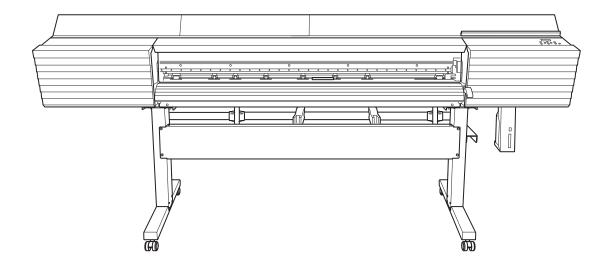
# TrueVIS VG2-640 VG2-540

# User's Manual



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# **Contents**

Chapte	r 1 Basic Handling Methods	8
1.	Basic Information	9
	Part Names and Functions	
	Printer Unit	10
	Operation Panel	15
	Display Screen	
	About the Media Used	17
	Types of Media	
	Conditions for Usable Media	
	Menu List	
	Main Menu	
	Function Menu	23
	Language and Unit Menu	24
2.	Basic Operations	25
	Power Supply Operations	26
	Turning the Power On	26
	Turning the Power Off	27
	Precautions When Operating the Power Supply	
	Sleep Mode (Power-saving Feature)	29
	Setup of Media	30
	Setup of Roll Media	30
	Setup of Sheet Media	
	Separating the Media	47
	What to Do First after Installation	
	Accurately Adjusting the Misalignment of the Ink Landing Position	48
	Checking before Output	50
	LAN Network Settings	50
	Preventing Sedimentation in Inks	51
	Pausing and Canceling Output	52
	Pausing and Resuming Output	52
	Canceling Output	
	Ink Pouch/TR2 Cleaning Liquid Pouch Replacement	54
	Out-of-ink Warnings	54
	Out-of-TR2-cleaning-liquid Warnings	55
	Ink Pouch Replacement	56
	TR2 Cleaning Liquid Pouch Replacement	58
Chapte	r 2 Output Method	60
1.	Printing Method	61
	Preparations before Printing Output	62
	Printing Tests and Normal Cleaning	62
	Printing Output	65
	Step 1: Batch Settings for Printing	65
	Step 2: Starting Output	74
2.	Cutting Method	76
	Preparations before Cutting Output	77
	Step 1: Switching Off the Print Heater and Dryer	
	Step 2: Preventing Pulling of the Media with Undue Force	
	Step 3: Adjusting Cutting	79
	Cutting Output	81
	Step 1: Batch Settings for Cutting	
	Step 2: Starting Output	88

3	B. Printing and Cutting Method	89
	Preparations before Printing and Cutting Output	90
	Step 1: Printing Tests and Normal Cleaning	
	Step 2: Adjusting Cutting	93
	Printing and Cutting Output	95
	Step 1: Batch Settings for Printing and Cutting	
	Step 2: Starting Output	108
4	I. How to Cut with Crop Marks	110
	Preparations before Cutting with Crop Marks	
	What Is Cutting with Crop Marks?	
	Step 1: Printing Tests and Normal Cleaning	
	Step 2: Adjusting Cutting	
	Cutting with Crop Marks	
	Step 1: Batch Settings for Cutting with Crop Marks	
	Step 2: Starting Output with Crop Marks	
	Step 3: Preparations for Cutting Output	
	Step 4: Starting Cutting Output	136
Chapte	er 3 Optimizing Quality and Efficiency	137
1	Optimizing the Output Quality	138
	Using the Correction Functions	139
	Adjust the misalignment of the ink landing position	139
	Accurately Adjusting the Misalignment of the Ink Landing Position	140
	Reducing Horizontal Bands (Feed Correction Function)	142
	Configuring Settings to Match the Properties of the Media	144
	Adjusting Print Head Height to Match Media Thickness	144
	Using Transparent Media	
	Using Hard-to-Dry Media	
	Using Media That Wrinkles Easily/Does Not Move Smoothly	
	Using Sticky Media	
	Preventing Ink Discharge Issues.	
	Preventing Soiling of the Media, Dot Drop-out, and Dot Displacement	
	Preventing Misaligned Media	
	Use Middle Pinch Rollers When Pulling Back or Feeding Media	
	Adjusting the Ink-drying Method	
	What Is the Media Heating System?	
	Setting the Print Heater Temperature	
	Setting the Dryer Temperature	
	Hints and Tips for Temperature Control	
	Drying the Trailing Edge of the Printing Area on the Dryer (When Only Printing)	
	印刷領域の後端をドライヤー上で乾燥させる(プリント&カットの場合)	
	Setting the Drying Time after Printing (When Only Printing)	
	Setting the Drying Time after Printing (When Printing and Cutting)	
	Switching Off the Print Heater and Dryer Together	160
	Using an Auxiliary Drying Unit	161
	Using a Blower-fan Unit	162
	Accurately Adjusting the Cutting Settings	163
	Fine-tuning the Cutting Conditions	163
	Accurately Adjusting the Cutting-in Amount	165
	Performing Distance Correction during Cutting	
	Cutting to Make It Possible to Cut Corners Attractively (Over Cut)	167
	Prioritizing the Cutting Settings of This Machine over the Software RIP Settings	
	Accurately Adjusting the Settings for Printing and Cutting	169
	Correcting the Misalignment of Printing and Cutting	
	Correcting the Misalignment of the Printing and Cutting Positions during Cutting	172

		Accurately Adjusting the Settings for Cutting with Crop Marks	. 1/4
		Aligning the Positions of Cutting with Crop Marks Manually	. 174
		Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Marks)	
		Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Marks)	
		Correct the sensor for reading crop marks	. 184
		Adjusting the Level of the Sensor for Reading Crop Marks According to the Media	. 187
		Resetting the Level of the Sensor for Reading Crop Marks	. 188
	2.	Optimizing Work Efficiency	189
		Using Presets	. 19(
		Saving the Current Settings in Presets	
		Loading and Outputting a Preset	. 192
		Adjusting the Output-start Location	. 193
		Setting the Base Point	. 193
		Reducing Output Time	. 195
		Speeding Up Output for Narrow Media	. 195
		Using the Media Take-up Unit	. 196
		About the Media Take-Up Unit	. 196
		Performing Operations from the Dedicated Mobile Operation Application	. 197
		What Is the Dedicated Mobile Operation Application?	. 197
		Downloading the Operation Application	. 198
		Using the Operation Application	
		Important Notes on Using the Operation Application	. 200
		Other Useful Functions	
		Using the Print Light (Interior Light)	
		Performing Printing Tests Arranged Horizontally	
		Using Media Flanges for Paper Tubes (Cores) with an Internal Diameter of 2 Inches	. 204
	3.	Optimizing Operation Management	205
		Managing the Operations Appropriately and Efficiently	. 206
		Setting the Current Date/Time and Using It for Maintenance	. 206
		Displaying the Amount of Media Remaining	
		Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed	
		Printing the Amount of Remaining Media	
		Thoroughly Using the Middle Pinch Rollers	
		Setting the Activation Interval for Sleep Mode (Power-saving Feature)	
		Managing the Basic Settings of the Printer	
		Setting the Menu Language and Units of Measurement	
		Turning on Bluetooth Communication	
		Returning All Settings to Factory Defaults	
Cha	oter	4 Maintenance	216
	1.	Introduction	217
		Important Notes on Handling and Use	
		Printer	
		Ink Pouches	
		Basic Maintenance Knowledge	
		Types and Timing of Maintenance	
		Measures When the Printer Is Not in Use for a Prolonged Period	
	2	Regular maintenance	221
	۷.	Cleaning the Machine	
		Cleaning the Media Path	
		Cleaning the Knife Carriage Roller	

		Disposing of Discharged Fluid	225
		Precautions for Disposing of Discharged Fluid	225
		If the Discharged Fluid Disposal Message Appears	226
		If the Drain Bottle Exceeds Its Capacity Limit	227
		Daily Print Head Check	228
		Printing Tests and Normal Cleaning	
		When Normal Cleaning Is Not Effective	
		<u> </u>	
		Medium Cleaning Method	
		Powerful Cleaning Method	
		Manual Cleaning	
		When Manual Cleaning Is Necessary	
		Manual Cleaning Method	
		Consumable Products and Parts Related to Manual Cleaning	242
		If Colors Are Uneven	243
		Mixing the Ink by Shaking the Pouch Tray	243
	3.	Advanced Maintenance	244
		When Uneven Color Issues Occur with White Ink	245
		Damper Cleaning Method	_
		Handling Severe Dot Drop-out and Dot Displacement	
		Super Cleaning Method	
		Partially Restricting the Print Heads Used for Printing	
		Emergency Measure) Cleaning the Print Head Surface	254
	4.	Replacing Consumable Parts	255
		Replacing Parts for Maintenance	256
		Replacing the Wiper and the Tray Pad	256
		Cleaning the Wiper Tray	259
		Replacing the Blade/Separating Knife	262
		Replacing the Blade	
		Replacing the Separating Knife	
Cha	pter	5 Troubleshooting Methods	271
	1.	Output Quality Problems	272
		Printed Results Are Coarse or Contain Horizontal Stripes	273
		Do the print heads cause dot drop-out?	273
		Is the print head height appropriate?	
		is the print head height appropriate:	273
		Have you carried out feed correction?	
			273
		Have you carried out feed correction?	273 273
		Have you carried out feed correction?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?	
		Have you carried out feed correction?	
		Have you carried out feed correction?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?	273 273 273 273 274 274 274 275 275 275 275
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven  Have you tried mixing the ink by shaking the pouch trays?	273 273 273 273 274 274 274 275 275 275 275 276 276
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven  Have you tried mixing the ink by shaking the pouch trays?  Is the media wrinkled?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven  Have you tried mixing the ink by shaking the pouch trays?  Is the media wrinkled?  Was printing paused partway through?	
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven  Have you tried mixing the ink by shaking the pouch trays?  Is the media wrinkled?  Was printing paused partway through?  Is the printer installed in a level and stable location?	273 273 273 273 274 274 274 275 275 275 275 276 276 276 276 276
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the pinth heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven  Have you tried mixing the ink by shaking the pouch trays?  Is the media wrinkled?  Was printing paused partway through?  Is the printer installed in a level and stable location?  Is the media loaded correctly?	273 273 273 273 274 274 274 275 275 275 275 276 276 276 276 276 276 276
		Have you carried out feed correction?  Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?  Is the printer installed in a level and stable location?  Is the media heating system at a suitable temperature?  Is the temperature of the room too low?  Is the print mode suitable?  Is the media loaded correctly?  Are the settings for the [PRESET] menu item appropriate?  The Media Becomes Soiled When Printed  Do the print heads come into contact with the media?  Are the print heads dirty?  Are the pinch rollers or the media clamps dirty?  Colors Are Unstable or Uneven  Have you tried mixing the ink by shaking the pouch trays?  Is the media wrinkled?  Was printing paused partway through?  Is the printer installed in a level and stable location?	273 273 273 273 274 274 274 275 275 275 275 276 276 276 276 276 276 276 276

	Cutting Is Misaligned or Skewed	278
	Is the media loaded correctly?	278
	Are the settings for the cutting conditions appropriate?	
	Is the length of output too long?	
	Are you using media that exhibits large expansion and contraction?	
	Is the setting for the [CALIBRATION] menu item (under [CUTTING MENU]) correct?	
	Are the pinch rollers placed on the proper locations?	278
	Printing and Cutting Are Misaligned	279
	Have you corrected the misalignment of printing and cutting?	279
2.	Problems in Cutting with Crop Marks	280
	Automatic Detection of Crop Marks Fails	281
	Is the media wrinkled or warped?	281
	Is the media size too large?	281
	Are you using media that is likely to reflect light?	281
	Are you using transparent media?	281
	Printing and Cutting Are Misaligned	282
	Have you corrected the misalignment of printing and cutting with crop marks?	282
3.	Media Feed Problems	283
	Media Wrinkles or Shrinks	284
	Is the media loaded and set up straight and securely?	284
	Was loaded media allowed to stand for some time?	
	Are the media clamps attached?	284
	Was the media loaded while the print heater was hot?	284
	Are the media heating system temperatures too high?	284
	Is the temperature of the room too low?	284
	Is the humidity of the room too high?	284
	Is the media sagging?	284
	Media Feeding Is Not Straight	285
	Is the media loaded and set up straight and securely?	285
	Media Feeding Is Not Smooth	286
	Is some other object coming into contact with the media?	286
	Is the media too thick?	286
	Are the grit rollers dirty?	286
	A Media Jam Occurs!	287
	Is an error message displayed?	287
	Is the media warped or wrinkled?	287
	Is the height of the print heads too low?	287
	Are the grit rollers dirty?	287
	Are the media clamps attached?	287
	Is the media loaded and set up straight and securely?	287
	Is some other object coming into contact with the media?	287
	Is the media too thick?	288
4.	Machine Problems	289
	The Print Heads Do Not Move	290
	What to Do First	290
	If the Heads Still Do Not Move	290
	The Printer Unit Does Not Run	291
	Is the power switched on?	
	Is [SETUP] lit?	
	Are any covers open?	
	Is the top menu displayed?	
	Is [PAUSE] lit?	
	Is a message displayed on the screen?	
	Are the cables connected?	
	Is the LAN routing appropriate?	
	Are the LAN settings correct?	292

Did the software RIP end abnormally?	292
Has the ink run out?	292
The Media Heating System Doesn't Warm Up	293
Is the media loaded?	293
Is the temperature of the room too low?	293
Cannot Separate the Media	294
Is the separating knife installed?	
Is the cut rail installed?	
Printer Cannot Be Operated from the Dedicated Application	
Is the printer's operation panel in use?	
Is printer-side Bluetooth communication turned on?	
·	
Is the operation application connected to a different printer?	
Is the printer-side Bluetooth communication normal?	
Is the distance between the printer and the mobile terminal too far?	
Are there any obstacles between the printer and the mobile terminal?	
Is the mobile terminal's Bluetooth function turned on?	
Is there a wireless LAN unit or anything else in the vicinity that is causing Bluetooth communication to b	e unstable?. 296
5. Messages on the Operation Panel	297
Messages	298
1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■	298
CLOSE COVER (FRONT COVER/COVER L/COVER R)	298
SHEET NOT LOADED PRESS SETUP KEY	298
CLOSE SLOT COVER	298
END OF THE SHEET	298
EMPTY DRAIN BOTTLE	298
INSTALL DRAIN BOTTLE	298
NOW HEATING NOW PROCESSING	298
TIME FOR MAINTENANCE	298
TIME FOR WIPER REPLACE	299
SET CL-LIQUID FOR WIPER	299
CHANGE CL-LIQUID FOR WIPER	299
TIME FOR TRAY CLEANING	299
HEAD PROTECTION ACTIVATED	299
Error Messages	300
ALIGN POINT POSITION INVALID	
OPTION DRYER IS NOT CONNECTED	
TEMPERATURE IS TOO LOW **°C	
TEMPERATURE IS TOO HIGH ***C	
CROPMARK ERROR NOT FOUND	
CAN'T PRINT CROP CONTINUE?	
SHEET TOO SMALL CONTINUE?	
SHEET SET ERROR SET AGAIN	
SOME MID PINCHS NOT SET RIGHT	
PINCHROLL ERROR LOWER PINCHROLL	
PINCHROLL ERROR INVALID LEFT(RIGHT)POS	
WRONG CARTRIDGE	
CANCELED FOR PUMP PROTECTION	
AVOIDING DRY-UP TURN POWER OFF	
SET HEAD HEIGHT TO ****	
MOTOR ERROR: TURN POWER OFF	
SERVICE CALL ****	
CLEANING ERROR	303
Chapter 6 Appendix	304
Operations When Moving the Unit	305
Preparing to Move the Machine	
sparing to more the maximic manner manne	

	Step 1: Removing Media and the Blade Holder	300
	Step 2: Circulating the Ink (Only When Using White Ink)	
	Step 3: Discharging the Wiper Tray Cleaning Liquid	
	Step 4: Securing the Print Heads in Place Using the Retainer	31:
	Step 5: Reinstalling the Machine	312
2.	Main Specifications	313
	Printing/Cutting Area	314
	Maximum Area	314
	Maximum Printing Area When Using Crop Marks	31!
	Media Separation Location during Continuous Printing	310
	About the Blade	
3	MEMO	315

# Chapter 1 Basic Handling Methods

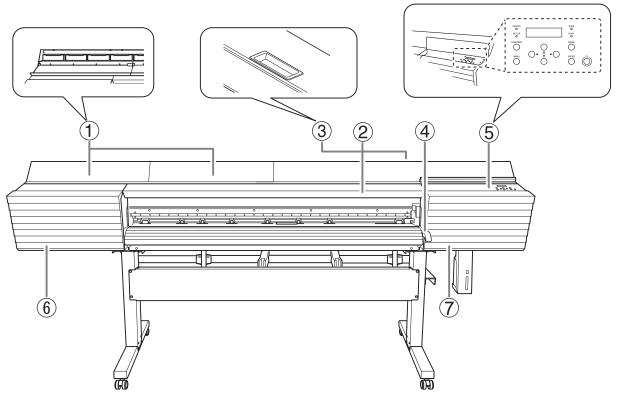
# 1. Basic Information

Part N	Names and Functions	10
	Printer Unit	10
	Operation Panel	15
	Display Screen	16
About	t the Media Used	17
	Types of Media	17
	Conditions for Usable Media	18
Menu	ı List	19
	Main Menu	19
	Function Menu	23
	Language and Unit Menu	. 24

# **Part Names and Functions**

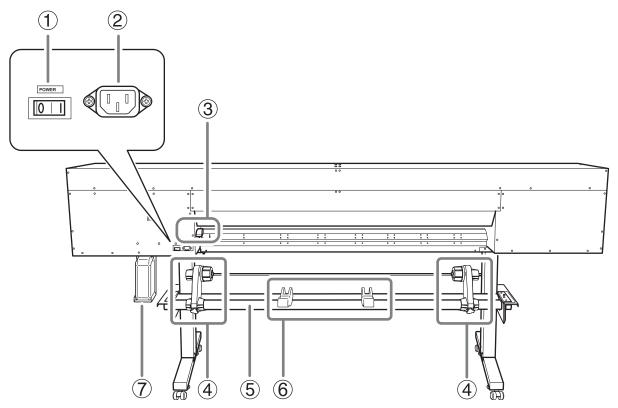
#### **Printer Unit**

#### **Front**



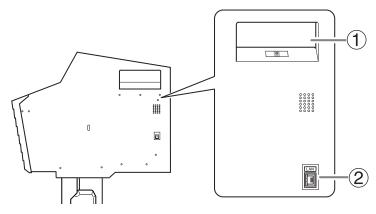
No.	Name	Function overview
1	Ink slot cover, ink slots	Open this cover to access the slots in which the pouch trays are inserted. Leave this closed except when switching pouch trays.
2	Front cover	Open this when necessary, such as when loading media. In all other situations, keep the front cover closed.
3	Small article storage	This is a useful space in which you can place small articles.
4	Loading lever (front)	Operate this when you load media.
(5)	Operation Panel	The panel containing the buttons used to operate the machine.  P. 15 「Operation Panel」
6	Left cover	Open this when you perform maintenance.
7	Right cover	Open this when you perform maintenance.

# **≅** Rear



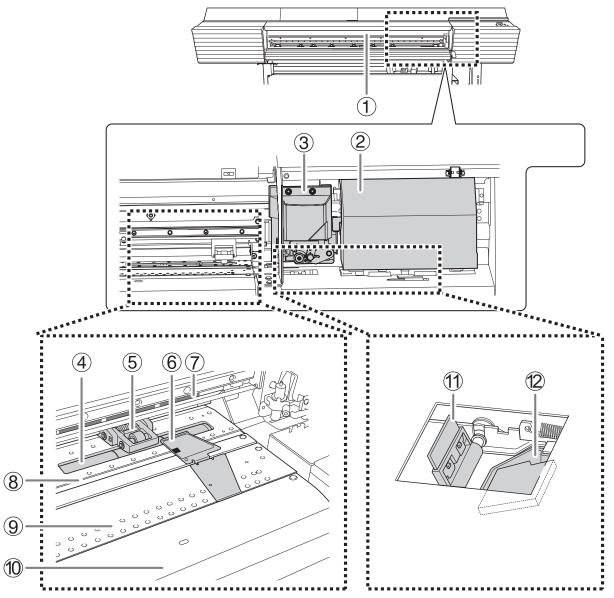
No.	Name	Function overview
1	Main power switch	Switch the main power on/off.
2	Power-cord connector	Use this to connect the power cable.
3	Loading lever (rear)	Operate this when you load media.
4	Media holders	
(5)	Shafts	Use these when you load media.
6	Media stays	
7	Drain bottle	Discharged fluid is stored in this bottle.

# 



No.	Name	Function overview
1	Cleaning liquid slot	Insert the pouch tray with the TR2 cleaning liquid pouch into this slot.
2	Ethernet connector	Use this to connect an Ethernet cable.

# **Front Cover Interior/Print Head Area Front Cover Interior Interior Print Head Area**



No.	Name	Function overview
1	Print light	This light illuminates the front cover interior. This makes it easier to see the printing status. It flashes if a serious error occurs.  P. 14 「Serious Errors Indicated by the Print Light」
2	Print-head carriage	The print heads are inside here.
3	Cutting carriage	The blade and the separating knife are inside here.
4	Grit roller	These rollers feed the media.
5	Pinch roller (left pinch roller, right pinch roller, and middle pinch roller)	These clamp the media when the loading lever is lowered. These rollers are called the left pinch roller, the right pinch roller, and the middle pinch roller according to their positions.
6	Media clamp	This clamps the edge of the media to keep it from coming loose. It also prevents fuzz on the cut edge of the media from touching the print heads.
7	Grit patterns	These indicate the locations of the grit rollers. When loading media, be sure to place the pinch rollers within the ranges indicated by these patterns.

No.	Name	Function overview
8	Blade protector	This is the path that the blade takes during cutting. It protects the tip of the blade.
9	Platen	This is the path over which the media passes. A suction fan that keeps the media from coming loose and a print heater that helps fix the ink are built in.
10	Apron	This has a built-in dryer to speed up drying of the ink.
11)	Wipers	Cleans the print heads during automatic cleaning and in similar situations.
12	Wiper tray	This tray houses the TR2 cleaning liquid used to clean the wiper. It contains a tray pad.

#### **Serious Errors Indicated by the Print Light**

If an error that may lead to serious damage to the printer occurs, the print light blinks.

This indicates one of the situations shown below.

When the print light blinks, the error also appears on the operation panel's display screen. Check the display screen, and then respond to the error according to the information in Error Messages(P. 300) in this manual.

Display Screen	Error overview
AVOIDING DRY-UP TURN POWER OFF	The print heads were about to dry out. The print heads may be damaged if allowed to dry out.
MOTOR ERROR: TURN POWER OFF	An excessive load was applied to the motor. If this error is not addressed, the print heads may be damaged.
TEMPERATURE IS TOO LOW ***C	The ambient temperature in the printer's installation location has fallen below the temperature in which operation is possible. If this error is not addressed, the printer may malfunction.
TEMPERATURE IS TOO HIGH **°C	The ambient temperature in the printer's installation location has risen above the temperature in which operation is possible. If this error is not addressed, the printer may malfunction.
CANCELED FOR PUMP PROTECTION	An excessive load was applied to the pump within the machine. If this error is not addressed, the pump may malfunction.
SERVICE CALL ****	An unrecoverable error or an error that requires a part replacement has occurred.

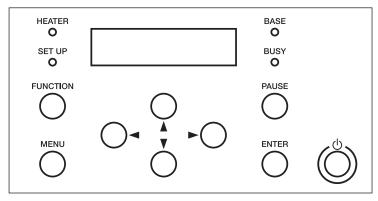
#### **If a Cover Opens during Operation**

If the front cover, left cover, or right cover (hereinafter referred to as "cover") opens during an output operation or while setting up the media, the machine makes an emergency stop. When an emergency stop occurs, a message prompting you to close the cover appears on the screen. Close the covers as directed in the instructions shown on the screen.

When the cover is closed, you will be able to continue the operation.

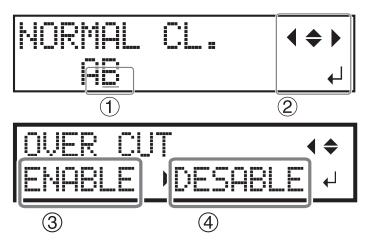
If you cannot continue the operation even after you close the cover, a nonrecoverable error may have occurred. Refer to Error Messages (P. 300) for details.

# **Operation Panel**



Part	Name	Details	Notation in this manual
W1200mm	Display Screen	This displays various setting menus and other information.	
	Sub power switch	This switches the printer on and off. (To switch the printer off, hold down the switch for one second or longer). The light flashes slowly when the machine is in sleep mode.	
ENTER	ENTER key	Use this for such tasks as enabling setting values.	[ENTER]
MENU	MENU key	Press this to enter the menus for various settings.	[MENU]
FUNCTION	FUNCTION key	You press this when entering the setting menu for cleaning of the print heads, printing tests, and so on.	[FUNCTION]
PAUSE	PAUSE key	This pauses the printing operation. It lights when operation is paused.	[PAUSE]
	Cursor keys	Use these to select settings for menu items, to move the media, and for other such operations.	[◄][▼][▲][▶]
BUSY	BUSY light	This lamp lights up during printing and other such operations.	[BUSY]
SETUP	SETUP light	This lights when media has been loaded correctly.	[SETUP]
BASE	BASE POINT light	This lights when the base point (the output-start location) has been set.	"BASE"
HEATER	HEATER light	This flashes while the media heating system is warming up. It stays lit when the set temperature is reached.	[HEATER]

# **Display Screen**



1	Cursor		Displays the setting to be changed. You can move it with the cursor keys.
2	Direction mark		You can select settings and switch screens by pressing the cursor keys indicating directions.
	ENTER mark	<b>+</b>	Press [ENTER] to set the selected setting or execute the processing.
3	Present value		The present value (before change) is displayed.
4	Setting value		Select the setting you want to set (after change).

# **About the Media Used**

#### **Types of Media**

In this manual, the paper used for output is called "media." There are the following two main media types used in this machine.

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

Various paper types of roll media and sheet media are selectable according to your purpose. For detailed information about each media, contact your media supplier.

#### **Conditions for Usable Media**

This machine cannot print on every kind of media. When selecting media, be sure to carry out testing in advance to make sure that satisfactory printing results are obtained.

#### Size

	64-inch model	54-inch model	
Width *1	315 to 1,625 mm (12.4 to 64 in.)	275 to 1,371 mm (10.8 to 54 in.)	
Cuttable media thickness *1 0.08 to 0.22 mm (3.2 to 8.6 mil; depends on the material of		e material of the media)	
	When performing printing only: 1.0 mm When performing cutting: 0.4 mm (15 mil)		
Maximum roll outer diameter	210 mm (8.2 in.)		
Paper tube (core) inner diameter	76.2 mm (3 in.) or 50.8 mm (2 in.) *2		

<sup>\*1</sup> Applies to both roll and sheet media

#### **Maximum Roll Weight**

• 64-inch model: 40 kg (88 lb.)

• 54-inch model: 30 kg (66 lb.)

If using the take-up unit, this specification depends on the conditions of the take-up unit.

#### **Other Conditions**

Media such as the following cannot be used.

- Media whose end is attached to the paper tube (core)
- Media that is severely warped or that has a strong tendency to reroll
- · Media that cannot withstand the heat of the media heating system
- · Media whose paper tube (core) is bent or crushed
- · Media that bends under its own weight when loaded
- Media on a sagging roll
- · Media that is rolled unevenly

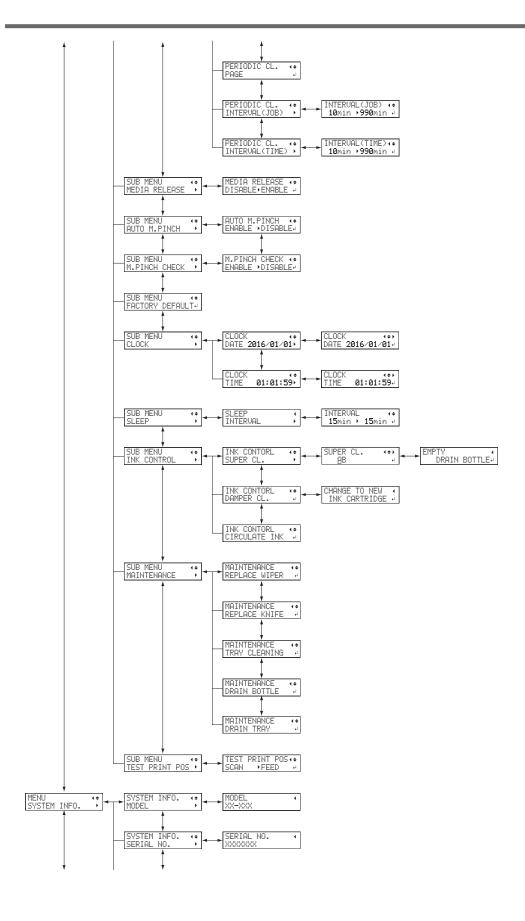
<sup>\*2</sup> To use 2-inch media, the optional media flanges are required. For information about optional items, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).

