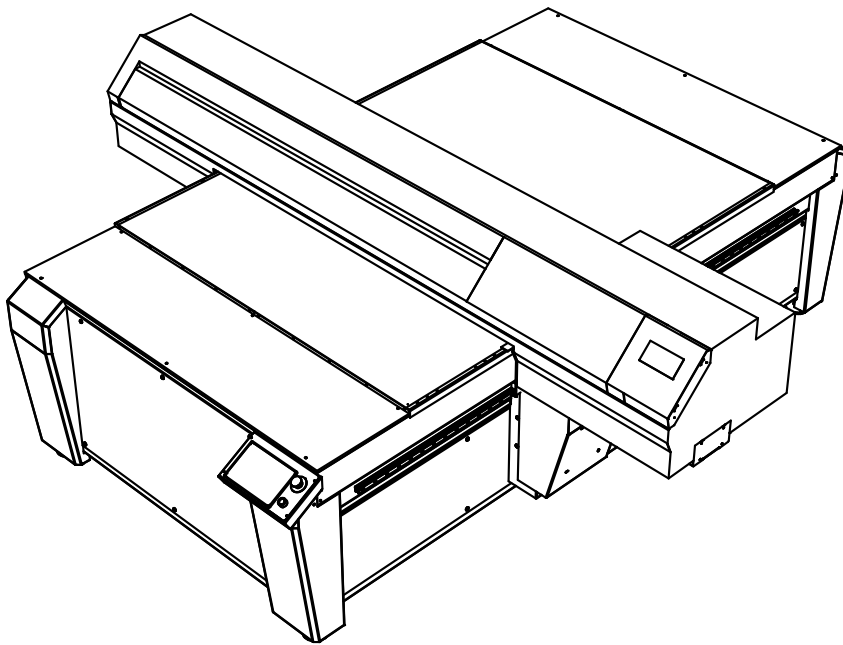


UV LED PRINTER **VersaUV**

LEJ-640 F

User's Manual



Thank you very much for purchasing this product.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
 - Unauthorized copying or transferral, in whole or in part, of this manual is prohibited.
 - The contents of this operation manual and the specifications of this product are subject to change without notice.
 - The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform us.
 - Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.
 - Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.
-

Roland DG Corporation

This product is using GNU General Public License (GPL) / GNU Lesser General Public License (LGPL) soft-ware. You have the right to acquire, modify, and distribute the source code for this GPL/LGPL software. You can obtain the GPL/LGPL source code used in this product by downloading it from the following website.

URL: <http://www.rolanddg.com/gpl/>

Roland DG Corp. has licensed the MMP technology from the TPL Group.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

Use only I/O cables that have been designed and manufactured specifically for this device.

For Canada

NOTICE

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For California

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm.

For EU Countries

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

For EU Countries



Manufacturer:

ROLAND DG CORPORATION

1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi, Shizuoka-ken, 431-2103 JAPAN

The authorized representative in the EU:

Roland DG Corporation, German Office Halskestrasse 7, 47877 Willich, Germany

NOTICE

Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn out cord immediately.

Operating Instructions

KEEP WORK AREA CLEAN. Cluttered areas and benches invites accidents.

DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.

DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and like.

REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure the switch is in off position before plugging in.

USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.

NEVER LEAVE TOOL RUNNING UNATTENDED. **TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

Contents

Contents	3
Chapter 1 Machine Highlights	5
Part Names and Functions	6
Printer Unit	6
Operation Panel	7
The Power-saving Feature (Sleep Mode)	8
Control Panel - Table	9
Menu List	11
Main Menu	11
Language and Unit Menu	15
Cleaning Menu	15
⚠ To Ensure Safe Use	16
Important Notes on Handling and Use	24
Printer Unit	24
Ink Cartridges	25
Chapter 2 Basic Operation	26
Prepare the Media	27
Type of Media	27
Usable Media	28
Switch On Loading Media	29
Switch On	29
Setup of Media	35
About [MEDIA SETTING] menu	35
Setup of Media ([MEDIA SETTING] menu)	35
Outputting	38
Printing Tests and Normal Cleaning	38
Getting Ready to Receive Data from a Computer	40
Starting Output	41
Pausing and Canceling Output	42
Switch Off	43
Switch Off	43
Chapter 3 Maintenance: For always using the printer in the best condition..	44
Checking for Remaining Ink and Replacing Cartridges	45
Checking for Remaining Ink	45
How to Replace Ink Cartridges	46
Automatic Maintenance Feature	48
Automatic Maintenance Feature and Notes	48
Maintenance that Should Be Performed Daily	49
Maintenance of Ink Cartridges	49
Disposing of Discharged Ink	50
About Care and Maintenance of Print Head	52
When Normal Cleaning Is Not Effective	53
Medium/ Powerful Cleaning	53
Maintenance that Should Be Performed Weekly	55
When Manual-Cleaning Becomes Necessary	55
Performing Manual Cleaning	56
When the Dot Drop-Out of White Ink Cannot be Cleared	62
White Ink Replacement	62

Replacing Consumable Parts.....	64
Replacing the Wiper	64
When Not in Use for a Prolonged Period	68
Keep Performing Maintenance	68
Alarm Feature	68
Important Note on Draining Ink	68
Chapter 4 Detailed Setting	69
Fully Utilizing Preset Function	70
Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)...	70
Saving the Various Settings to the Preset	73
Loading a Saved Preset	74
Assigning a Name to a Preset.....	74
Fully Utilizing the Correction Function.....	76
Correcting for Misalignment in Bidirectional Printing.....	76
Correcting for Misalignment in Bidirectional Printing More Precisely	77
Accommodating to the Types and Condition of Media	78
Adjusting Head Height to Match Media Thickness.....	78
Expanding the Printing Area by Reducing the Margins.....	79
Speeding Up Output for Narrow Media	80
Preventing Soiling of the Media and Dot Drop-out.....	82
Switching the Ink Type	83
Restrictions on Switching Ink Type	83
Method for Switching the Ink Type.....	84
Chapter 5 Printing Administration	87
Printing with Crop Marks	88
Printing with Crop Marks.....	88
Output Operation Management.....	89
Printing a System Report.....	89
Determining What Happens When Ink Runs Out	89
Displaying the Amount of Media Remaining.....	90
Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed	91
Printing the Amount of Remaining Media	92
System Management of Printer	93
Setting the Interval until Activation of the Sleep Mode (Power Saving Function).....	93
Deactivating the Sleep Mode (Power Saving Function).....	93
Viewing Information about the System of This Machine	94
Returning All Settings to Their Initial Values.....	95
Chapter 6 Read this chapter whenever you face a problem. (FAQ).....	96
The Machine Doesn't Run.....	97
The Printer Unit Doesn't Run.....	97
Attractive Printing is Impossible	99
Printed Results Are Coarse or Contain Horizontal Stripes	99
Colors Are Unstable or Uneven	100
The Media Becomes Soiled or Damaged When Printed.....	101

Media Jam Occurs	102
The Media Jams.....	102
Media Feed is Not Smooth.....	103
Media Wrinkles or Shrinks	103
The Print Heads Stopped Moving	104
What to Do First	104
If the Heads Still Do Not Move.....	104
A Message Appears	107
An Error Message Appears	109
Chapter 7 Main Specifications.....	111
Locations of the Power Rating and Serial Number Labels.....	112
Specifications	113
Vacuum Specifications	116

Chapter 1

Machine Highlights

Part Names and Functions	6
Printer Unit	6
Operation Panel	7
The Power-saving Feature (Sleep Mode)	8
Control Panel - Table	9
Menu List	11
Main Menu	11
Language and Unit Menu	15
Cleaning Menu	15
 To Ensure Safe Use	16
Important Notes on Handling and Use	24
Printer Unit	24
Ink Cartridges	25

Part Names and Functions

Printer Unit

Front

Front cover 1
Be sure to close this when you perform printing.

Side cover
You remove this when you perform maintenance.

Loading lever
You operate this when you load media.

Maintenance cover
You remove this when you perform cleaning of the print heads.

Operation panel
P. 7, "Operation Panel"

Rear

Main power switch

Power-cord connector

Cartridge slots
There are where ink cartridges are installed.

Ink cartridge cover
Be sure to close this cover except when absolutely necessary, such as when you are replacing ink cartridges.

Drain bottle

Link LED

This lights up green when the connection to the network is correct.

Status LED

This flashes yellow while data is being received from the network.

Ethernet connector

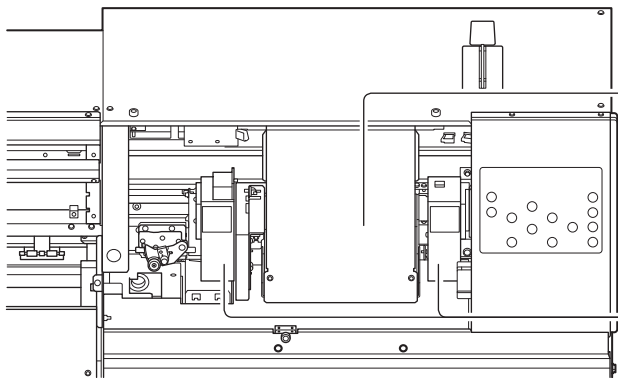
This is used to connect the printer to a network.

Ventilating equipment attachment opening

This is where air intake is performed to lessen the characteristic odor of inks. Ventilating equipment is required separately.

P. 10 "Setup guide"

Print head periphery



Print-head carriage
The print heads are inside this.

UV emitter
This is the ultraviolet (UV) LED. It emits light only during printing.

Operation Panel

Display screen
This displays various setting menus and other information.

TEST PRINT key
Holding this down for one second or longer performs a printing test.

CLEANING key
You use this to perform cleaning of the print heads.

BUSY light
This lights up during printing and other such operations.

W XXXX mm

BASE POINT key
You use this when you want to set the output-start location. This lights up when the setting has been made.

SETUP key
You press this when you load media. This lights up when media is loaded and the machine is ready to perform output.

PAUSE key
This pauses the output operation. This lights up when operation is paused.

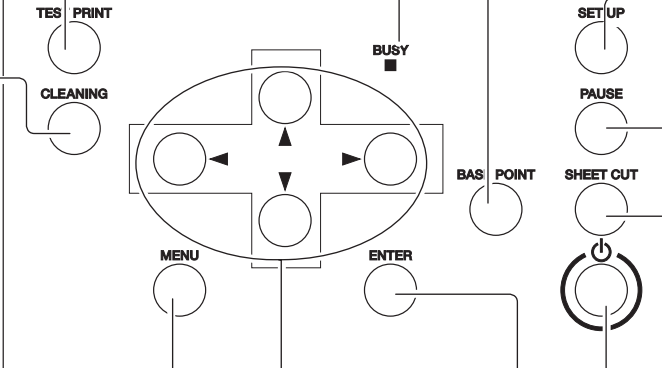
SHEET CUT key
Holding this down for one second or longer cuts off media.

Sub power switch
This switches the printer on and off. (To switch the printer off, you hold down the switch for one second or longer.) This flashes slowly when the machine is in the sleep mode.

ENTER key
You use this for such tasks as enabling setting values.

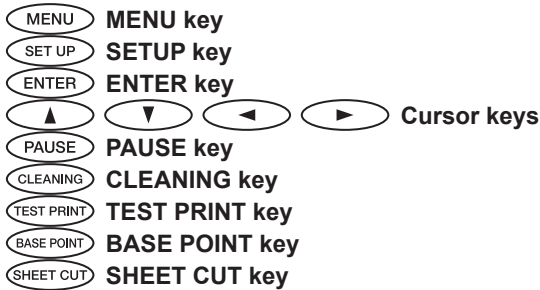
Cursor keys
You use these to select settings for menu items, to move the media, and for other such operations.

MENU key
You press this to enter the menus for various settings.



Panel Notation

In this document, the keys and lights on the operation panel are indicated by the following images.



The Power-saving Feature (Sleep Mode)

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 the sleep mode is 30 minutes. When the machine is in the sleep mode, the sub power switch flashes slowly. Using the operation panel or performing operations such as sending print data from the computer (when media is loaded) restores the machine to its normal mode.

This setting of sleep mode can be changed. However, we recommend leaving the power-saving feature on and setting the activation time for the sleep mode to 30 minutes or less to reduce power consumption and so on.

☞ P. 93, "Setting the Interval until Activation of the Sleep Mode (Power Saving Function)," p. 93, "Deactivating the Sleep Mode (Power Saving Function)"

Control Panel - Table

2e – Alphanumeric Keys

When these are pushed, they allow to set numeric or alphanumeric data.

2g – HOME Key

When this is pushed, it places the printing bar in the last origin set.

2h – DEL Key

When pushed it deletes the numeric or alphanumeric data.

2c - Display

It displays all the actions being executed.

2d - Commands Keys

When pushed they activate the command related to the display.

2n – Arrows Keys

They have 2 functions:

- The first is used to move the printing unit,
- the right arrow, when pushed, moves the printing unit forward
- the left arrow, when pushed, moves the printing unit backward
- the top arrow, when pushed, raises the printing unit
- the low arrow, when pushed, lowers the printing unit

In the second function, when they are pushed, they move from one parameter to the other.

2p – ESC Key

When pushed is cancels the last operation.

2a – Emergency/Stop Key

When pushed, it stops immediately all the phases of the machine, cutting the tension. When rearmed it doesn't restart the machine but allows the insertion of tension.

2m – SHIFT Key

It is used at the same time of other keys and it assumes specific functions.

2o – ENT Key

When pushed it confirms the numeric or alphanumeric data inserted.

2b – Start Key

When pushed it allows the start of the machine. When the symbol  is active it means that to work you need to push the Start Key, this will allow to act on the commands of the table commands panel.

Definition: DISPLAY Symbols



When pushed it allows to enter the printing mode.



When pushed it allows to enter in the machine parameters.



When pushed it allows to enter in the machine settings.



When it is visualized it means that there are problems/errors or there is an emergency key armed (to debug it you need to rearm it and then push the green key to start).



When pushed it allows to get back to the earlier screen page.

↓+0161.900

DOWNLOAD
SEQUENCE
RETURN
STRATIFY

Printing Mode:

When the printing job is completed, the unit will place itself in the position of pick up of the printed material. It gives the possibility to work continuously.
At the end of the work the unit will place itself at the starting point, ready to start a new printing cycle.
It is used to simulate a 3D kind of printing, where the printing action is repeated as many times as it is wished.

1 2 3 4 5 6



Indicates the vacuum zone which you wish to enable.



When pushed it is used to reset the axes.

↓+0161.900

Indicates the height from the head to point 0 of the plane.

↓+0000.000



Indicates the longitudinal position of the printing unit.

When pushed it allows to switch on the laser pointer.



It indicates that the laser pointer is switched on.



When pushed it allows to set the height manually measured of the material to be printed.



When pushed it allows to select the printing mode.



When pushed it allows to select the start of the printing cycle.



When pushed it allows to confirm the height of the measured material.



When pushed it allows to disable the selected function.



When pushed it confirms the selected function.



It indicates that the data are protected by the password, actions limited to technical personnel.



When pushed it allows to move from one screen page to the other.

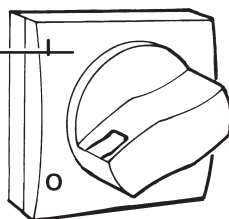


When pushed it allows to move from one screen page to the other.

General Switch

General Switch

- In vertical position "ON" it feeds the electric line.
- When turned to the left (in position "OFF") disconnects all the electric line.

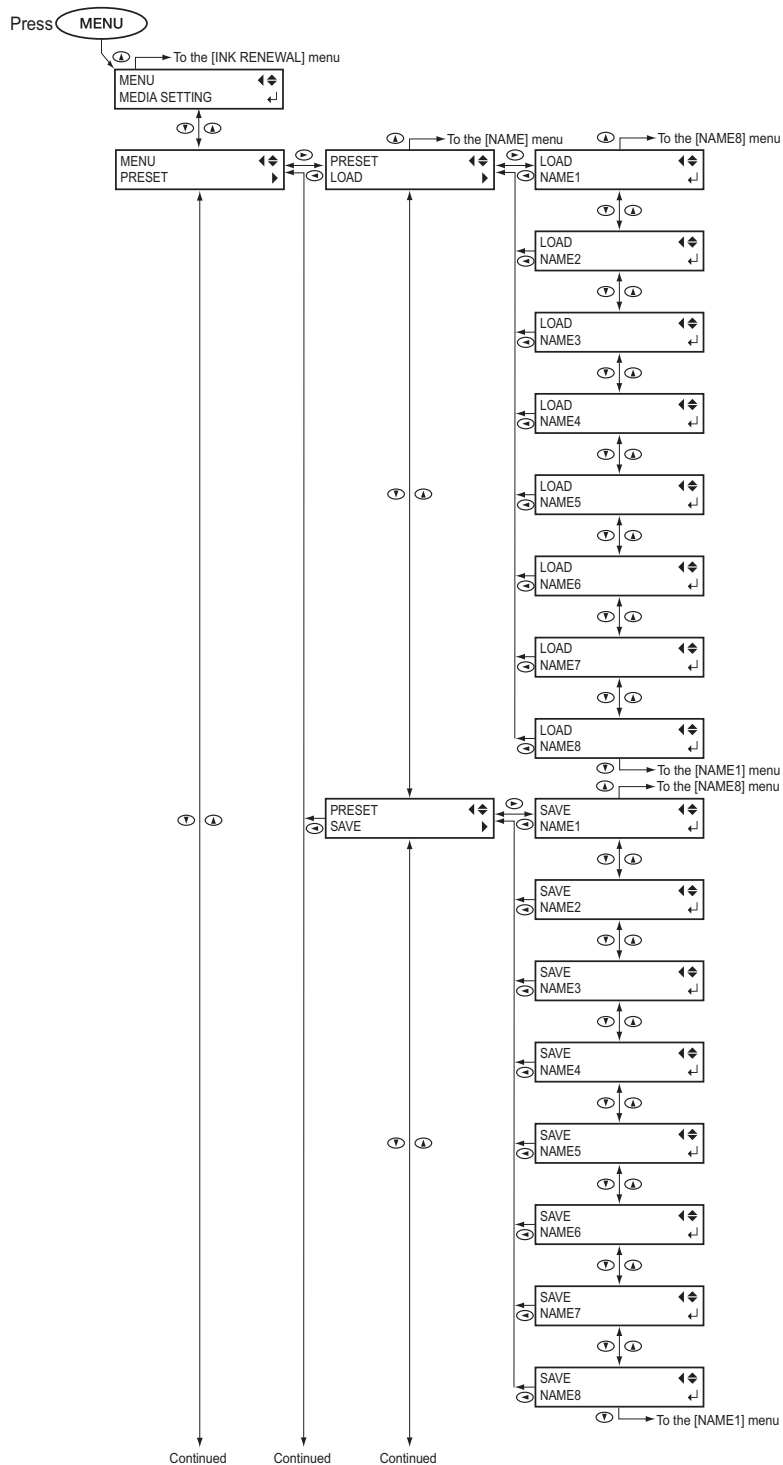


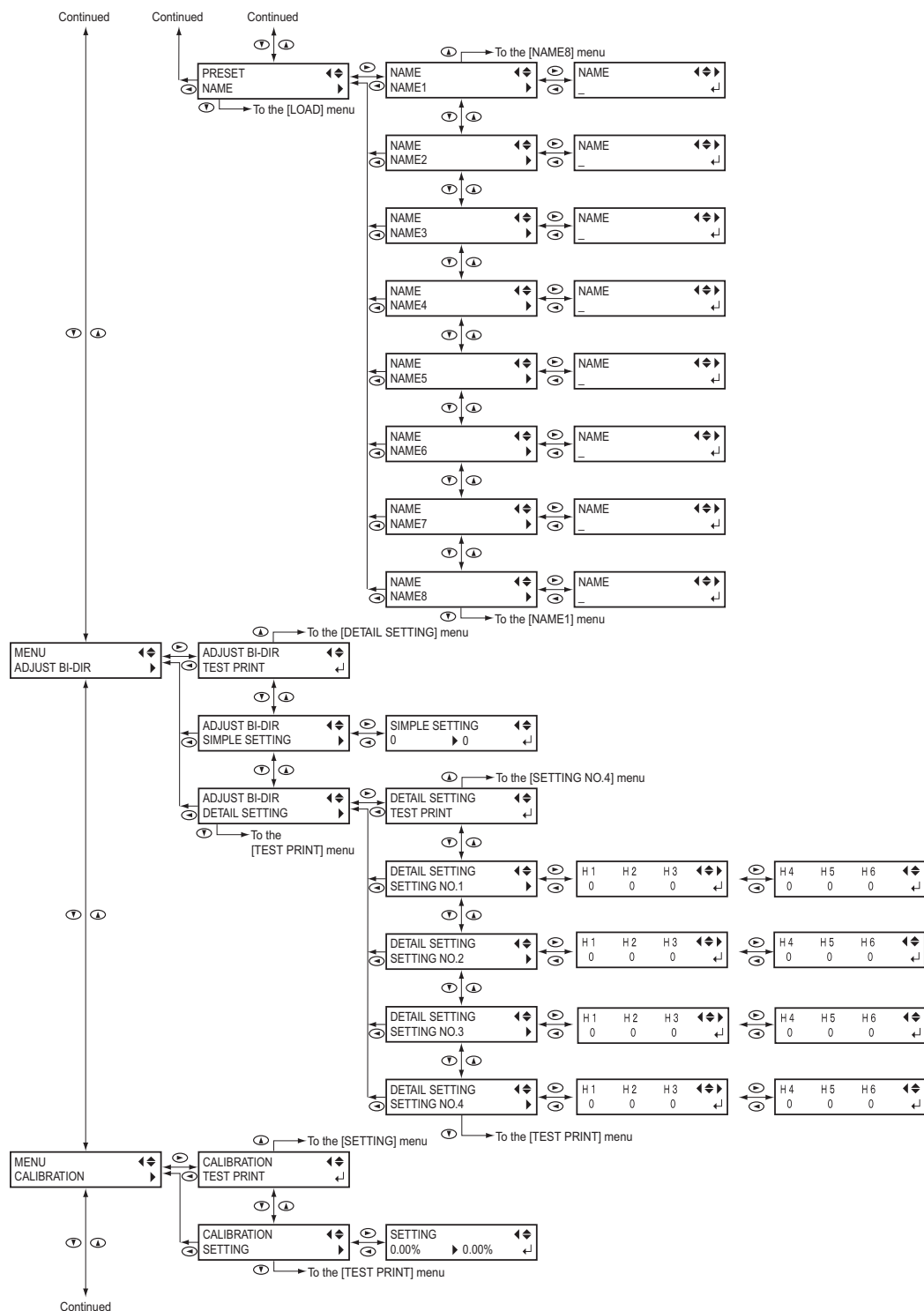
Key of the General Electric Panel

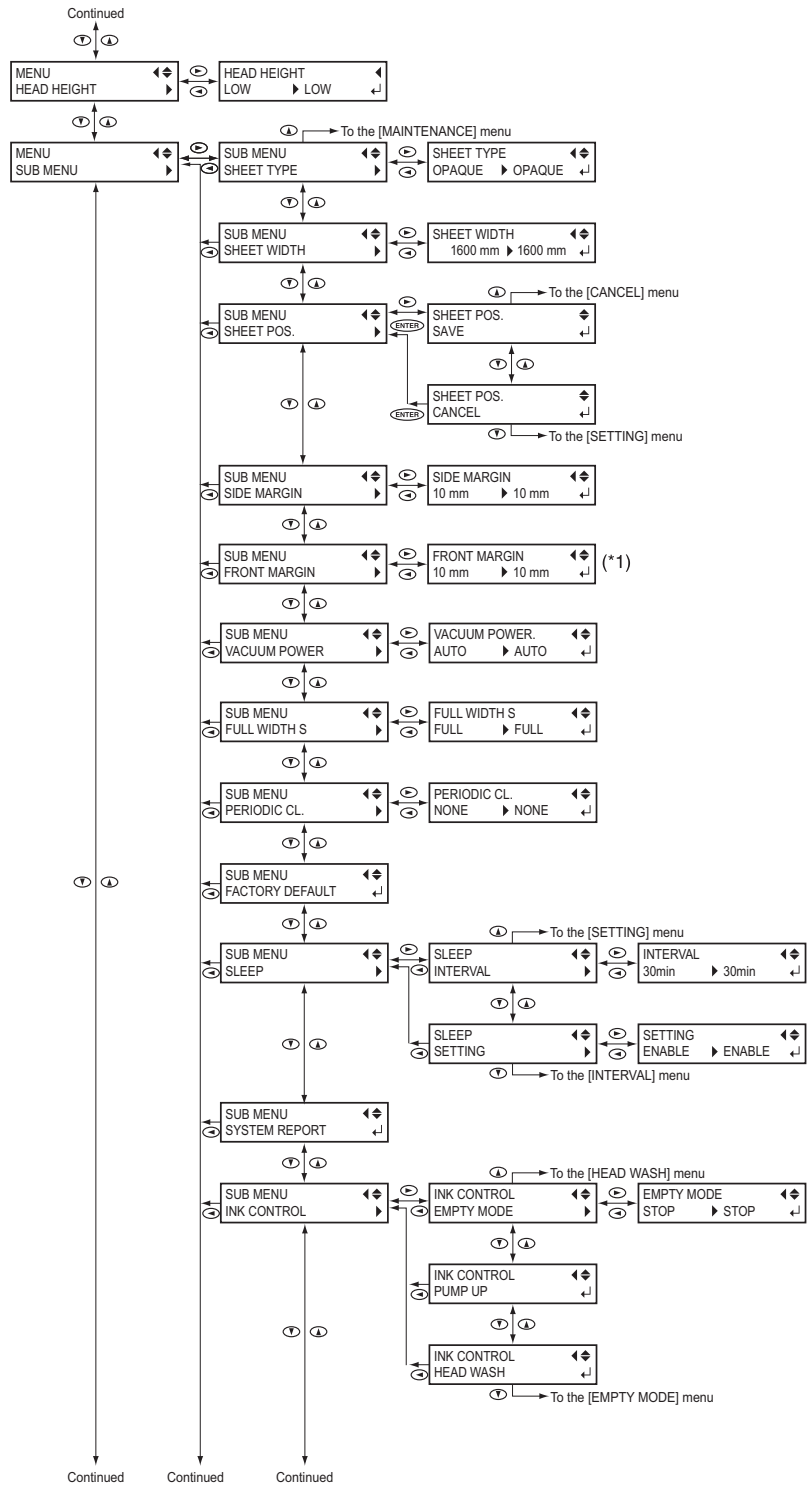
Key provided only and exclusively to the responsible of the electric installation who should keep it always with him.
It is absolutely forbidden to unauthorized personnel to open the electrical panel.
For more security the key doesn't open the panel if the general switch is not in the "OFF" position.

