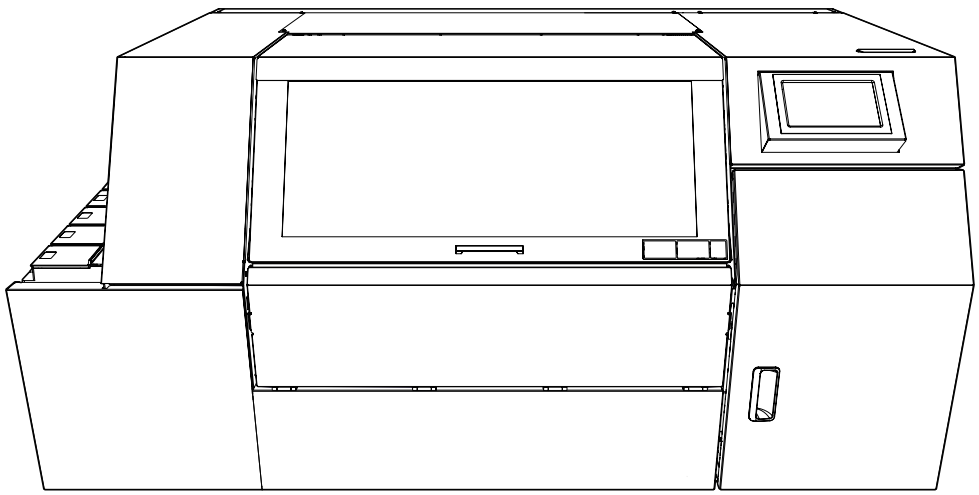
VersaOBJECT RC-300

User's Manual



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- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely.
- Unauthorized copying or transferal, in whole or in part, of this manual is prohibited.
- The specifications of this product and the contents of this operation manual are subject to change without notice.
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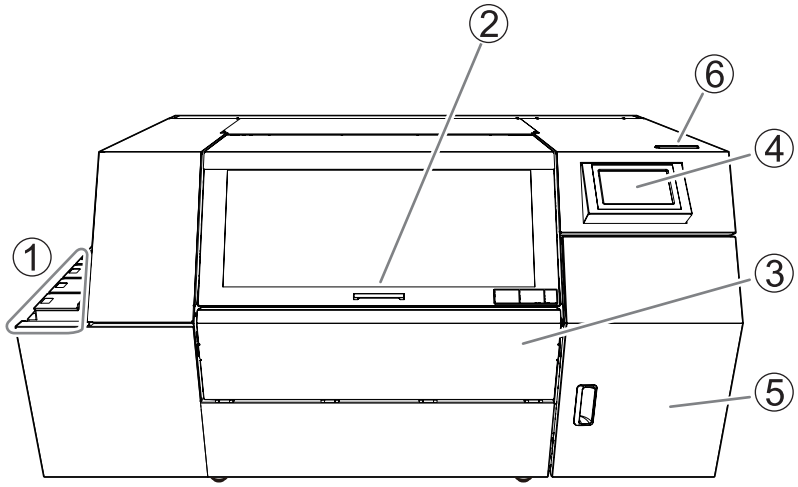
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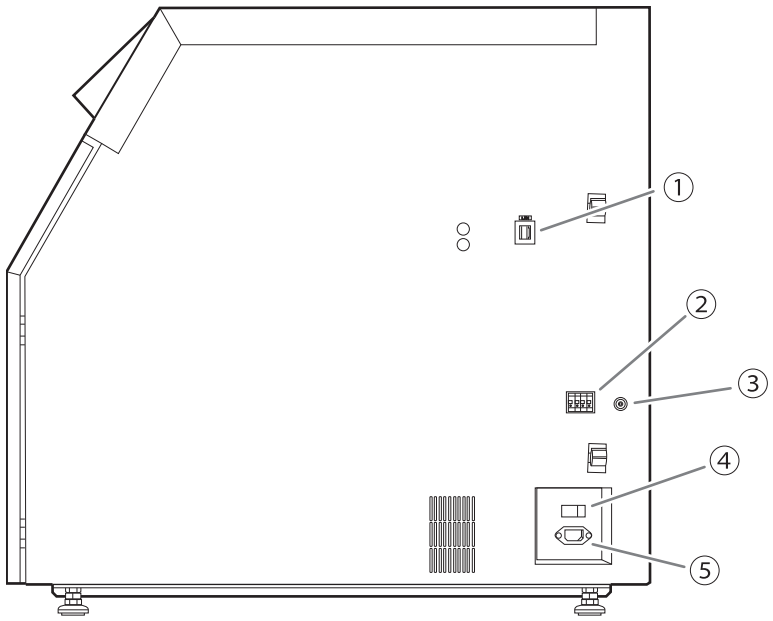
Part Names and Functions

Front



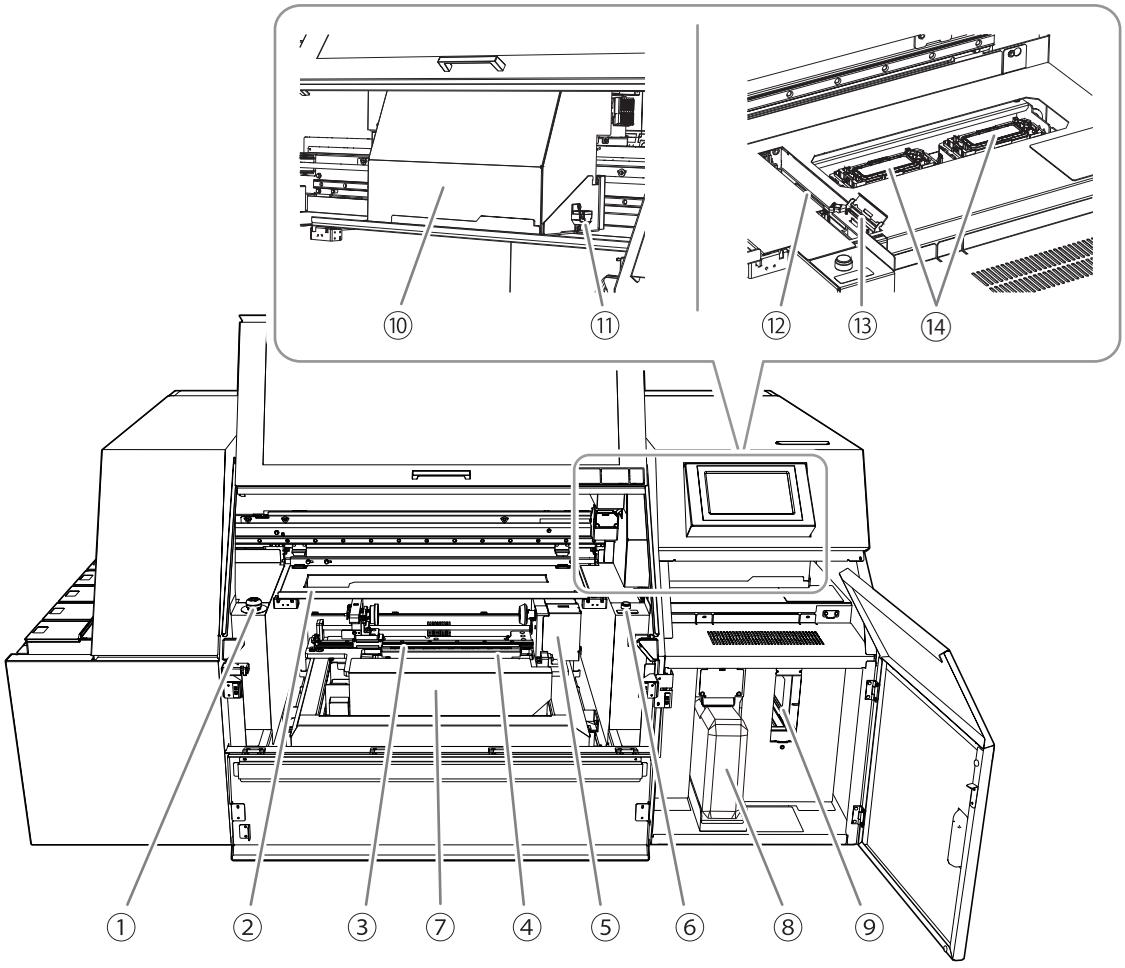
No.	Name	Function overview
①	Ink tanks	Insert the ink bottle and fill with ink.
②	Front cover	Prevents contact with the print-head carriage and other such fast-moving parts when the machine is operating and reduces ultraviolet light from the UV-LED device. To prevent excessive dust from entering inside the printer, keep the front cover closed except when loading objects to be printed or when performing maintenance.
③	Under cover	
④	Operation panel	Used to perform all machine operations including printing, setup, and maintenance. Operation Panel(P. 33)
⑤	Maintenance cover	Provides access to the interior of the right side of the machine. Open this cover when performing maintenance such as cleaning and part replacement.
⑥	Status light	Uses colors to indicate the status of the machine. Safety Devices(P. 13)

Side



No.	Name	Function overview
①	Ethernet connector	Connects an Ethernet cable.
②	Alarm Lamp Connector	This terminal is used to connect a commercially available alarm lamp.
③	Deodorizer fan switching control connector	You can switch the deodorizer fan on and off in tandem with the unit by connecting it to a deodorizer (sold separately).
④	Main power switch	Switches the main power of the machine on/off.
⑤	Power-cord connector	Connects the included power cable.

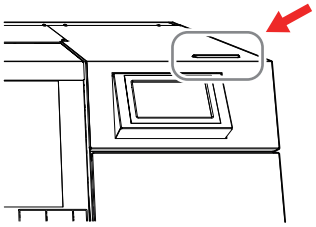
Inside the Printer/Print Head Area



No.	Name	Function overview
①	Emergency stop button	This button is used to immediately stop the machine's operation in the event of an unintended movement of the machine due to an incorrect operation, etc. Safety Devices(P. 13)
②	Light shield cover	Covers so that UV light does not contact the ink discharge surfaces of the print heads during printing. It also prevents degradation of print quality caused by ink mist adhering to the object during printing.
③	UV-LED device	Irradiates the ultraviolet light. Irradiates the ultraviolet light on the print surface to cure the ink.
④	Support table	Adjusts the posture (angle) and height when chucking the object with the rotary device. Perform adjustment so that the center axis of the object aligns with that of the rotary device.
⑤	Rotary device	Loads (grips) the object, orients it so the print surface is horizontal, then rotates the object. Attach a fixing jig suited to the object's shape to prevent detachment of the object from the rotary device and unstable rotation during printing.
⑥	Load/unload button	If the media is selected, the object can be loaded or released from the rotary device. Pressing the button while an object is being gripped will release it. Pressing the button while no object is being gripped will result in the device gripping the object that has been placed on the support table.
⑦	Table	Raises or lowers the entire rotary device to adjust the spacing between the print surface and print head nozzle surface.

No.	Name	Function overview
⑧	Drain bottle	Stores cleaning liquid and discharged ink. When discharged fluid is nearly overflowing from the bottle, an error is displayed and printing is not possible.
⑨	Cleaning liquid slot	A cleaning cartridge containing a cleaning liquid pouch is inserted here.
⑩	Print-head carriage	Transports the built-in print heads.
⑪	Pointer	Shines the light when determining the printing area. The point of the shined light determines the printing reference point of the left and right edges of the printing area.
⑫	Wiper	Cleans the print heads. Removes dirt and excess ink that have adhered to these heads.
⑬	Wiper cleaner	Removes ink and dirt that have adhered to the wiper.
⑭	Print head caps	Prevents the print heads from drying out. Seals to the print heads to protect the ink emission surface when the print heads are at the right side of the machine, such as when waiting for printing.

Statuses Indicated by Status Light Color



The status light colors indicate the following statuses.

Status Light Color	Status
Off	When the sub power is off and no periodic maintenance or other operations are being performed.
Blue	• During initialization after turning on the sub power. • When an object has not been set, and the machine is not ready to print. • During maintenance operations. When flashing, the machine is in sleep mode.
Green	When printing. A flashing light indicates that printing is finished.
Yellow	An object has been set, and the machine is ready to print. When flashing, printing has been paused.
Red	When an error that can be recovered from or an error that makes it impossible to continue operation has occurred. The error details are shown on the operation panel.

RELATED LINKS

• P. 187 Messages on the Operation Panel

Safety Devices

UV-LED devices are very dangerous because the ultraviolet radiation emitted from UV-LED devices can cause eye damage and skin diseases when directly irradiated on the human body. The machine is fitted with a cover to keep external leakage of ultraviolet radiation at low levels.

Therefore, if the front cover, under cover, or maintenance cover (hereinafter collectively referred to as the "covers") is opened during printing, lamp irradiation will immediately cease and operation will stop. At this time, a message is displayed on the operation panel prompting the user to close the cover. Close the covers as directed in the instructions shown on the screen. Also, if print data is received while the cover is open, printing will not begin.

When the cover is closed, you will be able to continue the operation. If you cannot continue the operation even after you close the cover, a nonrecoverable error may have occurred.

Front cover and under cover

This cover absorbs ultraviolet radiation from the UV-LED device and reduces it to a non-harmful level.

If the front cover or under cover is damaged or cracked, stop using the printer immediately and contact your dealer or service center.

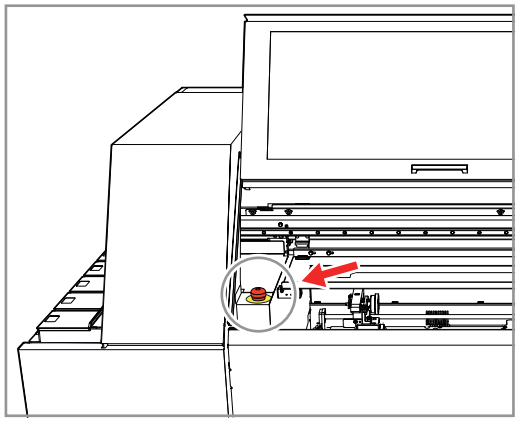
Maintenance cover

This cover is opened and closed when the print heads and surrounding components are undergoing maintenance, during disposal of discharged fluid, or when cleaning liquid is being replaced. If opened while printing is in progress, the UV-LED device will immediately stop irradiating, triggering an emergency stop.

If the maintenance cover is damaged or deformed, stop using the printer immediately and contact your dealer or service center.

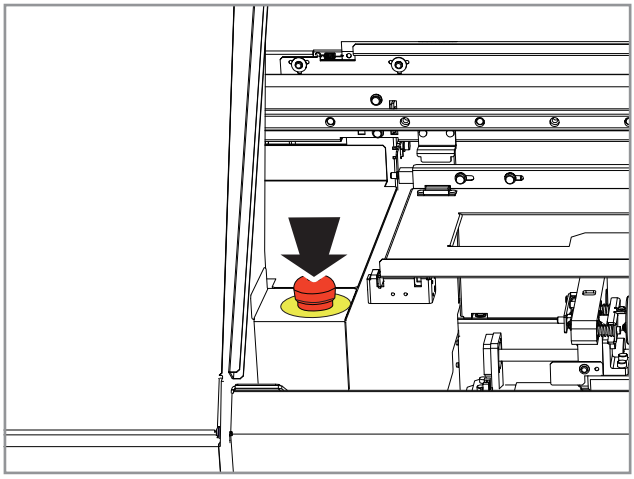
Emergency stop button

This button is used to immediately stop the machine's operation in the event of an unintended movement of the machine due to an incorrect operation, etc. As an example, assume that the front cover is open so a worker can perform operations on the machine. Pressing one of these buttons in the event of unexpected machine operation eliminates the hazards presented by such a situation.

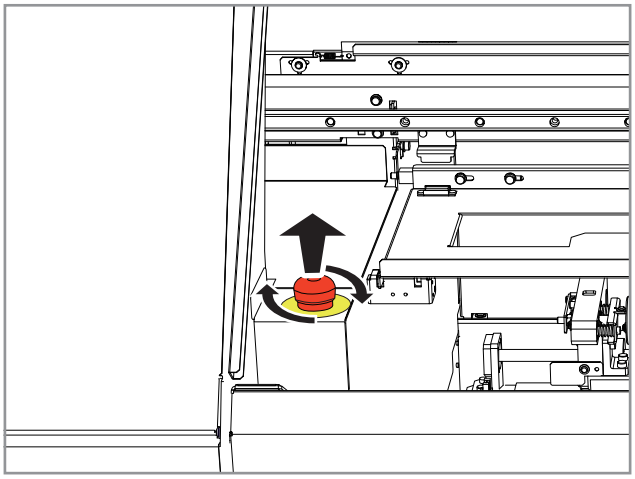


For emergency stop, push in the button shown in the figure. "Fatal Error" is displayed in the screen, and all operations of the machine are immediately stopped.

If the print heads are stopped in a position where they are disengaged from the print head caps, turn the power back on within 10 minutes to prevent them from drying out.



To cancel the emergency stop, turn the button clockwise until it stops turning, and then release the button. If the button is pulled out toward you, it is released. After canceling the emergency stop, turn on the power.



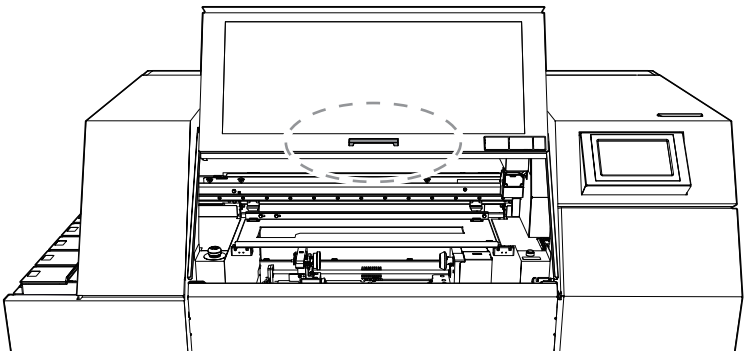
RELATED LINKS

- P. 29 Turning the Power On

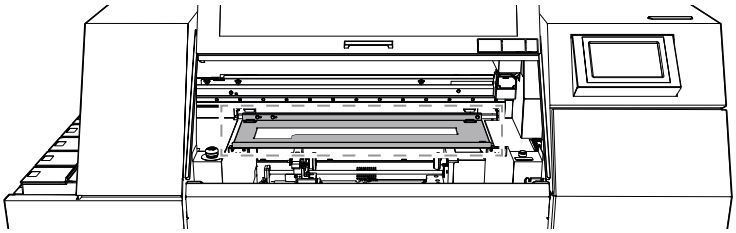
Important Notes on Handling and Use

Printer

- **This machine is a precision device.**
  - Never subject the machine to impacts or excessive force.
  - Never needlessly put your hand or fingers inside the cover, inside an ink tank, or other internal areas of the machine.
- **Install in a suitable location.**
  - Install the machine in a location having the specified temperature and relative humidity.
  - Install the machine in a quiet, stable location offering good operating conditions.
- **Open and close the front cover gently.**
  - Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed. If you do not open and close the front cover gently, it may break or you may be injured.



- **Do not place any objects on top of the light blocking cover or press on it with force.**
  - Placing any objects on top of the extension plate or pressing on it forcefully with your hand may cause damage.



- **The print heads and the UV-LED device are delicate devices.**
  - Avoid needlessly touching them, allowing them to scrape against the object, or similar. Failure to handle with care may cause damage.
  - The print heads may be damaged if allowed to dry out. The machine prevents desiccation automatically, but improper operation may render this feature inoperative. Operate properly, as specified in this manual.
  - Do not leave for a prolonged time with the ink bottle removed. The ink in the ink tank may harden and clog the print heads.
  - Daily maintenance as well as various types of maintenance depending on the status must be performed. Read this manual thoroughly and perform the appropriate maintenance at the appropriate times.

- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use.

- **Keep the operation panel clean.**
  - If dirt or ink adheres to the operation panel, immediately wipe it clean with dry, soft fabric.

Ink Bottle

- **There are various types of ink bottles.**
  - Use a type that is compatible with the printer. Also, be sure to use only genuine items from Roland DG Corporation.
- **Do not subject ink bottles to impacts.**
  - Never drop the ink bottles or shake them forcefully. The impact may damage the ink bottle, causing ink to leak out.
  - A used ink bottle must not be refilled with ink or otherwise reused.
  - If ink gets on your hands or clothing, wash it off as soon as possible. Removal may become difficult if you leave such adhered ink untreated.
- **Storage**
  - Use up the ink before the expiration date printed on the ink bottle.
  - Store the ink bottle in a location that is not subject to direct sunlight or strong illumination.
  - Store the ink bottle unopened in a well-ventilated location at a temperature of 5°C (41°F) or higher and less than 40°C (104°F) and a relative humidity of 20 to 80% RH.

Printable Materials and Shapes

MEMO

In this manual, the printed matter is called "object" or "media."

The UV ink used in this machine is an ink that instantly adheres to the object by irradiating it with ultraviolet light. This makes it possible to perform printing on objects that are difficult to print on using conventional inks. Primer allows printing on a wider range of materials than printing with UV inks alone.

This section explains the materials and forms of objects using the machine.

Even materials with the same name have many variations with different properties depending on slight differences in ingredients, and even if the ingredients are the same, printing may or may not be possible depending on differences in surface treatment such as plating or coating.

Even if a material is listed as a printable material, always be sure to perform a test print to confirm that satisfactory print quality can be achieved.

Objects that cannot be printed on or have print quality issues

- In the case of objects that easily reflect light, the reflection of UV light may accelerate the curing of the UV ink on the surface of the print heads, resulting in ink discharge failure.
- When the UV light passing through the object exceeds the threshold value (80 μW/cm^2), printing is not possible. The ink near the nozzle will be hardened by the UV light. This may make restoration impossible and force the replacement of the print head. Be sure to use a light meter specified by Roland DG to measure UV light.
- Objects that are electrostatically charged should be discharged before use.

  If the object is electrostatically charged, the position of the ink landing will not be stable, and printing quality will be adversely affected.
- Objects with excessive unevenness cannot be used for printing.

RELATED LINKS

- P. 70 Measuring the UV Light Amount

Materials and Hardness

Even materials with the same name have many variations with different properties depending on slight differences in ingredients, and even if the ingredients are the same, printing may or may not be possible depending on differences in surface treatment such as plating or coating. An object with a material, shape, or thickness that is deformed by the force of chucking is not suitable for printing with this machine because the print surface cannot be kept level.

Even if a material is listed as a printable material, always be sure to perform a test print to confirm that satisfactory print quality can be achieved.

Material which can be printed on without using a primer

- ABS
- PET (polyethylene terephthalate)
- PC (polycarbonate)
- TPU (thermoplastic polyurethane)
- Acrylic
- Wood
- Bamboo

Material which can be printed on by using a primer

- Glass
- Aluminum
- Iron
- Stainless steel

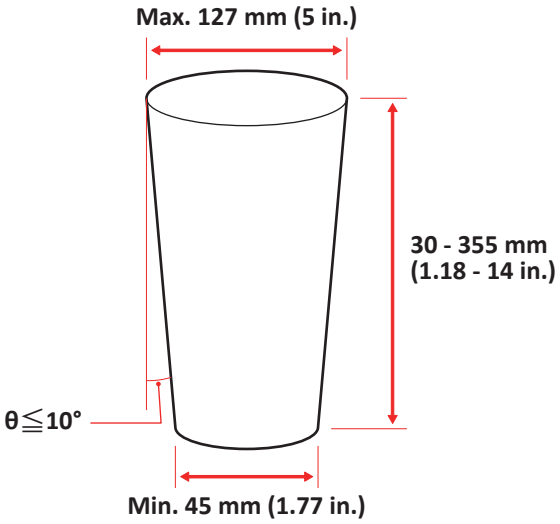
Hardness of the object

An object where the print surface bends as a result of the pinching force of the rotary device or the centrifugal force of rotation is not suitable for printing with this machine. Try using a printer with a different fixing method, such as a flatbed printer.

Sizes and Shapes

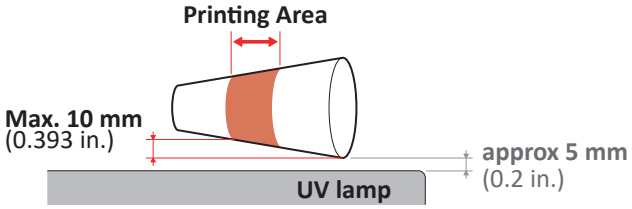
This section describes the suitable shapes when printing on the surface of an object using the rotary device. It is not possible to print on objects with a shape that does not meet the following conditions.

Installable sizes and shapes



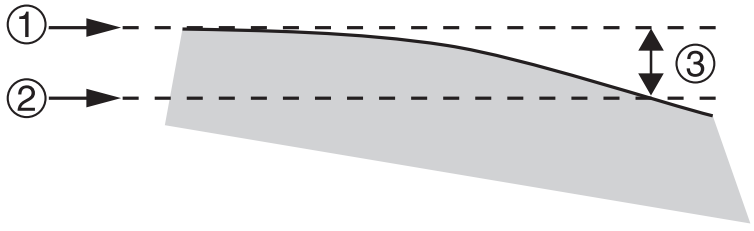
- Must be a rotating body (a three-dimensional object with a rectangular, trapezoidal, triangular or similar planar shape that can be rotated a full rotation around a straight line at the center).
- Diameter of rotating body: 45 to 127 mm (1.77 to 5.00 in.)
- Length of rotating body: 30 to 355 mm (1.19 to 13.97 in.) (However the maximum printing width is 300 mm (11.81 in.).)
- Taper angle: Max. 10°
- For models with the UV-LED device located in front of the support table, the shape must be such that the distance between the UV light irradiation surface and the print surface does not exceed 15 mm (0.59 in.).

  To allow the UV-LED device to get close to the location where the distance between it and the object is approximately 5 mm (0.2 in.), the height difference between the maximum diameter and the left edge of the printing area must be 10 mm (0.39 in.) or less.

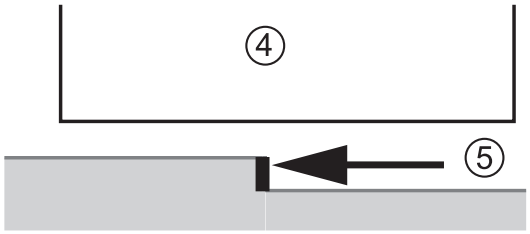


Shapes that cannot be printed on: When unevenness (variation in height) of the print surface exceeds 7 mm (0.28 in.)

The difference between the "highest position of the print surface" (①) and the "lowest position of the print surface" (②) within the printing area should be 7 mm (0.28 in.) or less (③).

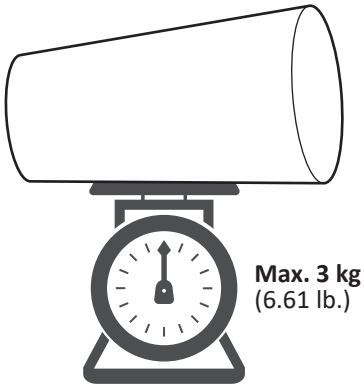


You cannot print on surfaces that are perpendicular to the print heads (④) or that have an overhang at the top that hides the surface beneath the overhang (⑤).



Weight

Printing is not possible on objects with a weight exceeding 3 kg (6.61 lb.)



First Object to be Printed on

If the object to be printed on has never been printed on using this machine before, be sure to perform a test print.

If you have an object to be printed on that is not a product, such as a sample or trial product, you can try printing on that.

In the test print, check the following.

- Does the ink adhere to the object to be printed on?
- Does it peel off when rubbed?
- Can you achieve satisfactory print quality?

In addition to the items listed above, the items to be checked will vary depending on the conditions required for the product. Exercise caution.

Disposing of Discharged Fluid

Precautions for Disposing of Discharged Fluid

⚠ WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause a fire.

⚠ CAUTION

To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap the container tightly.

Any spillage or vapor leakage may cause fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not dispose of it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

If the Discharged Fluid Disposal Message Appears

When the accumulated discharged fluid needs to be disposed of, one of the following messages will appear on the operation panel.

- Notifications: When output, cleaning, and other operations are completed, discard the discharged fluid.
- ERROR: Drain bottle error. Discard the discharged fluid in the drain bottle.

When [When output, cleaning, and other operations are completed, discard the] Is Displayed

Procedure

1. **Tap [OK].**
2. **Tap** .
3. **Tap [When output, cleaning, and other operations are completed, discard the discharged fluid.].**
4. **Tap [Execute].**
   Tap [**Execute**] to display a message reminding the user to wear protective gear.
5. **Tap [OK].**
6. **Open the maintenance cover.**
7. **Remove the drain bottle and discard the discharged fluid.**



8. **Quickly attach the emptied bottle to the machine once more.**
9. **Close the maintenance cover.**

10. Tap [Finish].

11. Tap .

The home screen appears.

When [Drain Bottle Error] Is Displayed

The drain bottle is already full of discharged fluid.

When this error occurs, a buzzer sounds at regular intervals.

Immediately dispose of the discharged fluid, and then clear the error.

Procedure

1. **Open the maintenance cover.**

2. **Remove the drain bottle and discard the discharged fluid.**



3. **Quickly attach the emptied bottle to the machine once more.**

   Weigh the amount of discharged fluid. If the drain bottle is no longer full, the error is cleared.

   If the drain bottle is not installed correctly, the error will not be cleared. If the error is not cleared after discarding the discharged fluid, try reinstalling the drain bottle.

4. **Close the maintenance cover.**

Basic Operations

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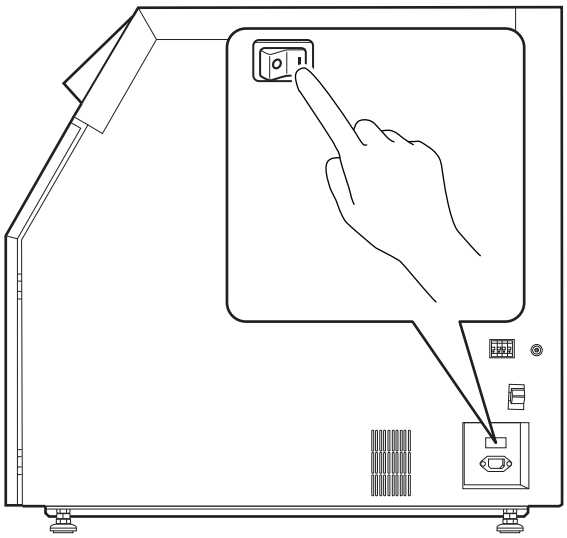
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Power Supply Operations

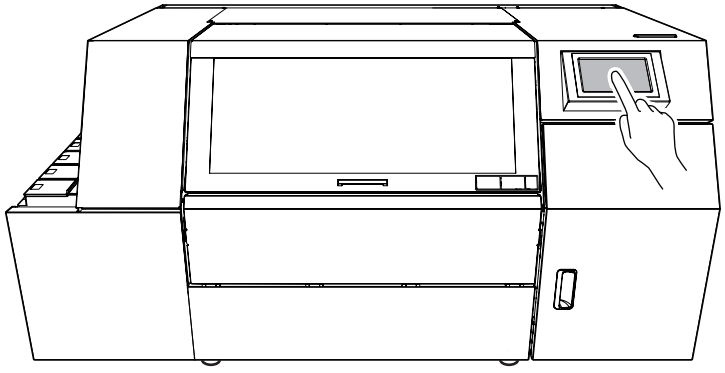
Turning the Power On

Procedure

1. Close the front cover.
2. If the main power supply is off, turn it on.



3. Tap the operation panel.



4. Tap ⏻ when the guide appears on the screen.

   The sub power is switched on.

Turning the Power Off

Never switch off the power during printing before it finishes. If printing is in progress, wait for printing to finish before switching off the power.

Procedure

1. **Tap on the operation panel.**

   The confirmation screen appears.

2. **Tap [Yes].**

   The sub power switches off automatically.

Precautions When Operating the Power Supply

Always keep the main power switched on.

Never switch off the main power. Leaving the main power enables automatic maintenance to be carried out periodically. If the automatic maintenance is not carried out, it may result in the breakdown of this machine, such as the breakdown of the print heads.

Never switch off the main power or unplug the power cord suddenly while operation is in progress.

Switching off the main power or unplugging the power cord suddenly while operation is in progress may damage the print heads. Be sure to first switch off the sub power. If the main power is accidentally switched off, immediately turn the main power and sub power back on.