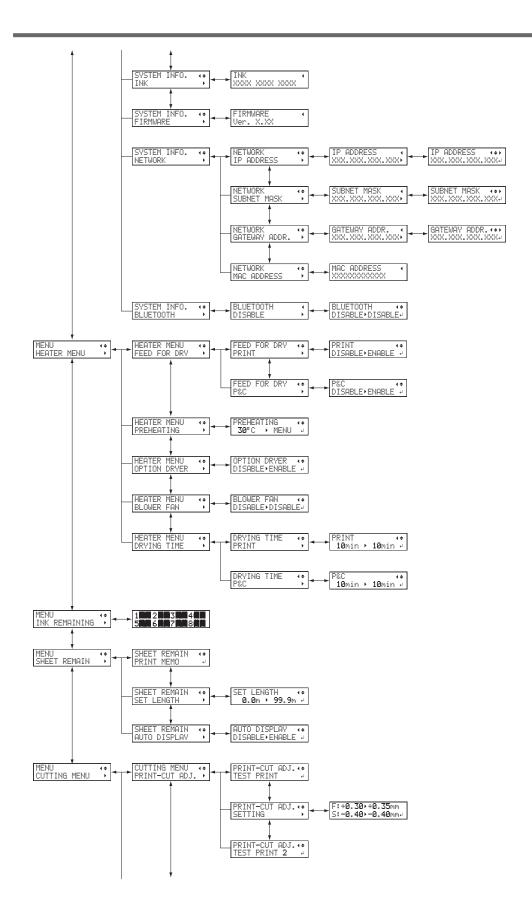
# **Menu List**

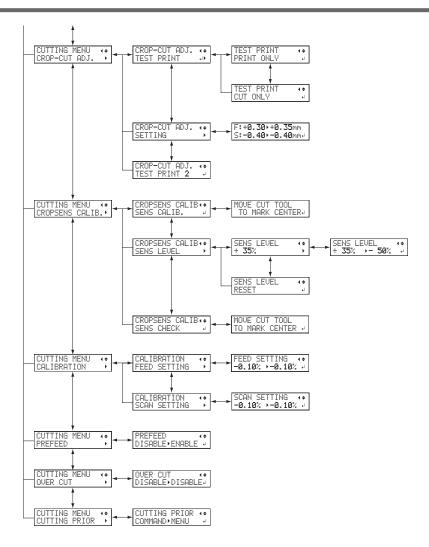
#### Main Menu

Press [MENU]. MENU (\*)
MEDIA SETTING -PRESET NAME1 PRESET 4.0 PRESE' LOAD NAME**8** PRESET SAVE SET NAME NAME8 MEDIA GAP ADJ. .. MEDIA GAP ADJ. (\*) MEDIA GAP ADJ.∢♦ DETAIL SETTING ▶ +1 H2 H3 ↔ 0 0 0 d d 0 DETAIL SETTING (\*)
SETTING NO.2 

H1 H2 H3 (\*)
0 0 0 0 0 MENU CALIBRATION CALIBRATION SETTING ► SETTING (+ 0.00% ++0.05% 4 MENU HEAD HEIGHT HEAD HEIGHT ↓ MENU SUB MENU SUB MENU
EDGE DETECTION SCAN INTERVAL (\*)
OFF 1.0sec SUB MENU (\*) SUB MENU (\*\*) VACUUM POWER ← AUTO → 90% → FULL WIDTH S ++ SUB MENU \*\*

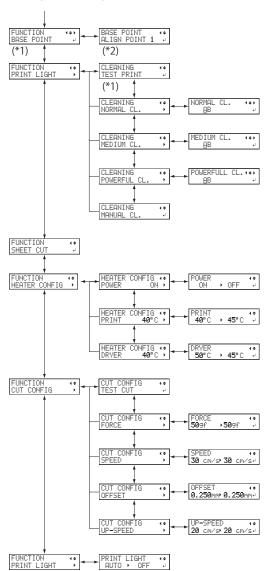






#### **Function Menu**

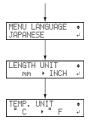
#### Press [FUNCTION].



- (\*1) This is displayed when the width of the media is displayed after the media has been loaded.
- (\*2) This is not displayed when the base point is not set.

# **Language and Unit Menu**

Hold down [MENU] and switch on the sub power.



# 2. Basic Operations

Devices County Oceanting	20
Power Supply Operations	
Turning the Power On	26
Turning the Power Off	27
Precautions When Operating the Power Supply	28
Sleep Mode (Power-saving Feature)	29
Setup of Media	30
Setup of Roll Media	30
Setup of Sheet Media	40
Separating the Media	47
What to Do First after Installation	48
Accurately Adjusting the Misalignment of the Ink Landing Position	48
Checking before Output	50
LAN Network Settings	50
Preventing Sedimentation in Inks	51
Pausing and Canceling Output	52
Pausing and Resuming Output	52
Canceling Output	53
Ink Pouch/TR2 Cleaning Liquid Pouch Replacement	54
Out-of-ink Warnings	54
Out-of-TR2-cleaning-liquid Warnings	55
Ink Pouch Replacement	
TR2 Cleaning Liquid Pouch Replacement	58

# **Power Supply Operations**

#### **Turning the Power On**

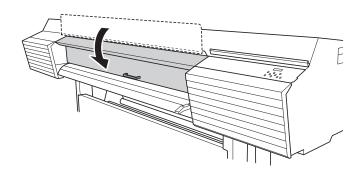
**⚠** WARNING

When output is not being performed, remove any loaded media or switch off the sub power.

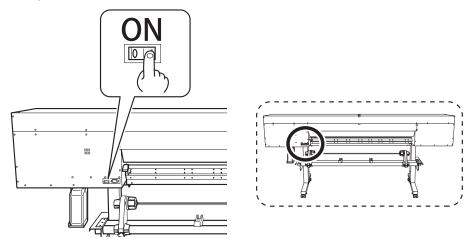
The continued application of heat at a single location may cause the release of toxic gases from the media or pose a fire hazard.

#### Procedure

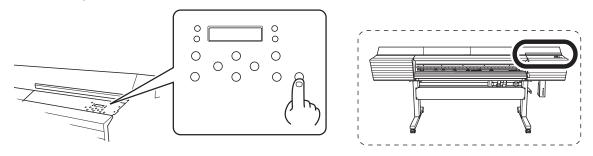
1. Close the front cover.



**2.** Turn on the main power switch.



**3.** Press the sub power button.



#### **Turning the Power Off**

#### **⚠** WARNING

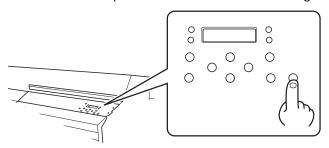
When output is not being performed, remove any loaded media or switch off the sub power.

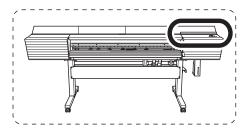
The continued application of heat at a single location may cause the release of toxic gases from the media or pose a fire hazard.

#### Procedure

1. Switch off the sub power whenever printing is finished.

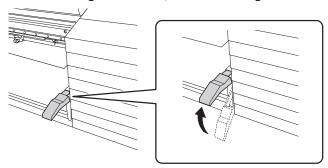
Hold down the sub power switch for one second or longer.

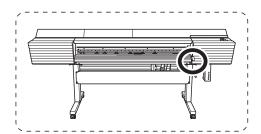




 ${\bf 2.} \ \ {\bf Raise\ the\ loading\ lever\ and\ remove\ the\ media}.$ 

When not using the machine, raise the loading lever even if the sub power is on.





#### **Precautions When Operating the Power Supply**

#### **IMPORTANT**

#### Always keep the main power switched on.

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

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

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

#### **Sleep Mode (Power-saving Feature)**

This machine is provided with a power-saving feature that switches to a low-power "sleep mode" when a fixed interval passes with no operation. The factory default for the time after which the machine switches to sleep mode is 30 minutes. 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 restores the machine to its normal mode.

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

#### RELATED LINKS

• P. 211 "Setting the Activation Interval for Sleep Mode (Power-saving Feature)"

# **Setup of Media**

#### **Setup of Roll Media**

Load the roll media on the printer. When you have finished loading the media, [SETUP] lights. This work is referred to as "Setup of Media."

**⚠** CAUTION Load the roll media correctly.

Otherwise the media may fall and cause injury.

<u>ACAUTION</u> The roll media is approximately 40 kg (88 lb.). To avoid injury, handle the roll media with

care.

<u>↑ CAUTION</u> Never load media that weighs over 40 kg (88 lb.). For the 54-inch model, never load me-

dia that weighs over 30 kg (66 lb.).

The machine may tip over because it is incapable of withstanding the weight. Alternatively, the media

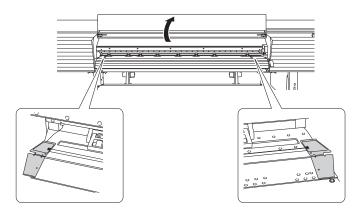
may fall out of the machine.

#### 1. Install the media on the media holders.

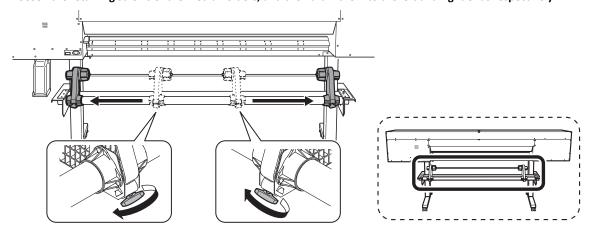
The media holder of this machine is designed to be used exclusively with media that has a paper tube (core) with an inner diameter of 3 inches. To use 2-inch media, the optional media flanges are required. For information about optional items, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).

#### Procedure

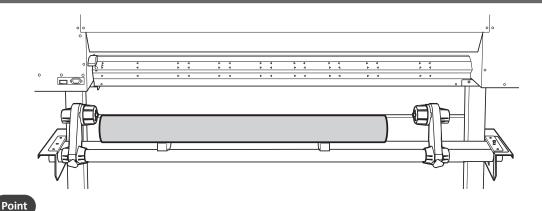
- 1. Open the front cover.
- 2. Move the media clamps to the outside of the grit rollers on the left and right edges respectively.



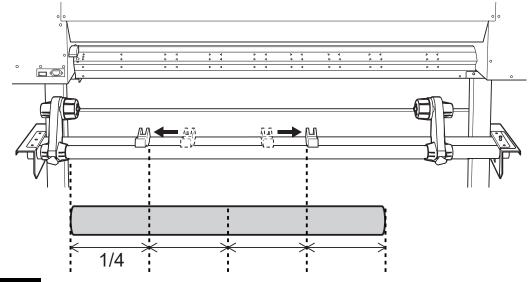
3. Loosen the retaining screws of the media holders, and then draw them to the left and right ends respectively.



4. Place the media on the media stays.



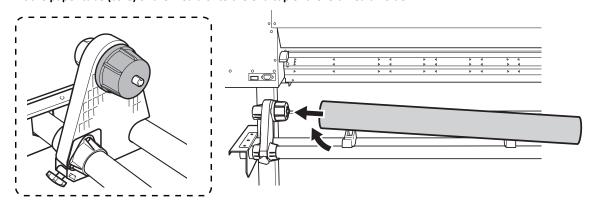
Place the media stays at positions that are 1/4 the length of the media from each end of the media.



#### **IMPORTANT**

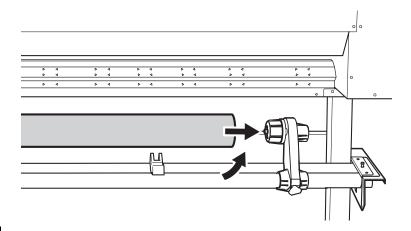
Do not leave media on the media stays for a long period of time. Doing so may lead to the media becoming deformed. Exercise caution.

**5.** Fit the paper tube (core) of the media onto the end cap of the left media holder.



**6.** Move the right media holder to fit its end cap onto the paper tube (core) of the media.

Fit the paper tube onto the media holders securely to prevent the media from moving easily.



#### **IMPORTANT**

#### Position the left media holder correctly.

If the position of the left media holder is incorrect, media may not be fed properly, which will have an adverse effect on the printing results. Use the following procedure to determine the appropriate position.

#### Do not secure the media holders in place just yet.

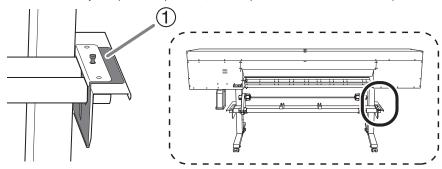
In the following procedure, you will adjust the positions of the media holders before securing them in place. Do not secure them in place just yet.

#### **IMPORTANT**

#### Do not touch the media holder adjuster.

The media holder adjuster is an important part that adjusts the position of the media. When this machine is installed, a suitably qualified worker performs an optimal adjustment that matches the installation environment. Changing the adjusted position of the media holder adjuster may lead to the media feeding at an angle or other adverse effects.

If you change the media holder adjuster position by mistake, contact your authorized Roland DG Corporation dealer.



1: Media holder adjuster

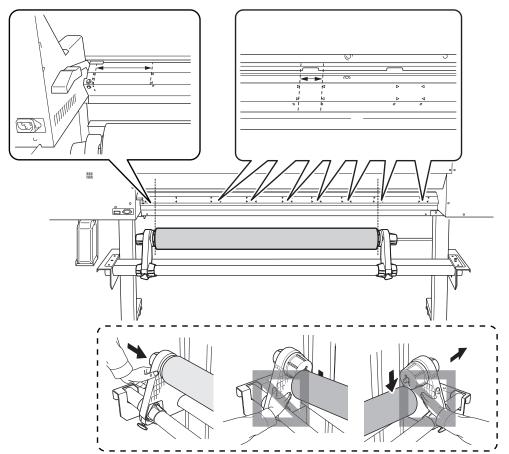
#### 2. Determine the positions of the media.

#### **Procedure**

1. Determine the left and right positions of the media with the grit patterns used as the reference.

Note the following points when determining the positions.

- Hold the media holders from the outside and move the media.
- Ensure that the left edge of the media is positioned so that it is within the range of the grit pattern of the left edge.
- Ensure that the right edge of the media is positioned so that it is within the range of one of the grit patterns.



⚠ CAUTION

Do not hold places other than those instructed. Do not move the media by holding it directly.

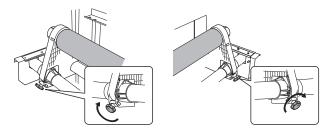
Otherwise the media may fall off the media holder and cause injury.

#### **IMPORTANT**

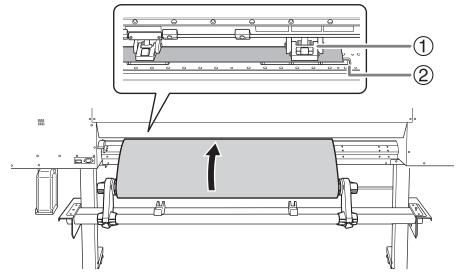
Firmly decide the left and right side positions of the media at this point.

After this procedure is completed, if the left and right side positions do not fit the proper positions when securing the media with pinch rollers, you will have to go back to this step to redo this procedure. If you just hold the media to readjust its position forcibly, the media will be skewed during printing, which will have an adverse effect on the printing results.

2. Secure the media holders by tightening the retaining screws.



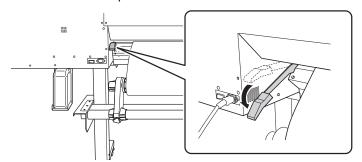
**3.** Pass the leading edge of the media between the pinch rollers ( $^{\textcircled{1}}$ ) and the grit rollers ( $^{\textcircled{2}}$ ).



#### 4. Lower the loading lever (rear).

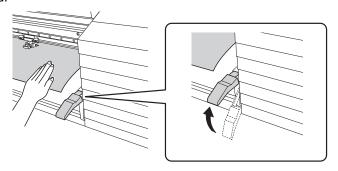
The media is held in place.

At this time, the message "PRESS ENTER KEY TO SETUP" is displayed on the screen, but do not press the [ENTER] yet, and proceed to the next step.

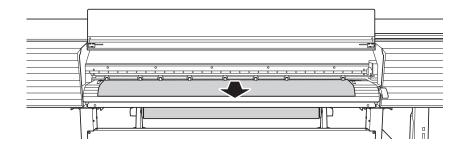


**5.** (Move to the front of the printer.) Gently hold down the media and raise the loading lever (front).

The media is released.



**6.** Pull out the media over the apron.

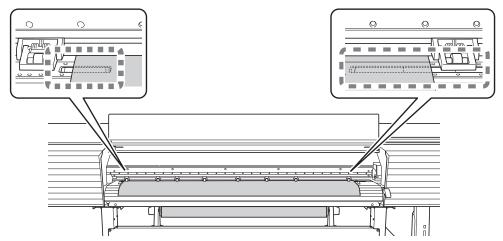


## **3.** Finish setup.

#### **Procedure**

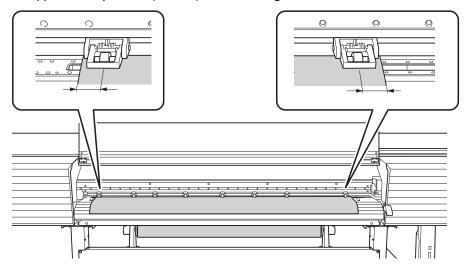
## 1. Make sure both edges of the media are above the grit rollers.

Be sure to place the right edge of the media on the right-end grit roller.



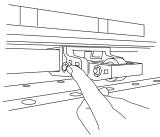
## 2. Move the left and right pinch rollers, placing them on both edges of the media.

Position them approximately 10 mm (0.39 in.) from each edge of the media.



#### Point

- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media will lead to unstable media feeding.
- If you want to readjust the media position before securing it in place, redo the procedure from step 2-1. If you just hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- To move the pinch rollers, push down close to the rail.

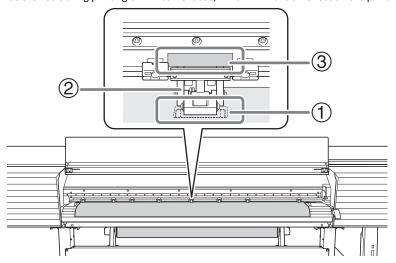


**3.** Move the middle pinch rollers ( $^{\circ}$ ) over all the remaining grit rollers covered by the media ( $^{\circ}$ ).

There are grit patterns (3) wherever there are grit rollers.

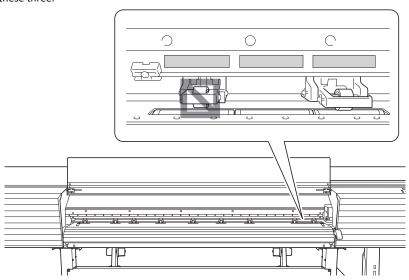
#### MEMO

Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.

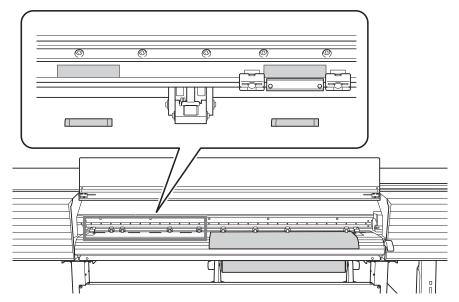


#### МЕМО

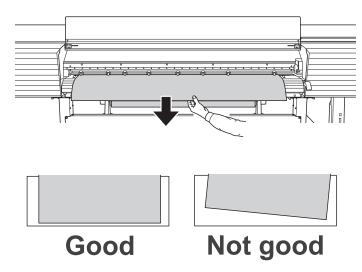
• The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.



• There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.

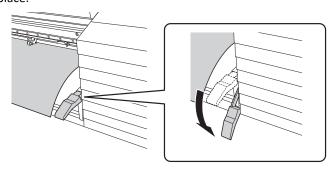


4. Hold the media at the center and pull it out, being sure to keep it straight and all areas of the media to be taut.

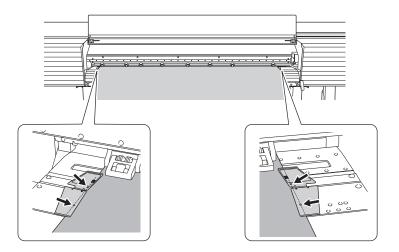


**5.** Lower the loading lever (front).

The media is held in place.

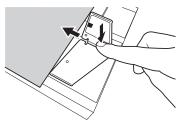


**6.** Line up the edges of the media with the centers of the holes of the media clamps (left and right).



#### МЕМО

Press down on the bent part of the media clamps to lift up both of their edges. Move the media clamps to the left and right with both edges lifted up.



## 7. Close the front cover.

The "PRESS ENTER TO PERFORM SETUP" message is displayed on the screen.

#### 8. Press [ENTER].

When you press [ENTER], the cutting carriage moves and detects the width of the media. This operation is called initialization. When initialization ends, [SETUP] on the operation panel lights, and the printable width is displayed on the screen. This completes the setup of the media.

#### **IMPORTANT**

#### Remove when not using roll media.

Do not leave roll media loaded on the machine for a long period of time. Be sure to remove and store the media when not in use. Leaving the roll media loaded on the machine for a long period of time will cause the media to sag, which may deteriorate the printing quality and may also lead to motor errors.

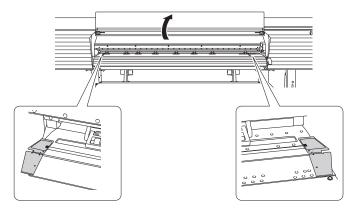
## **Setup of Sheet Media**

Load the sheet media on the printer. When you have finished loading the media, [SETUP] lights. This work is referred to as "Setup of Media."

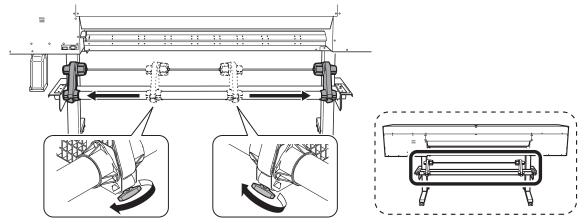
## 1. Determine the positions of the media (sheet media).

#### **Procedure**

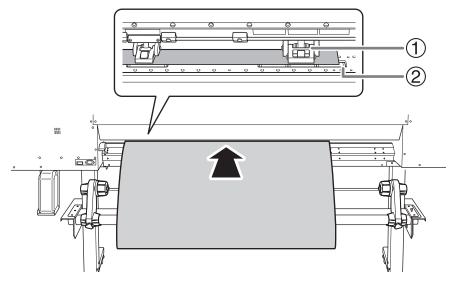
- 1. Open the front cover.
- 2. Move the media clamps to the outside of the grit rollers on the left and right edges respectively.



3. Loosen the retaining screws of the media holders, and then draw them to the left and right ends respectively.



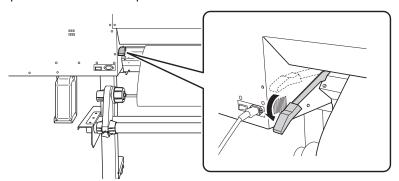
**4.** Pass the leading edge of the media between the pinch rollers ( $^{\textcircled{1}}$ ) and the grit rollers ( $^{\textcircled{2}}$ ).



## **5.** Lower the loading lever (rear).

The media is held in place.

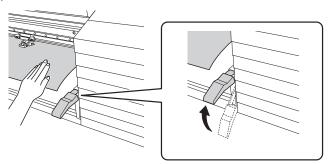
At this time, the message "PRESS ENTER KEY TO SETUP" is displayed on the screen, but do not press the [ENTER] yet, and proceed to the next step.



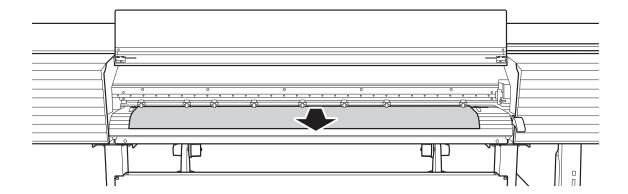
## 6. Open the front cover.

7. (Move to the front of the printer.) Gently hold down the media and raise the loading lever (front).

The media is released.



 $oldsymbol{8}$  . Pull out the media over the apron.

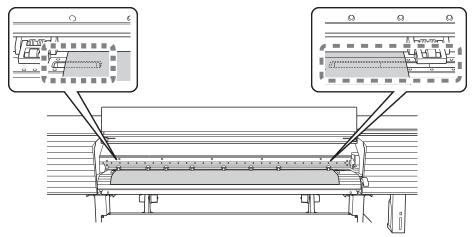


## 2. Finish setup (sheet media).

#### **Procedure**

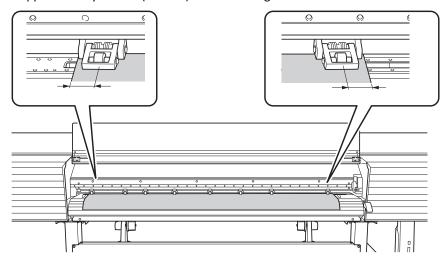
1. Make sure both edges of the media are above the grit rollers.

Be sure to place the right edge of the media on the right-end grit roller.



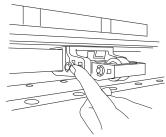
2. Move the left and right pinch rollers, placing them on both edges of the media.

Position them approximately 10 mm (0.39 in.) from each edge of the media.



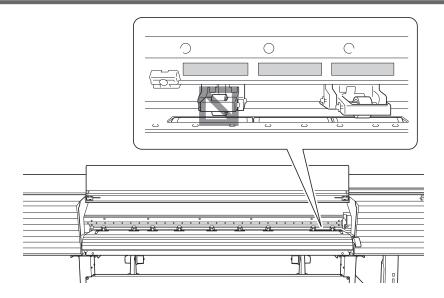
#### Point

- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media will lead to unstable media feeding.
- To move the pinch rollers, push down close to the rail.



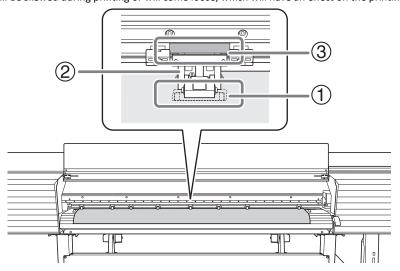
**3.** Move the middle pinch rollers ( $^{\textcircled{2}}$ ) over all the remaining grit rollers covered by the media ( $^{\textcircled{1}}$ ).

There are grit patterns (3) wherever there are grit rollers.



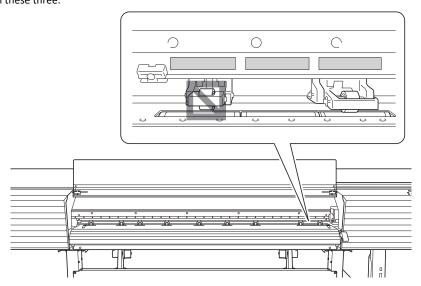
#### МЕМО

Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.

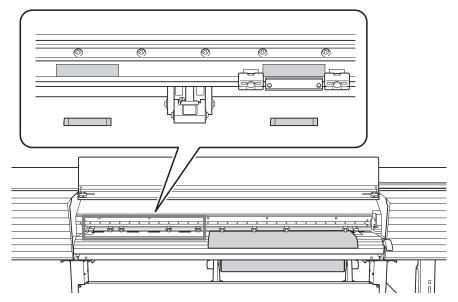


#### МЕМО

• The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.

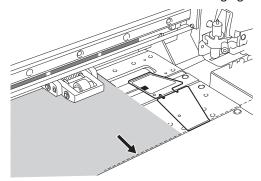


• There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



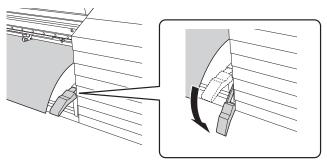
## 4. Straighten the media.

Align the media with the line indicated with the arrow in the following figure.

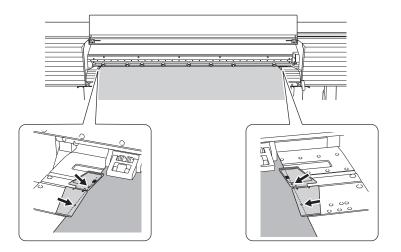


## **5.** Lower the loading lever (front).

The media is held in place.

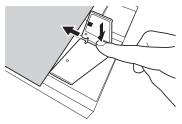


**6.** Line up the edges of the media with the centers of the holes of the media clamps (left and right).



#### МЕМО

Press down on the bent part of the media clamps to lift up both of their edges. Move the media clamps to the left and right with both edges lifted up.



## 7. Close the front cover.

The "PRESS ENTER TO PERFORM SETUP" message is displayed on the screen.

#### **8.** Press [ENTER].

When you press [ENTER], the cutting carriage moves and detects the width of the media. This operation is called initialization. When initialization ends, [SETUP] on the operation panel lights, and the printable width is displayed on the screen. This completes the setup of the media.

#### **Separating the Media**

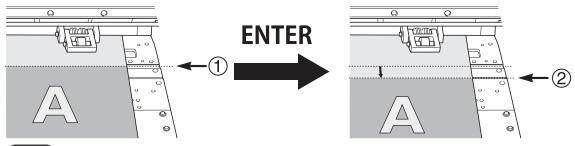
#### **Procedure**

- 1. Close the front cover.
- 2. Check that [SETUP] is lit.
- 3. Press [FUNCTION].
- **4.** Press [▼] several times to display the screen shown below.



5. Press [ENTER].

From its position on the blade protection line prior to [ENTER] being pressed ( $^{\textcircled{1}}$ ), the media moves to a position on the separating line ( $^{\textcircled{2}}$ ) and is separated.



#### MEMO

You can configure settings in the software RIP for automatic media separation after output has finished. For information on how to configure the settings, refer to the documentation for the software RIP you are using.

#### **IMPORTANT**

#### **Separation Operations**

 When performing separation, do not use [▲] to pull the media back. If the distance from the end of the media to the separation location is short, separation may not be performed smoothly.

#### **Give Attention to the Media Composition**

- For some types of media, separation is not possible.
- Some types of media may remain on the platen after separation. If the media remains on the platen, remove it by hand.

## What to Do First after Installation

#### **Accurately Adjusting the Misalignment of the Ink Landing Position**

This adjusts the misalignment of the ink landing position.

This adjustment must be performed in the following cases.

- · When using this machine for the first time
- · When changing the media to use
- · When you have changed the print-head height
- When printing is not improved by performing [MEDIA GAP ADJ. SIMPLE SETTING] (Adjust the misalignment of the ink landing position.(P. 139))

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶], then [▲] to display the screen shown below.



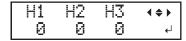
**4.** Press [▶] to display the screen shown below.



5. Press [ENTER].

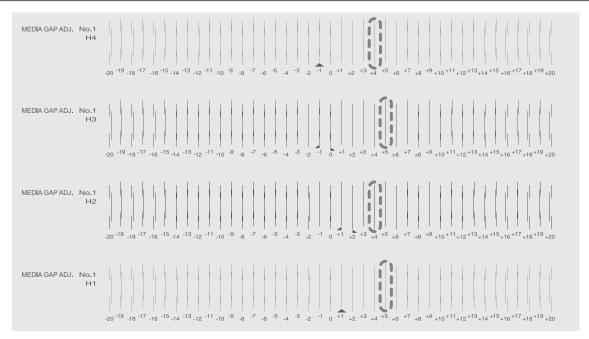
Printing of the test pattern starts.

**6.** When printing is finished, press [▼], then [▶] to display the screen shown below.

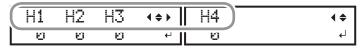


7. View the printed test pattern, and then determine the correction values from "MEDIA GAP ADJ. NO.1 H1" to "MEDIA GAP ADJ. NO.1 H4."

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "+5" for H1 and H3 and "+4" for H2 and H4. When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



- 8. Set the correction values from "H1" to "H4."
  - (1) Press [◄] or [▶] to select a value from H1 to H4.
  - (2) Press [▲] or [▼] to select the correction value.



(3) When you have finished setting the correction values, press [ENTER].

The screen shown below appears again.

**9.** Press [▼] to display the screen shown below.

- 10. 8. Set the correction values from "MEDIA GAP ADJ. NO.2 H1" to "MEDIA GAP ADJ. NO.2 H4" in the same manner as step.
- **11.** Press [▼] to display the screen shown below.

12. Press [ENTER].

Printing of the test pattern starts.

 $\textbf{13.} \ \ \textbf{Check the test pattern to see whether the correction was successful.}$ 

For all the correction values, check that the misalignment is minimized for the two vertical lines indicated by "\( \textit{ that is, the current correction value} \). If the misalignment is smaller for another set of vertical lines, set the correction value again.

