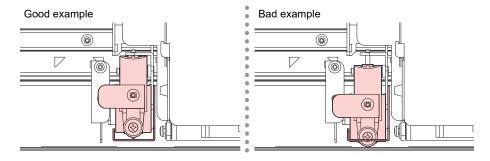
Return the media cutter to its original position.



• Tighten the screw securely. A loose screw may cause cutter or platen damage.

7 Check the position of the media cutter.

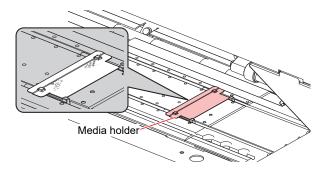
· Lift up the media cutter by hand if it has dropped down.



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

Media Holder Cleaning

Continuing to use a dirty media holder will prevent correct media detection or proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).





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



• Be careful to prevent liquids from getting inside the machine. Otherwise there is a risk of failure, electric shock, or fire.



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

Jam Sensor Detecting Plate Cleaning

Continuing to use the dirty carriage underside will rub dried ink and attached dust on to the media, resulting in contaminated prints.

- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- **9** Select [Station Maint.] > [Carriage Out] > [Move To Maint. Space], then press the [ENTER] key.
 - The carriage moves to the maintenance space.
- **?** Clean the jam sensor detecting plate.
 - · Clean the jam sensor detecting plate underside at the left and right sides of the carriage.
 - Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe
 off the maintenance liquid. Make sure none remains.
- **△** Once cleaning is complete, press the [ENTER] key.

Platen Cleaning

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 ejection failures (e.g., nozzle clogging or deflection).



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



• Be careful to prevent liquids from getting inside the machine. Otherwise there is a risk of failure, electric shock, or fire.

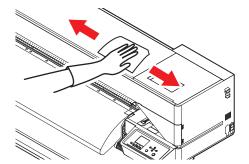


• The grooves in which the media holder slides and the media is cut are susceptible to dust accumulation. Remove any debris carefully.



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

Cover (Exterior) Cleaning





• Be careful to prevent liquids from getting inside the machine. Otherwise there is a risk of failure, electric shock, or fire.



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

When this Printer is Left Unused for a Long Time

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

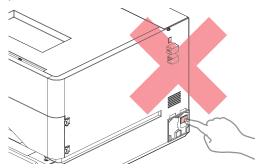
Check beforehand

Is [Near End] or [Ink End] displayed?

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



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). This increases the risk of ejection failures (such as nozzle
clogging or deflection).





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



When the machine is not in use, raise the clamp lever to **separate the pinch rollers from the grit rollers**.

- Leaving the pinch rollers lowered may cause them to become deformed and prevent media from being fed correctly.
- Leaving media loaded will subject it to force from the pinch rollers, which may leave pinch roller marks on it.

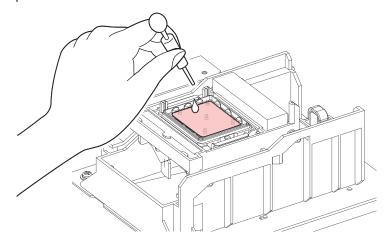


Perform the following if the "Check Waste Ink Tank" message appears on the display.
 "Waste Ink Tank Replacement"(P. 115)

- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- **9** Select [Station Maint.] > [Custody Wash], then press the [ENTER] key.
 - · The carriage moves over the platen.
- 3 Open the maintenance cover (right side).
- Clean the wiper.
 - # "Wiper Cleaning"(P. 96)
- 5 Clean the cap rubber.
 - @ "Cap Rubber Cleaning"(P. 94)
- 6 Once cleaning is complete, press the [ENTER] key.
- 7 Fill the cap with maintenance liquid.

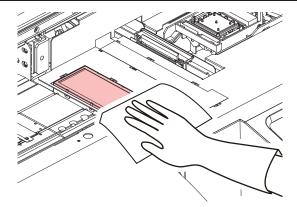


• Use a syringe to draw up some maintenance liquid and fill until it almost overflows from the cap.



- 8 Close the maintenance cover (right side).
- Set the exposure time, then press the [ENTER] key.
 - · Cleaning is performed automatically once print nozzle washing has ended.
 - [Please wait] is displayed.
- 10 When [Maintenance liquid Fill the liquid.] appears again, open the maintenance cover (right side), and fill the cap with cleaning solution as in step 7.
- 1 1 Close the maintenance cover (right side).

Flushing Unit Cleaning





• Be careful to prevent liquids from getting inside the machine. Otherwise there is a risk of failure, electric shock, or fire.



• For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.

4.3 Replacement of Consumable Item

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).



• Do not store consumable items in locations where children may enter.



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



Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when
handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking
ink may adhere to the skin or get into the eyes or mouth.





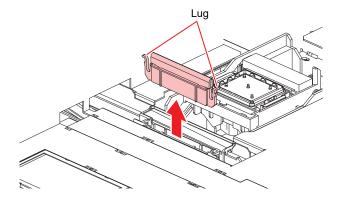
Consumable Item Replacement Timing

Timing	Item
When dirty	"Replacing the Absorber Around the Station"(P. 110)
When ejection failures cannot be remedied	"Cap Replacement"(P. 109) "Wiper Replacement"(P. 108)
When damaged	"Cap Replacement"(P. 109) "Pinch Roller Replacement"(P. 111) "Media Holder Replacement"(P. 112) "Media Cutter Replacement"(P. 114)
When "Check Waste Ink Tank" appears on the display	"Waste Ink Tank Replacement"(P. 115)

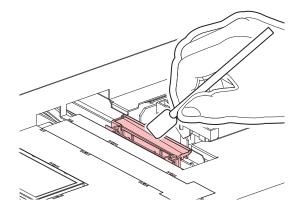
Wiper Replacement

The machine 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.

