

Replacing Consumable Parts

Replacing the Wipers

The wiper is a component that is used for cleaning the print heads. When the screen displays a message like the one shown below, it is time to replace the item. Replace them with new items.

For information about purchasing wipers, contact your authorized Roland DG Corp. dealer or visit our website (<http://www.rolanddg.com/>).

TIME FOR
WIPER REPLACE ↵

When a warning beep sounds during wiper replacement

A warning beep sounds 10 minutes after operation begins. Stop work and close the front cover. Press [ENTER] to exit the wiper replacement menu. After that, restart operation from the first procedure.



CAUTION

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

Failure to observe this instruction may cause the machine to move suddenly, resulting in injury.

1. Enter the REPLACE WIPER Mode

NOTE

Be sure to hold the handle of the front cover and open and close it gently.

1. When the message shown in the figure appears, press [ENTER].

TIME FOR
WIPER REPLACE ↵

2. Remove any media.
3. Press [MENU].

4. Press [▼] to display the screen shown below.

MENU
SUB MENU ▶

5. Press [▶], then [▲].

SUB MENU
MAINTENANCE ▶

6. Press [▶], then [▼].

MAINTENANCE
REPLACE WIPER ↵

7. Press [ENTER].

The print-head carriage moves, and then the screen shown in the figure appears.

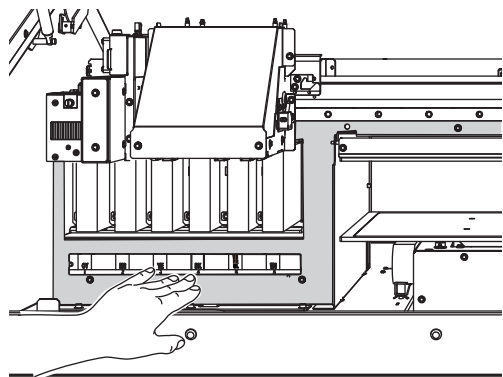
NOW PROCESSING..

OPEN FRONT
COVER

8. Open the front cover.

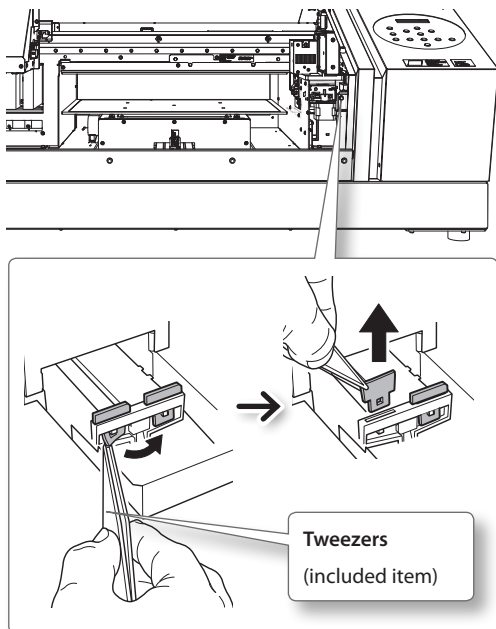
FINISHED? ↵

9. Touch the location shown in the figure (the area below the ink cartridge slots) to discharge any static electricity.



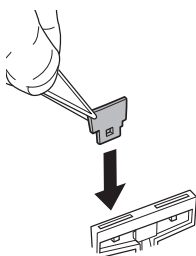
2. Replace the Wipers

1. Disconnect the old wipers from the hooks, and then pull the wipers up and out.

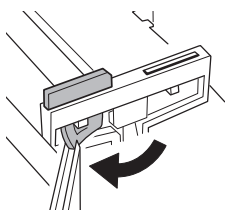


2. Insert the new wipers.

Insert the wipers with the orientation shown in the figure.



3. Attach the wipers to the hooks.



MEMO

Replace the two wipers at the same time.

3. Exit the REPLACE WIPER Mode

NOTE

Be sure to hold the handle of the front cover and open and close it gently.

1. Close the front cover.

FINISHED?

2. Press [ENTER].

CLEANING...
>>>>>

After exiting the REPLACE WIPER mode, the original screen appears again.

Replacing the Filter

This section explains how to replace the filter used for the mist fan that adjusts the scattering of ink mist. When the screen displays a message like the one shown below, it is time to replace the item. Replace them with new items.

For information about purchasing a filter, contact your authorized Roland DG Corp. dealer.

When a warning beep sounds during filter replacement

A warning beep sounds 10 minutes after operation begins. Stop work and close the front cover. Press [ENTER] to exit the filter replacement menu. After that, restart operation from the first procedure.



CAUTION

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

Failure to observe this instruction may cause the machine to move suddenly, resulting in injury.

1. Enter the REPLACE FILTER Mode

1. When the message shown in the figure appears, press [ENTER].



TIME FOR
FILTER REPLACE

2. Remove any media.
3. Press [MENU].
4. Press [▼] to display the screen shown below.



MENU
SUB MENU

5. Press [▶], then [▲].



SUB MENU
MAINTENANCE

6. Press [▶], [▼], then [▼].



MAINTENANCE
REPLACE FILTER

2. Replace the Filter

NOTE

Be sure to hold the handle of the front cover and open and close it gently.

1. Press [ENTER].

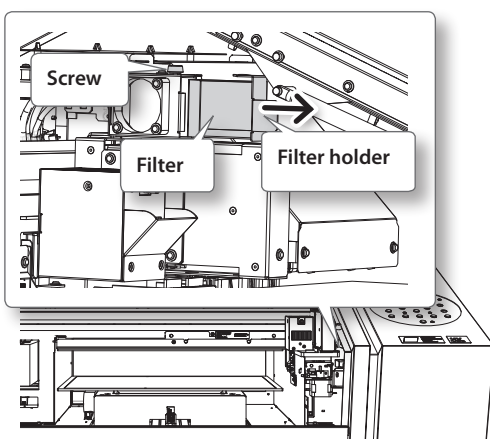
The print-head carriage moves, and then the screen shown in the figure appears.