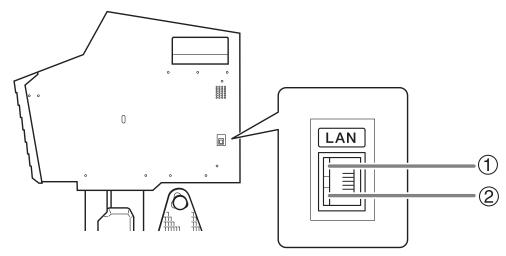
14. When you have successfully performed the correction, press [MENU] to go back to the original screen.

# **Checking before Output**

## **LAN Network Settings**

Check that you can perform communication through the LAN.

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



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

#### **Preventing Sedimentation in Inks**

The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the pouch tray horizontally with a stroke length of around 5 cm (2 in.) from each end of the tray.

- Remove just the pouch tray for the white ink, shake the pouch tray 50 times (about 20 seconds), and then reinsert this pouch tray.
- The pouch trays for colors other than white do not need to be shaken before every operation, but be sure to shake them when installing new ones.

The ingredients in white ink tend to settle. Each day, before starting the day's operations, be sure to carry out the above steps. Allowing the ink to stand without carrying out these steps can cause the settled material to harden, resulting in malfunction or other problems.



#### **IMPORTANT**

- . Do not remove the ink pouches. Shake the entire pouch tray. Removing the ink pouches may lead to the ink leaking.
- Before shaking, wipe off any ink from around the mouth of the ink pouch. If you do not wipe off the ink, it may splatter when you shake the pouch tray.
- When you have finished mixing the ink, reinsert the pouch tray immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you rarely use white ink, shake the pouch tray for the white ink 50 times (about 20 seconds) once a week.

# **Pausing and Canceling Output**

You can pause and cancel output before it finishes.

## **Pausing and Resuming Output**

#### **IMPORTANT**

We do not recommend resuming printing because horizontal stripes are produced at the place where printing was paused.

#### **Procedure**

1. Press [PAUSE] before printing finishes.

This pauses the printing operation.

2. Press [PAUSE] again.

The printing operation resumes.

## **Canceling Output**

#### Procedure

1. Press [PAUSE] before printing finishes.

This pauses the printing operation.

 $\pmb{2.} \ \ \text{When the screen shown below appears, hold down [PAUSE] for 1 second or longer.}$ 



This cancels the printing operation.

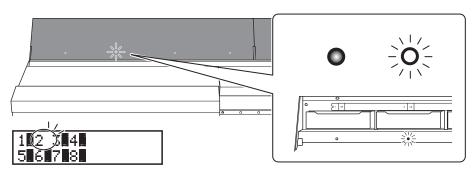
3. Stop sending the output data from the computer.

# Ink Pouch/TR2 Cleaning Liquid Pouch Replacement

#### **Out-of-ink Warnings**

#### If Using 8 Colors (CMYKLcLmLkW or CMYKLcLmLkOr)

When an ink pouch runs out, printing pauses and a warning beep sounds.

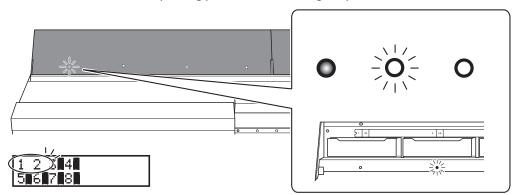


If an ink runs out, the numbers of the color that has run out flash.

Lit	Indicates that ink still remains
Flashing	Indicates that ink has run out

#### If Using 4 Colors (CMYK)

If one ink cartridge of the same color runs out, the machine continues printing using the other ink cartridge. When all the ink of the same color runs out, printing pauses and a warning beep sounds.



If both inks of the same color run out, the numbers of the color that has run out flash.

Lit	Indicates that ink still remains	
Flashing	Indicates that ink has run out	
Off Indicates an ink pouch that is currently not in use		

#### **IMPORTANT**

Never reuse an ink pouch when the machine shows a sign indicating no ink.

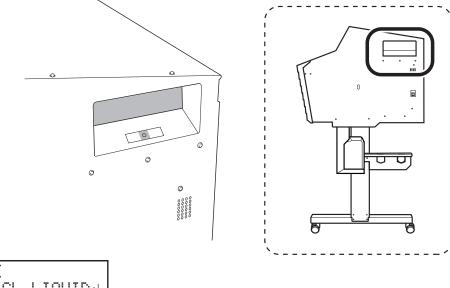
Occasionally the machine will show a sign indicating no ink even if there is a small amount of ink remaining in the pouch, but nevertheless do not use it. Such an ink pouch is in a state where drawing ink from it is impossible. Using it in such a state may force air into the ink path and cause printer malfunctions.

#### **RELATED LINKS -**

• P. 56 "Ink Pouch Replacement"

## **Out-of-TR2-cleaning-liquid Warnings**

If the TR2 cleaning liquid runs out, the cleaning liquid slot light flashes. After some time, a message requesting that you replace the TR2 cleaning liquid will be displayed on the screen.



CHANGE SOLCL-LIQUID4

<sup>&</sup>quot;CL-LIQUID FOR WIPER" indicates the TR2 cleaning liquid.

#### **Ink Pouch Replacement**

#### **⚠** WARNING

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

- Any location exposed to open flame
- Any location where high temperature may occur
- Near bleach or any other such oxidizing agent or explosive material
- Any location within the reach of children Such locations present the risk of fire occurring.

Accidental ingestion by children may pose a health hazard.

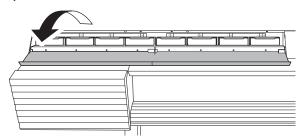
#### **IMPORTANT**

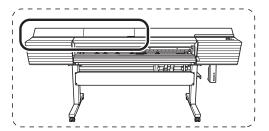
Precautions regarding ink pouch replacement

- Be sure to replace each pouch with an item of identical type and color.
- Never use an ink pouch that has already been used in another machine even if it is an identical type.
- Never mix different types of items.
- Never leave the machine with a pouch tray removed. The print heads may become clogged.
- Do not insert or remove pouch trays unless necessary. Ink may leak.
- Take care not to drop ink pouches.

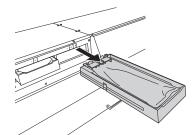
#### **Procedure**

1. Open the ink slot cover.

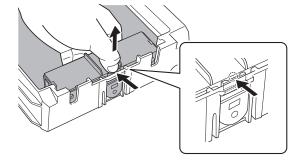




2. Remove the pouch tray for the color that you will replace.

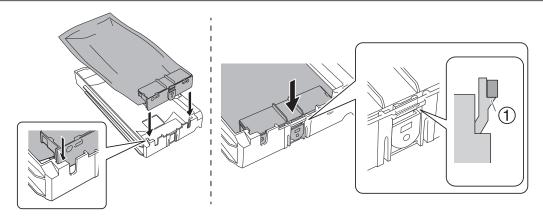


3. Remove the ink pouch from the pouch tray.



4. Set the new ink pouch in the pouch tray.

Check that the hook (1) has caught on the edge.



#### 5. Gently shake the new ink pouch.

During storage, the ink components may have precipitated. When replacing an ink pouch, gently shake the new ink pouch to mix its contents before setting the ink pouch in the tray.



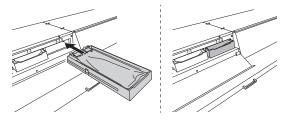
#### **IMPORTANT**

Never reuse an ink pouch when the machine shows a sign indicating no ink.

Occasionally the machine will show a sign indicating no ink even if there is a small amount of ink remaining in the pouch, but nevertheless do not use it. Such an ink pouch is in a state where drawing ink from it is impossible. Using it in such a state may force air into the ink path and cause printer malfunctions.

## **6.** Set the pouch tray in the ink slot.

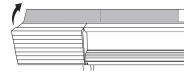
Insert the ink tray as far as it will go.



#### **IMPORTANT**

- Do not insert empty pouch trays. Doing so may force air into the ink path and cause printer malfunctions.
- Check the color names indicated on the ink slots and the ink pouches to set all the pouch trays in their correct positions. Insert the pouch trays as far as they will go.

## 7. Close the ink slot cover.



#### **TR2 Cleaning Liquid Pouch Replacement**

**⚠** WARNING

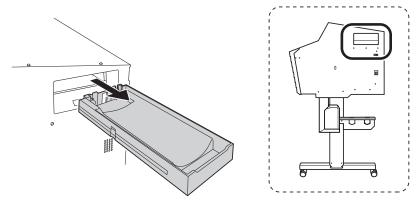
Never store ink, cleaning liquid, or discharged fluid in any of the following locations.

- Any location exposed to open flame
- Any location where high temperature may occur
- Near bleach or any other such oxidizing agent or explosive material
- Any location within the reach of children Such locations present the risk of fire occurring.

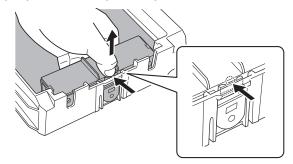
Accidental ingestion by children may pose a health hazard.

#### Procedure

1. Remove the pouch tray from the cleaning liquid slot.

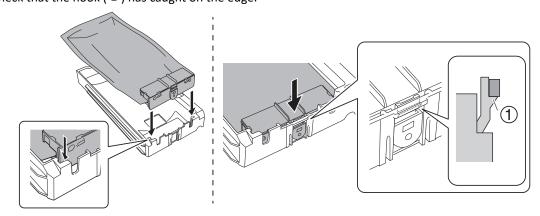


2. Remove the TR2 cleaning liquid pouch from the pouch tray.



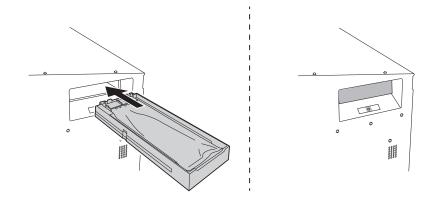
3. Set the new TR2 cleaning liquid pouch in the pouch tray.

Check that the hook (1) has caught on the edge.



**4.** Set the pouch tray in the cleaning liquid slot.

Insert the ink tray as far as it will go.



# **Chapter 2 Output Method**

# 1. Printing Method

Preparations before Printing Output	67
Printing Tests and Normal Cleaning	
Printing Output	6!
Step 1: Batch Settings for Printing	6
Step 2: Starting Output	74

# **Preparations before Printing Output**

#### **Printing Tests and Normal Cleaning**

## 1. Perform a printing test.

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

#### MEMO

- This operation is unnecessary if you will only perform cutting.
- When performing printing tests successively, you can select "SCAN" (vertical printing) or "FEED" (horizontal printing) as the print position for the 2nd and later tests in comparison to the 1st test.
  - ▶ P. 203 「Performing Printing Tests Arranged Horizontally」

#### Procedure

- 1. Load the media.
  - P. 30 Setup of Media
- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.

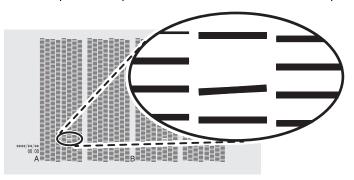


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

If no dot drop-out or dot displacement occurs, this operation is finished. Press [FUNCTION] to go back to the original screen.

## 2. Performing Normal Cleaning

#### **Procedure**

1. Press [FUNCTION] to display the screen shown below.

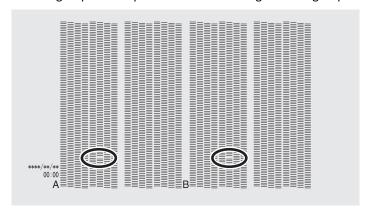
FUN	CTION	<b>∢</b> ♦ <b>&gt;</b>
BAS	E POINT	<b>↓</b>

2. Press [▼], then [▶][▼] to display the screen shown below.

CLEANI	NG	<b>♦</b>
NORMAL	CL.	•

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

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

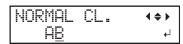


### МЕМО

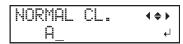
If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- **4.** Press [▶].
- 5. Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.

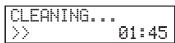


(3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

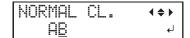
Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.

**6.** Press [ENTER] to confirm your entry.

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



- **7.** Press [A] to display the screen shown below.
- 8. Press [ENTER].

Printing of the test pattern starts.

 $\textbf{9.} \ \ \textbf{Check to make sure the dot drop-out or dot displacement has been corrected.}$ 

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

#### **RELATED LINKS —**

• P. 231 "When Normal Cleaning Is Not Effective"

# **Printing Output**

#### **Step 1: Batch Settings for Printing**

To ensure the optimal output according to the media size and type, you can configure various settings on this machine. However, it is hard work to configure these settings one at a time. You can use the "MEDIA SETTING" menu to configure the absolute minimum of necessary items as a batch. You can save the setting details as a preset.

Note that you can set all the items set here individually as well.

## 1. Start the "MEDIA SETTING" menu.

#### Procedure

1. Load the media.

Check that the media is not sagging. If any sagging exists, settings such as the correction values will not function effectively.

- 2. Press [MENU].
- 3. Press [ENTER].



If you want to cancel the batch settings before they are completed, see the following page.

#### **RELATED LINKS -**

• P. 73 "Canceling Batch Settings before They Are Completed"

## 2. Set the print heater and dryer temperatures.

#### Procedure

1. Press [▲] or [▼] to set the "PRINT HEATER" temperature.

Recommended temperature: 40°C (104°F)



- 2. Press [ENTER] to confirm your entry.
- **3.** Press [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] to set the "DRYER" temperature.

Recommended temperature: 45°C (113°F)

**4.** Press [ENTER] to confirm your entry.

## 3. Adjust the print head height.

#### **Procedure**

1. Press [◄] to select "CHANGE."

HEAD	HGT	LOW	<b>4 )</b>
[ CHAP	4GE]	NEXT	↵

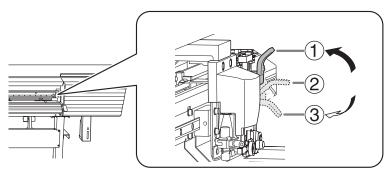
2. Press [ENTER] to confirm your entry.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. When the following screen is displayed, open the front cover.

**4.** Move the height-adjustment lever to adjust the head height.

When you change the position of the height-adjustment lever, the display screen changes and the buzzer sounds at the same time.



	Position	Display Screen	
1	HIGH	HEAD HEIGHT LOW → HIGH →	
2	MIDDLE	HEAD HEIGHT LOW → MIDDLE4	
3	LOW	HEAD HEIGHT LOW → LOW ↔	

#### MEMO

- Normally move the height-adjustment lever to "LOW." For media that is wrinkled or comes loose from the platen, move the height-adjustment lever to "MEDIUM" or "HIGH."
- The printing quality degrades as the distance between the media and the print heads increases. Do not move the height-adjustment lever to "MEDIUM" or "HIGH" needlessly.

#### **5.** Close the front cover.

## 4. Perform position adjustment of the feed direction (reduce horizontal stripes).

Feed direction means the feed direction of the media. Perform the correction adjusting to the media in advance because horizontal strips are more likely to occur during printing when the movement distance of the media changes subtly depending on the media's thickness.

#### Procedure

1. Press [◄] to select "SET".

CAL	IΒ	RAT	ION	<b>4 &gt;</b>
ESE	TJ		NEXT	<b>↓</b>

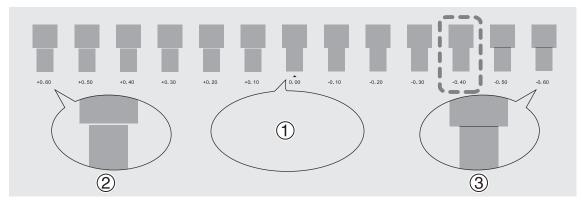
2. Press [ENTER] to confirm your entry.

Printing of the test pattern starts.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. Press [ENTER].

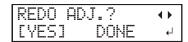
- 4. View the printed test pattern, and then determine the correction value.
  - $\triangle$  = Current correction value (1) Select the value to make the gap (2) and overlap (3) between the upper/lower squares smallest. In the case of the following figure, select "-0.40." When you cannot choose between two sequential numbers, specify a value that is between them.



**5.** Press [▲] or [▼] to select the correction value.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "SET".

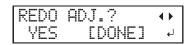


**8.** Press [ENTER] to confirm your entry.

The test pattern is printed again. Check that the gap and overlap are the smallest for the figure indicated by "\( \times\)" (that is, the current correction value). If the gap and overlap are smaller for another figure, return to step 5 to perform the setting again.

If you do not need to change the correction value, press [ENTER] again.

**9.** Press [▶] to select "DONE".



**10.** Press [ENTER] to confirm your entry.

## 5. Adjust the misalignment of the ink landing position.

#### **Procedure**

1. Press [◄] to select "SET".



2. Press [ENTER] to confirm your entry.

Printing of the test pattern starts.

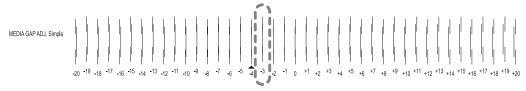
You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. Press [ENTER].

```
INPUT
ADJ. VALUES →
```

4. View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



**5.** Press [▲] or [▼] to select the correction value.



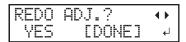
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "SET".

**8.** Press [ENTER] to confirm your entry.

The test pattern is printed again. Check that the gap and overlap are the smallest for the figure indicated by "\( \times\)" (that is, the current correction value). If the gap and overlap are smaller for another figure, return to step 5 to perform the setting again.

If you do not need to change the correction value, press [ENTER] again.

**9.** Press [▶] to select "DONE".



10. Press [ENTER] to confirm your entry.

## **6.** Set the drying method and time after printing.

#### **Procedure**

1. Press [◄] or [▶] to select "NEXT".



2. Press [ENTER] to confirm your entry.



**3.** Press [▲] or [▼] to select "ENABLE" or "DISABLE".

Set whether the media should be fed until the trailing edge of the printed area is put on the dryer after the 1st page is printed. To make sure to dry the entire printed area, select "ENABLE". If "DISABLE" is selected, the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.



- 4. Press [ENTER] to confirm your entry.
- **5.** Press [▲] or [▼] to set the drying time.

Set the drying time after the 1st page is printed. The next operation is not started until the set time passes.



#### MEMO

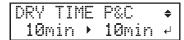
This setting is enabled for output data designed only for printing.

This setting is ignored for output data designed for printing and cutting. When the drying time has been set in the software RIP, priority is given to the software RIP's setting.

#### Example of setting time (general guide)

The setting time varies according to the settings such as the type of media and the printing quality.

- Condition Non-coated vinyl chloride media
- Setting time: About three minutes
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [ENTER] when the following screen appears.



This setting is ignored for output data designed only for printing. Any value is acceptable, so press [ENTER] and proceed to the next step.

## 7. Save the settings as a preset.

#### **Procedure**

1. Press [◄] to select "SAVE".



2. Press [ENTER] to confirm your entry.

If you select "NEXT" and press [ENTER], the screen in step 7 is displayed, and the settings you have selected up to this point are not saved as a preset. However, they will remain as the current setting values for the machine.

**3.** Press [▲] or [▼] to select a destination to save the preset.

You can select a name from NAME1 to NAME8.



- 4. Press [ENTER] to confirm your entry.
- **5.** Set the name.
  - (1) Press [▲] or [▼] to select a character.
  - (2) Press [▶] to move to the next character.
  - (3) Set the following characters in the same way.

You can enter up to 15 characters.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



This completes the operation of the "MEDIA SETTING" menu.

## **Solution** Canceling Batch Settings before They Are Completed

#### Procedure

- 1. Press [MENU] during setup.
- **2.** Press [◄] to select "YES".



**3.** Press [ENTER] to confirm your entry.

The screen shown below appears again.



Selecting "NO" in step 2 returns you to the screen that was displayed when you pressed [MENU].



Even if you cancel media settings before they are completed, the values set so far will be saved.

#### **Step 2: Starting Output**

#### ⚠ CAUTION

Never touch the print-head carriage while output is in progress.

The print-head carriage moves at high speed. Coming into contact with the moving carriage may cause injury.

#### **Procedure**

1. In the case of output for the first time on that day, shake the white ink pouch tray.

Remove just the pouch tray for the white ink, shake the pouch tray 50 times (about 20 seconds), and then reinsert this pouch tray. The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the pouch tray horizontally with a stroke length of around 5 cm (2 in.) from each end of the tray.

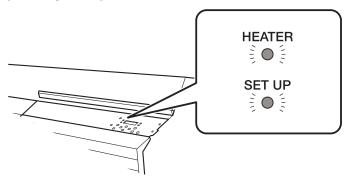


#### **IMPORTANT**

- The pouch trays for colors other than white do not need to be shaken before every operation, but be sure to shake them when installing new ones.
- . Do not remove the ink pouches. Shake the entire pouch tray. Removing the ink pouches may lead to the ink leaking.
- Before shaking, wipe off any ink from around the mouth of the ink pouch. If you do not wipe off the ink, it may splatter when you shake the pouch tray.
- When you have finished mixing the ink, reinsert the pouch tray immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you rarely use white ink, shake the pouch tray for the white ink 50 times (about 20 seconds) once a week.
- 2. Close the front cover.
- 3. Check that [SETUP] is lit.

If [SETUP] is not lit, the setup is not completed. Lower the loading lever, and then press the [ENTER] key.

4. Wait until [HEATER] stops flashing and stays lit.



5. Check that the screen shown below (the top menu) is displayed.

If the top menu is not displayed, press [MENU].



**6.** Send the output data from the computer.

For information on how to create the output data, refer to the documentation for the included software RIP.

#### MEMO

When you send the output data, "FILLING" or "CLEANING" may be displayed on the screen. These indicate the preparation operations performed before output. Output will begin after the time displayed on the screen elapses.

#### **IMPORTANT**

#### **Output Is Not Possible in These Situations**

- The machine does not run when a cover (front, left, right, or ink slot) is open.
- Data from the computer is not accepted when [SETUP] is dark.
- Printing does not start until [HEATER] lights. However, in the following cases printing is possible even if [HEATER] is not lit.
  - The settings for "PRINT" (print heater) and "DRYER" are "OFF".
    - P. 153 Setting the Print Heater Temperature
    - ▶ P. 154 「Setting the Dryer Temperature」
  - Heater settings "POWER" is "OFF."
    - ▶ P. 160 「Switching Off the Print Heater and Dryer Together」
- Data from the computer is not accepted when you are not at the top menu.

#### Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the media feed or cause the media to rub against the print 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.

#### When not using the machine, remove any media and store it in a suitable environment.

• If the machine is left with the media loaded, the media may be damaged, which may adversely affect printing. When not using the machine, remove any media and store it in a suitable environment.

# 2. Cutting Method

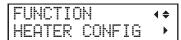
Prepa	arations before Cutting Output	77
	Step 1: Switching Off the Print Heater and Dryer	
	Step 2: Preventing Pulling of the Media with Undue Force	78
	Step 3: Adjusting Cutting	79
Cutti	ng Output	81
	Step 1: Batch Settings for Cutting	81
	Step 2: Starting Output	88

# **Preparations before Cutting Output**

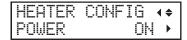
#### Step 1: Switching Off the Print Heater and Dryer

#### Procedure

- 1. Press [FUNCTION].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶] to display the screen shown below.



- **4.** Press [▶].
- **5.** Press [▲] or [▼] to select "OFF."



**6.** Press [ENTER] to confirm your entry.

The settings for the print heater and dryer are turned off.

7. Press [FUNCTION] to go back to the original screen.

## Step 2: Preventing Pulling of the Media with Undue Force

#### Procedure

- 1. Press [MENU].
- **2.** Press  $[\blacktriangle]$  to display the screen shown below.



**3.** Press  $[\triangleright]$  once, and then press  $[\blacktriangle]$  several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "ENABLE."



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

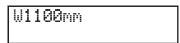
#### **Step 3: Adjusting Cutting**

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

#### **Procedure**

- 1. Close the front cover.
- 2. Press [◄] while the following screen is displayed.

The cutting carriage comes out over the platen.



- **3.** Press [◄], [▶], [▲], or [▼] to move the cutting carriage to the location where you want to carry out the cutting test. You can freely set the location for the cutting test.
- 4. Press [FUNCTION].
- **5.** Press [▼] several times to display the screen shown below.



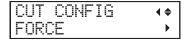
**6.** Press [▶] to display the screen shown below.



7. Press [ENTER].

The test pattern is cut.

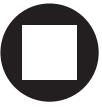
8. Press [▼] to display the screen shown below.



**9.** Press [▶] to display the screen shown below.



**10.** Peel off the cut shapes to verify the cutting quality.



- Two shapes are peeled off separately
  You do not need to perform the setting because the blade force is appropriate.
- Two shapes are peeled off together/backing paper is also cut
   Proceed to the next step to set the blade force.
- **11.** Press [▲] or [▼] to select a value.
  - Two shapes are peeled off together Raise the blade force.
  - Backing paper is also cut

Reduce the blade force.

- 12. Press [ENTER] to confirm your entry.
- 13. Press [ $\blacktriangle$ ] to display the screen shown below.



14. Press [ENTER].

The test pattern is cut.

**15.** Check whether the correction was successful.

At the [CUT CONFIG] menu, you can also make settings for other cutting conditions in addition to the blade force. Refer to the following page.

#### **RELATED LINKS** —

• P. 163 "Fine-tuning the Cutting Conditions"

# **Cutting Output**

#### **Step 1: Batch Settings for Cutting**

To ensure the optimal output according to the media size and type, you can configure various settings on this machine. However, it is hard work to configure these settings one at a time. You can use the "MEDIA SETTING" menu to configure the absolute minimum of necessary items as a batch. You can save the setting details as a preset.

Note that you can set all the items set here individually as well.

## 1. Start the "MEDIA SETTING" menu.

#### Procedure

1. Load the media.

Check that the media is not sagging. If any sagging exists, settings such as the correction values will not function effectively.

- 2. Press [MENU].
- 3. Press [ENTER].



If you want to cancel the batch settings before they are completed, see the following page.

#### **RELATED LINKS -**

• P. 73 "Canceling Batch Settings before They Are Completed"

## 2. Switch off the print heater and dryer.

#### Procedure

Press [▲] or [▼] to select "OFF".



- 2. Press [ENTER] to confirm your entry.
- **3.** Press [▲] or [▼] to select "OFF".



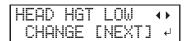
**4.** Press [ENTER] to confirm your entry.

## 3. Set the blade force.

For high-quality cutting, perform a cutting test to check the cutting quality for the media and adjust the blade force.

#### **Procedure**

1. Press [▶] to select "NEXT".



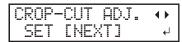
- 2. Press [ENTER] to confirm your entry.
- **3.** Press [▶] to select "NEXT".



- 4. Press [ENTER] to confirm your entry.
- **5.** Press [▶] to select "NEXT".



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "YES."



- 8. Press [ENTER] to confirm your entry.
- 9. Press [◄] to select "YES."



**10.** Press [ENTER] to confirm your entry.

The test pattern is cut.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

11. Peel off the two cut shapes (a circle and a square).



- **12.** Check how the two shapes peel off.
  - Two shapes are peeled off together/backing paper is also cut

Press [◀] to select "YES".



· Two shapes are peeled off separately

Press [▶] to select "DONE".



## **13.** Press [ENTER] to confirm your entry.

- If you select "YES", proceed to the next procedure.
- If you select "DONE", proceed to step 4. Save the settings as a preset. (P. 85).

## **14.** Press $[\blacktriangle]$ or $[\blacktriangledown]$ to adjust the blade force.

- If the two shapes are peeled off together → increase the blade force.
- If the backing paper is also cut → reduce the blade force.



#### **15.** Press [ENTER] to confirm your entry.

The test pattern is cut again. Check the result.

## **16.** Check how the two shapes peel off.

• Two shapes are peeled off together/backing paper is also cut

Press [◀] to select "YES".



· Two shapes are peeled off separately

Press [▶] to select "DONE".



## 17. Press [ENTER] to confirm your entry.

- If you select "YES", the test pattern is cut again. Go back to step 12 and perform the setting again.
- If you select "DONE", proceed to step 4.Save the settings as a preset.(P. 85).

## 4. Save the settings as a preset.

#### **Procedure**

1. Press [▶] to select "NEXT".



- 2. Press [ENTER] to confirm your entry.
- 3. Press [▶] to select "NEXT".

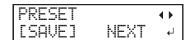


- 4. Press [ENTER] to confirm your entry.
- **5.** Press [ENTER] when the following screen appears.

These three settings are ignored for output data designed only for cutting. Press [ENTER] and proceed to the next step.



**6.** Press [◀] to select "SAVE".



7. Press [ENTER] to confirm your entry.

If you select "NEXT" and press [ENTER], the screen in step 12 is displayed, and the settings you have selected up to this point are not saved as a preset. However, they will remain as the current setting values for the machine.

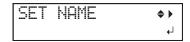
8. Press [▲] or [▼] to select a destination to save the preset.

You can select a name from NAME1 to NAME8.



- **9.** Press [ENTER] to confirm your entry.
- 10. Set the name.
  - (1) Press [▲] or [▼] to select a character.
  - (2) Press [▶] to move to the next character.
  - (3) Set the following characters in the same way.

You can enter up to15 characters.



11. Press [ENTER] to confirm your entry.

<b>12</b> .	Press [ME	NUI to go	back to the	original	screen.
	LIE33 LIVIE	.ivoj to go	Dack to the	Uligiliai	scieeii.

This completes the operation of the "MEDIA SETTING" menu.

## **Solution** Canceling Batch Settings before They Are Completed

#### Procedure

- 1. Press [MENU] during setup.
- **2.** Press [◄] to select "YES".



**3.** Press [ENTER] to confirm your entry.

The screen shown below appears again.



Selecting "NO" in step 2 returns you to the screen that was displayed when you pressed [MENU].



Even if you cancel media settings before they are completed, the values set so far will be saved.

#### **Step 2: Starting Output**

#### ⚠ CAUTION

Never touch the print-head carriage while output is in progress.

The print-head carriage moves at high speed. Coming into contact with the moving carriage may cause injury.

#### **Procedure**

- 1. Close the front cover.
- 2. Check that [SETUP] is lit.

If [SETUP] is not lit, the setup is not completed. Lower the loading lever, and then press the [ENTER] key.

3. Check that the screen shown below (the top menu) is displayed.

If the top menu is not displayed, press [MENU].

W1	10	10mm		

4. Send the output data from the computer.

For information on how to create the output data, refer to the documentation for the included software RIP.

#### **IMPORTANT**

#### **Output Is Not Possible in These Situations**

- The machine does not run when a cover (front, left, right, or ink slot) is open.
- Data from the computer is not accepted when [SETUP] is dark.
- Data from the computer is not accepted when you are not at the top menu.

#### Points that must be observed

- · Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- During output, do not touch the media. Doing so may obstruct the media feed or cause the media to rub against the print 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.

When not using the machine, remove any media and store it in a suitable environment.

• If the machine is left with the media loaded, the media may be damaged, which may adversely affect printing. When not using the machine, remove any media and store it in a suitable environment.