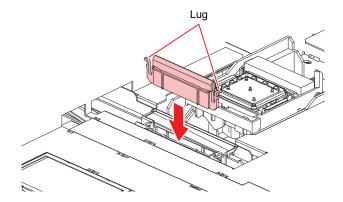
- "Replace Wiper" appears on the display.
- **9** On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- 3 Select [Station Maint.] > [Replace Wiper], then press the [ENTER] key.
 - · The carriage moves over the platen.
- ▲ Open the maintenance cover (right side).
- 5 Remove the wiper.
 - · Hold the lug at the rear of the wiper bracket, then pull out the wiper.



- 6 Clean the wiper slider.
 - Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.



7 Mount a new wiper.



- **Q** Once replacement is complete, close the cover, then press the [ENTER] key.
 - The wiper usage count is reset.
- **9** Once replacement is complete, close the cover, then press the [ENTER] key.

Cap Replacement

If ejection failures (e.g., nozzle clogging or 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.

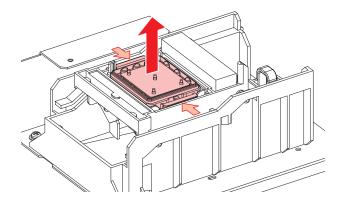




- We recommend replacing the cap every six to twelve months.
- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - The Maintenance menu is displayed.
- **2** Select [Station Maint.] > [Replace Cap], then press the [ENTER] key.
 - · The carriage moves over the platen.
- 3 Open the maintenance cover (right side).

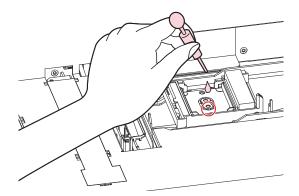
▲ Remove the cap.

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



5 Apply maintenance liquid.

Use a syringe to apply two or three drops of maintenance liquid to the hole at the front.



6 Mount a new cap.

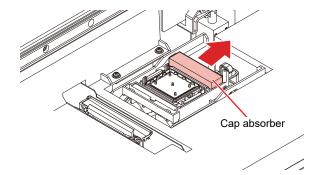
- · Position with the slot at the front and push in until it clicks.
- 7 Once replacement is complete, close the cover, then press the [ENTER] key.

Replacing the Absorber Around the Station

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

- On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- 2 Select [Station Maint.] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
 - · The carriage moves over the platen.
- 3 Open the maintenance cover (right side).

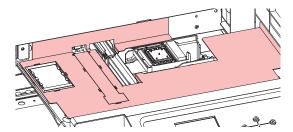
A Remove the cap absorber.





· Avoid ink dripping when removing the cap absorbers.

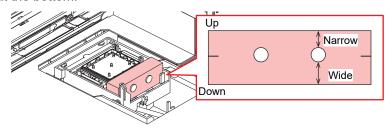
5 Clean the station cover.



- 0
- For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.
- 6 Mount a new cap absorber.



• As shown in the figure, mount the absorber with the narrow side on top and the wide side at the bottom.



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

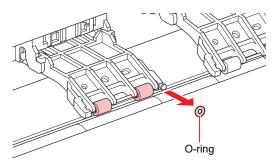
Pinch Roller Replacement

Replace worn or dirty pinch rollers with new ones.



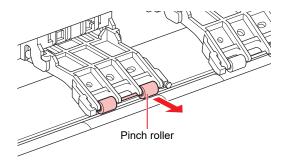
- Turn off the main power and unplug the power cable before replacement.
- 1 Raise the clamp lever.

? Remove the O-ring retaining the pinch rollers.





- The pinch rollers are small. Be careful to avoid dropping them into the product interior. Keep media on them so that it is less likely to fall into a gap.
- Remove the pinch roller spindle.



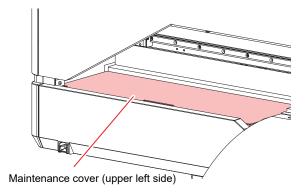
Mount new pinch rollers, and secure them using the O-ring.

Media Holder Replacement

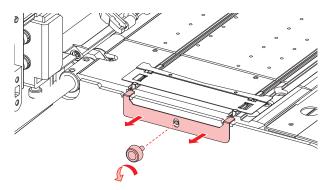
If the media holder becomes deformed and touches the carriage or print head, replace with a new media holder.



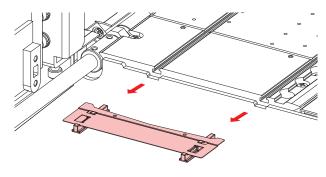
- Turn off the main power and unplug the power cable before replacement.
- Remove the maintenance cover (upper left side).



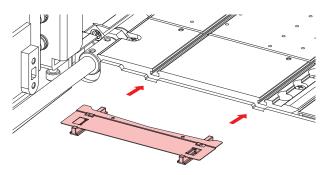
? Remove the side screw, and detach the media holder stopper.



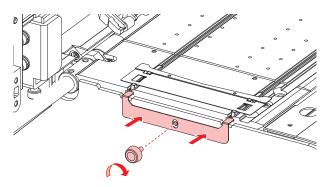
3 Remove the media holder.



4 Mount the new media holder on to the platen.



5 Secure the media holder stopper with the screw.



6 Attach the maintenance cover (upper left side).

Media Cutter Replacement

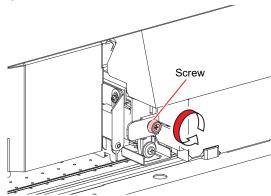
Replace cutters when blades are chipped or blunt.