NOW PROCESSING..

OPEN FRONT
COVER

2. Open the front cover.

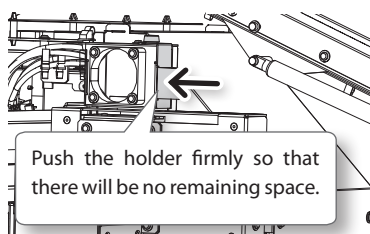
3. Loosen the screw and pull out the filter holder of the carriage mist fan.



Before the replacement, wipe away any buildup of ink around the fan module with a cloth.

4. Replace the filter.

5. Tighten the screw while pushing the filter holder of the carriage mist fan.



3. Exit the REPLACE FILTER Mode

NOTE

Be sure to hold the handle of the front cover and open and close it gently.

1. Close the front cover.

2. Press [ENTER].

CLEANING...
>>>>

After exiting the REPLACE FILTER mode, the original screen appears again.

When Moving the Unit

Procedure from Preparing to Move to Reinstallation

To move the machine, you must completely drain all ink inside the machine and secure the print heads in place with packing materials to protect them. Attempting to move the machine without first doing this may result in damage to internal components due to leaking ink or damage to the print heads.

This operation requires six unused SOL INK cleaning cartridges (four for cleaning and two for refilling ink). Have these on hand before you start.

Important notes on moving

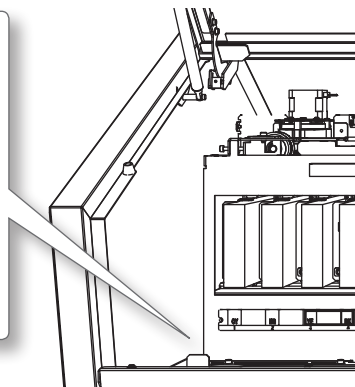
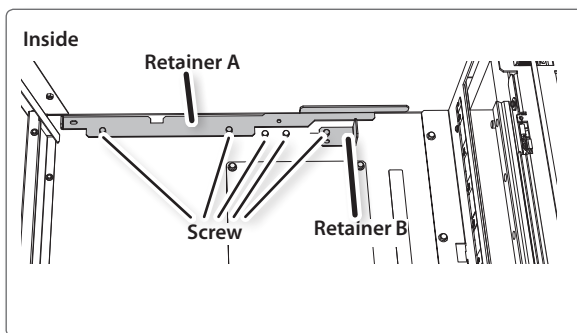
- Be sure to use SOL INK cleaning cartridges. Using any other cleaning cartridges may result in breakdown.
- Once the preparations for moving are complete, move the machine and fill it with ink with as little delay as possible. Leaving the machine alone without ink may damage the print heads.
- When 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 breakdown.
- Handle the machine with care when moving it, keeping it level (not tilted at an angle) and preventing it from striking other objects.
- For transportation of this machine, contact your authorized Roland DG Corp. dealer.

Procedure

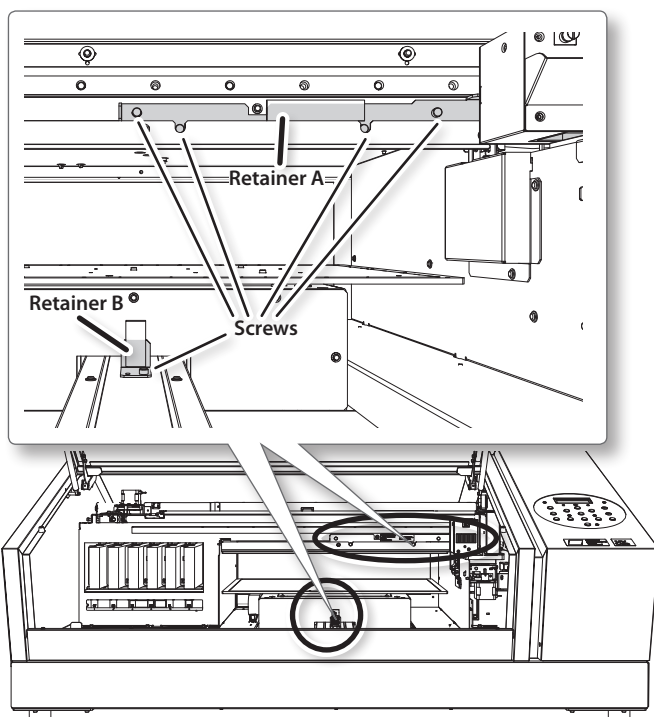
Prepare

SOL INK cleaning cartridges (6)

1. Clean the print heads.
☞ "Cleaning All Print Heads" (P. 44)
2. If the drain bottle and the panel cover have been removed, attach them.
3. Remove the stored retainers.



4. Secure the print heads and the flat table in place.



The machine is now ready to be moved.

5. Move the machine as soon as possible.

6. After moving the machine, immediately reinstall it and fill it with ink.

See "STEP 7: Filling with Ink for the First Time" (First Step Guide) and promptly fill the machine with ink. When filling the machine with ink, use (two) SOL INK cleaning cartridges again.