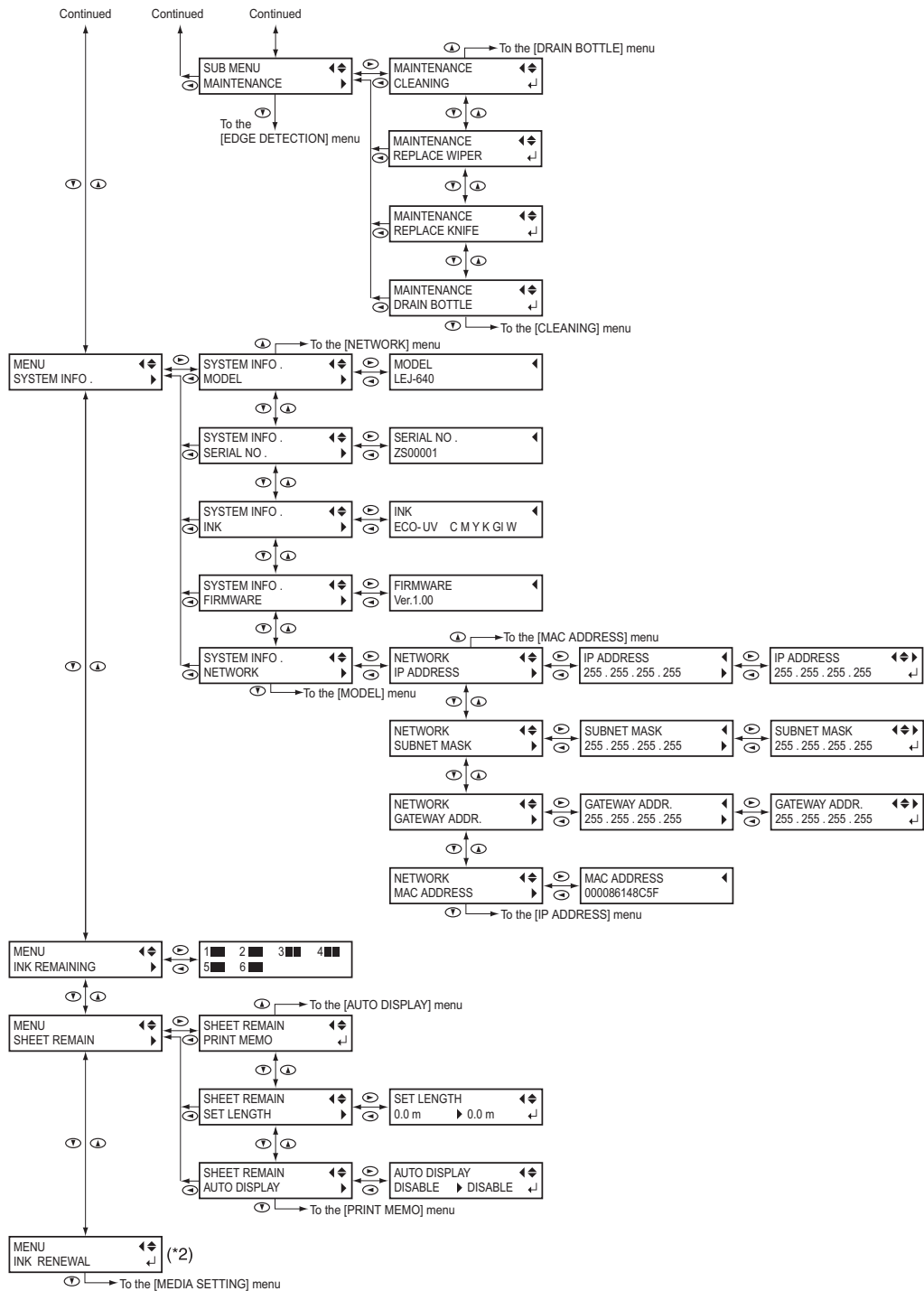
Menu List

Main Menu





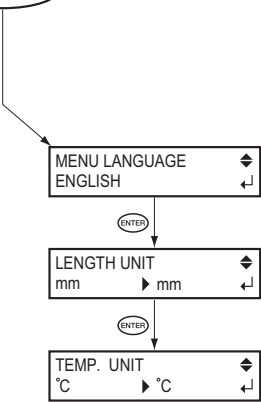




(*2) This is not displayed when "CMYKGIGI" (cyan, magenta, yellow, black, gloss, gloss) is selected as the ink mode.

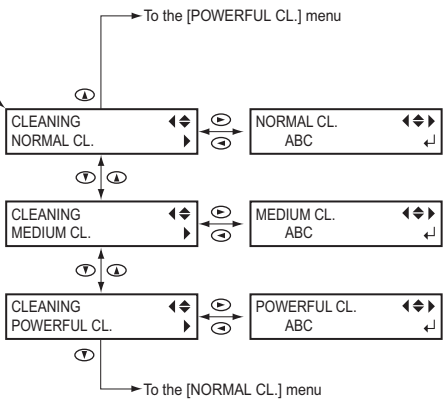
Language and Unit Menu

Hold down **MENU** and switch on the sub power.



Cleaning Menu

Press **CLEANING**.



Hold down **CLEANING** for one second or longer.

Normal cleaning for all print heads

To Ensure Safe Use

Improper handling or operation of this machine may result in injury or damage to property. Points which must be observed to prevent such injury or damage are described as follows.

About WARNING and CAUTION Notices

 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. Note: Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

	The  symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. The symbol at left means "danger of electrocution."
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. The symbol at left means the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. The symbol at left means the power-cord plug must be unplugged from the outlet.

 Incorrect operation may cause injury

 WARNING



Be sure to follow the operation procedures described in this documentation. Never allow anyone unfamiliar with the usage or handling of the machine to touch it.

Incorrect usage or handling may lead to an accident.



Keep children away from the machine.

The machine includes areas and components that pose a hazard to children and may result in injury, blindness, choking, or other serious accident.



Never operate the machine while tired or after ingesting alcohol or any medication.

Operation requires unimpaired judgment. Impaired judgment may result in an accident.



Never use the machine for any purpose for which it is not intended, or use the machine in an undue manner that exceeds its capacity.

Doing so may result in injury or fire.



For accessories (optional and consumable items, power cord, and the like), use only genuine articles compatible with this machine.

Incompatible items may lead to an accident.



Before attempting cleaning, maintenance, or attachment or detachment of optional items, disconnect the power cord.

Attempting such operations while the machine is connected to a power source may result in injury or electrical shock.



WARNING



Never attempt to disassemble, repair, or modify the machine.

Doing so may result in fire, electrical shock, or injury. Entrust repairs to a trained service technician.



CAUTION



Exercise caution to avoid being pinched or becoming caught.

Inadvertent contact with certain areas may cause the hand or fingers to be pinched or become caught. Use care when performing operations.



Never attempt operation while wearing a necktie, necklace, or loose clothing. Bind long hair securely.

Such items may become caught in the machine, resulting in injury.



Conduct operations in a clean, brightly lit location.

Working in a location that is dark or cluttered may lead to an accident, such as becoming caught in the machine as the result of an inadvertent stumble.



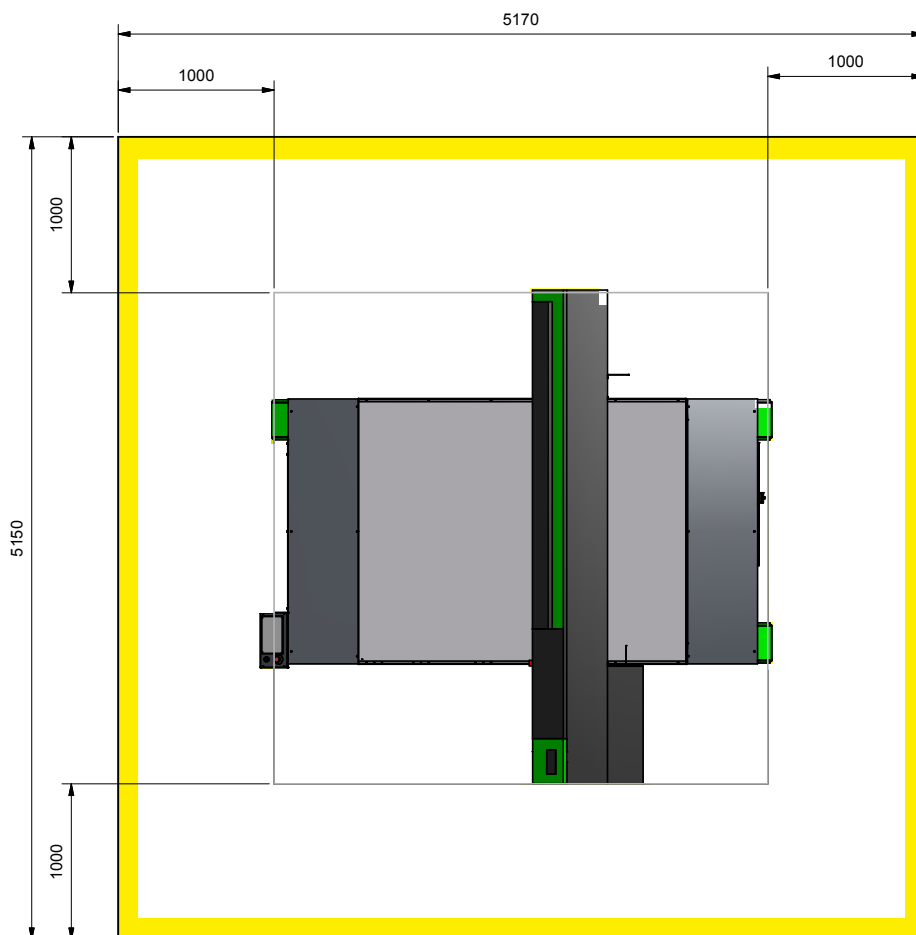
Never climb or lean on the machine.

The machine is not made to support a person. Climbing or leaning on the machine may dislodge components and cause a slip or fall, resulting in injury.

 The plotter movement system could hit or make damages to objects or people when they are located in the working area of the machine.

To avoid such a risk it is needed:

- Signal the working area of LEJ-640 F by making a rectangle with a continuous yellow strip on the floor. Such rectangle must represent a distance of at least one meter from the maximum encumbrance at each side of the machine and identifies the working area of LEJ-640 F;
- inside such a rectangle there must not be structural elements of the building or fixed or mobile parts of other machines present in the room; also there cannot be stored materials both free or placed on pallet, nor other material also of small dimension that could represent a risk of hindrance during the work:
the working area must remain constantly free during the entire period of use. Such a prescription must be verified before the machine is put in service;
- In case of ingestion, do not stimulate vomit but immediately consult a medical doctor. Forcefully stimulating vomit could create a risk of suffocation.
- The operator must operate along the perimeter of the machine but always taking care of the plotter movements: such movements are slow but could become a risk of hit or contact with the operator during the various printing phases; the operator must always keep a distance of at least one meter from the plotter. In case the odour creates physical discomfort, go to a well aired area and lie down. In case the feeling of dizziness or nausea persists, consult a medical doctor.

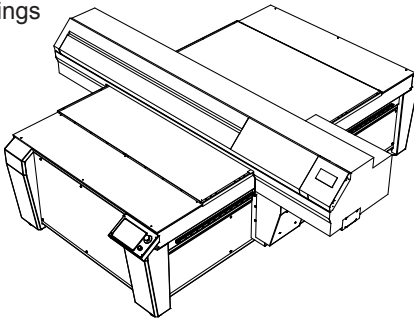


 Danger of electrical short, shock, electrocution, or fire

 WARNING

-  **Connect to an electrical outlet that complies with this machine's ratings (for voltage, frequency, and current).**
Incorrect voltage or insufficient current may cause fire or electrical shock.

Ratings



-  **Never use out of doors or in any location where exposure to water or high humidity may occur. Never touch with wet hands.**
Doing so may result in fire or electrical shock.

-  **Never allow any foreign object to get inside. Never expose to liquid spills.**
Inserting objects such as coins or matches or allowing beverages to be spilled into the ventilation ports may result in fire or electrical shock. If anything gets inside, immediately disconnect the power cord and contact your authorized Roland DG Corp. dealer.

-  **Never place any flammable object nearby. Never use a combustible aerosol spray nearby. Never use in any location where gases can accumulate.**
Combustion or explosion may be a danger.

 WARNING

-  **Handle the power cord, plug, and electrical outlet correctly and with care. Never use any article that is damaged.**
Using a damaged article may result in fire or electrical shock.

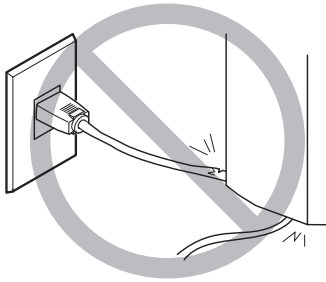
-  **When using an extension cord or power strip, use one that adequately satisfies the machine's ratings (for voltage, frequency, and current).**
Use of multiple electrical loads on a single electrical outlet or of a lengthy extension cord may cause fire.

-  **Connect to ground.**
This can prevent fire or electrical shock due to current leakage in the event of malfunction.

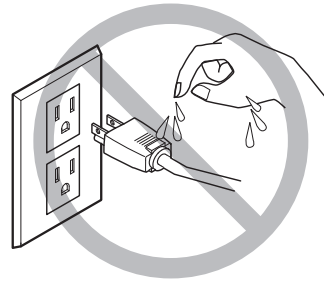
-  **Position so that the power plug is within immediate reach at all times.**
This is to enable quick disconnection of the power plug in the event of an emergency. Install the machine next to an electrical outlet. Also, provide enough empty space to allow immediate access to the electrical outlet.

-  **If sparking, smoke, burning odor, unusual sound, or abnormal operation occurs, immediately unplug the power cord. Never use if any component is damaged.**
Continuing to use the machine may result in fire, electrical shock, or injury. Contact your authorized Roland DG Corp. dealer.

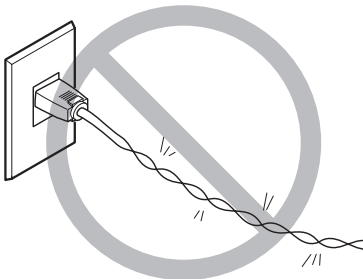
 Important notes about the power cord, plug, and electrical outlet



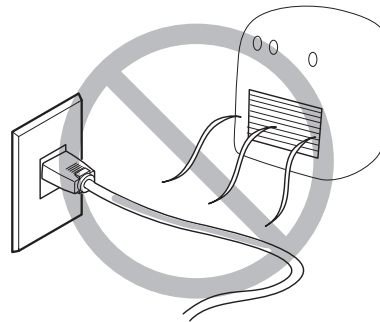
Never place any object on top or subject to damage.



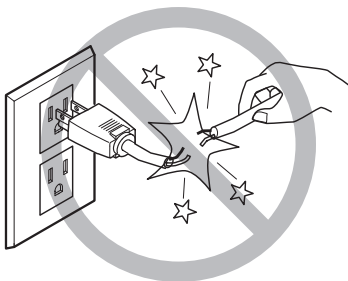
Never allow to get wet.



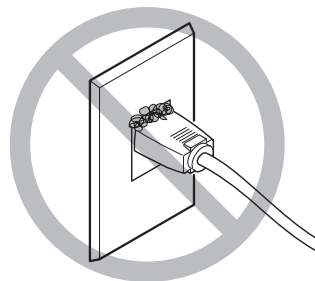
Never bend or twist with undue force.



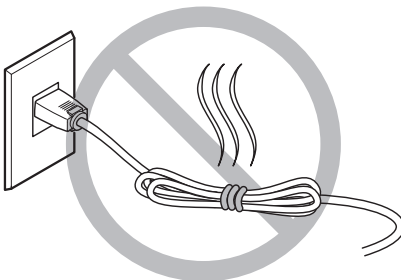
Never make hot.



Never pull with undue force.



Dust may cause fire.



Never bundle, bind, or roll up.

 Ink, cleaning fluid, and discharged fluid are flammable and toxic

 WARNING



Keep open flame away from the work area.

Ink and discharged fluid are flammable.



Never store ink, cleaning fluid, 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.



Never place an ink cartridge in fire.

Ink may flow out, catch fire, and spread fire to other nearby objects.

 WARNING



Never drink or sniff ink, cleaning fluid, or discharged fluid, or allow them to come in contact with the eyes or skin.

Doing so may be hazardous to the health.

 CAUTION



Ensure adequate ventilation for the work area.

Failing to perform ventilation may result in a health hazard or danger of combustion due to ink fumes.



Never allow an ink cartridge to be subjected to impact, and never attempt to disassemble.

Ink may leak.

 In the event of ingestion or physical distress

- In the event of contact with the eyes, immediately flush with water for at least 15 minutes. If eye irritation continues, seek treatment by a physician.
- In the event of contact with skin, immediately wash with soap. If irritation or inflammation occurs, seek treatment by a physician.
- In the event of ingestion, do not induce vomiting, and immediately seek treatment by a physician. Forcibly inducing vomiting may lead to danger of choking.
- If odor leads to physical distress, move to a well-ventilated location and rest quietly. If dizziness or nausea persists, seek treatment by a physician.

 **This machine weighs 400 kg (882 lb.). Media weighs 40 kg (88 lb.).**

WARNING



Install the machine in a location that is level, stable, and able to bear the weight of the machine.

The total weight of the machine may reach 1000 kg or more. Installation in an unsuitable location may cause a major accident, including tip over, fall, or collapse.



Unloading and emplacement are operations that must be performed by 6 persons or more.

Tasks that require undue effort when performed by a small number of persons may result in physical injury. Also, if dropped, such items may cause injury.

WARNING



When storing media, implement adequate safety measures to ensure that the stored media will not roll, fall, or topple over.

Danger exists of becoming pinned under the media and suffering serious injury.

 **This machine uses ultraviolet light.**

CAUTION



Never look at the blue-white (ultraviolet) light emitted from the print-head area for an extended time.

Looking directly at the ultraviolet light from up close for an extended period may result in eye injury.

Caution: Ultraviolet Light

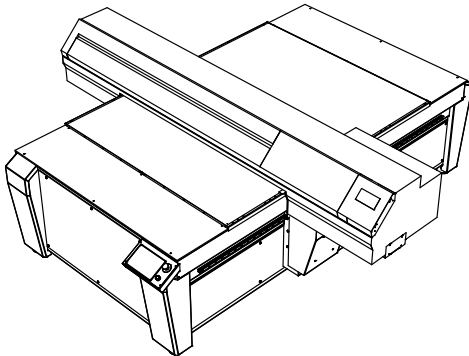
This machine is fitted with covers to keep external leakage of ultraviolet light at low levels, but incorrect handling or operation can lead to physical injury due to ultraviolet light. The extent of injury depends on the intensity and wavelength of the ultraviolet light, and the length of time of exposure. Prolonged exposure to strong ultraviolet light of hazardous wavelengths can cause injury to the eyes or skin. Exercise caution.

Warning Labels

Warning labels are affixed to make areas of danger immediately clear. The meanings of these labels are as follows. Be sure to heed their warnings.

Also, never remove the labels or allow them to become obscured.

In case of deterioration, ask for replacement.



Caution: Pinching Hazard
Never needlessly touch the dancer roller. Exercise caution to avoid pinching of the fingers.



Flammable
Ink and discharged fluid are flammable. Keep away from open flame.



Ink Is Toxic
Ink and discharged fluid are toxic. Avoid contact with the body. Use only in a well-ventilated area.



Caution: Ultraviolet Light
Never look directly from up close for a prolonged period.



Caution: Moving Print Heads
The print heads inside the cover move at high speed and pose a hazard. Never insert the hand or fingers into the gap.



Caution: Pinching Hazard
Be careful not to allow the fingers to become pinched when loading media or closing covers.

Important Notes on Handling and Use

This machine is a precision device. To ensure the full performance of this machine, be sure to observe the following important points. Failure to observe them may not only result in loss of performance, but may also cause malfunction or breakdown.

Printer Unit

This machine is a precision device.

- Handle carefully, and never subject the machine to impact or excessive force.
- Never needlessly put your hand or fingers inside the cover, the ink-cartridge ports, or other internal areas of the machine.

Install in a suitable location.

- Install in a location having the specified temperature and relative humidity.
- Install in a quiet, stable location offering good operating conditions.

The printing heads and the UV emitter are delicate devices.

- Never needlessly touch or allow media to scrape them. 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.
- Never allow the machine to stand with an ink cartridge removed. Remaining ink in the printer may harden and clog the print heads.
- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use.

Ink Cartridges

Ink cartridges come in various types.