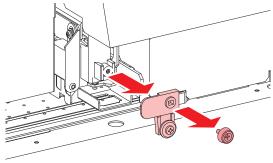
- Avoid touching the cutter blade. Failure to do so may result in injury.
- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- 2 Select [Station Maint.] > [Carriage Out] > [Move To Platen Right End], then press the [ENTER] key.
 - · The carriage moves over the platen.



- The carriage can be moved by hand. Move the carriage slowly to a position allowing easy access while working.
- 3 Replace the media cutter.
 - (1) Unscrew the cutter screw.



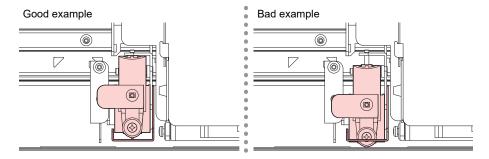
(2) Remove the cutter.



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

⚠ Check the position of the media cutter.

· Lift up the media cutter by hand if it has dropped down.



5 Once replacement is complete, press the [ENTER] key.

Waste Ink Tank Replacement

Ink used during head cleaning and other processes is collected in the waste ink tank at the lower right of the machine.

This product keeps track of the waste ink level. A "Check Waste Ink Tank" message appears when the preset level is reached. Use this a guide for replacing the waste ink tank.



- For a 2-liter tank, the preset level is 80 % (1.6 L).
- Continuing to use the product without disposing of the waste ink may result in waste ink
 overflowing from the waste ink tank. Visually check ink levels in the waste ink tank about once a
 week.



Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when
handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking
ink may adhere to the skin or get into the eyes or mouth.



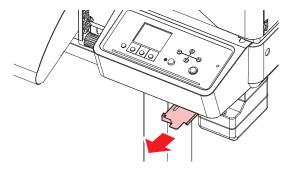
When "Check Waste Ink Tank" message appears

- The "Check Waste Ink Tank" message appears on the display.
- Check the waste ink levels in the waste ink tank.
 - If you note any discrepancies from actual levels, proceed to the next step.
 - If there is no discrepancy, replace (dispose of) the waste ink tank referring to Replacing the Waste Ink Tank"(P. 116).
- On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- ▲ Select [Waste Ink Tank], then press the [ENTER] key.
- Select [Adjust Waste Ink Volume], then press the [ENTER] key.
- A Press ▲ ▼ to adjust the level.

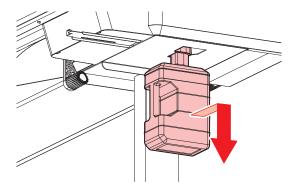
7 Press the [ENTER] key once adjustment is complete.

Replacing the Waste Ink Tank

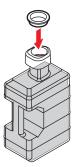
- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- **9** Select [Waste Ink Tank], then press the [ENTER] key.
- **3** Select [Reset Waste Ink Volume], then press the [ENTER] key.
- 4 Pull the waste ink tank stopper forward.



5 Hold the handle on the waste ink tank and slide out.

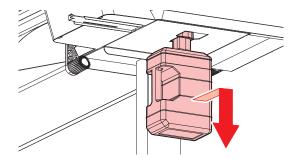


Attach the cap to the removed waste ink tank, and use tape to prevent leakage of waste ink.

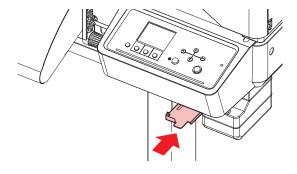




 When disposing of ink, maintenance liquid or other liquid used with the product, or containers or non-woven fabric contaminated with ink or other liquid, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations. 7 Mount a new waste ink tank.



8 Close the waste ink tank stopper.



- **9** Press the [ENTER] key.
 - The waste ink level will be reset.

Spout Rubber Replacement

Spout rubber is installed in the eco-case to reduce ink leakage from the 2 L ink pack. Spout rubber is supplies (SPA-0317: spout rubber (8 sets). If the gap in the center widens as shown in the photo, replace the spout rubber.



· Replace all eight sets at the same time.

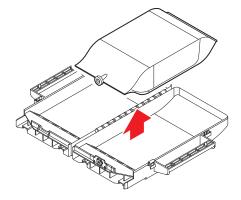






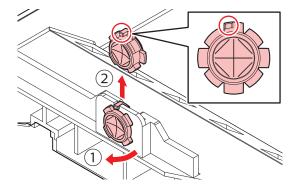
Early stage Usable Unusable

- 1 Open the 2 L eco-case.
- 7 Take out the 2 L ink pack.



Remove the spout rubber.

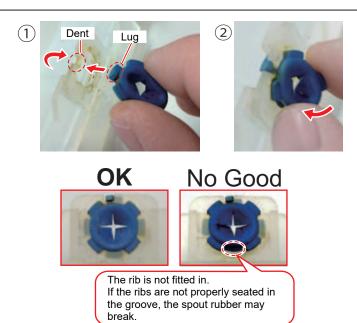
• Push the spout rubber out of the fit hole of the 2 L eco-case while holding it with a paper towel.



- **1** Attach new spout rubber from the outside of the eco-case.
 - Adjust the positioning lug of the spout rubber to the recessed position of the eco-case and insert it.
 - · Note the orientation of the rubber when attaching it.
 - Push the entire rubber into the groove until the spout rubber is evenly fitted in.



• Warping the entire spout rubber makes it easier to insert from the outside of the case.