Sleep Mode (Power-saving Feature)

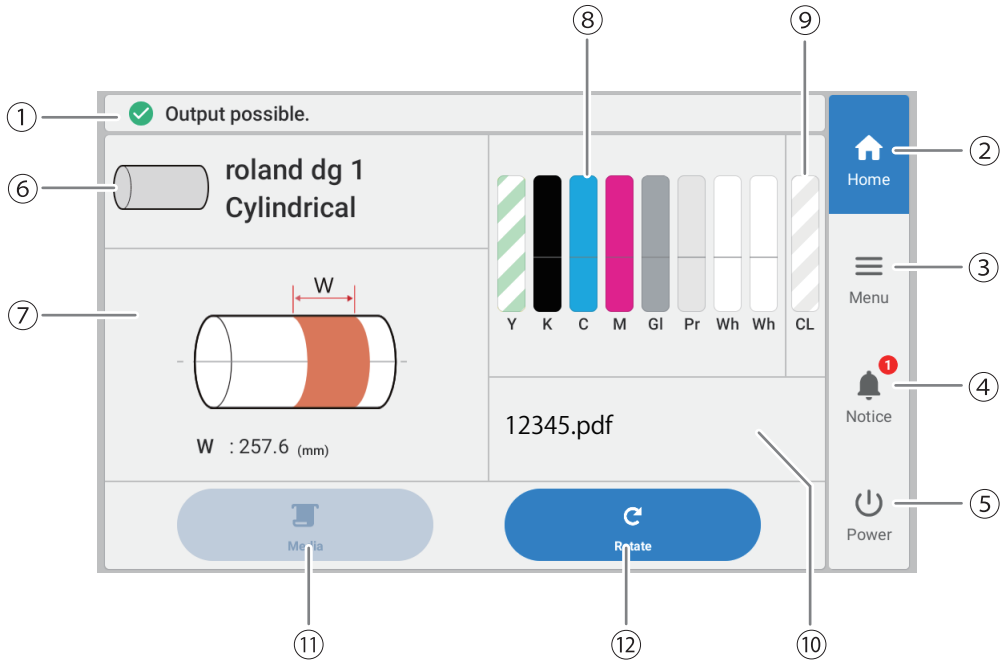
This machine is provided with a power-saving feature that switches to a low-power "sleep mode" when a fixed interval passes with no operation. The factory default for the time after which the machine switches to sleep mode is 30 minutes. The operation panel turns off when the machine enters sleep mode. Using the operation panel or performing operations such as sending print data from the computer restores the machine to its normal mode.

This sleep mode setting can be changed. However, we recommend setting the activation time for sleep mode to 30 minutes or less to reduce power consumption and prevent problems such as overheating.

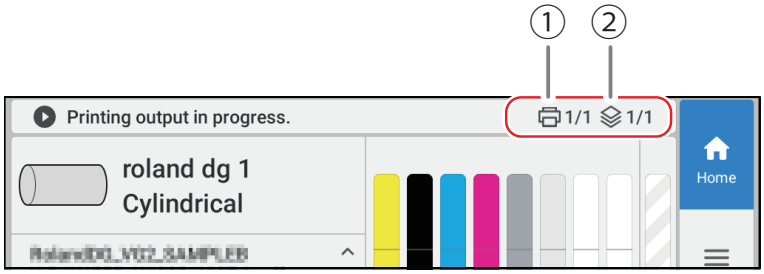
RELATED LINKS

- P. 112 Setting the Activation Interval for Sleep Mode (Power-saving Feature)

Operation Panel



No.	Name	Details
①	Status bar	Displays the printer status and indicates the next operation.
②	Home	Displays the home screen.
③	Menu	Displays various setting menus.
④	Notifications	Displays important information. When there are notifications, their number is displayed next to the icon.
⑤	Sub power	Turn off the sub power. Tap the operation panel to turn the sub power back on.
⑥	Media name and shape type	Displays the selected media name and shape type.
⑦	Printing area and printing reference point	Displays the width of the set printing area and the position of the printing reference point. This is displayed only when the object is loaded. You can tap it to re-set the printing area and printing reference point.
⑧	Amount of ink remaining	Displays the amount of ink remaining in each ink tank. is displayed for ink tanks that require refilling. Tap this icon to display the detailed information for the ink.
⑨	Amount of cleaning liquid remaining	Displays the amount of cleaning liquid remaining. When the time for replacement arrives, is displayed. Tap to display the cleaning liquid replacement procedure.
⑩	Reprinting	Reprints the most recent printed job.
⑪	Media	Select a registered object, or register a new object. Printable Materials and Shapes(P. 18) 2. Setting the Object to be Printed On for the First Time(P. 60) 2. Setting a Registered Object(P. 67)
⑫	Rotate	Adjust the degree of eccentricity of the object mounted on the rotary device relative to the center of rotation. Check the offset amount from the center of rotation and adjust as necessary. Enabled if the object has been set.

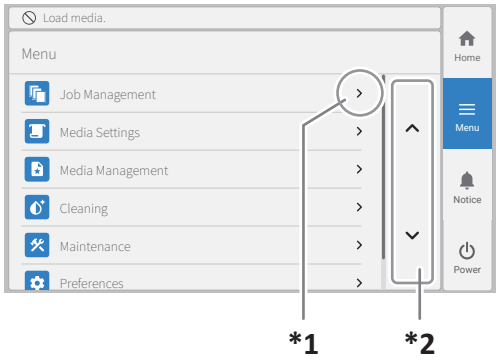


No.	Name	Details
①	Copies to Print	*/* is displayed. The left side indicates the number of the copy currently being printed. The right side indicates the total number of copies.
②	Number of Layers	*/* is displayed. The left side indicates which number layer is currently being printed. The right side indicates the total number of layers.

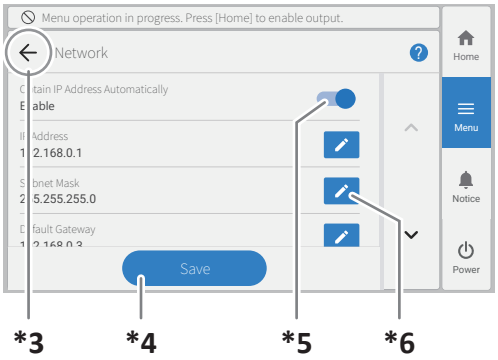
Menu

Menu Operation Legend

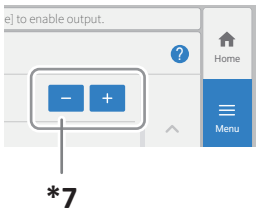
The explanation uses screenshots from the English version.



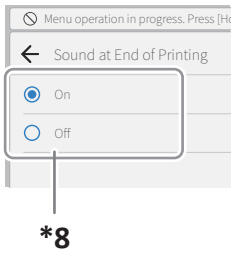
*1: Displays the settings screen for the tapped item.
*2: Scrolls the screen up or down.



*3: The previous screen will be displayed.
*4: Confirms the changes and saves them to the device.
*5: Switches the setting on or off.
*6: Tap to change the settings.



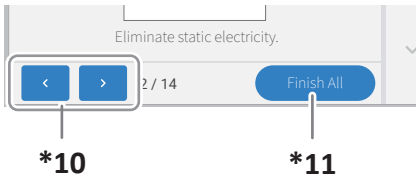
*7: Increases or decreases the setting value (numeric value).



*8: Switches the selection.



*9: Starts the operation.



*10: Moves to the next step or the previous step when performing a series of work.
*11: Skips all remaining steps if there are still unfinished steps remaining, and completes the operation. If all of the steps have been finished, the operation is completed.

Menu List

Tap ☰ to display the list of operations.

Level 1	Level 2	Level 3	Level 4	Details
[Job Management]	[Direct Printing]			Outputs a job saved in VersaWorks on the computer connected to the machine.
	[Printing Log]			Displays the job log. The [**Job Properties**] for each job, and the [**Total Time**] and [**Total Area**] for all jobs, can be checked.
[Media Settings][*1]	[List of Media Settings]			Displays a list of the setting values for the selected media. Tap a setting to move to a screen for changing this setting.
	[Printing Zone]			Changes the printing area.
	[Print Origin Position Setup]			Changes the printing reference position.
	[Holding Pressure Settings]			Change the degree of force when the object is pinched by the rotary device.
	[Print Height and Angle Settings]			Adjusts the spacing between the print surface and print head nozzle surface.
	[Eccentricity Adjustment]			Adjusts the height of the left and right sides of the support table to reduce the eccentricity of the object during loading.
[Media Management]				Displays a list of registered media. Up to 50 media names can be saved, and the following operations on media settings are possible. • Checking setting details in a list • Changing media names • Copying media settings • Deleting media settings
[Cleaning]	[Printing Test]			Before printing, use [**Nozzle Drop-out Test**] to check whether ink is discharged from the print heads correctly. If dot drop-out is present, perform cleaning appropriate for the severity of the drop-out.
	[Normal Cleaning]			If dot drop-out or dot displacement occurs, select the nozzle from [**Group A**], [**Group B**], and [**Both**], and then perform cleaning of the print heads. If the problem cannot be fixed, perform more powerful cleaning. [**Powerful Cleaning**] also has the effect of improving uneven colors with white ink.
	[Medium Cleaning]			
	[Powerful Cleaning]			
	[Manual Cleaning]			Use cleaning liquid and a cleaning stick to clean the area around the print heads.

Level 1	Level 2	Level 3	Level 4	Details
[Maintenance]	[Refilling Inks]			Refills the ink in the ink tanks.
	[UV Lamp Manual Cleaning]			Cleans dirt from the glass surface of the UV-LED device.
	[Wiper Replacement]			Replaces the wiper used in cleaning the print heads.
	[Cap Replacement]			Replaces the print head caps, which are used to protect the print heads from drying out and from dust.
	[Wiper Cleaner Replacement]			Replaces the wiper cleaner used to wipe away dirt from the wiper.
	[Ink Renewal]			Perform this operation when ink circulation and other cleaning methods (normal, medium, powerful, manual, and ink renewal in the damper) do not correct poor discharge or uneven colors. However, this operation consumes a large amount of ink and may damage the print heads, so do not perform it more than necessary.
	[Ink Renewal Inside Damper]			Use this operation to stabilize output when uneven color issues with ink are not resolved even after performing ink circulation or powerful cleaning. However, this operation consumes a large amount of ink and may damage the print heads, so do not perform it more than necessary.
	[Ink Circulation]			Circulates ink to prevent uneven color issues with white ink.
	[Drain Bottle]			Use this menu to discard discharged fluid at any desired time, regardless of any notifications or errors.
	[Automatic Maintenance]			Set the maintenance items that are performed automatically and the [**Type**] and [**Frequency**] according to the printer service environment, types of products that are frequently output, and other factors. A maximum of five settings for automatic maintenance can be saved.
	[Automatic Sub Power On Settings]			This can be set so that the printer sub power is automatically turned on for each day of the week. The time when the sub power is turned on and the cleaning execution setting can also be configured. You can also specify days when the sub power will not automatically be turned on.
[Preferences]	[UV Light Leakage Measurement]			Performs additional UV irradiation after UV light curing.
	[UV Light Curing]			Measures the amount of UV light that passed through the object.
	[Sound at End of Printing]			Selects whether to play a sound at the end of printing.
	[Status Light]			Sets whether the status light is turned on or off.
	[Ink Circulation Interval]			Sets the frequency of white ink circulation.
	[Notifications On/Off]			When this is set to on, notifications are displayed at the appropriate times. • [**Ink Expiration Date Notification**]
	[Sleep Time]			Sets the time until sleep mode (the state in which the power-saving features operate) activates.
	[Time before Automatically Returning to Home Screen]			When [**Menu operation in progress: Press [Home] to enable output.**] is displayed in the status bar and this set time elapses without any operation while the menu is displayed, the display will automatically switch to the home screen.
	[Head Discharge Strength/Temperature Adjustment]			Change the discharge strength and temperature of the print heads to adjust the ink discharge amount and discharge speed.
	[Head Horizontal Alignment]			When you want to correct the left/right printing misalignment of spot colors (white, gloss, and primer) and process colors (CMYK) in multilayer printing, adjust the distance between the left and right print heads.
	[Reset to Factory Defaults]			Returns all settings other than [**Language**] and [**Units**] to their factory default values.

Level 1	Level 2	Level 3	Level 4	Details
[System Information]	[Machine Information]			Displays the [Model], [Serial Number], [Ink Type], [Firmware Version], and [MAC Address].
	[Network]			Sets the [Obtain IP Address Automatically], [IP Address], [Subnet Mask], and [Default Gateway] to connect the machine to a computer.
	[Units]			Sets the [Length] and [Temperature].
	[Language]			Sets the language. The languages that can be set include Japanese, English, French, Italian, German, Spanish, Portuguese, and Chinese.
	[Date/Time]			Sets the current year, month, day, hour, minute, and second.
	[Appearance]			Selects the color scheme of the operation panel's screen.
	[Screen Brightness]			Sets the brightness of the operation panel's screen.
	[Screen Operation Sound]			Turns the operation sound of the operation panel on/off.
	[2D Codes]		[User's Manual]	Displays the 2D code for viewing the manual using a smartphone or other mobile terminal.
			[Roland DG Connect]	Displays the 2D code for accessing Roland DG Connect using a smartphone or other mobile terminal.
	[License]			Displays the license information of the operation panel.

*1 This setting only appears when the media is selected.

Before, During, and After Printing

⚠ CAUTION

Caution: High Temperature

The area around the UV-LED device becomes hot. Exercise caution to avoid burns.

⚠ CAUTION

Do not place any objects on top of the light blocking cover or press on it with force.

Doing so may cause damage.

⚠ CAUTION

Do not place any objects in front of or behind the rotary device.

The rotary device moves horizontally and vertically. If there is an object between the rotary device and the machine, it can be caught and cause the machine to malfunction.

⚠ CAUTION

If anything drops toward the back of the rotary device, turn off all power switches before looking for the dropped object.

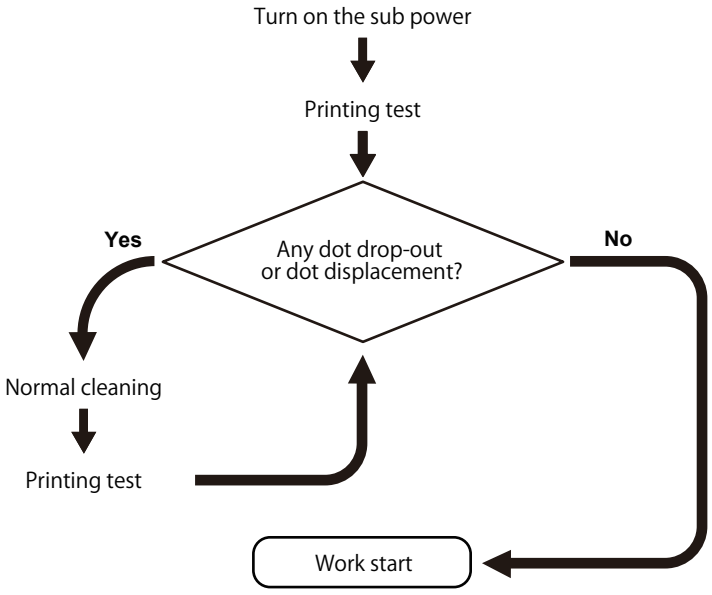
Otherwise sudden movement of the machine may cause injury.

First Thing Every Day

Before starting the day's work, eliminate dot drop-out on the print heads.

We especially recommend test printing if the printer has not been used for a few days.

If there is a problem with discharge, clean the print heads.



Step 1: Performing a Nozzle Drop-out Test

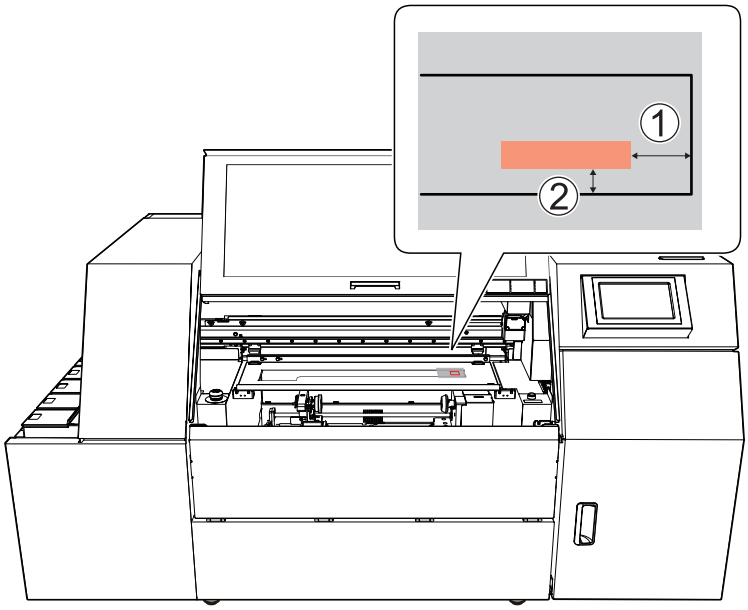
Before you carry out actual printing, perform a printing test to ensure no dot drop-out or dot displacement occurs. If dot drop-out or dot displacement occurs, perform cleaning of the print heads (normal cleaning).

Procedure

1. **Fix the nozzle drop-out test paper to the light shield cover with masking tape or something similar.**

   The printing size for the nozzle drop-out test is approximately 200 mm × 150 mm (7.87 in. × 5.91 in.) (landscape).

   Fix the test paper in alignment with the printing position (approximately 70 mm (2.76 in.) ① × 20 mm (0.79 in.) ② from the edge of the irradiation window of the light shield cover).



2. **Tap ☰ on the operation panel.**

3. **Tap [Cleaning]>[Printing Test].**

4. **Tap [Execute].**

   Printing of the test pattern starts.

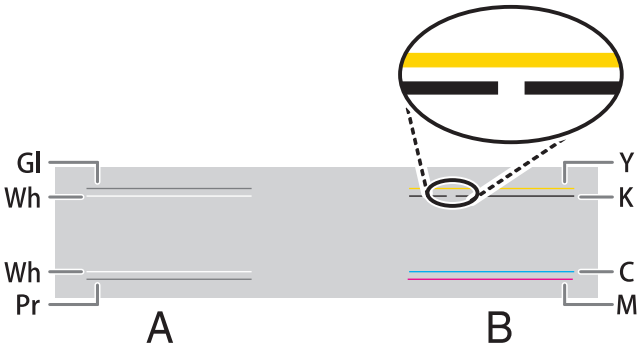
5. **Open the front cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.

6. **Check whether there is dot drop-out or dot displacement in the test pattern.**

   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



MEMO

If the printing-test results are difficult to interpret

Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

7. Close the front cover.

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.

If you do not open and close the front cover gently, it may break or you may be injured.

If no dot drop-out or dot displacement occurs, preparations for output are finished.

RELATED LINKS

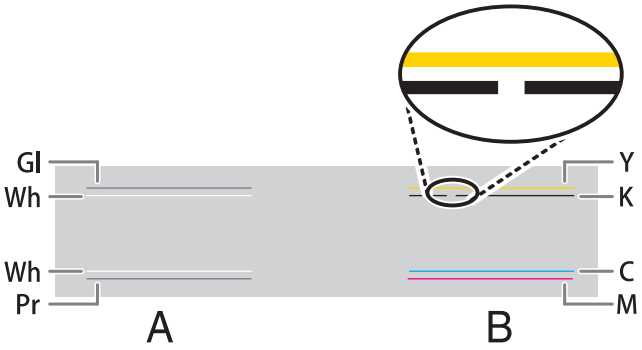
- P. 144 When Dot Drop-out or Dot Displacement Occurs

Step 2: Normal Cleaning Method

Procedure

1. Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.

The gloss, white, and primer strokes are in Group A, and the yellow, black, cyan, and magenta strokes are in Group B.



MEMO

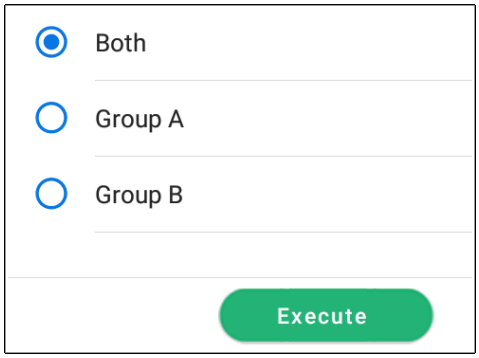
If the printing-test results are difficult to interpret

Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

2. Tap [Cleaning].

3. Tap [Normal Cleaning].

The screen shown below appears.



4. Select the group of print heads to clean.

5. Tap [Execute].

Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

When the work is finished, the status bar returns to its original display.

6. Tap ←, and then tap it one more time after the screen switches.

7. Perform a printing test again.

Tap [**Execute**] under [**Printing Test**].

8. **Check to make sure the dot drop-out or dot displacement has been corrected.**

   If the problem persists, try performing normal cleaning again. If the printer has been used for a long period, dot drop-outs may not be fixed even after performing normal cleaning two or three times. If this is the case, clean using a different method.

RELATED LINKS

- P. 40 Performing a Nozzle Drop-out Test
- P. 146 When Normal Cleaning Is Not Effective

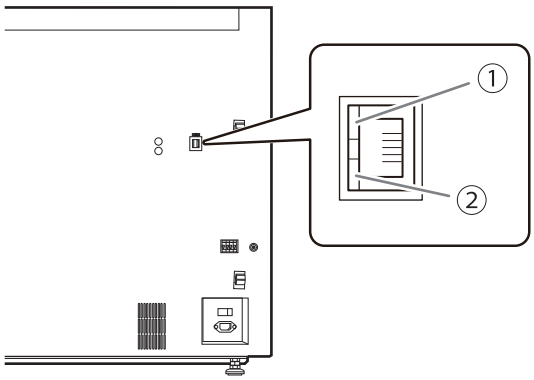
Before Printing

Before you start printing, check or perform the following.

LAN (Local Area Network) Terminal Status

Check that you can perform communication through the LAN terminal.

The LAN is enabled if the status LED (②) on the LAN connector located on the side of the printer is lit in green.

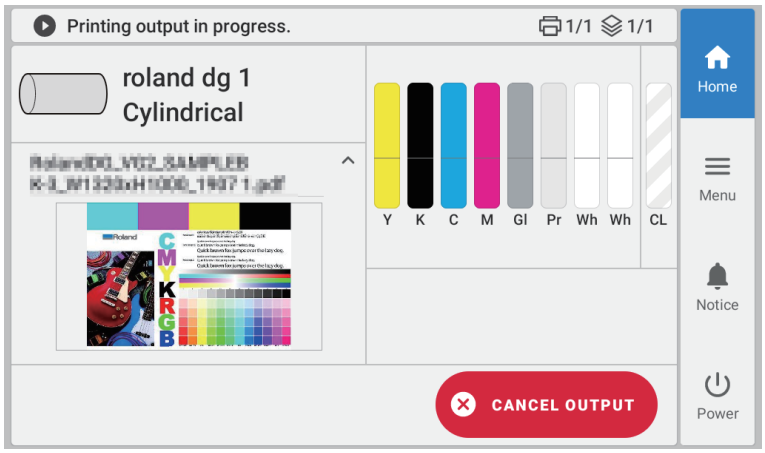


①	Activity LED	This flashes orange while data is being received from the network.
②	Status LED	This indicates the status of the communication function. When it lights in green, communication is possible.

Canceling Printing

Tap [**Cancel Output**] during printing to display the screen for confirming whether to cancel printing. Tap [**Yes**] to cancel printing.

If you have canceled printing, stop sending print data from your computer.



MEMO

[**Normal Cleaning**], [**Medium Cleaning**], and [**Powerful Cleaning**] can be canceled if necessary.

To cancel cleaning, tap to return to the home screen, and then tap [**Cancel**].

If [**After cleaning, perform a printing test.**] or [**After ink circulation, perform a printing test.**] is turned on, cleaning and printing tests can be canceled.

To cancel cleaning, tap to return to the home screen, and then tap [**Cancel Cleaning**].

To cancel a printing test, tap to return to the home screen, and then tap [**Cancel Printing Test**]. Note, however, that [**Ink Circulation**] cannot be canceled.

[**Medium Cleaning**] performed by tapping [**Finish All**] in the [**Manual Cleaning**] screen can also be canceled by tapping to return to the home screen and then tapping [**Cancel**].

Refilling Inks

Timing of Ink Refilling

The remaining ink display on the home screen shows whether ink can be refilled and the amount of ink remaining.

IMPORTANT

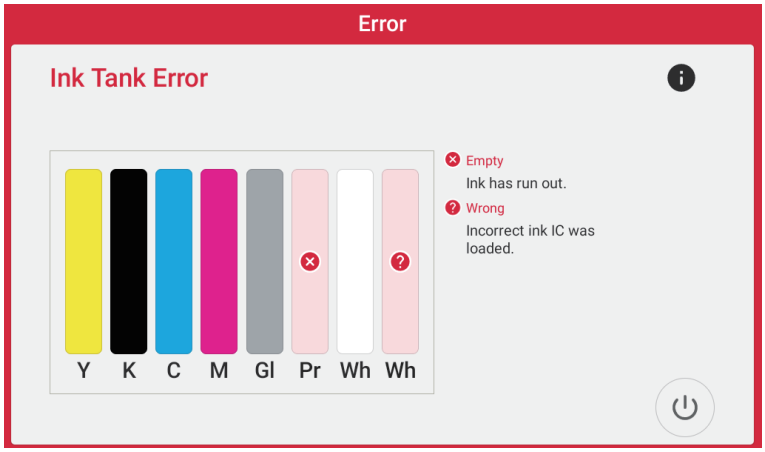
If ! or ✕ is not displayed, do not refill the machine with ink. Doing so will cause the ink to overflow from the ink tank.

List of icons

!	**[Remaining ink level low. Refill the ink.]** Refill the ink as soon as possible during the time between tasks.
✕	**[Ink has run out.]** Refill the empty ink.
−	**[Ink IC is not set.]** Insert the ink IC.
?	**[Incorrect ink IC was loaded.]** Insert the correct ink IC.
!	**[Replace with a new ink IC.]** Insert the new ink IC.
!	**[Refill with new ink.]** Refill the ink.

When ink runs out or when an incorrect ink IC is loaded, an Ink Tank Error appears.

Correct the error.



IMPORTANT

If ink runs out during printing, printing is stopped. Printing cannot be resumed even after refilling the ink.

MEMO

If ink runs out during cleaning, cleaning is interrupted. When the ink is refilled, cleaning resumes.

Refilling Inks

This section describes how to refill the ink when you are notified that it is possible to do so.

⚠ WARNING

Never store ink, cleaning liquid, or discharged fluid in any of the following locations.

- Any location exposed to open flame
- Any location where high temperature may occur
- Near bleach or any other such oxidizing agent or explosive material
- Any location within the reach of children

Fire may be a danger. Accidental ingestion by children may pose a health hazard.

IMPORTANT

- Use an ink bottle that is within the expiration date.
- Never under any circumstances use anything other than the specified type of ink bottle.
- The ink bottles must be purchased separately. Contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).
- The ink tank is a consumable item. To purchase consumable items, contact your authorized Roland DG Corporation dealer or visit our website (https://www.rolanddg.co.jp/).

Procedure

1. **Tap** .

   A notification screen appears.

2. **Tap the notifications.**

   The [**Refilling Inks**] window appears.

3. **Tap [Execute].**

4. **Remove the ink bottle and ink IC from the ink bottle box.**

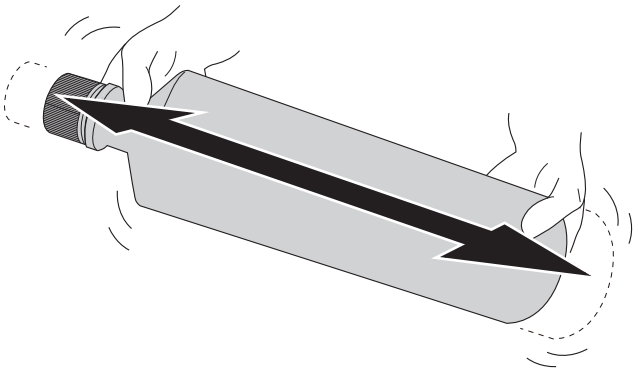
5. **Follow the onscreen instructions to replace the ink IC and insert the ink bottle.**

   Before inserting the ink bottle

   Shake the ink bottle 50 times (about 20 seconds).
   The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, turn the ink bottle so it is horizontal and shake it left/right.

   IMPORTANT

   Firmly hold the ink bottle so that you do not drop it. If the ink bottle falls, it may cause damage or printer malfunctions.



How to insert the ink bottle

(1) **Open the ink bottle lid.**

Do not remove the sealing attached to the ink bottle pouring port. The properties of UV ink cause it to harden when exposed to light. Using hardened ink may cause machine malfunction.

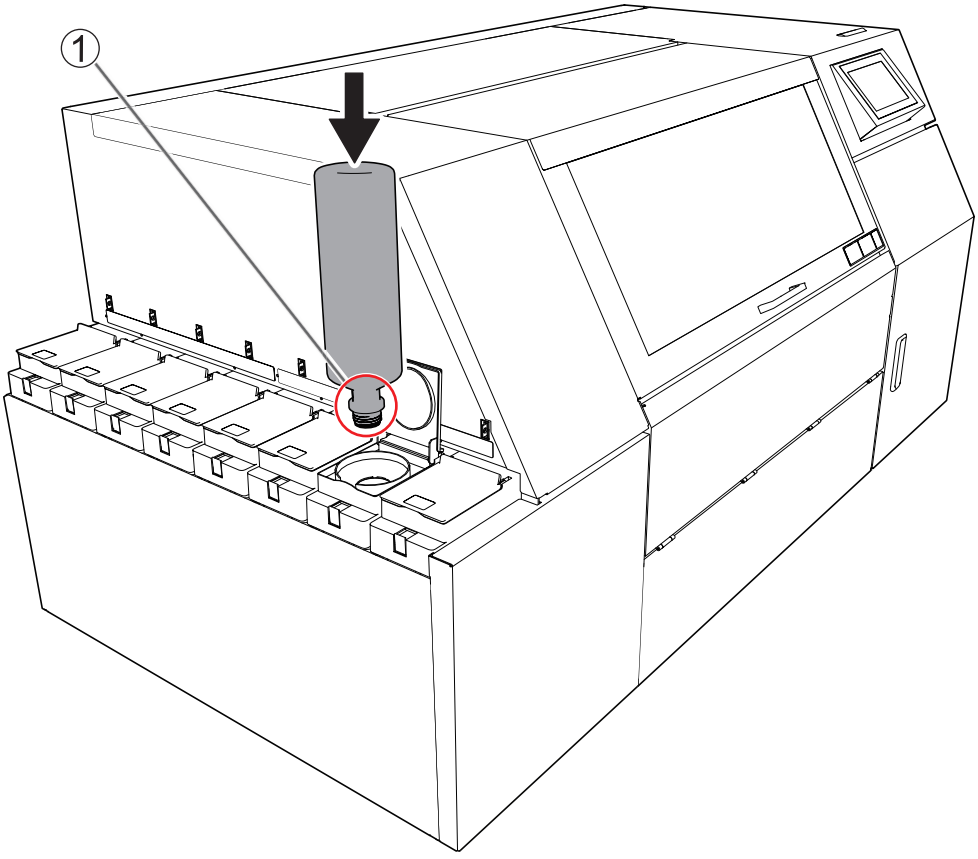
(2) **Open the ink tank lid.**

(3) **Insert the ink bottle into the ink tank.**

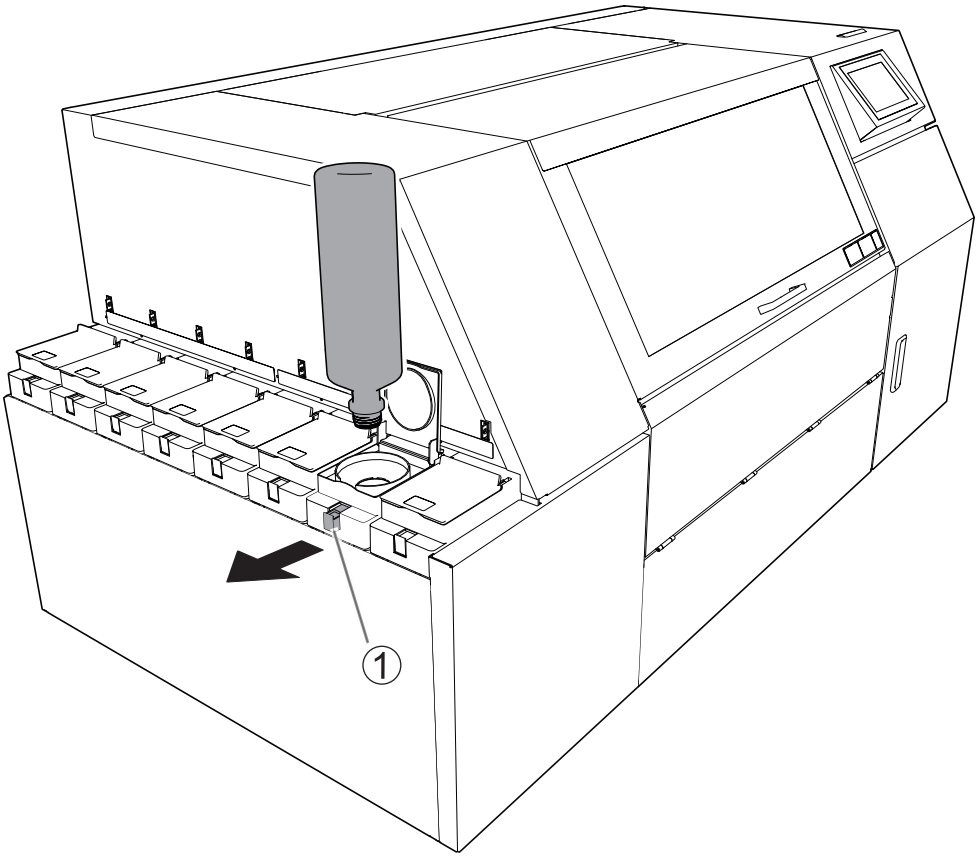
Place the ink bottle pouring port (①) against the projection on the ink tank and press it all the way in. The sealing is broken and ink flows into the ink tank.