# 3. Printing and Cutting Method

Preparations before Printing and Cutting Output	90
Step 1: Printing Tests and Normal Cleaning	90
Step 2: Adjusting Cutting	
Printing and Cutting Output	9!
Step 1: Batch Settings for Printing and Cutting	
Sten 2: Starting Output	

# **Preparations before Printing and Cutting Output**

#### **Step 1: Printing Tests and Normal Cleaning**

## 1. Perform a printing test.

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

#### МЕМО

- This operation is unnecessary if you will only perform cutting.
- When performing printing tests successively, you can select "SCAN" (vertical printing) or "FEED" (horizontal printing) as the print position for the 2nd and later tests in comparison to the 1st test.
  - ▶ P. 203 「Performing Printing Tests Arranged Horizontally」

#### **Procedure**

- 1. Load the media.
  - P. 30 Setup of Media
- 2. Press [FUNCTION].
- **3.** Press [V], then [V] to display the screen shown below.

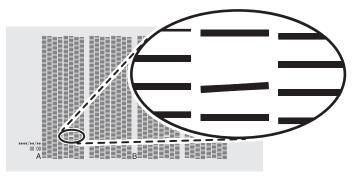


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

If no dot drop-out or dot displacement occurs, this operation is finished. Press [FUNCTION] to go back to the original screen.

## 2. Performing Normal Cleaning

#### **Procedure**

1. Press [FUNCTION] to display the screen shown below.

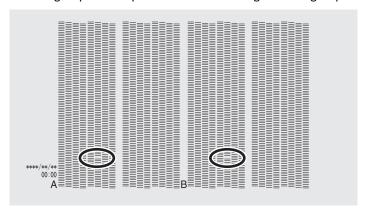
FUN	CTION	<b>∢</b> ♦ <b>&gt;</b>
BAS	E POINT	<b>↓</b>

2. Press [▼], then [▶][▼] to display the screen shown below.

CLEANI	NG	<b>♦</b>
NORMAL	CL.	•

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

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

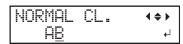


## МЕМО

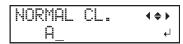
If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- **4.** Press [▶].
- 5. Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.

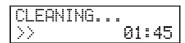


(3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.

**6.** Press [ENTER] to confirm your entry.

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



- 7. Press [▲] to display the screen shown below.
- 8. Press [ENTER].

Printing of the test pattern starts.

 $\textbf{9.} \ \ \textbf{Check to make sure the dot drop-out or dot displacement has been corrected.}$ 

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

#### **RELATED LINKS** —

• P. 231 "When Normal Cleaning Is Not Effective"

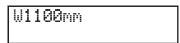
#### **Step 2: Adjusting Cutting**

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

#### Procedure

- 1. Close the front cover.
- 2. Press [◄] while the following screen is displayed.

The cutting carriage comes out over the platen.



- **3.** Press [◄], [▶], [▲], or [▼] to move the cutting carriage to the location where you want to carry out the cutting test. You can freely set the location for the cutting test.
- 4. Press [FUNCTION].
- Press [▼] several times to display the screen shown below.



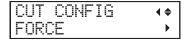
**6.** Press [▶] to display the screen shown below.



7. Press [ENTER].

The test pattern is cut.

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



**9.** Press [▶] to display the screen shown below.



**10.** Peel off the cut shapes to verify the cutting quality.



- Two shapes are peeled off separately
  You do not need to perform the setting because the blade force is appropriate.
- Two shapes are peeled off together/backing paper is also cut
   Proceed to the next step to set the blade force.
- **11.** Press [▲] or [▼] to select a value.
  - Two shapes are peeled off together Raise the blade force.
  - Backing paper is also cut

Reduce the blade force.

- 12. Press [ENTER] to confirm your entry.
- 13. Press [ $\blacktriangle$ ] to display the screen shown below.



14. Press [ENTER].

The test pattern is cut.

**15.** Check whether the correction was successful.

At the [CUT CONFIG] menu, you can also make settings for other cutting conditions in addition to the blade force. Refer to the following page.

#### **RELATED LINKS** —

• P. 163 "Fine-tuning the Cutting Conditions"

## **Printing and Cutting Output**

#### **Step 1: Batch Settings for Printing and Cutting**

To ensure the optimal output according to the media size and type, you can configure various settings on this machine. However, it is hard work to configure these settings one at a time. You can use the "MEDIA SETTING" menu to configure the absolute minimum of necessary items as a batch. You can save the setting details as a preset.

Note that you can set all the items set here individually as well.

## 1. Start the "MEDIA SETTING" menu.

#### Procedure

1. Load the media.

Check that the media is not sagging. If any sagging exists, settings such as the correction values will not function effectively.

- 2. Press [MENU].
- 3. Press [ENTER].



If you want to cancel the batch settings before they are completed, see the following page.

#### **RELATED LINKS -**

• P. 73 "Canceling Batch Settings before They Are Completed"

## 2. Set the print heater and dryer temperatures.

#### Procedure

1. Press [▲] or [▼] to set the "PRINT HEATER" temperature.

Recommended temperature: 40°C (104°F)



- 2. Press [ENTER] to confirm your entry.
- **3.** Press [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] to set the "DRYER" temperature.

Recommended temperature: 45°C (113°F)

**4.** Press [ENTER] to confirm your entry.

## 3. Adjust the print head height.

#### **Procedure**

1. Press [◄] to select "CHANGE."

HEAD	HGT	LOW	<b>4 )</b>
E CHAP	4GE]	NEXT	↵

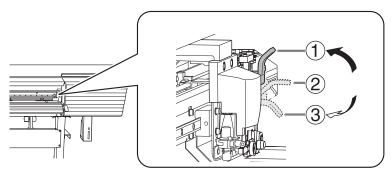
2. Press [ENTER] to confirm your entry.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. When the following screen is displayed, open the front cover.

4. Move the height-adjustment lever to adjust the head height.

When you change the position of the height-adjustment lever, the display screen changes and the buzzer sounds at the same time.



	Position	Display Screen
1	HIGH	HEAD HEIGHT LOW → HIGH →
2	MIDDLE	HEAD HEIGHT LOW → MIDDLE4
3	LOW	HEAD HEIGHT LOW → LOW ↔

#### MEMO

- Normally move the height-adjustment lever to "LOW." For media that is wrinkled or comes loose from the platen, move the height-adjustment lever to "MEDIUM" or "HIGH."
- The printing quality degrades as the distance between the media and the print heads increases. Do not move the height-adjustment lever to "MEDIUM" or "HIGH" needlessly.

#### **5.** Close the front cover.

## 4. Perform position adjustment of the feed direction (reduce horizontal stripes).

Feed direction means the feed direction of the media. Perform the correction adjusting to the media in advance because horizontal strips are more likely to occur during printing when the movement distance of the media changes subtly depending on the media's thickness.

#### Procedure

1. Press [◄] to select "SET".

CALI	BRAT	ION	<b>4 )</b>
ESET	]	NEXT	$\leftarrow$

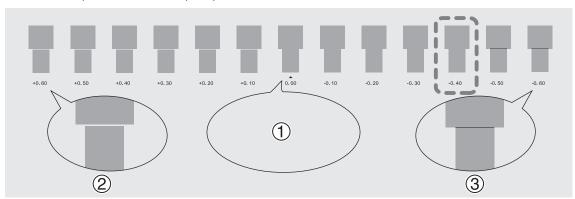
## 2. Press [ENTER] to confirm your entry.

Printing of the test pattern starts.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. Press [ENTER].

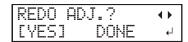
- 4. View the printed test pattern, and then determine the correction value.
  - $\triangle$  = Current correction value (1) Select the value to make the gap (2) and overlap (3) between the upper/lower squares smallest. In the case of the following figure, select "-0.40." When you cannot choose between two sequential numbers, specify a value that is between them.



**5.** Press [▲] or [▼] to select the correction value.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "SET".

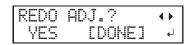


**8.** Press [ENTER] to confirm your entry.

The test pattern is printed again. Check that the gap and overlap are the smallest for the figure indicated by "\( \times\)" (that is, the current correction value). If the gap and overlap are smaller for another figure, return to step 5 to perform the setting again.

If you do not need to change the correction value, press [ENTER] again.

**9.** Press [▶] to select "DONE".



 $\textbf{10.} \ \ \mathsf{Press} \ [\mathsf{ENTER}] \ \mathsf{to} \ \mathsf{confirm} \ \mathsf{your} \ \mathsf{entry}.$ 

## 5. Adjust the misalignment of the ink landing position.

#### **Procedure**

1. Press [◄] to select "SET".



2. Press [ENTER] to confirm your entry.

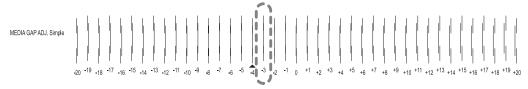
Printing of the test pattern starts.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. Press [ENTER].

4. View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



**5.** Press [▲] or [▼] to select the correction value.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "SET".

```
REDO ADJ.? ↔
[YES] DONE ↔
```

**8.** Press [ENTER] to confirm your entry.

The test pattern is printed again. Check that the gap and overlap are the smallest for the figure indicated by "\( \times\)" (that is, the current correction value). If the gap and overlap are smaller for another figure, return to step 5 to perform the setting again.

If you do not need to change the correction value, press [ENTER] again.

**9.** Press [▶] to select "DONE".



10. Press [ENTER] to confirm your entry.

## **6.** Set the blade force.

For high-quality cutting, perform a cutting test to check the cutting quality for the media and adjust the blade force.

#### Procedure

1. Press [◄] to select "SET".



- 2. Press [ENTER] to confirm your entry.
- 3. Press [◄] to select "SET".



4. Press [ENTER] to confirm your entry.

The test pattern is cut.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

**5.** Peel off the two cut shapes (a circle and a square).



- **6.** Check how the two shapes peel off.
  - Two shapes are peeled off together/backing paper is also cut

Press [◀] to select "YES".



· Two shapes are peeled off separately

Press [▶] to select "DONE".



- 7. Press [ENTER] to confirm your entry.
  - If you select "YES", proceed to the next procedure.
  - If you select "DONE", proceed to step 7. Correct the misalignment of the printing and cutting positions. (P. 103).
- 8. Press [▲] or [▼] to adjust the blade force.
  - If the two shapes are peeled off together → increase the blade force.
  - If the backing paper is also cut → reduce the blade force.



**9.** Press [ENTER] to confirm your entry.

The test pattern is cut again. Check the result.

## **10.** Check how the two shapes peel off.

• Two shapes are peeled off together/backing paper is also cut

Press [◀] to select "YES".



• Two shapes are peeled off separately

Press [▶] to select "DONE".



### 11. Press [ENTER] to confirm your entry.

- If you select "YES", the test pattern is cut again. Go back to step 12 and perform the setting again.
- If you select "DONE", proceed to step 7. Correct the misalignment of the printing and cutting positions. (P. 103).

## 7. Correct the misalignment of the printing and cutting positions.

Subtle misalignment between the printing and cutting positions may occur due to the thickness of the media or the head height. We recommend that you make corrections to match the media you are using.

#### **Procedure**

- 1. Press [◄] to select "SET".
- 2. Press [ENTER] to confirm your entry.

The test pattern (P&C1) is printed and cut. The test pattern is printed at each edge of the media.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

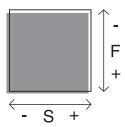
## МЕМО

If the media is tilted, the positions at the edges will be misaligned. You can also adjust for misalignments due to the media being tilted by printing the test pattern at each edge.

#### 3. Check the test pattern (P&C1).

Check whether the printing position (shaded part) and the cutting position (outer frame) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

"F" indicates the feed direction of the media (the feed direction) and "S" indicates the direction of print head movement (the scan direction).



- 4. Determine whether to correct the misalignment.
  - · Cutting position and printing position are not aligned

Press [◀] to select "YES".

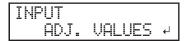


· Cutting position and printing position are aligned

Press [▶] to select "DONE".



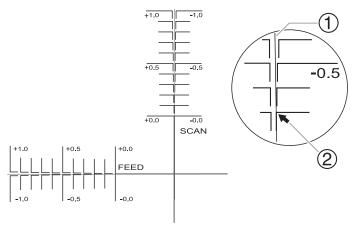
- **5.** Press [ENTER] to confirm your entry.
  - If you select "YES", the test pattern (P&C2) for setting the correction values is printed and cut. Proceed to the next step.
  - If you select "DONE", 8.Set the drying method and time after printing.(P. 105) proceed to step 8.
- **6.** Press [ENTER].



7. Check the correction values from the test pattern (P&C2) condition.

The point where the cutting line ( $^{\textcircled{1}}$ ) intersects the correction-value scale ( $^{\textcircled{2}}$ ) is the correction value. In the following figure, the correction value is "-0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



- 8. Set the correction values for the feed direction "F" and the scan direction "S."
  - (1) Press [▲] or [▼] to set the correction value for the feed direction (F).

(2) Press [◄] or [▶] to set the correction value for the scan direction (S).

(3) When you have finished setting the correction values, press [ENTER].

The test pattern (P&C1) is printed and cut again. Check the condition of the test pattern to check whether the printing position and the cutting position are aligned.

- **9.** Determine whether to correct the misalignment.
  - · Cutting position and printing position are not aligned

Press [◀] to select "YES".

Cutting position and printing position are aligned

Press [▶] to select "DONE".

- **10.** Press [ENTER] to confirm your entry.
  - If you select [YES], the test pattern (P&C1) is printed and cut again. Go back to step 8 and perform the setting again.
  - If you select "DONE", proceed to the next procedure.

## 8. Set the drying method and time after printing.

#### **Procedure**

1. Press [◄] or [▶] to select "NEXT".



- 2. Press [ENTER] to confirm your entry.
- **3.** Press [▲] or [▼] to select [P&C].

Set whether the media should be fed until the trailing edge of the printed area is put on the dryer after the 1st page is printed. To enable this function only for output data designed for printing and cutting, select "DISABLE". If "DISABLE" is selected, the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.



- 4. Press [ENTER] to confirm your entry.
- **5.** Press [▲] or [▼] to set the drying time.

Set the drying time after the 1st page is printed. The next operation is not started until the set time passes.



#### MEMO

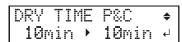
This setting is enabled for output data designed only for printing.

This setting is ignored for output data designed for printing and cutting. When the drying time has been set in the software RIP, priority is given to the software RIP's setting.

#### Example of setting time (general guide)

The setting time varies according to the settings such as the type of media and the printing quality.

- Condition Non-coated vinyl chloride media
- Setting time: About three minutes
- **6.** Press [ENTER] to confirm your entry.
- Press [▲] or [▼] to set the drying time.



#### MEMO

This setting is enabled for output data designed for printing and cutting.

This setting is ignored for output data designed only for printing. This setting is also applied during printing and cutting with crop marks. Even if the drying time has been set in the included software RIP, priority is given to the setting on this machine.

**8.** Press [ENTER] to confirm your entry.

## **9.** Save the settings as a preset.

#### **Procedure**

1. Press [◄] to select "SAVE".



2. Press [ENTER] to confirm your entry.

If you select "NEXT" and press [ENTER], the screen in step 7 is displayed, and the settings you have selected up to this point are not saved as a preset. However, they will remain as the current setting values for the machine.

**3.** Press [▲] or [▼] to select a destination to save the preset.

You can select a name from NAME1 to NAME8.



- 4. Press [ENTER] to confirm your entry.
- **5.** Set the name.
  - (1) Press [▲] or [▼] to select a character.
  - (2) Press [▶] to move to the next character.
  - (3) Set the following characters in the same way.

You can enter up to 15 characters.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



This completes the operation of the "MEDIA SETTING" menu.

## **Solution** Canceling Batch Settings before They Are Completed

#### Procedure

- 1. Press [MENU] during setup.
- **2.** Press [◄] to select "YES".



**3.** Press [ENTER] to confirm your entry.

The screen shown below appears again.



Selecting "NO" in step 2 returns you to the screen that was displayed when you pressed [MENU].



Even if you cancel media settings before they are completed, the values set so far will be saved.

#### **Step 2: Starting Output**

#### ⚠ CAUTION

Never touch the print-head carriage while output is in progress.

The print-head carriage moves at high speed. Coming into contact with the moving carriage may cause injury.

#### **Procedure**

1. In the case of output for the first time on that day, shake the white ink pouch tray.

Remove just the pouch tray for the white ink, shake the pouch tray 50 times (about 20 seconds), and then reinsert this pouch tray. The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the pouch tray horizontally with a stroke length of around 5 cm (2 in.) from each end of the tray.

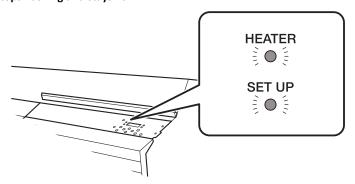


#### **IMPORTANT**

- The pouch trays for colors other than white do not need to be shaken before every operation, but be sure to shake them when installing new ones.
- . Do not remove the ink pouches. Shake the entire pouch tray. Removing the ink pouches may lead to the ink leaking.
- Before shaking, wipe off any ink from around the mouth of the ink pouch. If you do not wipe off the ink, it may splatter when you shake the pouch tray.
- When you have finished mixing the ink, reinsert the pouch tray immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you rarely use white ink, shake the pouch tray for the white ink 50 times (about 20 seconds) once a week.
- 2. Close the front cover.
- 3. Check that [SETUP] is lit.

If [SETUP] is not lit, the setup is not completed. Lower the loading lever, and then press the [ENTER] key.

4. Wait until [HEATER] stops flashing and stays lit.



5. Check that the screen shown below (the top menu) is displayed.

If the top menu is not displayed, press [MENU].



**6.** Send the output data from the computer.

For information on how to create the output data, refer to the documentation for the included software RIP.

#### MEMO

When you send the output data, "FILLING" or "CLEANING" may be displayed on the screen. These indicate the preparation operations performed before output. Output will begin after the time displayed on the screen elapses.

#### **IMPORTANT**

#### **Output Is Not Possible in These Situations**

- The machine does not run when a cover (front, left, right, or ink slot) is open.
- Data from the computer is not accepted when [SETUP] is dark.
- Printing does not start until [HEATER] lights. However, in the following cases printing is possible even if [HEATER] is not lit.
  - The settings for "PRINT" (print heater) and "DRYER" are "OFF".
    - P. 153 Setting the Print Heater Temperature
    - ▶ P. 154 「Setting the Dryer Temperature」
  - Heater settings "POWER" is "OFF."
    - ▶ P. 160 「Switching Off the Print Heater and Dryer Together」
- Data from the computer is not accepted when you are not at the top menu.

#### Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the media feed or cause the media to rub against the print 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.

#### When not using the machine, remove any media and store it in a suitable environment.

• If the machine is left with the media loaded, the media may be damaged, which may adversely affect printing. When not using the machine, remove any media and store it in a suitable environment.

# 4. How to Cut with Crop Marks

Preparations before Cutting with Crop Marks	111
What Is Cutting with Crop Marks?	
Step 1: Printing Tests and Normal Cleaning	112
Step 2: Adjusting Cutting	115
Cutting with Crop Marks	117
Step 1: Batch Settings for Cutting with Crop Marks	117
Step 2: Starting Output with Crop Marks	130
Step 3: Preparations for Cutting Output	132
Sten 4: Starting Cutting Output	136

## **Preparations before Cutting with Crop Marks**

#### What Is Cutting with Crop Marks?

If you are removing the printed media and loading it again in order to cut it (for example, if you are processing the media such as laminating after printing, and then loading this media again for cutting), you have to align the printing and cutting positions. By printing the data together with crop marks, you can make it possible to align the positions using the crop marks when you load the media again to cut it. In this manual, this printing method is referred to as "cutting with crop marks."

#### **Step 1: Printing Tests and Normal Cleaning**

## 1. Perform a printing test.

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

#### MEMO

- This operation is unnecessary if you will only perform cutting.
- When performing printing tests successively, you can select "SCAN" (vertical printing) or "FEED" (horizontal printing) as the print position for the 2nd and later tests in comparison to the 1st test.
  - ▶ P. 203 「Performing Printing Tests Arranged Horizontally」

#### Procedure

1. Load the media.

▶ P. 30 「Setup of Media」

- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.

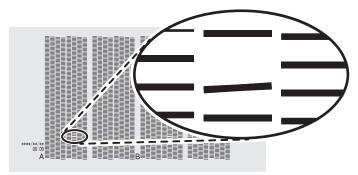


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

If no dot drop-out or dot displacement occurs, this operation is finished. Press [FUNCTION] to go back to the original screen.

## 2. Performing Normal Cleaning

#### **Procedure**

1. Press [FUNCTION] to display the screen shown below.

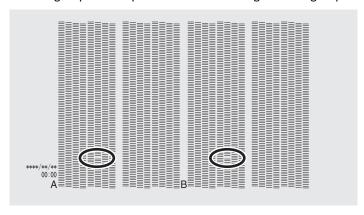
FUN	CTION	<b>( \$ )</b>
BAS	E POINT	4

2. Press [▼], then [▶][▼] to display the screen shown below.

CLEANIN	G	<b>4 \$</b>
NORMAL	CL.	•

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

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

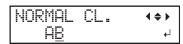


#### МЕМО

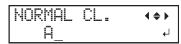
If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- **4.** Press [▶].
- 5. Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.

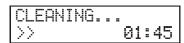


(3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.

**6.** Press [ENTER] to confirm your entry.

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



- **7.** Press [▲] to display the screen shown below.
- 8. Press [ENTER].

Printing of the test pattern starts.

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

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

#### **RELATED LINKS —**

• P. 231 "When Normal Cleaning Is Not Effective"

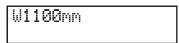
#### **Step 2: Adjusting Cutting**

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

#### Procedure

- 1. Close the front cover.
- 2. Press [◄] while the following screen is displayed.

The cutting carriage comes out over the platen.



- **3.** Press [◄], [▶], [▲], or [▼] to move the cutting carriage to the location where you want to carry out the cutting test. You can freely set the location for the cutting test.
- 4. Press [FUNCTION].
- **5.** Press [▼] several times to display the screen shown below.



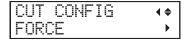
**6.** Press [▶] to display the screen shown below.



7. Press [ENTER].

The test pattern is cut.

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



**9.** Press [▶] to display the screen shown below.



**10.** Peel off the cut shapes to verify the cutting quality.



• Two shapes are peeled off separately
You do not need to perform the setting because the blade force is appropriate.

Two shapes are peeled off together/backing paper is also cut
 Proceed to the next step to set the blade force.

- **11.** Press [▲] or [▼] to select a value.
  - Two shapes are peeled off together Raise the blade force.
  - Backing paper is also cut

Reduce the blade force.

- 12. Press [ENTER] to confirm your entry.
- 13. Press [ $\blacktriangle$ ] to display the screen shown below.



14. Press [ENTER].

The test pattern is cut.

**15.** Check whether the correction was successful.

At the [CUT CONFIG] menu, you can also make settings for other cutting conditions in addition to the blade force. Refer to the following page.

#### **RELATED LINKS** —

• P. 163 "Fine-tuning the Cutting Conditions"

## **Cutting with Crop Marks**

#### Step 1: Batch Settings for Cutting with Crop Marks

To ensure the optimal output according to the media size and type, you can configure various settings on this machine. However, it is hard work to configure these settings one at a time. You can use the "MEDIA SETTING" menu to configure the absolute minimum of necessary items as a batch. You can save the setting details as a preset.

Note that you can set all the items set here individually as well.

## 1. Start the "MEDIA SETTING" menu.

#### Procedure

1. Load the media.

Check that the media is not sagging. If any sagging exists, settings such as the correction values will not function effectively.

- 2. Press [MENU].
- 3. Press [ENTER].



If you want to cancel the batch settings before they are completed, see the following page.

#### **RELATED LINKS -**

• P. 73 "Canceling Batch Settings before They Are Completed"

## 2. Set the print heater and dryer temperatures.

#### Procedure

1. Press [▲] or [▼] to set the "PRINT HEATER" temperature.

Recommended temperature: 40°C (104°F)



- 2. Press [ENTER] to confirm your entry.
- **3.** Press [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] to set the "DRYER" temperature.

Recommended temperature: 45°C (113°F)

**4.** Press [ENTER] to confirm your entry.

## 3. Adjust the print head height.

#### **Procedure**

1. Press [◄] to select "CHANGE."

HEAD	HGT	LOW	<b>4 )</b>
[ CHAP	4GE]	NEXT	↵

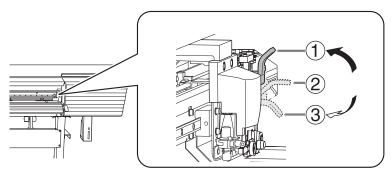
2. Press [ENTER] to confirm your entry.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. When the following screen is displayed, open the front cover.

4. Move the height-adjustment lever to adjust the head height.

When you change the position of the height-adjustment lever, the display screen changes and the buzzer sounds at the same time.



	Position	Display Screen
1	HIGH	HEAD HEIGHT LOW → HIGH ↔
2	MIDDLE	HEAD HEIGHT LOW → MIDDLE4
3	LOW	HEAD HEIGHT LOW → LOW ↔

#### MEMO

- Normally move the height-adjustment lever to "LOW." For media that is wrinkled or comes loose from the platen, move the height-adjustment lever to "MEDIUM" or "HIGH."
- The printing quality degrades as the distance between the media and the print heads increases. Do not move the height-adjustment lever to "MEDIUM" or "HIGH" needlessly.

#### **5.** Close the front cover.

## 4. Perform position adjustment of the feed direction (reduce horizontal stripes).

Feed direction means the feed direction of the media. Perform the correction adjusting to the media in advance because horizontal strips are more likely to occur during printing when the movement distance of the media changes subtly depending on the media's thickness.

#### Procedure

1. Press [◄] to select "SET".

CAL	IΒ	RAT	ION	<b>+</b>
ESE	Tl		NEXT	↵

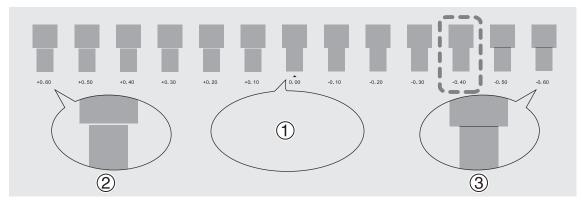
## 2. Press [ENTER] to confirm your entry.

Printing of the test pattern starts.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. Press [ENTER].

- 4. View the printed test pattern, and then determine the correction value.
  - $\triangle$  = Current correction value (1) Select the value to make the gap (2) and overlap (3) between the upper/lower squares smallest. In the case of the following figure, select "-0.40." When you cannot choose between two sequential numbers, specify a value that is between them.



**5.** Press [▲] or [▼] to select the correction value.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "SET".

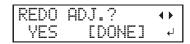
REDO	ADJ.?	<b>+</b>
[YES]	DONE	4

**8.** Press [ENTER] to confirm your entry.

The test pattern is printed again. Check that the gap and overlap are the smallest for the figure indicated by "\( \times\)" (that is, the current correction value). If the gap and overlap are smaller for another figure, return to step 5 to perform the setting again.

If you do not need to change the correction value, press [ENTER] again.

**9.** Press [▶] to select "DONE".



 $\textbf{10.} \ \ \mathsf{Press} \ [\mathsf{ENTER}] \ \mathsf{to} \ \mathsf{confirm} \ \mathsf{your} \ \mathsf{entry}.$ 

## **5.** Adjust the misalignment of the ink landing position.

#### **Procedure**

1. Press [◄] to select "SET".

MED	IΑ	GAP ADJ.	<b>4 &gt;</b>
[SE	T]	MEXT	↵

2. Press [ENTER] to confirm your entry.

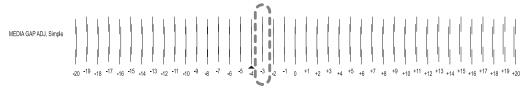
Printing of the test pattern starts.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

3. Press [ENTER].

4. View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



**5.** Press [▲] or [▼] to select the correction value.



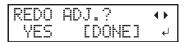
- 6. Press [ENTER] to confirm your entry.
- 7. Press [◄] to select "SET".

8. Press [ENTER] to confirm your entry.

The test pattern is printed again. Check that the gap and overlap are the smallest for the figure indicated by "\( \times\)" (that is, the current correction value). If the gap and overlap are smaller for another figure, return to step 5 to perform the setting again.

If you do not need to change the correction value, press [ENTER] again.

**9.** Press [▶] to select "DONE".



10. Press [ENTER] to confirm your entry.

## 6. Set the blade force.

For high-quality cutting, perform a cutting test to check the cutting quality for the media and adjust the blade force.

#### Procedure

1. Press [◄] to select "SET".



- 2. Press [ENTER] to confirm your entry.
- 3. Press [◄] to select "SET".



4. Press [ENTER] to confirm your entry.

The test pattern is cut.

You can select "NEXT" and press [ENTER] to skip the current menu and proceed to the next menu.

**5.** Peel off the two cut shapes (a circle and a square).



- **6.** Check how the two shapes peel off.
  - · Two shapes are peeled off together/backing paper is also cut

Press [◀] to select "YES".



· Two shapes are peeled off separately

Press [▶] to select "DONE".



- 7. Press [ENTER] to confirm your entry.
  - If you select "YES", proceed to the next procedure.
  - If you select "DONE", proceed to step 7. Correct the misalignment of the printing and cutting positions when using crop marks. (P. 125).
- 8. Press [▲] or [▼] to adjust the blade force.
  - If the two shapes are peeled off together → increase the blade force.
  - If the backing paper is also cut → reduce the blade force.



**9.** Press [ENTER] to confirm your entry.

The test pattern is cut again. Check the result.

- **10.** Check how the two shapes peel off.
  - Two shapes are peeled off together/backing paper is also cut

Press [◀] to select "YES".



• Two shapes are peeled off separately

Press [▶] to select "DONE".



## 11. Press [ENTER] to confirm your entry.

- If you select "YES", the test pattern is cut again. Go back to step 12 and perform the setting again.
- If you select "DONE", proceed to step 7.Correct the misalignment of the printing and cutting positions when using crop marks.(P. 125).

## 7. Correct the misalignment of the printing and cutting positions when using crop marks.

When you remove the printed media, and then reload it and perform cutting, use the crop marks. For this case, correction is to be performed because the positioning of printing and cutting may be misaligned even when you are using crop marks depending on the composition of the media.

#### **Procedure**

1. Press [▶] to select "NEXT".

- 2. Press [ENTER] to confirm your entry.
- 3. Press [◄] or [▶] to select "NEXT" or "SET".

Select "NEXT" when you will not print crop marks. Select "SET" when you will print crop marks.



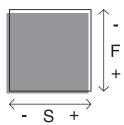
4. Press [ENTER] to confirm your entry.

If you select "NEXT", proceed to step 8.

5. Check the test pattern (C&C1) condition.

Check whether the printing position (shaded part) and the cutting position (outer frame) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

"F" indicates the feed direction of the media (the feed direction) and "S" indicates the direction of print head movement (the scan direction).



- **6.** Determine whether to correct the misalignment.
  - · Cutting position and printing position are not aligned

Press [◀] to select "YES".