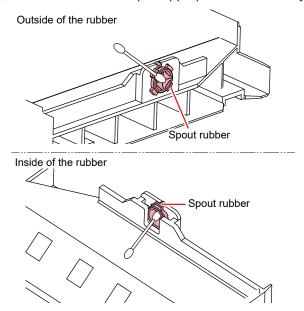


5 Thoroughly moisten the spout rubber surface with maintenance liquid.



- Thoroughly moisten the spout rubber surface with maintenance liquid before inserting it.

 Inserting the spout rubber into the eco-case without moistening it may damage the rubber.
- At this time, use a maintenance liquid appropriate for the ink type.



Chapter 5 Troubleshooting



This chapter

This chapter describes corrective actions for troubleshooting and messages on the display.

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5.1 Troubleshooting

For information on troubleshooting, refer to this chapter. Refer to our website (https://mimaki.com/support/) for frequently asked questions (FAQs) about this product and customer support videos.

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 supply. 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 interface cable connected?	Connect the cable securely to the USB 2.0 port. Tusing a USB Cable"(P. 34)
Is a LAN cable connected?	Connect the cable securely to the LAN port. Tusing a LAN Cable (P. 33)
Are you using a LAN cable approved by Mimaki?	Check the LAN cable type. Tusing a LAN Cable (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. 27)

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.
Is the media skewed?	Use the take-up unit to adjust the media or reload the media. © "Loading the Media"(P. 51)

Points to check	Corrective action
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. You can also improve this problem by attaching the NITOFLON® tape provided on the platen. Be careful not to cover the vacuum holes. For more information, refer to the description on transporting media on the platen. https://mimaki.com/download/inkjet.html

Image defects occur.

Symptom	Corrective action	
White streaks, blurriness, and dark streaks occur. (Carriage scan direction)	1. Remove any paper scraps or other debris adhering to areas over which the head passes (e.g., media holders). ** "Media Holder Cleaning"(P. 102)** "Platen Cleaning"(P. 103)	
	2. Perform the procedure described in 💝 "Head Cleaning"(P. 65).	
	3. Perform the procedure described in 💝 "Feed Correction"(P. 67).	
	4. Perform the procedure described in 💝 "Cap Rubber Cleaning"(P. 94).	
	5. Perform the procedure described in "Carriage Underside Cleaning" (P. 95).	
Text is double- or triple-printed in the media feed direction.	1. Perform the procedure described in Feed Correction"(P. 67).	
Offsetting occurs during bidirectional printing.	Perform the procedure described in "Correcting the Drop Position"(P. 69).	
Ink droplets drip during printing.	1. Perform the procedure described in 💝 "Cap Rubber Cleaning"(P. 94).	
	2. Perform the procedure described in Tarriage Underside Cleaning"(P. 95).	
	3. Perform the procedure described in 💝 "Head Cleaning"(P. 65).	
	4. Set auto maintenance. The "Maintenance Menu"(P. 82)	
Nozzles are clogged.	1. Perform the procedure described in 💝 "Head Cleaning"(P. 65).	
	2. Perform the procedure described in Trint Head Nozzle Washing"(P. 124).	
	3. Perform the procedure described in Transport Registering Nozzle Recovery Manually"(P. 85).	
	4. Perform the procedure described in 💝 "Filling Up Ink"(P. 86).	
Are the print heads too high?	Adjust the print head height. Tadjusting Print Head Height"(P. 50)If the print heads cannot be lowered, increase the refresh level during printing (P. 82) or perform regular test printing to check for nozzle clogging.	
Are there any ink colors that aren't used much?	Discharge from infrequently used nozzles tends not to be consistent. Although increasing the refresh level during printing (Maintenance Menu) will enable more frequent nozzle use, note that this will also increase ink consumption.	

Symptom	Corrective action
Are you using media easily affected by static electricity?	Increase the refresh level during printing (P. 82) or perform regular test printing to check for nozzle clogging.
Is the machine installed in a location with low humidity?	Increase the humidity by installing a humidifier or similar equipment. When printing continuously, also increase the refresh level during printing (P. 82) or perform regular test printing to check for nozzle clogging.
Is the machine installed in a location where dust or powder is present?	Install the machine in a location free of dust or powder (office equivalent: dust level 0.15 mg/m ³).

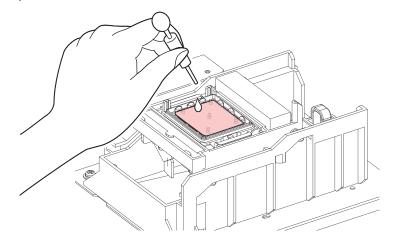
Print Head Nozzle Washing

If ejection failures (e.g., nozzle clogging or deflection) remain unresolved even after head cleaning (Head Cleaning), apply nozzle wash to the print head.

- 1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.
 - · The Maintenance menu is displayed.
- **9** Select [Station Maint.] > [Nozzle Wash], then press the [ENTER] key.
 - The carriage moves over the platen.
- **?** Open the maintenance cover on the right side.
 - Wiper Cleaning"(P. 96)
- ▲ Clean the cap rubber.
 - @ "Cap Rubber Cleaning"(P. 94)
- 5 Fill the cap with maintenance liquid.



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



- 6 Close the maintenance covers.
- **7** Set the exposure time, then press the [ENTER] key.
 - · Cleaning is performed automatically once print nozzle washing has ended.



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

The ink has leaked out



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

Media cannot be taken up.

As shown in the figure below, images with shading in the direction of media transport may be difficult to be taken up in long lengths.

Ink density may be adjusted to allow for take-up.



<Example of ink density adjustment>

Change the overall value of density from 0 to about -40 from the color adjustment in the print conditions under the following conditions.