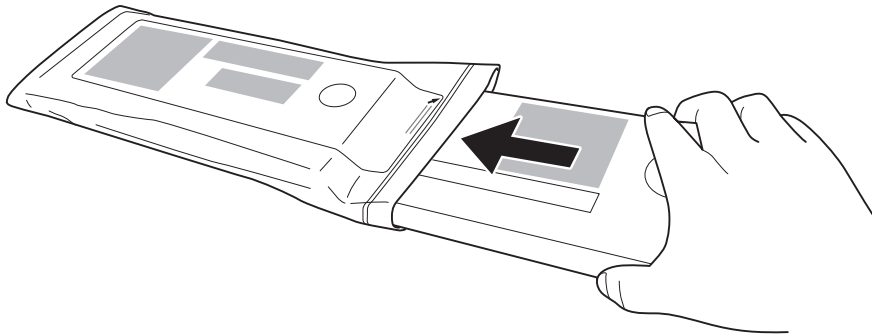
- Use a type that is compatible with the printer. Also, be sure to use only genuine items from Roland DG Corp.

Never subject to impact or attempt to disassemble.

- Never drop or shake forcefully. The impact may rupture the internal pouch and cause the ink to leak.
- Never attempt to disassemble.
- Never attempt to refill the ink.
- If ink gets on your hands or clothing, wash it off as soon as possible. Removal may become difficult if allowed to stand.

Storage

- Use up the ink before the expiration date printed on the ink cartridge.
- Store the ink cartridge in a location avoiding direct sunlight or strong illumination.
- Store the ink cartridge unopened in a well-ventilated location at a temperature of over 5°C (41°F) and under 35°C (95°F) and relative humidity of 20 to 80%.
- Once opened, store the ink cartridge in the sealed original (shading) bag.



Chapter 2

Basic Operation

Prepare the Media	27
Type of Media.....	27
Usable Media.....	28
Switch On Loading Media.....	29
Switch On	29
Setup of Media	35
About [MEDIA SETTING] menu	35
Setup of Media ([MEDIA SETTING] menu)	35
Outputting	38
Printing Tests and Normal Cleaning.....	38
Getting Ready to Receive Data from a Computer.....	40
Starting Output	41
Pausing and Canceling Output.....	42
Switch Off	43
Switch Off	43

Type of Media

In this manual the term “medium” is referred to a wide selection of rigid material (up to a thickness of max 15 cm) which are sheets or panels of:

- Polyurethane
- Polystyrene
- Cardboard
- Aluminium
- Pleated material
- Transparent Acrylics
- DBOND
- FOREX
- Kapa
- PET
- Polyethylene
- Polycarbonate
- Polypropylene
- PVC

➤ **Sheet media:** Media not wound onto a paper tube such as standard-size media

➤ **Rigid media:** Sheet media that is rigid

Roll media, sheet media, and rigid media of various qualities can be selected according to the application. For detailed information about each media, contact your media supplier. Media is also available from our following website.

<http://www.rolanddg.com/>

Usable Media

This machine cannot necessarily output to every kind of media. When selecting media, be sure to carry out testing in advance to make sure that satisfactory output quality is obtained.

Rigid media

Size

Width

250 to 1625 mm (9.8 to 64 inches)

Maximum media thickness

15 cm

Maximum weight

200 kg

Other conditions

- Certain metallic and glass materials cannot be used even if they satisfy the conditions listed above.
- When using media that is warped, print quality will be affected if the ripples in the media are 0.5 mm (0.02 inch) or higher, even if the media is held down by the media hold down bar.*

* Adjusting settings can improve print quality.

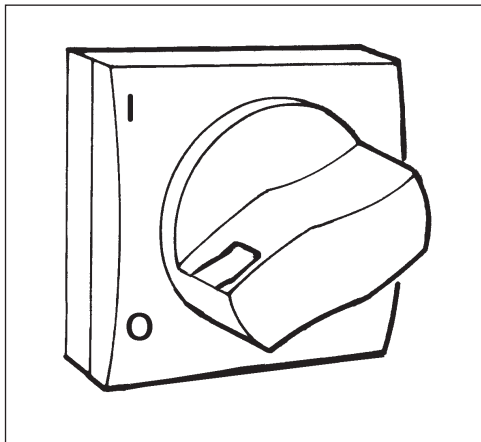
Switch On Loading Media

Switch On

Procedure

Once the authorized technician has executed the set up of the machine the starting operations can be executed as follows:

1

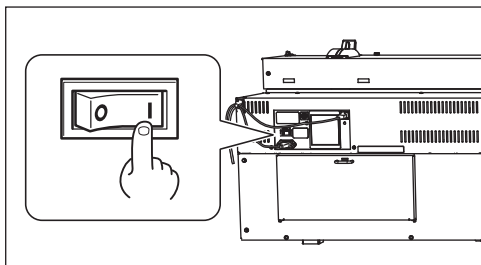


Turn the General Switch on the position "ON".

On the Display of the Table Commands Panel will appear:

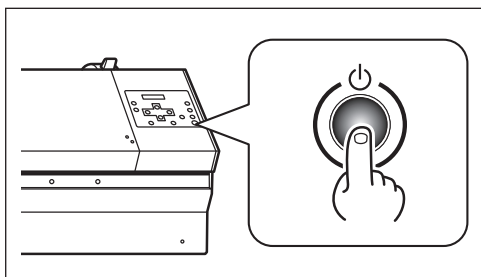


2



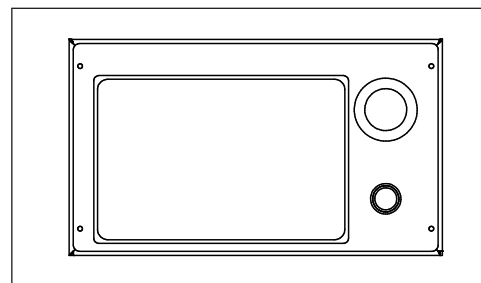
Push on the Power Switch to start the Printing Unit

3



Push the Start Key. The related led will switch on, wait until on the display will appear "SETUP SHEET"

4



Check that the Stop/Emergency Key is armed

- If not go to point 5
- If armed, rearm it.
- Then push the Start key to start the machine.

2

Basic
Operation

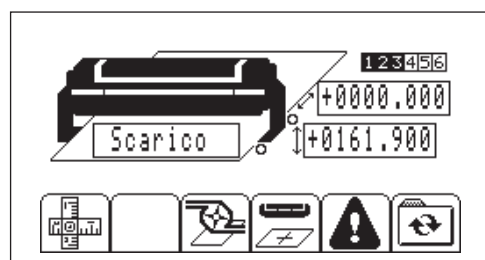
5



On the Display of the Table Commands

Panel, Push the key

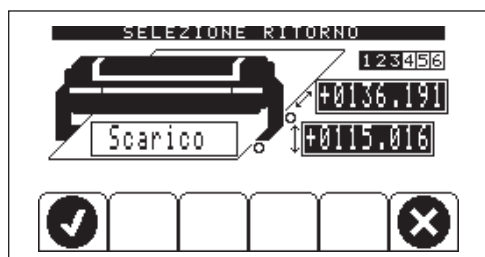
6



On the display will appear this screen page:

push the key to execute the machine axis reset,

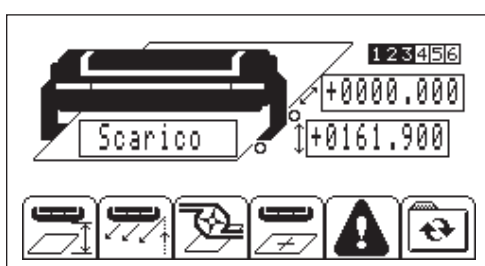
7



On the display will appear this screen page:

Push the key to confirm the beginning of the machine resetting and...

8



... wait until on the display the following screen page will appear

9 The machine is ready for use.

10



Push and keep pushed the arrow key >.

To position manually the printing unit as much as it is needed to place the material to be printed on the table.

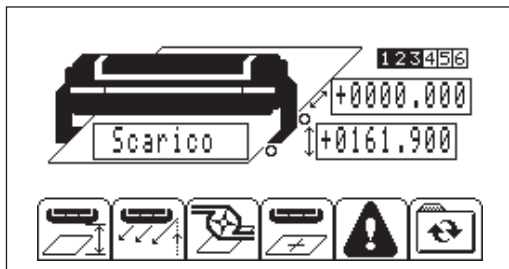
11 The printing unit will move to the wished position.

12 Take the material to be printed and with a proper tool, measure the thickness (i.e. 1mm)

13 Position the material to be printed in the correct position based on the reference points on the plane.

14 Push the button to select the mode.

15



If the one underlined is the correct mode (i.e. Download)

confirm with the key , otherwise...

16



... with the arrow ^ select the interested mode (i.e. "Sequence").

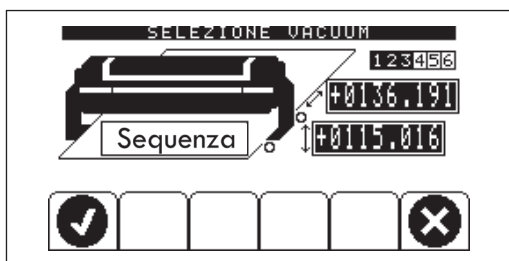
17

Then confirm by pushing the key 

18

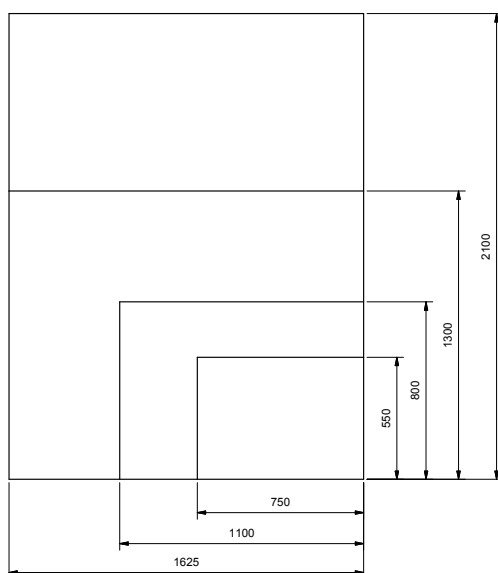
Push the key  to activate the aspiring plane (Vacuum) so the material will remain adherent to the table and will not move during the making.

19



On the display will appear "VACUUM Selection"

20 Observe (part 7 of this manual) the Vacuum Specifications



21 Establish which one is the working area that you wish to occupy (i.e. area 3)

22



With the numeric key (from 2 to 6) enable the areas from 1 to 3 pushing on the related keys, you will notice that the numbers 1, 2 and 3 will be lighted, the others should remain disabled (not lighted keys) **123456**

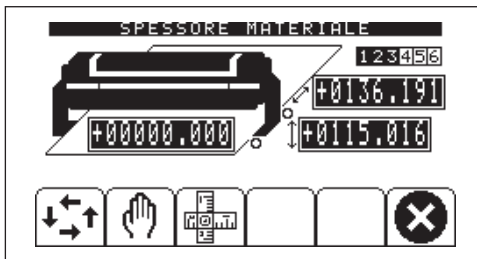
23 Confirm by pushing the key



24 On the display will appear the screen page  It indicates that the vacuum is active.

25 Push the key  to set the thickness (i.e. 1 mm) of the charged medium.

26



On the display will appear number "0" flashing **+00000.000**

27



With the numeric keyboard, digit the thickness (in the example number "1")

28 Push the key, , the machine will move at the set height.

29

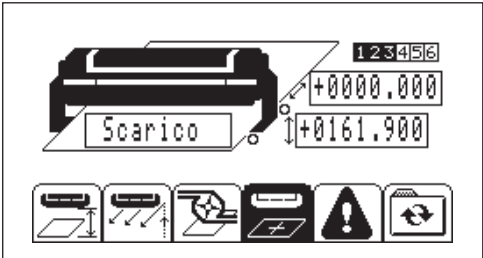


To set up the starting point of the printing FORWARD (that is to move the machine at the right position) you need to push and keep pushed the arrow key < until the printing unit stops.

30 In order to give the starting point of the printing carriage on the printing unit commands panel, push the arrow key once. 

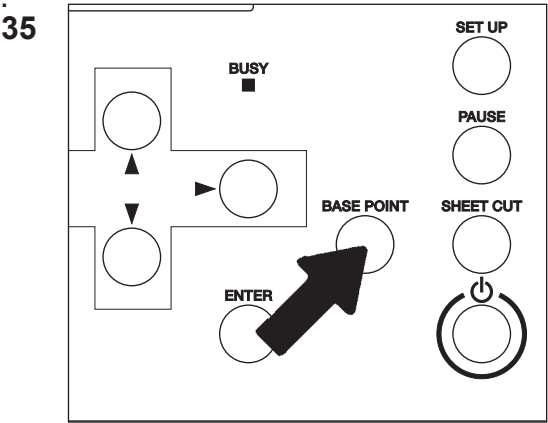
31 The carriage will start moving, wait until it is positioned at the starting point and on the display will appear "W1600 mm", it means that the action is completed.

32 In order to see well where the laser pointer is positioned, push  it will appear

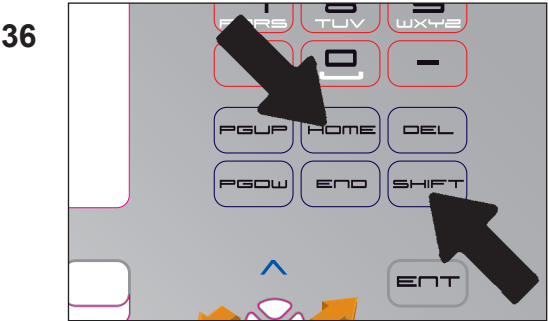


33 Observe through the front cover where the laser pointer is positioned, if it is in the right position, go to point 38

34 If it isn't in the right position, always observing the laser light, with the key  move manually until you have reached the wanted position



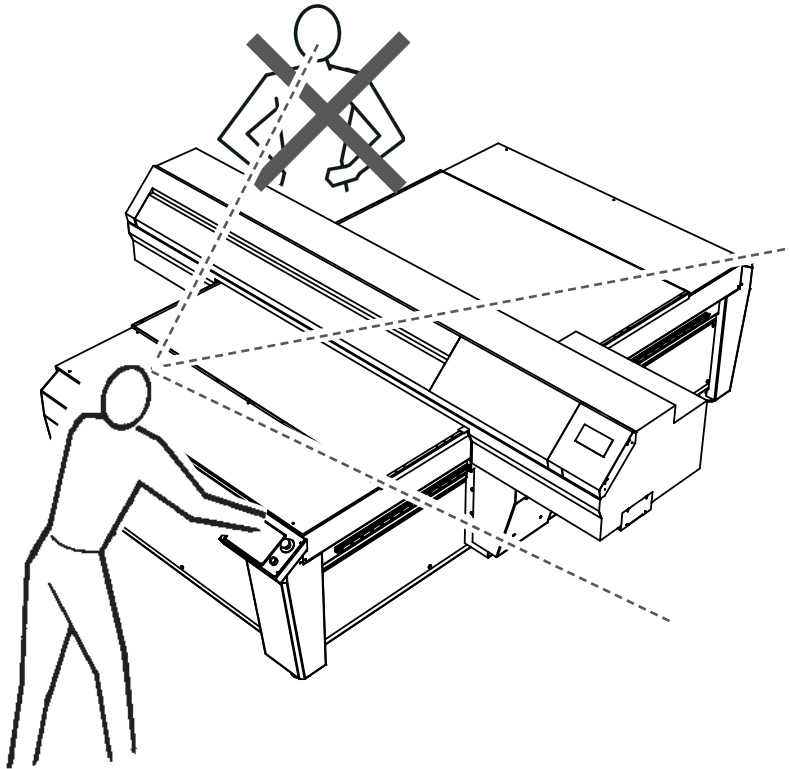
Push the key **BASE POINT** (the related control light will switch on) to memorize the new starting point.



In case you want to memorize the entire working area as it is set up, push at the same time the keys **HOME** and **SHIFT**, the red and green leds under the display will start flashing and then will switch off, it means that the storage of the area was successfully completed.

37 In case the red and green leds would not flash, in order to memorize you need to repeat all the actions above described (from point 29 to point 36).

38 NOTE: It has to be reminded that the computer (on which the printing job is set up) must be positioned near the machine. This way the operator can check that in the working area there are no people/animals exposed and therefore avoid dangers of harm and fall.



39 At this point, go to the part “Material Set up”.

About [MEDIA SETTING] menu

To ensure the optimal output according to the media size and type, various setting items are provided in this machine. However, it is hard work to perform these settings one by one referring to this document. So, this machine provides the [MEDIA SETTING] menu that guides these settings in the interactive mode. Using this menu, you can set all of the basic settings only by setting according to the instructions on the display.

Since the setting details can be stored as the preset menu, you can promote your operation efficiently saving the setup steps when using the same type of media. Once storing the basic settings as the preset, you can do fine adjustment according to need.

The items set through the [MEDIA SETTING] menu can be also set individually.

Setup of Media ([MEDIA SETTING] menu)

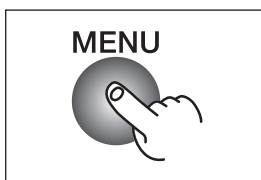
Note: If any setting is not needed for each setting item, you can go to the next menu by selecting [NEXT].

1. Starting the [MEDIA SETTING] menu.

1 Load media.

Check that no sagging is found on the media. If any sagging exists, the followed correction value settings do not work effectively.

2



Press **MENU**.

3



When the left figure is displayed, press **ENTER**.

2. Performing the correction for misalignment in bidirectional printing

POINT!

This machine prints by the bidirectional mode (in which the heads perform printing during both their outbound pass and return pass). This printing method is called "Bidirectional Printing." This method offers the advantage of being able to shorten output times, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is "Bidirectional Correction."

1

ADJUST BI-DIR ◀ ▶
[SET] NEXT ↵

Press **◀** to select [SET].

Press **ENTER** to enable the setting.

The test pattern of bidirectional correction is output.

2

INPUT
ADJ. VALUES ↵

When the left figure is displayed, press **ENTER**.

3

ADJUST BI-DIR ▲ ▼
0 ▶ -6 ↵

Use **▲** **▼** to set the correction value.

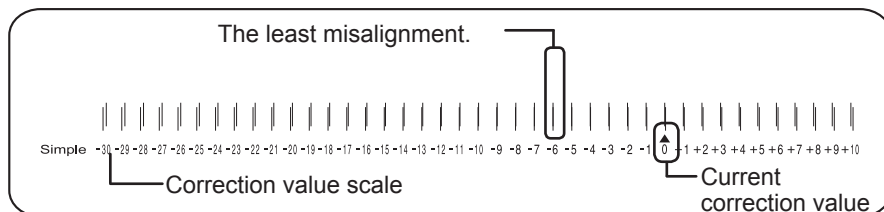
Press **ENTER** to enable the setting.

Current correction
value

Value to be set

To decide a Correction Value

Choose the value that produces the least misalignment of 2lines.



4

REDO ADJ. ?	◀ ▶
YES [DONE]	↵

[To confirm again / adjust again]

Press ◀ to select [YES].

Press ENTER to enable the setting.

The test pattern of bidirectional correction is output again. Go back to the procedure 3 and set again.

[To go to the next after correction is completed]

Press ▶ to select [DONE].

Press ENTER to enable the setting.

For the individual setting method of this setting item and the description, refer to page 77 "Correcting for Misalignment in Bidirectional Printing."

3. Saving the Setting as Preset

1

PRESET	◀ ▶
[SAVE] NEXT	↵

Press ◀ to select [SAVE].

Press ENTER to enable the setting.

If you select [NEXT], the performed settings are retained. However, those settings are not saved as presets.

2

SAVE TO	◆ ▼
NAME1	↵

Use ▲ ▼ to select the destination to save.

You can select one of NAME1 to 8.

Press ENTER to enable the setting.

3

SET NAME	◆ ▶
	↵

↓

COMPLETED

Use ▲ ▼ to select characters.

Use ▶ to move the next character.

Select the following characters in the same way.

You can enter up to 15 characters.

Press ENTER to enable the setting.

For the individual setting method of this setting item and the description, refer to page 70 "Fully Utilizing Preset Function."

This completes the operation of the [MEDIA SETTING] menu.

Printing Tests and Normal Cleaning

Before you carry out actual printing, we recommend performing a printing test to ensure no dot drop-out occurs. If dot drop-out occurs, perform cleaning of the print head (Normal Cleaning).

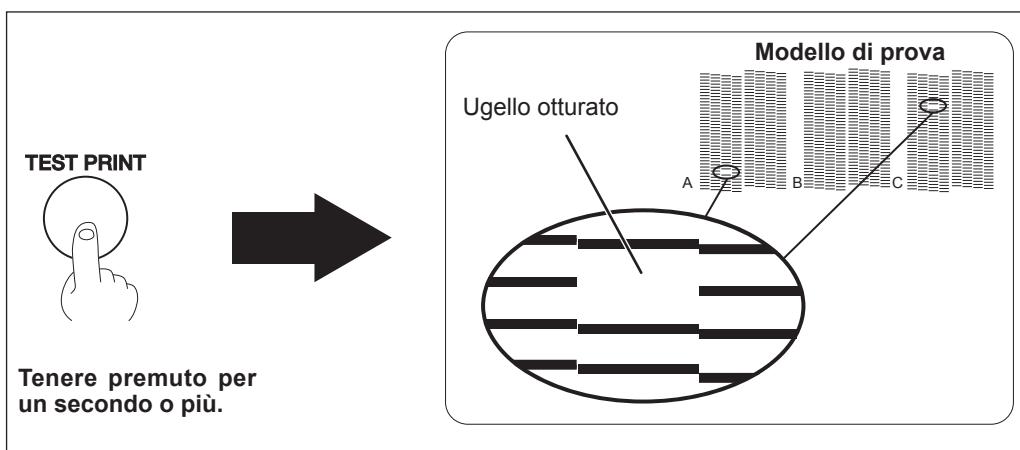
2

Basic
Operation

How to Perform a Printing Test

Procedure

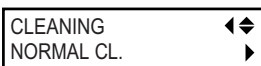
- 1 **Setting the Output-start Location**
 ➤ P. 29, "Switch On and Loading Media"
- 2 **Holding down TEST PRINT for one second or longer.**
 A test pattern is printed.



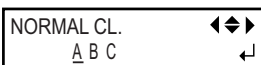
How to Perform a Normal cleaning

Procedure

- 1 **Press CLEANING.**

- 2 

Press ▶.

- 3 

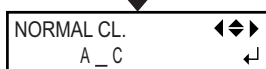
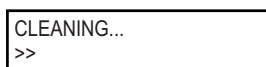
Press ◀ ▶ to choose the group of heads that is not to be cleaned.

Press ▲ ▼ to get rid of the group display.
 Repeat this procedure to display the groups of only the heads that require cleaning.

Of groups A through C, cleaning is performed only for the group displayed.



Press **ENTER**.
Normal cleaning starts.



When it finishes, the screen shown in the figure appears again.



Press **MENU** **◀** in this order to go back to the original screen.

6 Perform a printing test again to make sure the dot drop-out has been corrected.

If the problem persists, try performing cleaning a second time. If the printer has been used for a long period, the problem may persist even after two or three-cycle cleaning. Then try cleaning using a different method.

➤ P. 53, "When Normal Cleaning Is Not Effective"

If the Printing-test Results Are Difficult to Interpret

Examine the results from different angles in a well-lighted location. Take advantage of reflected light to enable visual checking.

If you want to perform normal cleaning with all the print heads.

Hold down **CLEANING** for one second or longer. The normal cleaning for all the print heads starts.