Chapter 3

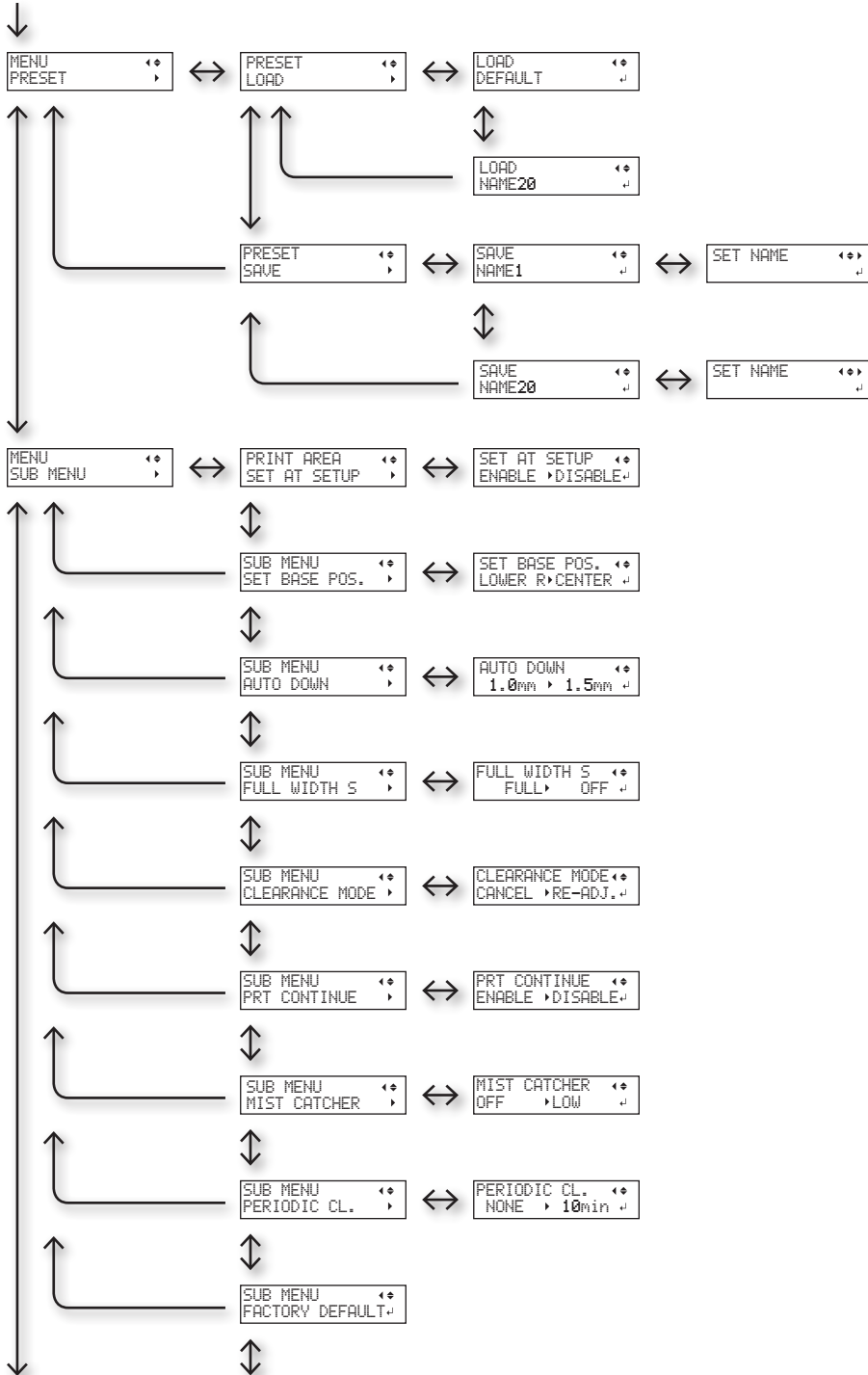
Appendix

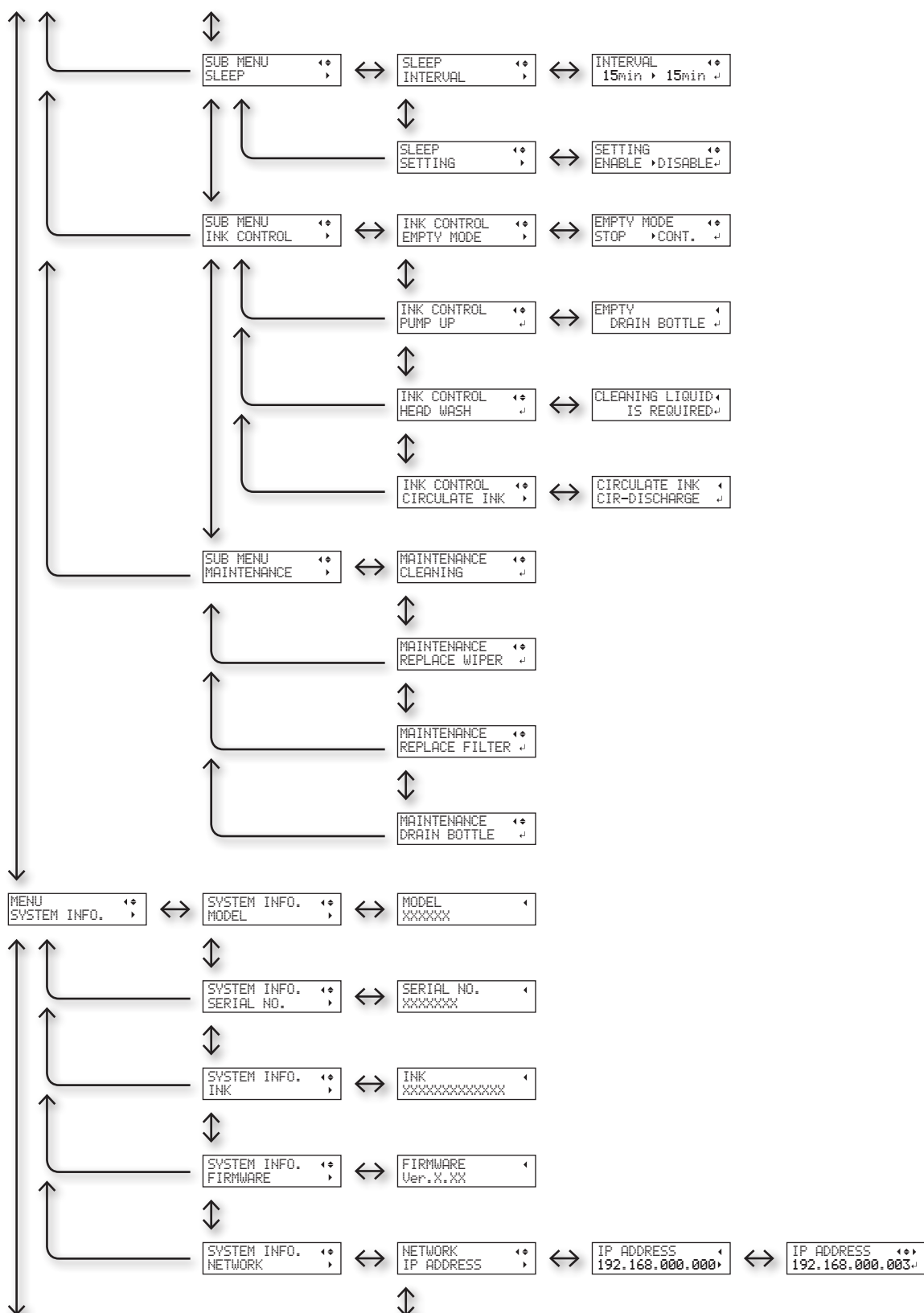
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Menu List