IMPORTANT

Ink labels indicating the colors are affixed to the machine. Insert each ink bottle into the slot whose label matches the color of the ink in the bottle. Inserting an ink bottle of the wrong color may cause malfunction. Be careful not to insert the wrong ink bottle. If you insert an incorrect ink bottle by mistake, contact your authorized dealer.



(4) **When all the ink in the bottle has been poured into the ink tank, pull out the ink bottle while pressing the lock release (①).**



(5) **Immediately turn the bottle so that the spout faces up.**

If ink remaining in the bottle drips out, wipe it away immediately.

(6) **Close the ink tank lid.**

6. **Tap [Refill the next tank].**

Repeat Step 7.

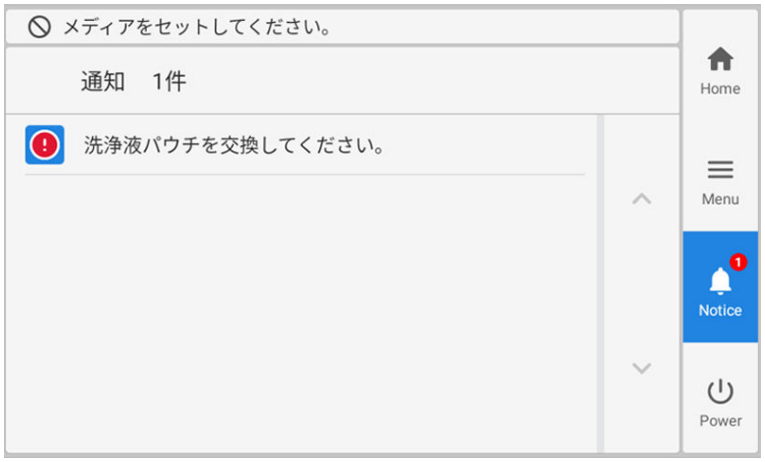
7. **When refilling of all the ink is complete, tap [Finish].**

Replacing the Cleaning Liquid

Out-of-cleaning-liquid Warnings

If the cleaning liquid runs out, [**Replace the cleaning liquid pouch.**] appears on the screen. Tap [**OK**] to close this message.

You can also check the message by tapping .



RELATED LINKS

- P. 51 Cleaning Liquid Replacement Method

Cleaning Liquid Replacement Method

⚠ WARNING

Never store ink, cleaning liquid, or discharged fluid in any of the following locations.

- Any location exposed to open flame
- Any location where high temperature may occur
- Near bleach or any other such oxidizing agent or explosive material
- Any location within the reach of children

Fire may be a danger. Accidental ingestion by children may pose a health hazard.

IMPORTANT

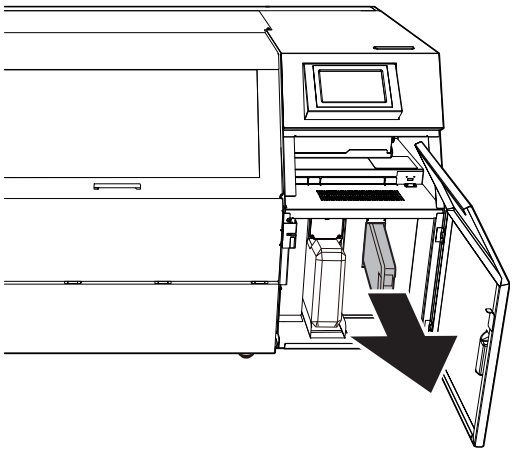
Precautions regarding cleaning liquid pouch replacement

- Never insert or remove the cleaning cartridge with undue force. Cleaning liquid may leak.
- If the cover of the cleaning cartridge does not lock securely, this cartridge needs to be replaced.
  For information about purchasing cleaning cartridges, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

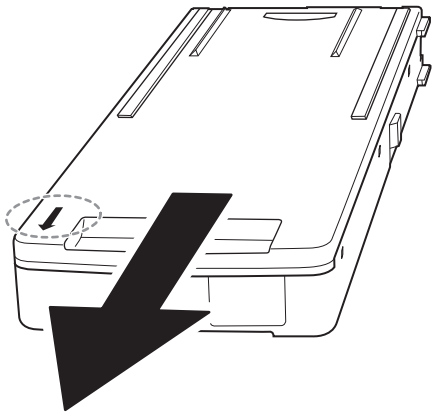
Procedure

1. **Open the maintenance cover.**

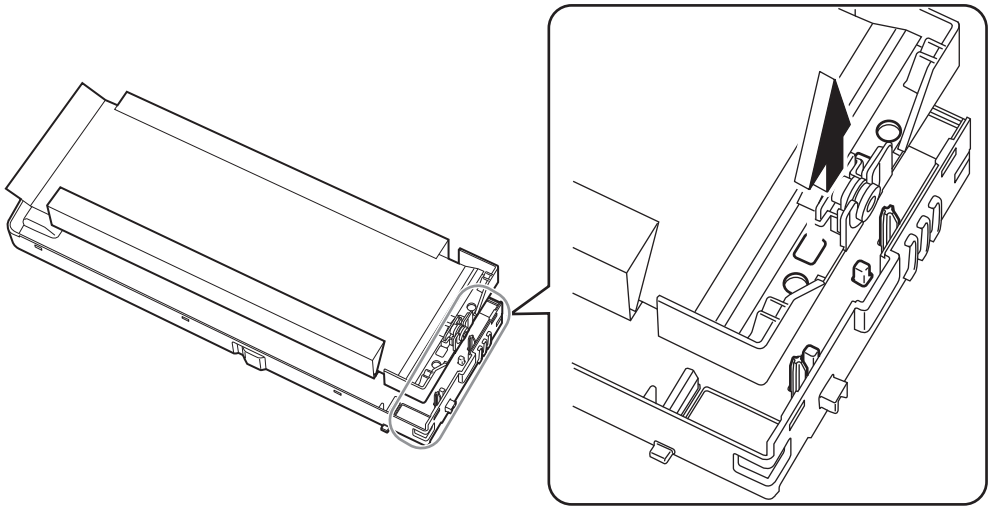
2. **Pull out the cleaning cartridge from the machine.**



3. **Remove the cleaning cartridge cover.**
   a. Keep the side with the arrow mark face up.
   b. Slide the cleaning cartridge cover in the direction of the arrow to remove it.



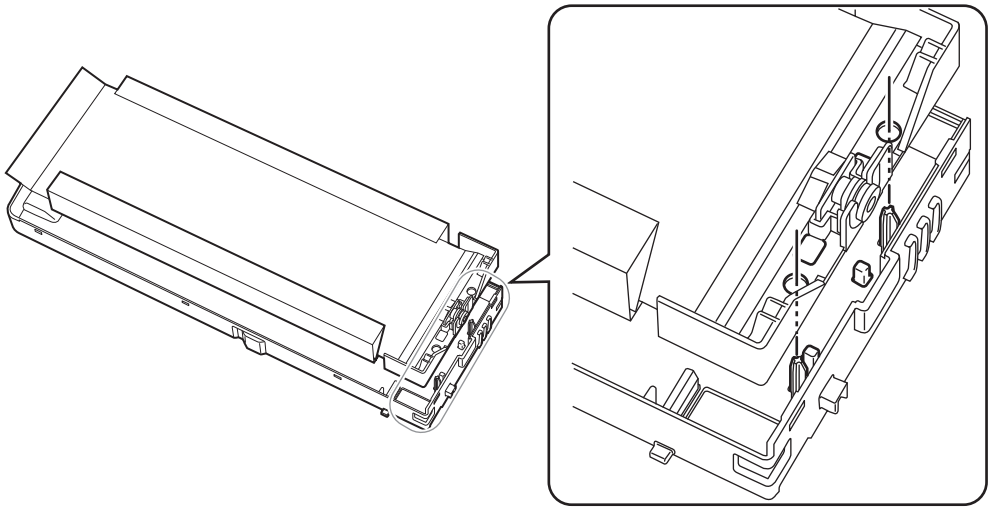
4. **Remove the used cleaning liquid pouch from the cartridge case.**



5. **Load a new cleaning liquid pouch in the cartridge case.**

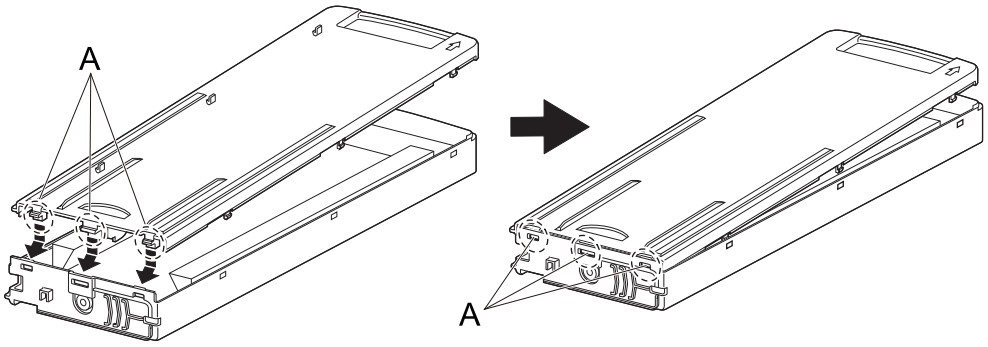
MEMO

Pass the protrusions on the cartridge case through the holes on the cleaning liquid pouch to load it in the correct position.



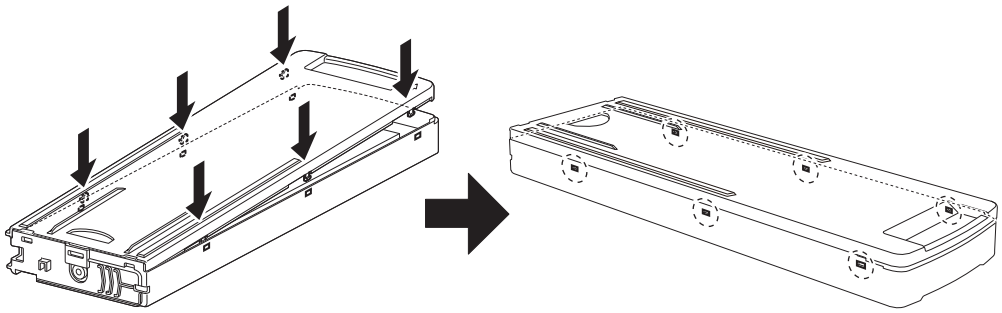
6. **Attach the cleaning cartridge cover to the cartridge case.**

a. Insert the protrusions (A) at the back of the cleaning cartridge cover into the holes in the cartridge case.



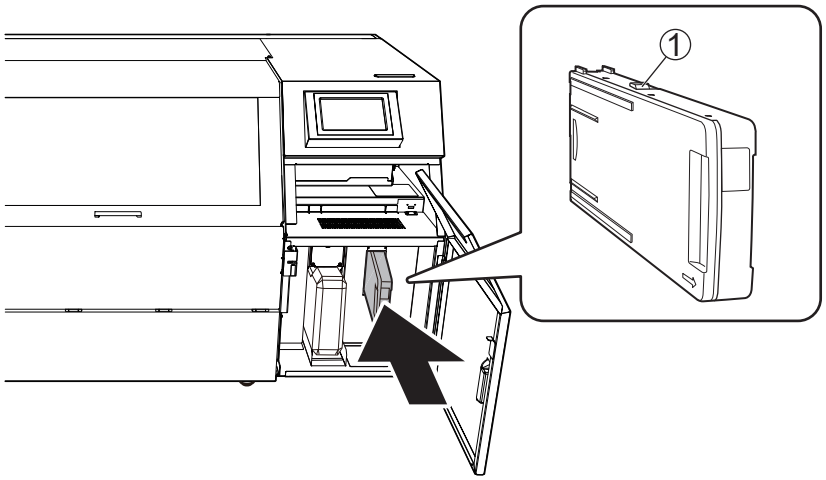
b. Push the cleaning cartridge cover to fit its hooks into the holes in the cartridge case.

There are hooks in six locations. Check that all the hooks are seated in the holes and that the cleaning cartridge cover does not come loose from the cartridge case.



7. Set the cleaning cartridge in the cleaning liquid slot.

Orient the ink cartridge so its protrusion (①) is face up, and then, while keeping the cartridge level, insert the cartridge as far as it will go.



8. Close the maintenance cover.

9. Tap [Yes] when the cleaning liquid pouch replacement confirmation screen appears.

If you tap [**Yes**] to reset the amount of cleaning liquid remaining, the cleaning liquid pouch will be identified as a new product.

MEMO

If you tap [**Yes**] on the cleaning liquid pouch replacement confirmation screen even though you have not replaced the cleaning liquid pouch, the amount of cleaning liquid remaining is reset. In this situation, no notification will appear even if the amount of cleaning liquid remaining is very small, and the message [**Replace the cleaning liquid pouch.**] will appear when the cleaning liquid runs out. To ensure you have enough time to prepare the replacement cleaning liquid, tap [**No**] if you have not replaced the cleaning liquid.

Printing Methods

Attaching the Object

Install the fixing jig onto the rotary device, and set the object so that printing is possible.

1. Installing the Jig 57
2. Setting the Object to be Printed On for the First Time.....60
2. Setting a Registered Object.....67
3. Measuring the UV Light Amount 70

1. Installing the Jig

Install a jig that can fix the object onto the rotary device.

If the object can be fixed with one of the provided jigs, install that jig onto the rotary device. If the object cannot be fixed with the provided jigs, it is necessary to prepare a special fixing jig. Keep the following points in mind when producing a special jig.

- Shape that can suitably load the object
- Material and surface treatment that will not scratch the object
- Design that allows the work to replace the object to be carried out efficiently
- Screw holes for installing onto the rotary device

For the positions and diameters of the screw holes on the rotary device, refer to "Rotary Device Dimensions" in the related information.

Procedure

1. **Tap [Media] when the media has not been selected.**

The [**Attaching a Jig**] window appears.

2. **Tap [Execute].**

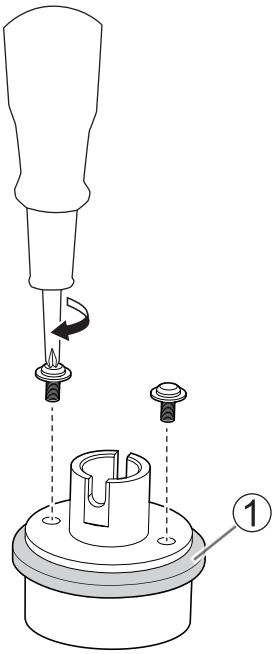
3. **Open the front cover and the light shield cover.**

4. **Install the jig.**

For the jig on the right side:

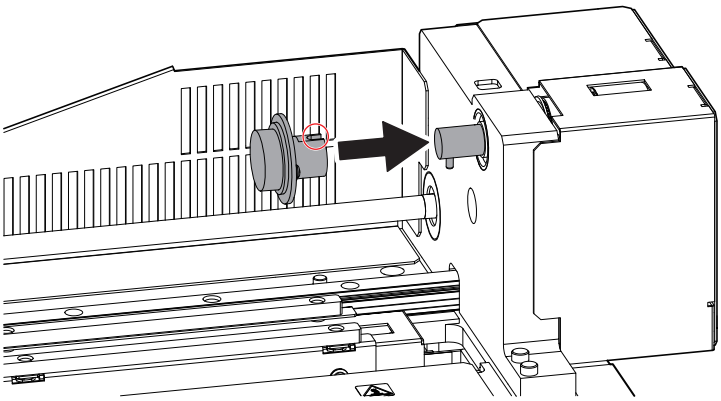
(1) **Attach the right-side jig adapter to the jig on the right side using a Phillips screwdriver.**

When using a right-side jig created in-house, also attach the right-side jig spare ① that matches the size of the jig on the right side to the right-side jig adapter.

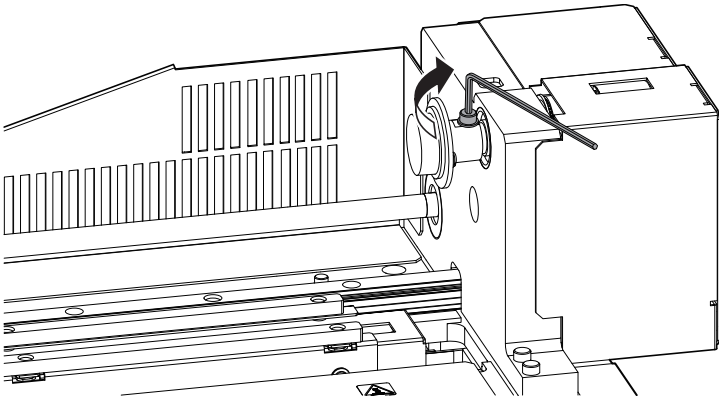


(2) **Attach (1) to the rotary device.**

Install the right-side jig adapter so that the shorter of the two grooves is facing up.



(3) **Tighten the screw on the right-side jig using the included 3.0 mm (0.12 in.) hexagonal wrench.**

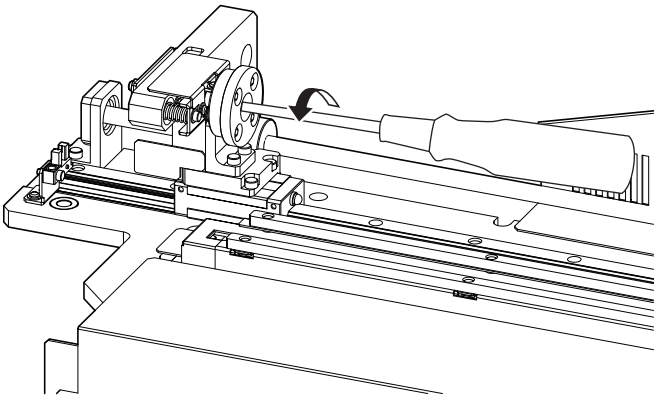


For the jig on the left side:

When using a jig created in-house or the included left-side jig (only for models with the UV-LED device located in front of the support table), replace it according to the following procedure.

Use a Phillips screwdriver.

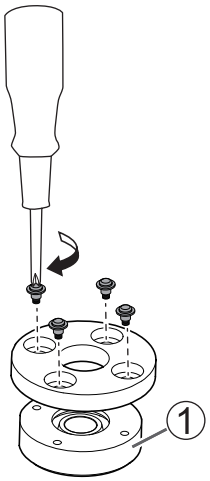
(1) **Use a Phillips screwdriver to remove the left-side jig from the rotary device.**



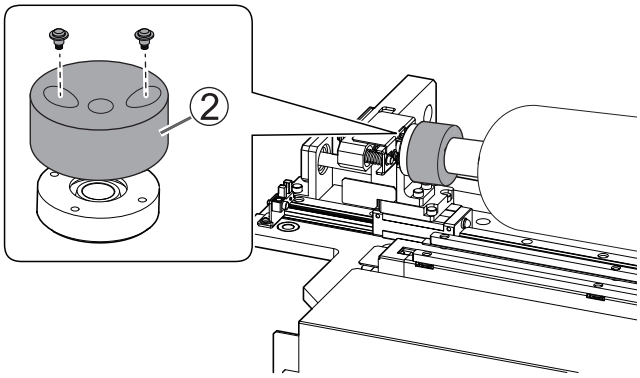
(2) **Replace the jig on the left side to match the object.**

MEMO

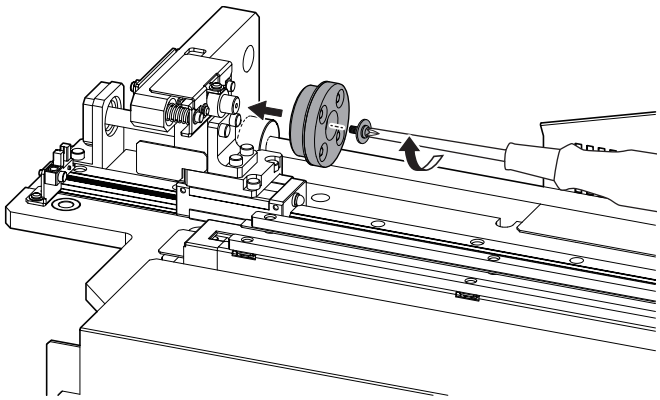
- **For a jig created in-house**
  Attach the included left-side jig spare ① to the jig on the left side.



- **For models with the UV-LED device located in front of the support table**
  Use the included left-side jig ② for irregularly shaped objects with narrow tops, such as wine bottles.



(3) **Attach the left-side jig to the rotary device.**



5. **Close the light shield cover.**

6. **Tap [Finish All].**

7. **Tap [Next].**

2. Setting the Object to be Printed On for the First Time

Load the object and set the printing area and reference point so that printing is enabled.

An overview of the procedure for setting the object is as follows. Follow the instructions displayed on the screen and perform the work in sequence.

1. Select the object shape type and color, and then enter the dimensions of the object.
2. Attach so that the center of the object and the rotation axis of the rotary device are aligned.
3. Set the printing area and printing reference point in order to specify the printing location.
4. If the object shape type is irregular, measure its ridge line.

Procedure

1. **Select [New] and tap [Next].**

2. **Enter a name, tap [OK], and then tap [Next] if the name is correct.**

To make corrections, tap the name you entered.

3. **Select the shape type of the object and tap [Next].**

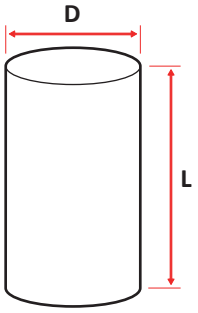
Shape type	Description
Cylindrical	A three-dimensional object which can be fully rotated using one side of the rectangle as the axis
Conical	Here, a truncated cone (three-dimensional object that can be fully rotated using the center line of the trapezoid as the axis) and a cone (three-dimensional object that can be fully rotated using one side of the right angle in a right triangle as the axis) are both referred to together as "conical."
Irregular	Here all rotating bodies which are not cylindrical or conical are referred to as "irregular." This is intended for shapes such as a cup with a slightly narrowed end or a bottle with a narrow pouring opening.

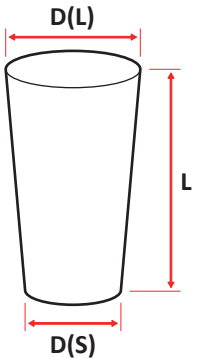
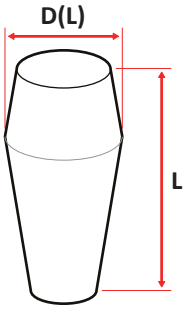
4. **Select the opacity of the object and tap [Next].**

5. **Enter the dimensions of the object.**

Measure the dimensions of the object, and enter the diameter and length. The items to be entered vary depending on the shape type.

Tap  for each item to display the entry screen. Enter the value and tap [OK].

Shape type	Description
Cylindrical	Enter the diameter [D] and length [L]. 

Shape type	Description
Conical	Enter the diameter of the larger end [D(L)], diameter of the smaller end [D(S)], and length [L]. 
Irregular	Enter the diameter of the larger end [D(L)] and the length [L]. 

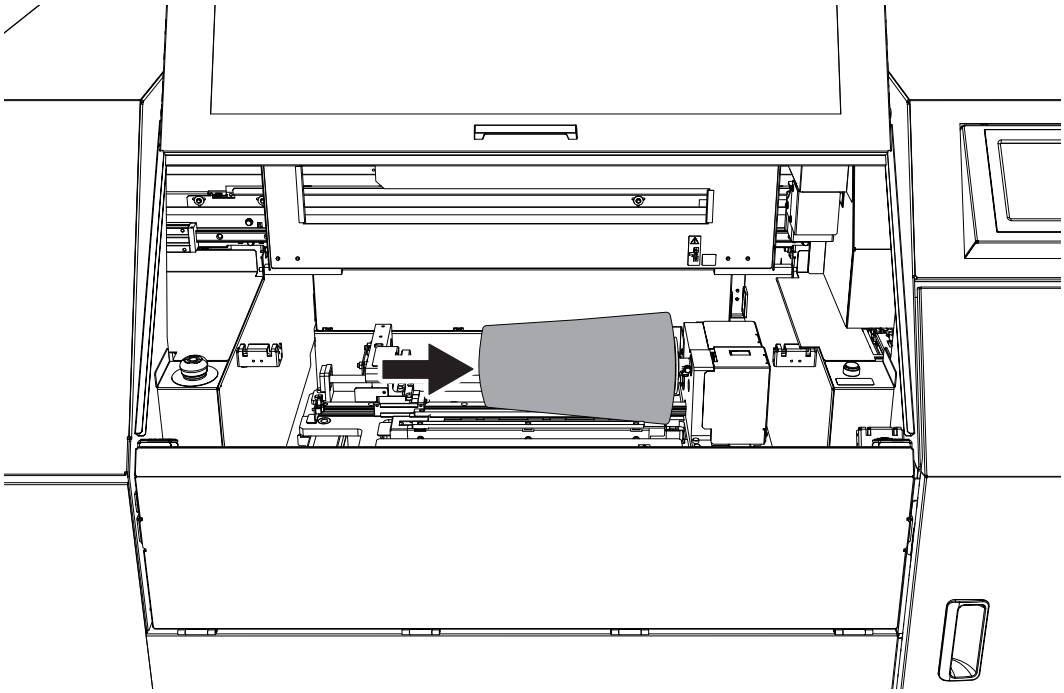
6. **When entry of the object dimensions is completed, tap [Next].**

The support table will move to where the object is loaded.

7. **Open the light shield cover and place the object on the support table.**

When the object has a conical shape or other shape where the diameter is not constant, place it so that the side with the larger diameter is on the right side. If it is placed with the smaller diameter on the right side, printing will not be possible.

Place the object so that its right edge is a few millimeters to the left of the jig on the right side.



8. **Tap [Next].**

The [**Media Loading Adjustment**] window appears.

9. **Correctly load the object onto the rotary device.**

- Align the rotational center axis of the rotary device with that of the object to reduce eccentricity.
- Ensure an appropriate distance between the print surface of the object loaded on the rotary device and the bottom surface of the print head (ink discharge surface).
- To prevent the object from deforming when held, ensure an appropriate force when the rotary device grips the object.

(1) **Tap [Load].**

The object has been loaded onto the rotary device.

If a message indicating the loading failed appears, tap [**OK**] to change to the screen for re-entering the dimensions of the object. Redo the procedure from when the dimensions of the object are entered.

(2) **To use a sensor to measure the amount of eccentricity, tap [Measurement]. To check visually, tap [Rotate].**

Estimate the amount of adjustment needed for the support table based on the measurement results or visual inspection.

Make adjustments so that the eccentricity in the measurement results is 1 mm (0.04 in.) or less. The lower the amount of eccentricity, the cleaner the printing results.

If no adjustment is required, proceed to adjustment of the print surface height (Step (7)).

(3) **If the support table needs to be adjusted, press the printer load/unload button to release the object.**

(4) **Tap the left or right raise/lower buttons (^ or v) to adjust the height of the support table.**

(5) **Tap [Load] again.**

(6) **Repeat steps (2) to (5) until the eccentricity during rotation is reduced.**

(7) **Tap [Printing Surface].**

The screen changes to the printing surface height adjustment screen.

(8) **If the object is not loaded on the rotary device, tap [Load].**

This operation is not necessary if the object to be printed on is already loaded. Proceed to the next step.

(9) **Close the light shield cover.**

(10) **Tap the [Table Height] raise/lower buttons (or) to adjust the height of the print surface.**

Adjust the object so that the print surface extends about 2 mm (0.08 in.) above the top of the light shield cover.

(11) **Tap [Rotate].**

If the object touches the light shield cover during rotation, or if any part of the print surface goes under the light shield cover, adjust the angle of the rotary device. If adjustment is not necessary, proceed to holding pressure adjustment (Step (15)).

(12) **Tap the [Rotary Device Angle Adjustment] raise/lower buttons (or) to adjust the tilt of the rotary device.**

(13) **Tap [Rotate] again.**

(14) **Repeat steps (10) to (13) until the object does not come into contact with the light shield cover during rotation and the printing surface is always above the light shield cover.**

(15) **Tap [Holding Pressure].**

The screen changes to the screen for setting the force with which the rotary device grips the object.

(16) **Set the holding pressure.**

(17) **When adjustment is completed, tap [Next].**

10. **Perform operations according to the on-screen instructions.**

If this step is not necessary, tap [**Next**] without performing any operations.

11. **Close the light shield cover if it is open.**

12. **When [Irregular] is selected for the shape type, tap [Measurement] on the [Ridge Line Measurement] screen.**

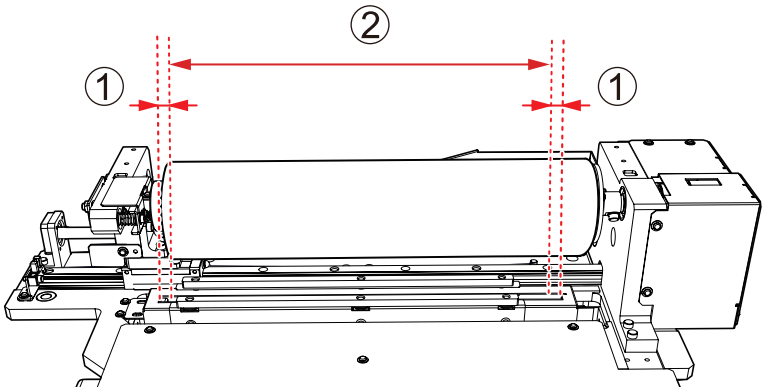
The undulations of the profile of the object are measured. When the measurement is completed, tap [**Next**].

When [**Cylindrical**] or [**Conical**] was selected for the shape type, this procedure is not displayed. Skip it and proceed to the next step.

13. **Set the printing area and reference point.**

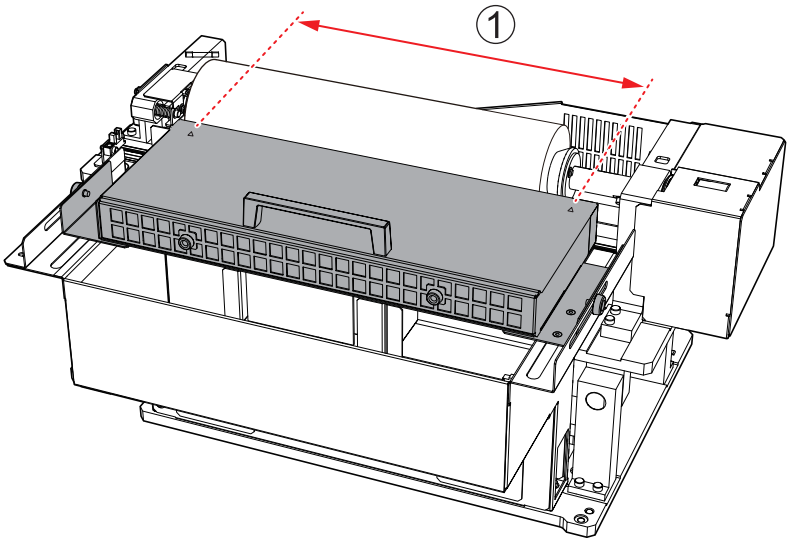
The maximum printing area is as follows.

- 12.5 mm (0.49 in.; [①]) to the inside from the left and right sides of the irradiation window of the UV-LED device. This area is indicated with ②.



- **For models with the UV-LED device located in front of the support table:**

  The maximum printing area is ①, the area to the inside from the alignment holes on the left and right sides of the top of the UV-LED device.



(1) **Tap [Change] next to [Printing Area].**

The [**Printing Area**] window appears.

(2) **Select [Print Origin].**

(3) **Tap ‹ or ›.**

The pointer moves.

(4) **Tap ‹ or › to move the pointer and set the right edge of the printing area.**

(5) **Select [Printing Area].**

(6) **Tap ‹ or › to move the pointer and set the length from the right edge of the printing area.**

(7) **Tap [Save Settings].**

You are returned to the [**Printing Area and Reference Point**] screen.

(8) **Tap [Printing Reference Point]. Tap [Change].**

The [**Printing Reference Point**] window appears.

(9) **Tap ‹.**

The pointer moves.