• Media: TRS95-1620 (our genuine decalcomania paper)

• RIP software: RasterLink7

Drawing quality

• Input profile: Mimaki_Expand_Color

• Device profile: Mimaki TRS95 [MTW110]

• Resolution: 900 x 600 VD

· Passes: 4 (default)

• Print direction: bi-directional (default)

5.2 Problems Causing Messages to Appear

If a problem arises, the buzzer sounds and a message appears on the display.

You can also check the local guidance. Tipisplaying Machine Information (Local Guidance)"(P. 29)

Take the appropriate action in accordance with the content of the message. If a message reappears even after taking the prescribed action, contact your local dealer or our service office.

Warning Messages

Message	Cause	Corrective action
Replace NCU ^{*1} Ink Pad	The ink absorber needs to be replaced.	The NCU ^{*1} ink absorber must be replaced. Contact your local dealer or our service office.
Replace NCU ^{*1}	A problem was detected with the nozzle clogging assessment.	 Clean the NCU*1. "Cleaning the NCU (Option)"(P. 98) Replace the NCU*1 if the error is not cleared. Contact your local dealer or our service office.
NCU ^{*1} Sensor Lv Low	The sensor's sensitivity is impaired.	Clean the NCU*1. TCleaning the NCU (Option)"(P. 98)
NCU ^{*1} Sens Adj Err H	Sensor sensitivity adjustment failed.	 Replace the NCU^{*1} if the error is not cleared. Contact your local dealer or our service office.
NCU ^{*1} Sens Adj Err L		
NCU ^{*1} Connect	A problem was detected with the NCU*1 connection.	• Turn off the main power and wait a while before turning back on. (**) "Turning Off the Power"(P. 31)
Ink Error	An ink error occurred.	Check the ink error details. "Ink error"(P. 128)
COVER OPEN	The cover is open.	Close the cover.
Lower the clamp lever	The clamp lever is raised.	• Lower the clamp lever. © "Front"(P. 22)
Data Remain	Print (RIP) data was received.	Switch to REMOTE mode and start printing or clear the data and abort printing.
Temporary Suspension	Printing has been paused.	Switch to REMOTE mode and resume printing or clear the data and abort printing.
Printing not possible/ink IC	An unusable ink IC chip is used.	Replace with new ink and a new ink IC chip. "Mounting the ink"(P. 38)
No Media	No media is loaded, or the sensors are faulty.	 Load the media. "Loading the Media"(P. 51) Clean the media sensor. "Media Sensor Cleaning"(P. 101)
Please load media	No media is loaded, or the sensors are faulty.	Load the media. "Loading the Media"(P. 51)

Message	Cause	Corrective action
Media Undetected	The media width has not been detected.	Detect the media width.
Wiper Move Failure	The wiper is not operating correctly.	Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)
Replace Wasteinktank	The waste ink tank count exceeded the preset value (90%).	Automatic maintenance is not possible while the covers are open. Perform the following steps:
		1. Check the waste ink levels in the waste ink tank. "When "Check Waste Ink Tank" message appears" (P. 115)
		2. Replace the waste ink tank, then reset the waste ink level. "Replacing the Waste Ink Tank"(P. 116)
Check Waste Ink tank	The waste ink tank count exceeded the preset value (80%).	1. Check the waste ink levels in the waste ink tank. "When "Check Waste Ink Tank" message appears"(P. 115)
	, ,	2. Replace the waste ink tank, then reset the waste ink level. Replacing the Waste Ink Tank"(P. 116)
High ambient temp ** ° C	Ambient temperatures are too high.	Adjust ambient temperatures to temperatures within the specified range.
Low ambient temp ** ° C	Ambient temperatures are too low.	Optimum print quality may not be possible unless ambient conditions are within the specified range. (2) "Installation Precautions"(P. 15)
Auto-correction failed	 White media is not used. The media is dirty. The media lifts up. There is dirt around the sensor. 	 Load white and clean media. Load media so it does not lift up. Clean the area around the sensor. The "DAS (automatic correction function) / Sheet width sensor cleaning" (P. 99) If automatic correction fails repeatedly, correct the position manually. The "Feed Correction" (P. 67) The "Correcting the Drop Position" (P. 69)
E. HEATER ^{*2} ERROR	 The external heater has a faulty connection. The external heater is tilted. A problem was detected with the temperature of the external heater. 	Check the external heater.

^{*1} NCU is optional.

^{*2.} An external heater is optional.

Ink error

Message	Cause	Corrective action
Ink End	The ink has run out.	 Replace with new ink. "When Ink End is Displayed"(P. 42) If you use UISS, you may perform cleaning.
Ink Near End	Ink levels are low.	The ink will run out soon. Have new ink ready. Mount the ink. "When Ink Near End is Displayed"(P. 42) The ink will run out soon. Have new ink ready. "When Ink Near End is Displayed"(P. 42)
Non Ink IC	No ink IC chip was detected.	1. Insert the ink IC chip. "Mounting the ink"(P. 38)
		2. Check to confirm the ink IC chip was inserted correctly. Thousand the ink"(P. 38)
		Turn off the main power and wait a while before turning back on.
Wrong Ink IC	An error occurred with the information on the ink IC chip.	Check to confirm the ink IC chip was inserted correctly. "Mounting the ink"(P. 38)
		Turn off the main power and wait a while before turning back on.
		3. Replace with new ink. The Replacing a 2 L Ink Pack"(P. 41)
Ink Color	The ink color registered on the IC chip is different from the ink color filled.	Insert an ink IC chip for the correct ink color. "Mounting the ink"(P. 38)
Ink Type	The ink type registered on the IC chip is different from the ink type filled.	Insert an ink IC chip for the correct ink type. "Mounting the ink"(P. 38)
Expiration Near	The ink has expired.	Replace with new ink or use up as quickly as possible. Printing is possible. "Precautions for Handling Ink Packs"(P. 43) "Replacing a 2 L Ink Pack"(P. 41)
Expiration Over	The ink is two months past its expiration date and cannot be used.	Replace with new ink. Printing is not possible. Replacing a 2 L Ink Pack"(P. 41)
Wrong Cartridge	The amount of ink used exceeded the specified value.	 Replace with new ink. The Replacing a 2 L Ink Pack (P. 41) Check to confirm the nozzle is not clogged.