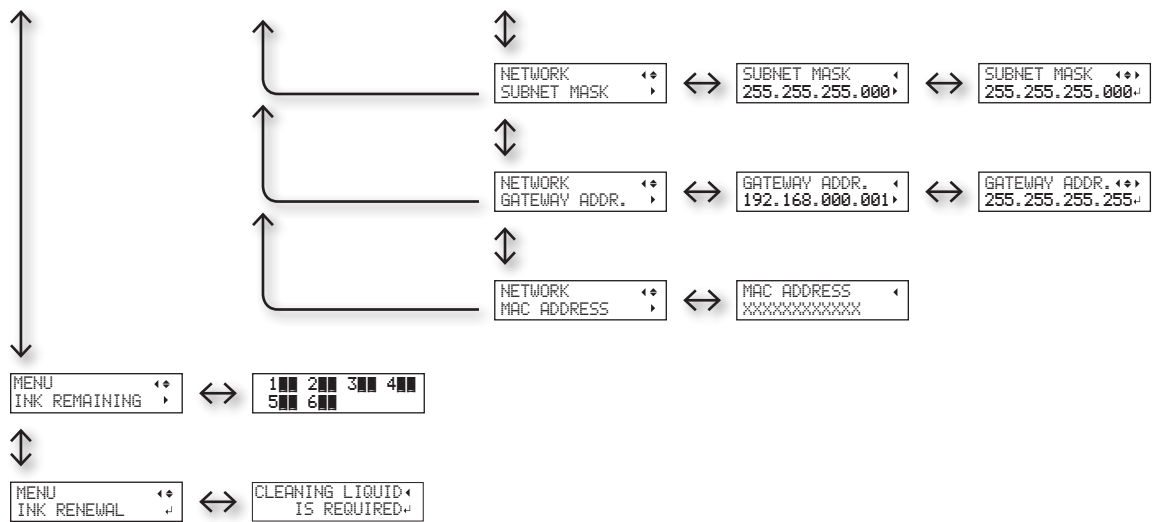
Main Menu

Press [MENU].



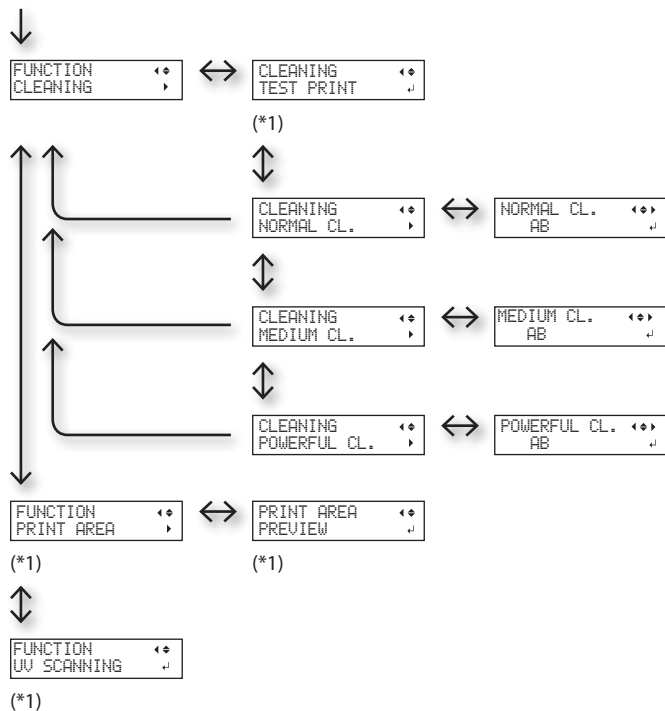


Menu List



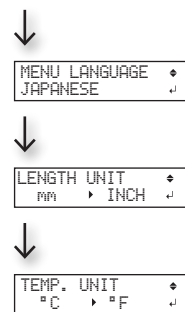
Function Menu

Press [FUNCTION].



Language and Unit Menu

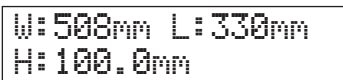
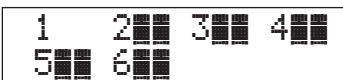
While holding down [MENU], switch on the sub power.



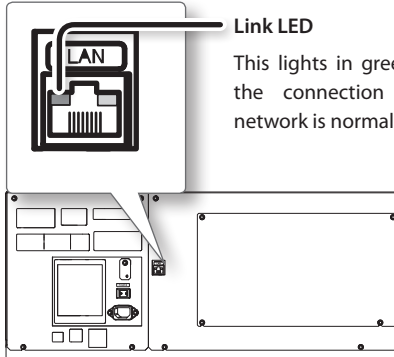
(*1) Not displayed if the setup of media is not completed (when [SETUP] is off or flashing).