Getting Ready to Receive Data from a Computer

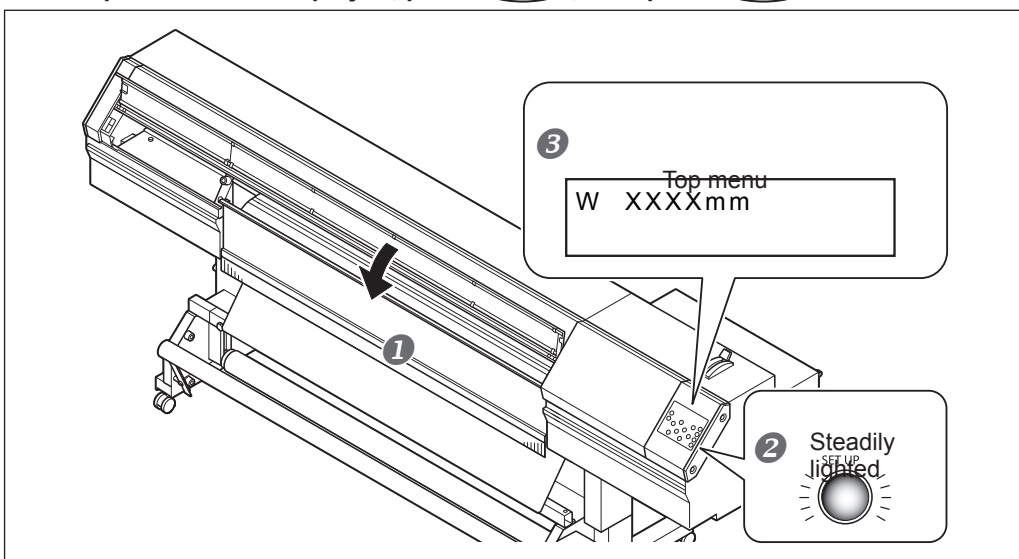
p. 29, "Switch On and Loading Media" are completed, get ready to receive the data from a computer.

Procedure

2

Basic
Operation

- 1 Close the front cover 1.
- 2 Make sure **SET UP** stays steadily lit.
If the light does not come on, press **SET UP**.
- 3 Make sure the top menu is displayed.
If the top menu is not displayed, press **MENU**, then press **◀**.



POINT! Output Is Not Possible in These Situations

- The machine does not run when the front cover 1 is open.
- The machine will not operate if the front cover 2 is not attached.
- Do not open the front cover 1 or remove the front cover 2 during output. Doing so interrupts output.
- Data from the computer is not accepted when **SET UP** is dark.
- Data from the computer is not accepted when you are not at the top menu.

Starting Output

① Creating Output Data

Create the output data using the application software like Adobe Illustrator and like that. For information on how to create the data, refer to the documentation of your application software.

② Sending the Output Data to This Machine Using the Software RIP.

Use the included software RIP "Roland VersaWorks." For information on how to install and use Roland VersaWorks, refer to "Roland VersaWorks Quick Start Guide" and HELP of Roland VersaWorks. If using the white ink and gloss ink, refer to "White & Gloss Ink Guide."

IMPORTANT! Points that must be observed

- Use the media clamps when using media that is less than 0.5 mm (0.02 inches) thick. Otherwise the edges of the media may warp and catch on the print head.
- If you are using media that is less than 0.5 mm (0.02 inches) thick, do not use the media clamps if [HEAD HEIGHT] is set to [LOW]. The media clamps may catch on the print heads, damaging the machine.
- ☞ P. 78, "Adjusting Head Height to Match Media Thickness"
- During output, never touch the media. Doing so may obstruct media feed or cause the media to rub against the heads, which may result in a paper jam or damage to the heads.
- Keep the loading lever raised when the machine is not in use.

POINT!

If Ink Runs Out

When ink runs out, a warning beep sounds and a slot number of which ink runs out is displayed on the display screen.

Before you perform lengthy printing, check the amount of ink remaining in the ink cartridges.

Before you perform lengthy printing, check the amount of ink remaining in the ink cartridges. When ink runs out and printing is paused, the coloring at the seam may be altered when printing resumes.

Pausing and Canceling Output

You can pause and cancel output before it finishes. However, a horizontal stripe is produced at the location where output was stopped. We do not recommend resuming output.

Procedure

- 1 Press **PAUSE** before output finishes.

This pauses the output operation.

- 2 Press **PAUSE** again to resume output.

To cancel the output, go the next Procedure without pressing **PAUSE**.

- 3

TO CANCEL, HOLD
DOWN SETUP KEY

When the screen shown in the figure appears, hold down **SET UP for one second or longer.**

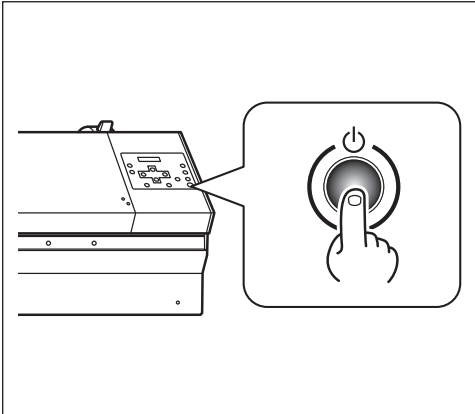
This cancels the output operation.

- 4 Stop sending the output data from the computer.

Switch Off

Procedure

1



Hold down the sub power button for one second or longer.

The sub power is turned off. Perform this process after output is finished.

IMPORTANT!

Leave the main power switched on at all times.

Never switch off the main power. By switching on the main power, the automatic maintenance function is carried out periodically. If the automatic maintenance is not carried out, it may result in breakdown of this machine such as breakdown of the print head.

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 in progress may damage the print head. Be sure to first switch off the sub power. If the main power is accidentally switched off, immediately turn the power back on.

2

Basic
Operation

Chapter 3

Maintenance:

For always using the printer in the best condition

Checking for Remaining Ink and Replacing Cartridges.....	45
Checking for Remaining Ink.....	45
How to Replace Ink Cartridges.....	46
Automatic Maintenance Feature	48
Automatic Maintenance Feature and Notes	48
Maintenance that Should Be Performed Daily	49
Maintenance of Ink Cartridges	49
Disposing of Discharged Ink.....	50
About Care and Maintenance of Print Head	52
When Normal Cleaning Is Not Effective	53
Medium/ Powerful Cleaning.....	53
Maintenance that Should Be Performed Weekly.....	55
When Manual-Cleaning Becomes Necessary	55
Performing Manual Cleaning.....	56
When the Dot Drop-Out of White Ink Cannot be Cleared ..	62
White Ink Replacement.....	62
Replacing Consumable Parts.....	64
Replacing the Wiper	64
When Not in Use for a Prolonged Period	68
Keep Performing Maintenance	68
Alarm Feature	68
Important Note on Draining Ink.....	68

Checking for Remaining Ink and Replacing Cartridges

Checking for Remaining Ink

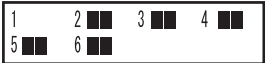
Procedure

1 Press **MENU**.

2 

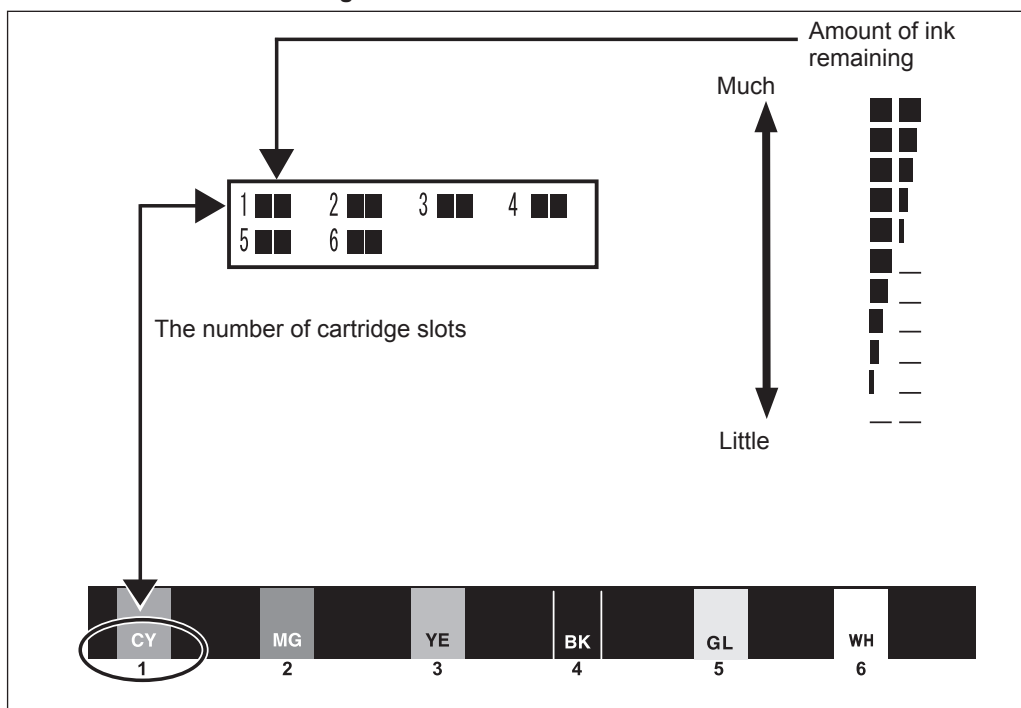
Press  several times until the screen shown on the left appears.

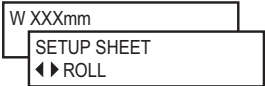
Press .



 indicates the amount of ink remaining. When there are more , the amount of ink remaining is larger.

* The display shows an approximate guide to the amount of remaining ink. It may differ somewhat from the actual amount remaining.



3 

Press **MENU**  in this order to go back to the original screen.

3

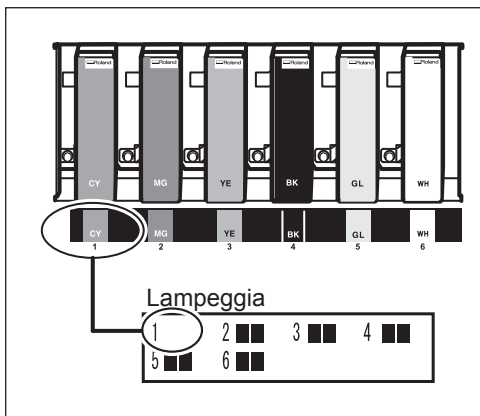
Maintenance

How to Replace Ink Cartridges

When ink runs out, a warning beep sounds and printing pauses (unless the default settings have been changed). Pull out the empty cartridge and insert a new one. Printing resumes.

Procedure

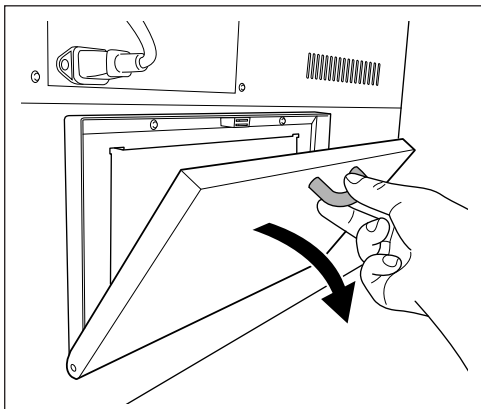
1



Check the number flashing on the screen.

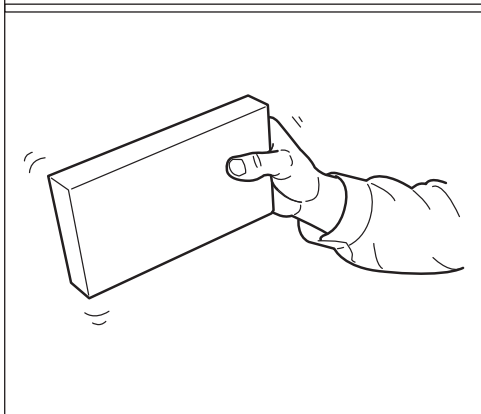
The ink at the flashing cartridge slot number is running out.

2



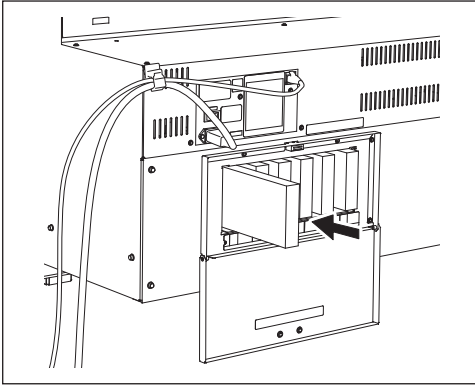
Open the ink cartridge cover.

3



Shake the ink cartridge of the same type and color to replace.

4

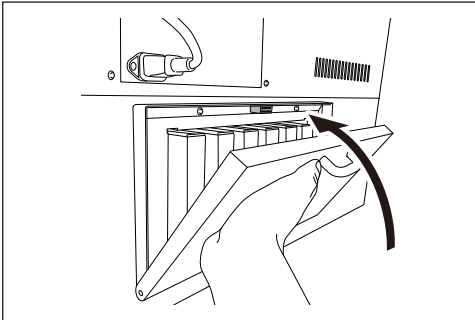


Pull out the empty ink cartridge and immediately insert the new one.

POINT!

- Keep the labeled side face up.
- Insert and remove slowly, one at a time.
- Make sure the cartridge is inserted completely.

5



Close the ink cartridge cover.

IMPORTANT! Important Notes on Replacing Cartridges

- Make sure that the ink cartridge cover is always closed except when absolutely necessary, such as when you are replacing ink cartridges. The ink inside the cartridges will become hardened, and it may cause the printer to malfunction.
- Be sure to replace with an item of identical type.
- Never use an ink cartridge which has already been used in other machines even if it is of the identical type.
- Never mix items of different types.
- Never allow the machine to stand with an ink cartridge removed. The print head may become clogged.
- Never insert or remove a partially used ink cartridge.
- Never remove an ink cartridge suddenly while the printer is in operation.

⚠ WARNING

Never store ink, cleaning fluid, 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.

3

Maintenance

Automatic Maintenance Feature

Automatic Maintenance Feature and Notes

This machine is provided with a feature that automatically performs maintenance on a periodic basis. Because this performs operations that are intended to keep the print heads from drying out, be sure to observe the following matters.

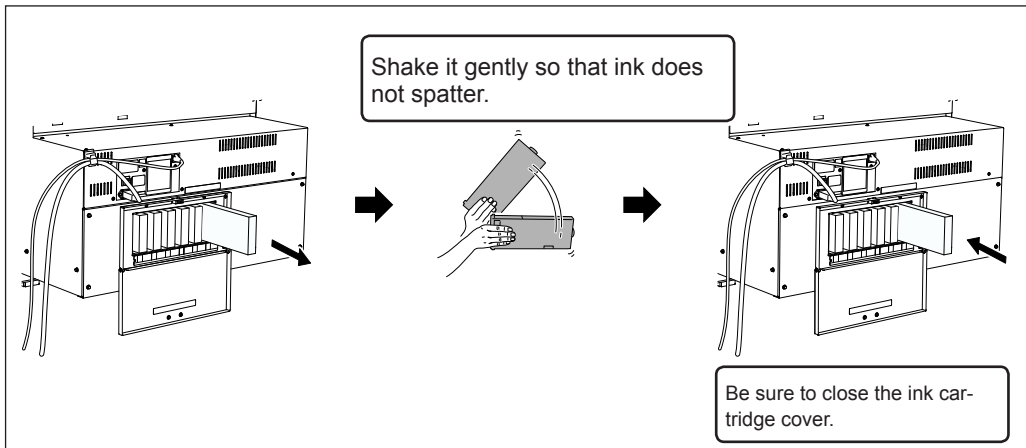
- **Leave the main power on at all times.**
- **Never leave the front cover 1 open for long periods.**
- **After finishing making the settings for the various menu items, go back to the top menu.**

Maintenance that Should Be Performed Daily

Maintenance of Ink Cartridges

Be sure to perform the following tasks. The ink contains ingredients that have the property of becoming deposited. Particularly, the white ink contains ingredients that are highly likely to get deposited, and the settled components may get hardened and cause troubles including malfunctions of the machine if it is left untouched for a certain time.

- **Shake the new ink cartridge gently before setting it in.**
- **Remove only the white ink cartridge once, shake it gently, and set it in before starting the operation for the day.**



3

Maintenance

Disposing of Discharged Ink

CHECK
DRAIN BOTTLE

The drain bottle collects discharged fluid. Dispose of collected material before the bottle becomes full. The message shown in the figure appears when a certain amount of discharged fluid has collected in the bottle. Follow the procedure below to discard the discharged fluid.

Procedure

1 CHECK
DRAIN BOTTLE

When the message shown in the figure appears, press **ENTER**.

2 Press **MENU**.

3 MENU
SUB MENU

Press **▼** several times to display the left figure. Press **▶**, and then **▲**.

4 SUB MENU
MAINTENANCE

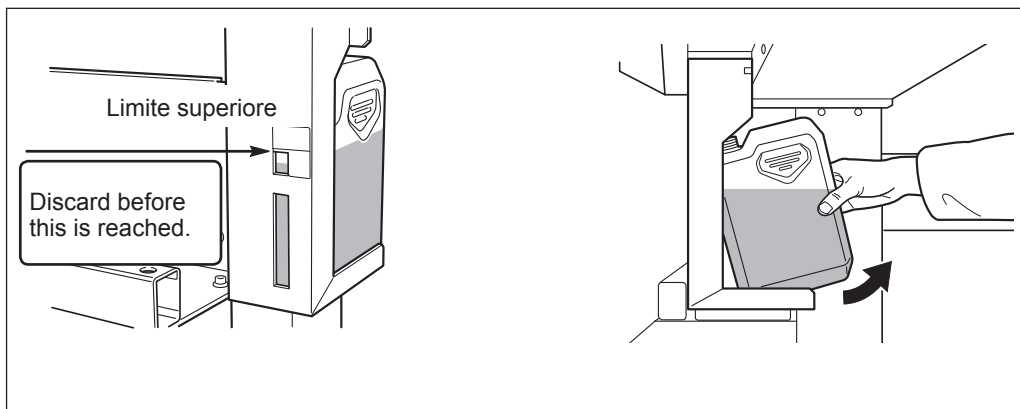
Press **▶**, and then **▲**.

5 MAINTENANCE
DRAIN BOTTLE

Press **ENTER**.

6 EMPTY
DRAIN BOTTLE

When the screen shown on the left appears, detach the bottle, discard the discharged fluid to empty it.



⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display **"EMPTY DRAIN BOTTLE."**

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

7

EMPTY DRAIN BOTTLE	◀ ↵
-----------------------	--------

Attach the emptied drain bottle to the machine.

Press **ENTER** .

8

RESET DRAIN COUNTER	↵
------------------------	---

Press **ENTER** .

9

W XXXmm	
SETUP SHEET	
◀▶ ROLL	

Press **MENU** **◀** in this order to go back to the original screen.

⚠ WARNING

Never place discharged fluid near open flame.

Doing so may cause 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 tightly.

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

Store discharged fluid in a location not exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, keep the drain bottle out of direct sunlight. Otherwise the discharged fluid may harden, making the drain bottle unusable.

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.

About Care and Maintenance of Print Head

Care of the print head is essential to ensuring optimal printing at all times. There are daily care and periodic care.

Daily Care and Maintenance

➤ Normal cleaning

It is recommended to perform the normal cleaning before daily operation.

☞ P. 38, "Printing Tests and Normal Cleaning"

Periodic Care and Maintenance

➤ Medium cleaning/Powerful cleaning

Perform the medium cleaning or powerful cleaning when the problems such as dot drop-out are not cleared up by the normal cleaning.

☞ P. 53, "Medium/ Powerful Cleaning"

➤ Manual Cleaning

Based on your frequency of use, perform the manual cleaning periodically.

☞ P. 56, "Performing Manual Cleaning"

➤ White Ink Replacement

Perform the white ink replacement when the dot drop-out cannot be cleared by conducting the cleaning features (including the normal, medium, and powerful cleaning) or the manual cleaning.

☞ P. 62, "White Ink Replacement"

*The print head is component that wears out. Periodic replacement is required, with the frequency of replacement depending on use. Purchase them from your authorized Roland DG Corp. dealer.

When Normal Cleaning Is Not Effective

Medium/ Powerful Cleaning

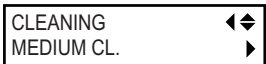
When the dot drop-out cannot be cleared by the normal cleaning ("Printing Test and Normal Cleaning" on page 38), perform a more powerful cleaning, a "medium cleaning," twice or three times. If the condition is not improved, try the even more forceful "powerful cleaning."

POINT!

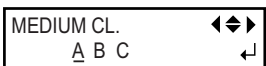
The medium cleaning consumes more ink than the normal cleaning. The powerful cleaning consumes more ink than the medium cleaning. Because the head is prone to get damaged if these cleanings are conducted too frequently, do not perform such cleanings more than necessary.

Procedure

1 Press **CLEANING**.

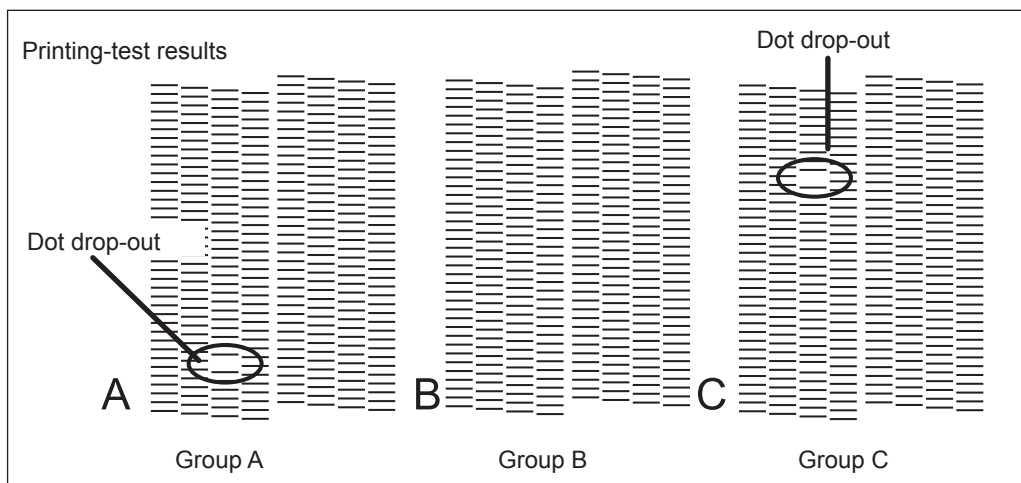
2 

Press  or  and select "Medium."
When "Medium" is not effective, select "Powerful."
Press .

3 

Press   to choose the group of heads that is not to be cleaned.

Press   to get rid of the group display.
Repeat this procedure to display the groups of only the heads that require cleaning.

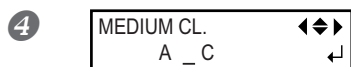


If the Printing-test Results Are Difficult to Interpret

Examine the results from different angles in a well-lighted location. Take advantage of reflected light to enable visual checking.

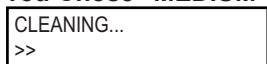
3

Maintenance

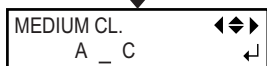


Press **ENTER**.

5 **If You Chose "MEDIUM CL."**

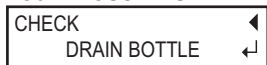


The screen shown in the figure appears, then cleaning starts.



When it finishes, the screen shown in the figure appears.

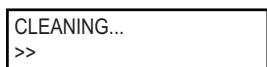
If You Chose "POWERFUL CL."



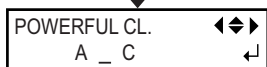
Check the drain bottle.

If the amount of discharged fluid is near the upper-limit line, then remove the bottle, discard the collected fluid, and reattach the bottle.

Press **ENTER**.



The screen shown in the figure appears.



When it finishes, the screen shown in the figure appears.



Press **MENU** **◀** in this order to go back to the original screen.

When Manual-Cleaning Becomes Necessary

Perform the manual cleaning more than once a month.