Error Message

Error number	Message	Cause	Corrective action
04	PARAM ROM	A problem was detected with the main PCB.	• Turn off the main power and wait a while before turning back on.
108	HD THERMIS[1]	 A problem was detected with print head temperature control. 	"Turning Off the Power"(P. 31)
108	HD CONNECT[1]	 A problem was detected with the print head connection. 	
108	HD MEM EMP[1]	A problem was detected with the print head.	
10e	FROM CLEAR	A problem was detected	
10f	FROM WRITE	with the main PCB.	
122	CHECK:SDRAM	A problem was detected with the SDRAM.	
123	PRAM DATA	A problem was detected	
124	PRAM ADDR	with the main PCB.	
127	POWER OFF		
128	HDC FIFO OVER	A problem was detected	
128	HDC FIFO UNDER	with the print head control PCB.	
129	Battery Exchange	 The internal clock battery is spent and must be replaced. 	Contact your local dealer or our service office.
12a	HDC SPEED	A problem was detected with the print head control.	Turn off the main power and wait a while before turning back on. **Time Turn of the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and wait a while before turning back on. **Time Turn off the main power and the mai
130	HD DATA SEQ	A problem was detected with the print head control.	"Turning Off the Power"(P. 31)
147	DS-IC BUSY	 Ink IC control abnormality detected. 	
148	E-LOG SEQ	 A log control abnormality was detected. 	
154	Main PCB V05	 A problem was detected with the main PCB 5V power supply. 	
155	Main PCB V42-1	A problem was detected with the main PCB 42V power supply.	
171	NEW HEAD CONNECT	A new print head connection was detected.	
186	HDC OVERFLOW/HDC UNDERFLOW	A problem was detected with the print head control.	
187	HDC SLEW RATE		
188	HDC MEMORY		

Error number	Message	Cause	Corrective action
18e	FLS NOT COMP	A problem was detected	
18f	OFFSET START [1]	with the print head control.	
18f	OFFSET END [1]		
1b8	HEAD XHOT	A problem was detected with the print head.	
201	Command Error Parameter Error	 Data other than print (RIP) data was received, or a problem was detected with the print (RIP) data received. A problem was detected 	 Clear the data and resend. Check the USB/Ether cable connection. Connecting a PC to the Product Use a compatible cable. Connecting a PC to the Product Turn off the main power and wait a
		with the print (RIP) data received.	while before turning back on. 😂 "Turning Off the Power"(P. 31)
206	Print Mode Error	 Print (RIP) data was received with print parameters that do not allow printing. 	Change the output parameters and profile using RIP software.
20A	Driver Version	 Printing is not possible because the Mimaki driver version is old. 	Install the latest Mimaki driver available from: https://mimaki.com/download/ inkjet.html
303	PCB MAIN ET	 A problem was detected with the main PCB. 	1. Turn off the main power and wait a while before turning back on. © "Turning Off the Power"(P. 31)
304	USB INIT ERR	A problem was detected	1. Check the USB cable connection. © "Using a USB Cable"(P. 34)
305	USB TIME OUT	with the USB cable connection.	2. Use a compatible cable. ""Using a USB Cable"(P. 34)
			3. Turn off the main power and wait a while before turning back on. Turning Off the Power"(P. 31)
401	Motor X	The X motor was overloaded.	Check to confirm the media is loaded correctly. "Loading the Media"(P. 51)
402	Motor Y	 The Y motor was overloaded. 	Check for anything that may obstruct carriage movement.
403	X Current	 An overcurrent error was detected in the X motor. 	3. Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)
404	Y Current	 An overcurrent error was detected in the Y motor. 	running on the rower (F. 31)
406	Wiper Move Failure	The wiper origin could not be detected.	Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31) Turning Off the Power"(P. 31)
44f	Take-up Roll Sns Err	A problem was detected with the take-up unit	Check to confirm the [Function Setting] [Take-up Unit] setting is "ON".
		sensor spindle.	 Check to confirm the media is loaded correctly. "Loading the Roll Media"(P. 56)
			3. Check to confirm the take-up unit switch functions properly. Take-up unit"(P. 52)