Read This Section Whenever You Face a Problem (FAQ)

Printer Does Not Run

Problem	Items to check	Action	Page
The printer unit does not run	Is the power switched on?	Switch on the printer's main power, and then press the sub power switch and make sure the sub power switch lights.	• "STEP 1: Turning the Power On" (First Step Guide)
	Is [SETUP] lit?	If [SETUP] is not lit, the printer cannot print. Configure the settings all the way to the setting of the print area, close the front cover, and then press [SETUP].	• "Loading Media (Media Setup)" (First Step Guide)
	Are any covers open?	Close the front cover and panel cover.	—
	Is the top menu displayed?	If the top menu is not displayed, printing will not start even when data is sent from the computer. To go to the top menu, press [MENU], and then press [↵]. 	—
	Is [PAUSE] lit?	When [PAUSE] is lit, operation is paused. To resume, press [PAUSE]. [PAUSE] turns off and printing resumes.	• "Pausing or Canceling Printing" (First Step Guide)
	Has the ink run out?	When data is sent while the screen shown in the figure is displayed, a message appears and a warning beep sounds. At the same time, operation pauses. When the ink cartridge is replaced with a new one, printing starts. 	• "How to Replace the Ink Cartridges" (P. 40)
	Is a message displayed on the screen?	• "A Message Appears" (P. 62) • "An Error Message Appears" (P. 64)	
	Are the cables connected?	Connect the cables securely.	• "STEP 5: Connecting the Cables" (First Step Guide)

Read This Section Whenever You Face a Problem (FAQ)

Problem	Items to check	Action	Page
The printer unit does not run	Is the link LED lit?	<p>If the link LED for the Ethernet connector is not lit, the network connection has not been made correctly. Check whether the network routing is appropriate. Try connecting the computer and the machine to the same hub, or connecting them directly using a crossover cable. If this makes it possible to perform printing, it means the problem is in the network itself.</p> 	—
	Are the network settings correct?	If printing is not possible even though the link LED is lit, make sure the IP address and other settings are appropriate. The settings on both the machine and the computer must be appropriate. Redo the settings by checking that the IP address does not conflict with the IP address for another device on the network, that the port setting for the RIP & PRINT MANAGEMENT SOFTWARE specifies the IP address set on the machine, that the settings have no typing errors, and for other such problems.	<ul style="list-style-type: none"> • "STEP 8: Network Settings" (First Step Guide) • "Viewing Information about the System of This Machine" (P. 26)
	Has the RIP & PRINT MANAGEMENT SOFTWARE been exited?	Make sure that the RIP & PRINT MANAGEMENT SOFTWARE is running correctly, and then switch the sub power switch off and back on.	• "Roland VersaWorks Dual Installation Guide"
	Is the temperature of the room too low?	Use the machine in an environment with an ambient temperature of 20 to 32°C (68 to 90°F).	—
The flat table does not move	Is something stuck in one of the movable axes (X, Y, or Z)?	Check whether something has become caught and is interfering with operation.	—
	Are any covers open?	Close the front cover and panel cover during startup and printing. In the interest of safety, the flat table does not move if any cover is open during startup or printing.	—
The head gap sensor does not detect the media	Is something covering the head gap sensor or has it attracted dust?	Check whether something is interfering with the head gap sensor's detection.	—

Attractive Printing Is Impossible

Problem	Items to check	Action	Page
Printed results are coarse or contain horizontal stripes	Do the print heads show dot drop-out?	Carry out a printing test and make sure no dot drop-out occurs. If dot drop-out is present, perform cleaning of the print heads.	<ul style="list-style-type: none"> • "STEP 3: Printing Tests and Normal Cleaning" (First Step Guide) • "Medium and Powerful Cleaning" (P. 32) • "When Dot Drop-Out Cannot Be Cleared Up for White/Gloss Ink or Primer" (P. 42) • "Cleaning All Print Heads" (P. 44)
	Is the print mode suitable?	Try an appropriate print mode. Specific combinations of media and print mode may cause the colors to be uneven, and results may also vary greatly depending on the settings of your RIP & PRINT MANAGEMENT SOFTWARE (such as the color-profile selection). Select settings appropriate for the media you are using.	—
	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 drop-out 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 reduced printing quality and may even result in malfunctions.	—
	Is the media loaded and set up correctly?	If the media is not loaded correctly, printing may be adversely affected. Make sure the media is loaded and set up correctly.	<ul style="list-style-type: none"> • "1. Loading Media (Media Setup)" (First Step Guide) • "2. Setting the Height of the Media Automatically" (First Step Guide) • "Setting the Height of the Media Manually" (P. 8) • "Changing the Print Area" (P. 12)

Read This Section Whenever You Face a Problem (FAQ)

Problem	Items to check	Action	Page
Colors are unstable or uneven	Did you shake the ink cartridges before installing them?	Shake new ink cartridges 50 times (about 15 seconds) before you install them.	• "2. Insert the Ink Cartridges for the Respective Colors" (First Step Guide)
	Has the printer been used for a long time?	If, during use, the white ink concentration becomes low, use the [CIRCULATE INK] function.	• "Restoring the White Ink Concentration" (P. 41)
	Was printing paused part-way through?	When printing is paused, the coloring at the seam may be altered when printing resumes. Avoid pausing printing. With the factory default settings, printing pauses when an ink cartridge becomes empty. Printing may also pause 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 drop-out or reduced printing quality.	—
	Are the operating parameters set to appropriate values?	Depending on the setting of the [PERIODIC CL.] menu, uneven colors may occur. If the setting has been changed, try restoring it to its default value.	• "Preventing Soiling and Dot Drop-Out by Cleaning during Printing" (P. 17)
	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 printing. When printing, use the machine in a location where the temperature and humidity are stable.	—
	Are the settings for the [PRESET] menu item appropriate?	If the settings selected with the [PRESET] menu item are not suitable for the type of media, printing may be adversely affected. Choose settings optimized to the media you are using.	• "Saving Frequently Used Media Sizes (Preset Function)" (P. 6)
The media becomes soiled when printed	Are the print heads dirty?	The following may cause ink to drip on the media during printing: <ul style="list-style-type: none"> • Buildup of fibrous dust (lint) around the heads • Ink transferred to the heads due to rubbing against the media If this happens, perform manual cleaning. We recommend carrying out periodic cleaning of the heads.	• "Manual Cleaning" (P. 35)
	Is the humidity too low?	Use the machine in an environment with a humidity of 35 to 80%RH (no condensation).	—

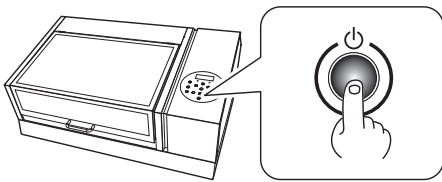
The Print Heads Do Not Move

If the print-head carriage stops anywhere other than the home position (the right side of the main unit), take action immediately to prevent the heads from drying out.