(10) **Tap ‹ or › and the rotate button on the rotary device (^ or ˇ) to move the pointer to the printing reference point.**

(11) **Tap [Save].**

You are returned to the [**Printing Area and Reference Point**] screen.

(12) **After configuring the settings, tap [Next].**

14. **Tap [Measurement].**

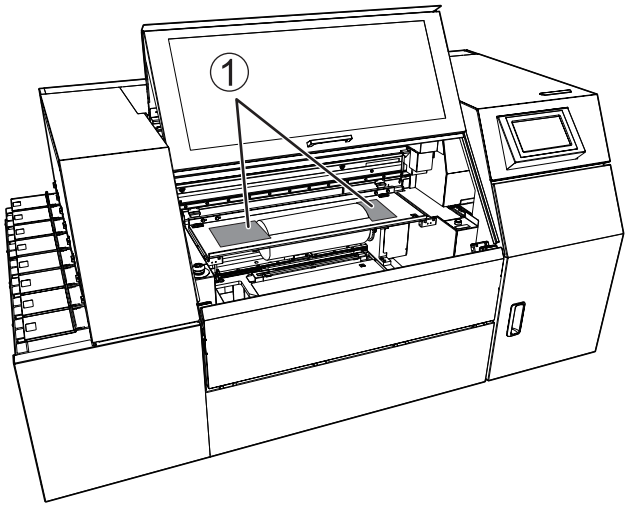
The head gap is measured, and the results are displayed on the screen.

Adjust [**Table Height**] and [**Rotary Device Angle Adjustment**] (with ^ or v) to make [**Min**] 3 mm (0.12 in.).

15. **After configuring the settings, tap [Next].**

16. **Attach the light blocking sheet ① to the light shield cover in the gap between the loaded object and the irradiation window of the light shield cover.**

Prevents UV light from passing through the gap. This operation is unnecessary if there is no gap.



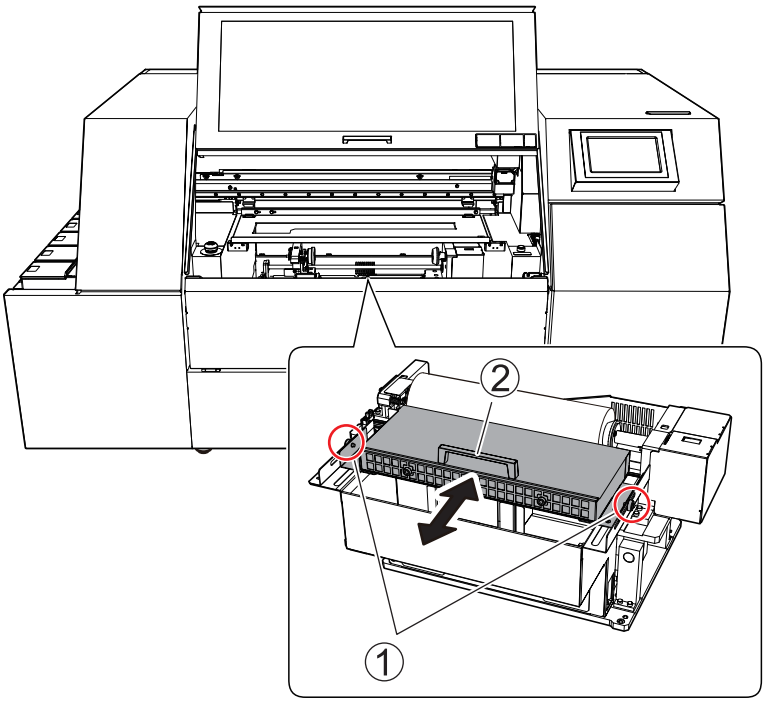
MEMO

Use scissors to cut the light blocking sheet to fit the size of the gap.

17. **For models with the UV-LED device located in front of the support table, adjust the position of the UV-LED device.**

(1) **Loosen the screws ①.**

(2) **Hold ② on the UV-LED device and move the UV-LED device forward or backward so that the distance between the object and the UV-LED device is about 5 mm (0.2 in.) at the closest point.**



(3) **When adjustment is completed, tap [Exit].**

The [**UV Light Leakage Measurement**] window appears.

RELATED LINKS

- P. 18 Printable Materials and Shapes
- P. 75 Printing on Large Numbers of Objects

2. Setting a Registered Object

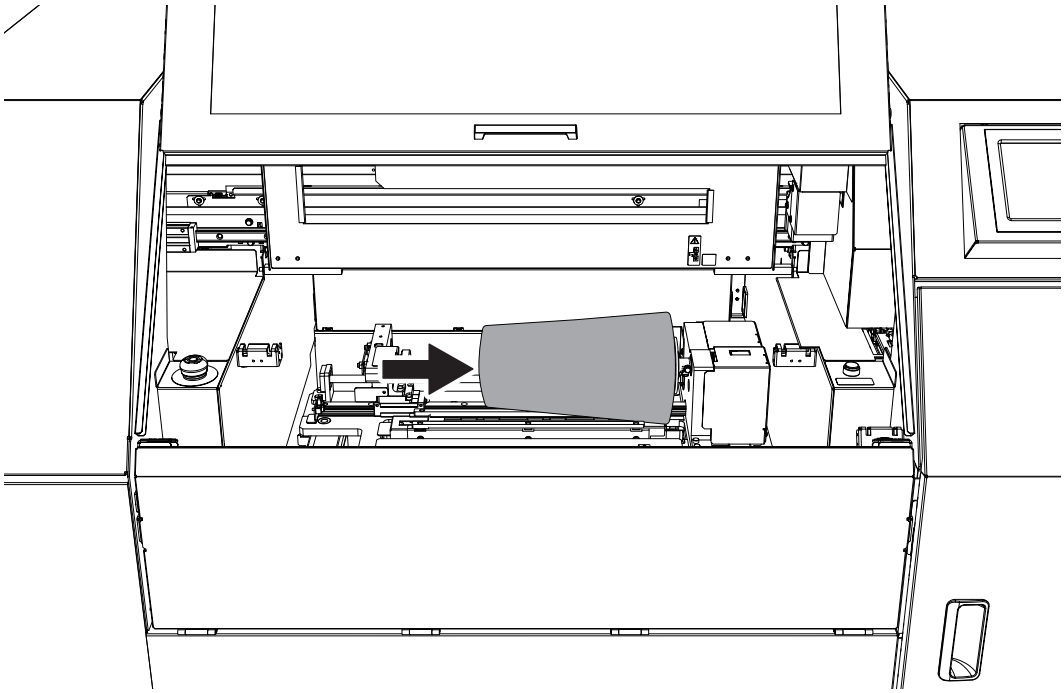
Load the object and select the registered media so that printing is enabled.

Procedure

1. **Select the media to use from the list of registered media, and tap [Next].**

2. **Open the light shield cover, place the object on the support table, and tap [Next].**

   When the object has a conical shape or other shape where the diameter is not constant, place it so that the side with the larger diameter is on the right side. If it is placed with the smaller diameter on the right side, printing will not be possible.



3. **To change the [Print Origin Position Setup], tap [Printing Reference Point]>[Change].**

   The [**Print Origin Position Setup**] window appears.

   If confirmation is not necessary or has been completed, tap [**Next**].

4. **Perform operations according to the on-screen instructions.**

   If this step is not necessary, tap [**Next**] without performing any operations.

5. **Tap ‹.**

   The pointer moves.

6. **Tap ‹ or › and the rotate button on the rotary device (^ or ˇ) to move the pointer to the printing reference point.**

7. **Tap [Save].**

   The [**Media Settings**] window appears.

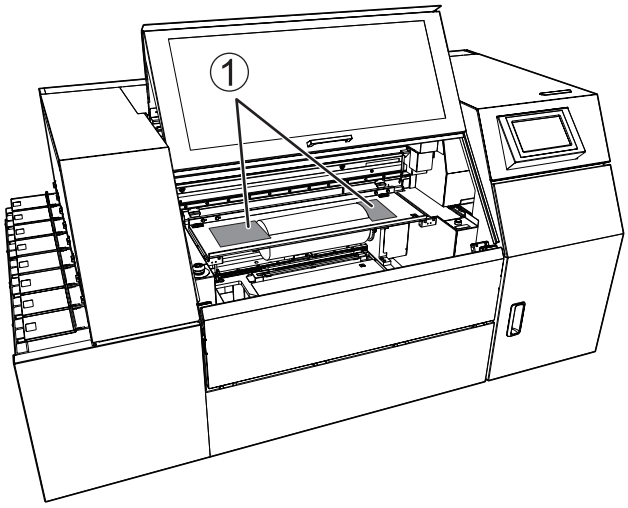
8. **To change the [Printing Area], tap [Printing Area]>[Change].**

   The [**Printing Area**] window appears.

   If confirmation is not necessary or has been completed, tap [**Next**].

9. **Attach the light blocking sheet ① to the light shield cover in the gap between the loaded object and the irradiation window of the light shield cover.**

Prevents UV light from passing through the gap. This operation is unnecessary if there is no gap.



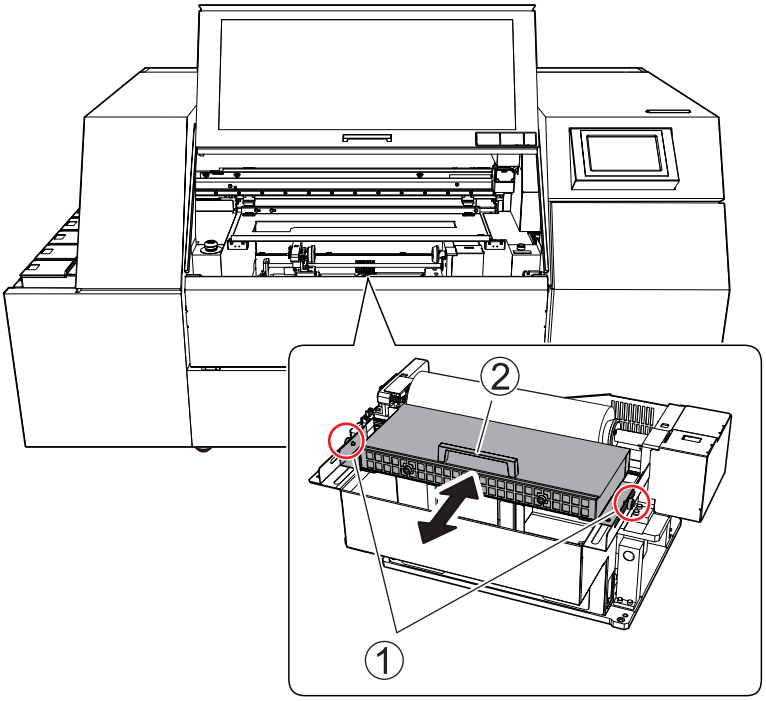
MEMO

Use scissors to cut the light blocking sheet to fit the size of the gap.

10. **For models with the UV-LED device located in front of the support table, adjust the position of the UV-LED device.**

(1) **Loosen the screws ①.**

(2) **Hold ② on the UV-LED device and move the UV-LED device forward or backward so that the distance between the object and the UV-LED device is about 5 mm (0.2 in.) at the closest point.**



(3) **When adjustment is completed, tap [Exit].**

The **[UV Light Leakage Measurement]** window appears.

11. Close the light shield cover.

3. Measuring the UV Light Amount

Check whether the machine is able to print on the installed object.

Shine UV light on the object and measure the amount of UV light that passes through it. The optimal light amount is less than 10 μW/cm^2.

IMPORTANT

If the measured value exceeds the prescribed light amount of **80 μW/cm2**,^{2}it is not possible to print on that object. The ink near the nozzle will be hardened by the UV light. This may make restoration impossible and force the replacement of the print head.

Required item

UV intensity meter*1

*1 Prepare the UV intensity meter (FUSO CENTER-532).

Procedure

1. **Put on a protective face shield, protective eyewear, and protective gloves.**

For the equipment and clothing of the person performing the work, refer to "Safety Precautions."

2. **Confirm that the object has been loaded onto the rotary device.**

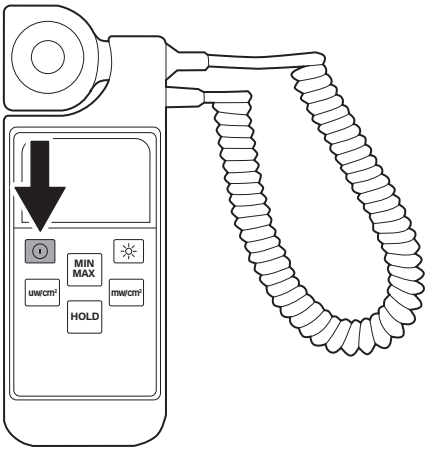
If it has not been loaded, UV light measurement is not possible.

IMPORTANT

Confirm that there is no gap between the loaded object to be printed on and the irradiation window of the light shield cover. If there is a gap, attach the light blocking sheet to the light shield cover. This prevents UV light from passing through the gap.

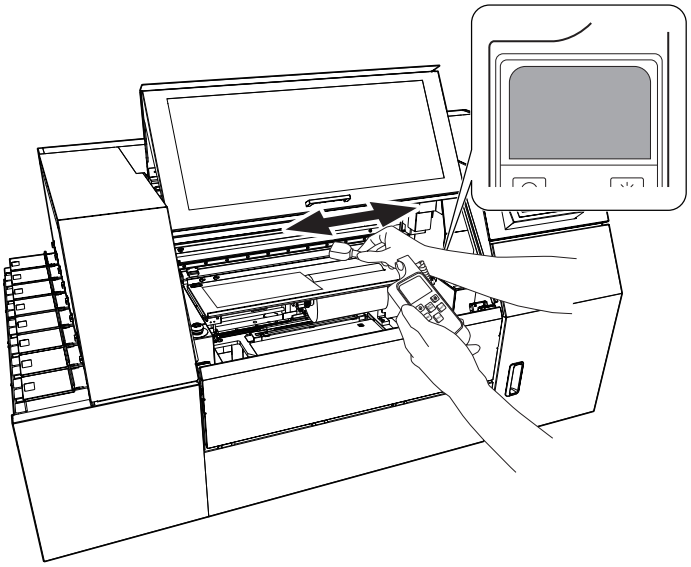
3. **Tap [Measurement].**

(1) **Press the green button on the UV intensity meter to turn on the power.**



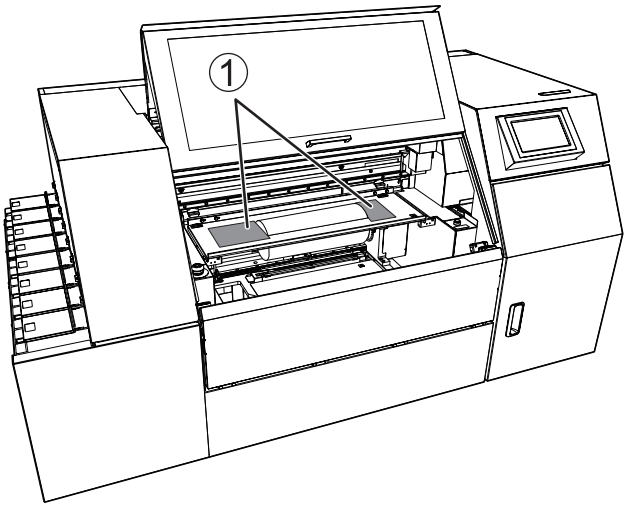
(2) **Bring the UV intensity meter close to the object to be printed on from above the light shield cover for measurement.**

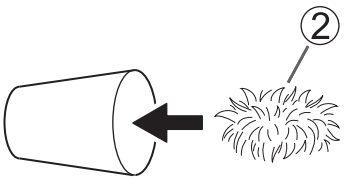
Confirm the UV light amount is 80 μW/cm^{2}or less.



IMPORTANT

- Make sure that the UV intensity meter does not come into contact with the light shield cover during measurement. Failure to do so may result in the machine malfunctioning.
- Keep the UV intensity meter about 0.5 to 1 cm (0.2 in. to 0.39 in.) away from the object.
- Perform measurement across the entire object for about three round trips.
- 80 µW/cm^{2}or less, confirm that there is no gap between the object and the light blocking window of the light blocking cover. If there is a gap, attach the light blocking sheet ① to eliminate the gap. Also, if the object is empty (such as a cup), adjust the UV light amount by placing the included light blocking insert ② inside the object so that there is no gap.





(3) **Press and hold the green button on the UV intensity meter to turn off the power after measurement is complete.**

4. **Tap [Finish].**

5. **Tap [Exit].**

If you want to measure again, tap [**Remeasure**].

6. **Tap the measurement result.**

Measurement result	Description
<10 μW/cm^2	The optimal UV light amount.
10 μW/cm^2～80 μW/cm^2	To protect the heads, cleaning is always performed before printing.

7. **Tap [Save].**

8. **Close the front cover.**

This completes the setup.

Performing Printing

Creating and Outputting Print Data.....74
Printing on Large Numbers of Objects 75

Creating and Outputting Print Data

Print data is created and then output to the machine using VersaWorks.

Print data is created in an application such as Adobe Illustrator and then saved in a file format (e.g., PDF or EPS) that can be read by VersaWorks. For details, refer to the "VersaWorks 7 User's Manual."

RELATED LINKS

- VersaWorks 7 User's Manual

Printing on Large Numbers of Objects

The procedure when printing consecutively any number of times on objects with the same material and shape is as follows.

Procedure

1. **Set the first object and ready the machine for printing.**
2. **Create the print data, specify the number of copies to be printed, and output the data.**
3. **When printing of the first copy is complete, open the front cover.**
4. **Press the load/unload button.**
   The object will be unloaded.
5. **Remove the object that was printed on and place a new object onto the support table.**
6. **Press the load/unload button.**
   The new object has been loaded.
7. **Close the front cover.**
8. **Tap [Resume].**
   Printing of the second copy starts.
   To cancel printing, tap [**Cancel**].
9. **Repeat steps 3 to 8.**

RELATED LINKS

- P. 60 Setting the Object to be Printed On for the First Time
- P. 67 Setting a Registered Object
- P. 74 Creating and Outputting Print Data

Removing the Object After Printing

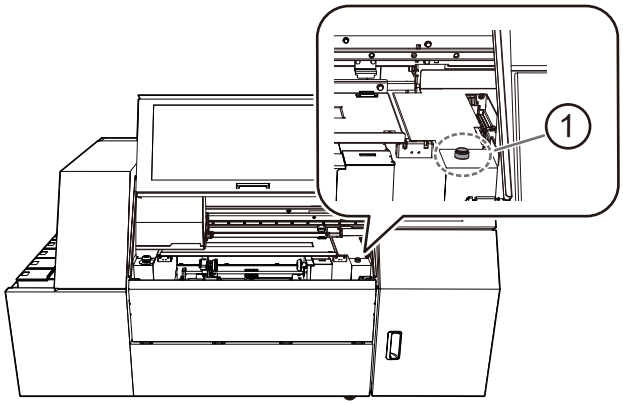
Remove the object. 77

Remove the object.

After printing, remove the object from the rotary device.

Procedure

1. **Press the load/unload button.**
   The held object is released.



2. **Remove the object from the rotary device.**

Optimizing Quality and Efficiency

Optimizing the Printing Settings

Changing the Printing Area and Reference Point 80
- Changing the Printing Area 80
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Changing the Printing Area and Reference Point

Changing the Printing Area

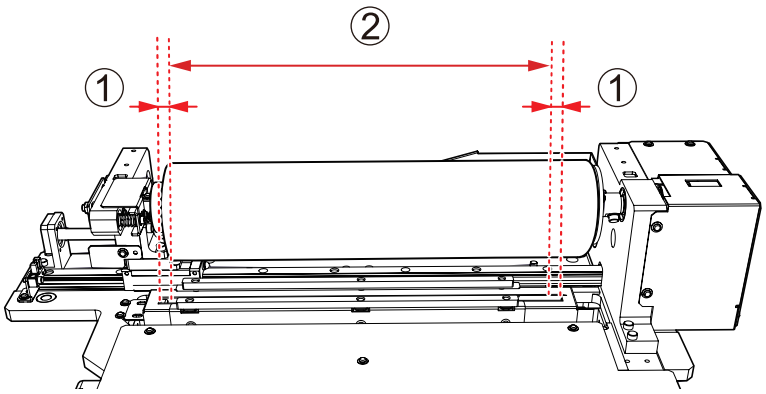
When you want to print a slightly larger size, change the printing area registered for the media.

Procedure

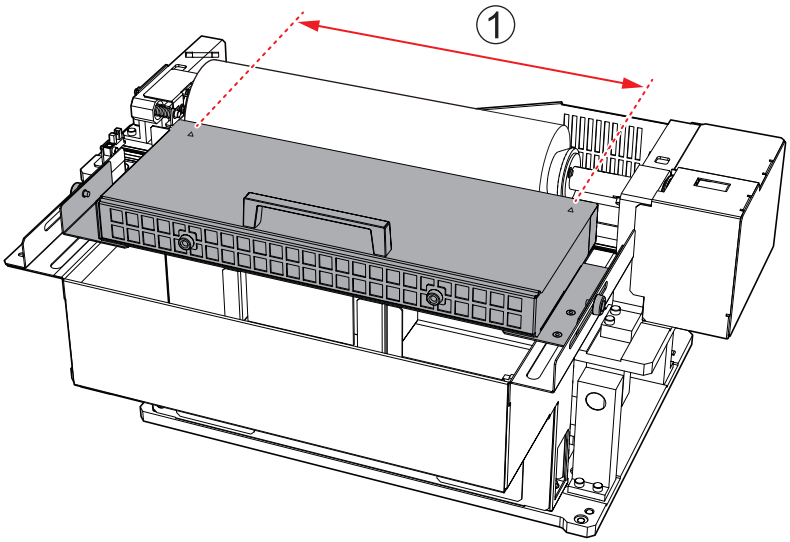
1. **Load the object.**
   Select the media that you want to change the printing area for.

2. **Tap** ☰.

3. **Tap [Media Settings]>[Printing Zone].**
   The maximum printing area is as follows.
   - 12.5 mm (0.49 in.; [①]) to the inside from the left and right sides of the irradiation window of the UV-LED device. This area is indicated with ②.



   - **For models with the UV-LED device located in front of the support table:**
     The maximum printing area is ①, the area to the inside from the alignment holes on the left and right sides of the top of the UV-LED device.



4. **Select [Print Origin].**

5. Tap ‹ or ›.
   The pointer moves.
6. Tap ‹ or › to move the pointer and set the right edge of the printing area.
7. Select [Printing Area].
8. Tap ‹ or › to move the pointer and set the length from the right edge of the printing area.
9. Tap [Save Settings].
10. Close the front cover.

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
If you do not open and close the front cover gently, it may break or you may be injured.

Changing the Printing Reference Point

When you want to displace the printing position left or right, change the printing area registered for the media.

Procedure

1. **Load the object.**
   Select the media that you want to change the printing reference point for.
2. **Tap** ☰**.**
3. **Tap [Media Settings]>[Print Origin Position Setup].**
4. **Tap** ‹**.**
   The pointer moves.
5. **Tap** ‹ **or** › **and the rotate button on the rotary device (** ^ **or** v **) to move the pointer to the printing reference point.**
6. **Tap [Save].**
7. **Close the front cover.**

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
If you do not open and close the front cover gently, it may break or you may be injured.

Changing the Holding Pressure of the Object

Changing the Holding Pressure

Change the degree of force when the object is pinched by the rotary device.

Procedure

1. **Load the object.**

   Select the media you want to change the [**Holding Pressure**] for, and load the object in the rotary device.

2. **Tap** ☰.

3. **Tap [Media Settings]>[Holding Pressure Settings].**

4. **Tap [Standard] or [Weak].**

   MEMO

   Default setting: [**Standard**]

5. **Tap [Save].**

6. **Close the front cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.

7. **Tap** ←.

   You are returned to the [**Media Settings**] screen.

Adjusting the Distance Between the Print Surface and the Nozzle Surface

Setting the Height of the Print Surface Manually

Manually set the height of the print surface on the object. This is suitable when you want to set the distance between the print heads and object to the preferred position. The manual setting takes a little longer than the automatic setting because you need to visually set the height. If the print surface is uneven, there is a limit to the area of unevenness.

Procedure

1. **Load the object.**
   Select the media that you want to adjust the table height for.
2. **Tap** ☰.
3. **Tap [Media Settings]>[Print Height and Angle Settings].**
4. **Change the [Table Height].**
   (1) **To raise or lower the table a little at a time while checking it visually, tap** ^ **or** v **on the left side of the screen.**
   (2) **To adjust the height using a number, tap** ✎.
5. **Tap [Save].**
6. **Close the front cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.
7. **Tap** ←.
   You are returned to the [**Media Settings**] screen.

Setting the Angle of the Print Surface Manually

Manually set the angle of the print surface on the object. This is suitable when you want to set the distance between the print heads and object to the preferred position. The manual setting takes a little longer than the automatic setting because you need to visually set the height. If the print surface is uneven, there is a limit to the area of unevenness.

Procedure

1. **Load the object.**
   Select the media that you want to adjust the table angle for.
2. **Tap** ☰.
3. **Tap [Media Settings]>[Print Height and Angle Settings].**
4. **Change the [Rotary Device Angle Adjustment].**
   (1) **Tap ^ or v on the right side of the screen to adjust the angle gradually while checking it visually.**
5. **Tap [Save].**
6. **Close the front cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.
7. **Tap** ←.
   You are returned to the [**Media Settings**] screen.

Adjusting the Rotational Misalignment (Eccentricity) during Printing

Adjusting the Eccentricity

Adjusts the height of the left and right sides of the support table to reduce the eccentricity of the object during loading.

Procedure

1. **Load the object.**
   Select the media for which you want to adjust the eccentricity.
2. **Tap ☰.**
3. **Tap [Media Settings]>[Eccentricity Adjustment].**
4. **Tap [Execute].**
5. **Adjust the angle of the support table.**
   (1) **To adjust the angle of the support table left or right a little at a time while checking it visually, turn automatic measurement off and tap ^ or v.**
   (2) **If you want to check while using automatic measurement, tap [Turn on automatic measurement] to switch the setting.**
6. **Tap [Eccentricity Check].**
   The eccentricity results will appear.
   Make adjustments so that the eccentricity in the measurement results is 1 mm (0.04 in.) or less. The lower the amount of eccentricity, the cleaner the printing results.
7. **If adjustment is necessary, tap [Readjust].**
8. **Tap [Save].**
9. **Close the front cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.
10. **Tap ←.**
    You are returned to the [**Media Settings**] screen.

Checking the UV Light Amount

Measuring the UV Light Amount

Check whether the machine is able to print on the installed object.

Shine UV light on the object and measure the amount of UV light that passes through it. The optimal light amount is less than 10 μW/cm^2.

IMPORTANT

If the measured value exceeds the prescribed light amount of **80 μW/cm2**,^{2}it is not possible to print on that object. The ink near the nozzle will be hardened by the UV light. This may make restoration impossible and force the replacement of the print head.

Required item

UV intensity meter*1

*1 Prepare the UV intensity meter (FUSO CENTER-532).

Procedure

1. **Put on a protective face shield, protective eyewear, and protective gloves.**

   For the equipment and clothing of the person performing the work, refer to "Safety Precautions."

2. **Confirm that the object has been loaded onto the rotary device.**

   If it has not been loaded, UV light measurement is not possible.

   IMPORTANT

   Confirm that there is no gap between the loaded object to be printed on and the irradiation window of the light shield cover. If there is a gap, attach the light blocking sheet to the light shield cover. This prevents UV light from passing through the gap.

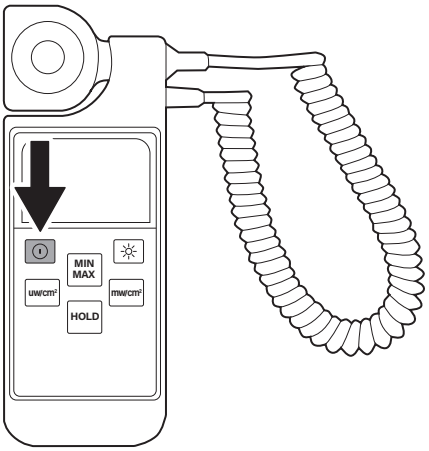
3. **Tap** ☰.

4. **Tap [Preferences]>[UV Light Leakage Measurement].**

5. **Open the front cover.**

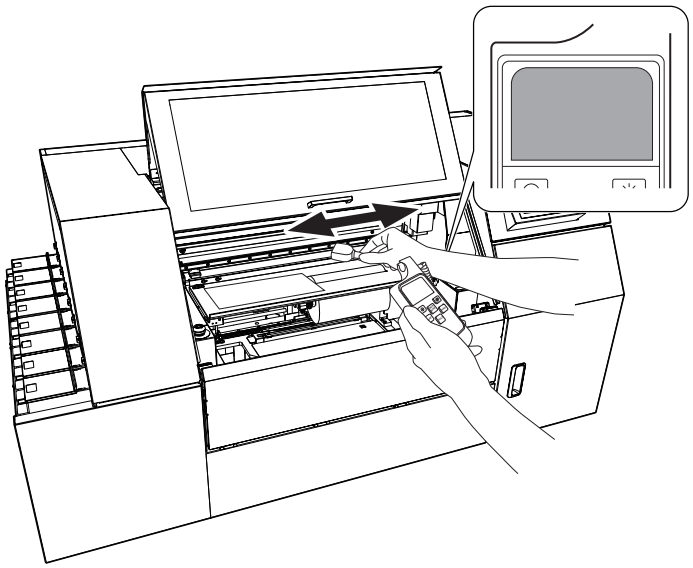
6. **Tap [Measurement].**

   (1) **Press the green button on the UV intensity meter to turn on the power.**



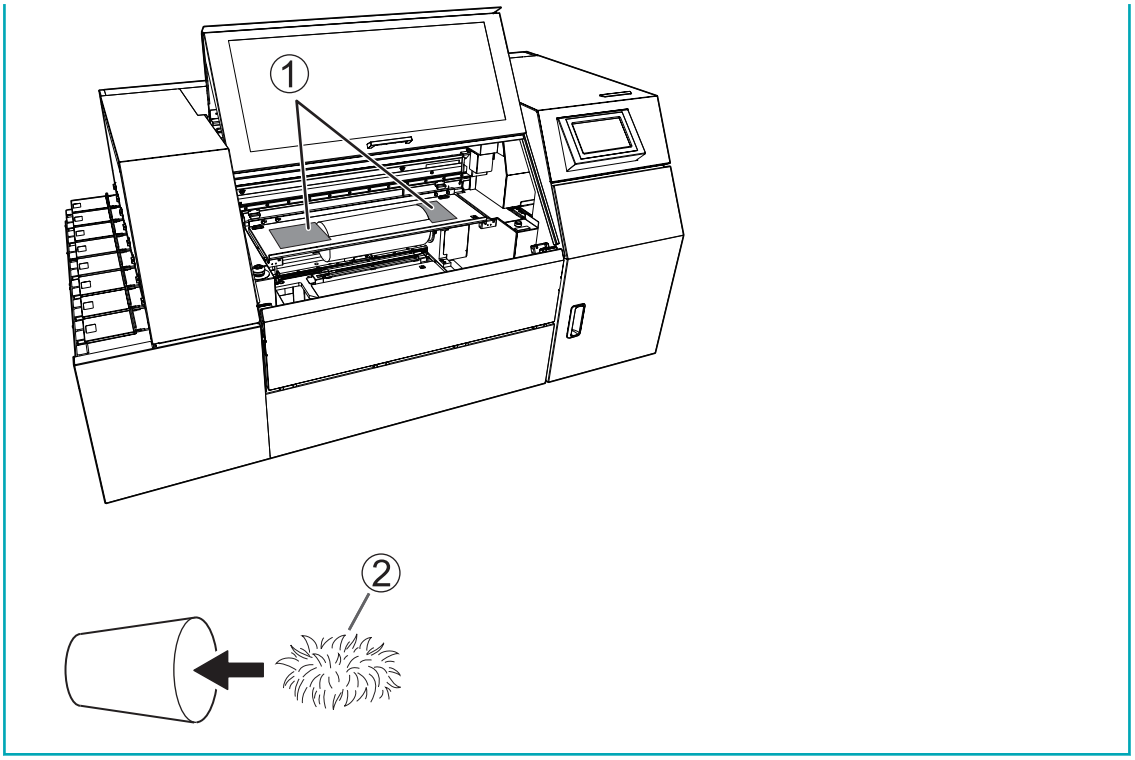
(2) **Bring the UV intensity meter close to the object to be printed on from above the light shield cover for measurement.**

Confirm the UV light amount is 80 μW/cm^{2}or less.