· Cutting position and printing position are aligned

Press [▶] to select "DONE".



- 7. Press [ENTER] to confirm your entry.
  - If you select "YES", the test pattern (C&C2) for setting the correction values is printed and cut. Proceed to the next step.
  - If you select "DONE", proceed to step 8.

#### 8. Press [ENTER].

#### **9.** Check the correction values from the test pattern (C&C2) condition.

The point where the cutting line  $(\begin{cal} \textcircled{1}\end{cal})$  intersects the correction-value scale  $(\begin{cal} \textcircled{2}\end{cal})$  is the correction value. In the following figure, the correction value is "-0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).

#### 10. Set the correction values for the feed direction "F" and the scan direction "S."

(1) Press [▲] or [▼] to set the correction value for the feed direction (F).

(2) Press [◄] or [▶] to set the correction value for the scan direction (S).

(3) When you have finished setting the correction values, press [ENTER].

The test pattern (C&C1) is printed and cut again. Check the condition of the test pattern to check whether the printing position and the cutting position are aligned.

#### 11. Determine whether to correct the misalignment.

• Cutting position and printing position are not aligned

Press [◀] to select "YES".

· Cutting position and printing position are aligned

Press [▶] to select "DONE".



## **12.** Press [ENTER] to confirm your entry.

• If you select "SET", the test pattern (C&C1) is printed and cut again. Go back to step 10 and perform the setting again.

If you select "DONE", proceed to the next procedure.

## **8.** Set the drying method and time after printing.

#### **Procedure**

1. Press [▲] or [▼] to select "ENABLE" or "DISABLE".

Set whether the media should be fed until the trailing edge of the printed area is put on the dryer after the 1st page is printed. To make sure to dry the entire printed area, select "ENABLE". If "DISABLE" is selected, the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.



- 2. Press [ENTER] to confirm your entry.
- **3.** Press [▲] or [▼] to set the drying time.

Set the drying time after the 1st page is printed. The next operation is not started until the set time passes.



#### МЕМО

This setting is enabled for output data designed only for printing.

This setting is ignored for output data designed for printing and cutting. When the drying time has been set in the software RIP, priority is given to the software RIP's setting.

#### Example of setting time (general guide)

The setting time varies according to the settings such as the type of media and the printing quality.

- Condition Non-coated vinyl chloride media
- · Setting time: About three minutes
- 4. Press [ENTER] to confirm your entry.
- **5.** Press [▲] or [▼] to set the drying time.



#### MEMO

This setting is enabled for output data designed for printing and cutting.

This setting is ignored for output data designed only for printing. This setting is also applied during printing and cutting with crop marks. Even if the drying time has been set in the included software RIP, priority is given to the setting on this machine.

**6.** Press [ENTER] to confirm your entry.

## **9.** Save the settings as a preset.

#### **Procedure**

1. Press [◄] to select "SAVE".



2. Press [ENTER] to confirm your entry.

If you select "NEXT" and press [ENTER], the screen in step 7 is displayed, and the settings you have selected up to this point are not saved as a preset. However, they will remain as the current setting values for the machine.

Press [▲] or [▼] to select a destination to save the preset.

You can select a name from NAME1 to NAME8.



- 4. Press [ENTER] to confirm your entry.
- **5.** Set the name.
  - (1) Press [▲] or [▼] to select a character.
  - (2) Press [▶] to move to the next character.
  - (3) Set the following characters in the same way.

You can enter up to 15 characters.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



This completes the operation of the "MEDIA SETTING" menu.

## **Solution** Canceling Batch Settings before They Are Completed

#### Procedure

- 1. Press [MENU] during setup.
- **2.** Press [◄] to select "YES".



**3.** Press [ENTER] to confirm your entry.

The screen shown below appears again.



Selecting "NO" in step 2 returns you to the screen that was displayed when you pressed [MENU].



Even if you cancel media settings before they are completed, the values set so far will be saved.

#### **Step 2: Starting Output with Crop Marks**

#### **⚠** CAUTION

Never touch the print-head carriage while output is in progress.

The print-head carriage moves at high speed. Coming into contact with the moving carriage may cause injury.

#### **Procedure**

1. In the case of output for the first time on that day, shake the white ink pouch tray.

Remove just the pouch tray for the white ink, shake the pouch tray 50 times (about 20 seconds), and then reinsert this pouch tray. The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the pouch tray horizontally with a stroke length of around 5 cm (2 in.) from each end of the tray.

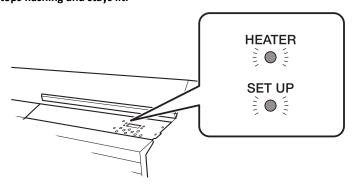


#### **IMPORTANT**

- The pouch trays for colors other than white do not need to be shaken before every operation, but be sure to shake them when installing new ones.
- . Do not remove the ink pouches. Shake the entire pouch tray. Removing the ink pouches may lead to the ink leaking.
- Before shaking, wipe off any ink from around the mouth of the ink pouch. If you do not wipe off the ink, it may splatter when you shake the pouch tray.
- When you have finished mixing the ink, reinsert the pouch tray immediately. Taking time to reattach the ink cartridge will
  adversely affect the ink path.
- Even if you rarely use white ink, shake the pouch tray for the white ink 50 times (about 20 seconds) once a week.
- 2. Close the front cover.
- 3. Check that [SETUP] is lit.

If [SETUP] is not lit, the setup is not completed. Lower the loading lever, and then press the [ENTER] key.

4. Wait until [HEATER] stops flashing and stays lit.



5. Check that the screen shown below (the top menu) is displayed.

If the top menu is not displayed, press [MENU].



**6.** Send the output data from the computer.

For information on how to create the output data, refer to the documentation for the included software RIP.

#### MEMO

When you send the output data, "FILLING" or "CLEANING" may be displayed on the screen. These indicate the preparation operations performed before output. Output will begin after the time displayed on the screen elapses.

#### **IMPORTANT**

#### **Output Is Not Possible in These Situations**

- The machine does not run when a cover (front, left, right, or ink slot) is open.
- Data from the computer is not accepted when [SETUP] is dark.
- Printing does not start until [HEATER] lights. However, in the following cases printing is possible even if [HEATER] is not lit.
  - The settings for "PRINT" (print heater) and "DRYER" are "OFF".
    - P. 153 Setting the Print Heater Temperature
    - ▶ P. 154 「Setting the Dryer Temperature」
  - Heater settings "POWER" is "OFF."
    - ▶ P. 160 「Switching Off the Print Heater and Dryer Together」
- Data from the computer is not accepted when you are not at the top menu.

#### Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the media feed or cause the media to rub against the print 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.

#### When not using the machine, remove any media and store it in a suitable environment.

• If the machine is left with the media loaded, the media may be damaged, which may adversely affect printing. When not using the machine, remove any media and store it in a suitable environment.

## **Step 3: Preparations for Cutting Output**

## 1. Switching Off the Print Heater and Dryer

#### Procedure

- 1. Press [FUNCTION].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press  $[\blacktriangleright]$  to display the screen shown below.



- **4.** Press [▶].
- **5.** Press [▲] or [▼] to select "OFF."



**6.** Press [ENTER] to confirm your entry.

The settings for the print heater and dryer are turned off.

7. Press [FUNCTION] to go back to the original screen.

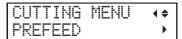
## 2. Preventing Pulling of the Media with Undue Force

#### Procedure

- 1. Press [MENU].
- **2.** Press [lack] to display the screen shown below.



**3.** Press [▶] once, and then press [▲] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "ENABLE."



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

## 3. Adjusting Cutting

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

#### Procedure

- 1. Close the front cover.
- 2. Press [◄] while the following screen is displayed.

The cutting carriage comes out over the platen.



- **3.** Press [◄], [▶], [▲], or [▼] to move the cutting carriage to the location where you want to carry out the cutting test. You can freely set the location for the cutting test.
- 4. Press [FUNCTION].
- 5. Press [▼] several times to display the screen shown below.



Press [►] to display the screen shown below.



7. Press [ENTER].

The test pattern is cut.

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



**9.** Press [▶] to display the screen shown below.



**10.** Peel off the cut shapes to verify the cutting quality.



- Two shapes are peeled off separately
  You do not need to perform the setting because the blade force is appropriate.
- Two shapes are peeled off together/backing paper is also cut
   Proceed to the next step to set the blade force.
- **11.** Press [▲] or [▼] to select a value.
  - Two shapes are peeled off together Raise the blade force.
  - Backing paper is also cut

Reduce the blade force.

- **12.** Press [ENTER] to confirm your entry.
- 13. Press [ $\blacktriangle$ ] to display the screen shown below.



14. Press [ENTER].

The test pattern is cut.

 $\textbf{15.} \ \ \textbf{Check whether the correction was successful.}$ 

#### **Step 4: Starting Cutting Output**

#### ⚠ CAUTION

Never touch the print-head carriage while output is in progress.

The print-head carriage moves at high speed. Coming into contact with the moving carriage may cause injury.

#### **Procedure**

- 1. Close the front cover.
- 2. Check that [SETUP] is lit.

If [SETUP] is not lit, the setup is not completed. Lower the loading lever, and then press the [ENTER] key.

3. Check that the screen shown below (the top menu) is displayed.

If the top menu is not displayed, press [MENU].

W11	00mm

4. Send the output data from the computer.

For information on how to create the output data, refer to the documentation for the included software RIP.

#### IMPORTANT

#### **Output Is Not Possible in These Situations**

- The machine does not run when a cover (front, left, right, or ink slot) is open.
- Data from the computer is not accepted when [SETUP] is dark.
- Data from the computer is not accepted when you are not at the top menu.

#### Points that must be observed

- · Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- During output, do not touch the media. Doing so may obstruct the media feed or cause the media to rub against the print 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.

When not using the machine, remove any media and store it in a suitable environment.

• If the machine is left with the media loaded, the media may be damaged, which may adversely affect printing. When not using the machine, remove any media and store it in a suitable environment.

# Chapter 3 Optimizing Quality and Efficiency

# 1. Optimizing the Output Quality

Using the Correction Functions	139
Adjust the misalignment of the ink landing position	139
Accurately Adjusting the Misalignment of the Ink Landing Position	140
Reducing Horizontal Bands (Feed Correction Function)	142
Configuring Settings to Match the Properties of the Media	144
Adjusting Print Head Height to Match Media Thickness	144
Using Transparent Media	146
Using Hard-to-Dry Media	147
Using Media That Wrinkles Easily/Does Not Move Smoothly	148
Using Sticky Media	149
Preventing Ink Discharge Issues	150
Preventing Soiling of the Media, Dot Drop-out, and Dot Displacement	150
Preventing Misaligned Media	151
Use Middle Pinch Rollers When Pulling Back or Feeding Media	151
Adjusting the Ink-drying Method	
What Is the Media Heating System?	
Setting the Print Heater Temperature	
Setting the Dryer Temperature	154
Hints and Tips for Temperature Control	155
Setting the Temperature during Preheating	
Drying the Trailing Edge of the Printing Area on the Dryer (When Only Printing)	157
印刷領域の後端をドライヤー上で乾燥させる(プリント&カットの場合)	0
Setting the Drying Time after Printing (When Only Printing)	158
Setting the Drying Time after Printing (When Printing and Cutting)	159
Switching Off the Print Heater and Dryer Together	160
Using an Auxiliary Drying Unit	161
Using a Blower-fan Unit	162
Accurately Adjusting the Cutting Settings	163
Fine-tuning the Cutting Conditions	163
Accurately Adjusting the Cutting-in Amount	165
Performing Distance Correction during Cutting	166
Cutting to Make It Possible to Cut Corners Attractively (Over Cut)	167
Prioritizing the Cutting Settings of This Machine over the Software RIP Settings	168
Accurately Adjusting the Settings for Printing and Cutting	169
Correcting the Misalignment of Printing and Cutting	
Correcting the Misalignment of the Printing and Cutting Positions during Cutting	172
Accurately Adjusting the Settings for Cutting with Crop Marks	174
Aligning the Positions of Cutting with Crop Marks Manually	174
Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Tes	t for Print-
ing and Cutting with Crop Marks)	
Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test	
ing/Cutting with Crop Marks)	
Correct the sensor for reading crop marks.	
Adjusting the Level of the Sensor for Reading Crop Marks According to the Media	
Resetting the Level of the Sensor for Reading Crop Marks	188

## **Using the Correction Functions**

To optimize the output quality, it is effective to use some correction functions.

#### Adjust the misalignment of the ink landing position.

This adjusts the landing position of the ink discharged from the print heads. The landing position varies according to the print head height and the thickness of the media, so we recommend that you make corrections to match the media you are using.

First, print a test pattern, and then determine and enter the correction value. After entering the correction value, print a test pattern again and check the correction results.

#### Procedure

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



3. Press [▲] or [▶] to display the screen shown below.

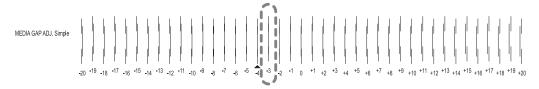


4. Press [ENTER].

Printing of the test pattern starts.

- 5. When printing is finished, press [▼], then [▶] to display the screen shown below.
- 6. View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



- 7. Press  $[\blacktriangle]$  or  $[\blacktriangledown]$  to select the correction value.
- **8.** Press [ENTER] to confirm your entry.
- **9.** Press [◄] or [▲] to display the screen shown below.



10. Press [ENTER].

Printing of the test pattern starts.

11. Check the test pattern to see whether the correction was successful.

Check that the misalignment is minimized for the two vertical lines indicated by ". (that is, the current correction value). If the misalignment is smaller for another set of vertical lines, set the correction value again.

12. When you have successfully performed the correction, press [MENU] to go back to the original screen.

#### **Accurately Adjusting the Misalignment of the Ink Landing Position**

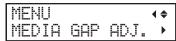
This adjusts the landing position of the ink discharged from the print heads. You can make adjustments more accurately than [MEDIA GAP ADJ. SIMPLE SETTING]. The landing position varies according to the print head height and the thickness of the media, so we recommend that you make corrections to match the media you are using. First, print a test pattern, and then determine and enter the correction value. After entering the correction value, print a test pattern again and check the correction results.

This adjustment must be performed in the following cases.

- · When using this machine for the first time
- · When changing the media to use
- · When you have changed the print-head height
- When printing is not improved by performing [MEDIA GAP ADJ. SIMPLE SETTING] (Adjust the misalignment of the ink landing position.(P. 139))

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶], then [▲] to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



5. Press [ENTER].

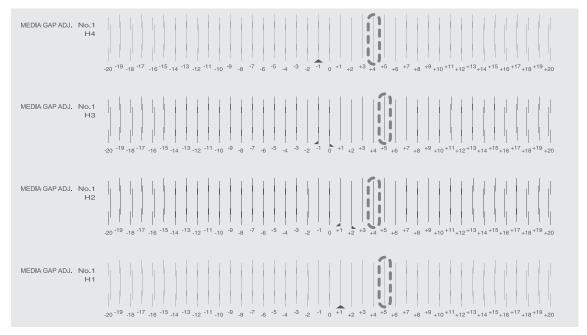
Printing of the test pattern starts.

**6.** When printing is finished, press [▼], then [▶] to display the screen shown below.

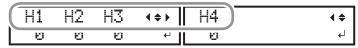
Н	1	12	H3	<b>4 \$ </b>
	0	0	0	↵

7. View the printed test pattern, and then determine the correction values from "MEDIA GAP ADJ. NO.1 H1" to "MEDIA GAP ADJ. NO.1 H4."

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "+5" for H1 and H3 and "+4" for H2 and H4. When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



- 8. Set the correction values from "H1" to "H4."
  - (1) Press [◄] or [▶] to select a value from H1 to H4.
  - (2) Press [▲] or [▼] to select the correction value.



(3) When you have finished setting the correction values, press [ENTER].

The screen shown below appears again.

**9.** Press [▼] to display the screen shown below.

- 10. 8. Set the correction values from "MEDIA GAP ADJ. NO.2 H1" to "MEDIA GAP ADJ. NO.2 H4" in the same manner as step.
- **11.** Press [▼] to display the screen shown below.

12. Press [ENTER].

Printing of the test pattern starts.

13. Check the test pattern to see whether the correction was successful.

For all the correction values, check that the misalignment is minimized for the two vertical lines indicated by "\( \textit{ that is, the current correction value} \). If the misalignment is smaller for another set of vertical lines, set the correction value again.

**14.** When you have successfully performed the correction, press [MENU] to go back to the original screen.

#### **Reducing Horizontal Bands (Feed Correction Function)**

Perform corrections to make the band-shaped "stripes" on the printed surface less noticeable.

The band-shaped "stripes" are called "horizontal bands" or "banding." Horizontal bands are caused by the subtle changes in the movement distance that occur when feeding the media depending on the media's thickness and the temperature of the dryer. We recommend that you make corrections to match the media you are using and the set temperature of the dryer.

First, print a test pattern, and then determine and enter the correction value. After entering the correction value, print a test pattern again and check the correction results. Repeat the process of printing a test pattern and entering a correction value several times to find the optimal correction value.

#### Procedure

- 1. If using roll media, check that the media is not sagging.
- 2. Press [MENU].
- **3.** Press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.

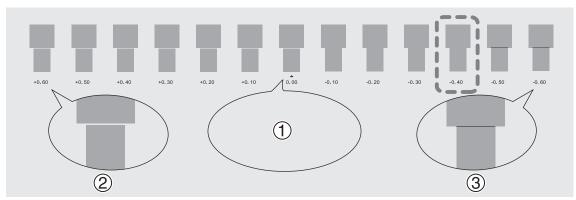


Press [ENTER].

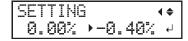
Printing of the test pattern starts.

**6.** When printing of the test pattern is finished, press [▼], then [▶] to display the screen shown below.

- 7. View the printed test pattern, and then determine the correction value.
  - $\triangle$  = Current correction value (1) Select the value to make the gap (2) and overlap (3) between the upper/lower squares smallest. In the case of the following figure, select "-0.40." When you cannot choose between two sequential numbers, specify a value that is between them.



8. Press [▲] or [▼] to select the correction value.



- **9.** Press [ENTER] to confirm your entry.
- **10.** Press [◄] or [▼] to display the screen shown below.



#### 11. Press [ENTER].

Printing of the test pattern starts.

## **12.** Check the test pattern to see whether the correction was successful.

Check that the gap and overlap are the smallest for the figure indicated by "..." (that is, the current correction value). If the gap and overlap are smaller for another figure, set the correction value again.

## $\textbf{13.} \ \ \text{When you have successfully performed the correction, press [MENU] to go back to the original screen.}$



Depending on the software RIP you are using, you can also configure this setting in the software RIP (by, for example, choosing the media type). When you have made the setting in the software RIP, the software RIP's setting is used and the printer's setting is ignored.

# Configuring Settings to Match the Properties of the Media

# **Adjusting Print Head Height to Match Media Thickness**

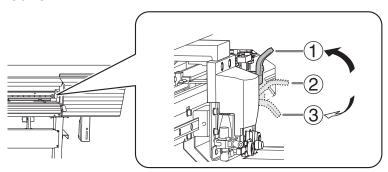
This adjusts the print head height to prevent media that is wrinkled or comes loose from the platen from contacting the print heads.

You can select the print head height from "LOW", "MIDDLE" or "HIGH". Printing quality when the print head height is set to "MIDDLE" or "HIGH" may be coarser or otherwise lower than when set to "LOW".

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.
- 3. Press [▶]. After "NOW PROCESSING.." is displayed, the screen shown below appears.
- 4. Open the front cover.
- 5. Move the height-adjustment lever to adjust the head height.

When you change the position of the height-adjustment lever, the display screen changes and the buzzer sounds at the same time.



	Position	Display Screen		
1	HIGH	HEAD HEIGHT LOW → HIGH ↔		
2	MIDDLE	HEAD HEIGHT LOW → MIDDLE4		
3	LOW	HEAD HEIGHT LOW → LOW ↔		

#### МЕМО

- Normally move the height-adjustment lever to "LOW." For media that is wrinkled or comes loose from the platen, move the height-adjustment lever to "MEDIUM" or "HIGH."
- The printing quality degrades as the distance between the media and the print heads increases. Do not move the height-adjustment lever to "MEDIUM" or "HIGH" needlessly.
- **6.** Close the front cover.
- 7. Press [MENU] to go back to the original screen.

#### MEMO

- · Default setting: LOW
- If degradation of printing quality occurs after raising the print head height, refer to the following page and try optimizing the quality.

#### **RELATED LINKS -**

• P. 139 "Adjust the misalignment of the ink landing position."

- P. 140 "Accurately Adjusting the Misalignment of the Ink Landing Position"
- P. 150 "Preventing Soiling of the Media, Dot Drop-out, and Dot Displacement"

# **Using Transparent Media**

You can set up transparent media by disabling detection of the leading and trailing edges of the media. Normally, detecting the leading and trailing edges of the media enables you to verify the presence of the media, and the media is then ready for setup. However, since transparent media cannot be detected, setup will not be possible.

# **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶] to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Press [▲] or [▼] to select "DISABLE".
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

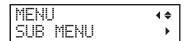
- Default setting: "ENABLE"
- When set to "DISABLE", printing operation does not stop when the media runs out. If media runs out while printing is in progress, immediately press [PAUSE] to stop printing. Otherwise, there is a chance that the platen or other parts may become soiled by ink or that ink may get inside and damage the machine.

# **Using Hard-to-Dry Media**

This setting is used to extend the drying time when the ink dries poorly even if the dryer is used.

# **Procedure**

- 1. Press [MENU].
- **2.** Press [lacktriangledown] several times to display the screen shown below.



**3.** Press [▶], then [▼] to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select a value.

Larger values cause the media to move more slowly, enabling you to extend the drying time accordingly.

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

- Default setting: "OFF"
- Depending on the software RIP you are using, you can also make this setting in the software RIP. When you have made the setting in the software RIP, the printer's setting is ignored.

# **Using Media That Wrinkles Easily/Does Not Move Smoothly**

The platen uses suction to grip the media and keep it stable. The suction force can be adjusted corresponding to the nature and condition of the media.

# Procedure

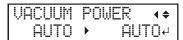
- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select a value.

0 to 100%	When the media is flimsy and cannot move smoothly, decreasing this value (reducing the suction force) may correct the problem.	
AUTO	The suction force is automatically adjusted to the optimal level for the media width	

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

- Default setting: "AUTO"
- Depending on the software RIP you are using, you can also make this setting in the software RIP. When you have made the setting in the software RIP, the machine's setting is ignored.

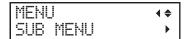
# **Using Sticky Media**

This setting is used to peel off the media before starting printing when using media that sticks easily to the platen. This setting is effective to prevent media jams.

Note, however, that peeling off the media may cause unstable media feed. Leave this menu item set to "DISABLE" unless you specifically need to change it.

# Procedure

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Press [▲] or [▼] to select "ENABLE".
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



Default setting: "DISABLE"

# **Preventing Ink Discharge Issues**

# Preventing Soiling of the Media, Dot Drop-out, and Dot Displacement

Printing by removing the ink buildup on the print head surface before or during printing prevents soiling of the media, dot drop-out, and dot displacement.

In the following cases, ink tends to collect on the surface of the print heads.

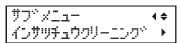
- When you use media prone to static electricity buildup.
- When the ambient temperature is low.
- When the print-head height is set to "HIGH".

# Procedure

- 1. Press [MENU].
- **2.** Press  $[\, lacktriangledown]$  several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.

The current setting is displayed on the screen.



**5.** Press [▲] or [▼] to select a setting.

"NONE"	Automatic cleaning is not performed.
"PAGE"	Automatic cleaning is performed each time prior to the start of printing.
"INTERVAL(JOB)"	Automatic cleaning is performed when the cumulative printing time reaches the value you set here. However, if this time is reached during printing, automatic cleaning is performed before the next printing operation starts. Because printing is not paused, uneven color issues due to paused operation do not occur.
"INTERVAL(TIME)"	Automatic cleaning is performed when the cumulative printing time reaches the value you set here. When this time is reached during printing, printing pauses and so colors may be uneven.

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

- Default setting: "NONE"
- Settings other than "NONE" result in longer printing times.

# **Preventing Misaligned Media**

# Use Middle Pinch Rollers When Pulling Back or Feeding Media

Set the setting that causes the middle pinch rollers to go up automatically during pullback printing or printing and cutting to "DISABLE." Holding down media that is not straight or comes loose is effective in preventing misalignment during printing and cutting.

"AUTO MIDDLE PINCH" is a function that causes the middle pinch rollers to automatically rise when media is pulled back, performs overprinting and cutting while they are raised. However, if you are performing lengthy printing or using non-resilient media, the media will be skewed or will come loose, which may have an effect on the output quality.

If you set "AUTO MIDDLE PINCH" to "DISABLE", the middle pinch rollers will press down on the media while moving, thus preventing skewing or coming loose. However, because the middle pinch rollers are pressed against the printed surface, it is easier for the rollers to leave a trace on the printed surface. Before pulling back the media, make sure to dry it thoroughly.

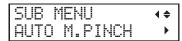
▶ P. 152 「Adjusting the Ink-drying Method」

# Procedure

- 1. Press [MENU].
- **2.** Press [ lackbreaktright] several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



- **4.** Press [▶].
- **5.** Press [▲] or [▼] to select "DISABLE".



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

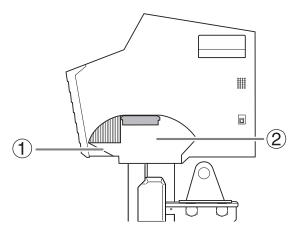


• Default setting: "ENABLE"

# Adjusting the Ink-drying Method

# What Is the Media Heating System?

This machine is equipped with a media heating system that warms the media. You use this mainly to improve ink adhesion and dry the ink. You can adjust the temperature settings to match the type of media and the printing speed.



1	Dryer	This is used to speed up the drying of the ink.
2	Print heater	This heater is used mainly to improve ink adhesion.

↑ WARNING High temperatures

The platen and dryer become hot. Exercise caution to avoid burns.

MARNING When output is not being performed, remove any loaded media or switch off the sub

power.

The continued application of heat at a single location may cause the release of toxic gases from the me-

dia or pose a fire hazard.

MARNING
Never use media that cannot withstand the heat.

Doing so may result in fire or the release of toxic gases or may degrade the media.

MARNING Never use the dryer for any purpose for which it is not intended, such as to dry clothing.

Doing so may cause overheating, resulting in fire or accident.

# **IMPORTANT**

Use the machine in an environment with an ambient temperature of 20 to 32°C (68 to 90°F).

If the machine is used at an ambient temperature lower than 20°C (68°F), then depending on the type or width of the media, wrinkling or temperature-caused unevenness may occur. If this happens, try lowering the temperature of the media heating system by about 2°C (36°F). To obtain stable printing results, however, use the machine in an environment with an ambient temperature of 20 to 32°C (68 to 90°F).

#### MEMO

By using an auxiliary drying unit, you can speed up the drying of the ink more. For information about purchasing an auxiliary drying unit, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).

#### **RELATED LINKS -**

P. 161 "Using an Auxiliary Drying Unit"

# **Setting the Print Heater Temperature**

Setting the temperature of the print heater appropriately improves ink adhesion and inhibits smudging.

- With the default settings, simply switching on the power does not make the dryer warm up to the set temperature. The temperature rises to the set temperature when the media is loaded correctly and [SETUP] lights.
- Depending on the usage environment, the temperature of the print heater may become higher than the set temperature, but this does not represent a problem.
- Temperature settings are not possible when heater settings "POWER" is "OFF".

# **Procedure**

- 1. Press [FUNCTION].
- **2.** Press [▼] several times to display the screen shown below.



**3.** Press [▶] or [▼] to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select the temperature.

If the ink forms lumps or smudges, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

You can also set the temperature to "OFF". When set to "OFF", the print heater does not operate at all.

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [FUNCTION] to go back to the original screen.



- Default setting: 40°C (104°F)
- You can also make this setting in the software RIP. When you have made the setting in the software RIP, the software RIP's setting is used.

#### **RELATED LINKS -**

P. 160 "Switching Off the Print Heater and Dryer Together"

# **Setting the Dryer Temperature**

Setting the temperature of the dryer appropriately makes the ink dry fast.

- With the default settings, simply switching on the power does not make the dryer warm up to the set temperature. The temperature rises to the set temperature when the media is loaded correctly and [SETUP] lights.
- Depending on the usage environment, the temperature of the print heater may become higher than the set temperature, but this does not represent a problem.
- Temperature settings are not possible when heater settings "POWER" is "OFF".

# **Procedure**

- 1. Press [FUNCTION].
- **2.** Press [▼] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] twice to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select the temperature.

When ink drying is poor, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

You can also set the temperature to "OFF". When set to "OFF", the dryer does not operate at all.

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [FUNCTION] to go back to the original screen.

- Default setting: 45°C (113°F)
- You can also make this setting in the software RIP. When you have made the setting in the software RIP, the software RIP's setting is used.

# **Hints and Tips for Temperature Control**

The optimal temperature for the media heating system varies according to such factors as the type of media and the settings of the software RIP.

### Relationship between the quality settings of the software RIP and temperature

If smudging or poor drying occur even after raising the temperature, try setting the printing quality of the software RIP to higher image quality. Conversely, if you want to use a faster print quality, raise the temperature.

# Amount of ink

When you change the amount of ink using the settings for your software RIP, adjusting this may yield better results. If problems such as smudging persist even after raising the temperature, try reducing the amount of ink.

#### Other points to remember

When recommended settings for temperature, printing quality, and other values are given for your media, use the suggested settings.

# **Setting the Temperature during Preheating**

Preheating: State in which the main power and the sub power are switched on and [SETUP] is not lit (state in which the media setup is not completed).

# Procedure

- 1. Press [MENU].



**3.** Press  $[\triangleright]$ , then  $[\blacktriangledown]$  to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Press [▲] or [▼] to select a setting.
  - MENU: The system performs heating to the set temperature at all times, without lowering the temperature during preheating.
  - 30°C: The system maintains a temperature of 30°C (86°F) during preheating.
  - OFF: The system switches the media heating system off during preheating.
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

# МЕМО

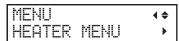
Default setting: 30°C

# Drying the Trailing Edge of the Printing Area on the Dryer (When Only Printing)

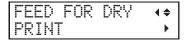
To dry the ink thoroughly, configure the settings so that the media is fed until the trailing edge of the printed area is put on the dryer after the printing is finished. This setting applies to output data designed only for printing.

# Procedure

- 1. Press [MENU].
- **2.** Press [lacktriangledown] several times to display the screen shown below.



**3.** Press [▶] twice to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "ENABLE" or "DISABLE".

"ENABLE"	Media feed is performed until the trailing edge of the printing area is positioned on the dryer. The margin between the print-end position and the next print-start position is set to a value of 100 mm (3.9 in.) when [OPTION DRYER] is set to "DISABLE" and 280 mm (11.1 in.) when it is set to "ENABLE".  P. 161 「Using an Auxiliary Drying Unit」
"DISABLE"	Media feed stops when printing ends. This means that the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



• Default setting: "DISABLE"

# **Setting the Drying Time after Printing (When Only Printing)**

To dry the ink thoroughly, set the drying time after the 1st page is printed. This setting applies to output data designed only for printing.