What to Do First

Switch the sub power off, then back on again.

If the print-head carriage moves to the home position (the right side of the main unit), the operation has ended successfully.



If the Print Heads Still Do Not Move

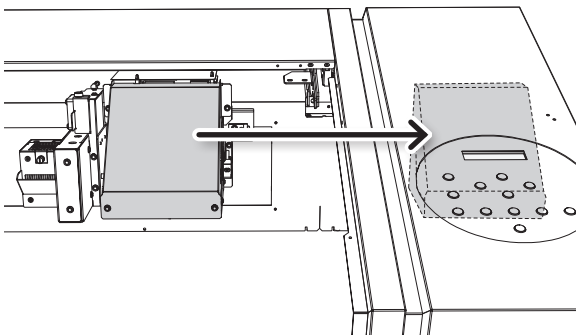
Try switching off the main power, then switching on the main power again, followed by the sub power.

If the print heads still do not move, carry out the following emergency response measure, then contact your authorized Roland DG Corp. dealer or us.

Procedure

1. Turn off the main power switch.
2. Open the front cover.
3. Gently move the print-head carriage to the home position by hand.

Stop when you hear the print-head carriage click into place.



4. Close the front cover.

Handling Messages and Error Messages

A Message Appears

These are the main messages that appear on the machine's display to prompt correct operation. They do not indicate any errors. Follow the prompts and take action accordingly.

Message	Explanation	Action	Page
1 2 ■ 3 ■ 4 ■ 5 ■ 6 ■	Only a small amount of ink remains.	Replace the ink cartridge indicated by the flashing number with a new cartridge.	—
PRESS THE POWER KEY TO CLEAN	This message appears when the machine has not been used for approximately a month.	Turn on the sub power once a month.	• "About Maintenance" (P. 28)
CIRCULATING INK	White ink is being circulated inside the machine. This action is automatically performed to clear the white ink precipitation.	Wait until the displayed message changes.	—
FINISHED PRINT	Printing is finished.	Press [ENTER].	• "Continuously Outputting Print Data" (P. 21)
SET CARTRIDGE	These messages appear during ink cartridge replacement and in similar situations.	Insert the ink cartridge indicated by the flashing number.	—
REMOVE CARTRIDGE		Remove the ink cartridge indicated by the flashing number.	—
CLOSE THE COVER DRY-UP MAY DAMAGE THE HEAD	The front cover or panel cover is open.	Close the front cover or panel cover or both. If the message is left displayed, the print heads may dry out, resulting in malfunction.	—
CLOSE THE FRONT COVER DRY-UP MAY DAMAGE THE HEAD	The front cover is open.		—
CLOSE THE PANEL COVER DRY-UP MAY DAMAGE THE HEAD	The panel cover is open.		—
SET CL-LIQUID	These messages appear at times such as during head cleaning.	Insert the SOL INK cleaning cartridge into the slot indicated by the flashing number.	—
REMOVE CL-LIQUID		Remove the SOL INK cleaning cartridge indicated by the flashing number.	—
INSTALL DRAIN BOTTLE	Check whether the drain bottle is installed.	Install the drain bottle, and then press [ENTER].	—
EMPTY DRAIN BOTTLE	This appears when a certain amount of discharged fluid collects in the drain bottle.	When this message is displayed, discard the discharged fluid.	• "Disposing of Discharged Fluid" (P. 30)

Message	Explanation	Action	Page
READJUST TABLE HEIGHT	During printing, the media came into contact with the gap sensor, but [CLEARANCE MODE] is set to [RE-ADJ], so the media height was reset automatically and printing was performed to completion.	After verifying the message, press [ENTER].	<ul style="list-style-type: none"> • "Setting the Height of the Media Manually" (P. 8) • "Changing the Print Area" (P. 12) • "Continuing Printing Even If Media Comes into Contact with the Head Gap Sensor" (P. 20)
SETUP MEDIA	This message appears when an attempt to perform a printing test was made while no media was loaded.	Reload the media and press [SETUP].	—
TIME FOR FILTER REPLACE	It is time to replace the filter.	After verifying the message, press [ENTER].	• "Replacing the Filter" (P. 48)
TIME FOR MAINTENANCE	It is time to perform manual cleaning.		• "Manual Cleaning" (P. 35)
TIME FOR WIPER REPLACE	It is time to replace the wipers.		• "Replacing the Wipers" (P. 46)

An Error Message Appears

This section describes the error messages that may appear on the machine's display and how to take action to remedy the problem. If the action described here does not correct the problem, or if an error message not described here appears, contact your authorized Roland DG Corp. dealer.