IMPORTANT

- Make sure the UV intensity meter does not come into contact with the light shield cover during measurement. Failure to do so may result in the machine malfunctioning.
- Keep the UV intensity meter about 0.5 to 1 cm (0.2 in. to 0.39 in.) away from the object.
- Perform measurement across the entire object for about three round trips.
- 80 μW/cm^{2}or less, confirm that there is no gap between the object and the light blocking window of the light blocking cover. If there is a gap, attach the light blocking sheet ① to eliminate the gap. Also, if the object is empty (such as a cup), adjust the UV light amount by placing the included light blocking insert ② inside the object so that there is no gap.



(3) **Press and hold the green button on the UV intensity meter to turn off the power after measurement is complete.**

7. **Tap [Finish].**

8. **Tap [Exit].**

If you want to measure again, tap [**Remeasure**].

9. **Tap the measurement result.**

Measurement result	Description
<10 μW/cm^2	The optimal UV light amount.
10 μW/cm^2～80 μW/cm^2	To protect the heads, cleaning is always performed before printing.

10. **Tap [Save].**

11. **Close the front cover.**

12. **Tap** .

The home screen appears.

Optimizing the Printing Quality

Performing Additional UV Irradiation.....91
Fine-Tuning the Ink Discharge Amount and Discharge Speed 92
Correcting the (Left/Right) Printing Misalignment of Spot Colors and Process Colors.....93

Performing Additional UV Irradiation

If the ink does not cure properly—for example, if drying takes a long time after printing—additional UV irradiation can be performed.

Procedure

1. Tap .
2. Tap [Preferences]>[UV Light Curing].
3. Tap [Execute].
4. Tap .
   The home screen appears.

Fine-Tuning the Ink Discharge Amount and Discharge Speed

Change the discharge strength and temperature of the print heads to adjust the ink discharge amount and discharge speed.

IMPORTANT

If the print head discharge strength/temperature settings are configured without an adequate understanding, the print quality may not be as the customer wanted. Before configuring these settings, contact your authorized dealer.

Procedure

1. **Tap** ☰.
2. **Tap [Preferences]>[Head Discharge Strength/Temperature Adjustment].**
3. **Tap** ⬤ **to display the settings screen.**

[Setting item/setting value]		Description
[H1]	[Head Discharge Strength Offset]	Sets the discharge strength of the print head.
	[Head Heater Temperature Offset]	Sets the print head heater temperature.
	[Pre-Heater Temperature Offset]	Sets the print heater temperature.
[H2]	[Head Discharge Strength Offset]	Sets the discharge strength of the print head.
	[Head Heater Temperature Offset]	Sets the print head heater temperature.
	[Pre-Heater Temperature Offset]	Sets the print heater temperature.

4. **Tap** − **or** + **for the item you want to adjust, and then configure the settings.**

MEMO

- When you tap ⬤ to hide the settings screen, the set values are reset.
- Default settings
  - **[Head Discharge Strength Offset]**: 0
  - **[Head Heater Temperature Offset]**: +0℃
  - **[Pre-Heater Temperature Offset]**: +0℃

5. **Tap [Save].**
6. **Tap** ⌂.

   The home screen appears.

Correcting the (Left/Right) Printing Misalignment of Spot Colors and Process Colors

When you want to correct the left/right printing misalignment of spot colors (white, gloss, and primer) and process colors (CMYK) in multilayer printing, adjust the distance between the left and right print heads.

Procedure

1. **Tap ☰.**
2. **Tap [Preferences]>[Head Horizontal Alignment].**
3. **Tap − or + to set the distance between the left and right print heads.**
4. **Tap [Save].**
5. **Tap ⌂.**

MEMO

Default settings: 0

The home screen appears.

Optimizing Work Efficiency

Managing the Media Settings....95
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Managing the Media Settings

Changing the Media Settings

Use the following procedure to change the media settings. These settings can only be changed for the currently selected media.

Procedure

1. **Load the object.**
   Select the media that you want to change the settings for.
2. **Tap** ☰.
3. **Tap [Media Settings]>[List of Media Settings].**
4. **Tap** › **next to the setting you want to change to move to the screen for editing this setting.**
   Items marked with › can be edited. Items where this mark is not displayed cannot be edited.

[List of Media Settings]	Reference page
[Print Height and Angle Settings]	P. 84 Setting the Height of the Print Surface Manually
[Eccentricity Adjustment]	P. 86 Adjusting the Eccentricity
[Holding Pressure Settings]	P. 83 Changing the Holding Pressure

5. **If you have changed a setting, tap [Save Settings] or [Save].**
6. **Tap** ⌂.
   The home screen appears.

Checking the Registered Media Settings

Procedure

1. Tap .
2. **Tap [Media Management].**
   The registered media are displayed in a list.
3. **Tap a media setting.**
4. **Tap [List of Media Settings].**
   The registered media setting values are displayed in a list.
5. Tap .
   The home screen appears.

Changing the Media Name

Procedure

1. Tap .
2. Tap [Media Management].
   The registered media are displayed in a list.
3. Tap the media whose name you want to change.
4. Tap .
5. Tap the input field and enter the media name.
6. Tap [OK] to confirm your entry.
7. Tap .
   The home screen appears.

Duplicating Media Settings

This section explains how to duplicate existing media.

Procedure

1. Tap .
2. **Tap [Media Management].**
   The registered media are displayed in a list.
3. **Tap the media to duplicate.**
4. **Tap [Duplicate Media].**
   A screen for entering the name of the duplicated media appears. To create this name, [**COPY**] is added at the start of the name of the media being duplicated.
5. **Enter the media name and tap [OK].**
6. Tap .
   The home screen appears.

Deleting Media Settings

This deletes registered media.

MEMO

This operation cannot be performed on the currently selected media. To perform this operation, first cancel media selection.

Procedure

1. **Tap** .
2. **Tap [Media Management].**
   The registered media are displayed in a list.
3. **Tap the media to be deleted.**
4. **Tap [Delete Media].**
5. **Tap [Yes] when the confirmation screen appears.**
   The media is deleted, and you are returned to the screen listing the registered media.
6. **Tap** .
   The home screen appears.

[Specifying and Outputting VersaWorks Jobs from the Machine]

Outputting a Job

From the operation panel, perform [**VersaWorks**] and [**Queue Folder**] via Roland DG Connect Hub, and then print the job.

First, check the following items:

- Roland DG Connect Hub version 3.2.6 or later is installed on the computer where VersaWorks is installed.
- The VersaWorks version is 7.7.0 or later.
- Roland DG Connect Hub has started, and you have signed in.
- VersaWorks has started.
- The printer is ready to print (media has been set up).

Procedure

1. **Tap** .
2. **Tap [Job Management]>[Direct Printing].**
   A list of the VersaWorks on the computer connected to this machine is displayed.
3. **Tap the desired VersaWorks.**
   A list of the queue folders is displayed.
4. **Tap the desired queue folder.**
   The job list is displayed.
   Tap to update the job and get the latest job status information.
5. **Tap the job you want to print.**
6. **Tap .**
7. **Enter the print count.**

   IMPORTANT

   The print count is output with the print count set in VersaWorks as a unit of one.
   If the print count in VersaWorks is set to two times, the actual output count according to the instructions on the operation panel is as follows.
   - With "One time" specified on the operation panel: The print count is output twice.
   - With "Two times" specified on the operation panel: The print count is output four times.
8. **Tap [Execute].**
   The job is printed.

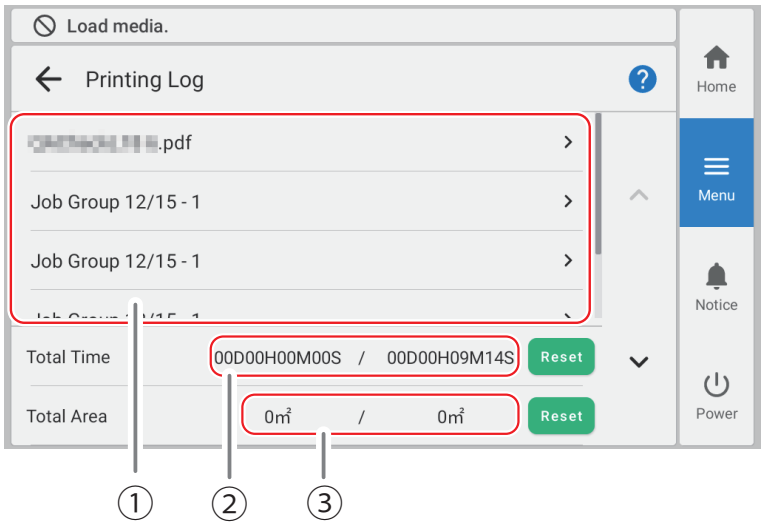
Displaying the [Printing Log]

Displays [**Printing Log**].
The [**Job Properties**] for each job, and the [**Total Time**] and [**Total Area**] for all jobs, can be checked.
First check that VersaWorks is version 7.7.0 or later.

Procedure

1. **Tap** ☰.

2. **Tap [Job Management]>[Printing Log].**
   The following is displayed.



①	[**Printing Log**] • [**Job Name**] • [**Copies to Print**] • [**Print Start Time**] • [**Print End Time**] • [**Required Time**]
②	[**Total Time**] */* is displayed. The left side indicates the trip [**Total Time**], and the right side indicates the total [**Total Time**]. • Trip [**Total Time**] Displays the total printing hours for any period of time, such as daily or weekly. To reset to 0, tap [**Reset**]. Reset when you wish to start measurement. • Total [**Total Time**] Displays the total cumulative printing time. This function cannot be reset.
③	[**Total Area**] */* is displayed. The left side indicates the trip [**Total Area**], and the right side indicates the total [**Total Area**]. • Trip [**Total Area**] Displays the total printing area for any period of time, such as daily or weekly. To reset to 0, tap [**Total Area**]. Reset when you wish to start measurement. • Total [**Total Area**] Displays the total cumulative printing area. This function cannot be reset.

3. **To check the [Job Properties] for a specific job, select the job.**

The [**Job Properties**] appears.

4. **Tap to return to the home screen.**

Other Useful Functions

Reprinting

First, check the following items:

- Roland DG Connect Hub version 3.2.6 or later is installed on the computer where VersaWorks is installed.
- The VersaWorks version is 7.7.0 or later.
- Roland DG Connect Hub has started, and you have signed in.
- VersaWorks has started.
- The printer is ready to print (media has been set up).
- The job to reprint is the last printed job, and VersaWorks has not been restarted since that job was printed.

Procedure

1. **Check that the [Job Name] you want to reprint is displayed on the home screen.**
   If it is not displayed, check that Roland DG Connect Hub is connected.
2. **Tap** .
   The job is reprinted.

Using the Status Light

This section explains how to set whether to turn the status light to indicate the status of the machine on or off.

Procedure

1. **Tap** .
2. **Tap [Preferences]>[Status Light].**
3. **Tap the [Status Light] setting.**

Status light	Description
[On]	Activates the status light that indicates the status of the machine.
[Off]	Turns off the status light.

4. **Tap [Save] to confirm your entry.**
5. **Tap** .
   The home screen appears.

MEMO

- Default setting: [On]

Setting the Ink Circulation Interval

This section explains how to set the circulation of white ink at set intervals of time.

Procedure

1. **Tap** .

2. **Tap [Preferences]>[Ink Circulation Interval].**

3. **Tap** − **or** + **to set [Ink Circulation Interval].**

[Ink Circulation Interval]	Description
30 to 360 min*1	Sets the circulation of white ink at set intervals of time.

*1 Increase or decrease in 30 minute increments.

4. **Tap [Save] to confirm your entry.**

5. **Tap** .

   The home screen appears.

MEMO

- Default settings: 360 min.

Displaying the 2D Code for Viewing the Manual on the Operation Panel

Displays the 2D code for viewing the manual using a smartphone or other mobile terminal.

Procedure

1. **Tap** .
2. **Tap [System Information]>[2D Codes]>[User's Manual].**
   The 2D code is displayed.
3. **Scan the 2D code with the smartphone.**
   The manual can be viewed.
4. **Tap [OK].**
5. **Tap to return to the home screen.**

Displaying the Roland DG Connect 2D Code on the Operation Panel

Displays the 2D code for accessing [**Roland DG Connect**] using a smartphone or other mobile terminal.

Procedure

1. Tap .
2. Tap [System Information]>[2D Codes]>[Roland DG Connect].
   The 2D code is displayed.
3. Scan the 2D code with the smartphone.
   [**Roland DG Connect**] opens.
4. Tap [OK].
5. Tap to return to the home screen.

Optimizing Operation Management

Managing the Operations Appropriately and Efficiently 108
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Managing the Operations Appropriately and Efficiently

Sounding a Buzzer to Notify the User of the End of Printing

You can configure the settings so that the user is notified of the end of printing with a buzzer.

Procedure

1. Tap .
2. Tap [Preferences]>[Sound at End of Printing].
3. Tap [On] to select it.
4. Tap [Save].
5. Tap .
   The home screen appears.

MEMO

- Default setting: **[Off]**

Setting the Time before Automatically Returning to Home Screen

When [**Menu operation in progress.**] is displayed in the status bar, such as when each setting screen is open, the system will automatically return to the home screen after a set amount of time has elapsed.

If the menu screen is open while printing is possible, printing will not start even if print data is sent to the machine. Close the open menu screen and return to the home screen so that printing can start when data is sent.

Procedure

1. Tap ☰.
2. Tap [Preferences]>[Time before Automatically Returning to Home Screen].
3. Tap − + to set the [Time before Automatically Returning to Home Screen].
4. Tap [Save].
5. Tap ⌂.

   The home screen appears.

MEMO

- Default setting: 5 min

Setting the Current Date/Time and Using It for Maintenance

Use the following procedure to set the current date and time. By setting this, when you perform a printing test the printing test date and time will be printed alongside the printed test pattern.

Procedure

1. Tap .
2. Tap [System Information]>[Date/Time].
3. Tap − or + to set the date and time.
4. Tap [Save] to confirm your entry.
5. Tap .
   The home screen appears.

Showing/Hiding Notifications

Use the following procedure to show/hide the following notifications, which prompt operators to perform proper operations.

Procedure

1. Tap .
2. Tap [Preferences]>[Notifications On/Off].
3. Tap to show/hide the notifications.

	Displayed notification	Description
[Ink Expiration Date Notification]	[There is ink that has expired.]	Ink has expired.

4. Tap [Save] to confirm your entry.
5. Tap .

   The home screen appears.

MEMO

Default setting:

- [Ink Expiration Date Notification]: Selected

Setting the Activation Interval for Sleep Mode (Power-saving Feature)

This setting is used to set how long it should take until the machine goes into sleep mode (the state in which the power-saving feature is working) when no output data is received and no operations are performed for a continued length of time.

Procedure

1. Tap .
2. Tap [Preferences]>[Sleep Time].
3. Tap − or + to set the time.
4. Tap [Save] to confirm your entry.
5. Tap .

   The home screen appears.

MEMO

- Default setting: 30 min.

Set the [Automatic Sub Power On].

Set the day of the week and the time at which to automatically switch the printer sub power on. You can also set the ink circulation[*1] and cleaning when the sub power switches on automatically.

Even if you have configured the settings to switch the sub power on, you can use the calendar to specify days (such as holidays) on which to not switch the sub power on.

Switching the Sub Power On Automatically on Specified Days at Specified Times

Procedure

1. Tap .
2. Tap [Maintenance]>[Automatic Sub Power On Settings].
3. Tap one of the following items.
   - When setting all days of the week from Monday to Sunday
     [**Collective Settings**]
   - When setting only the required days of the week
     [**Monday**] to [**Sunday**]

   The [**Automatic Sub Power On Settings**] window appears.
4. Set the following.
   - [**Automatic Sub Power On**]
     Set whether to switch on the sub power automatically.
   - [**Time at Which to Automatically Turn Sub Power On**]
     Set the time at which to switch on the sub power automatically. Set the [**Hour**] and [**Minute**], and then tap [**OK**].
   - [**Circulation When Sub Power Automatically Turns On**]
     Set whether to perform [**Ink Circulation**] when the sub power switches on automatically.
   - [**Cleaning When Sub Power Automatically Turns On**]
     Set whether to perform cleaning when the sub power switches on automatically.
   - [**Type**]
     Set the type of cleaning ([**Normal Cleaning**], [**Medium Cleaning**], or [**Powerful Cleaning**]) to perform when the sub power switches on automatically. After you configure the settings, tap [**OK**].
5. Tap [**Save**].
6. Tap .
   You are returned to the home screen.

MEMO

- Default settings
  - [**Automatic Sub Power On**]: Off

*1 This menu item is only displayed when the machine ink type includes white ink.

- [Time at Which to Automatically Turn Sub Power On]: 0:00
- [Circulation When Sub Power Automatically Turns On]: Off
- [Cleaning When Sub Power Automatically Turns On]: Off
- [Type]: [Normal Cleaning]

Setting Days on Which to Not Switch the Sub Power on Automatically

Even if you have configured the settings to switch the sub power on automatically on given days of the week, you can set days (such as holidays and extended periods of days off) on which to not switch the sub power on. You can configure these settings for up to 12 months ahead of the current month.

Procedure

1. Tap .
2. Tap [Maintenance]>[Automatic Sub Power On Settings].
3. Tap [Exception Dates].
   The calendar for the current month appears.
4. Select the days on which to not switch the sub power on automatically.
5. Tap [Save].
6. Tap .
   You are returned to the home screen.

Managing the Basic Settings of the Printer

Changing the Display Language

This feature sets the language displayed on the operation panel.

Procedure

1. Tap ☰.
2. Tap [System Information]>[Language].
3. Tap [Language].
4. Select the display language.
5. Tap [OK].
6. Tap [Save] to confirm your entry.
   The display language is changed, and you are returned to the home screen.

MEMO

Default setting

- [Language]: ENGLISH

Changing the Units of Measurement

This feature sets the units displayed on the operation panel.

Procedure

1. Tap .
2. Tap [System Information]>[Units].
3. Tap [Length].
4. Select the unit.

   MEMO

   - Default setting
     - [Length]: mm

5. Tap [Save] to confirm your entry.
6. Tap [Temperature].
7. Select the unit.

   MEMO

   - Default setting
     - [Temperature]: ˚C

8. Tap [Save] to confirm your entry.
9. Tap .
   The home screen appears.

Viewing Printer Information

This is a method for viewing information of this machine, such as serial number and ink type.

Procedure

1. Tap .
2. **Tap [System Information]>[Machine Information].**
   You can check the following information:
   - [**Model**]: Model name
   - [**Serial Number**]: Serial number
   - [**Ink Type**]: Ink type
   - [**Firmware Version**]
   - [**MAC Address**]
3. Tap .
   The home screen appears.

Viewing Network Information

Use the following procedure to view network information such as the IP address and default gateway.

Procedure

1. Tap .

2. **Tap [System Information]>[Network].**
   You can check the following information:
   - **[Obtain IP Address Automatically]**: Enables/disables the automatic obtaining of IP addresses via DHCP. When this is disabled, tap to change the following settings.
   - **[IP Address]**
   - **[Subnet Mask]**
   - **[Default Gateway]**

3. **Tap .**
   The home screen appears.

MEMO

- For information on how to set up a network, see the "Setup Guide."

RELATED LINKS

- Setup Guide

Adjusting the Brightness of the Operation Panel

Procedure

1. Tap .
2. Tap [System Information]>[Screen Brightness].
3. Tap − or + to adjust the brightness.
   The larger the value, the brighter the screen.
4. Tap [Save] to confirm your entry.
5. Tap .
   The home screen appears.

MEMO

- Default setting: 50%

Turning Off Operation Panel Sounds

Use the following procedure to turn off the sound when you tap the operation panel.

Procedure

1. **Tap** .
2. **Tap [System Information]>[Screen Operation Sound].**
3. **Tap [Off].**
4. **Tap [Save] to confirm your entry.**
   The operation sound turns off.
5. **Tap** .
   The home screen appears.

MEMO

- Default setting: **[On]**

Returning All Settings to Factory Defaults

This menu returns all settings to the same as their factory defaults.
The settings for [**Language**] and [**Units**] are not returned to their factory default values.

Procedure

1. Tap .
2. Tap [Preferences]>[Reset to Factory Defaults].
3. Tap [Reset].
4. Tap [Yes] on the confirmation screen.
5. Tap .
   The home screen appears.

Maintenance

Introduction

Basic Maintenance Knowledge 124
Types and Timing of Maintenance 124
Automatic Maintenance Feature and Notes 126
Measures When the Printer Is Not in Use for a Prolonged Period 128

Basic Maintenance Knowledge

Types and Timing of Maintenance

To use this machine under its optimal conditions, it is important to perform the appropriate maintenance at the appropriate times.

Regular Maintenance

These are the maintenance items that are required on a daily basis.

Timing	Category	Item
Before daily operations	Print head check	Step 1: Performing a Nozzle Drop-out Test(P. 40)
After daily operations	Cleaning the machine	Cleaning the Machine(P. 132)
If a message appears	Cleaning around the print heads	Cleaning around the Print Heads(P. 133)
When the discharged fluid is ready to overflow	Disposing of discharged fluid	If the Discharged Fluid Disposal Message Appears(P. 141)
Once a month	Cleaning the UV-LED devices	Cleaning the UV-LED Device(P. 136)

Advanced Maintenance

Maintenance that is performed in an emergency. Some of this maintenance consumes a large amount of ink, so thoroughly read the explanation, and then perform the operation at the appropriate point in time.

Timing	Category	Item
When dot drop-out or dot displacement occurs	Checking and cleaning the print heads	Step 1: Performing a Nozzle Drop-out Test(P. 40)
		Step 2: Normal Cleaning Method(P. 42)
		Medium Cleaning Method(P. 146)
		Powerful Cleaning Method(P. 148)
		Method for Ink Renewal Inside Damper(P. 152)*1
When uneven colors with white ink are not resolved	Performing ink circulation and replacing ink in an ink path	Ink Circulating Method(P. 150)
		Method for Eliminating Uneven Color Issues with Powerful Cleaning(P. 151)
		Method for Ink Renewal Inside Damper(P. 152)*1
When uneven color, dot drop-out, and dot displacement issues are not resolved even by performing the above operations	Replacing the ink in all ink paths	Ink Renewal Method(P. 158)*1
When the operation panel is dirty	Cleaning the operation panel	Operation Panel Cleaning Method(P. 165)

*1 This cleaning consumes a large amount of ink.

Replacing Consumable Parts

These items are for replacement of consumable parts. Thoroughly read the explanation, and then perform the operation at the appropriate point in time.

Timing	Category	Item
When a message appears	Replacing consumable parts • Wiper • Print head caps • Wiper cleaner	Replacing the Wiper(P. 167)
		Replacing the Print Head Caps(P. 169)
		Replacing the Wiper Cleaner(P. 171)

Automatic Maintenance Feature and Notes

This machine has a feature that automatically performs maintenance periodically.

Set the maintenance items that are performed automatically and the [**Type**] and [**Frequency**] according to the printer service environment, types of products that are frequently output, and other factors. A maximum of five settings for automatic maintenance can be saved.

This function performs operations for preventing the print heads from drying out, so:

- **Always keep the main power switched on.**
- **Do not leave the front cover, under cover, or maintenance cover open for a prolonged time.**
- **Return to the home screen after specifying settings in the menus.**

The setting items for automatic maintenance are as follows.

Setting item	Contents	Setting value
[**Cleaning When the Sub Power Turns On**]	Set [**Type**] and [**Frequency**] for cleaning that is performed when the sub power is turned on. This prevents discharge issues during printing.	[**Type**] • [**Normal Cleaning**] • [**Medium Cleaning**] • [**Powerful Cleaning**] [**Frequency**] • [**None**] • [**Periodically**] 1 to 24 hours
[**Ink Circulation when Sub Power Turns On**]	Set [**Frequency**] for the ink circulation performed when the sub power is turned on. This prevents uneven color issues caused by precipitation.	[**Frequency**] • [**None**] • [**Periodically**] 1 to 12 hours
[**Cleaning before Printing Starts**]	Set [**Type**] and [**Frequency**] for the cleaning that is performed at the start of printing. This prevents discharge issues during printing.	[**Type**] • [**Normal Cleaning**] • [**Medium Cleaning**] • [**Powerful Cleaning**] [**Frequency**] • [**None**] • [**Periodically**] 0.5 to 12 hours • [**Each Time**]
[**Ink Circulation before Printing Starts**]*1	Set [**Frequency**] for the ink circulation that is performed before the start of printing. This prevents uneven color issues caused by precipitation.	[**Frequency**]: • [**None**] • [**Periodically**] 0.5 to 24 hours • [**Each Time**]
[**Ink Discharge before Printing Starts**]*1	Set [**Frequency**] for the discharge of ink that cannot be mixed by ink circulation at the start of printing. This prevents uneven color issues caused by precipitation.	[**Frequency**] • [**Disable**] • [**Enable**]
[**Ink Circulation after Printing Ends**]	Set [**Frequency**] for the ink circulation that is performed after printing is completed. This prevents uneven color issues caused by precipitation.	[**Frequency**]: • [**None**] • [**Periodically**] 1 to 12 hours
[**Periodic Ink Circulation**]*1	Set [**Frequency**] for the ink circulation that is performed after the previous ink circulation. This prevents printer malfunctions caused by ink precipitation.	[**Frequency**] • [**Periodically**] 1 to 12 hours
[**Periodic Cleaning**]	Set [**Type**] and [**Frequency**] for the cleaning that is performed periodically. This prevents print head malfunction.	[**Type**] • [**Normal Cleaning**] • [**Medium Cleaning**] • [**Powerful Cleaning**] [**Frequency**] • [**Periodically**] 1 to 72 hours

*1 White ink only

IMPORTANT

If the automatic maintenance settings are configured without an adequate understanding, the maintenance results may not be as the customer wanted. Before configuring the automatic maintenance settings, be sure to contact your authorized dealer.

Measures When the Printer Is Not in Use for a Prolonged Period

Be sure to follow the instructions shown below when the printer is not in use for a prolonged period.

- Empty the drain bottle.

  If you know that you will not use the machine for a prolonged period, empty the drain bottle. When the main power is on, the machine periodically performs automatic maintenance in which fluid is discharged.

  The drain bottle is filled when the following periods elapse, so periodically discard the discharged fluid.

  - Approximately 1 week after the message [**When output, cleaning, and other operations are completed, discard the**] is displayed or approximately 120 days after the drain bottle is emptied

    If the Discharged Fluid Disposal Message Appears(P. 141)

- Do not allow the machine to run out of ink or cleaning liquid.

  The machine discharges ink and cleaning liquid during the automatic maintenance that is performed periodically. Set in the machine ink and cleaning liquid pouches having sufficient remaining ink and cleaning liquid. The machine cannot perform automatic maintenance if it has run out of ink or cleaning liquid.

- Switch on the sub power once a month.

  Switch on the sub power once a month. When you turn on the power, the machine automatically performs operations such as those to keep the print heads from drying out. Leaving the machine unused for a prolonged period may damage the print heads, so be sure to switch on the power to perform these automatic operations.

- Keep the machine at a constant temperature and relative humidity.

  Even when the machine is not in use, keep it at a temperature of 5 to 40°C (41 to 104°F) and a relative humidity of 20 to 80% (with no condensation). Temperatures that are too high may degrade the ink and cause malfunctions. Temperatures that are too low may cause the ink to freeze and damage the print heads.

- Do not leave the front cover open for a long time.

  If left open, it may cause the print heads to dry out or allow dust and debris to enter the machine.

RELATED LINKS

- P. 47 Refilling Inks
- P. 51 Cleaning Liquid Replacement Method

Regular Maintenance

Print Head Check before Printing 130
Ink Tank Maintenance 130
Performing a Nozzle Drop-out Test 130
Cleaning the Machine 132
Cleaning the Machine on a Daily Basis 132
Cleaning around the Print Heads 133
Cleaning the Print Heads 134
Cleaning the UV-LED Device 136
When UV-LED Device Cleaning Is Necessary 136
UV Lamp Manual Cleaning Method 137

Print Head Check before Printing

Ink Tank Maintenance

The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, the ink in the ink tank is automatically stirred periodically.

Note that even when ink consumption is expected to be high, such as when performing a large amount of printing, the ink must not be refilled before the ink empty message appears. Refilling when the remaining capacity of the ink tank is less than the ink bottle capacity will cause the ink to overflow.

Performing a Nozzle Drop-out Test

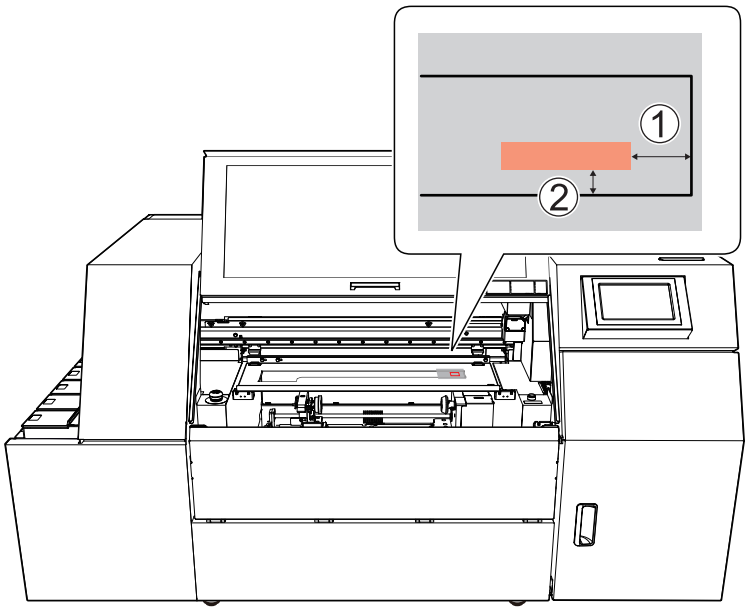
Before you carry out actual printing, perform a printing test to ensure no dot drop-out or dot displacement occurs. If dot drop-out or dot displacement occurs, perform cleaning of the print heads (normal cleaning).

Procedure

1. **Fix the nozzle drop-out test paper to the light shield cover with masking tape or something similar.**

   The printing size for the nozzle drop-out test is approximately 200 mm × 150 mm (7.87 in. × 5.91 in.) (landscape).

   Fix the test paper in alignment with the printing position (approximately 70 mm (2.76 in.) ① × 20 mm (0.79 in.) ② from the edge of the irradiation window of the light shield cover).



2. **Tap ☰ on the operation panel.**

3. **Tap [Cleaning]>[Printing Test].**

4. **Tap [Execute].**

   Printing of the test pattern starts.

5. **Open the front cover.**

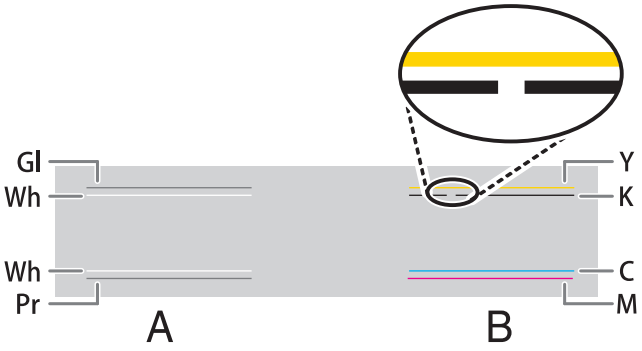
MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.

If you do not open and close the front cover gently, it may break or you may be injured.

6. **Check whether there is dot drop-out or dot displacement in the test pattern.**

Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



MEMO

If the printing-test results are difficult to interpret

Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

7. **Close the front cover.**

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.

If you do not open and close the front cover gently, it may break or you may be injured.

If no dot drop-out or dot displacement occurs, preparations for output are finished.

RELATED LINKS

- P. 144 When Dot Drop-out or Dot Displacement Occurs

Cleaning the Machine

Cleaning the Machine on a Daily Basis

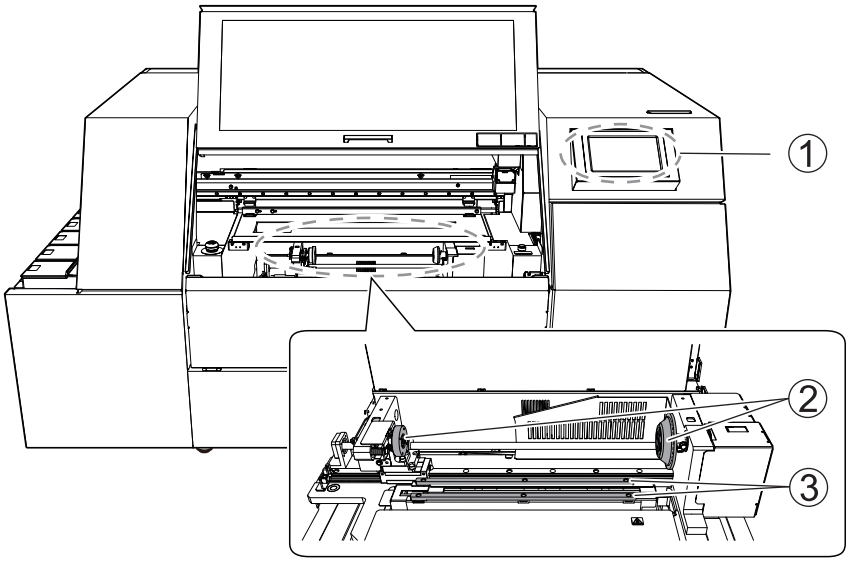
As part of daily cleaning, wipe away any buildup of ink or grime that has adhered to the machine. Clean by wiping with a cloth moistened by neutral detergent diluted with water then wrung dry or a soft, dry cloth.