# Procedure

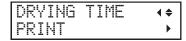
- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▶] to display the screen shown below.



- **6.** Press [▲] or [▼] to select the drying time.
- 7. Press [ENTER] to confirm your entry.
- **8.** Press [MENU] to go back to the original screen.

# MEMO

- Default setting: 0 min
- The next operation is not started until the set time elapses.
- During drying, [PAUSE] is lit. Press [PAUSE] while [PAUSE] is lit to finish the drying time and start the next operation.
- Hold down [PAUSE] while [PAUSE] is lit to cancel the output.
- When the drying time has been set in the software RIP, priority is given to the software RIP's setting.
- This setting is ignored for output data designed for printing and cutting. To set the drying time after printing when printing and cutting, see the following section.

# **RELATED LINKS -**

• P. 159 "Setting the Drying Time after Printing (When Printing and Cutting)"

# **Setting the Drying Time after Printing (When Printing and Cutting)**

To dry the ink thoroughly, set the drying time after the 1st page is printed. This setting applies to output data designed for printing and cutting.

# Procedure

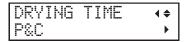
- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶], then [▼] to display the screen shown below.



**5.** Press [▶] to display the screen shown below.



- **6.** Press [▲] or [▼] to select the drying time.
- 7. Press [ENTER] to confirm your entry.
- **8.** Press [MENU] to go back to the original screen.

# МЕМО

- Default setting: 0 min
- The next operation is not started until the set time elapses.
- During drying, [PAUSE] is lit. Press [PAUSE] while [PAUSE] is lit to finish the drying time and start the next operation.
- Hold down [PAUSE] while [PAUSE] is lit to cancel the output.
- When you have configured this setting, we recommend setting the [FEED FOR DRY] menu to "ENABLE" or "P&C". ()
- This setting is also applied during printing and cutting with crop marks.
- Even if the drying time has been set in the included software RIP, priority is given to the setting on this machine.
- This setting is ignored for output data designed only for printing. To set the drying time after printing when only printing, see the following section.

#### **RELATED LINKS** ·

P. 158 "Setting the Drying Time after Printing (When Only Printing)"

# **Switching Off the Print Heater and Dryer Together**

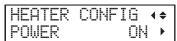
This setting is useful when you want to switch off the media heating system collectively, such as when performing only cutting. Setting the heater settings "POWER" to "OFF" will cause temperature settings of the print heater and dryer to become impossible.

# **Procedure**

- 1. Press [FUNCTION].
- Press [▼] several times to display the screen shown below.



**3.** Press [▶] to display the screen shown below.



- **4.** Press [▶].
- **5.** Press [▲] or [▼] to select "OFF."



**6.** Press [ENTER] to confirm your entry.

The settings for the print heater and dryer are turned off.

7. Press [FUNCTION] to go back to the original screen.



• Default setting: "ON"

### **IMPORTANT**

When this is set to "OFF", the heater will not turn on even if the heater temperature is set in the included software RIP.

# **Using an Auxiliary Drying Unit**

This setting is required when using an auxiliary drying unit. By using an auxiliary drying unit, you can dry the ink faster.

# Procedure

- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Press [▲] or [▼] to select "ENABLE".
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

- Default setting: DISABLE
- For recommended auxiliary drying unit models, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).
- · For details on how to use the auxiliary drying unit, refer to the documentation of the drying unit you are using.

# **Using a Blower-fan Unit**

This setting is required when using the optional blower-fan unit. By using a blower-fan unit, you can dry the ink faster.

# Procedure

- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Press [▲] or [▼] to select "ENABLE".
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

- Default setting: DISABLE
- For recommended blower-fan unit models, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).
- · For details on how to use the blower-fan unit, refer to the documentation of the blower-fan unit you are using.

# **Accurately Adjusting the Cutting Settings**

# **Fine-tuning the Cutting Conditions**

You can accurately set items such as the blade force, movement speed, and blade offset to match the nature of the media and the shape to cut. First, perform a cutting test, and then determine and enter the setting values. After entering the setting values, perform a cutting test again and check the results. Repeat the process of performing a cutting test and making the settings several times to find the optimal setting values.

#### Procedure

- 1. Close the front cover.
- **2.** Press [◄], [▶], [▲], or [▼] to move the cutting carriage to the location where you want to carry out the cutting test. You can freely set the location for the cutting test.
- 3. Press [FUNCTION].
- **4.** Press [▼] several times to display the screen shown below.



5. Press [▶] to display the screen shown below.



6. Press [ENTER].

The test pattern is cut.

- **8.** Check the results of the cutting test.

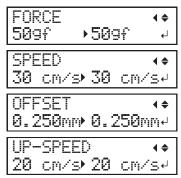


Check item	Result		Setting item	Adjustment
Check the shape.	The cut shape is distorted.		SPEED	Reduce
	The square also peels off.		FORCE	Increase
	Some uncut areas remain.		SPEED	Reduce
Peel off the square.	The blade leaves faint traces on the backing paper.		FORCE	No change
	The blade trace is indistinct.			Increase
·	The blade trace is too deep and cuts into the backing paper.			Reduce
		The corners are not rounded and do not have "horns."		No change
square you have peeled		The corners are rounded.	Offset	Increase
		The corners have "horns."		Reduce

**9.** Press [A] or [V] to select the cutting condition you want to set.

Display screen (cutting conditions)	Setting details	Default set- tings
CUT CONFIG (+) FORCE	Set the force (pressure) of the blade.	50 gf
CUT CONFIG (+ SPEED )	Set the speed of cutting.	30 cm/s
CUT CONFIG (+) OFFSET	Set the blade offset. Enter the listed offset value for the blade. The offset value for the included blade is 0.250 mm (9.8 mil).	0.250mm
CUT CONFIG (+ UP-SPEED )	Set the blade's up speed during cutting (the speed at which the blade travels when it moves to the next cutting line after cutting one cutting line). If the media comes loose during no-load feed and the blade damages the surface of the media, reduce the speed.	30 cm/s

10. Press  $[\blacktriangleright]$  to display the screen shown below.



- **11.** Press [▲] or [▼] to select a value.
- 12. Press [ENTER] to confirm your entry.
- **13.** Press [◄] to go back to step 9.

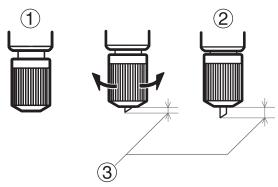
  Repeat steps 9 and 10 to adjust the cutting conditions.
- **14.** Press [FUNCTION] to go back to the original screen.

# Accurately Adjusting the Cutting-in Amount

When you want to perform accurate and fine adjustment of the cutting-in amount, such as when cutting media with thin backing paper, you can obtain good results by adjusting the amount of blade extension. Turn the cap portion of the blade holder to adjust the amount of blade extension. Each indicator tick corresponds to 0.1 mm (3.9 mil), and adjustment for 0.5 mm (19.7 mil) can be made by rotating the cap one full turn.

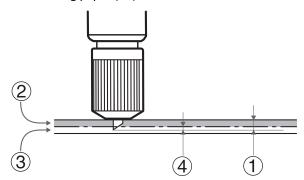
Note that making the amount of blade extension too small may cause the tip of the blade holder cap to touch, and may soil and damage the printed surface. It is important to be especially careful about this when you are using media that has poor ink-adhesion properties.

The amount of blade extension ( $^{\textcircled{3}}$ ) is 0 mm ( $^{\textcircled{1}}$ ) at minimum and 2.5 mm (98.4 mil) ( $^{\textcircled{2}}$ ) at maximum.



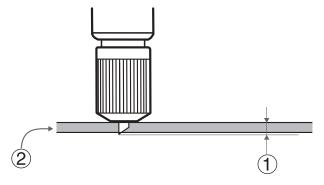
# Rough Estimate for the Amount of Blade Extension (When Creating a Sticker)

Set the amount of blade extension (1) to an amount that is the sum of the thickness of the material portion (2) and half (4) the thickness of the backing paper (3).



# Rough Estimate for the Amount of Blade Extension (When Cutting Perforated Lines)

Set the amount of blade extension (1) so that when the cutter pierces the media (2), the blade extends slightly. For information about the output settings for cutting perforated lines, refer to the documentation for VersaWorks.



#### **IMPORTANT**

Pushing the blade out too far will damage the blade and blade protector and hasten their deterioration, so exercise caution.

# **Performing Distance Correction during Cutting**

This correction is performed when you want to accurately align the lengths of cut lines when cutting. This setting is also applied during cutting only, printing and cutting, or cutting with crop marks.

The movement distance of the media changes subtly depending on the media's thickness. This means that the length of a line when cut may differ from the length setting in the data.

# **Procedure**

- 1. Press [MENU].
- 2. Press [▲] to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] twice to display the screen shown below.



**5.** Press [▲] or [▼] to select the correction value.

Set the correction value of the media feed direction.

```
FEED SETTING ←
0.00% →-0.10% →
```

- **6.** Press [ENTER] to confirm your entry.
- 7. Press [◄], then [▼] to display the screen shown below.



8. Press [▶] to display the screen shown below.

```
SCAN SETTING (◆
0.00% → 0.00% →
```

**9.** Press [▲] or [▼] to select the correction value.

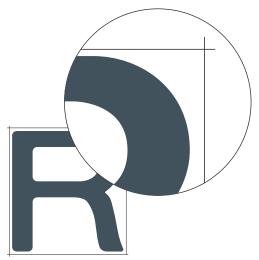
Set the correction value of the cutting carriage movement direction.

- 10. Press [ENTER] to confirm your entry.
- 11. Press [MENU] to go back to the original screen.

- Default settings
  - FEED SETTING: 0.00%
  - SCAN SETTING: 0.00%

# **Cutting to Make It Possible to Cut Corners Attractively (Over Cut)**

Cutting the corners of the border of the cutting line slightly longer makes it possible to cut the corners attractively. This is effective when using laminated or thick media, or non-resilient media. It also has the effect of making stickers easier to peel off.



# Procedure

- 1. Press [MENU].
- 2. Press [▲] to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Press [▲] or [▼] to select "ENABLE".
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

# МЕМО

• Default setting: "DISABLE"

# **Prioritizing the Cutting Settings of This Machine over the Software RIP Settings**

# Procedure

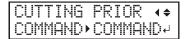
- 1. Press [MENU].
- 2. Press [▲] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "MENU".

Prioritize the cutting conditions set on the machine over the software RIP settings.

If this is set to "COMMAND", priority is given to the software RIP settings.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

# МЕМО

• Default setting: "COMMAND"

# Accurately Adjusting the Settings for Printing and Cutting

# **Correcting the Misalignment of Printing and Cutting**

This is a correction method performed when printing followed immediately by cutting yields positioning for printing and cutting that is slightly misaligned.

Print alignment marks, perform detection of the printed marks, and then correct the discrepancy. Subtle misalignment between the printing and cutting positions may occur due to the thickness of the media or the head height. We recommend that you make corrections to match the media you are using.

# 1. Adjust the misalignment of the ink landing position.

# **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▲] or [▶] to display the screen shown below.

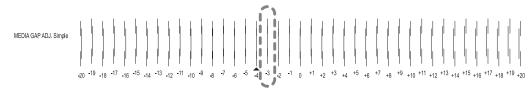


4. Press [ENTER].

Printing of the test pattern starts.

- 5. When printing is finished, press [▼], then [▶] to display the screen shown below.
- **6.** View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



- **7.** Press [▲] or [▼] to select the correction value.
- 8. Press [ENTER] to confirm your entry.
- **9.** Press [◄] or [▲] to display the screen shown below.



10. Press [ENTER].

Printing of the test pattern starts.

11. Check the test pattern to see whether the correction was successful.

Check that the misalignment is minimized for the two vertical lines indicated by "..." (that is, the current correction value). If the misalignment is smaller for another set of vertical lines, set the correction value again.

12. When you have successfully performed the correction, press [MENU] to go back to the original screen.

# 2. Correcting the Misalignment of Printing and Cutting

This is a correction method performed when printing followed immediately by cutting yields positioning for printing and cutting that is slightly misaligned.

Print alignment marks, perform detection of the printed marks, and then correct the discrepancy. Subtle misalignment between the printing and cutting positions may occur due to the thickness of the media or the head height. We recommend that you make corrections to match the media you are using.

# Procedure

- 1. Press [MENU].
- 2. Press [▲] once, and then press [▶] twice to display the screen shown below.



3. Press [ENTER].

The test pattern (P&C1) is printed and cut. The test pattern is printed at each edge of the media.

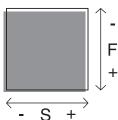


If the media is tilted, the positions at the edges will be misaligned. You can also adjust for misalignments due to the media being tilted by printing the test pattern at each edge.

# 4. Check the test pattern (P&C1).

Check whether the printing position (shaded part) and the cutting position (outer frame) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

"F" indicates the feed direction of the media (the feed direction) and "S" indicates the direction of print head movement (the scan direction).



If the printing position and the cutting position are aligned, no corrections are necessary.

If the printing position and the cutting position are not aligned, proceed to the next procedure.

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



6. Press [ENTER].

The test pattern (P&C2) is printed and cut.

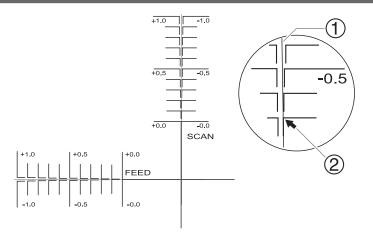
Press [▲] to display the screen shown below.



8. Check the correction values from the test pattern (P&C2) condition.

The point where the cutting line (1) intersects the correction-value scale (2) is the correction value. In the following figure, the correction value is "-0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



- **9.** Press [▶].
- 10. Set the correction values for the feed direction "F" and the scan direction "S."
  - (1) Press [▲] or [▼] to set the correction value for the feed direction (F).

(2) Press [◄] or [▶] to set the correction value for the scan direction (S).

- (3) When you have finished setting the correction values, press [ENTER].
- **11.** Press [MENU], then [▲] to display the screen shown below.

12. Press [ENTER].

The test pattern (P&C1) is printed and cut. If the printing and cutting lines are aligned, adjustment is complete. If further adjustment is needed, press  $[\mbox{\ensuremath{\nabla}}]$ , then  $[\mbox{\ensuremath{\triangleright}}]$  to go back to step 10 and fine-tune the adjustment.

- · Default settings
  - F (correction value of the media feed direction): 0.00 mm
  - S (correction value of the cutting carriage movement direction): 0.00 mm

# Correcting the Misalignment of the Printing and Cutting Positions during Cutting

This method pauses a cutting operation to correct the misalignment of the printing and cutting positions. The correction values set here are applied as the default values of the printing and cutting positions.

If the printing and cutting positions are misaligned, you normally adjust the positions while checking a test pattern

▶ P. 169 「Correcting the Misalignment of Printing and Cutting」

# Procedure

1. During cutting, press [PAUSE] to display the screen shown below.

The cutting operation is paused.

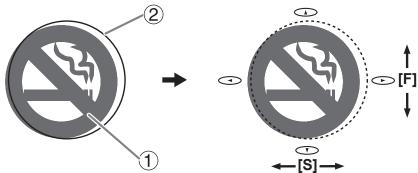
- 2. Press [FUNCTION].
- 3. Press [▼] several times to display the screen shown below.

**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.

- **5.** Press [▶].
- **6.** Determine the correction values.

# MEMO

Determine the values so as to correct the misalignment of the cutting position (2) in relation to the printing position (1). In the case of the following figure, feed direction "F" is misaligned in a negative direction and scan direction "S" in a positive direction. Therefore, set the correction values for the feed direction "F" to positive values and the scan direction "S" to negative values. Measure the actual misalignment amount when determining the value.



- $7.\,$  Set the correction values for the feed direction "F" and the scan direction "S."
  - (1) Press [▲] or [▼] to set the correction value for the feed direction (F).

(2) Press [◄] or [▶] to set the correction value for the scan direction (S).

- (3) When you have finished setting the correction values, press [ENTER].
- 8. Press [PAUSE] to display the screen shown below.

# TO CANCEL, HOLD DOWN PAUSE KEY

# $\boldsymbol{9.} \ \ \mathsf{Press} \ [\mathsf{PAUSE}] \ \mathsf{again} \ \mathsf{to} \ \mathsf{restart} \ \mathsf{the} \ \mathsf{cutting} \ \mathsf{operation}.$

Hold down [PAUSE] for one second or longer to cancel the cutting operation.

▶ P. 52 「Pausing and Canceling Output」

- Default settings
  - F (correction value of the media feed direction): 0.00 mm
  - S (correction value of the cutting carriage movement direction): 0.00 mm

# Accurately Adjusting the Settings for Cutting with Crop Marks

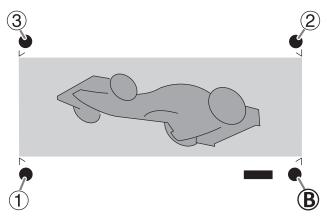
# Aligning the Positions of Cutting with Crop Marks Manually

Depending on the type of media, it may not be possible to detect crop marks automatically. When crop marks cannot be detected automatically, perform alignment manually.

The following figure is given as an example to explain how to manually set the base point and align points.

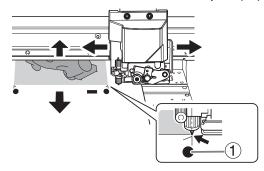
The following figure is given as an example to explain how to manually set the base point (B) and align points ( $^{\textcircled{1}}$  2 3).

The numbers for align points are determined with reference to the location of the base point, as shown in the following figure. You cannot set the align points unless you specify the base point. Redoing the setting for the base point clears any align points that have been set.

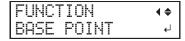


# **Procedure**

**1.** Press  $[\blacktriangleleft]$ ,  $[\blacktriangleright]$ ,  $[\blacktriangle]$  or  $[\blacktriangledown]$  to move the center of the blade to the "base point  $(^{\textcircled{1}})$ " position.



2. Press [FUNCTION] to display the screen shown below.

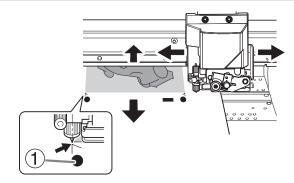


3. Press [ENTER].

The [BASE POINT] is set. The character "B" is displayed on the screen.



**4.** Press [**4**], [**▶**], [**∆**] or [**V**] to move the center of the blade to the "align point 1 (<sup>1</sup>)" position.



**5.** Press [FUNCTION], then  $[\blacktriangleright]$  to display the screen shown below.

BASE		NT	<b>♦</b>
ALIG	iN PO	INT :	<u> </u>

6. Press [ENTER].

The [ALIGN POINT] is set. The characters "B1" are displayed on the screen.

7. Repeat steps 4 through 6 to specify "align point 2" and "align point 3" as required.

The number of the align point you are setting is determined automatically.

# Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks)

Depending on the composition of the media, the positioning of printing and cutting may be misaligned even when you are using crop marks. Make corrections for misaligned printing and cutting for the media you are using.

In cutting with crop marks, cutting is performed after removing the media after printing. However, with this method, you can make corrections of printing and cutting positions at the same time without removing the media.

# 1. Adjust the misalignment of the ink landing position.

# **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▲] or [▶] to display the screen shown below.

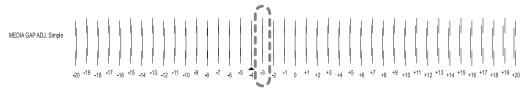


4. Press [ENTER].

Printing of the test pattern starts.

- When printing is finished, press [▼], then [▶] to display the screen shown below.
- **6.** View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



- 7. Press [▲] or [▼] to select the correction value.
- 8. Press [ENTER] to confirm your entry.
- **9.** Press [◄] or [▲] to display the screen shown below.



10. Press [ENTER].

Printing of the test pattern starts.

11. Check the test pattern to see whether the correction was successful.

Check that the misalignment is minimized for the two vertical lines indicated by "..." (that is, the current correction value). If the misalignment is smaller for another set of vertical lines, set the correction value again.

12. When you have successfully performed the correction, press [MENU] to go back to the original screen.

# 2. Correct the misalignment of printing and cutting with crop marks at the same time.

# **Procedure**

- 1. Press [MENU].
- 2. Press [A] to display the screen shown below.

MENU		<b>♦</b>
CUTT	ING MENU	•

**3.** Press  $[\triangleright]$ , then  $[\blacktriangledown][\triangleright]$  to display the screen shown below.

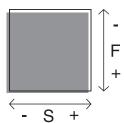
4. Press [ENTER].

The test pattern (C&C1) is printed and cut. One test pattern is printed on the media.

5. Check the test pattern (C&C1) condition.

Check whether the printing position (shaded part) and the cutting position (outer frame) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

"F" indicates the feed direction of the media (the feed direction) and "S" indicates the direction of print head movement (the scan direction).



If the printing position and the cutting position are aligned, no corrections are necessary.

If the printing position and the cutting position are not aligned, proceed to the next procedure.

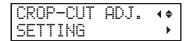
**6.** Press [▼] twice to display the screen shown below.



7. Press [ENTER].

The test pattern (C&C2) is printed and cut.

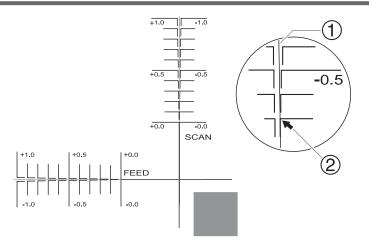
8. Press [▲] to display the screen shown below.



9. Check the correction values from the test pattern (C&C2) condition.

The point where the cutting line ( $^{\textcircled{1}}$ ) intersects the correction-value scale ( $^{\textcircled{2}}$ ) is the correction value. In the following figure, the correction value is "-0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



- **10.** Press [▶].
- 11. Set the correction values for the feed direction "F" and the scan direction "S."
  - (1) Press [▲] or [▼] to set the correction value for the feed direction (F).

(2) Press [◄] or [▶] to set the correction value for the scan direction (S).

- (3) When you have finished setting the correction values, press [ENTER].
- **12.** Press [MENU], then [▲] to display the screen shown below.

13. Press [ENTER].

The test pattern (C&C1) is printed and cut. If the printing and cutting lines are aligned, adjustment is complete. If further adjustment is needed, press  $[\P]$ , then  $[\Vdash]$  to go back to step 11 and fine-tune the adjustment.

# МЕМО

- Default settings
  - F (correction value of the media feed direction): 0.00 mm
  - S (correction value of the cutting carriage movement direction): 0.00 mm
- Depending on the changes in the condition of media caused by laminating and the loading position of the media before cutting, the positioning of cutting may be misaligned. In such cases, refer to the following page.

#### **RELATED LINKS** ·

• P. 179 "Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)"

# Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)

Due to changes in the thickness of media caused by laminating and misalignment of the loading position of the media before and after cutting, the positioning of printing and cutting may be misaligned even when you are using crop marks. Make corrections for misaligned printing and cutting for the media you are using and its condition.

In this test, so as to create the same conditions as the actual operation, print only the crop marks, remove the media, load the media again, and then cut the media.

# 1. Adjust the misalignment of the ink landing position.

# **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



3. Press [▲] or [▶] to display the screen shown below.

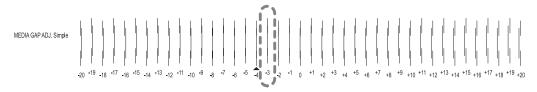


4. Press [ENTER].

Printing of the test pattern starts.

- 5. When printing is finished, press [▼], then [▶] to display the screen shown below.
- **6.** View the printed test pattern, and then determine the correction value.

Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "-3." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



- 7. Press [▲] or [▼] to select the correction value.
- 8. Press [ENTER] to confirm your entry.
- 9. Press [◄] or [▲] to display the screen shown below.



10. Press [ENTER].

Printing of the test pattern starts.

11. Check the test pattern to see whether the correction was successful.

Check that the misalignment is minimized for the two vertical lines indicated by ". (that is, the current correction value). If the misalignment is smaller for another set of vertical lines, set the correction value again.

12. When you have successfully performed the correction, press [MENU] to go back to the original screen.

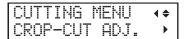
#### 2. Print only the crop marks.

#### Procedure

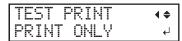
- 1. Press [MENU].
- **2.** Press  $[\blacktriangle]$  to display the screen shown below.



**3.** Press [▶], then [▼] to display the screen shown below.



**4.** Press [▶] twice to display the screen shown below.



5. Press [ENTER].

Printing of the test pattern starts.

Only one crop mark is printed.

- **6.** When printing is finished, press [MENU] to go back to the original screen.
- 7. Remove any media.

If the media needs to be separated, refer to the following page.

- ▶ P. 47 「Separating the Media」
- 8. Complete operations before cutting output for normal cutting with crop marks, such as laminating.

## 3. Perform a cutting test (separate test for printing/cutting with crop marks).

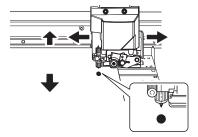
#### **Procedure**

- 1. Set up the media for which operations before cutting output, such as lamination, is complete.
- 2. Press [◄] while the following screen is displayed.

The cutting carriage comes out over the platen.



**3.** Press  $[\blacktriangleleft]$ ,  $[\blacktriangleright]$ ,  $[\blacktriangle]$  or  $[\blacktriangledown]$  to move the center of the blade over the crop marks.



4. Once the position has been decided, press [FUNCTION] to display the screen shown below.

FUNCT	ION	<b>∢</b> ♦ ▶
BASE	POINT	4

**5.** Press [ENTER] to confirm your entry.

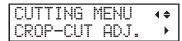
When the screen displays the character "B" together with the printable width at the location (as shown in the following figure), setting is completed.

```
W1100mm
B
```

- 6. Press [MENU].
- 7. Press [▲] to display the screen shown below.



8. Press [▶], then [▼] to display the screen shown below.



**9.** Press [▶] twice, and then press [▼] once to display the screen shown below.



10. Press [ENTER].

The cutting test starts.

## **4.** Set the correction values (separate test for printing/cutting with crop marks).

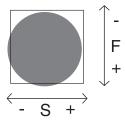
#### **Procedure**

- 1. Press [◄], then [▼][▶] to display the screen shown below.
- 2. View the results of the cutting test to determine the correction values.

Check whether the crop mark (shaded part) and the cutting position (outer frame) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

If the test printed crop marks are inside the cutting line, correction is not necessary.

If the test printed crop marks are extending beyond the cutting line, correction is necessary.



"F" indicates the feed direction of the media (the feed direction) and "S" indicates the direction of print head movement (the scan direction). ("F," "S," "+," "-," and the arrows are not displayed on the actual test pattern.)

#### MEMO

Determine the values so as to correct the misalignment of the cutting position. In the case of the above figure, feed direction "F" is misaligned in a negative direction and scan direction "S" in a positive direction. Therefore, set the correction values for the feed direction "F" to positive values and the scan direction "S" to negative values. Measure the actual misalignment amount when determining the value.

- 3. Set the correction values for the feed direction "F" and the scan direction "S."
  - (1) Press [▲] or [▼] to set the correction value for the feed direction (F).

(2) Press [◄] or [▶] to set the correction value for the scan direction (S).

- (3) When you have finished setting the correction values, press [ENTER].
- 4. Perform steps 2.Print only the crop marks.(P. 180), 3.Perform a cutting test (separate test for printing/cutting with crop marks).(P. 181) again to check whether the correction was successful.
  - If the test printed crop marks are inside the cutting line, correction is complete.
  - If the test printed crop marks are extending beyond the cutting line, redo the correction.
- 5. Press [MENU] to go back to the original screen.

#### MEMO

- · Default settings
  - F (correction value of the media feed direction): 0.00 mm
  - S (correction value of the cutting carriage movement direction): 0.00 mm
- You can also make corrections of printing and cutting positions at the same time without removing the media. Refer to the following page.

#### **RELATED LINKS** —

• P. 176 "Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks)"

#### Correct the sensor for reading crop marks.

Depending on the characteristics of the media, such as reflectivity and colors, the machine may not be able to read the crop marks. In such cases, correct the sensor for reading crop marks.

#### 1. Correct the sensor for reading crop marks.

#### **Procedure**

1. Set up the media for which the machine has failed to read the crop marks.

Use the very media that has already been printed for which the machine has failed to read the crop marks.

- 2. Press [MENU].
- 3. Press [▲] to display the screen shown below.



**4.** Press [▶] once, and then press [▼] twice to display the screen shown below.

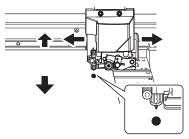


**5.** Press [▶] to display the screen shown below.

**6.** Press [ENTER] to display the screen shown below.

7. Press [◄], [▶], [▲] or [▼] to move the center of the blade over the crop marks.

The center of the blade should only be over the crop marks, and does not need to be aligned with the center of the crop marks.



#### 8. Press [ENTER].

If correction succeeds, the following message appears. Proceed to the next step.

CAL	IB.	SUCCESS
+ 2	0%	

If correction fails, the following message appears. Take countermeasures and redo the correction.

Messages	Cause	Countermeasures
CALIB. FAILED (TOO BRIGHT)	The lighting in the room where the printer is installed or vicinity of the printer is too bright.  The reflected light from the media is too strong.	Adjust the brightness of the lighting.     Change the media type.

Messages	Cause	Countermeasures
CALIB. FAILED (TOO DARK)	The reflection from the media is too weak.	Change the media type.
CALIB. FAILED TRY AGAIN	Correction failed for some reason.	Redo the correction.

If the same message appears even after you redo correction several times, contact your authorized Roland DG Corporation dealer.

 $\textbf{9.} \ \ \text{Press any one of the keys on the operation panel to display the screen shown below.}$ 

CROP	SENS	CAL	IB∢♠
SENS	CAL	IB.	<b>↓</b>

## 2. Check whether crop marks can be read.

#### **Procedure**

1. Press [▲] to display the screen shown below.

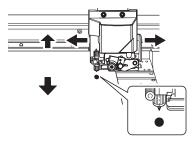
CROPS	ENS CAL	.IB∢¢
SENS	CHECK	↵

2. Press [ENTER] to display the screen shown below.

MOVE	CUT	TOOL
TO t	MARK	CENTER <i>←</i>

**3.** Press  $[\blacktriangleleft]$ ,  $[\blacktriangleright]$ ,  $[\blacktriangle]$  or  $[\blacktriangledown]$  to move the center of the blade over the crop marks.

The center of the blade should only be over the crop marks, and does not need to be aligned with the center of the crop marks.



#### 4. Press [ENTER].

Check whether crop marks can be read.

If reading succeeds, the following message appears. Proceed to the next step.

ı	CHECK SUCCESS	
ı	MARK FOUND	

If reading fails, the following message appears.