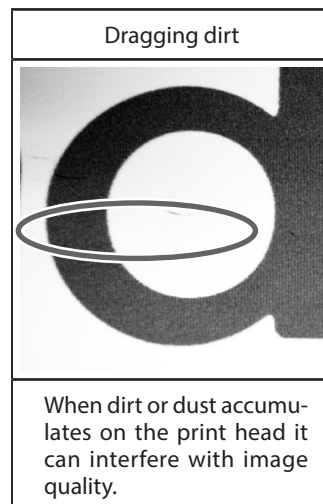
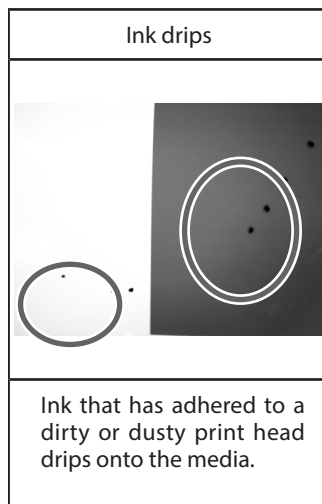
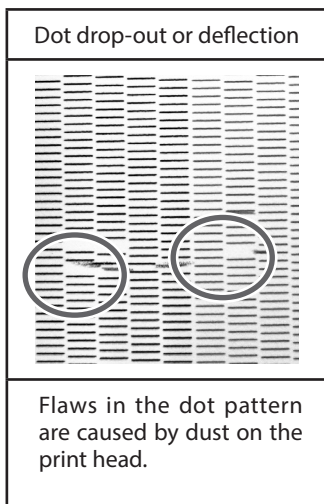
To keep the stable output condition at all times, perform the manual cleaning more than once a month.

The manual cleaning is recommended when the following symptoms occur.

It is recommended to perform the manual cleaning when any of the symptoms given below occurs and it cannot be solved by the automatic cleaning functions such as the normal cleaning.

For your information, replacement of the wiper is also effective to improve the symptoms.

☞ P. 64, "Replacing the Wiper"



* When the cleaning stick and cleaning fluid for the manual cleaning runs out, place an order for them with your authorized Roland DG Corp. dealer.

* The print head is a component that wears out. Periodic replacement is required, with the frequency of replacement depending on use. Purchase them from your authorized Roland DG Corp. dealer.

Performing Manual Cleaning

IMPORTANT!

Important Notes on This Procedure

- For the manual cleaning, the included cleaning fluid, cleaning stick and the commercially available glass cleaner are necessary. Please prepare them in advance.
- Before attempting this operation, remove any media.
- To prevent the heads from drying out, finish this procedure in 10 minutes or less. A warning beep sounds after 10 minutes.
- Never use any implement other than the included cleaning stick. Cotton swabs or other lint-producing items may damage the heads. If you use up the cleaning stick, purchase a new one from your authorized Roland DG Corp. dealer.
- Use one cleaning stick per cleaning session, then discard the stick after use. Reusing cleaning sticks may reduce printing quality.
- Do not put the cleaning stick used for cleaning into the cleaning fluid. It will deteriorate the fluid.
- Never rub the nozzle surface of the print head.
- Stroke the sponges very gently, applying as little pressure as possible. Never rub, scrape, or crush them.

When a warning beep sounds during cleaning

- A warning beep sounds after 10 minutes. At this time, stop work, attach the side cover and the maintenance cover, then close the front cover 1. Press **ENTER** to quit the manual-cleaning menu. After that, restart the procedure from the beginning.

CAUTION

Be sure to perform operations as specified by the instructions above, and never touch any area not specified in the instructions. Sudden movement of the machine may cause injury.

1. Change to the print-head manual-cleaning menu.

1 Remove any media.

2 Press **MENU**.

3

MENU	◀▶
SUB MENU	▶

Press **▼** several times until the screen shown on the left appears.

Press **▶**, and then **▲**.

4

SUB MENU	◀▶
MAINTENANCE	▶

Press **▶**.

5

MAINTENANCE	◀▶
CLEANING	↵

Press **ENTER**.

6

OPEN MAINTENANCE COVER	◀
	↵

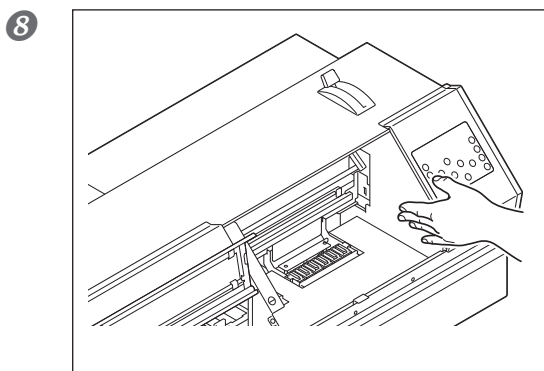
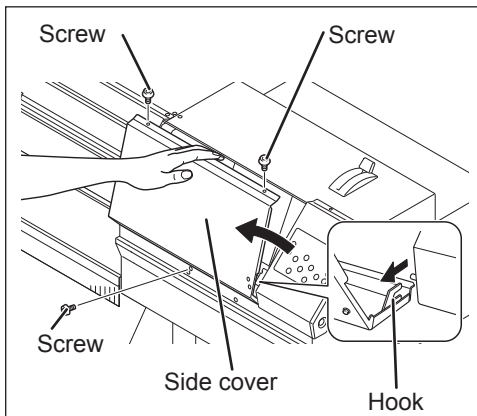
Open the front cover 1 and remove the maintenance cover. Close the front cover 1 and press **ENTER**.

The print-head carriage moves to the left side of the machine.

7

OPEN SIDE COVER	
-----------------	--

When the screen shown on the left appears, open the side cover.



Touch the location shown in the figure to discharge any static electricity.

3

Maintenance

9

FINISHED?



Preparations are complete when this screen appears.

2. Clean using the cleaning stick.

1

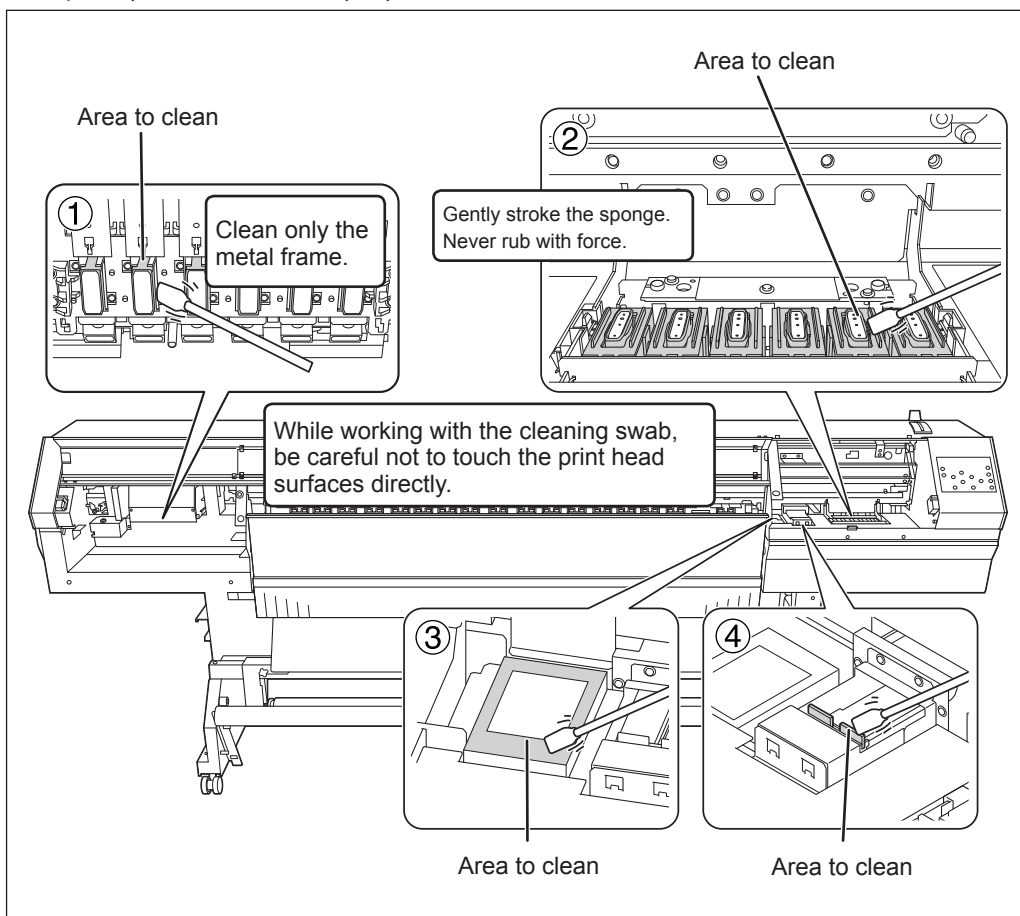


Moisten the cleaning stick with the cleaning liquid.

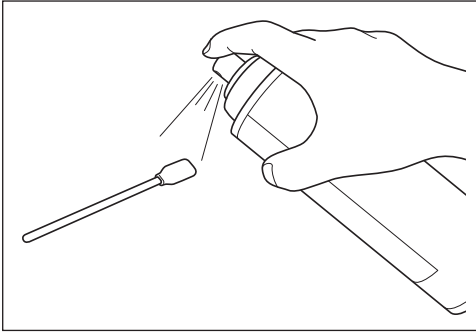
2

Perform cleaning in the sequence shown in the figure below.

Be especially careful to clean away any fibrous dust (lint).



3



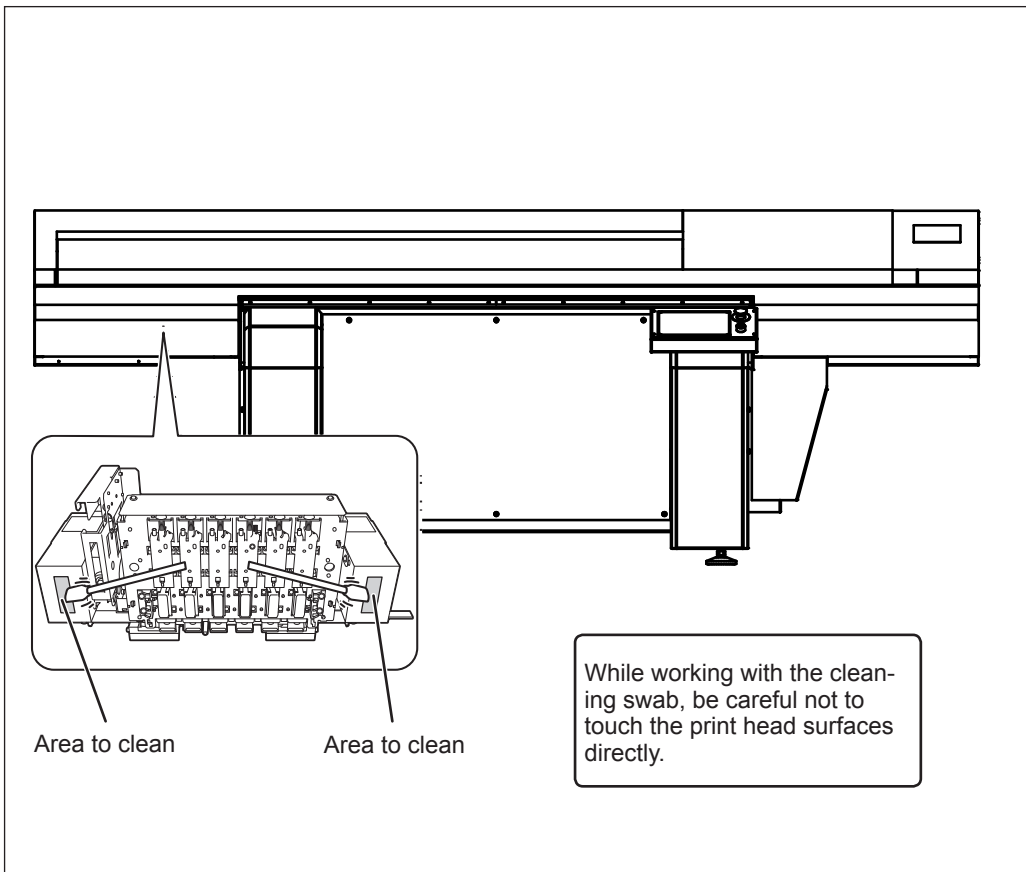
Apply commercially available glass cleaner to the cleaning stick.

Use a new cleaning stick.

4

Clean the locations shown in the figure.

Be especially careful to clean away any fibrous dust (lint).



3

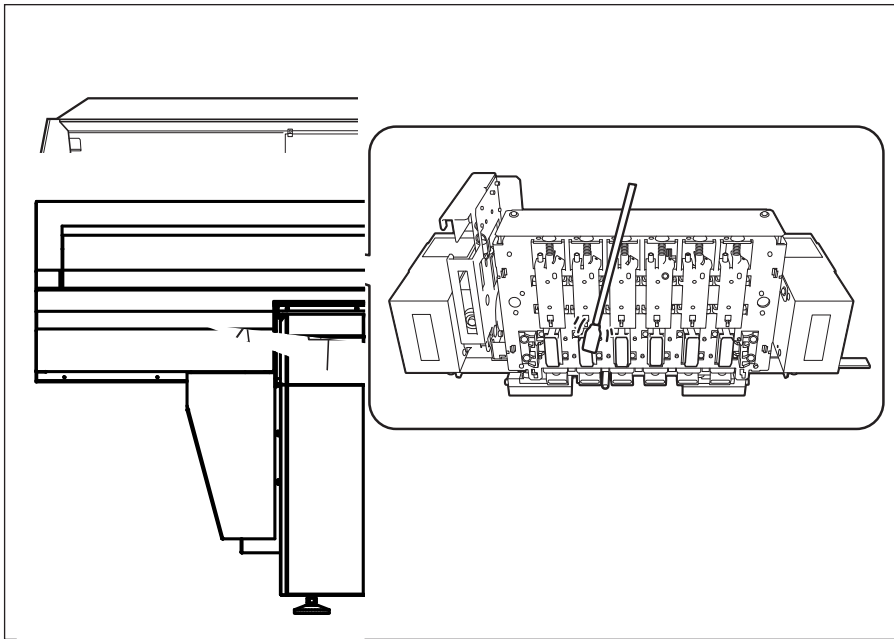
Maintenance

POINT! Cleaning of the head surface as an emergency measure

When dot drop-out and/or dot deflection is not improved even if cleaning is performed several times, you can clean the head surface as an emergency measure. Since the head surface (nozzle surface) has an extremely delicate mechanism, make sure to perform the operation carefully and deliberately. Note that this operation is an emergency measure. It may damage defect-free parts depending on the symptom, deteriorating it. If you have any questions, contact your authorized Roland DG Corp. dealer.

Procedure

- 1** Moisten the cleaning stick with the cleaning liquid.
- 2** Softly press the cleaning stick to the head surface (nozzle surface).
Press it gently and softly so that the head nozzle is permeated with the cleaning fluid. Never rub the stick on the surface and press it forcibly.



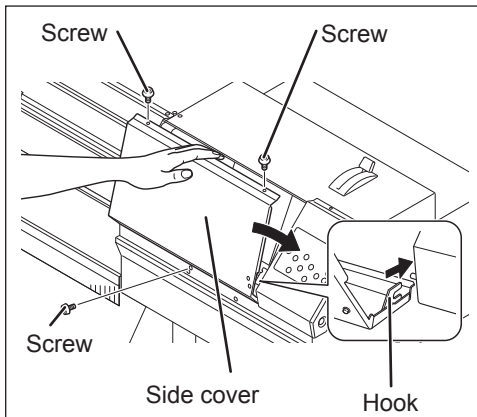
3. Quit the manual cleaning mode.

1 Press **ENTER**.

2 **CLOSE SIDE
COVER** ↵

When the screen shown on the left appears, attach the side cover.

Press **ENTER**.



3 **CLOSE FRONT
COVER** ↵

↓

CLEANING...
>>

Close the front cover 1.

Press **ENTER**.

The print-head carriage moves to the right side of the machine.

4 **CLOSE MAINTENANCE
COVER** ↵

When the screen shown on the left appears, open the front cover 1, and then attach the maintenance cover.

Close the front cover 1.

Press **ENTER**.

4. Perform a printing test to verify the results of the procedure.

Perform a printing test to check the results.

Perform cleaning using the machine's cleaning feature several times when necessary.

☞ P. 38, "Printing Tests and Normal Cleaning"

When the Dot Drop-Out of White Ink Cannot be Cleared

White Ink Replacement

White ink may sometimes cause abnormal discharges including the dot drop-out even when the cleaning features (such as the normal, medium, and powerful cleaning) and the manual cleaning are performed. This can occur because the ingredients in white ink tend to settle, and may harden if allowed to stand for a lengthy time. If this happens, carry out the operations described below. This operation requires two cleaning cartridges.

IMPORTANT!

A large amount of ink will be discharged during this operation. Perform this operation only when dot drop-out cannot be cleared up even after performing cleaning using the cleaning function (normal, medium, or powerful) or manual cleaning.

☞ P. 49, "Maintenance that Should Be Performed Daily," p. 53, "When Normal Cleaning Is Not Effective," p. 55, "Maintenance that Should Be Performed Weekly"

Procedure

1 Press **MENU**.

2 **MENU**
INK RENEWAL

3 **CHECK**
DRAIN BOTTLE

4 **REMOVE CARTRIDGE**
1 2 3 4 5 6

Number 5 and 6
flashes.

SET CL-LIQUID
1 2 3 4 5 6

Number 5 and 6
flashes.

RENEWING INK . . .
>>>>>>

5 **REMOVE CL-LIQUID**
1 2 3 4 5 6

RENEWING INK . . .
>>>>>>>>>>

Press **▲** several times until the screen shown on the left appears.

Press **ENTER**.

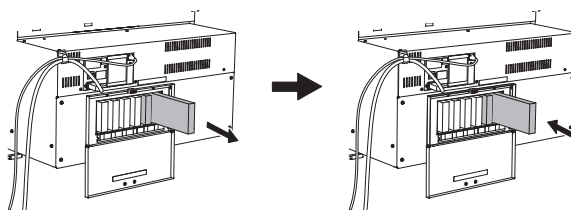
Discard the discharged fluid and attach the emptied bottle.

Press **ENTER**.

1 Open the ink cartridge cover.

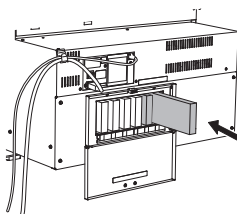
2 Remove the ink cartridges from slots 5 and 6.

3 Insert SOL INK cleaning cartridges into slots 5 and 6.



When this screen appears, pull out the SOL INK cleaning cartridges from slots 5 and 6.

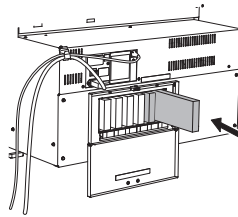
Carry out steps 4 and 5 as many times as indicated by the on-screen messages.



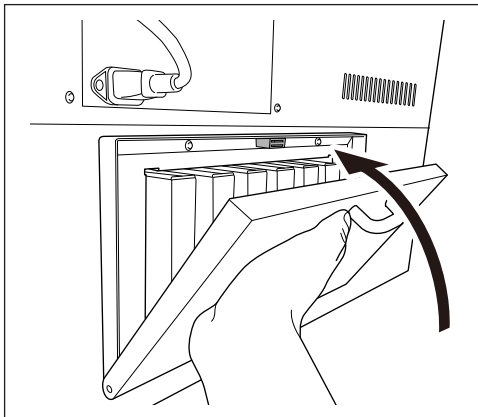
6

[illegible]

Al comparire di questa schermata, inserire le cartucce d'inchiostro nei portacartucce 5 e 6.



7



Chiudere lo sportello delle cartucce.

8

W XXXmm
SETUP SHEET
◀▶ ROLL

Premere   in quest'ordine per ritornare alla schermata iniziale.

Replacing Consumable Parts

Replacing the Wiper

TIME FOR
WIPER REPLACE ↵

The wipers are components that you use when cleaning the print heads. When the screen displays a message like the one shown, it means the item needs to be replaced. Replace with new items.

Regarding the purchase of the wiper, contact your authorized Roland DG Corp. dealer.

When a warning beep sounds during replacing the wiper.

A warning beep sounds after 10 minutes. At this time, stop work, attach the side cover. And then press **ENTER** to finish the wiper replacement menu. When the head-protection operation finishes, restart the procedure from the beginning.

⚠ CAUTION

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

Sudden movement of the machine may cause injury.

3

Maintenance

1. Display the [REPLACE WIPER] menu.

1 TIME FOR
WIPER REPLACE ↵

When the message shown in the figure appears, press **ENTER**.

2 Remove any media from the platen.

3 Press **MENU**.

4 MENU
SUB MENU ▶

Press **▼** several times until the screen shown on the left appears.

Press **▶** and then **▲**.

5 SUB MENU
MAINTENANCE ▶

Press **▶** and then **▼**.

6 MAINTENANCE
REPLACE WIPER ↵

Press **ENTER**.

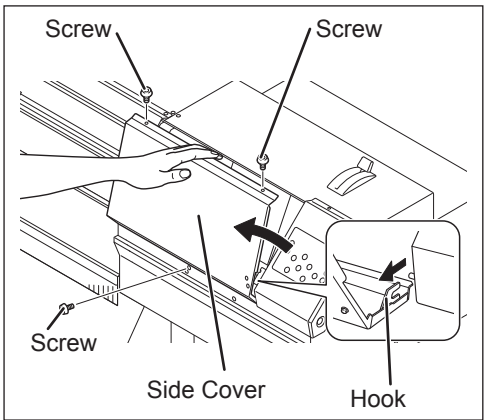
NOW PROCESSING..



OPEN SIDE
COVER

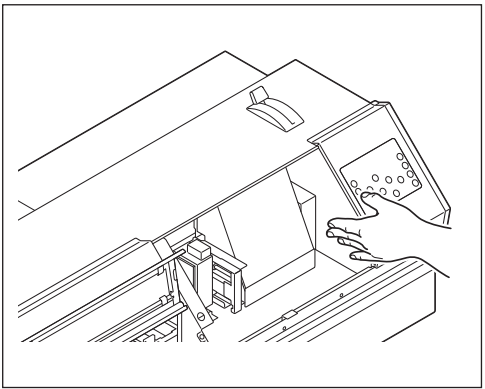
The print-head carriage moves to a location where wiper replacement is possible, and then the screen shown in the figure appears.

7



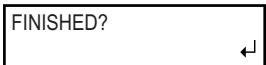
Remove the side cover.

8



Touch the location shown in the figure to discharge any static electricity.

9

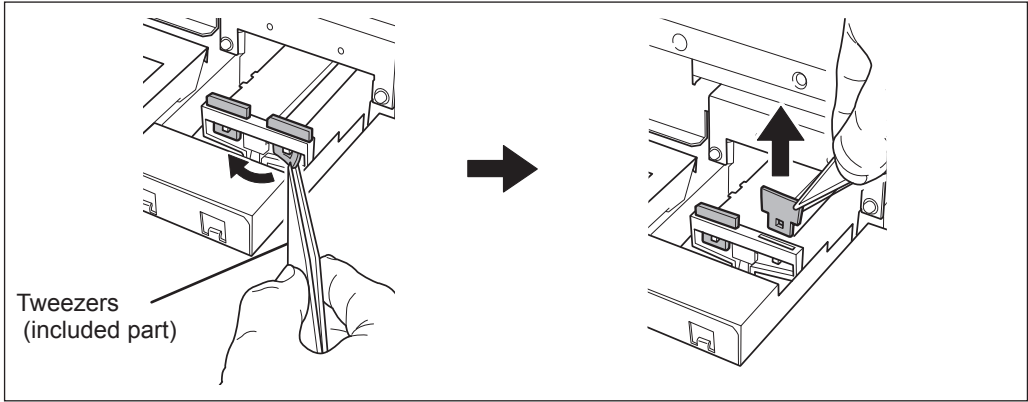


Preparations are complete when this screen appears

2. Replace the wipers.

1

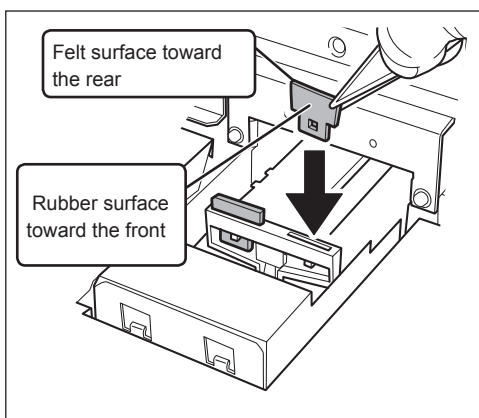
Detach the old wipers.
Detach the hook and pull up and out.