⚠ WARNING

Never use a solvent such as gasoline, alcohol, or thinner to perform cleaning.
Doing so may cause a fire.

IMPORTANT

- This machine is a precision device and is sensitive to dust and dirt. Perform cleaning on a daily basis.
- Never attempt to oil or lubricate the machine.
- Before cleaning, remove the object.



①	Operation panel	The panel used to operate the machine. If dirt or ink adheres to the operation panel, immediately wipe it clean with dry, soft fabric.
②	Fixing jig	The provided fixing jig is made of silicone rubber. If dirt or ink accumulates on it, clean it by wiping with a cloth that was moistened by neutral detergent diluted with water and then wrung dry. If this part is dirty, it may not be possible to print at the correct position.
③	Support table	If dirt or ink accumulates on it, gently wipe it with a cloth (lint-free) impregnated with anhydrous ethanol or isopropyl alcohol. If the support table is dirty, the object may become dirty or misaligned.

MEMO

Frequently clean the inside of the machine using a vacuum cleaner or by wiping with a cloth moistened with water then wrung dry. If dust and dirt accumulate in the machine, they are likely to affix to printed materials.

Cleaning around the Print Heads

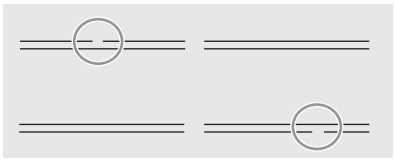
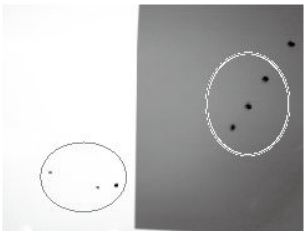
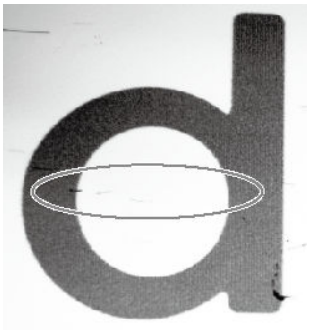
The print heads are important components that discharge ink. They require periodic and appropriate maintenance. Cleaning around the print heads is known as "manual cleaning." Be sure to perform manual cleaning in the following situations.

When a message appears

When a message appears, you can tap on the home screen to check the notification details. Tap the notification to display the manual cleaning menu screen.

When symptoms that cannot be improved with powerful cleaning occur

When any of the symptoms given below occur and powerful cleaning is not effective, perform manual cleaning and clean around the print heads.

Dot drop-out/Dot displacement	Ink drips	Dragging dirt
		
Dust or other foreign matter adheres to the print heads and impedes correct ink discharge.	Ink accumulates on dirty areas around the print heads and drips onto the object.	Dirt accumulates on the area around the print heads and touches the object.

MEMO

Wiper replacement may also be effective in improving these symptoms.

RELATED LINKS

- P. 167 Replacing the Wiper

Cleaning the Print Heads

Perform manual cleaning to clean the print head caps and the nozzle guards.

Required items	
	
Cleaning stick	Cleaning liquid

⚠ CAUTION

Do not perform cleaning immediately after printing has finished. (Wait approximately 15 minutes after printing finishes.)

The area around the UV-LED device is hot and may cause burns.

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Sudden movement of the machine may cause injury or burns.

IMPORTANT

- Never use any implements other than the included cleaning sticks. Cotton swabs or other lint-producing items may damage the print heads.
- Do not use cleaning liquid other than the included cleaning liquid.
- Do not dip the used cleaning stick in the cleaning liquid again during cleaning. To add cleaning liquid, use a new cleaning stick.
- Use a clean pair of tweezers to remove clumps of ink. Do not pull with excessive force when clumps of ink are difficult to remove.
- If you use up the cleaning sticks or cleaning liquid, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).
- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Contact your authorized dealer.

Procedure

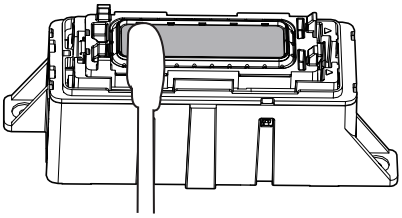
1. **Remove the object.**
2. **Tap ☰ on the operation panel.**
3. **Tap [Cleaning]>[Manual Cleaning].**
4. **Tap [Execute].**
5. **Follow the instructions on the operation panel to perform the work.**

   After finishing the work as instructed on the screen, tap › to display the next step. In this manner, perform each step of the work in order. If you want to check the previous step or perform it again, tap ‹.

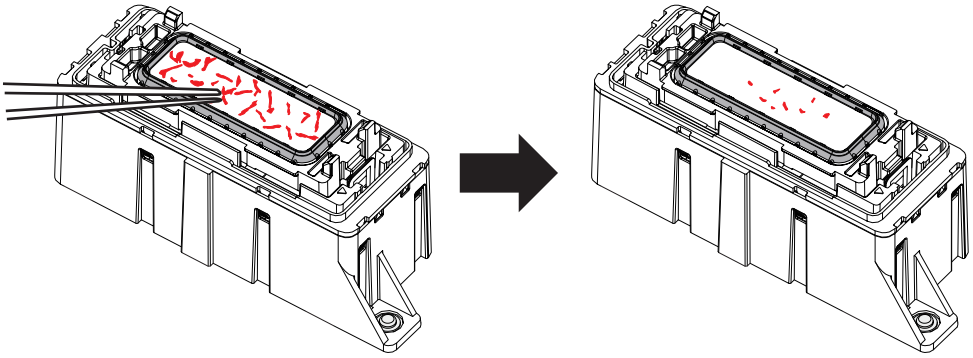
When you finish the last step, tap [**Finish All**]. When print-head cleaning finishes after this work, the cleaning is finished. Dispose of used cleaning sticks.

IMPORTANT

- Press the cleaning stick against the colored area in the center of the cap to soak it with cleaning liquid.



- Use a pair of tweezers to remove the pieces of hardened ink that are 3 mm (0.12 in.) or more in length. Do not use excessive force when pulling on pieces of hardened ink that are difficult to remove. Doing so may damage the print head caps.



6. Tap .

The home screen appears.

Cleaning the UV-LED Device

When UV-LED Device Cleaning Is Necessary

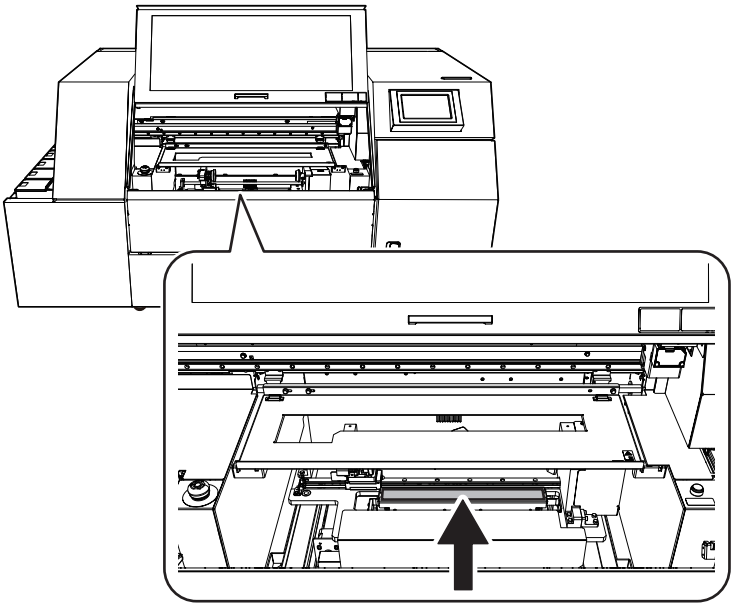
The UV-LED device is an important component for ink adhesion. They require periodic and appropriate maintenance. It is important to clean the UV-LED device with the appropriate timing.

Perform the UV lamp manual cleaning at the following times.

- When the notification **[The time for UV lamp manual cleaning has arrived.] appears.**

  To keep a stable printing condition at all times, perform manual cleaning whenever the notification is displayed.
- **When there is a lot of scattered ink mist and the inside of the machine is soiled**

  Perform this cleaning every day when frequently printing with the print heads at a distance from the print surface or when ink is emitted to locations that protrude from the print surface. If the scattered ink mist is allowed to harden, it may cause malfunctions.
- **When the irradiation window (glass plate) of the UV-LED device is dirty (see the following figure)**



MEMO

- The frequency with which UV-LED device cleaning is required depends on the machine's use. For information about the frequency of cleaning needed for your conditions of use, contact your authorized dealer.
- For hardened ink and other such dirt that cannot be completely cleaned away, contact your authorized dealer.

⚠ WARNING

High Temperature

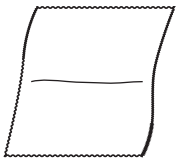
The area around the UV-LED device becomes hot. Exercise caution to avoid burns.

UV Lamp Manual Cleaning Method

IMPORTANT

Important notes on this procedure

- Before performing this operation, remove any objects.
- The cloths, alcohol, and similar items used in cleaning are not included with the product.
- Do not apply cleaning liquids such as alcohol directly to the glass surface of the UV device. Instead, use a cloth soaked in the liquid for cleaning.

Required items	
	
Anhydrous ethanol or isopropyl alcohol	Cloth (that is not fluffy)

⚠ CAUTION

Do not perform cleaning immediately after printing has finished. (Wait approximately 15 minutes after printing finishes.)

The area around the UV-LED device is hot and may cause burns.

⚠ CAUTION

When using anhydrous ethanol or isopropyl alcohol, be sure to follow the product's usage precautions.

Exercise caution regarding items such as fire, ventilation, and skin irritation.

⚠ CAUTION

Only use anhydrous ethanol or isopropyl alcohol.

Using chemicals (or similar substances) other than anhydrous ethanol or isopropyl alcohol may lead to UV-LED device damage.

⚠ CAUTION

Use cloth that is not fluffy to wipe off the parts. Do not use a hard material such as metal.

Using cloth that is fluffy or a hard material such as metal may lead to UV-LED device damage.

Procedure

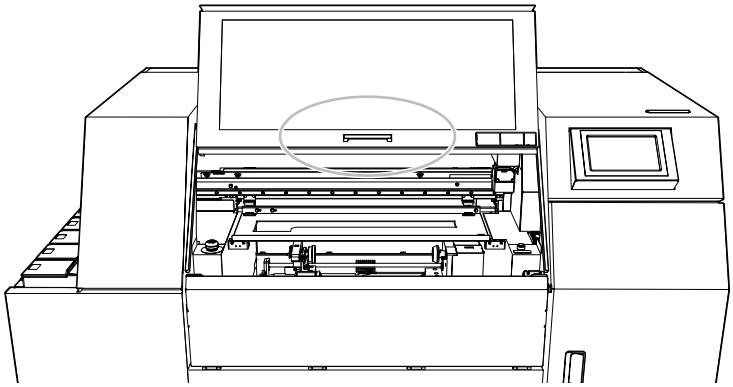
1. If an object is installed, remove it.

(1) **Open the front cover.**

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.

If you do not open and close the front cover gently, it may break or you may be injured.



(2) **Remove the object.**

(3) **Close the front cover.**

2. **Tap** ☰.

3. **Tap [Maintenance]>[UV Lamp Manual Cleaning].**

4. **Tap [Execute].**

A message urging the user to wear protective equipment appears.

When wiping the irradiation window (glass plate) on the UV-LED device, wipe the window for approximately 10 round trips until all the dirt is cleared away. Do not drip anhydrous ethanol or isopropyl alcohol directly onto the UV-LED device.

5. **Follow the instructions on the operation panel to perform the work.**

After finishing the work as instructed on the screen, tap › to display the next step. In this manner, perform each step of the work in order. If you want to check the previous step or perform it again, tap ‹.

When you finish the last step, tap **[Finish All]**. When UV lamp manual cleaning finishes after this work, the cleaning is finished.

6. **Tap** ⌂.

The home screen appears.

RELATED LINKS

- P. 136 When UV-LED Device Cleaning Is Necessary

Disposing of Discharged Fluid

Precautions for Disposing of Discharged Fluid 140
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Precautions for Disposing of Discharged Fluid

⚠ WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause a fire.

⚠ CAUTION

To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap the container tightly.

Any spillage or vapor leakage may cause fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not dispose of it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

If the Discharged Fluid Disposal Message Appears

The [**When output, cleaning, and other operations are completed, discard the**] message appears when a certain amount of discharged fluid has collected in the bottle. If this message appears, dispose of the discharged fluid.

Procedure

1. **When the message [When output, cleaning, and other operations are completed, discard the] appears, tap [OK].**

2. **Tap to display the notification.**

3. **Tap the notification for disposal of discharged fluid.**

   The [**Drain Bottle**] screen appears.

   MEMO

   You can dispose of discharged fluid even if the above message has not appeared.
   Use the following operations to display the drain bottle screen, and then dispose of discharged fluid according to the procedure starting from step 4.

   1. Tap .
   2. Tap [**Maintenance**]>[**Drain Bottle**].

4. **Tap [Execute].**

   Tap [**Execute**] to display a message reminding the user to wear protective gear.

5. **Tap [OK].**

6. **Open the maintenance cover.**

7. **Remove the drain bottle and discard the discharged fluid.**



⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

Failing to follow this procedure may cause discharged fluid to flow out of the tube and spill, soiling your hands or the floor.

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.

8. **Quickly attach the emptied bottle to the machine once more.**

9. **Close the maintenance cover.**

10. **Tap [Finish].**

11. **Tap** .

    The home screen appears.

Advanced Maintenance

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When Dot Drop-out or Dot Displacement Occurs

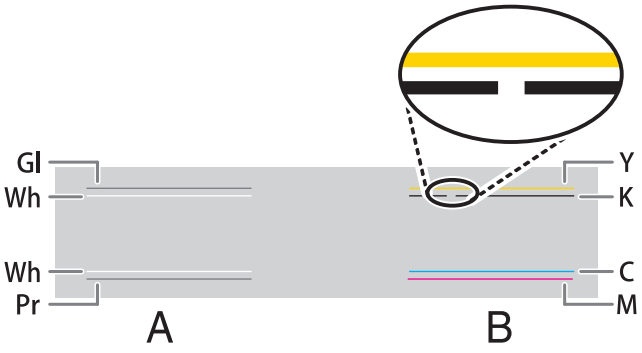
If dot drop-out or dot displacement occurs, perform cleaning of the print heads (normal cleaning).

Normal Cleaning Method

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**

   The gloss, white, and primer strokes are in Group A, and the yellow, black, cyan, and magenta strokes are in Group B.



MEMO

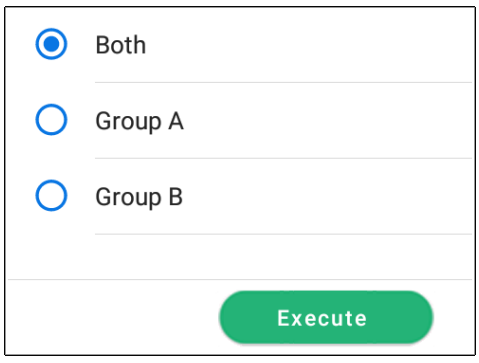
If the printing-test results are difficult to interpret

Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

2. **Tap ☰ on the operation panel.**

3. **Tap [Cleaning]>[Normal Cleaning].**

   The screen shown below appears.



4. **Select the group of print heads to clean.**

5. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

   When the work is finished, the status bar returns to its original display.

6. Tap ←.

7. Tap [Printing Test].

8. Tap [Execute].

   Perform a printing test again to check whether the dot drop-out and dot displacement have been corrected.

MEMO

If the problem persists, try performing [**Normal Cleaning**] again. If the printer has been used for a long period, dot drop-outs may not be fixed even after performing [**Normal Cleaning**] two or three times. If this is the case, clean using a different method.

RELATED LINKS

- P. 40 Performing a Nozzle Drop-out Test
- P. 146 When Normal Cleaning Is Not Effective

When Normal Cleaning Is Not Effective

Medium Cleaning Method

The print heads are important components that discharge ink. They require periodic and appropriate maintenance. When problems such as dot drop-out are not resolved by [**Normal Cleaning**], perform the more forceful [**Medium Cleaning**] to remove clogging from the print heads.

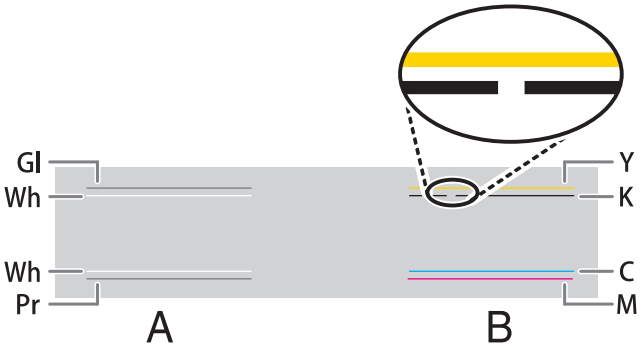
IMPORTANT

[**Medium Cleaning**] is more forceful cleaning that consumes more ink than [**Normal Cleaning**].

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**

   The gloss, white, and primer strokes are in Group A, and the yellow, black, cyan, and magenta strokes are in Group B.



MEMO

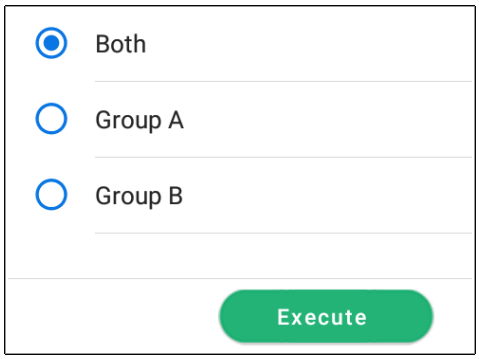
If the printing-test results are difficult to interpret

Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

2. **Tap ☰ on the operation panel.**

3. **Tap [Cleaning]>[Medium Cleaning].**

   The screen shown below appears.



4. **Select the group of print heads to clean.**

5. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

   When the work is finished, the status bar returns to its original display.

6. **Tap ←.**

7. **Tap [Printing Test].**

8. **Tap [Execute].**

   Perform a printing test again to check whether the dot drop-out and dot displacement have been corrected.

MEMO

- If the problem persists, try performing [**Medium Cleaning**] again.
- If problems such as dot drop-out and dot displacement persist even after you have performed [**Medium Cleaning**] several times, perform [**Powerful Cleaning**].

RELATED LINKS

- P. 148 Powerful Cleaning Method

Powerful Cleaning Method

The print heads are important components that discharge ink. They require periodic and appropriate maintenance. When problems such as dot drop-out are not resolved by [**Medium Cleaning**], perform the more forceful [**Powerful Cleaning**] to remove clogging from the print heads.

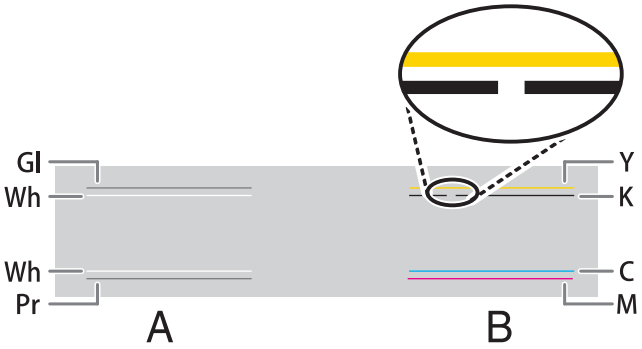
IMPORTANT

[**Powerful Cleaning**] is more forceful cleaning that consumes more ink than [**Medium Cleaning**].

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**

   The gloss, white, and primer strokes are in Group A, and the yellow, black, cyan, and magenta strokes are in Group B.



   MEMO

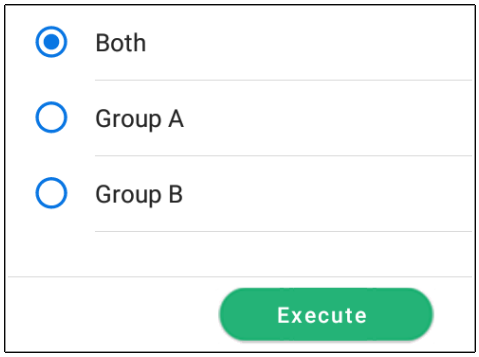
   If the printing-test results are difficult to interpret

   Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

2. **Tap ☰ on the operation panel.**

3. **Tap [Cleaning]>[Powerful Cleaning].**

   The screen shown below appears.



4. **Select the group of print heads to clean.**

5. **Tap [Execute].**

Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

When the work is finished, the status bar returns to its original display.

6. Tap ←.

7. Tap **[Printing Test]**.

8. Tap **[Execute]**.

   Perform a printing test again to check whether the dot drop-out and dot displacement have been corrected.

MEMO

- If the problem persists, try performing **[Powerful Cleaning]** again.
- If problems such as dot drop-out and dot displacement persist even after you have performed **[Powerful Cleaning]** several times, perform **[Manual Cleaning]**.
- If the problem persists when using ink other than white ink, perform **[Ink Renewal Inside Damper]**.

RELATED LINKS

- P. 134 Cleaning the Print Heads
- P. 150 When Uneven Color Issues Occur with White Ink
- P. 155 Handling Severe Dot Drop-out, Dot Displacement, and Uneven Colors

When Uneven Color Issues Occur with White Ink

Ink Circulating Method

When there is uneven color in the white ink printing results, it may be improved by performing [**Ink Circulation**]. Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

Procedure

1. Tap .
2. Tap [Maintenance]>[Ink Circulation].
3. Tap [Execute].

   Depending on the timing with which the [**Ink Circulation**] is started, cleaning may start. When cleaning is complete, [**Ink Circulation**] will start.

   If uneven output color issues with white ink are not resolved even after performing [**Ink Circulation**], perform [**Powerful Cleaning**].
4. Tap .

   The home screen appears.

RELATED LINKS

- P. 151 Method for Eliminating Uneven Color Issues with Powerful Cleaning

Method for Eliminating Uneven Color Issues with Powerful Cleaning

When uneven color issues with white ink are not resolved even after performing [**Ink Circulation**], perform the more forceful [**Powerful Cleaning**] to eliminate these issues. Uneven colors refer to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

IMPORTANT

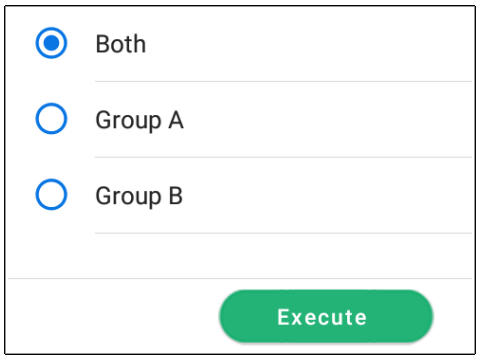
The ink in the print heads is discharged to stabilize the output color, so a certain amount of ink is consumed.

Procedure

1. **Tap on the operation panel.**

2. **Tap [Cleaning]>[Powerful Cleaning].**

   The screen shown below appears.



3. **Select [Group A].**

4. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

   When the work is finished, the status bar returns to its original display.

   If uneven output color issues with white ink are not resolved even after performing [**Powerful Cleaning**], perform [**Ink Renewal Inside Damper**].

RELATED LINKS

- P. 152 Method for Ink Renewal Inside Damper

Method for Ink Renewal Inside Damper

If uneven color issues with ink are not resolved even after performing **[Powerful Cleaning]**, perform **[Ink Renewal Inside Damper]**. Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

[Ink Renewal Inside Damper] can be used to stabilize the output colors by replacing the ink.

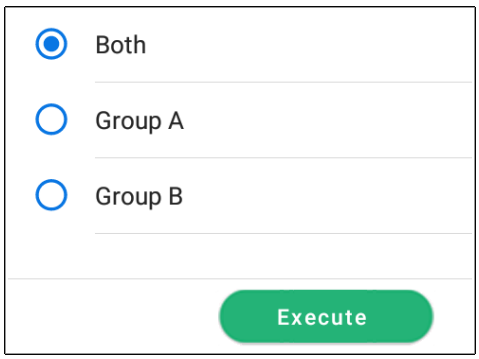
IMPORTANT

- **[Ink Renewal Inside Damper]** consumes more ink than **[Powerful Cleaning]**.
- When **[Ink Renewal Inside Damper]** is displayed, refill the ink in all ink tanks where the refill sign is displayed. If the ink runs out during cleaning, a **[Cleaning Error (Ink Tanks)]** will occur and cleaning will stop.

Procedure

1. **Tap** .

2. **Tap [Maintenance]>[Ink Renewal Inside Damper].**
   The screen shown below appears.



3. **Select the group of print heads to renew the ink inside the damper.**

4. **Refill the ink in the ink tanks where the mark is displayed.**
   Refilling Inks(P. 47)

5. **Tap [Execute].**
   Starts the **[Ink Renewal Inside Damper]** function. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.
   When the work is finished, the status bar returns to its original display.

MEMO

If [Discard the discharged fluid in the bottle.] appears after tapping [Execute]
1. **Open the maintenance cover.**
2. **Remove the drain bottle and discard the discharged fluid.**

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.



3. Quickly attach the emptied drain bottle to the machine once more.
4. Close the maintenance cover.
5. Tap [Finish].

⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

Failing to follow this procedure may cause discharged fluid to flow out of the tube and spill, soiling your hands or the floor.

⚠ WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause a fire.

⚠ CAUTION

To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap the container tightly.

Any spillage or vapor leakage may cause fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not dispose of it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

6. **If uneven output color issues with ink are not resolved even after performing [Ink Renewal Inside Damper], perform [Ink Renewal].**

7. **Tap** **.**

   The home screen appears.

RELATED LINKS

- P. 158 Ink Renewal Method
- P. 195 **[Cleaning Error (Ink Tanks)]**
- P. 195 **[Cleaning Error]**

Handling Severe Dot Drop-out, Dot Displacement, and Uneven Colors

Method for Ink Renewal Inside Damper

If uneven color issues with ink are not resolved even after performing [**Powerful Cleaning**], perform [**Ink Renewal Inside Damper**]. Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

[**Ink Renewal Inside Damper**] can be used to stabilize the output colors by replacing the ink.

IMPORTANT

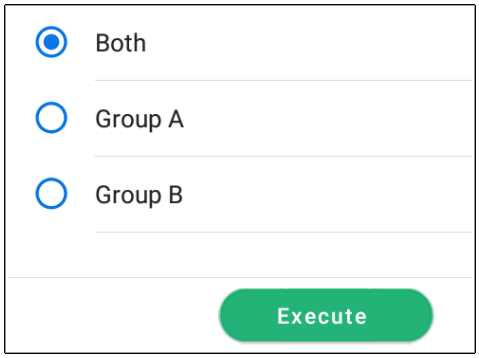
- [**Ink Renewal Inside Damper**] consumes more ink than [**Powerful Cleaning**].
- When [**Ink Renewal Inside Damper**] is displayed, refill the ink in all ink tanks where the refill sign is displayed. If the ink runs out during cleaning, a [**Cleaning Error (Ink Tanks)**] will occur and cleaning will stop.

Procedure

1. **Tap** .

2. **Tap [Maintenance]>[Ink Renewal Inside Damper].**

   The screen shown below appears.



3. **Select the group of print heads to renew the ink inside the damper.**

4. **Refill the ink in the ink tanks where the mark is displayed.**

   Refilling Inks(P. 47)

5. **Tap [Execute].**

   Starts the [**Ink Renewal Inside Damper**] function. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

   When the work is finished, the status bar returns to its original display.

   MEMO

   If [Discard the discharged fluid in the bottle.] appears after tapping [Execute]

   1. Open the maintenance cover.

   2. Remove the drain bottle and discard the discharged fluid.

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.



3. Quickly attach the emptied drain bottle to the machine once more.
4. Close the maintenance cover.
5. Tap [Finish].

⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

Failing to follow this procedure may cause discharged fluid to flow out of the tube and spill, soiling your hands or the floor.

⚠ WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause a fire.

⚠ CAUTION

To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap the container tightly.

Any spillage or vapor leakage may cause fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not dispose of it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

6. **If uneven output color issues with ink are not resolved even after performing [Ink Renewal Inside Damper], perform [Ink Renewal].**

7. **Tap** **.**

   The home screen appears.

RELATED LINKS

- P. 158 Ink Renewal Method
- P. 195 **[Cleaning Error (Ink Tanks)]**
- P. 195 **[Cleaning Error]**

Ink Renewal Method

Perform [**Ink Renewal**] in the following situations.

- When dot drop-out or uneven colors are an issue even after performing cleaning using the cleaning function (normal, medium, powerful), [**Manual Cleaning**], or [**Ink Renewal Inside Damper**].
- When white is uneven even after performing [**Ink Renewal Inside Damper**]

IMPORTANT

A large amount of ink will be discharged during [**Ink Renewal**]. Perform this operation only when ink discharge issues such as dot drop-out, dot displacement, and uneven colors cannot be corrected even after performing cleaning using the other cleaning functions (normal, medium, powerful, manual, and ink renewal inside damper).

RELATED LINKS

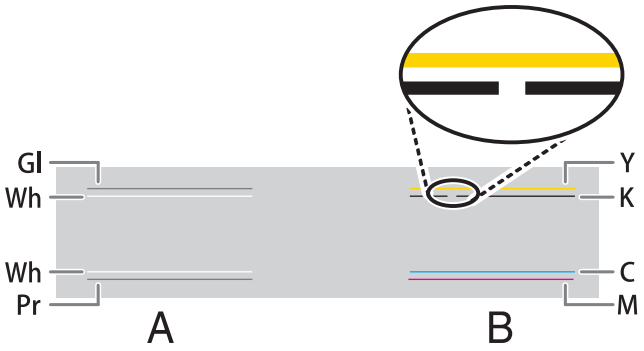
- P. 144 When Dot Drop-out or Dot Displacement Occurs
- P. 146 Medium Cleaning Method
- P. 148 Powerful Cleaning Method
- P. 134 Cleaning the Print Heads
- P. 151 Method for Eliminating Uneven Color Issues with Powerful Cleaning
- P. 152 Method for Ink Renewal Inside Damper

1. Start the [Ink Renewal] menu.

Procedure

1. **Check for the group with dot drop-out, dot displacement, or uneven colors by viewing the results of the printing test.**

   The gloss, white, and primer strokes are in Group A, and the yellow, black, cyan, and magenta strokes are in Group B.



MEMO

If the printing-test results are difficult to interpret

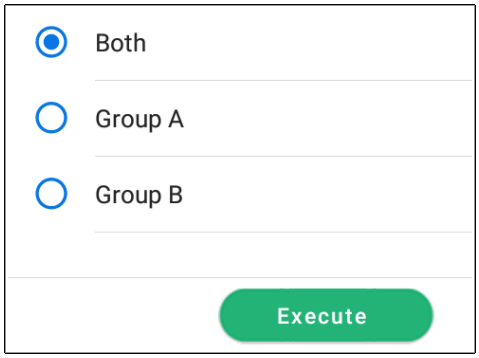
Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.

2. **Remove the object.**

3. **Tap** ☰.

4. **Tap [Maintenance]>[Ink Renewal].**

The screen shown below appears.



5. **Select the group of print heads to renew the ink of.**

6. **Tap [Execute].**

The **[Discard the discharged fluid in the bottle.]** screen appears.

7. **Open the maintenance cover.**

8. **Remove the drain bottle and discard the discharged fluid.**

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.

⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

Failing to follow this procedure may cause discharged fluid to flow out of the tube and spill, soiling your hands or the floor.

⚠ WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause a fire.

⚠ CAUTION

To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap the container tightly.

Any spillage or vapor leakage may cause fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not dispose of it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.



9. **Quickly attach the emptied drain bottle to the machine once more.**

10. **Close the maintenance cover.**

11. **Tap [Finish].**

Ink renewal starts.

The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

When the work is finished, the status bar returns to its original display.

12. **Tap** .

The home screen appears.