CHECK	FAI	LED
MARK	NOT	FOUND

It is possible that crop marks cannot be detected because they are not the crop marks output from the software RIP that is compatible with this machine. Crop marks drawn using drawing software also cannot be detected.

Use the software RIP that is compatible with this machine to output the crop marks and redo the correction from the start.

If detection failed even with crop marks output by the compatible software RIP, redo the correction from the sensor correction stage.

**5.** Press any one of the keys on the operation panel to display the screen shown below.



**6.** Press [MENU] to go back to the original screen.

#### Adjusting the Level of the Sensor for Reading Crop Marks According to the Media

When the sensor for reading crop marks is corrected, the correction value is stored. When using another media, adjust the level of the sensor for reading crop marks, as the correction value may not match.

#### Procedure

- 1. Press [MENU].
- **2.** Press [A] to display the screen shown below.



**3.** Press [▶] once, and then press [▼] twice to display the screen shown below.



**4.** Press [▶], then [▼] to display the screen shown below.



**5.** Press [▶] twice to display the screen shown below.



- **6.** Press [▲] or [▼] to set the correction value.
- 7. Press [ENTER] to confirm your entry.
- **8.** Press [MENU] to go back to the original screen.

#### Resetting the Level of the Sensor for Reading Crop Marks

When the sensor for reading crop marks is corrected, the correction value is stored. When using another media, reset the level of the sensor for reading crop marks to initial settings, as the correction value may not match.

#### **Procedure**

- 1. Press [MENU].
- **2.** Press [A] to display the screen shown below.



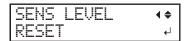
**3.** Press [▶] once, and then press [▼] twice to display the screen shown below.



**4.** Press [▶], then [▼] to display the screen shown below.



**5.** Press [▶], then [▼] to display the screen shown below.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

# 2. Optimizing Work Efficiency

Using Presets	190
Saving the Current Settings in Presets	190
Loading and Outputting a Preset	192
Adjusting the Output-start Location	193
Setting the Base Point	193
Reducing Output Time	195
Speeding Up Output for Narrow Media	195
Using the Media Take-up Unit	196
About the Media Take-Up Unit	196
Performing Operations from the Dedicated Mobile Operation Application	197
What Is the Dedicated Mobile Operation Application?	197
Downloading the Operation Application	198
Using the Operation Application	199
Important Notes on Using the Operation Application	200
Other Useful Functions	202
Using the Print Light (Interior Light)	202
Performing Printing Tests Arranged Horizontally	203
Using Media Flanges for Paner Tubes (Cores) with an Internal Diameter of 2 Inches	204

# **Using Presets**

#### **Saving the Current Settings in Presets**

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 trouble-some. 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.

#### Procedure

- 1. Press [MENU].
- **2.** Press [▼] to display the screen shown below.



**3.** Press [▶] once, and then press [▼] twice to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



- **5.** Decide on the preset number.
  - (1) Press [▲] or [▼] to select one option from "NAME1" to "NAME8."
  - (2) Press [ENTER] to confirm your entry.

The current menu settings are saved, and then the screen shown below appears.



- **6.** Set the preset name.
  - (1) Press [▲] or [▼] to select a character.
  - (2) When you have selected the character you want to enter, press [▶].

    The characters you can enter are "A" through "Z," "0" through "9," and the "-" character.
  - (3) Press [▲] or [▼] to select the next character.

Select the following characters in the same way. You can enter up to 15 characters, including spaces.



- (4) When you have finished, press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.

The menu items that can be saved in presets are listed below.

Menu item	Reference page
[PRINT] (print heater), [DRYER]	<ul> <li>▶ P. 153 「Setting the Print Heater Temperature」</li> <li>▶ P. 154 「Setting the Dryer Temperature」</li> </ul>
[PREHEATING]	▶ P. 156 「Setting the Temperature during Preheating」
[FEED FOR DRY]	▶ P. 157 「Drying the Trailing Edge of the Printing Area on the Dryer (When Only Printing)」

Menu item	Reference page
[DRYING TIME]	▶ P. 158 「Setting the Drying Time after Printing (When Only Printing)」
[DRY TIME P&C]	▶ P. 159 「Setting the Drying Time after Printing (When Printing and Cutting)」
[MEDIA GAP ADJ. SIMPLE SETTING]	▶ P. 139 「Adjust the misalignment of the ink landing position.」
[MEDIA GAP ADJ. DETAIL SETTING]	▶ P. 140 「Accurately Adjusting the Misalignment of the Ink Landing Position」
[CALIBRATION]	▶ P. 142 「Reducing Horizontal Bands (Feed Correction Function)」
[EDGE DETECTION]	▶ P. 146 「Using Transparent Media」
[SCAN INTERVAL]	▶ P. 147 「Using Hard-to-Dry Media」
[VACUUM POWER]	▶ P. 148 「Using Media That Wrinkles Easily/Does Not Move Smoothly」
[FULL WIDTH S]	▶ P. 195 「Speeding Up Output for Narrow Media」
[MEDIA RELEASE]	▶ P. 149 「Using Sticky Media」
[FORCE], [SPEED], [OFFSET], [UP-SPEED]	▶ P. 163 「Fine-tuning the Cutting Conditions」
[CALIBRATION] (in the [CUTTING MENU])	▶ P. 166 「Performing Distance Correction during Cutting」
[PRINT-CUT ADJ.]	▶ P. 169 「Correcting the Misalignment of Printing and Cutting」
[CROP-CUT ADJ.]	<ul> <li>▶ P. 176 「Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks)」</li> <li>▶ P. 179 「Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with</li> </ul>
[CROP SENSOR ADJ.]	Crop Marks) ☐  P. 187 「Adjusting the Level of the Sensor for Reading Crop Marks According to the Media ☐

#### **Loading and Outputting a Preset**

This loads a saved preset from among the eight types of presets. If you load a preset while [SETUP] is lit, [SETUP] flashes. After that, when the setup operation is complete, [SETUP] returns to being lit.

#### Procedure

- 1. Press [MENU].
- **2.** Press  $[\, lackbreak \,]$  to display the screen shown below.



**3.** Press [▶], then [▼][▶] to display the screen shown below.



- 4. Select the preset that you want to load.
  - (1) Press [▲] or [▼] to select the name of the preset you want to load.
  - (2) Press [ENTER] to confirm your entry.
- **5.** Press [MENU] to go back to the original screen.

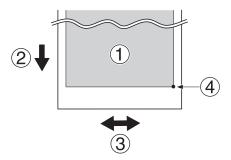
# Adjusting the Output-start Location

#### **Setting the Base Point**

Set the base point in order to determine the area on the loaded media in which to print (the output area).

The base point (4) indicates the right edge of the output area (1). (2): Media feed direction, 3: print-head carriage movement direction) You can print without setting the base point, but setting the output area enables you to use media without being wasteful and also to print on the targeted location.

Make this setting for each individual page. When the printing of one page finishes, the base point returns to its default value.



#### MEMO

- Note that the left and right positions are not restored to their defaults for test patterns.
- If you are using the media take-up unit (sold separately), do not press [▲] after you finish setting up the media. Pressing [▲] will cause the machine to make an emergency stop in order to protect the motor.

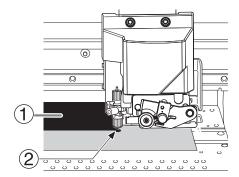
#### Procedure

1. Press [◄] while the following screen is displayed.

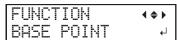
The cutting carriage comes out over the platen.



2. Press [◄], [▶], [▲] or [▼] to move the center of the blade to the position that you want to set as the base point. Only the cutting carriage moves.



- ①: Output area
- ②: Base point (right edge of the output area)
- **3.** Once the position has been decided, press [FUNCTION] to display the screen shown below.



4. Press [ENTER] to confirm your entry.

When the screen displays the character "B" together with the printable width at the location (as shown in the following figure), setting is completed.

W1100mm B

# **Reducing Output Time**

#### **Speeding Up Output for Narrow Media**

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

#### Procedure

- 1. Press [MENU].
- **2.** Press [ lackbreak ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "SHEET" or "OFF".



"SHEET"	"SHEET" matches the range of print head movement to the width of the media.
"OFF"	"OFF" matches the range of print 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"	"FULL" makes the speed of media movement constant at all times and produces the most stable printing result.

- 6. Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



Default setting: FULL

# **Using the Media Take-up Unit**

#### **About the Media Take-Up Unit**

- The media take-up unit (hereinafter referred to as the "take-up unit") is an optional item.
- For information on how to assemble, install, and operate the take-up unit, refer to the take-up unit user's manual.

# Performing Operations from the Dedicated Mobile Operation Application

#### What Is the Dedicated Mobile Operation Application?

The dedicated mobile operation application (hereinafter referred to as the "operation application") is an application for mobile terminals. This application can be used to operate the machine by way of Bluetooth communication.

▶ P. 199 「Using the Operation Application」

#### **Required System Environment**

Supported operating systems	<ul> <li>iOS 10.0 or later</li> <li>Android 6 or later (The operation application may not work on some Android devices even if their operating system is version 6 or later.)</li> </ul>	
Supported lan- guages	Japanese, English, French, German, Italian, Peninsular Spanish, Latin American Spanish	
Communication method	Bluetooth 4.0 LE The mobile terminal you are using must support the above communication method.	

For the latest information, visit the Roland DG Corporation website (http://www.rolanddg.com/).

#### **Downloading the Operation Application**

To download the operation application, visit the Roland DG Corporation website (http://www.rolanddg.com/).

#### **Using the Operation Application**

#### **Procedure**

1. Check that this machine is turned on.

It is sufficient to only have the main power switched on.

- **2.** Turn on Bluetooth communication on the machine.
  - ▶ P. 213 「Turning on Bluetooth Communication」
- 3. Turn on Bluetooth communication on the mobile terminal you are using.

For information on how to configure the settings, refer to the documentation for the mobile terminal you are using.

**4.** Start the operation application.

Use the operation application according to the instructions shown on your mobile terminal.

#### Important Notes on Using the Operation Application

#### Number of printers that you can connect to

You can only connect to one printer from a mobile terminal on which the operation application has been installed. You can register multiple printers, but you cannot connect to multiple printers at the same time.

#### No pairing is required

Generally speaking, "pairing" is required to establish a Bluetooth connection. With the operation application, no "pairing" is required. After starting the operation application, follow the instructions on the screen to connect to the printer.

#### Perform operations from a position where you can see the printer.

To enable immediate handling of unexpected printer operations, perform operation application operations from a position where you can see the printer.

#### Important notes on Bluetooth communication

- With Bluetooth wireless technology, it is possible to establish a connection between devices separated by approximately 10 m (32.8 ft.). However, the valid range of the connection may vary depending on the presence of obstacles (such as people, metal, and walls) and the status of the radio waves.
- The communication status of the Bluetooth connection may become unstable if:
  - A wireless LAN is in place in the location.
  - The devices are in the vicinity of a microwave that is in use.
  - Other electromagnetic waves are generated in the location.
- Bluetooth communication uses the same frequency band (2.4 GHz) as wireless LAN (IEEE802.11b/g). If the devices are used in the vicinity of equipment in which a wireless LAN unit is installed, the connection status may become unstable due to the occurrence of radio-frequency interference. In this situation, carry out the following countermeasures.
  - When using Bluetooth communication to connect the printer and the mobile terminal, do so at a distance of 10 m (32.8 ft.) or more away from the equipment in which a wireless LAN unit is installed.
  - Bring the mobile terminal and the printer as close together as possible.
  - If using Bluetooth communication within 10 m (32.8 ft.) of the equipment in which a wireless LAN unit is installed, turn off the wireless LAN unit.
- The radio waves generated by Bluetooth communication may have an effect on the operation of electronic medical equipment and similar devices. This may lead to accidents, so turn off Bluetooth communication in the following locations.
  - · The vicinity of in-use hearing aids and pacemakers
  - Hospitals
  - The vicinity of automatic doors and fire alarms
    - P. 213 Turning on Bluetooth Communication
- Using Bluetooth communication in the vicinity of TVs or radios may lead to noise in the image or audio.
- Roland DG Corporation accepts no responsibility for the leakage of information during a connection using Bluetooth technology.
- The mobile terminal that you are using to connect to the printer must comply with Bluetooth standards determined by the Bluetooth SIG and must be a certified device.
- Even if the mobile terminal complies with the Bluetooth standards outlined above, phenomena may occur due to the characteristics and specifications of the device. Examples of these phenomena include the inability to connect to the printer and the operation methods, display, and operations being different.
- Depending on the mobile terminal that you are connecting to the printer, it may take some time until the Bluetooth connection can be established.

• While the Bluetooth connection is established, do not cover the mobile terminal with your hand or anything else. Doing so may hinder the Bluetooth connection.

#### Other important notes

- Bluetooth communication may increase the mobile terminal's battery consumption.
- Additional communication charges apply to the downloading of the application. You will have to bear the communication charges.
- Note that it may take time to confirm whether this application is supported by new mobile terminals.
- Depending on the usage environment, this application may not operate normally even with mobile terminals that have been confirmed to be supported.

# **Other Useful Functions**

#### **Using the Print Light (Interior Light)**

You can select the status of the light that shines on the platen.

#### Procedure

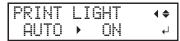
- 1. Press [FUNCTION].
- **2.** Press [A] to display the screen shown below.



**3.** Press [▶] to display the screen shown below.



**4.** Press [▲] or [▼] to select the status of the print light.



"AUTO"	The light is turned on/off automatically according to the status of the printer.
"ON"	The light is on at all times.
"OFF"	The light is off at all times.

- **5.** Press [ENTER] to confirm your entry.
- **6.** Press [MENU] to go back to the original screen.



• Default setting: "AUTO"

#### **Performing Printing Tests Arranged Horizontally**

When performing printing tests successively, you can select "SCAN" (vertical printing) or "FEED" (horizontal printing) as the print position for the 2nd and later tests in comparison to the 1st test.

If you are using the optional media take-up unit, test prints will be printed with the "SCAN" orientation regardless of this setting.

#### Procedure

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶], then [▲] to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "SCAN".



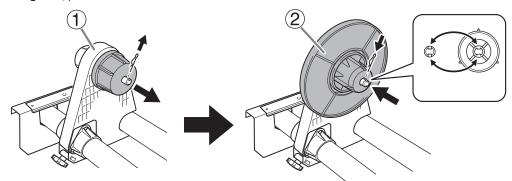
- **6.** Press [ENTER] to confirm your entry.
- 7. Press [ENTER] to go back to the original screen.



Default setting: "FEED"

#### Using Media Flanges for Paper Tubes (Cores) with an Internal Diameter of 2 Inches

The media flanges for paper tubes (cores) with an internal diameter of 2 inches are optional items. For information about purchasing them, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).



- ①: End cap: Remove the pin. If it is difficult to remove the pin, use a pair of pliers or a similar tool.
- ②: Media flange for 2-inch media: Align the depression with the projection, attach the media flange, and then insert the pin.

# 3. Optimizing Operation Management

Managing the Operations Appropriately and Efficiently	206
Setting the Current Date/Time and Using It for Maintenance	206
Displaying the Amount of Media Remaining	207
Making Sure to Verify the Setting for the Amount Remaining Every Time the Mo	edia Is Changed .
	208
Printing the Amount of Remaining Media	209
Thoroughly Using the Middle Pinch Rollers	210
Setting the Activation Interval for Sleep Mode (Power-saving Feature)	211
Managing the Basic Settings of the Printer	212
Setting the Menu Language and Units of Measurement	212
Turning on Bluetooth Communication	213
Viewing System Information	214
Returning All Settings to Factory Defaults	215

# Managing the Operations Appropriately and Efficiently

#### Setting the Current Date/Time and Using It for Maintenance

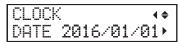
Set the current date/time. By setting this, when you perform a printing test the printing test date and time will be printed alongside the printed test pattern. When the message "TIME FOR MAINTENANCE" is displayed, the date/time of the previous manual cleaning will be displayed. When this message is displayed, perform manual cleaning.

#### **Procedure**

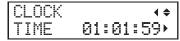
- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



- 3. Press [▶] once, and then press [▼] several times to display the screen shown below.
- 4. SUB MENU (+ CLOCK )
- **5.** Press [▶] to display the screen shown below.



- (1) Press [▲] or [▼] to set the year.
- (2) Press [▶].
- (3) Press [▲] or [▼] to set the month.
- (4) Press [►].
- (5) Press [▲] or [▼] to set the day.
- **6.** Press [ENTER] to confirm your entry.
- **7.** Press  $[\, lackbreak \,]$  or  $[\, lackbreak \,]$  to display the screen shown below.

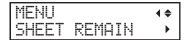


- (1) Press [▲] or [▼] to set the hour.
- (2) Press [▶].
- (3) Press [▲] or [▼] to set the minute.
- (4) Press [▶].
- (5) Press [▲] or [▼] to set the second.
- **8.** Press [ENTER] to confirm your entry.
- **9.** Press [MENU] to go back to the original screen.

#### **Displaying the Amount of Media Remaining**

#### Procedure

- 1. Press [MENU].
- **2.** Press [lacktriangledown] several times to display the screen shown below.



**3.** Press [▶], then [▼] to display the screen shown below.



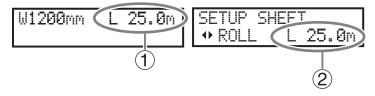
**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to set the current amount of media remaining.



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



- 1: This display is updated.
- ②: If media has not been loaded, the set value flashes.

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

Set the machine to display the amount of media remaining every time the media is changed. Setting this menu item to "ENABLE" can keep you from forgetting to redo the setting when you change the media. However, be sure to also set the [EDGE DETECTION] menu item to "ENABLE" (Using Transparent Media(P. 146)). When [EDGE DETECTION] is set to "DISABLE", [SHEET REMAIN] is not displayed automatically.

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press  $[\triangleright]$ , then  $[\blacktriangle]$  to display the screen shown below.



**4.** Press [▶] to display the screen shown below.



**5.** Press [▲] or [▼] to select "ENABLE".



**6.** Press [ENTER] to confirm your entry.

If you select "ENABLE", you must set the [EDGE DETECTION] menu to "ENABLE".

7. Press [MENU] to go back to the original screen.



• Default setting: "DISABLE"

#### **RELATED LINKS -**

• P. 146 "Using Transparent Media"

#### **Printing the Amount of Remaining Media**

This prints the amount of media remaining, which is displayed on the top menu.

Use this when you want to make a record of the remaining length of the media currently 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 if you continue printing, the next printing operation will start on top of the portion where the amount of remaining media is printed. If you want to continue printing, separate the media before starting the next printing operation.

#### Procedure

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶] to display the screen shown below.



4. Press [ENTER].

Printing starts.

**5.** Press [MENU] to go back to the original screen.

#### **Thoroughly Using the Middle Pinch Rollers**

This menu lets you enable the checking function to make sure the operators who perform output will use the middle pinch rollers.

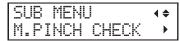
When this is set to "ENABLE", the message "SOME MID.PINCHS NOT SET RIGHT" is displayed if the user forgets to place the middle pinch rollers during setup. Press [ENTER] to clear the message and complete the setup. Failing to use the middle pinch rollers will cause the media feeding accuracy to drop and the media to come loose, which will lead to a decrease in the output quality. If the message is displayed, we recommend that you raise the loading lever and perform the setup of media again.

#### Procedure

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



- **4.** Press [▶].
- **5.** Press [▲] or [▼] to select "ENABLE".



- **6.** Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



Default setting: "ENABLE"

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

This setting is used to set how long it should take until the machine goes into sleep mode (the state in which power-saving feature is working) when reception of output data or non-operating state continues.

#### Procedure

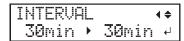
- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] twice to display the screen shown below.



**5.** Press [A] or [V] to set the time.



- 6. Press [ENTER] to confirm your entry.
- 7. Press [MENU] to go back to the original screen.



• Default setting: 30 min

# Managing the Basic Settings of the Printer

#### **Setting the Menu Language and Units of Measurement**

This feature sets the language and units of measurement displayed on the display screen of the operation panel.

#### Procedure

- 1. Hold down [MENU] and switch on the sub power.
- 2. Press [▲] or [▼] to select the display (menu) language.



- 3. Press [ENTER] to confirm your entry.
- **4.** Press [▲] or [▼] to select the measurement unit for length.



- **5.** Press [ENTER] to confirm your entry.
- **6.** Press [▲] or [▼] to select the measurement unit for temperature.



7. Press [ENTER] to confirm your entry.



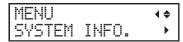
- Default settings
  - [MENU LANGUAGE]: ENGLISH
  - [LENGTH UNIT]: mm
  - [TEMP. UNIT]: °C

#### Turning on Bluetooth Communication

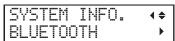
This machine supports the operation application, which is an application for mobile terminals. When using the operation application, set this machine's Bluetooth communication to "ENABLE". However, when you are operating this machine from its operation panel, you cannot perform operations from the operation application.

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] twice to display the screen shown below.

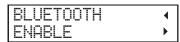


**5.** Press [▲] or [▼] to select "ENABLE".



- 6. Press [ENTER] to confirm your entry.
- 7. Press [◄] to display the screen shown below.

The current state is displayed on the screen.



ENABLE	Bluetooth communication is on, and the printer is waiting for a connection to be established. If you cannot operate this machine from the dedicated mobile operation application (hereinafter referred to as the "operation application") that you are using, there is a problem with the connection environment.  P. 295 「Printer Cannot Be Operated from the Dedicated Application」
ENABLE*	Bluetooth communication is on, and the printer is connected to the operation application.  However, when this screen is displayed, you cannot perform operations from the operation application.  P. 197 「Performing Operations from the Dedicated Mobile Operation Application」
DISABLE	Bluetooth communication is off.
ERROR	An error has occurred in Bluetooth communication. Purchase them from your authorized Roland DG Corporation dealer.

**8.** Press [MENU] to go back to the original screen.

#### МЕМО

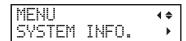
- Default setting: "DISABLE"
- There are some precautions regarding Bluetooth communication. Refer to Important Notes on Using the Operation Application (P. 200) for details.
- For details on the operation application, visit the Roland DG Corporation website (http://www.rolanddg.com/).

#### **Viewing System Information**

This is a method to view system information of this machine, such as serial number and ink type.

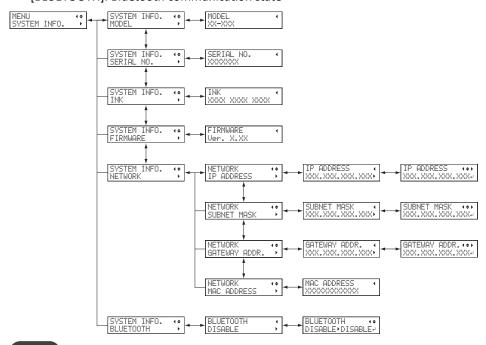
#### **Procedure**

- 1. Press [MENU].
- **2.** Press [lacktriangledown] several times to display the screen shown below.



You can check the following information:

- [MODEL]: Model name
- [SERIAL NO.]: Serial number
- [INK]: Ink type
- [FIRMWARE]: Firmware version
- [NETWORK]: Network settings such as the IP address
- [BLUETOOTH]: Bluetooth communication state



#### MEMO

- For information on how to set up a network, see the "Setup Guide."
- Refer to the following page for information on how to set up Bluetooth communication.

#### **RELATED LINKS**

• P. 213 "Turning on Bluetooth Communication"

#### **Returning All Settings to Factory Defaults**

This menu returns all settings to the same as their factory defaults.

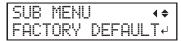
The settings for [MENU LANGUAGE], [LENGTH UNIT], and [TEMP. UNIT] are not returned to their factory default values.

#### Procedure

- 1. Press [MENU].
- **2.** Press [lacktriangledown] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [ENTER] to execute the operation.

# **Chapter 4 Maintenance**

# 1. Introduction

Important Notes on Handling and Use	218
Printer	218
Ink Pouches	219
Basic Maintenance Knowledge	220
Types and Timing of Maintenance	220
Measures When the Printer Is Not in Use for a Prolonged Period	

# Important Notes on Handling and Use

#### **Printer**

- This machine is a precision device.
  - Never subject the machine to impacts or excessive force.
  - Never needlessly put your hand or fingers inside the cover, the ink-pouch ports, or other internal areas of the machine.
- Install in a suitable location.
  - Install the machine in a location having the specified temperature and humidity.
  - Install the machine in a quiet, stable location offering good operating conditions.
- The print heads are delicate.
  - Never needlessly touch or allow media to scrape them.
  - 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 the machine properly, as specified in this manual.
  - Never leave the machine with an ink pouch removed. Remaining ink in the printer may harden and clog the print heads.
  - The print heads require various types of cleaning depending on the situation. Read this manual thoroughly and perform the appropriate maintenance at the appropriate times.
  - The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use.
- · This machine becomes hot.
  - Never cover the ventilation holes with cloth, tape, or anything else.

#### **Ink Pouches**

- Ink pouches come in various types.
  - Use a type that is compatible with the printer.
- Never subject to impact or attempt to disassemble.
  - Never drop the ink cartridges or shake them forcefully. The impact may rupture the internal pouch and cause the ink to leak.
  - Never attempt to disassemble the ink pouches.
  - 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 you leave such adhered ink untreated.
- Storage
  - Store the ink pouches unopened in a well-ventilated location at a temperature of -5 to 40°C (23 to 104°F).
     However, do not store the ink pouches for a prolonged period of time in low- or high-temperature environments.

# **Basic Maintenance Knowledge**

#### **Types and Timing of Maintenance**

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

#### Regular maintenance

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

Timing	Category	Item	Page
After daily operations	Cleaning the machine	Media path	P. 223
		Knife carriage roller	P. 224
When the discharged fluid is	Disposing of discharged fluid	Disposal due to a message	P. 226
ready to overflow		Disposal due to the drain bottle capacity	P. 227
When dot drop-out or dot dis-	Cleaning of the print heads	Normal cleaning	P. 228
placement occurs		Medium cleaning	P. 231
		Powerful cleaning	P. 233
		Manual Cleaning	P. 235
If Colors Are Uneven	Eliminating uneven colors	Shaking the pouch trays	P. 243

#### **Advanced Maintenance**

These maintenance methods consume a large amount of ink. Thoroughly read the explanation, and then perform the operation at the appropriate point in time.

Timing	Category	Item	Page
When uneven colors are not resolved	Eliminating uneven colors, dot drop-out, and dot displacement	Damper cleaning (Only when the ink type is CMYKLcLmLkW)	P. 245
When manual cleaning is not effective		Super cleaning	P. 247
When damper cleaning is not effective			

#### **Replacing Consumable Parts**

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

Timing	Category	Item	Page
When a replacement message	Replacing Consumable Parts	Replacing the Wiper and the Tray Pad	P. 256
appears	• Wipers	Cleaning the Wiper Tray	P. 259
When a cutting edge becomes	Tray pad     Blade	Replacing the Blade	P. 262
dull	Separating knife	Separating knife Replacement	P. 269

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

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

• Empty the drain bottle.

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

The drain bottle is filled when the following periods elapse. Leaving the drain bottle as-is will lead to the discharged fluid overflowing.

- Approximately 2 weeks after the message "EMPTY DRAIN BOTTLE" is displayed
  - ▶ P. 226 「If the Discharged Fluid Disposal Message Appears」
- Approximately 150 days after the drain bottle is emptied
  - ▶ P. 227 「If the Drain Bottle Exceeds Its Capacity Limit」
- Do not empty the ink or cleaning liquid.

Periodically performed automatic maintenance discharges ink and cleaning liquid. Install a cleaning liquid pouch and ink pouches with a sufficient amount remaining. If ink or cleaning liquid is empty, automatic maintenance becomes impossible.

- P. 56 Ink Pouch Replacement
- ▶ P. 58 「TR2 Cleaning Liquid Pouch Replacement」
- Switch on the sub power once a month.

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

Keep the machine at a constant temperature and relative humidity.

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

# 2. Regular maintenance

Clear	ning the Machine	223
	Cleaning the Media Path	223
	Cleaning the Knife Carriage Roller	224
Dispo	osing of Discharged Fluid	225
	Precautions for Disposing of Discharged Fluid	225
	If the Discharged Fluid Disposal Message Appears	226
	If the Drain Bottle Exceeds Its Capacity Limit	227
Daily	Print Head Check	228
	Printing Tests and Normal Cleaning	228
Whe	n Normal Cleaning Is Not Effective	231
	Medium Cleaning Method	231
	Powerful Cleaning Method	233
Manı	ual Cleaning	235
	When Manual Cleaning Is Necessary	235
	Manual Cleaning Method	
	Consumable Products and Parts Related to Manual Cleaning	242
If Col	ors Are Uneven	243
		243

# **Cleaning the Machine**

#### **Cleaning the Media Path**

Wipe away any ink or grime on the media path and other areas as part of the daily cleaning procedure. It is easy for ink or grime to affix to the media path, and, if left unattended, this will contaminate new media and have a negative effect on the transport of media when it is output. Pinch rollers, grit rollers, and the platen are particularly prone to the buildup of grime.

MARNING Never use a solvent such as gasoline, alcohol, or thinner to perform cleaning.

Doing so may cause fire.

Before attempting cleaning, switch off the sub power and wait until the heater and dryer

cool (approximately 30 minutes).

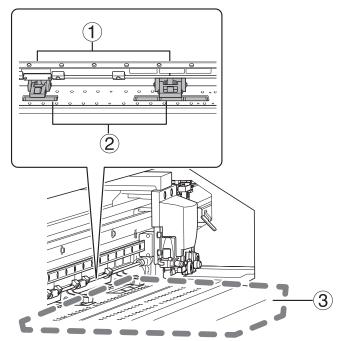
Sudden movement of the machine may cause injury, or hot components may cause burns.

#### **IMPORTANT**

 ⚠ CAUTION

• This machine is a precision device and is sensitive to dust and dirt. Perform cleaning on a daily basis.

• Never attempt to oil or lubricate the machine.



Clean by wiping with a cloth moistened by neutral detergent diluted with water then wrung dry.

1	Pinch roller	These are the positions where the media is fixed in place or transported, so it is easy for ink and grime to affix to these positions. Failure to clean this part properly may result in the transfer of grime to the surface of media.
2	Grit roller	These are the positions where the media is fixed in place or transported, so it is easy for grime to affix to these positions. Remove buildup of media scraps and other material using a brush. Never use a metal brush.
3	Platen	Wipe away any buildup of ink, grime, or cut media on the media path and in the grooves.

#### **Cleaning the Knife Carriage Roller**

Paper dust affixes to the separating knife carriage roller during media separation. Periodically wipe the area clean.

MARNING Never use a solvent such as gasoline, alcohol, or thinner to perform cleaning.

Doing so may cause fire.

<u>A CAUTION</u> Before attempting cleaning, switch off the sub power and wait until the heater and dryer

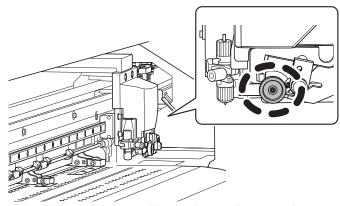
cool (approximately 30 minutes).