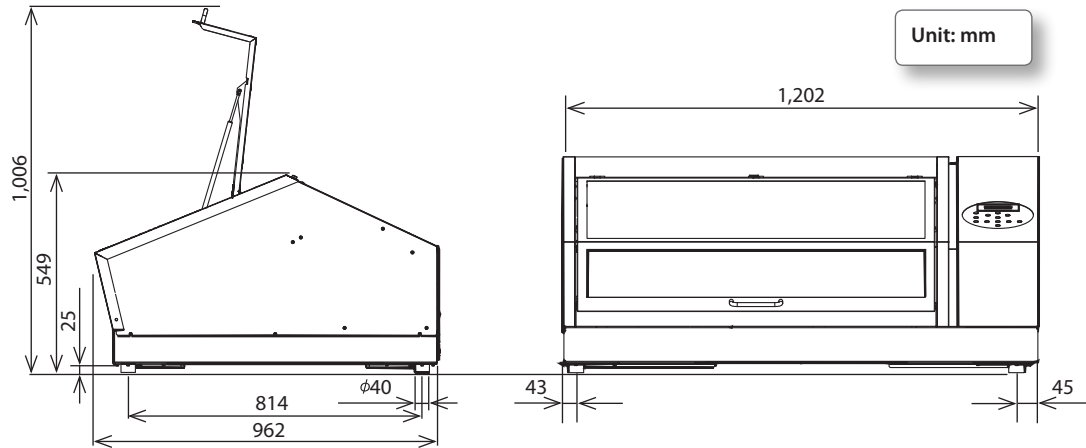
Message	Explanation	Action
AREA TOO SMALL CONTINUE?	The size of the data is larger than the print area of the loaded media	To continue printing without correcting this, press [ENTER]. The portion extending beyond the print area will not be printed. To stop printing, stop sending data from the computer and hold down [SETUP] for one second or longer. Make the print area wider by replacing the media with a larger piece of media or by changing the position of the media, and then send the data again.
PRINT AREA TOO SMALL	The size of the test print is larger than the print area of the loaded media.	Press any key on the operation panel to go back to the main menu. Make the print area wider by replacing the media with a larger piece of media or by changing the position of the media, and then send the data again.
CANCELED FOR TABLE HEIGHT	The media was detected in a position (at a height) at which it hits the print heads.	Press any key (except the sub power switch) on the operation panel to make the message disappear. If the setup of the media has been completed, the setup is canceled. Redo the setup. ☞ "1. Loading Media (Media Setup)" (First Step Guide) ☞ "2. Setting the Height of the Media Automatically" (First Step Guide) ☞ "Setting the Height of the Media Manually" (P. 8) ☞ "Changing the Print Area" (P. 12) ☞ "Continuing Printing Even If Media Comes into Contact with the Head Gap Sensor" (P. 20)
CHECK TABLE HEIGHT		Remove the media (remove the cause of the failure) or change its position. After verifying the message, press [ENTER]. ☞ "1. Loading Media (Media Setup)" (First Step Guide) ☞ "2. Setting the Height of the Media Automatically" (First Step Guide) ☞ "Setting the Height of the Media Manually" (P. 8) ☞ "Changing the Print Area" (P. 12) ☞ "Continuing Printing Even If Media Comes into Contact with the Head Gap Sensor" (P. 20)
TEMPERATURE IS TOO HIGH ***°C	The temperature of the location where the machine is installed has risen above the ambient temperature at which the machine can operate.	Operation cannot be continued. Turn off the sub power. The displayed temperature is the current ambient temperature of the installation location. 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.

Message	Explanation	Action
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 display screen, and then switch off the sub power. After you switch off the power, inform your authorized Roland DG Corp. dealer or Roland Corp. of the number that appeared on the display.
TEMPERATURE IS TOO LOW **°C	The temperature of the location where the machine is installed has fallen below the ambient temperature at which the machine can operate.	Operation cannot be continued. Turn off the sub power. The displayed temperature is the current ambient temperature of the installation location. 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.
DATA ERROR CANCELING...	Printing was stopped because a problem was found in the received data.	Operation cannot be continued. Check whether there is an error in the data. Check for a problem with the connector cable or the computer, and then redo the operations starting from the setup of the media.
WRONG CARTRIDGE	A cartridge that cannot be used was installed.	Remove the ink cartridge to clear the error. Use an ink cartridge of the specified type.
WRONG HEAD IS INSTALLED	An unusable print head has been installed.	Turn off the sub power. After switching off the power, contact your authorized Roland DG Corp. dealer.
AVOIDING DRY-UP TURN POWER OFF	The print heads were forced to the home position to prevent them from drying out.	Operation cannot be continued. Switch the sub power off, then back on. Opening the front cover while printing is in progress causes an emergency stop. Never allow the print heads to remain in this state.
MOTOR ERROR TURN POWER OFF	A motor error occurred.	Operation cannot be continued. Turn off the sub power. Next, eliminate the cause of the error, and then immediately switch on the sub power. If the machine is left with the error uncorrected, the print heads may dry out and become damaged. This error may be caused by the media being set incorrectly.
CANCELED FOR MOTOR PROTECTION	<p>An attempt was made to perform one of the following operations (menu items) immediately after performing another one.</p> <ul style="list-style-type: none"> • PUMP UP • HEAD WASH • INK RENEWAL • POWERFUL CL. • Filling with ink 	<p>Press any key other than the sub power switch to clear the error message.</p> <p>When performing these menu items sequentially, this error message may appear in order to prevent malfunctions due to the overheating of the pump motor.</p> <p>In this case, leave the machine alone for approximately 10 minutes before resuming operation.</p>