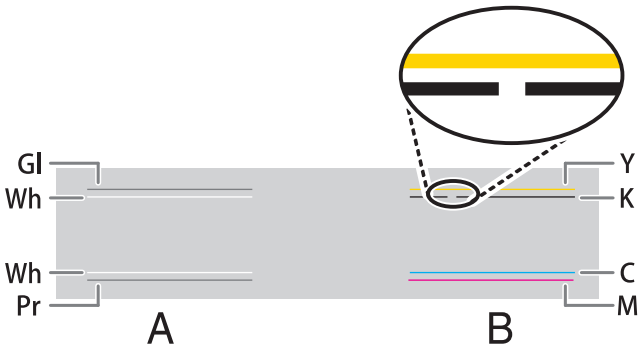
2. Performing a Printing Test to Check the Results

Procedure

1. **Attach the nozzle drop-out test paper to the light shield cover with masking tape or something similar.**
   The printing size for the nozzle drop-out test is approximately 200 mm × 100 mm (7.87 in. × 3.94 in.) (landscape).
2. **Tap ☰ on the operation panel.**
3. **Tap [Cleaning]>[Printing Test].**
4. **Tap [Execute].**
   Printing of the test pattern starts.
5. **Open the front cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.
6. **Check whether there is dot drop-out or dot displacement in the test pattern and whether its uneven colors have been eliminated.**



   MEMO

   If the printing-test results are difficult to interpret
   Try changing the test paper color, or check the results in a bright location while changing your line of vision. They are visible using the reflection of the light.
7. **Close the front cover.**
8. **Tap ⌂.**
   The home screen appears.

If the dot drop-out or dot displacement location is different, repeat medium cleaning two or three times.
If this problem is not fixed, contact your authorized dealer.

Emergency Measure) Cleaning the Print Head Surface

When dot drop-out or dot displacement is not improved even if cleaning is performed several times, you can clean the surface of the print heads as an emergency measure. The print head surface (nozzle surface) is a very delicate mechanism, so work must be performed carefully and cautiously.

This operation is an emergency measure. It may damage defect-free parts depending on the symptoms, worsening the symptoms. If you have any questions, contact your authorized dealer.

⚠ CAUTION

Do not perform cleaning immediately after printing has finished. (Wait approximately 15 minutes after printing finishes.)

The area around the UV-LED device is hot and may cause burns.

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Sudden movement of the machine may cause injury or burns.

IMPORTANT

Important notes on this procedure

- Before performing this operation, remove any objects.
- To prevent the print heads from drying out, finish this procedure in 10 minutes or less. A warning beep sounds after 10 minutes.
- Never use any implements other than the included cleaning sticks. Cotton swabs or other lint-producing items may damage the print heads.
- Do not use cleaning liquid other than the included cleaning liquid.
- Be sure to use new cleaning sticks. Reusing cleaning sticks will adversely affect the printing results.
- Do not put a cleaning stick that has been used for cleaning into the cleaning liquid. Doing so will deteriorate the cleaning liquid.
- Never rub the print head surface (nozzle surface).
- If you use up the cleaning sticks or cleaning liquid, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

When a warning beep sounds during cleaning

- A warning beep sounds 10 minutes after operation starts. Stop work, close all the covers, and then tap **[Finish All]** to end the manual cleaning mode. After that, restart the procedure from the beginning.

Required items	
	
Cleaning stick	Cleaning liquid

Procedure

1. **Remove the object.**
2. **Tap ☰ on the operation panel.**

3. **Tap [Cleaning]>[Manual Cleaning].**

4. **Tap [Execute].**

Tap [**Execute**] to display a message reminding the user to wear protective gear.

5. **Tap [OK].**

Tap [**OK**] to move the print-head carriage and the rotary device.

MEMO

The cleaning of the print head surface (as an emergency measure) uses the manual cleaning menu and moves the print-head carriage to the left side of the machine. For this purpose, the manual cleaning procedure is displayed on the operation panel. However, ignore the screen instructions and perform the following operations.

6. **Open the front cover.**

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
If you do not open and close the front cover gently, it may break or you may be injured.

7. **Touch the metal part at the bottom inside the printer to discharge any static electricity from your body.**

8. **Apply a large amount of cleaning liquid to a new cleaning stick.**

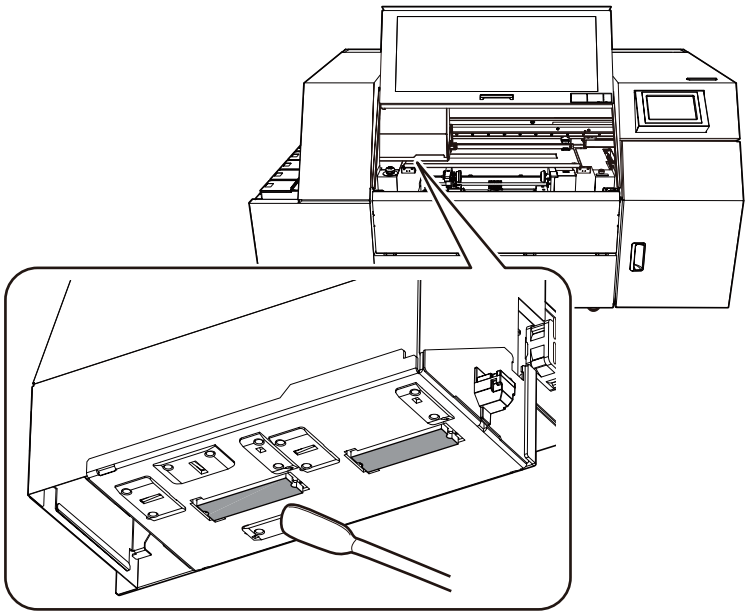
IMPORTANT

- Be sure to use one of the included cleaning sticks.
- Do not use a previously used cleaning stick.
- Do not put a previously used cleaning stick into the cleaning liquid.



9. **Very gently touch the cleaning stick against the print head surface (nozzle surface).**

Very softly press the cleaning stick against the print head so that cleaning liquid soaks into the print head surface (nozzle surface). Never rub the stick on the surface or press it forcibly.



10. Tap [Finish All].

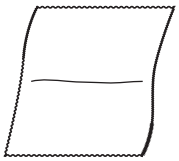
When the Operation Panel Is Dirty

Operation Panel Cleaning Method

IMPORTANT

Important notes on this procedure

- The cloths, alcohol, and similar items used in cleaning are not included with the product.
- Be sure to use a cloth when cleaning the operation panel. Liquid entering into the operation panel through its gaps may cause printer malfunctions.

Required items	
	
Anhydrous ethanol or isopropyl alcohol	Cloth (that is not fluffy)

⚠ CAUTION

When using anhydrous ethanol or isopropyl alcohol, be sure to follow the product's usage precautions.

Exercise caution regarding items such as fire, ventilation, and skin irritation.

⚠ CAUTION

Only use anhydrous ethanol or isopropyl alcohol.

Using chemicals (or similar substances) other than anhydrous ethanol or isopropyl alcohol may lead to operation panel damage.

Procedure

1. **Switch off the sub power.**
2. **Wipe off the operation panel with a cloth soaked in anhydrous ethanol or isopropyl alcohol.**

   Wipe slowly and gently to remove the grime.

Replacing Consumable Parts

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Replacing the Wiper 167
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Replacing Parts for Maintenance

Replacing the Wiper

The wiper periodically cleans the surface of the print heads.

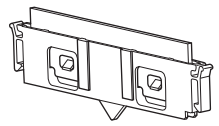
When it is time to replace the wiper, the message [**The time for wiper replacement has arrived.**] appears. In this situation, replace the wiper.

For information about purchasing wipers, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Sudden movement of the machine may cause injury or burns.

Required item

Wiper

IMPORTANT

- To prevent the print heads from drying out, finish this procedure in 10 minutes or less. A warning beep sounds after 10 minutes.
- Take care to prevent ink from adhering to the operation panel.

Procedure

1. **When the message [The time for wiper replacement has arrived.] appears, tap [OK].**
2. **Remove the object to be printed on.**
3. **Tap  to display the messages.**
4. **Tap [The time for wiper replacement has arrived.].**

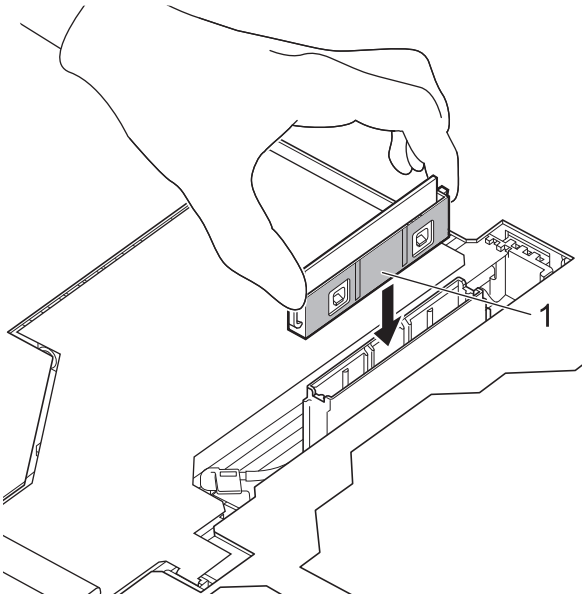
   The [**Wiper Replacement**] screen appears.
5. **Tap [Execute].**

   Tap [**Execute**] to display a message reminding the user to wear protective gear.
6. **Tap [OK].**

   Tap [**OK**] to move the print-head carriage to a location where wiper replacement is possible.
7. **Follow the instructions on the operation panel to replace the wiper.**
   - Tap ‹ or › to check the procedure.
   - If you complete the work without viewing the instructions, tap [**Finish All**].

IMPORTANT

- Install the wiper so that surface (1) faces to the right.
- After installing the wiper, hold the hooks on the left and right sides, pressing in just enough so that the locks are not released. Then, gently pull the wiper up and check that it is not removed.



8. **When the wiper replacement is finished, tap [Finish All].**

9. **When [Close the cover.] is displayed, close the front cover and the maintenance cover.**

When you close the front cover and the maintenance cover, you are returned to the original screen.

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
If you do not open and close the front cover gently, it may break or you may be injured.

10. **Tap** .

The home screen appears.

Replacing the Print Head Caps

The print head caps seal the nozzle surfaces of the print heads, preventing these surfaces from drying out and preventing dust from adhering to them.

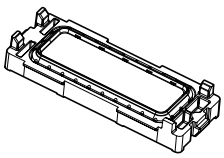
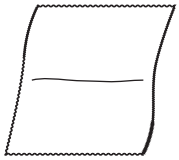
When it is time to replace the print head caps, the message [**The time for cap replacement has arrived.**] appears. In this situation, replace the print head caps.

For information about purchasing print head caps, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Sudden movement of the machine may cause injury or burns.

Required items		
		
Print head cap	Cloth (that is not fluffy)	Cleaning stick

IMPORTANT

- To prevent the print heads from drying out, finish this procedure in 10 minutes or less. A warning beep sounds after 10 minutes.
- Take care to prevent ink from adhering to the operation panel.

Procedure

1. **When the message [The time for cap replacement has arrived.] appears, tap [OK].**
2. **Remove the object to be printed on.**
3. **Tap to display the messages.**
4. **Tap [The time for cap replacement has arrived.].**
5. **Tap [Execute].**

   Tap [**Execute**] to display a message reminding the user to wear protective gear.
6. **Tap [OK].**

   Tap [**OK**] to move the print-head carriage to a location where print head cap replacement is possible.
7. **Follow the instructions on the operation panel to replace the print head caps.**
   - Tap ‹ or › to check the procedure.
   - If you complete the work without viewing the instructions, tap [**Finish All**].

IMPORTANT

Ink may drip from the removed print head cap. Exercise caution to prevent this fluid from soiling your hands or the floor.

To prevent ink from adhering to your hands, the machine, or the floor, cover the bottom surface of the removed print head cap with paper towels or something similar.

8. **When the print head cap replacement is finished, tap [Finish All].**

9. **When [Close the cover.] is displayed, close the front cover and the maintenance cover.**

When you close the front cover and the maintenance cover, you are returned to the original screen.

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.

If you do not open and close the front cover gently, it may break or you may be injured.

10. **Tap .**

The home screen appears.

Replacing the Wiper Cleaner

The wiper cleaner removes ink, dust, and similar substances that have adhered to the wiper during cleaning.

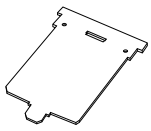
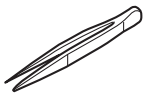
When it is time to replace the wiper cleaner, the message [**The time for wiper cleaner replacement has arrived.**] appears. In this situation, replace the wiper cleaner.

For information about purchasing wiper cleaners, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Sudden movement of the machine may cause injury or burns.

Required items	
	
Wiper cleaner	Tweezers

IMPORTANT

- To prevent the print heads from drying out, finish this procedure in 10 minutes or less. A warning beep sounds after 10 minutes.
- Take care to prevent ink from adhering to the operation panel.

Procedure

1. **When the message [The time for wiper cleaner replacement has arrived.] appears, tap [OK].**
2. **Remove the object to be printed on.**
3. **Tap  to display the messages.**
4. **Tap [The time for wiper cleaner replacement has arrived.].**

   The [**Wiper Cleaner Replacement**] screen appears.
5. **Tap [Execute].**

   Tap [**Execute**] to display a message reminding the user to wear protective gear.
6. **Tap [OK].**

   Tap [**OK**] to move the print-head carriage to a location where wiper cleaner replacement is possible.
7. **Follow the instructions on the operation panel to replace the wiper cleaner.**
   - When the message [**Eliminate static electricity.**] appears, touch the indicated location, and then tap [**Finish**] to display the instructions for wiper cleaner replacement.

- Tap < or > to check the procedure.
- If you complete the work without viewing the instructions, tap [**Finish All**].

8. **When the wiper cleaner replacement is finished, tap [Finish All].**

9. **When [Close the cover.] is displayed, close the front cover, the flushing cover, and the maintenance cover.**

When you close the front cover, the flushing cover, and the maintenance cover, you are returned to the original screen.

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
If you do not open and close the front cover gently, it may break or you may be injured.

10. **Tap .**

The home screen appears.

Positioning Jigs

Positioning jigs are components that wear out. Contact your authorized dealer if new parts are needed.

RELATED LINKS

- P. 208 Rotary Device Dimensions

Consumable Parts That Require Inquiries before Replacement

When replacing the following consumable parts, contact your authorized dealer.

Item	Related page
Print heads	Cleaning around the Print Heads(P. 133)

Troubleshooting Methods

Output Quality Problems

Printed results are coarse or contain horizontal bands 177
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Printed results are coarse or contain horizontal bands

Do the Print Heads Cause Dot Drop-out?

Carry out a printing test and make sure no dot drop-out or dot displacement occurs. If dot drop-out or dot displacement is present, perform cleaning.

When [**Automatic Maintenance Frequency**] is set to [**Low**], the minimal amount of cleaning is performed. If necessary, perform [**Normal Cleaning**] or similar cleaning to eliminate dot drop-out or dot displacement. You can also reduce the risk of dot displacement and dot drop-out by setting [**Automatic Maintenance Frequency**] to [**High**].

RELATED LINKS

- P. 40 Performing a Nozzle Drop-out Test
- P. 144 Normal Cleaning Method
- P. 146 When Normal Cleaning Is Not Effective
- P. 126 Automatic Maintenance Feature and Notes

Is the printer installed in a level and stable location?

Never install the machine in a location where it is tilted or where it may wobble or experience vibration. These factors may lead to dot-dropout or reduced printing quality.

Is the printer installed in a location that is not exposed to direct sunlight?

Never install the machine in a location that is exposed to direct sunlight. Doing so may result in dot drop-out or other problems with reduced printing quality, or may even result in malfunction.

Are the software RIP settings appropriate?

Try using the optimal print mode on software RIP. Specific combinations of the object to be printed on and print mode may cause the colors to be uneven. Results may also vary greatly depending on the color-profile selection. Select settings appropriate for the object to be printed on.

Is the method of loading the object to be printed on appropriate?

If the object to be printed on is not loaded correctly, output may be adversely affected. Load the object to be printed on correctly.

RELATED LINKS

- P. 56 Attaching the Object

Are the [Media Settings] appropriate?

If the settings are not suitable for the object to be printed on, output may be adversely affected. Select settings optimized for the object to be printed on.

RELATED LINKS

- P. 95 Changing the Media Settings

The Object to be Printed on Becomes Soiled When Printed

Are the print heads dirty?

The following may cause ink to drip on the object to be printed on during printing.

- Fibrous dust (lint) is built up around the print heads
- Ink transferred to the print heads due to rubbing against the object to be printed on

If this happens, perform manual cleaning. We recommend carrying out periodic cleaning of the print heads.

RELATED LINKS

- P. 133 Cleaning around the Print Heads

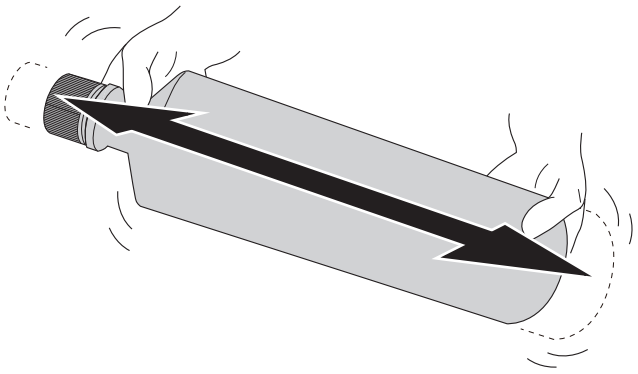
Is the humidity of the room too low?

Use the machine in an environment with a humidity of 35 to 80% RH (no condensation).

Colors are unstable or uneven

Did you shake the ink bottle before installing it?

Turn the ink bottle so it is horizontal and shake it 50 times (about 20 seconds) before refilling the ink tank with ink.



Color is Uneven

If uneven color issues with white ink occur, perform [**Ink Circulation**]. If the white ink uneven color is not corrected even after circulating the ink, perform the work for [**Powerful Cleaning**], [**Ink Renewal Inside Damper**], and [**Ink Renewal**] in sequence.

If uneven color issues occur with a color other than white ink, perform [**Powerful Cleaning**], [**Ink Renewal Inside Damper**], and then [**Ink Renewal**].

RELATED LINKS

- P. 150 Ink Circulating Method
- P. 151 Method for Eliminating Uneven Color Issues with Powerful Cleaning
- P. 152 Method for Ink Renewal Inside Damper
- P. 158 Ink Renewal Method

Was printing paused partway through?

When printing is paused, the coloring at the seam may be altered when printing resumes. Printing may be paused when data is not sent from the computer quickly enough. We recommend not performing any other tasks with the computer while printing is in progress.

Is the printer installed in a level and stable location?

Never install the machine in a location where it is tilted or where it may wobble or experience vibration. These factors may lead to dot-dropout or reduced printing quality.

Is the method of loading the object to be printed on appropriate?

If the object to be printed on is not loaded correctly, output may be adversely affected. Load the object to be printed on correctly.

RELATED LINKS

- P. 56 Attaching the Object

Is the printer being used in a location subject to severe changes in the operating environment?

Large fluctuations in temperature or humidity while printing is in progress may cause the colors to change partway through the printing. When printing, use the machine in a location where the temperature and humidity are stable.

Are the [Media Settings] appropriate?

If the settings are not suitable for the object to be printed on, output may be adversely affected. Select settings optimized for the object to be printed on.

RELATED LINKS

- P. 95 Changing the Media Settings

Are the irradiation windows of the UV-LED devices dirty?

If the irradiation windows are dirty, this can reduce ink adhesion and the quality of the printed materials. Check the level of dirt and clean at the appropriate times.

RELATED LINKS

- P. 136 Cleaning the UV-LED Device

Machine Problems

Why Has the Print-Head Carriage Stopped Moving? 182
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- If the Print Heads Still Do Not Move 182

The printer unit does not run 184
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- Is an [**Ink Tank Error**] displayed? 185

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- Is something stuck in one of the movable components inside of the machine? 186
- Are any covers open? 186

Why Has the Print-Head Carriage Stopped Moving?

If the print-head carriage stops on the light blocking cover, take immediate action to prevent the print heads from drying out.

What to Do First

Switch the sub power off and then back on again.

If the print-head carriage moves to the home position (inside the maintenance cover), it means the operation has ended successfully.

If the print-head carriage still does not move

Try switching off the sub power, followed by the main power, then switching on the main power again, followed by the sub power.

If the Print Heads Still Do Not Move

If the heads still do not move, carry out the following emergency response measure, and then contact your authorized dealer.

Procedure

1. **Switch off the sub power.**
2. **Turn off the main power switch.**
3. **Open the front cover and maintenance cover.**

   MEMO

   Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.
   If you do not open and close the front cover gently, it may break or you may be injured.

4. **Gently move the print-head carriage to the home position by hand.**

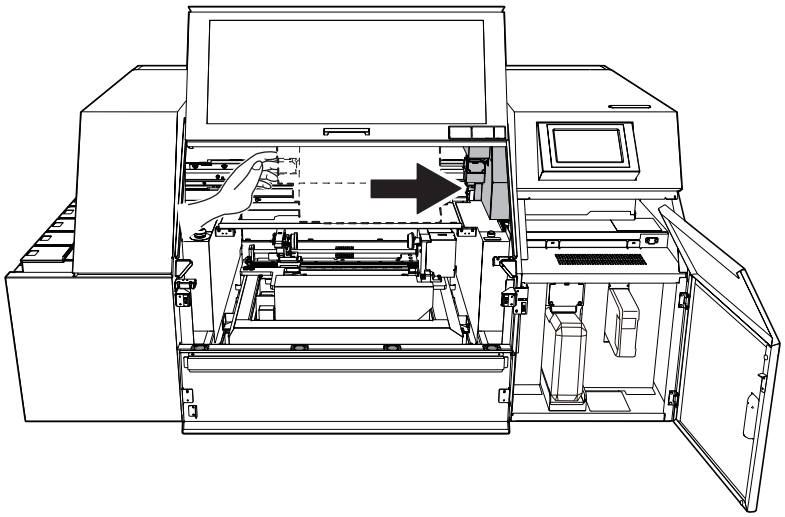
   Stopping at the place where the audible click is heard locks the print-head carriage in place.

   ⚠ CAUTION

   When moving the print-head carriage by hand, be sure to hold the specified position.
   Moving it by holding positions other than those specified may deform and damage the cover.

   IMPORTANT

   When moving the print-head carriage by hand, check that it does not come in contact with the wiper or the print head cap. If it does come into contact with the wiper or print head cap, the print-head carriage cannot be moved to the standby position and should be left in place.



5. **Gently apply pressure from the right side to make sure the print-head carriage does not move to the left.**

If the print-head carriage moves to the left, move it again slowly by applying pressure from the left side and make sure it locks in place.

6. **Close the front cover and maintenance cover.**

MEMO

Be sure to hold the handle of the front cover and keep holding it until the cover is completely opened or closed.

If you do not open and close the front cover gently, it may break or you may be injured.

The printer unit does not run

Is the power switched on?

Switch on the printer's main power, followed by the sub power and make sure the home screen appears.

RELATED LINKS

- P. 29 Turning the Power On

Is [Output possible.] displayed?

Output is not performed when [**Output possible.**] is not displayed at the top of the operation panel. Select the media and load the object in the printer to ready it for printing. Also, when operating the setting menu, output doesn't start when data is sent from the computer with some menu items. When you return to a menu item where output is possible or tap  to return to the home screen, output starts.

Are any covers open?

Close the front cover and maintenance cover.

Is a message displayed on the screen?

RELATED LINKS

- P. 188 Messages
- P. 192 Error Messages

Are the cables connected?

Connect the cables securely.

RELATED LINKS

- Setup Guide

Is the LAN routing appropriate?

Check whether or not the network routing is appropriate. Try connecting the computer and the machine to the same hub or connecting them directly using a cable. If this makes it possible to perform output, it means the problem may be in the network itself.

Are the LAN settings correct?

If the cable connections are secure and no problem is found in the network itself, make sure that the IP address and other such settings are appropriate. The settings on both the machine and the computer must be appropriate. Redo the settings, checking to ensure that the IP address does not conflict with the IP address for another device on the network, that the port setting for the software RIP specifies the IP address set on the machine, that the settings have no typing errors, and for other such problems.

RELATED LINKS

- P. 117 Viewing Printer Information
- Setup Guide

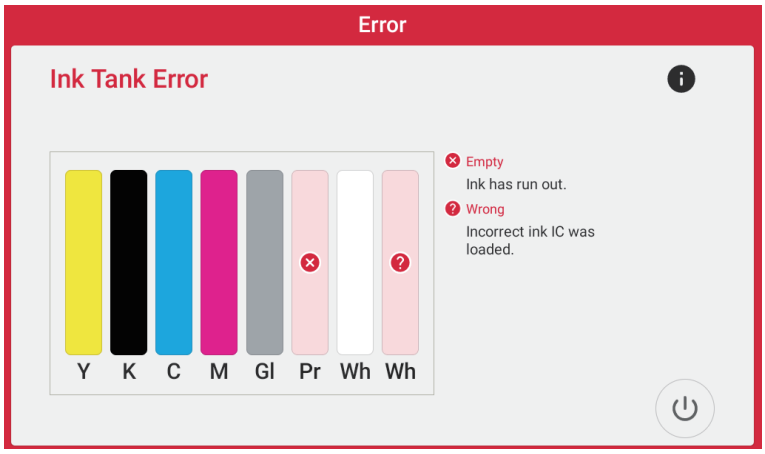
Did the software RIP end abnormally?

Make sure the software RIP is running correctly, then switch the sub power switch off and back on.

RELATED LINKS

- VersaWorks manual

Is an [Ink Tank Error] displayed?



When **[Ink Tank Error]** appears on the operation panel, output data cannot be accepted. If there is data that has not yet been output remaining in the machine, output resumes when the error is cleared. If there is unsent data in the computer, output resumes when the data is resent.

Correct the error displayed on the screen.

RELATED LINKS

- P. 47 Refilling Inks
- P. 192 **[Ink Tank Error]**

The Support Table Does Not Move

Is something stuck in one of the movable components inside of the machine?

Check whether or not something is catching or stuck and interfering with operation.

Are any covers open?

Keep the front cover and maintenance cover closed during printing. If any cover is open while printing, the table cannot be moved for your safety.

Messages on the Operation Panel

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Messages

These are the main messages that appear on the machine's operation panel to prompt correct operation. These messages are not errors, so you can close them and perform other work. To check messages again or to carry out their corresponding actions, tap  to display the list of messages. Tap a message to display the menus and procedure required for the action. Perform operations according to the on-screen instructions.

[When output, cleaning, and other operations are completed, discard the]

This message appears when a certain amount of discharged fluid collects in the drain bottle.

Tap [**When output, cleaning, and other operations are completed, discard the**]>[**Execute**] to discard this fluid.

RELATED LINKS

- P. 141 If the Discharged Fluid Disposal Message Appears

[The time for manual cleaning has arrived.]

This message appears when it is time to perform manual cleaning.

Tap [**The time for manual cleaning has arrived.**]>[**Execute**] to perform manual cleaning.

RELATED LINKS

- P. 134 Cleaning the Print Heads

[The time for UV lamp manual cleaning has arrived.]

This message appears when it is time to perform UV lamp manual cleaning.

Tap [**The time for UV lamp manual cleaning has arrived.**]>[**Execute**] to perform UV lamp manual cleaning.

RELATED LINKS

- P. 137 UV Lamp Manual Cleaning Method

[The time for wiper replacement has arrived.]

This message appears when it is time to replace the wiper.

Tap [**The time for wiper replacement has arrived.**]>[**Execute**] to replace the wiper.

RELATED LINKS

- P. 167 Replacing the Wiper

[The time for cap replacement has arrived.]

This message appears when it is time to replace the print head caps.

Tap [**The time for cap replacement has arrived.**]>[**Execute**] to replace the print head caps.

RELATED LINKS

- P. 169 Replacing the Print Head Caps

[Print head protection mode has activated.]

This message appears when the ink in use may not be a product specified by Roland DG Corporation.

If the ink is not a product specified by Roland DG Corporation, a larger amount of ink will be consumed, and cleaning will be performed frequently. To obtain optimal performance, we recommend that you use ink specified by Roland DG Corporation. To purchase ink, contact your authorized dealer.

[Replace the cleaning liquid pouch.]

This message appears when the cleaning liquid runs out.

Replace the empty cleaning liquid pouch.

When you replace the cleaning liquid pouch, the message [**Has the cleaning liquid pouch been replaced? Tap "Yes" to reset the amount of remaining cleaning liquid.**] appears.

Tap [**Yes**] to reset the amount of cleaning liquid remaining and identify the cleaning liquid pouch as a new product.

MEMO

If you tap [**Yes**] on the cleaning liquid pouch replacement confirmation screen even though you have not replaced the cleaning liquid pouch, the amount of cleaning liquid remaining is reset. In this situation, no notification will appear even if the amount of cleaning liquid remaining is very small, and the message [**Replace the cleaning liquid pouch.**] will appear when the cleaning liquid runs out. To ensure you have enough time to prepare the replacement cleaning liquid, tap [**No**] if you have not replaced the cleaning liquid.

RELATED LINKS

- P. 51 Cleaning Liquid Replacement Method

[Install the cleaning liquid pouch.]

This message appears when a cleaning cartridge that does not contain a cleaning liquid pouch is loaded or when the cleaning cartridge is removed from the machine.

Correctly load a new cleaning liquid pouch into the cleaning cartridge and insert this cartridge into the machine. If the cleaning cartridge was removed from the machine, quickly insert it.

When you insert the cleaning cartridge, the cleaning liquid pouch replacement confirmation screen appears.

- If you have replaced the cleaning liquid pouch, tap [**Yes**]. The amount of cleaning liquid remaining is reset.
- If you have not replaced the cleaning liquid pouch, tap [**No**]. The amount of cleaning liquid remaining is not changed.

MEMO

If you tap [**Yes**] on the cleaning liquid pouch replacement confirmation screen even though you have not replaced the cleaning liquid pouch, the amount of cleaning liquid remaining is reset. In this situation, no notification will appear even if the amount of cleaning liquid remaining is very small, and the message [**Replace the cleaning liquid pouch.**] will appear when the cleaning liquid runs out. To ensure you have enough time to prepare the replacement cleaning liquid, tap [**No**] if you have not replaced the cleaning liquid.

RELATED LINKS

- P. 51 Cleaning Liquid Replacement Method

[Remaining cleaning liquid level low.]

This message appears when the remaining cleaning liquid level is low.

The cleaning liquid can be used until it runs out, so it does not need to be replaced immediately. However, printing is not possible if there is no cleaning liquid. If this message appears, prepare a replacement cleaning liquid pouch.

[The LAN cable is not connected.]

This message appears when the machine and a computer are not connected with a LAN cable.

Properly connect the LAN cable.

[There is ink that has expired.]

Ink has expired.

When the refill ink message is displayed, refill the ink. If there is no refill display but there is an effect on print quality, consider replacing the ink.

RELATED LINKS

- P. 47 Refilling Inks

[Remaining ink level low.]

This message appears when the remaining ink level is low.

The cleaning liquid can be used until it runs out, so it does not need to be replaced immediately. However, printing is not possible if there is no cleaning liquid.

If this message appears, prepare an ink bottle.

[Ink refilling in progress.]

This message appears when the ink is being refilled.

Do not remove the ink bottle until ink refilling has finished.

[Output canceled because printing data failed to transfer.]

This message is displayed if the print data is not transferred to the machine.

Check that:

- Your computer meets the recommended system requirements.

  Refer to the following requirements.

	Windows	Mac
Operating system (OS)	Windows 11	macOS 26, 15, 14
CPU	Intel Core i5 4670 or higher	Apple Silicon
Memory	16 GB or more	8 GB or more

	Windows	Mac
Video card, monitor	Full HD (1,920 × 1,080 pixels, 24-bit color)	1,280 × 1,024 pixels or more
Solid state drive	256 GB or more free space	Minimum 128GB
Hard disk drive	500 GB or more free space	
Communication interface	Wired: 1x Gigabit Ethernet (1000BASE-T) Wireless: IEEE 802.11ax (Wi-Fi 6) * Continuous execution throughput: 20 MB/s or higher	
Others	Internet connectivity and web browser	

- Change to a wired connection between the computer and the machine.

[Output canceled because of insufficient light shielding.]

This message appears when the light blocking is insufficient.

Confirm that there is no gap between the object and the light blocking window of the light shield cover. If there is a gap, attach the light blocking sheet to eliminate the gap. Also, if the object is empty (such as a cup), adjust the UV light amount by placing the included light blocking insert inside the object so that there is no gap.

RELATED LINKS

- P. 87 Checking the UV Light Amount

Error Messages

This section describes the error messages that may appear on the machine's operation panel and how to take action to remedy the problem.

Follow the instructions on the screen to clear the error or switch the power off before starting to operate the machine again.

If the action displayed on the screen does not correct the problem or if an error message not described here appears, contact your authorized dealer.