3

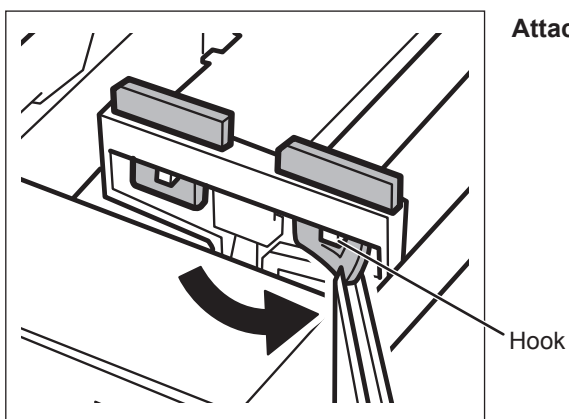
Maintenance

2



Insert the new wipers.

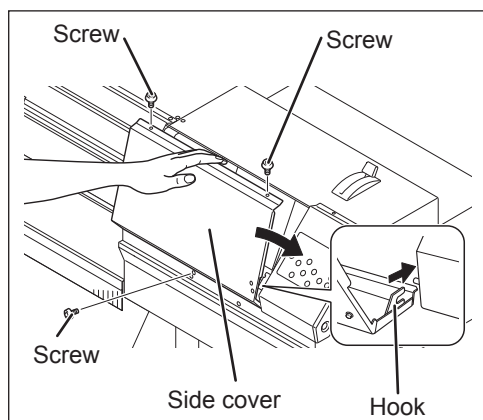
3



Attach the hook.

3. Quit the wiper replacement menu.

1



Attach the side cover.

2

FINISHED? ↵

Press **ENTER** .

CLEANING...
>>



MAINTENANCE
REPLACE WIPER ↵

After the process to quit the wiper replacement mode, the screen shown in the figure appears.

4. Perform a printing test to verify the results of the procedure.

Perform a printing test to check the result.

☞ P. 38, "Printing Tests and Normal Cleaning"

3

Maintenance

When Not in Use for a Prolonged Period

Keep Performing Maintenance

Switch on the power once every two weeks

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

Keep 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). If temperatures are too high or too low, it may cause malfunction.

Alarm Feature

PRESS THE POWER
KEY TO CLEAN

This feature is to remind you to switch on the sub power once a month. When the machine remains unused for about one month, this screen appears and a warning beep sounds. If this screen appears, switch on the sub power. When maintenance operations finish, switch off the sub power.

This feature operates when the printer's main power is turned on. We recommend leaving on just the main power to the printer even when the machine is to remain out of use for a prolonged period.

3

Maintenance

Important Note on Draining Ink

INK CONTROL
PUMP UP

INK CONTROL
HEAD WASH

This machine has features for draining internal ink and for performing washing using SOL INK cleaning cartridges, but they should never be used except in special cases. Allowing the machine to stand without ink for a prolonged period may damage the heads, even if internal washing is performed. Once ink has been filled, then as a rule the ink should never be drained.

Chapter 4

Detailed Setting

Fully Utilizing Preset Function.....	70
Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely).....	70
Saving the Various Settings to the Preset.....	73
Loading a Saved Preset	74
Assigning a Name to a Preset	74
Fully Utilizing the Correction Function	76
Correcting for Misalignment in Bidirectional Printing	76
Correcting for Misalignment in Bidirectional Printing More Precisely.....	77
Accommodating to the Types and Condition of Media	78
Adjusting Head Height to Match Media Thickness.....	78
Expanding the Printing Area by Reducing the Margins	79
Speeding Up Output for Narrow Media.....	80
Preventing Soiling of the Media and Dot Drop-out	82
Switching the Ink Type	83
Restrictions on Switching Ink Type	83
Method for Switching the Ink Type.....	84

Fully Utilizing Preset Function

Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)

Perform the initial adjustment (correction for misalignment in bidirectional printing more precisely) of this machine. This adjustment is necessary in the following cases. When changing the height of the print heads, change the height before performing this adjustment.

☞ P. 122, "Adjusting Head Height to Match Media Thickness"

- **When using this machine for the first time**
- **When changing the media to use**
- **When further correction is required to improve printing, such as when simple correction is performed for misalignment in bidirectional printing.** ☞ P. 76, "Correcting for Misalignment in Bidirectional Printing"

1. Output a test pattern.

1 Press **MENU**.

2

MENU	◀▶
ADJUST BI-DIR	▶

Press **▼** several times until the screen shown on the left appears.

Press **▶** and then **▲**.

3

ADJUST BI-DIR	◀▶
DETAIL SETTING	▶

Press **▶**.

4

DETAIL SETING	◀▶
TEST PRINT	↵

Press **ENTER**.

A test pattern is output.

When printing ends, press **MENU** and then **◀**.

5 Remove the front cover 2.

6 Press **▼** and feed the media forward to a position where you can clearly see the condition of the test print.

This operation is not necessary when using roll media or sheet media. Proceed to step 7.

7

DETAIL SETING	◀▶
TEST PRINT	↵

Repeat steps 1 to 3 until the screen shown on the left appears.

Press **▼**.

8

DETAIL SETTING	◀▶
SETTING NO.1	▶

Press **▶**.

2. Enter the adjustment value.

1

H1	H2	H3	◀▶
0	0	0	↵

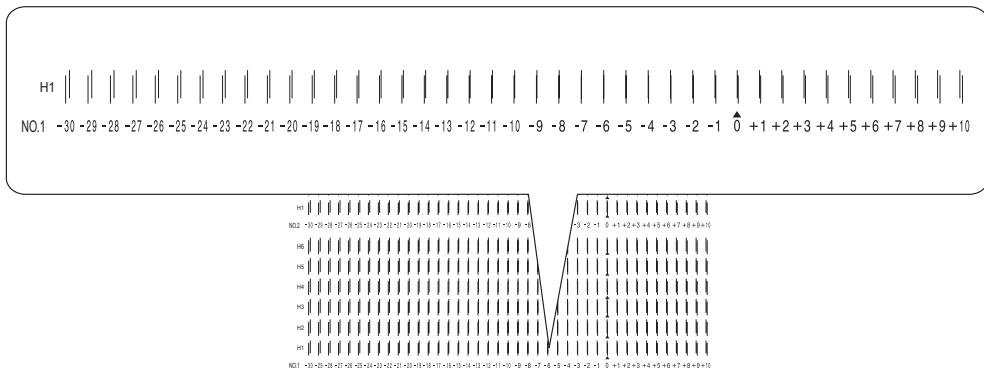
↑

H4	H5	H6	◀▶
0	0	0	↵

Press to select one from H1 to H6.
 Press to decide a correction value for the selected item from H1 to H6.
 Press to finish making the settings for [SETTING NO.1].

To decide a Correction Value

Choose the value that produces the least misalignment of 2lines.



If the Printing-test Results Are Difficult to Interpret

Examine the results from different angles in a well-lighted location. Take advantage of reflected light to enable visual checking.

If you cannot see "H5" or "H6" (such as when using white media with no shine)

You may not be able to see "H5" or "H6" when using certain media, such as white media with no shine. In this case, set "H5" and "H6" to the same value as "H4."

2

DETAIL SETTING	◀▶
SETTING NO.1	▶

Press .

3

DETAIL SETTING	◀▶
SETTING NO.2	▶

In the same manner as performed for [SETTING NO.1], set the correction values for the other items from [SETTING NO.2] to [SETTING NO.4].

4

H1	H2	H3	◀▶
0	0	0	↵

↑

H4	H5	H6	◀▶
0	0	0	↵

When correction value settings end, press **ENTER**.

5

Attach the front cover 2.

When using rigid media, press **▲** and pull back the media to the appropriate position.

6

W XXXmm

Press **MENU** **◀** in this order to go back to the original screen.

Saving the Various Settings to the Preset

Procedure

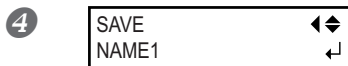
1 Press **MENU**.



Press **▼** twice to display the left figure.
Press **▶**, and then **▼**.



Press **▶**.



Press **▲** **▼** to select one of NAME1 through 8.
Press **ENTER** to enable the setting.

The present menu settings are saved.



Press **MENU** **◀** in this order to go back to the original screen.

Description

Using the [PRESET] menu lets you easily change a wide variety of settings to optimize them for the media. Up to eight types of presets can be saved. You can assign a name to each one. Using media names for these may aid recognition and clarity. Making changes for each menu item every time you change the media can be troublesome. That's why it can be useful to save the menu-item settings optimized for an often-used type of media as a preset. The next time you use the media, you can change the menu-item settings to the optimal values for the media simply by loading the preset you saved. Menu items that can be saved in presets are listed below.

[ADJUST BI-DIR SIMPLE SETTING]	☞ P. 76, "Correcting for Misalignment in Bidirectional Printing"
[ADJUST BI-DIR DETAIL SETTING]	☞ P. 77, "Correcting for Misalignment in Bidirectional Printing More Precisely"
[SIDE MARGIN], [FRONT MARGIN]	☞ P. 79, "Expanding the Printing Area by Reducing the Margins"
[FULL WIDTH S]	☞ P. 80, "Speeding Up Output for Narrow Media"

☞ P. 74, "Loading a Saved Preset," p. 74, "Assigning a Name to a Preset"

Loading a Saved Preset

Procedure

- 1

Press 

2

MENU
PRESET


- Press  to display the left figure.

Press  twice.
- 3

LOAD
NAME1



SETUP SHEET
ROLL



Press   to select a name to be called.

Press  to enable the setting.

The settings are changed and the screen shown in the figure appears.
- ### Description
- This loads a saved preset. You can select any one of eight types of presets. (When no names have been assigned, you select from among NAME1 through NAME8.) If you load a preset while  is illuminated,  goes dark. When starting output, press  again to make the output operation available
- ## Assigning a Name to a Preset
- ### Procedure
- 1

Press 

2

MENU
PRESET



Press  to display the left figure.

Press  and then .

3

PRESET
NAME



Press .

4

NAME
NAME1



Press   to select one of NAME1 through 8.

Press .

5

NAME
S_



Press   to enter a character.

When a character is decided, press .

The characters you can enter are "A" through "Z," "0" through "9," and the "-" character. You can enter up to 15 characters, including spaces.

6

NAME
SAMPLE_



Press   to enter a character.

Enter the following characters in the same way.

4

Detailed
Setting

74

When entries are completed, press **ENTER** to enable the setting.

7

W XXXmm
SETUP SHEET
◀ ROLL

Press **MENU** **◀** in this order to go back to the original screen.

Description

This assigns a name to a saved preset. Using media names may aid recognition and clarity.

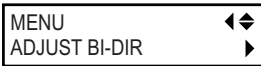
The characters you can enter are "A" through "Z," "0" through "9," and the "-" character. You can enter up to 15 characters, including spaces.

Fully Utilizing the Correction Function

Correcting for Misalignment in Bidirectional Printing

Procedure

1 Press **MENU**.

2 

Press  several times to display the left figure.
Press .

3 

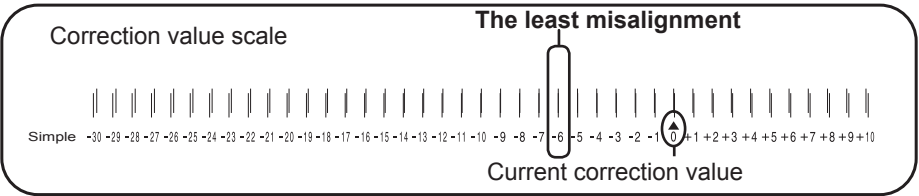
Press **ENTER**.
A test pattern is printed.
When printing is completed, press   in this order.

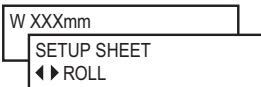
4 

Press   to select a correction value.
Press **ENTER** to enable the setting.

To decide a Correction Value

Choose the value that produces the least misalignment of 2lines.



5 

Press **MENU**  in this order to go back to the original screen.

Description

This machine prints by the bidirectional mode (in which the heads perform printing during both their outbound pass and return pass). This printing method is called "Bidirectional Printing." This method offers the advantage of being able to shorten output times, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is "Bidirectional Correction." This misalignment varies according to the head height and the thickness of the media, so we recommend performing correction to match the media you're using.

Correcting for Misalignment in Bidirectional Printing More Precisely

When further correction is required, such as when adjustment made using [SIMPLE SETTING] does not enhance printing, use [DETAIL SETTING] to make corrections.

Adjusting Head Height to Match Media Thickness

Procedure

1 Press **MENU**.

2

MENU	◀▶
HEAD HEIGHT	▶

Press **▼** several times to display the left figure.
Press **▶**.

3

HEAD HEIGHT	◀
MIDDLE ▶ HIGH	↵

Press **▲** **▼** to select an item.

HIGH: Use this setting when using media that may rise up.

MIDDLE: Use this setting normally (recommended).

LOW: Use this setting when you want to print small text at high resolution.

* When "HIGH" or "LOW" is selected, print quality may be affected.

See "Description" for more information.

Press **ENTER** to enable the setting.

Description

When using media that is likely to rise up, note that the media may contact the print heads. When you are using such media, adjust the head height to "HIGH."

When the head height is set to "HIGH", printing may be coarse and print quality may be affected. If this happens, refer to the pages indicated below.

☞ P. 76, "Correcting for Misalignment in Bidirectional Printing," p. 77, "Correcting for Misalignment in Bidirectional Printing More Precisely," p.82, "Preventing Soiling of the Media and Dot Drop-out"

Select "LOW" when you want to print small text at high resolution.

Default Setting

[HEAD HEIGHT]: MIDDLE

Expanding the Printing Area by Reducing the Margins

Procedure

1 Press **MENU**.



Press **▼** several times until the screen shown on the left appears.

Press **▶**.



Press **▼** several times until the screen shown on the left appears.

Press **▶**.



Press **▲** **▼** to select "5 mm (3/16 inch)."

Press **ENTER** to enable the setting.



A type of media is displayed.

When "SHEET SETUP" is set to any value other than "RIGID," the screen shown on the left appears and setting is complete.

When "SHEET SETUP" is set to "RIGID," proceed to the next step.

5 Press **MENU**.



Press **▼** several times until the screen shown on the left appears.

Press **▶**.



Press **▼** several times until the screen shown on the left appears.

Press **▶**.



Press **▲** **▼** to select "25 mm (16/16 inch)."

Press **ENTER** to enable the setting.

Only available when "SETUP SHEET" is set to "RIGID".

4

Detailed
Setting

Description

The "SIDE MARGIN" setting determines the distance from the left or right media clamp to the corresponding left or right edge of the printing area. You can select "5 mm (3/16 inch)," "10 mm (6/16 inch)," or "25 mm (16/16 inch)." Setting this to "5 mm (3/16 inch)" lets you expand the printing area.

Note, however, that when you're using transparent media, setting this to "5 mm (3/16 inch)" may result in printing on top of the media clamps.

The "FRONT MARGIN" setting determines the distance from the front edge of the rigid media to the printing area. You can select "5 mm (3/16 inch)," "10 mm (6/16 inch)," or "25 mm (16/16 inch)." Setting this to "5 mm (3/16 inch)" lets you expand the printing area.

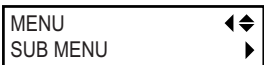
Default Setting

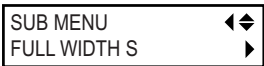
[SIDE MARGIN]: 10mm (6/16 inch)
[FRONT MARGIN]: 10mm (6/16 inch)

Speeding Up Output for Narrow Media

Procedure

1 Press **MENU**.

2 

3 

4 

Press  several times to display the left figure.
Press .

Press  several times to display the left figure.
Press .

Press   to select an item.
SHEET

"SHEET" matches the range of head movement to the width of the media.

OFF

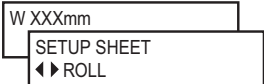
"OFF" matches the range of head movement to the output data. Movement is limited to the minimum amount necessary, and this can be expected to yield the fastest output. Note, however, that because the speed of media movement is no longer constant, colors may be uneven.

FULL

This makes the speed of media movement constant at all times and produces the most stable output result.

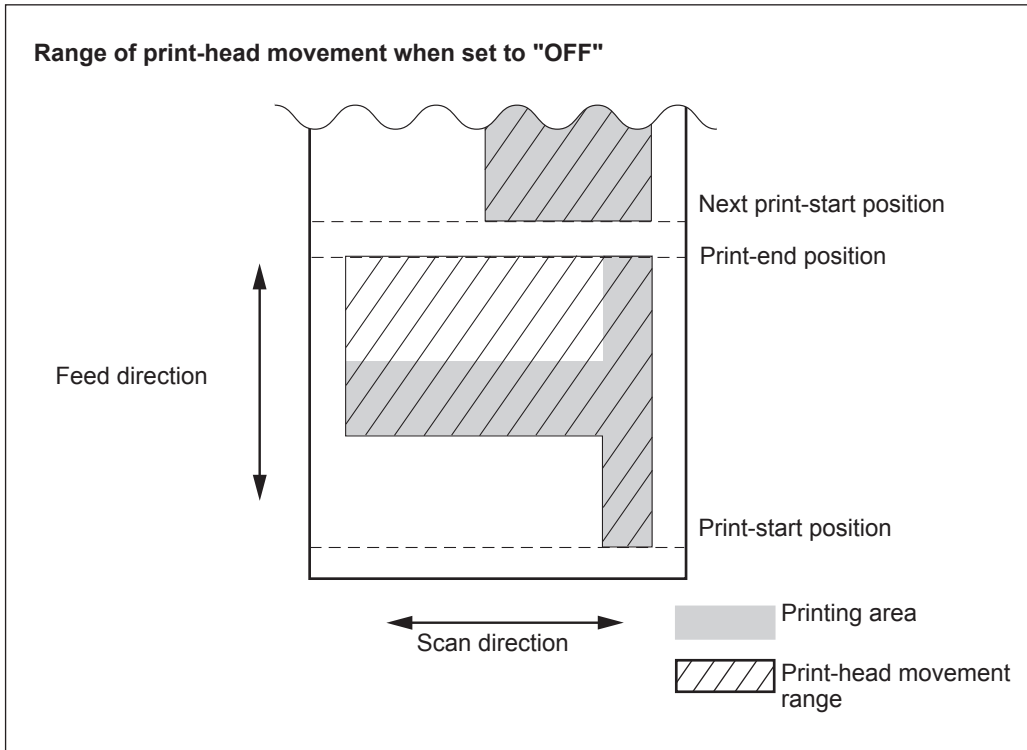
Press **ENTER** to enable the setting.

Press **MENU**  in this order to go back to the original screen.

5 

Description

This shortens print time by reducing the width of print head movement to the minimum necessary. This is effective when the width of the media or the print data is narrow.



Default Setting

[FULL WIDTH S]: FULL

Preventing Soiling of the Media and Dot Drop-out

Procedure

1 Press **MENU**.

2

MENU	◀▶
SUB MENU	▶

Press **▼** several times to display the left figure.
Press **▶**.

3

SUB MENU	◀▶
PERIODIC CL.	▶

Press **▼** several times to display the left figure.
Press **▶**.

4

PERIODIC CL.	◀▶
NONE ▶ 10 min	↵

Press **▲** **▼** to select an item.
PAGE

Automatic cleaning is performed every time before printing starts.

5 to 990 min

Automatic cleaning is performed when the cumulative printing time reaches the value you set here.

NONE

Automatic cleaning is not performed.

Press **ENTER** to enable the setting.

5

W XXXmm
SETUP SHEET
◀▶ ROLL

Press **MENU** **◀** in this order to go back to the original screen.

Description

In the following cases, Ink tends to collect on the surface of the heads. Under some conditions, this ink may be transferred to the media or cause dot drop-out.

- When you use media prone to buildup of static charge.
- When the ambient temperature is low.
- When the head height is set to "HIGH."

Selecting "PAGE" or a value from "5 min" to "990 min," the ink buildup is removed before or during printing while printing is performed. Note, however, that using "PAGE" or a value from "5 min" to "990 min," results in longer printing times.

Default Setting

[PERIODIC CL.]: NONE.

Switching the Ink Type

Restrictions on Switching Ink Type



On this machine, you can switch the ink type using the [HEAD WASH] menu after filling with ink.

However, there are the restrictions given below:

- **The ink types that can be used on this machine are the ECO-UV ink and ECO-UVS ink.**
- **When you select [ECO-UV CMYKGIGI] (*1) or [ECO-UV CMYKGIW] (*2) when you fill with ink for the first time, you cannot switch the ink type from the ECO-UVS ink to ECO-UV ink.**
- **You can only select [ECO-UV CMYKWW] (*3) when you switch the ECO-UVS ink to ECO-UV ink.**

ECO-UV CMYKGIGI ⇒ ECO-UVS CMYKWW (*4)	OK
ECO-UV CMYKWW ⇒ ECO-UVS CMYKWW	OK
ECO-UV CMYKGIW ⇒ ECO-UVS CMYKWW	OK
ECO-UVS CMYKWW ⇒ ECO-UV CMYKGIGI	Not OK
ECO-UVS CMYKWW ⇒ ECO-UV CMYKWW	OK (*5)
ECO-UVS CMYKWW ⇒ ECO-UV CMYKGIW	Not OK

(*1) Cyan, magenta, yellow, and black ECO-UV ink cartridges and two gloss ink cartridges are used.

(*2) Cyan, magenta, yellow, and black ECO-UV ink cartridges, one gloss ink cartridge, and one white ink cartridge are used.

(*3)Cyan, magenta, yellow, and black ECO-UV ink cartridges and two white ink cartridges are used.

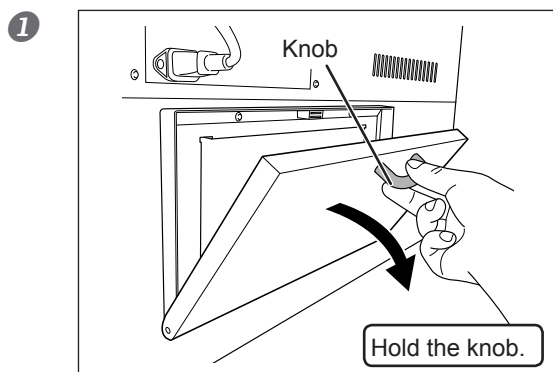
(*4) Cyan, magenta, yellow, and black ECO-UVS ink cartridges and two white ink cartridges are used.

(*5) When you select [ECO-UV CMYKGIGI] or [ECO-UV CMYKGIW] when you fill with ink for the first time, you cannot switch the ink type from the ECO-UVS ink to ECO-UV ink.