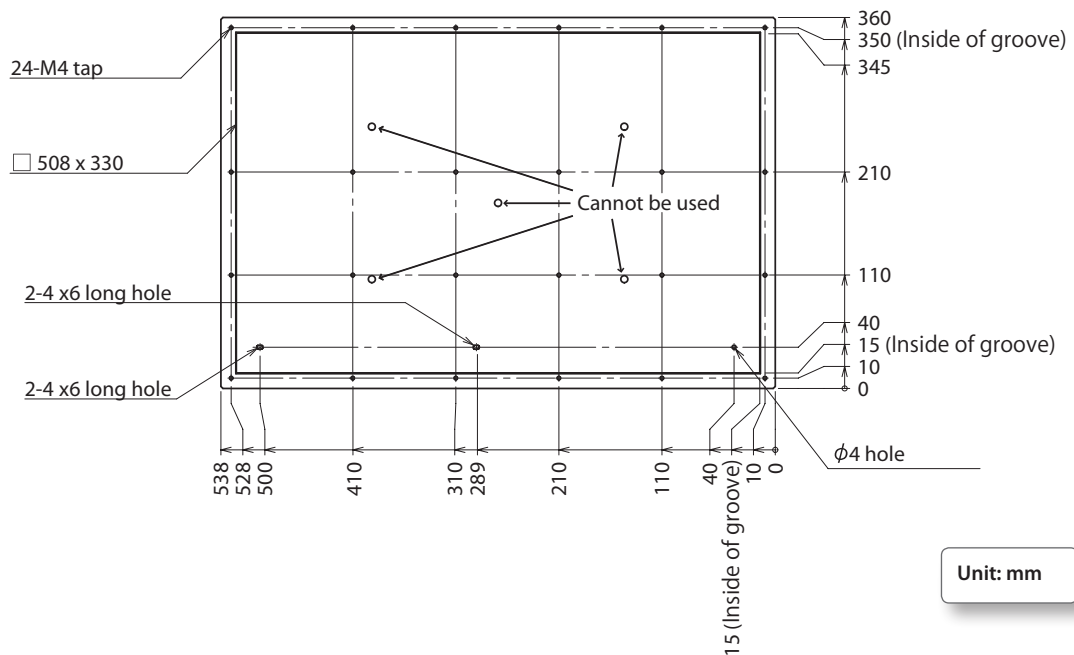
Main Specifications

Dimensional Drawings

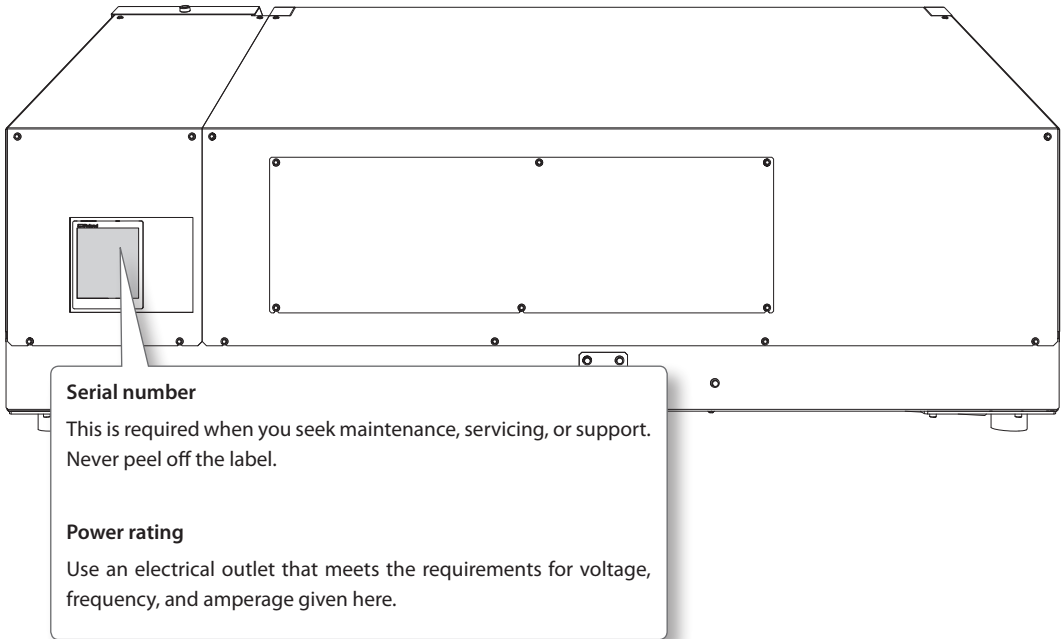
Outer dimensions



Flat Table Dimensions



Locations of the Power Rating and Serial Number Label



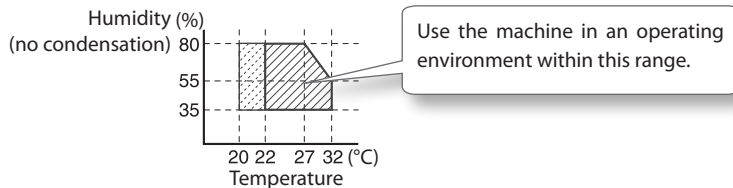
Main Specifications

Specification Table

		LEF-200
Printing technology		Piezoelectric inkjet
Acceptable media	Width	Max. 538 mm (21.2 in.)
	Length	Max. 360 mm (14.2 in.)
	Thickness	Max. 100 mm (3.94 in.)
	Weight	Max. 5 kg (11 lb.)
Maximum printing width/printing length		Maximum 508 (width) x 330 (length) mm (20 x 13 in.)
Ink cartridges	Types	ECO-UV (EUV, EUV4) 220 cc cartridge
	Colors	Five colors (cyan, magenta, yellow, black, and white)
		Five colors (cyan, magenta, yellow, black, and white) and primer Six colors (cyan, magenta, yellow, black, white, and gloss)
Ink-curing unit		Built-in UV-LED lamp
Print resolution (dpi)		Max. 1,440 dpi
Distance accuracy (*1)		Error of less than ±0.3% of distance traveled or ±0.3 mm (±11.8 mil), whichever is greater
Connectivity		Ethernet (10BASE-T/100BASE-TX, automatic switching)
Power-saving function		Automatic sleep feature
Power requirements		100 VAC ±10%, 1.8 A (50/60 Hz)
Power consumption	Power on	Approximately 149 W
	Sleep mode	Approximately 13 W
Acoustic noise level	Power on	60 dB (A) or less
	During standby	49 dB (A) or less
Outer dimensions		1,202 (width) x 962 (depth) x 549 (height) mm (47.4 x 37.9 x 21.7 in.)
Weight		110 kg (242.5 lb.)
Environment	During operation (*2)	Temperature: 20 to 32°C (68 to 90°F) (22°C [72°F] or higher recommended), 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 item		Power cord, RIP & PRINT MANAGEMENT SOFTWARE (Roland VersaWorks Dual), user documentation, pad trays, etc.

*1 Temperature: 25°C (77°F), humidity: 50%RH

*2 Operating environment



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