[Ink Tank Error]

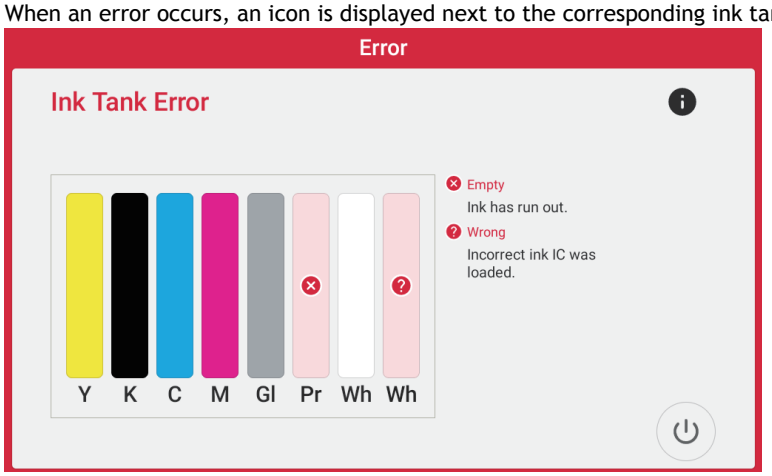
This message appears when one of the following errors is detected in the ink tank.

Implement appropriate countermeasures according to the error.

	[Ink has run out.] Refill the empty ink.
	[Incorrect ink IC was loaded.] Insert the correct ink IC.

MEMO

When an error occurs, an icon is displayed next to the corresponding ink tank on the screen.



[Cover Open Error]

The front cover or maintenance cover is open.

For safety, the machine stops if a cover is opened during operation.

Close the open cover.

[Close the light shield cover.]

The light shield cover is open.

This message indicates that the light shield cover was open when the sub power was turned on or when the machine attempted to perform periodic maintenance. Close the cover and tap [**OK**] to recover.

[Drain Bottle Error]

[Discard the discharged fluid in the drain bottle.]

This message appears when the drain bottle has reached its limit for discharged fluid.

Discard the discharged fluid in the drain bottle, and then attach this bottle again.

MEMO

When the drain bottle is detached, the error message changes to [**Install the drain bottle.**].

[Install the drain bottle.]

This message appears when the drain bottle is misaligned or removed.

Install the drain bottle again.

[Unable to Fill Wiper Cleaning Liquid]

The cleaning liquid pouch in the cleaning cartridge is empty.

Quickly replace this cleaning liquid pouch with a new one.

[Height Error]

[Check the table height, workpiece diameter, and workpiece attachment position.]

This message appears when the table moves to an inappropriate position and the light shield cover lifts up due to an incorrect selection of registered media in the setup of the object or due to you forgetting to attach a jig.

Check that you have selected the correct media and that you have attached the jig.

Tap [**OK**] to clear the message.

[Table Height Error]

[Check the table height. Press [OK].]

This message is displayed when the head gap sensor interferes with the object during non-printing operations.

Check to see if the object does not exceed the size that can be mounted. If it exceeds the size, mount an object that is the size that can be mounted.

Tap [**OK**] to clear the message.

[Operation was stopped because the media height is abnormal. Press [OK].]

Printing stops when an abnormality in the height of the object is detected during printing.

The clearance between the print surface and print head exceeds the specified value. It is possible that the diameter and length settings for the object are different from the actual object, that loading of the object failed, or that there was large deviation from the rotation center. Investigate the cause and resolve the problem.

Tap [**OK**] to clear the message.

RELATED LINKS

- P. 18 Printable Materials and Shapes

[Load Error]

Attempted loading (gripping) of the object but was unable to grasp it.

Loading (gripping) of the object failed. Check that the object is correctly placed on the support table and that the object length setting is correct.

[Unload Error]

The object could not be unloaded (released).

Check the rotary device.

[Motor Error]

A motor error occurred.

Operation cannot be continued. Turn off the sub power. Next, eliminate the cause of the error, then immediately switch on the sub power.

If the machine is allowed to stand with the error uncorrected, the print heads may dry out and become damaged. This error may be caused by the object to be printed on being set incorrectly, etc.

[Print Head Dry-out Error]

This message appears when the print heads are forced to the home position to prevent them from drying out.

Operation cannot be continued. Switch the sub power off, and then back on.

[Low Temperature Error]

The internal temperature of the machine has fallen below that at which it can operate.

This message appears when the temperature falls to 14°C (57.2°F) or lower during startup or operation. Operation cannot be continued. Turn off the sub power. Bring the installed location to a temperature of 20°C to 32°C (68°F to 89.6°F), and then turn on the power.

RELATED LINKS

- P. 29 Power Supply Operations

[High Temperature Error]

The internal temperature of the machine has risen above that at which it can operate.

This message appears when the temperature rises to 46°C (114.8°F) or higher during startup. Operation cannot be continued. Turn off the sub power. Bring the installed location to a temperature at which operation is possible (20 to 32°C [68 to 90°F]), and then turn on the power.

RELATED LINKS

- P. 29 Power Supply Operations

[Pump Stop Error]

This message appears when 10 minutes or more have passed after ink ran out during pump operation, such as during cleaning.

Operation cannot be continued. Switch the sub power off, and then back on.

[Cleaning Error]

During operation, an error was detected with the internal pressure, and an emergency stop was executed.

Operation cannot be continued. Perform the following operations.

1. Switch the sub power off and back on.
2. Perform [**Manual Cleaning**].
3. Perform [**Ink Renewal Inside Damper**].
4. To check whether the error has been cleared, perform the same operation that you performed when the error occurred (for example, printing).

   You may also perform a printing test. If no error messages appear when you perform the above operations, the work is complete.

   If [**Cleaning Error**] appears again while you perform steps 2 to 4, perform the following operations.
5. Replace the print head cap.
6. Perform steps 2 to 4.

   If, once more, an error message appears during this work, switch the sub power off, and then contact your authorized dealer.

RELATED LINKS

- P. 134 Cleaning the Print Heads
- P. 152 Method for Ink Renewal Inside Damper
- P. 169 Replacing the Print Head Caps

[Cleaning Error (Ink Tanks)]

The printer made an emergency stop for one of the following reasons.

- Ink ran out during [**Ink Renewal Inside Damper**].
- The ink ran out during the first ink fill.

Operation cannot be continued. Perform the following operations.

1. Check that there is sufficient ink.
2. Switch the sub power off and back on.
3. Perform [**Ink Renewal Inside Damper**] or fill the machine with ink.

MEMO

If the printer stopped partway through [**Ink Renewal Inside Damper**], perform [**Ink Renewal**] for the target print head, and then perform [**Ink Renewal Inside Damper**] again.

RELATED LINKS

- P. 152 Method for Ink Renewal Inside Damper

• P. 158 Ink Renewal Method

[Cleaning Error (Drain Bottle)]

This message appears when one of the following situations is detected.

- The drain bottle was removed while [**Ink Renewal Inside Damper**] was in progress.
- The drain bottle became full while [**Ink Renewal Inside Damper**] was in progress.
- The drain bottle is removed during initial ink filling.
- The drain bottle became full during the first ink fill.

Operation cannot be continued. Perform the following operations.

1. Discard the discharged fluid and correctly attach the drain bottle.
2. Check that there is sufficient ink in the ink tank.
3. Switch the sub power off and back on.
4. Perform [**Ink Renewal Inside Damper**] or fill the machine with ink.

MEMO

If the printer stopped partway through [**Ink Renewal Inside Damper**], perform [**Ink Renewal**] for the target print head, and then perform [**Ink Renewal Inside Damper**] again.

RELATED LINKS

• P. 152 Method for Ink Renewal Inside Damper
• P. 158 Ink Renewal Method

[Emergency Stop In Progress]

This is displayed when the emergency stop button is pressed.

Operation cannot be continued. Perform the following operations.

1. Check the safety of the surrounding area.
2. Release the emergency stop button.
3. Switch the sub power off and back on.

RELATED LINKS

• P. 13 Safety Devices

[Service Call]

An unrecoverable error occurred or part replacement that must be performed by a service technician is required.

Note the number displayed on the operation panel, and then switch off the sub power. After turning the power off, contact your authorized Roland DG Corporation dealer.

[Software error]

An error occurred in the internal communication or applications of the machine or part replacement that must be performed by a service technician is required.

Switch off the main power. Then, switch on the main power again, followed by the sub power. If the error still occurs, contact your authorized Roland DG Corporation dealer.

[Communication with Roland DG Connect Hub was not possible.]

[Communication with Roland DG Connect Hub was not possible. Try again later.]

This message is displayed when Roland DG Connect Hub cannot establish an external connection.

Tap [OK] and try again later.

[Check the status of the connection between Roland DG Connect Hub and VersaWorks.]

This message is displayed when connecting to Roland DG Connect Hub or VersaWorks fails.

Verify that Roland DG Connect Hub and VersaWorks are running.

[Failed to connect to VersaWorks.]

[Restart VersaWorks.]

This message is displayed when connecting to VersaWorks fails.

Restart VersaWorks and tap [OK].

[Printing could not start.]

[Check the status of VersaWorks. (One possibility is that the job could not be found.)]

This message is displayed when no job that has been set to [Print] in VersaWorks is found.

Check the jobs set to [**Print**] in VersaWorks.

[Check the status of VersaWorks. (Two possibilities are that printing is already in progress and that the setup area has been exceeded.)]

This message is displayed when printing is already in progress or when the print data is larger than the printing area.

Check to see if printing is in progress or if the print data is larger than the printing area.

[The job could not be reprinted.]

[Check the status of the connection between Roland DG Connect Hub and VersaWorks.]

This message is displayed when connecting to Roland DG Connect Hub or VersaWorks fails.

Verify that Roland DG Connect Hub and VersaWorks are running.

Appendix

Connecting and Removing External Devices

Connecting an Alarm Lamp 200
Removing the Alarm Lamp 203

Connecting an Alarm Lamp

You can connect an alarm lamp to this machine. The alarm lamp must be prepared by the user separately.

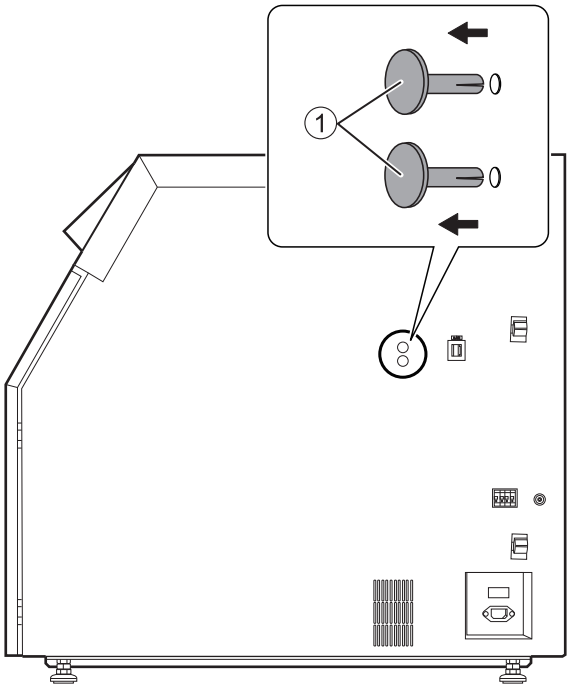
⚠ WARNING

Perform this task with all power switches left switched off.
Otherwise sudden movement of the machine may cause injury.

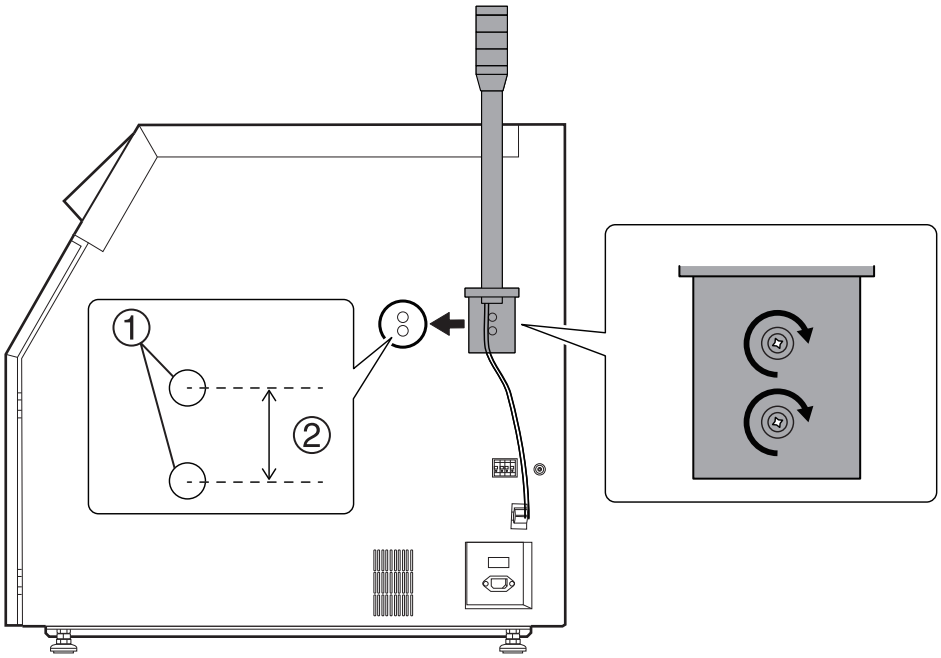
Procedure

1. **Turn off the machine's main power and sub power switches.**

2. **Remove the cap (①) on the right side of the machine.**



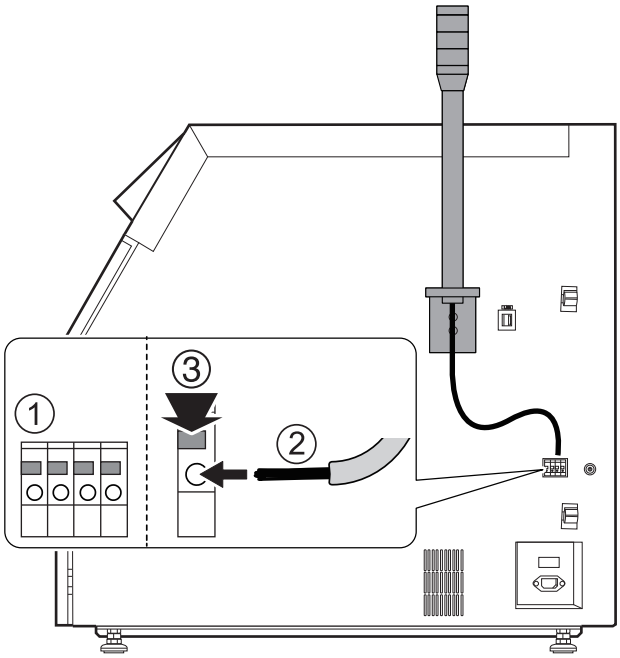
3. **Attach the alarm lamp to the position where you removed the caps.**



- ①: 2 - M8 tap
- 20 mm (0.79 in.)

4. **Connect the alarm lamp wires (①) to the alarm lamp connectors (②).**

While pressing the release button (③) with the included tweezers, insert the alarm lamp wire.



5. **Lightly tug the wire of the alarm lamp to make sure it does not come loose.**

6. **Turn on the machine's main power and sub power.**

7. **Check the alarm lamp connection.**

(1) **Set the object and ready the machine for printing.**

Select the media and load the object in the rotary device.

(2) **Close the front cover.**

Make sure that the alarm lamp turns on.

RELATED LINKS

- P. 56 Attaching the Object

Removing the Alarm Lamp

⚠ WARNING

Perform this task with all power switches left switched off.

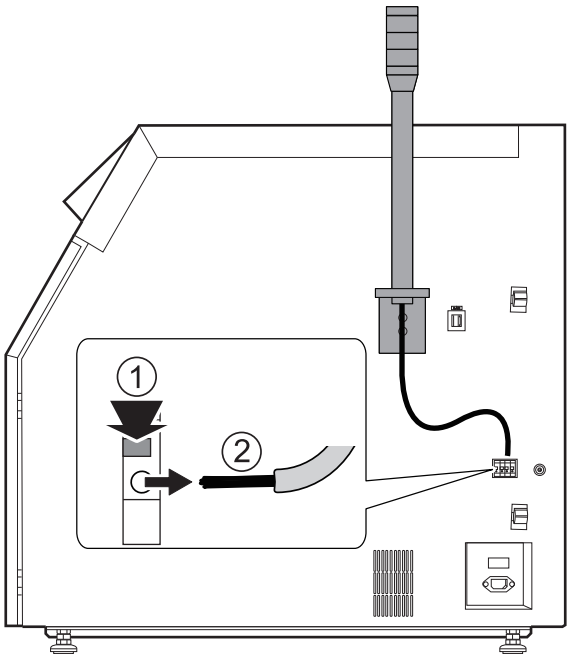
Otherwise sudden movement of the machine may cause injury.

Procedure

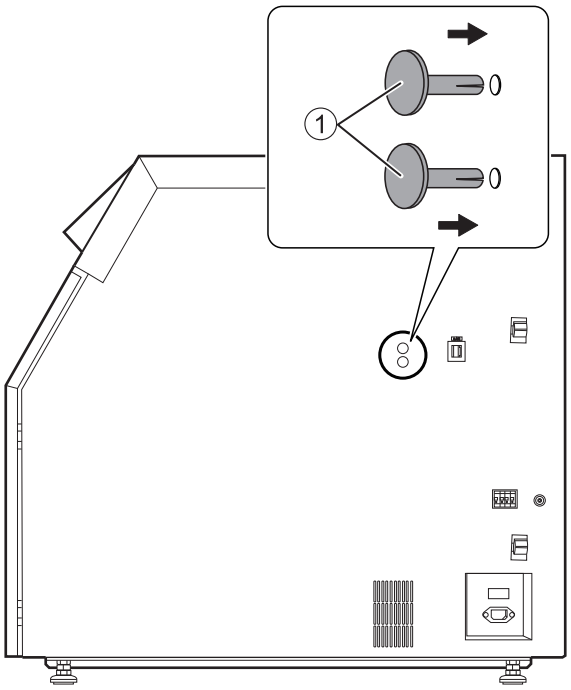
1. **Turn off the machine's main power and sub power switches.**

2. **Remove the alarm lamp wires.**

   While pressing the release button (①) with the included tweezers, pull out the alarm lamp wire (②).



3. **Remove the alarm lamp and mount caps (①) on the screw holes.**



4. Turn on the machine's main power and sub power.

Moving the Machine

Preparations prior to moving

Perform the following work before moving in order to minimize the damage to the machine that can occur during moving. If the preparations prior to moving are not performed, ink may leak and damage the internal devices, or the print heads may be damaged.

IMPORTANT

- Once the preparations for moving the machine are complete, move the machine promptly and turn on the machine as soon as possible after the machine is relocated. If you leave the machine alone without turning it on, the precipitated ink will coagulate and result in problems such as the clogging of the print heads.
- When moving the machine, keep it at a temperature from 5 to 40°C (41 to 104°F) and at a humidity from 20 to 80%RH (with no condensation). Failure to do so may result in a breakdown.
- Handle the machine with care when moving it, keeping it level (not tilted at an angle) and preventing it from striking other objects.

1. Circulate the ink.
2. Discard the discharged fluid.
3. Install retainers on moving parts so they do not move during moving.

Reinstalling after moving

Once the preparations for moving are complete, move and reinstall the machine with as little delay as possible.

1. Once the preparations for moving are complete, move the machine without delay.
2. Place the machine in a location that is suitable as an installation location.
3. Removing the Retainers

RELATED LINKS

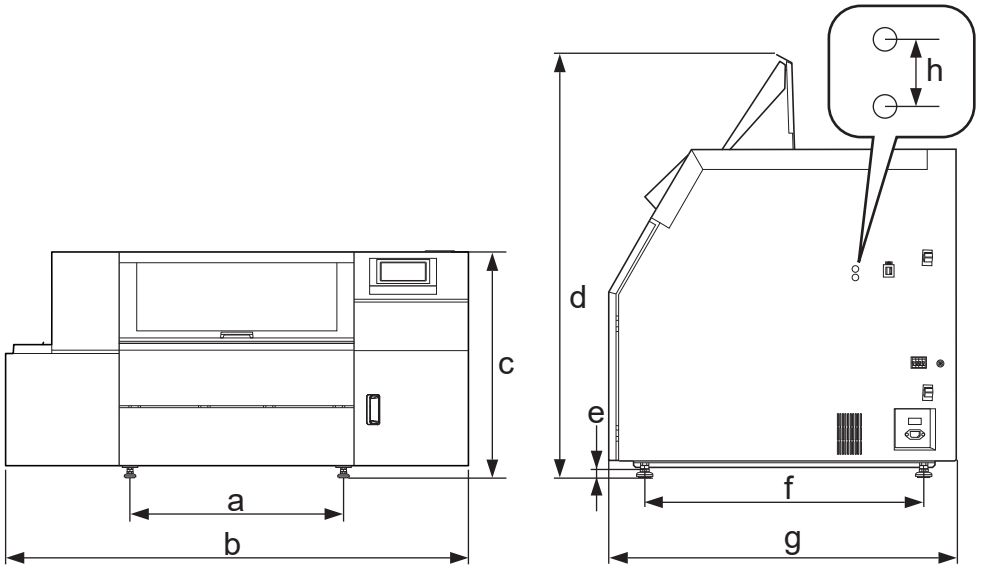
- P. 150 Ink Circulating Method
- P. 141 If the Discharged Fluid Disposal Message Appears
- RC-300 Setup Guide (Describes the retainers and the environment in the installation location.)

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Alarm Lamp Connector 210

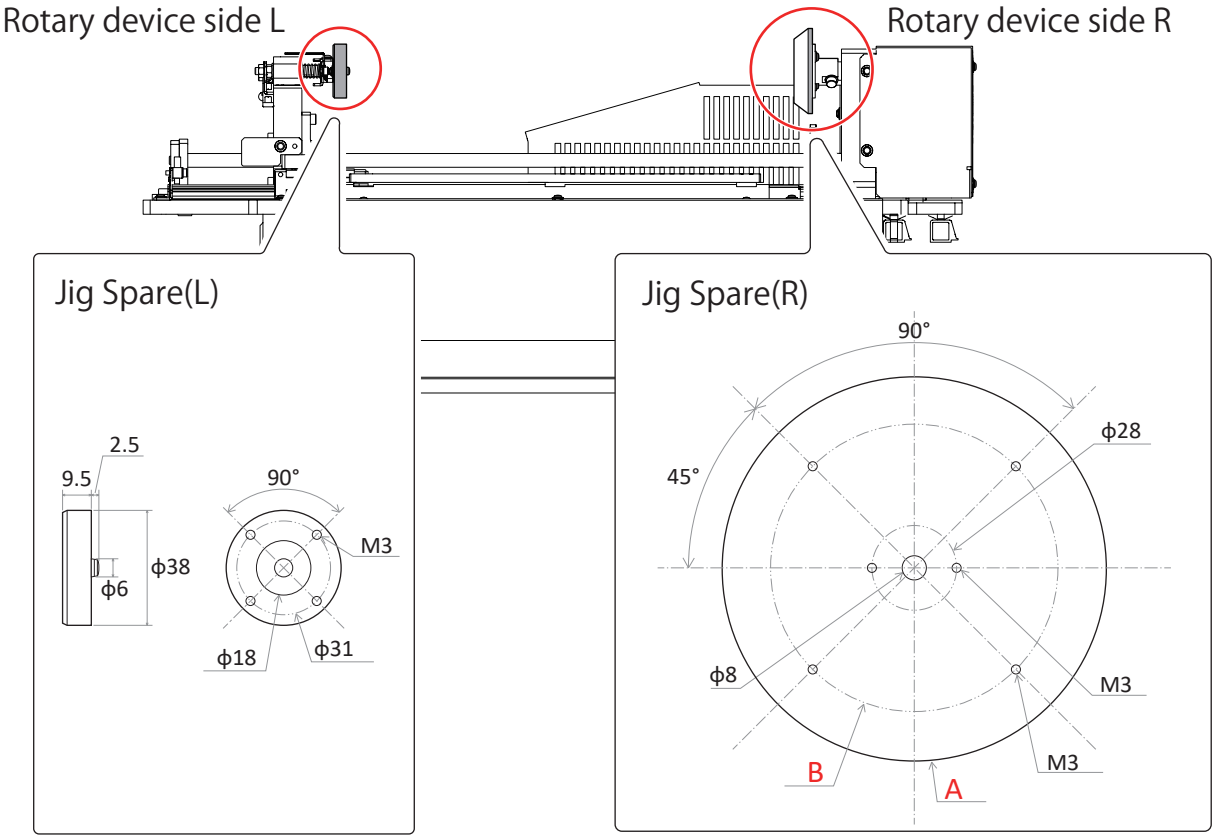
Dimensional Drawings

Outer Dimensions



a	736 mm (28.98 in.)
b	1,599 mm (63 in.)
c	783 mm (30.9 in.)
d	1,009 mm (39.8 in.)
e	39 mm (1.6 in.)
f	688 mm (27.1 in.)
g	840 mm (33.1 in.)
h	20 mm (0.79 in.)

Rotary Device Dimensions



* Unit: mm (in.)

Jig Spare (R) Size List

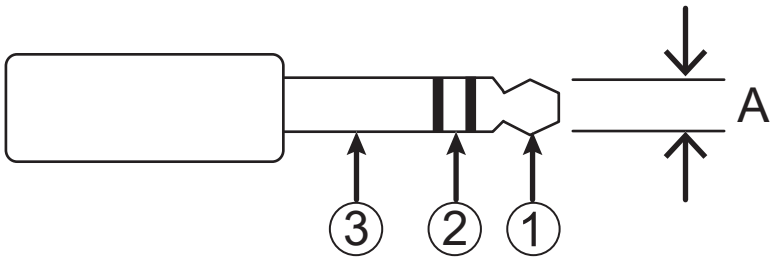
A	B
45 mm (1.77 in.)	23 mm (0.91 in.)
50 mm (1.97 in.)	28 mm (1.1 in.)
60 mm (2.36 in.)	30 mm (1.18 in.)
70 mm (2.76 in.)	40 mm (1.57 in.)
80 mm (3.15 in.)	50 mm (1.97 in.)
90 mm (3.5 in.)	60 mm (2.36 in.)
100 mm (3.94 in.)	70 mm (2.76 in.)
110 mm (4.3 in.)	80 mm (3.15 in.)
120 mm (4.72 in.)	90 mm (3.5 in.)
127 mm (5 in.)	95 mm (3.74 in.)

Specifications and Diagrams for the External Expansion Terminal

Connector for an External Deodorizer

Compliant plug

Only use three-contact type plugs of the size shown below.

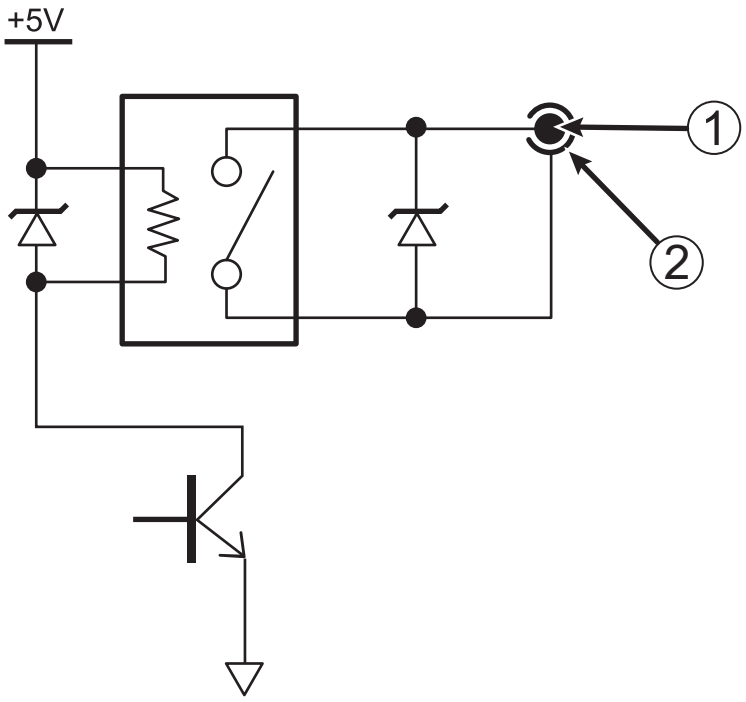


A: Diameter 3.5 mm (0.14 in.)

Output specifications

Output	Relay contact
Output capacity	100 mA or less

Connect to ① and ② of the compliant plug described above. Ensure that the current capacity is 100 mA or less. The output turns on during printing and turns off when printing finishes.



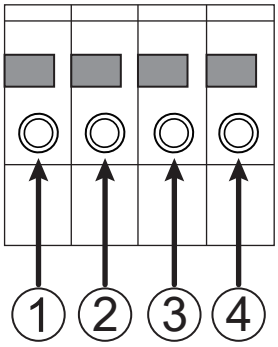
Alarm Lamp Connector

Pin assignment

CN	Signal name	Details
①	+24 V	Power supply for the light
②	ERROR	[**Motor Error**], [**Print Head Dry-out Error**], or [**Temperature Error**] status
③	READY	• Lit In this status, setup has been completed and the machine can start printing. • Flashing In this status, output has been paused.
④	BUSY	Printing.

* Off: This indicates the standby status, warning status, or a similar status. The machine cannot start printing when it is in this status.

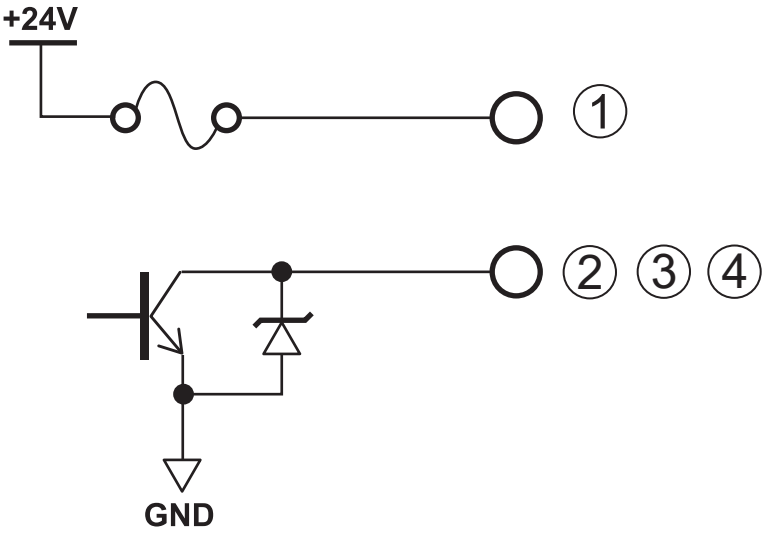
Connector assignment



Output specifications

Power supply	+24 V (Max 150 mA)
Output	Open collector
Output capacity	Max 50 mA / terminal

Connect the lamp between the 24 V power supply (①) and (②), (③), and (④).



Specifications

			RC-300
Printing method			Piezo ink-jet method (helical printing)
Supported material sizes	Diameter		Max. 127 mm (5.00 in.) / Min. 45 mm (1.78 in.)
	Length		Max. 355 mm (13.97 in.) / Min. 30 mm (1.19 in.)
	Taper	Angle	Max. 10°
		Height difference between the maximum diameter and the left edge of the printing area	Max. 10 mm (0.39 in.; only for models with the UV-LED device located in front of the support table)*1
	Weight		Max. 3 kg (6.61 lb.)
Printing width			Max. 300 mm (7.87 in.)
Ink	Type		ECO-UV (EUV-HB) 1000 ml bottle
	Color		Six colors (cyan, magenta, yellow, black, gloss, and white [×2]) and primer
Ink-curing unit			Built-in UV-LED lamp
Printing resolution (dots per inch)			Max. 1,200 dpi
Connectivity			Ethernet (100BASE-TX/1000BASE-T, automatic switching)
Power-saving function			Automatic sleep feature
Rated input			100 - 240 Va.c. 50/60 Hz 6.0 A
Power consumption	During operation		Approx. 550 W
	Sleep mode		Approx. 120 W
Acoustic noise level	During operation		65 dB (A) or less
	During standby		64 dB (A) or less
Dimensions (Width × Depth × Height)			1,599 mm × 840 mm × 783 mm (63 in. × 33.1 in. × 30.9 in.)
Weight			202 kg (446 lb.)
Environment	During operation		Temperature: 20 to 32°C (68 to 89.6°F), humidity: 35 to 80%RH (no condensation)
	Not operating		Temperature: 5 to 40°C (41 to 104°F), humidity: 20 to 80%RH (no condensation)
Included items			Power cord, cleaning liquid, drain bottle, user documentation, software (VersaWorks, Roland DG Connect Hub), etc.

*1 With the distance between the UV-LED device and the object set to 5 mm (0.2 in.)

Memo

Software 213

Software

This product is equipped with an "eT-Kernel Multi-Core Edition" eT-Kernel and a "PrCONNECT(R)/Pro" TCP/IP protocol stack, both made by eSOL Co., Ltd. eT-kernel and PrCONNECT are registered trademarks of eSOL Co., Ltd.

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