Method for Switching the Ink Type

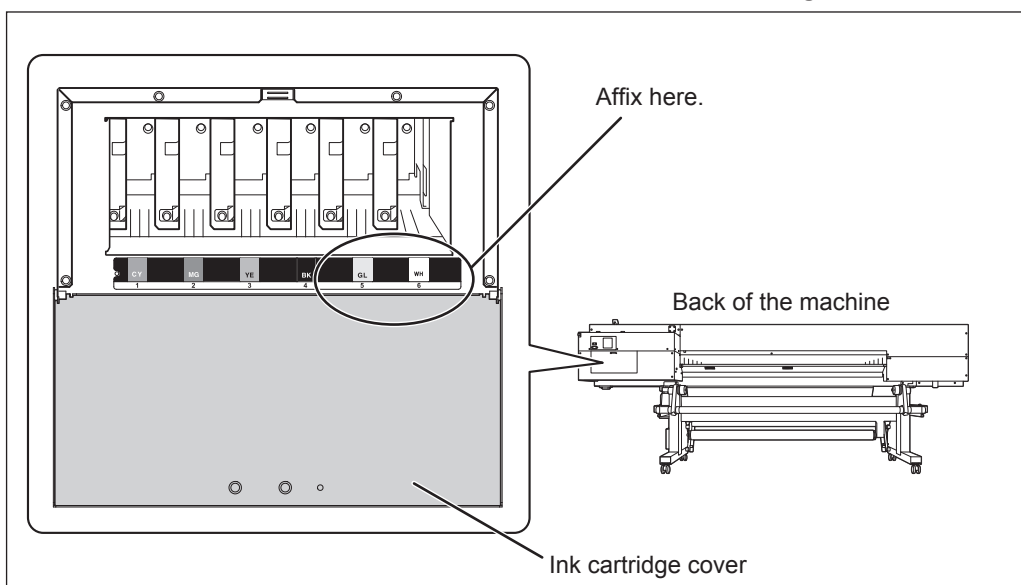
This operation requires four unused SOL INK cleaning cartridges. Have these on hand before you start.

1. Affixing the Cartridge-slot Labels.



Open the ink cartridge cover.

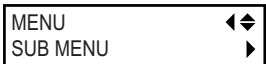
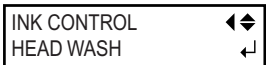
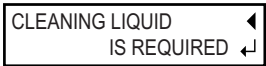
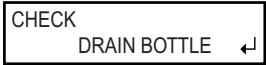
② If  is not affixed, affix it to the location shown in the figure.



2. Drain the ink and wash the interior.

IMPORTANT!

Insert each color ink cartridge into the slot labeled with the matching color. If you insert wrong cartridges when filling ink, the condition cannot be restored easily. Contact your authorized Roland DG Corp. dealer or us, if you filled ink with wrong cartridges inserted.

- 1 Press **MENU**.
- 2  Press **▼** several times until the screen shown on the left appears.
Press **▶**.
- 3  Press **▲** several times until the screen shown on the left appears.
Press **▶** **▲** in this order.
- 4  Press **ENTER**.
- 5  Make sure the cleaning fluid is ready.
Press **ENTER**.
- 6  Discard the discharged ink in the drain bottle.
Be sure to discard the discharged ink.
Press **ENTER**.
- 7 Thereafter, follow the on-screen instructions to carry out the operations.
After cleaning has finished, the sub power is automatically switched off.

⚠ WARNING

Never put discharged fluid or ink closed to fire.
Doing so may cause the blaze.

⚠ CAUTION

To store discharged fluid temporarily, keep it in the provided drain bottle or in a durable container such as a metal can or polyethylene tank, and close the cap tightly.
Any spillage or vapor leakage may cause fire, odor, physical distress.

Store discharged fluid in a location not exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, keep the drain bottle out of direct sunlight. Otherwise the discharged fluid may harden, making the drain bottle unusable.

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.

3. Fill with ink.

1 Press the sub power button.

2 Select the ink type.

<When switching to ECO-UV ink>



Press to display the left figure.
Press .

<When switching to ECO-UVS ink>



Press to display the left figure.
Press .

3 Thereafter, follow the on-screen instructions to carry out the operations.

After finishing the operation, close the ink cartridge cover.

IMPORTANT!

When you use VersaWorks

Be sure to perform the following operation after filling with ink. Otherwise, you cannot use VersaWorks.

Procedure

- 1 From the [Start] menu, click [All programs (or Programs)] - [Roland VersaWorks] - [Roland VersaWorks] - [Initialize Application].
- 2 Click [Yes] when a confirmation message for initialization of the application appears.
- 3 Click [OK] when a completion message for initialization of the application appears
- 4 **Start VersaWorks.**
The [Printer Settings] window is displayed. This is because the connection with the printer is initialized by performing Initialize Application.
- 5 **Make the settings of the printer.**

☞ "Printer Connection and Settings" in "Roland VersaWorks Quick Start Guide"

When you initialize the application, the settings of Roland@NET are initialized as well. Please make the settings again.

☞ "Making the Settings for Roland@NET" in "Roland VersaWorks Quick Start Guide"

Chapter 5

Printing Administration

Printing with Crop Marks	88
Printing with Crop Marks	88
Output Operation Management	89
Printing a System Report	89
Determining What Happens When Ink Runs Out	89
Displaying the Amount of Media Remaining	90
Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed	91
Printing the Amount of Remaining Media	92
System Management of Printer	93
Setting the Interval until Activation of the Sleep Mode (Power Saving Function).	93
Deactivating the Sleep Mode (Power Saving Function)	93
Viewing Information about the System of This Machine	94
Returning All Settings to Their Initial Values.....	95

Printing with Crop Marks

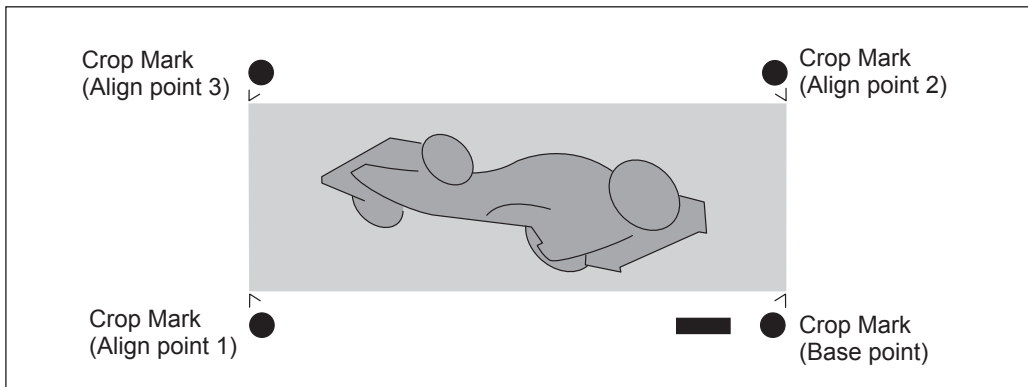
Printing with Crop Marks

Use your software RIP to make the settings for printing crop marks. For information on how to make the setting, refer to the documentation for the software RIP you're using.

IMPORTANT!

Alignment marks and symbols drawn using a graphics program cannot be used as crop marks.

The crop marks are printed as shown in the figure.



Output Operation Management

Printing a System Report

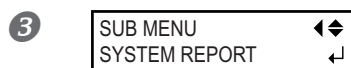
This prints system information, including a list of setting values.

Procedure

- 1 Press **MENU**.



Press **▼** several times to display the left figure.
Press **▶**.



Press **▼** several times to display the left figure.
Press **ENTER**.
Start printing.



Press **MENU** **◀** in this order to go back to the original screen.

Determining What Happens When Ink Runs Out

This lets you change, according to your purpose, the operation that takes place when an ink cartridge is empty.

Procedure

- 1 Press **MENU**.



Press **▼** several times to display the left figure.
Press **▶**.



Press **▲** several times to display the left figure.
Press **▶** twice.

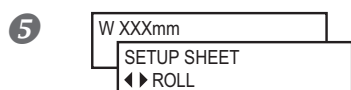


Press **▲** **▼** to select.

"STOP": Printing pauses immediately when a cartridge becomes empty.

"CONT" (continue): Printing does not stop when a cartridge becomes empty. When a cartridge becomes empty, a warning beep sounds.

Press **ENTER** to enable the setting.



Press **MENU** **◀** in this order to go back to the original screen.

Description
When "STOP" is selected, printing pauses and so colors may be uneven. Ensure a sufficient amount of remaining ink before you begin printing. When "CONT" is selected, printing does not stop even if ink runs out completely. To replace the cartridge, wait until printing ends or press PAUSE to pause printing.
Default Setting
[EMPTY MODE]: STOP

Displaying the Amount of Media Remaining

You can display how much of the media in use is left. First, you set the amount of media remaining, the amount remaining is displayed at the top menu until it reaches zero.

Procedure

- 1

Press **MENU**.
- 2

MENU
SHEET REMAIN

Press **▲** several times to display the left figure.
Press **▶**, and then **▼**.
- 3

SHEET REMAIN
SET LENGTH

Press **▶**.
- 4

SET LENGTH
0.0 m ▶ 25.0 m

Press **▲** **▼** to set the current amount of media remaining.
Press **ENTER** to enable the setting.
- 5

W XXXXmm L XX.Xm

Press **MENU** **◀** in this order to go back to the original screen.

SETUP SCREEN
◀ ROLL L XX.X m

Questo display viene aggiornato.
Se l'installazione non è stata eseguita,
il valore impostato lampeggia.
- | Description |
|---|
| If you cancel the setup such as by removing the media or raising the loading lever, the amount remaining at that time flashes on the screen.
Because the amount of media remaining is not updated automatically when you change the media, redo the setting whenever you change the media. You can also make the setting display this menu automatically whenever you change the media. See the next section, "Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed"
Note: The remaining amount that is displayed is only an estimate, and its accuracy is not assured. |
- 5
Printing
Administration
- 90

Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed

Set to display

SET LENGTH	◀▶
0.0 m ▶ 25.0 m	↵

 every time when a media is changed.

Procedure

1 Press **MENU**.

2

MENU	◀▶
SHEET REMAIN	▶

Press **▲** several times to display the left figure.

Press **▶**, and then **▲**.

3

SHHET REMAIN	◀▶
AUTO DISPLAY	▶

Press **▶**.

4

AUTO DISPLAY	◀▶
DISABLE ▶ ENABLE	↵

Press **▲** **▼** to select "ENABLE".

Press **ENTER** to enable the setting.

If you set to "ENABLE," you must set the [SHEET TYPE] menu to "OPAQUE"

☞ P. 123, "Using Transparent or High Gloss Media"

5

W XXXmm
SETUP SHEET
◀▶ ROLL

Press **MENU** **◀** in this order to go back to the original screen.

Description

Setting this menu to "ENABLE" can keep you from forgetting to redo the setting when you change the media. Be sure, however, also to set the [SHEET TYPE] menu (refer to P. 123, "Using Transparent or High Gloss Media") to "OPAQUE." When [SHEET TYPE] is set to "CLEAR," [SHEET REMAIN] is not displayed automatically.

Default Setting

[AUTO DISPLAY]: DISABLE

Printing the Amount of Remaining Media

This prints the amount of media remaining that is displayed at the top menu.

Procedure

- 1

Press  .
- 2

MENU

SHEET REMAIN

◀▶

▶

Press  several times to display the left figure.
Press  .
- 3

SHHET REMAIN

PRINT MEMO

◀▶

↵

Press  .
Start printing.
- 4

W XXXXmm L XX.Xm

Press   in this order to go back to the original screen.

Description

You use this when you want to make a record of the remaining length of the media now in use. Printing the amount of media remaining before you change the media enables you to refer to the printed record and use the value to make the setting for the remaining amount the next time you use the media.

Note, however, that continuing by performing the next output starts the output on top of the portion where the amount of remaining media is printed. After printing the amount remaining, then before you perform the next output operation, we recommend cutting off the media.

System Management of Printer

Setting the Interval until Activation of the Sleep Mode (Power Saving Function).

Procedure

1 Press **MENU**.



Press **▼** several times to display the left figure.
Press **▶**.



Press **▲** several times to display the left figure.
Press **▶** twice.



Use **▲** **▼** to make the setting.
Press **ENTER** to enable the setting.



Press **MENU** **◀** in this order to go back to the original screen.

Default Setting

[INTERVAL]: 30min

Deactivating the Sleep Mode (Power Saving Function)

Procedure

1 Press **MENU**.



Press **▼** several times to display the left figure.
Press **▶**.



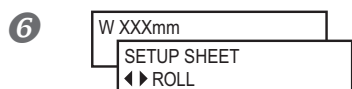
Press **▼** several times to display the left figure.
Press **▶** and then **▼**.



Press **▶**



▲ **▼** to select "DISABLE."
Press **ENTER** to enable the setting.



Press **MENU** **◀** in this order to go back to the original screen.

Default Setting

[SETTING]: ENABLE

Viewing Information about the System of This Machine

Note: For information on how to set up a network, refer to "Setup Guide."

Procedure

1 Press **MENU**.

2 **MENU**
SYSTEM INFO.

Press **▲** several times to display the left figure.

You can view the following information.

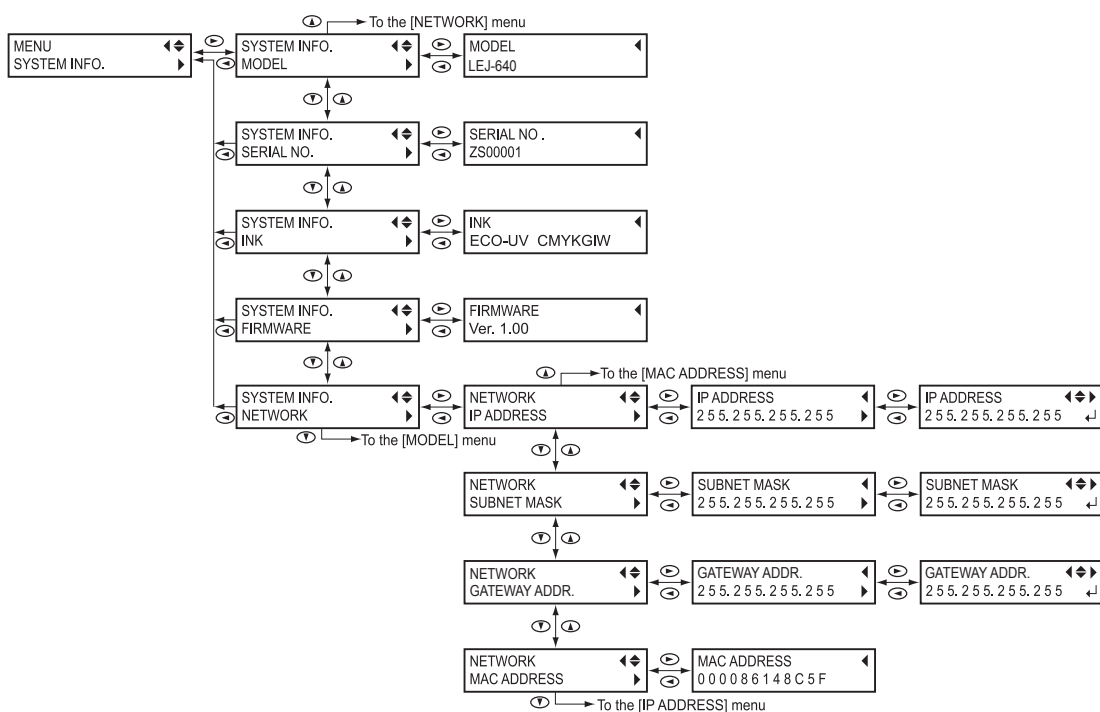
[MODEL]: Model name

[SERIAL NO.]: Serial number

[INK]: Ink type

[FIRMWARE]: Firmware version

[NETWORK]: Network configuration (IP address, etc)

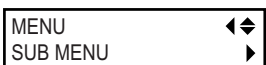


Returning All Settings to Their Initial Values

This menu returns all settings to the same as their factory defaults. However, the settings for [MENU LANGUAGE], [LENGTH UNIT], and [TEMP. UNIT] are not returned to the factory defaults.

Procedure

1 Press **MENU**.

2 

Press  several times to display the left figure.

Press .

3 

Press  several times to display the left figure.

Press  to execute.

Chapter 6

Read this chapter whenever you face a problem. (FAQ)

The Machine Doesn't Run	97
The Printer Unit Doesn't Run	97
Attractive Printing is Impossible	99
Printed Results Are Coarse or Contain Horizontal Stripes.....	99
Colors Are Unstable or Uneven	100
The Media Becomes Soiled or Damaged When Printed	101
Media Jam Occurs	102
The Media Jams	102
Media Feed is Not Smooth	103
Media Wrinkles or Shrinks.....	103
The Print Heads Stopped Moving	104
What to Do First	104
If the Heads Still Do Not Move.....	104
A Message Appears	107
An Error Message Appears.....	109

The Machine Doesn't Run

The Printer Unit Doesn't Run

Is the power switched on?

Switch on the printer's main power, then press the sub power switch and make sure the sub power switch lights up.

☞ P. 29, "Switch On Loading Media"

Is illuminated?

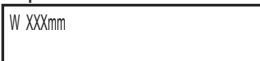
Output is not performed when  is not illuminated. Pull back the loading lever, close the front cover 1, and press .

Is the cover open?

Close front cover 1, front cover 2, side cover, and maintenance cover.

Is the top menu displayed?

Top menu



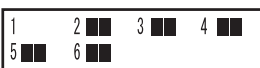
If the top menu isn't displayed, output doesn't start even when data is sent from the computer. To go to the top menu, press , then press .

Is illuminated?

When  lights up, operation is paused. To resume, press .  goes dark and outputting resumes.

☞ P. 42, "Pausing and Canceling Output"

Has ink run out?



When printing 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, output or cutting starts.

☞ P. 46, "How to Replace Ink Cartridges," p. 89, "Determining What Happens When Ink Runs Out"

Is a message displayed on the screen?

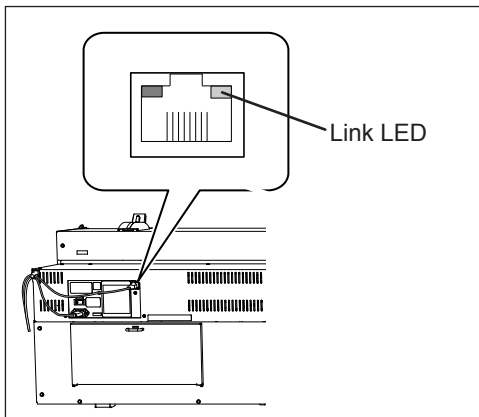
☞ P. 107, "A Message Appears," p. 109, "An Error Message Appears"

Is the cable connected?

Connect the cable securely.

☞ "Setup Guide"

Is the Link LED lighted?



If the Link LED for the Ethernet connector is not lighted, it means that a correct connection to the network has not been made. Make sure the network routing is suitable. 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 output, it means the problem is in the network itself.

Are the network settings correct?

If output is impossible even though the link LED is on, make sure the IP address and other settings are correct. The settings on both the machine and the computer must be appropriate. Redo the settings, checking to ensure that the IP address doesn't 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.

☞ "Setup Guide," p. 94, "Viewing Information about the System of This Machine"

Did the software RIP end abnormally?

Make sure the software RIP is running correctly, then switch the sub power switch off and back on.

☞ "Roland VersaWorks Quick Start Guide"

Is the temperature of the room too low?

Use the machine in an environment where the temperature is 20 to 32°C (68 to 90°F).

Attractive Printing is Impossible

Printed Results Are Coarse or Contain Horizontal Stripes

Does the print head show dot drop-out?

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

☞ P.38, "Printing Tests and Normal Cleaning," p. 53, "When Normal Cleaning Is Not Effective," p. 62, "When the Dot Drop-Out of White Ink Cannot Be Cleared"

Is the head height appropriate?

When [HEAD HEIGHT] is set to [HIGH], the print is rougher than when it is set to [MIDDLE] or [LOW]. Normally set to "MIDDLE", except when using media that is likely to rise up. (When it is set to [LOW], the ability for the media to pass through the machine may be affected because the media clamps cannot be used.)

☞ P. 78, "Adjusting Head Height to Match Media Thickness"

Have you carried out bidirectional correction?

When you are performing bidirectional printing, use the [ADJUST BI-DIR] menu item to carry out correction. The optimal adjustment value may vary, depending mainly on the thickness of the media. Set or select an adjustment value that is suited to the media. When further correction is required, such as when adjustment made using [SIMPLE SETTING] does not enhance printing, use [DETAIL SETTING] to make correction.

☞ P. 76, "Correcting for Misalignment in Bidirectional Printing," p. 77, "Correcting for Misalignment in Bidirectional Printing More Precisely"

Is the print mode suitable?

Try a higher-quality print mode. Depending on the media, uneven colors may occur in high-quality print modes, and the results are also greatly affected by the settings of the software RIP (such as the selected color profile). Make settings suited to the media you're 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. Also make sure that the print heads are not exposed to moving air. These factors may lead to missing dots or reduced printing quality.

Is the printer installed in a location out of direct sunlight?

Never install in a location 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.

Is the print side of the rigid media warped with wrinkles or waves more than 0.5 mm (0.02 inches) high?

Use Roland VersaWorks to set unidirectional printing. If the problem is still not resolved, the wrinkles or waves are too large. Use media with no wrinkles or waves in it.

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're using.

☞ P. 35, "Setup of Media," p. 70, "Fully Utilizing Preset Function"

Colors Are Unstable or Uneven

Did you shake the ink cartridges gently before in-stalling them?

Shake new cartridges gently before you install them.

Is the media wrinkled?

If the media is wrinkled and comes loose from the platen, colors may be uneven or printing quality may suffer.

☞ P. 103, "Media Feed is Not Smooth"

Was printing paused partway through?

When printing is paused, the coloring at the seam may be altered when printing resumes. Avoid pausing printing. By default, printing pauses when ink remaining inside the machine runs out. Before you perform lengthy printing, check the amount of ink remaining in the ink cartridges. 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. Also make sure that the print head is not exposed to moving air. These factors may lead to missing dots or reduced printing quality.

Are the operating parameters set to appropriate values?

Depending on the settings for such menu items as [FULL WIDTH S] and [PERIODIC CL.], uneven colors may occur. If the settings have been changed, try restoring them to their default values.

☞ P. 80, "Speeding Up Output for Narrow Media," p. 82, "Preventing Soiling of the Media and Dot Drop-out"

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. When you're performing printing, use the machine in a location where temperature and humidity are stable.

Is the relative humidity of the environment 35% or less? Is static electricity likely to form in the environment?

Keep the machine's environment between 35% and 80% when operating the machine. Static electricity is more likely to form at lower temperatures, and the pinch rollers may become charged with static electricity, causing inconsistent colors. If the temperature of the environment is not the problem, use a device to remove the static electricity charge from the pinch rollers. If there is a high degree of static electricity, keep the operating environment at a relative humidity of 50% or higher.

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're using.

☞ P. 70, "Fully Utilizing Preset Function"

The Media Becomes Soiled or Damaged When Printed

Does the print head contact the media?

The height of the print head may be too low. Also, if the media is not loaded and set up correctly, it may wrinkle or come loose and strike the heads.

☞ P. 78, "Adjusting Head Height to Match Media Thickness," p. 103, "Media Feed is Not Smooth"

Is the print head dirty?

The following may cause ink to drip on the media during printing.

- Buildup of fibrous dust (lint) around the heads.
- Ink transferred to the heads due to rubbing against the media.

If this happens, perform the manual cleaning. We recommend carrying out periodic head cleaning.

☞ P. 55, "Maintenance that Should Be Performed Weekly"

- Too Low Humidity.

Use this machine in the environment of 35 to 80 %RH (non condensation).

Media Jam Occurs

The Media Jams

If an error message is displayed because the media has jammed, immediately correct the problem. Failure to do so may damage the print head.

➤ P. 110 [MOTOR ERROR TURN POWER OFF]

Is the media warped or wrinkled?

Many factors can cause warping or wrinkling. Refer to the following and correct the problem.

Is the height of the print head too low?