Error number	Message	Cause	Corrective action
47f	Take-up Diameter Max	The take-up unit media diameter has reached the maximum value.	Replace the paper core in the take-up unit.
48a	Detect winding failure	A problem was detected with the take-up unit.	Check to confirm the [Function Setting] [Take-up Unit] setting is "ON".
		·	2. Check to confirm the media is loaded correctly. The "Loading the Roll Media" (P. 56)
			3. Check to confirm the take-up unit switch functions properly. Take-up unit"(P. 52)
504	CLAMP UP	The clamp lever is lifted.	Lower the clamp lever.
505	Media Jam	The media jam sensor was triggered.	1. Remove the media in contact with the carriage and reload with fresh media. "Loading the Media"(P. 51)
			Check for anything that may obstruct carriage movement.
509	HDC POSCNT	A problem was detected with position control.	Turn off the main power and wait a while before turning back on. "Turning Off the Power" (P. 31)
50a	Y Org Detect Error	A problem was detected with Y origin detection (initialization).	"Turning Off the Power"(P. 31)
50c	Check Media With Sensor	A problem was detected with media width	1. Check the media loading position. "F" "Loading the Media"(P. 51)
		detection.	2. Clean the media width sensor. The "DAS (automatic correction function) / Sheet width sensor cleaning"(P. 99)
50f	L-SCALE BLACK	A problem was detected with the linear scale.	Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)
516	Media Set Position R (L)	The media was loaded outside the range of valid	Check the media loading position. "Loading the Media"(P. 51)
		positions.	2. Clean the media width sensor. (%) "Media Sensor Cleaning"(P. 101)
54b	Media Press	Media retainer detection failed.	1. Check the media loading position. (2) "Loading the Media"(P. 51)
			2. Clean the media width sensor. (**) "Media Sensor Cleaning"(P. 101)
54c	Vacuum Fan Err	A problem was detected with the vacuum fan.	Turn off the main power and wait a while before turning back on. Turning Off the Power"(P. 31)
602	Ink End	The ink has run out.	Replace with new ink. "When Ink End is Displayed"(P. 42)
604	Check Waste Ink tank	The waste ink tank count exceeded the preset value (80%).	1. Check the waste ink levels in the waste ink tank. "When "Check Waste Ink Tank" message appears"(P. 115)
			2. Replace the waste ink tank, then reset the waste ink level. (Fig. 116) "Replacing the Waste Ink Tank" (P. 116)

Error number	Message	Cause	Corrective action
605	Replace Wiper	The wiper needs to be replaced.	Perform [Maintenance] > [Station Maint.] > [Replace Wiper], then replace the wiper (the wiper usage count will be reset).
608	Wrong Ink IC	An error occurred with the information on the ink IC chip.	Check to confirm the ink IC chip was inserted correctly. "Mounting the ink"(P. 38)
		·	2. Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)P
			3. Replace with new ink. The "Mounting the ink" (P. 38)
60a	Excess Ink Usage	 The ink usage amount stored in the ink IC chip exceeded the preset value. The ink IC chip was not replaced during ink replacement. (The same chip continued to be used.) The machine was used with nozzle clogging. 	Replace with new ink. "Mounting the ink"(P. 38) "The state of the ink
60c	Ink Type	The ink type registered on the IC chip is different from the ink type filled.	 Insert an ink IC chip for the correct ink type. ** "Mounting the ink"(P. 38)
627	Set Eco-cases	The ink IC chip could not be read for a certain	Check to confirm the ink IC chip was inserted correctly.
		period of time.	2. Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)
629	Expiration Near	The ink has expired.	Replace with new ink or use up as quickly as possible. Printing is possible. "When Ink End is Displayed"(P. 42)
62a	Expiration Over	The ink is two months past its expiration date and cannot be used.	Replace with new ink. Printing is not possible. "When Ink End is Displayed"(P. 42)
631	Ink Color	The ink color registered on the IC chip is different from the ink color filled.	Insert an ink IC chip for the correct ink color. "Mounting the ink"(P. 38)
650	NCU ^{*1} Connect	A problem was detected with the NCU ^{*1} connection.	Turn off the main power and wait a while before turning back on. Turning Off the Power"(P. 31)
651	Replace NCU ^{*1}	A problem was detected with the nozzle clogging assessment.	 Clean the NCU*1. "Cleaning the NCU (Option)"(P. 98) Replace the NCU if the error does not clear. Contact your local dealer or our service office.
652	NCU ^{*1} Nzk Chk (Hw)	A problem was detected with the nozzle clogging	• Clean the NCU*1. TCleaning the NCU (Option)"(P. 98)
653	NCU ^{*1} Nzk Chk (Mark)	assessment.	

Error number	Message	Cause	Corrective action
654	NCU ^{*1} Center Pos	Printing position	
655	NCU ^{*1} Flush Pos	adjustment failed.	
656	NCU ^{*1} SN Adjst	Sensor sensitivity adjustment failed.	
657	Replace NCU ^{*1} Ink Pad	• The NCU ^{*1} ink absorber is full.	The NCU ^{*1} ink absorber must be replaced. Contact your local dealer or our service office.
658	NCU ^{*1} Sensor Lv Low	The sensor's sensitivity is impaired.	Clean the NCU*1. "Cleaning the NCU (Option)"(P. 98)
65b	NCU ^{*1} Sens Adj Err H	Sensor sensitivity adjustment failed.	Replace the NCU (option) if the error does not clear. Contact your
65c	NCU ^{*1} Sens Adj Err L	adjustment falled.	local dealer or our service office.
801	(C) OPCODE	A problem was detected	Turn off the main power and wait a
802	(C) SWI	with the main PCB.	while before turning back on. © "Turning Off the Power"(P. 31)
803	(C)PFTCHABRT		
804	(C)DATAABRT		
806	FW/SIO bit	A communication error was detected between the boards.	
808	FW/STP-MTR**	A problem was detected with the main PCB.	
80f	FW/SIO Vch	 A communication error was detected between the boards. 	
811	FW/SIO read	A communication error was detected between the boards.	
81b	FW/STACK OV	A problem was detected	
828	PRG ERR L****	with the main PCB.	
901	Operation Error	The function is disabled due to an error.	Check the error details. Media Undetected Ink error Waste ink tank, etc.
902	Data Remain	Print (RIP) data was received.	Switch to REMOTE mode and start printing or clear the data and abort printing.
90f	Print Area Short	The media is too small for the print.	 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.
b49	PCB VHVFET[1]	A problem was detected with the PCB power supply.	Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)

Error number	Message	Cause	Corrective action
C10	Command	Received a code other than a COMMAND code.	 Clear the data and resend. Check the USB/Ether cable connection.
C11	Parameter	Received parameter outside numerical value range	 "Connecting a PC to the Product"(P. 33) Use a compatible cable. "Connecting a PC to the Product"(P. 33)
C12	Device	Received an invalid device control command.	4. Turn off the main power and wait a while before turning back on. "Turning Off the Power"(P. 31)
d1b	COM VOLT[1]	A problem was detected with the main PCB voltage.	Turn off the main power and wait a while before turning back on. Turning Off the Power"(P. 31)
b	PCB MAIN-F*	A fuse has blown on the main PCB.	
b5c	Main PCB V05U	A problem was detected with the main PCB 5V power supply.	
b5d	Main PCB V3R3U	A problem was detected with the main PCB 3.3V power supply.	
b5e	Main PCB V1R5D	A problem was detected with the main PCB 1.5V power supply.	
b5f	Main PCB V1R2U	A problem was detected with the main PCB 1.2V power supply.	
b60	Main PCB V24	A problem was detected with the main PCB 24V power supply.	

^{*1.} NCU is optional.

SYSTEM HALT



• If a SYSTEM HALT number is displayed, turn off the main power and wait a while before turning back on.

Chapter 6 Appendix



This chapter

This chapter describes the machine specifications.

6.1 Specifications

	Item		Details	
Print head	Туре		On-demand piezo head	
	Specifications		One head with 400 nozzles × 8 rows each	
	Resolu	Υ	300 dpi, 600 dpi, 900 dpi	
	tion	Х	600 dpi	
Ink set	4-color	•	M, B, Y, K (UISS)	
	8-color		M, B, Y, K, Vi, Or, Fy, Fp	
Media	Туре		Transfer paper	
	Maximu printing		1610 mm	
	Maximu	m width	1620 mm	
	Minimur	n width	210 mm	
	Thickne	SS	Max. 1.0 mm	
	Roll external diameter*2		Max. 180 mm	
	Roll weight*2, 3		Max. 25 kg	
	Paper core internal diameter*4		2 inches or 3 inches	
	Printing face		Exterior/interior	
	Roll end		Taped or loosely affixed to paper core	
Print	Left/right		15 mm (default), minimum: Left/right 5 mm	
margins	Top end		70 mm (default), minimum: Left/right 10 mm	
	Bottom end		70 mm (default), minimum: Left/right 10 mm	
Distance accuracy*5	Absolute accurac		±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	
Perpendicula	rity		±0.5 mm/1,000 mm	
Media skew			Not more than 5 mm/10 m	
Printing gap			Manual, two settings (3.0, 3.5 mm)	
Media cutting			Cutting precision (steps): Not more than 0.5 mm	
Origin alignment			LED pointer	
Ink supply			MBIS eco-cartridge (2 L ink pack)	
Waste Ink Tank			Bottle type (2,000 ml)	
Take-up unit			Selectable inside/outside winding	
NCU (Nozzle clogging detection)			Options	
DAS (Automatic correction function)		ction	DAS1 is provided.	

Item			Details	
Interior lightin	g		-	
UV unit			-	
Interface	Data transfer function		Ethernet 1000BASE-T *6, 7, USB 2.0 Hi-speed *7, 8	
Command			MRL-V	
Languages			English, Japanese, Chinese, Turkish, Portuguese, Spanish, Italian, Korean	
Noise levels	During s	standby	Not more than 45 dB (FAST-A, 1 m on all sides)	
	Continu operatio		Not more than 59 dB (FAST-A, 1 m on all sides)	
	Non-cor operatio		Not more than 70 dB (FAST-A, 1 m on all sides)	
Compliance w	vith stand	lards	VCCI Class A, FCC Class A, IEC 62368-1 ETL compliance, CE marking (EMC Directive, Low Voltage Directive, Machinery Directive, RoHS Directive), CB certified, REACH, EnergyStar, RCM marking, KC certified, UKCA marking	
Power supply specifications*9		ations ^{*9}	Single-phase 100 to 120 V AC ±10 %/11 A, single-phase 200 to 240 V AC ±10 %/5.5A, 50/60 Hz ±1 Hz ×2	
Power Maxim Inlet consumption um*10		Inlet 1	100 to 120 V AC: Max. 250 W, 200 to 240 V AC: Max. 250 W	
	Standa rd	Inlet 1	150 W	
	Minimu m*11	Inlet 1	4.5 W or less	
Installation environment *12	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		2000 m	
External	Width		2,770 mm (2910 mm)	
dimensions [*]	Depth		748 mm (750 mm)	
	Height		1,623 mm ^{*14} (1,092 mm)	

Item	Details
Weight ^{*13}	155 kg

- *1. With 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 initial loading fluctuations.
- *6. Printing is not possible if local guidance shows any speed other than "1000Mbps". The "Using a LAN Cable" (P. 33)
- *7. The print speed may be decreased depending on the connection environment or print data.
- *8. Data may be transferred to the machine too slowly, causing the carriage to pause at the left-hand or right-hand end during printing. "Connecting a PC to the Product" (P. 33)
- *9. Excluding options.
- *10. Varies depending on print mode.
- *11. In sleep.
- *12. Ink ejection consistency may decrease in conditions outside this range.
- *13. The figures in parentheses indicate package dimensions.
- *14. When the ink eco-cases are mounted

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MEMO

OperationManual

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