Try raising the heads higher. Media may inevitably warp or wrinkle slightly, so adjust the height of the heads to take this into account.

➤ P. 78, "Adjusting Head Height to Match Media Thickness"

Media Feed is Not Smooth

A variety of problems can occur if the media feed is not smooth. This can cause such problems as poor printing quality, contact with the media by the print head, misaligned positioning, or media jams. Take action as follows.

Media Wrinkles or Shrinks

Is the temperature of room too low?

Use this machine in an environment having an ambient temperature of 20 to 32°C (68 to 90°F). If used in the environment where the temperature is below 20°C, the media may get wrinkled depending its type or width.

Is the using media deflected?

If using the deflected media, it cause winkle of the media.

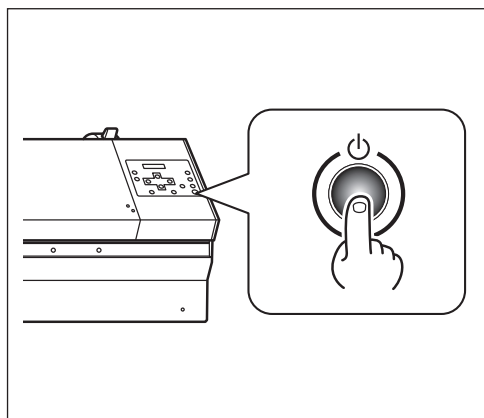
Is the humidity of the room too high?

Use this machine in the environment of 35 to 80 %RH (non condensation).

The Print Heads Stopped Moving

If the print-head carriage stops over the platen, 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 media is jammed, then also remove the media.
If the print-head carriage moves to the standby position (the right side of the main unit), it means the operation has ended successfully.

If The Heads Still Do Not Move

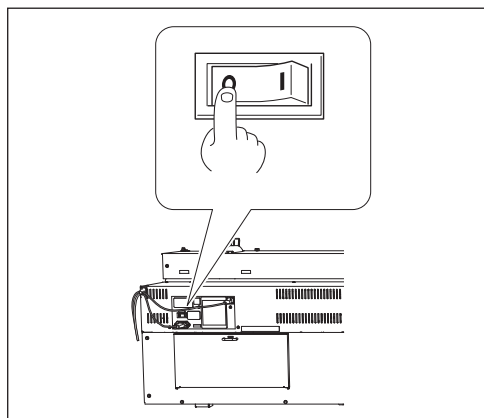
Try switching off the main power, then again switching on the main power, followed by the sub power.

If the Heads Still Do Not Move

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

Procedure

1

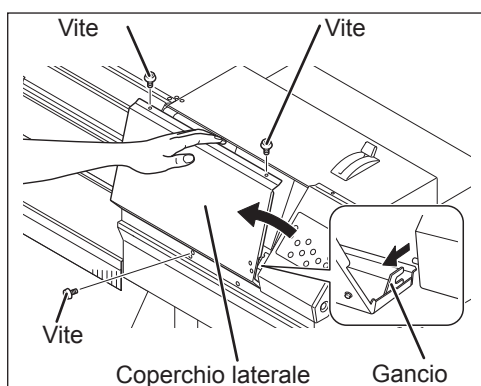


Switch off the main power.

2

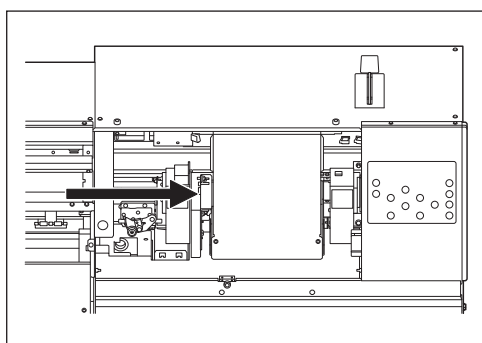
Open the front cover 1.

3



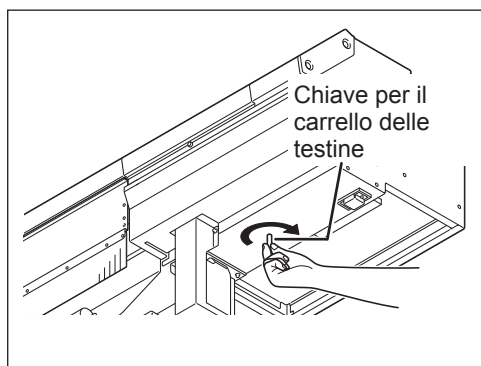
Detach the side cover.

4



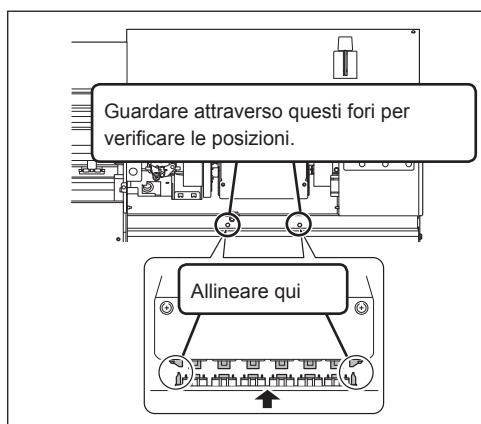
Gently move the print heads by hand as far as the standby position.

5



Insert the head-unit tool into the hole at the bottom of the machine and turn gently.
The cap unit rises.

6

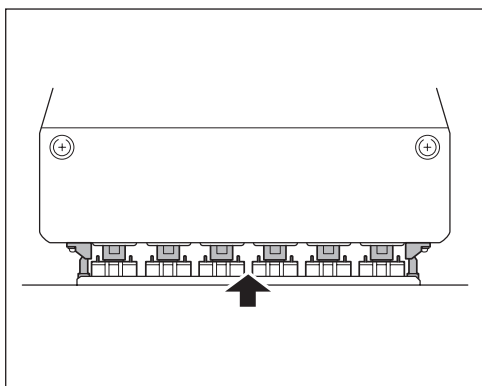


Make the guides at the edges of the print heads line up with the guides at the edges of the cap unit.

6

FAQ

7



Turn the head-unit tool until the print heads make contact with the cap unit.

8

When the heads make contact with the cap unit, turn the head-unit tool one or two turns more.

Make sure the print heads are capped tightly.

If the cap unit does not reach the print heads, contact your authorized Roland DG Corp. dealer.

A Message Appears

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

[1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■]

Only a small amount of ink remains. Replace the cartridge indicated by the flashing number with a new cartridge.

[PRESS THE POWER KEY TO CLEAN]

This appears when the machine has been unused for about one month. Switch on the sub power once a month.

☞ P. 68, "When Not in Use for a Prolonged Period"

[CIRCULATING INK]

The white ink is being circulated inside the machine. This is automatically performed to clear the precipitation of the white ink. Wait until the displayed message changes.

[SET CARTRIDGE]

Insert the ink cartridge indicated by the flashing number. This message appears at times such as during ink cartridge replacement.

[REMOVE CARTRIDGE]

Remove the ink cartridge indicated by the flashing number. This message appears at times such as during ink cartridge replacement.

[CLOSE THE COVER (FRONT COVER, SIDE COVER or MAINTENANCE COVER)]

Close the front cover 1, front cover 2, side cover, maintenance cover. For safety, the carriage does not operate while a cover is open.

[SET CL-LIQUID]

Insert the SOL INK cleaning cartridge indicated by the flashing number. This message appears at times such as during head cleaning.

[REMOVE CL-LIQUID]

Remove the SOL INK cleaning cartridge indicated by the flashing number. This message appears at times such as during head cleaning.

[INSTALL DRAIN BOTTLE]

Check whether the drain bottle is installed. Install the drain bottle, then press **ENTER** .

[CHECK DRAIN BOTTLE]

This appears when a certain amount of discharged fluid collects in the drain bottle. To clear the message, press **ENTER** . If this screen appears, go to the [DRAIN BOTTLE] menu and discard the discharged fluid in the bottle.

☞ P. 50, "Disposing of Discharged Ink"

[CAN'T SETUP]

This is displayed when the print head may have contacted the media and media setup is interrupted. Adjust the height of the print head and set up the media again.

☞ P. 78 "Adjusting Head Height to Match Media Thickness"

[TIME FOR MAINTENANCE]

The time has come to perform the manual cleaning. After verifying, press **ENTER**.

☞ P. 56, "Performing Manual Cleaning"

[TIME FOR WIPER REPLACE]

It is time to replace the wipers. After verifying, press **ENTER**.

☞ P. 64, "Replacing the Wiper"

An Error Message Appears

This 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 .

[TURN POWER OFF AND SET INK MODE]

The sub power is turned on with the ink mode unset.

Turn off the sub power. Select the ink mode, and then turn on the sub power.

☞ "Setup Guide"

[CAN'T PRINT CROP CONTINUE?]

The size of the data including the crop marks is larger than the printing or cutting area of the loaded media.

To continue performing output without correcting this, press **ENTER** . At this time, the portion extending beyond the printing or cutting area and the crop marks are not output. To stop output, stop sending data from the computer, then raise the loading lever. Make the printing or cutting area wider, such as by replacing the media with a larger piece of media or by changing the positions of the pinch rollers, then send the data again.

The size of the data being output is too small.

Make the scanning-direction (movement direction of head) size of the data at least 65 mm (2.6 in). To continue performing output without correcting this, press **ENTER** . At this time, the data is output without printing the crop marks. To stop output, stop sending data from the computer, then hold down **SET UP** for one second or longer. Change the size of the data, then send the data again. There is no limitation in the size of the data in the media-feed direction.

[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. Switch 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) and allow the machine to come to room temperature, then turn on the power.

[SERVICE CALL xxxx]

An unrecoverable error occurred, or part replacement that must be performed by a service technician is required.

Note the number displayed, then switch off the sub power. After you switch off the power, inform your authorized Roland DG Corp. dealer of the number that appeared on the display screen.

[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. Switch 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) and allow the machine to come to room temperature, then turn on the power.

[DATA ERROR CANCELING...]

Output was stopped because a problem was found in the data received.

Operation cannot be continued. Check whether the data contains errors. Also, check for a problem with the connector cable or the computer, and redo the operation from the step of loading the media.

[WRONG CARTRIDGE]

A cartridge that cannot be used was installed.

Remove the cartridge to clear the error. Use a cartridge of the specified type.

[WRONG HEAD IS INSTALLED]

An unusable print head is installed.

Switch off the sub power. After you switch off the power, inform your authorized Roland DG Corp. dealer.

[AVOIDING DRY-UP TURN POWER OFF]

The print heads were forced to standby position to prevent them from drying out.

Operation cannot be continued. Switch the sub power off, then back on. Opening the front cover while output 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. Switch 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 such factors as a mistake in loading the media, a media jam, or an operation that pulls the media with excessive force.

[CANCELED FOR MOTOR PROTECTION]

Continuous operation made the pump motor become hot, and so operation was paused.

Press any key to clear the error. Allow the machine to stand for approximately 40 minutes before resuming operation.

Chapter 7

Main Specifications

Locations of the Power Rating and Serial Number Labels	112
Specifications.....	113
Vacuum Specifications.....	116

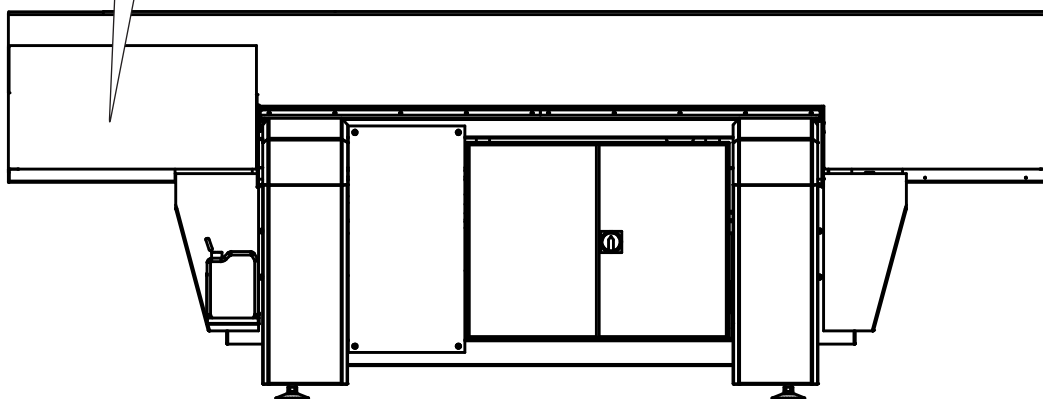
Locations of the Power Rating and Serial Number Labels

Serial Number

This is required when you seek maintenance, servicing, or support.
Never peel off the label.

Power Rating

Use an electrical outlet that meets the requirements for voltage, frequency, and amperage given here..



Specifications

Printing Method		6 piezo heads, UV LED
Acceptable medium	Size	Width 1625 mm; Height 2100 (both can be extended)
	Thickness	Up to 150 mm
	Weight	Max. 200 kg
Printing area *1		Width 1615 mm; Length 2100
Length outside working area *2		1870 mm
Ink Cartridge	Type	ECO-UV/ECO-UVS da 220cc, ECO-UV da 440cc
	Color	Cyan blue, Magenta, Yellow, Black. White and transparent (only ECO-UV)
Vacuum System	Turbine	2,2 KW (three-phase) with silencer system
	Partition	4 selectable areas (mm): 750x550, 800x1100, 1610x1300 and full area
Network interface		Ethernet Base 10/100
Printing resolution		Up to 1440 DPI
Movement		Amplified step motors 24000 pulse/mm resulting
Accuracy of movement		Mistake < 0,3% of the run distance or o +-0,3 mm max at (25°C)
Repeatability on horizontal reposition		+/- 0,01 mm
Control Panel		LCD B/N 6 inches
Working mode		Continuous, Download, Back to the origin, Pleased
Medium height reading		Manual / Optical (laser barrier) for opaque medium
Surface homogeneity control		Optical (laser barrier)
Power		AC 380V three-phase (3+ ground) socket 16A 50/60Hz
Consumption	Working Vacuum	2700 W
	Sleep mode	150 W
Acoustic level	Working Vacuum	< 70 dB
Compressed air	Pressure	from 4 to 7 bar
	Volume *3	< 3 litres/hour
Operating Environment	Switched on	Room temperature suggested: 20-32 °C, Humidity 35-80% (not condensed)
	Switched off	Room temperature suggested: 5-45 °C, Humidity 20-80% (not condensed)
Encumbrance		3184(L) x 3283(P) mm
Encumbrance for transport	Trasport	2225(L) x 3283(P) mm
	Minimum *4	1700(L) x 3233(P)
Height of the printing plane		895 mm
Weight	Total	1000Kg
	Distribution	on 4 points diameter 120mm (1510 x 2910 mm)

*1 Functional dimension of the aspirating plane.

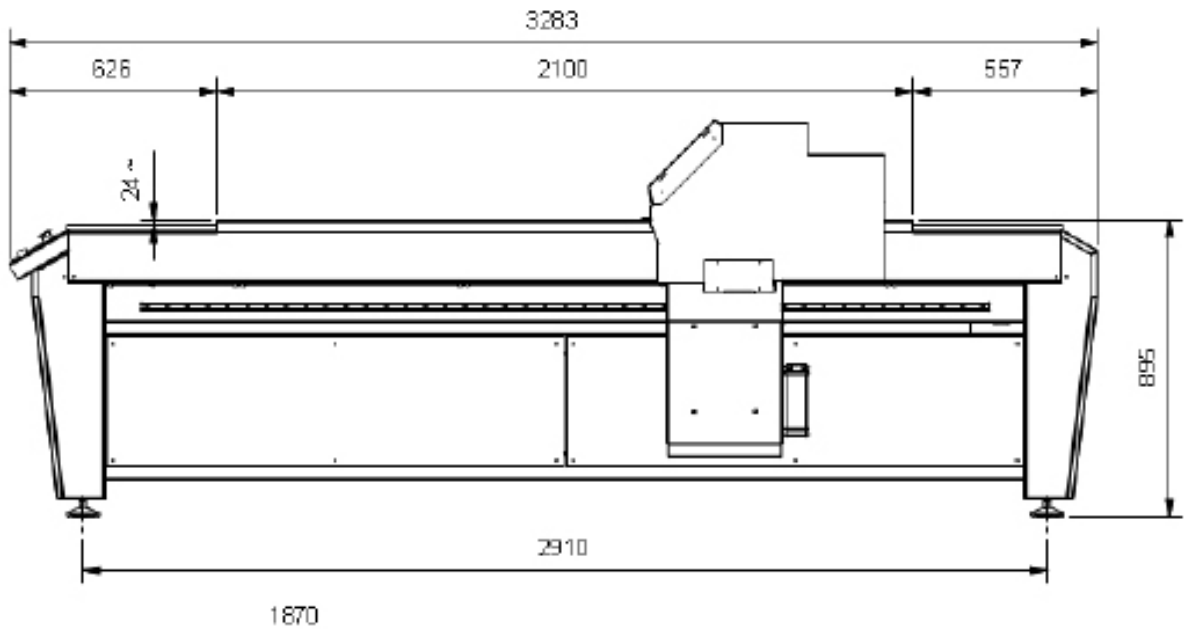
*2 Uncovered height, out of the printing unit.

*3 It depends from the number of starts of the Vacuum system. The air is used only for valves command.

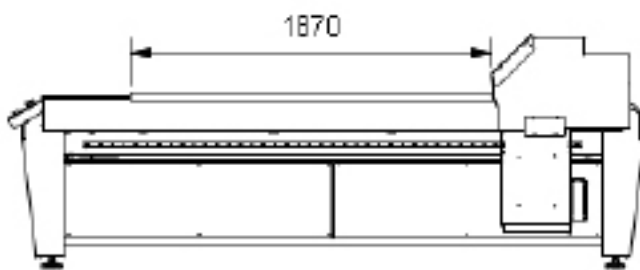
*4 On request and for an additional cost (turrets installation on the site).

Specifications

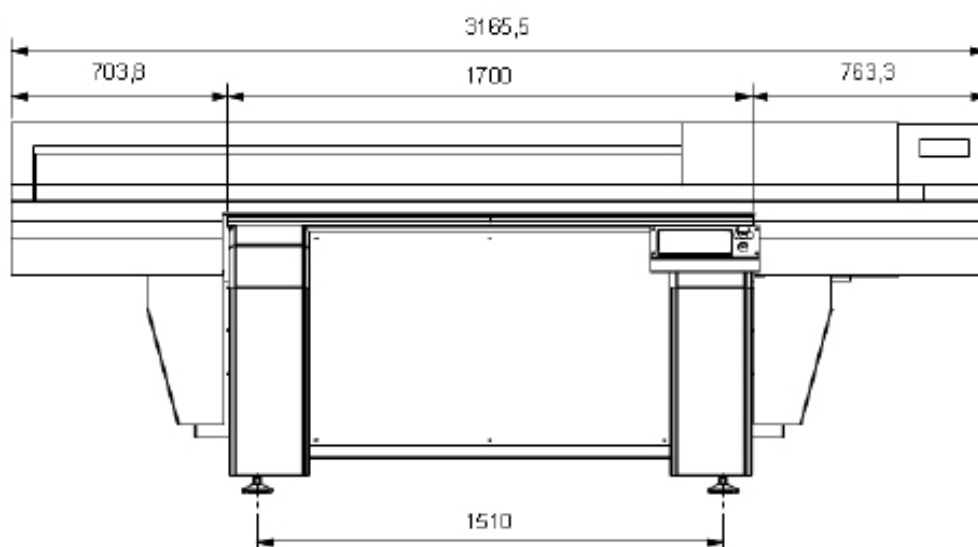
The use of the machinery is limited only to personnel trained by Roland. It might be necessary to use a system of printing vapours collection.



Encumbrance and measures of the printing plane (seen from the side)



Printing area free from the encumbrance of the printing bridge
The printing is anyway executed for 210 cm continuously

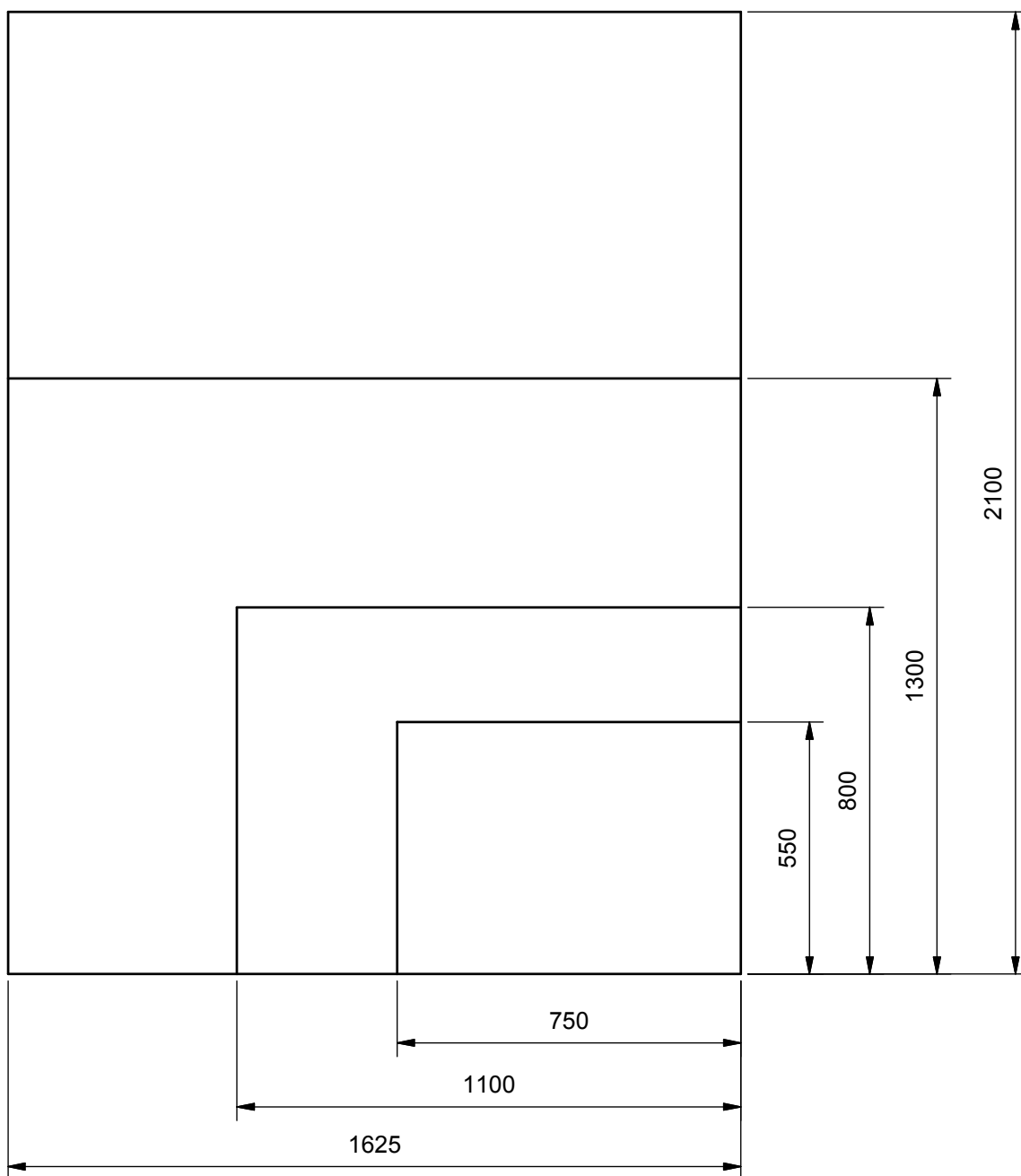


Encumbrance and measures of the printing plane (seen from the front)

The plotter is installed on the site and it is made of two parts, the base and the bridge.

For encumbrance and security reasons, for the transport, the bridge is placed on the plane.

Vacuum Specifications



Specifications