Sudden movement of the machine may cause injury, or hot components may cause burns.

#### **IMPORTANT**

• This machine is a precision device and is sensitive to dust and dirt. Perform cleaning on a daily basis.

• Never attempt to oil or lubricate the machine.



Clean by wiping with a cloth moistened by neutral detergent diluted with water then wrung dry.

# **Disposing of Discharged Fluid**

#### **Precautions for Disposing of Discharged Fluid**

MARNING Never place discharged fluid or ink near an open flame.

Doing so may cause fire.

<u>ACAUTION</u> To store discharged fluid temporarily, place it in the included drain bottle or in a durable

sealed container such as a metal can or polyethylene tank, and cap the container tightly.

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

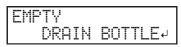
#### **IMPORTANT**

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

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

#### If the Discharged Fluid Disposal Message Appears

The message shown below appears when a certain amount of discharged fluid has collected in the bottle. If this message appears, dispose of the discharged fluid.

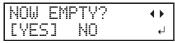


#### **Procedure**

1. When the following message appears, press [ENTER].



2. When the screen shown below appears, remove the drain bottle and discard the discharged fluid.





**A** CAUTION

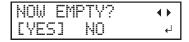
Before you detach the drain bottle, be sure to wait for the screen to display "NOW EMPTY?" After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

#### **IMPORTANT**

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

- $\textbf{3.} \ \ \text{Quickly attach the emptied drain bottle to the machine once more.}$
- **4.** Press [**4**] or [**▶**] to select "YES".



5. Press [ENTER] to confirm your entry.

The display returns to the original screen.



If you did not discard the discharged fluid and selected [NO]

The display also returns to the original screen if you did not discard the discharged fluid and selected [NO] In this case the [EMPTY DRAIN BOTTLE] message disappears temporarily. The message appears again once a certain amount of discharged fluid has collected.

**⚠** CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display "NOW EMPTY?"

Repeatedly selecting "NO" without discarding the discharged fluid may cause it to spill out of the drain bottle, soiling your hands or the floor.

#### If the Drain Bottle Exceeds Its Capacity Limit

The drain bottle collects discharged fluid. You can dispose of discharged fluid even if the message "EMPTY DRAIN BOTTLE" is not displayed on the screen. Discard the discharged fluid before the drain bottle exceeds its capacity limit.

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



- Press [ENTER].
- 6. When the screen shown below appears, remove the drain bottle and discard the discharged fluid.





**⚠** CAUTION

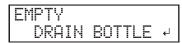
Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE." After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

#### **IMPORTANT**

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

- 7. Quickly attach the emptied drain bottle to the machine once more.
- 8. Press [ENTER].



9. Press [ENTER].



10. Press [MENU] to go back to the original screen.

# **Daily Print Head Check**

#### **Printing Tests and Normal Cleaning**

## 1. Perform a printing test.

The print heads are important components that discharge ink. They require periodic and appropriate maintenance. Before daily operations, perform a printing test to ensure that no dot drop-out or dot displacement occurs. If dot drop-out or dot displacement occurs, perform cleaning of the print heads (normal cleaning).

#### MEMO

- This operation is unnecessary if you will only perform cutting.
- When performing printing tests successively, you can select "SCAN" (vertical printing) or "FEED" (horizontal printing) as the print position for the 2nd and later tests in comparison to the 1st test.
  - ▶ P. 203 Performing Printing Tests Arranged Horizontally

#### **Procedure**

1. Load the media.

P. 30 Setup of Media

- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.

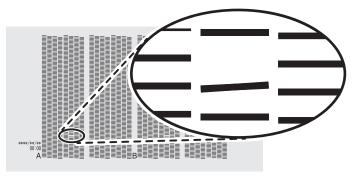


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

If no dot drop-out or dot displacement occurs, this operation is finished. Press [FUNCTION] to go back to the original screen.

## 2. Performing Normal Cleaning

#### **Procedure**

1. Press [FUNCTION] to display the screen shown below.

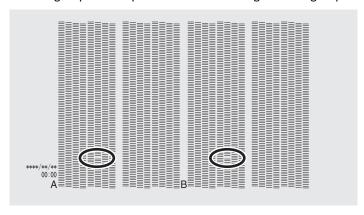
FUN	CTION	<b>( \$ )</b>
BAS	E POINT	<b>↓</b>

2. Press [▼], then [▶][▼] to display the screen shown below.

CLEANIN	G	<b>4 \$</b>
NORMAL	CL.	•

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

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

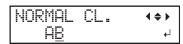


### МЕМО

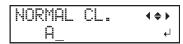
If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- **4.** Press [▶].
- 5. Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.

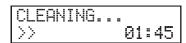


(3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

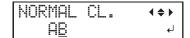
Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.

**6.** Press [ENTER] to confirm your entry.

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



- **7.** Press [A] to display the screen shown below.
- 8. Press [ENTER].

Printing of the test pattern starts.

 $\textbf{9.} \ \ \textbf{Check to make sure the dot drop-out or dot displacement has been corrected.}$ 

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

#### **RELATED LINKS -**

• P. 231 "When Normal Cleaning Is Not Effective"

# When Normal Cleaning Is Not Effective

#### **Medium Cleaning Method**

The print heads are important components that discharge ink. They require periodic and appropriate maintenance. When problems such as dot drop-out are not resolved by normal cleaning (Printing Tests and Normal Cleaning(P. 228)), perform the more forceful "medium cleaning" to remove clogging from the print heads.

#### **IMPORTANT**

Medium cleaning consumes more ink than normal cleaning, and overly frequent use may damage the print heads themselves. Avoid performing this operation more than necessary.

#### Procedure

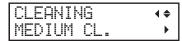
- 1. Load the media.
- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.



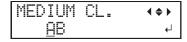
4. Press [ENTER].

A test pattern is printed.

5. Press [▼] several times to display the screen shown below.

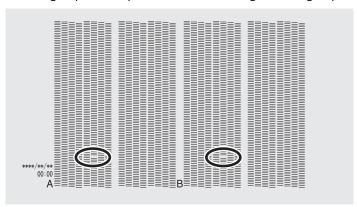


**6.** Press [▶] to display the screen shown below.



 $7.\,$  Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

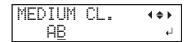


#### MEMO

If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- **8.** Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.

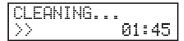
MEDIUM	CL.	<b>∢</b> ♦ ▶
A_		-

(3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.

### **9.** Press [ENTER] to confirm your entry.

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



**10.** Press [◄] once, and then press [▼] several times to display the screen shown below.



#### 11. Press [ENTER].

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



- If the problem persists, try performing medium cleaning again.
- If problems such as dot drop-out and dot displacement persist even after you have performed medium cleaning several times, perform "powerful cleaning."
  - ▶ P. 233 「Powerful Cleaning Method」
- This cleaning can be effective when carried out periodically, according to the frequency of use.

#### **Powerful Cleaning Method**

The print heads are important components that discharge ink. They require periodic and appropriate maintenance. When problems such as dot drop-out are not resolved by medium cleaning (Medium Cleaning Method(P. 231)), perform the more forceful "powerful cleaning" to remove clogging from the print heads.

#### **IMPORTANT**

Powerful cleaning consumes more ink than medium cleaning, and overly frequent use may damage the print heads themselves. Avoid performing this operation more than necessary.

#### **Procedure**

- 1. Load the media.
- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.



4. Press [ENTER].

A test pattern is printed.

**5.** Press [▼] several times to display the screen shown below.

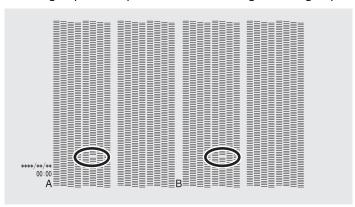


6. Press [▶] to display the screen shown below.



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

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

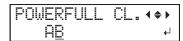


#### MEMO

If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- 8. Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.

POWERF	TLL	CL.	<b>( \$ )</b>
A_			↵

(3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.

### **9.** Press [ENTER] to confirm your entry.

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")

When finished, the screen shown below appears again.



**10.** Press [◄] once, and then press [▼] several times to display the screen shown below.



#### 11. Press [ENTER].

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



- If the problem persists, try performing powerful cleaning again.
- This cleaning can be effective when carried out periodically, according to the frequency of use.
- If problems such as dot drop-out and dot displacement persist even after you have performed powerful cleaning several times, perform "manual cleaning."

▶ P. 236 「Manual Cleaning Method」

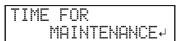
# **Manual Cleaning**

#### When Manual Cleaning Is Necessary

The print heads are important components that discharge ink. They require periodic and appropriate maintenance. It is important to perform manual cleaning with the appropriate timing.

#### When a Message Appears

The following message appears periodically. When this message is displayed, be sure to perform manual cleaning.



#### When Symptoms That Cannot Be Improved with Powerful Cleaning Occur

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

Dot drop-out/Dot displacement	Ink drips	Dragging dirt
Dust or other foreign matter adheres to the print heads and impedes correct ink discharge.	Ink pools in dust or dirt adhered to the print heads, and drips onto the media.	The phenomenon where dirt or dust accumulates on the print heads.

#### MEMO

Wiper replacement may also be effective in improving these symptoms.

▶ P. 256 「Replacing the Wiper and the Tray Pad」

#### **Manual Cleaning Method**

If the message "TIME FOR MAINTENANCE" is displayed or if dot drop-out or ink drip issues that cannot be improved with powerful cleaning occur, perform manual cleaning.

 ⚠ 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.

#### **IMPORTANT**

#### Important notes on this procedure

- Before attempting this operation, remove any media.
- To prevent the print heads from drying out, finish this procedure in 30 minutes or less. A warning beep sounds after 30 minutes.
- Never use any implements other than the included cleaning sticks. Cotton swabs or other lint-producing items may damage the print heads.
- Use only the included cleaning liquid.
- Use one cleaning stick per cleaning session, and then discard the stick after use. Reusing cleaning sticks will adversely affect the printing results.
- Do not put a cleaning stick that has been used for cleaning into the cleaning liquid. Doing so will deteriorate the cleaning liquid.
- Never rub the print head surface (nozzle surface).
- Stroke the sponges very gently, applying as little pressure as possible. Never rub, scrape, or crush them.
- If you use up the cleaning sticks or cleaning liquid, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).

#### If a warning beep sounds during cleaning

• A warning beep sounds 30 minutes after operation starts. Stop work, close all the covers, and then press [ENTER] to end the manual cleaning mode. After that, restart the procedure from the beginning.

Required items		
Cleaning sticks	Cleaning liquid	

## 1. Clean the print head caps.

#### Procedure

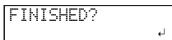
- 1. Remove any media.
- 2. Press [FUNCTION].
- Press [▶] once, and then press [▼] several times to display the screen shown below.

CLEANI	NG	<b>∢</b> ♦
MANUAL	.CL.	↵

4. Press [ENTER].

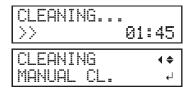
After "NOW PROCESSING.." is displayed, the screen shown below appears.

Also, the print head moves to the left end of the platen.

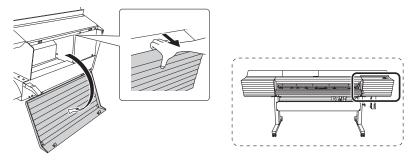


#### **IMPORTANT**

Do not press the [ENTER] key at this stage. Press the [ENTER] key after cleaning is complete. If you press the [ENTER] key at this stage, wait for the screen to change as shown in the following figure, and then press the [ENTER] key again.



**5.** Open the right cover.



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



 $\textbf{7.} \ \ \textbf{Moisten the cleaning stick with the cleaning liquid.}$ 

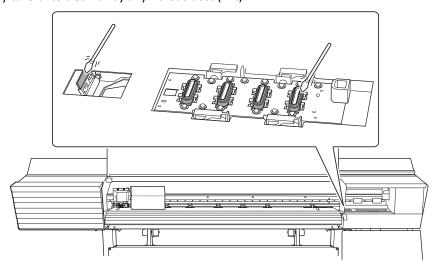
#### **IMPORTANT**

Be sure to use one of the included cleaning sticks.



 $oldsymbol{8}$  . Clean the locations shown in the following figure.

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

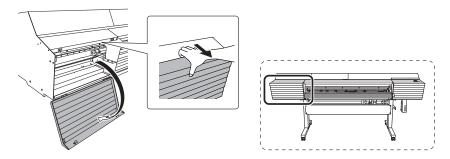


 $\boldsymbol{9.} \ \ \text{When you have finished cleaning, close the right cover.}$ 

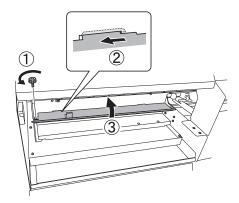
## 2. Clean the print heads.

#### **Procedure**

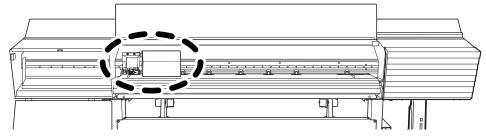
- 1. Open the front cover.
- 2. Open the left cover.



**3.** Remove the cut rail.



4. Move the print-head carriage to the position where the cut rail was present.

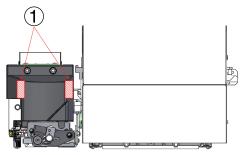


Move the print-head carriage by hand.

**⚠** CAUTION

When moving the print-head carriage by hand, be sure to hold the specified position.

Moving it by holding positions other than that specified may deform and damage the cover.



①: Position to hold with your hand

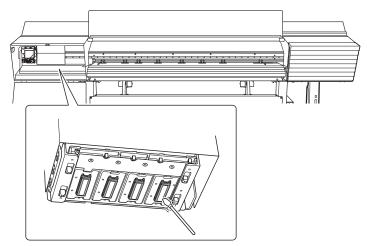
**5.** Moisten the cleaning stick with the cleaning liquid.

#### IMPORTANT

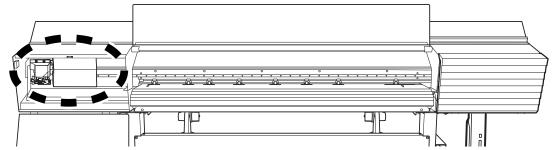
Be sure to use one of the included cleaning sticks.

**6.** Clean the locations shown in the following figure.

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



 $\textbf{7.} \ \ \text{When you have finished cleaning, move the print-head carriage to above the platen}.$ 

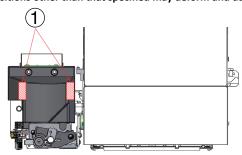


Move the print-head carriage by hand.

**⚠** CAUTION

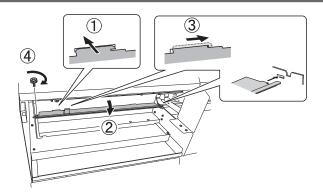
When moving the print-head carriage by hand, be sure to hold the specified position.

Moving it by holding positions other than that specified may deform and damage the cover.

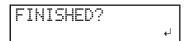


1: Position to hold with your hand

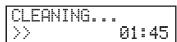
8. Attach the cut rail.



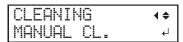
- **9.** Close the left cover.
- **10.** Close the front cover.
- 11. Press [ENTER].



The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When cleaning finishes, the screen shown below appears again.



 ${\bf 12.} \ \ {\bf Press} \ [{\bf FUNCTION}] \ to \ go \ back \ to \ the \ original \ screen.$ 

## **3.** Perform a printing test to check the results.

#### **Procedure**

1. Load the media.

P. 30 Setup of Media

- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.

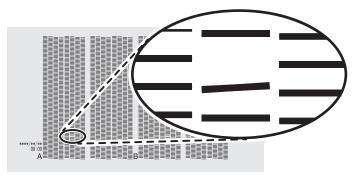


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

If no dot drop-out or dot displacement occurs, this operation is finished. Press [FUNCTION] to go back to the original screen.

If dot drop-out or dot displacement is present, perform cleaning such as normal cleaning.

#### **RELATED LINKS**

- P. 228 "Printing Tests and Normal Cleaning"
- P. 231 "Medium Cleaning Method"
- P. 233 "Powerful Cleaning Method"

#### **Consumable Products and Parts Related to Manual Cleaning**

The cleaning sticks, cleaning liquid, and print heads are consumable products or consumable parts.

- If you use up the cleaning sticks and cleaning liquid used for manual cleaning, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).
- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Contact your authorized Roland DG Corporation dealer.

## If Colors Are Uneven

#### Mixing the Ink by Shaking the Pouch Tray

If ink components precipitate in the ink pouch, colors may be uneven (unevenness in printed colors). If colors are uneven, remove the pouch trays, and then shake them gently.

So that the ink mixes well, shake the pouch tray horizontally 50 times (about 20 seconds) with a stroke length of around 5 cm (2 in.) from each end of the tray.



- Do not remove the ink pouches. Shake the entire pouch tray. Removing the ink pouches may lead to the ink leaking.
- Before shaking, wipe off any ink from around the mouth of the ink pouch. If you do not wipe off the ink, it may splatter when you shake the pouch tray.
- When you have finished mixing the ink, reinsert the pouch tray immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.

If uneven color issues are not resolved even after shaking the pouch trays to mix the ink, perform "damper cleaning" or "super cleaning."

Color for which uneven color issues remain	Cleaning to perform	Page
White	Damper cleaning	P. 245
Cyan, magenta, yellow, black, light cyan, light magenta, light black, orange	Super cleaning	P. 247

# 3. Advanced Maintenance

When Uneven Color Issues Occur with White Ink	245
Damper Cleaning Method	245
Handling Severe Dot Drop-out and Dot Displacement	247
Super Cleaning Method	247
Partially Restricting the Print Heads Used for Printing	252
Emergency Measure) Cleaning the Print Head Surface	254

## When Uneven Color Issues Occur with White Ink

#### **Damper Cleaning Method**

If uneven color issues with white ink are not resolved even after shaking the pouch trays to mix the ink, perform "damper cleaning." Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

Damper cleaning can be used to stabilize the printed colors by agitating the ink.

#### **IMPORTANT**

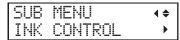
- Damper cleaning consumes a lot of ink, and overly frequent use may damage the print heads themselves. Avoid performing this
  operation more than necessary.
- When you perform damper cleaning, replace the LcLmLkW ink with a new ink pouch. If the ink runs out during cleaning, a "CLEAN-ING ERROR" will occur and cleaning will stop.
  - ▶ P. 303 「CLEANING ERROR」
  - The ink pouch that you have removed can still be used in operations other than damper cleaning (such as printing).

#### Procedure

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**5.** Press [ENTER].

The screen shown below appears. The ink slot whose LED is flashing is the target for ink replacement.

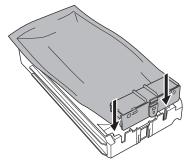


**6.** Replace the LcLmLkW ink with a new ink pouch.

#### IMPORTANT

Replace only the LcLmLkW ink with a new ink pouch. There is no need to replace the other colors of ink.

▶ P. 56 「Ink Pouch Replacement」



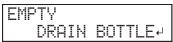
#### 7. Press [ENTER].

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")

CLEANING... >> 01:45

#### MEMO

When "EMPTY DRAIN BOTTLE" is displayed during cleaning





- 1. Remove the drain bottle and discard the discharged fluid.
- 2. Quickly attach the emptied drain bottle to the machine once more.
- 3. Press [ENTER].

#### **IMPORTANT**

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

<u>↑ CAUTION</u> When [EMPTY DRAIN BOTTLE] is displayed on the screen, you must discard the dis-

charged fluid.

Failing to discard the discharged fluid when [EMPTY DRAIN BOTTLE] is displayed will lead to the

discharged fluid overflowing during cleaning.

<u>A CAUTION</u> Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY

DRAIN BOTTLE." After discarding the discharged fluid, promptly attach the drain bot-

tle to the machine.

Failing to follow this procedure may cause discharged fluid to flow out of the tube and spill, soiling

your hands or the floor.

MARNING Never place discharged fluid or ink near an open flame.

Doing so may cause fire.

<u>AUTION</u> To store discharged fluid temporarily, place it in the included drain bottle or in a du-

rable sealed container such as a metal can or polyethylene tank, and cap the con-

tainer tightly.

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

#### **IMPORTANT**

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

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

When cleaning finishes, the screen shown below appears again.

**8.** Press [MENU] to go back to the original screen.



If uneven color issues with white ink are not resolved by "damper cleaning," perform "super cleaning."

#### **RELATED LINKS -**

P. 247 "Super Cleaning Method"

# Handling Severe Dot Drop-out and Dot Displacement

#### **Super Cleaning Method**

In the following cases, perform "super cleaning."

- If ink discharge issues such as dot drop-out are not corrected after performing cleaning using the cleaning function (normal, medium, powerful) or manual cleaning.
- If white is uneven even after performing damper cleaning.
  - ▶ P. 245 「Damper Cleaning Method」
- If colors other than white (cyan, magenta, yellow, black, light cyan, light magenta, light black, or orange) are uneven even after shaking the pouch trays to mix the ink.

#### **IMPORTANT**

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

#### **RELATED LINKS**

- · P. 228 "Printing Tests and Normal Cleaning"
- · P. 231 "Medium Cleaning Method"
- P. 233 "Powerful Cleaning Method"
- P. 235 "Manual Cleaning"

### 1. Perform a printing test.

#### **Procedure**

1. Load the media.

P. 30 Setup of Media

- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.

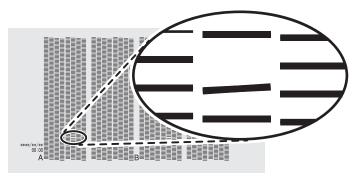


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

When the printing test is finished, the screen shown below appears. Remove the media at this point.



## 2. Start the super cleaning menu.

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



3. Press [▶] once, and then press [▼] several times to display the screen shown below.

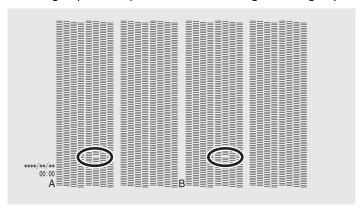


**4.** Press [▶] to display the screen shown below.



- **5.** Press [▶].
- **6.** Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.

The space from "A" to "B" is group A. The space from "B" to the right side is group B.

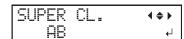


#### МЕМО

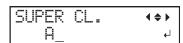
If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

- 7. Select the group of print heads to clean.
  - (1) Press [◄] or [▶] to select the group of print heads that is not to be cleaned.



(2) Press [▲] or [▼] to get rid of the group display.



- (3) Repeat steps 1 and 2 to display only the group of print heads that requires cleaning.

  Only the displayed groups will be cleaned. If A and B are displayed, they will both be cleaned.
- 8. Press [ENTER] to confirm your entry.
- 9. When the screen shown below appears, remove the drain bottle and discard the discharged fluid.





 ⚠ CAUTION

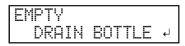
Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE." After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

#### **IMPORTANT**

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

- $\textbf{10.} \ \ \textbf{Quickly attach the emptied drain bottle to the machine once more.}$
- 11. Press [ENTER].



⚠ WARNING

Never place discharged fluid or ink near an 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 the container tightly.

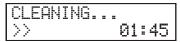
Any spillage or vapor leakage may cause fire, odor, or physical distress.

#### **IMPORTANT**

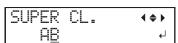
Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

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

The screen shown below appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



**12.** Press [MENU] to go back to the original screen.

## **3.** Perform a printing test to check the results.

#### Procedure

1. Load the media.

P. 30 「Setup of Media」

- 2. Press [FUNCTION].
- **3.** Press [▼], then [▶] to display the screen shown below.

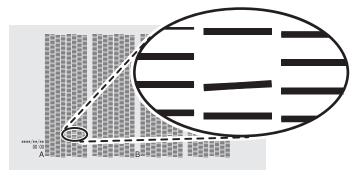


4. Press [ENTER].

Printing of the test pattern starts.

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

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



**6.** If you have opened the front cover, close it.

If no dot drop-out or dot displacement occurs, this operation is finished. Press [FUNCTION] to go back to the original screen.

If dot drop-out or dot displacement is present, perform medium cleaning.

If the results are still the same even after you perform super cleaning a few times, contact your authorized Roland DG Corporation dealer.2

#### Partially Restricting the Print Heads Used for Printing

When dot drop-out or dot displacement is not improved even if super cleaning is performed, partially restrict the print heads to use for printing (i.e. prevent the use of the print heads that are causing discharge issues). This operation is called the "nozzle mask," and while it slows down printing speed, it also allows you to decrease the impact of dot drop-out or dot displacement.

First print a test pattern, and then select the nozzle group to use by viewing the test results. After that, use Versa-Works to select the nozzle group used for printing.

## 1. Perform a printing test for the nozzle mask.

#### **Procedure**

- 1. Load the media.
- 2. Press [FUNCTION].
- Press [▼] once, and then press [▶] twice to display the screen shown below.

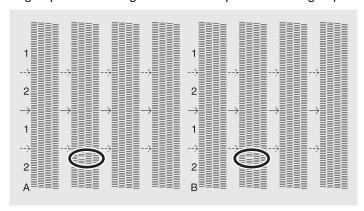


4. Press [ENTER].

Printing of the test pattern starts.

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

"1" or "2" is the nozzle group. The following shows a dot drop-out in nozzle group 2.



#### MEMO

If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. It is visible using the reflection of the light.

### 2. Limiting Print Heads Used for Printing

#### Procedure

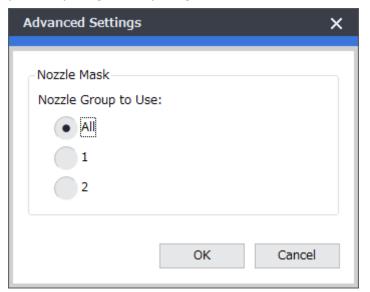
- 1. Start VersaWorks.
- 2. Click [Printer] [Printer Settings].

The [Printer Settings] dialog box appears.

- **3.** From the [Printer List], select the printer whose print heads will be limited.
- 4. Click [Advanced].

The [Advanced] dialog box appears.

**5.** Select the nozzle group to use in printing from the printing-test results.



6. Click [OK].

Close the [Advanced] dialog box.

7. Click [OK].

Close the [Printer Settings] dialog box.

The <sup>10</sup> icon is displayed on top of the image of the printer whose setting has been changed.

#### **Emergency Measure) Cleaning the Print Head Surface**

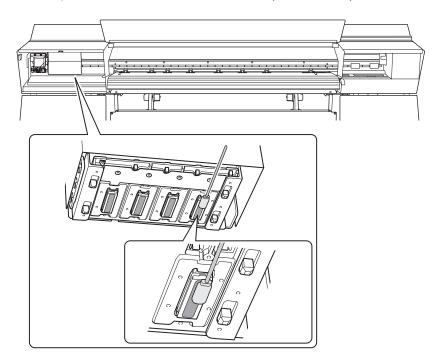
When dot drop-out or dot deflection is not improved even if cleaning is performed several times, you can clean the surface of the print heads as an emergency measure. The print head surface (nozzle surface) is a very delicate mechanism, so work must be performed carefully and cautiously.

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

#### Procedure

- 1. Apply a large amount of cleaning liquid to the cleaning stick.
- 2. Very gently touch the cleaning stick against the print head surface (nozzle surface).

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



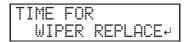
## 4. Replacing Consumable Parts

Replacing Parts for Maintenance	250
Replacing the Wiper and the Tray Pad	250
Cleaning the Wiper Tray	259
Replacing the Blade/Separating Knife	262
Replacing the Blade	262
Replacing the Separating Knife	269

## **Replacing Parts for Maintenance**

#### Replacing the Wiper and the Tray Pad

The wipers and the tray pads are components that are used for cleaning the print heads. When the following screen is displayed, it is time to replace the wiper.

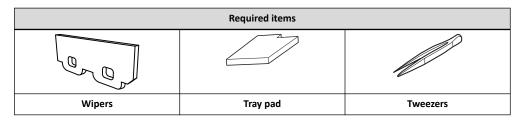


For information about purchasing wipers or tray pads, contact your authorized Roland DG Corporation dealer or visit our website (http://www.rolanddg.com/).

**⚠** CAUTION

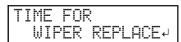
Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Otherwise sudden movement of the machine may cause injury.



#### Procedure

1. Press [ENTER] when the following screen appears.



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



**5.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**6.** Press [▶] to display the screen shown below.

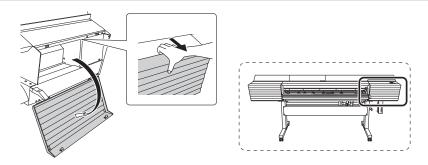


7. Press [ENTER].

The cutting carriage moves to a location where wiper replacement is possible, and then the screen shown below appears.



8. Open the right cover.



Preparation is complete once the following screen is displayed.

F	Ι	ŀ	ΙI	Sł	E	D	?	
								٢

#### **IMPORTANT**

Do not press the [ENTER] key at this stage. Press [ENTER] after replacing the wipers and the tray pads. If you press [ENTER] at this stage, close the right cover according to the instructions on the screen, wait for the following screen to be displayed, and then press [ENTER] again.



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



#### **10.** Replace the wipers.

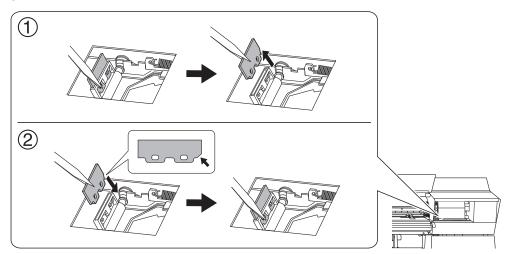
#### (1) Detach the old wipers.

Using the tweezers, unhook the wipers, and then pull them up. Using the tweezers to press on the hook in the hole on the wiper makes it easier to remove the wiper.

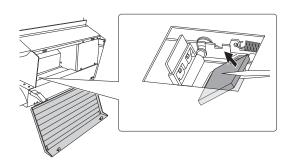
#### (2) Attach the new wipers.

Place the inclined end of the wiper on the back side of the machine. If the wiper is installed with the incorrect orientation, appropriate cleaning will not be possible.

Be sure to attach the wipers to the hooks. Failure to do so may result in dot drop-out or other problems.



## **11.** Replace the tray pad.



#### **IMPORTANT**

Place the tray pad with an orientation that matches the shape of the wiper tray. If you place the tray pad with the incorrect orientation, it will not be possible to clean the wiper correctly.

- 12. Press [ENTER].
- ${f 13.}\,$  When the following screen is displayed, close the right cover.



When the following screen is displayed again, the wiper replacement is finished.



 $\textbf{14.} \ \ \mathsf{Press} \ [\mathsf{MENU}] \ \mathsf{to} \ \mathsf{go} \ \mathsf{back} \ \mathsf{to} \ \mathsf{the} \ \mathsf{original} \ \mathsf{screen}.$ 

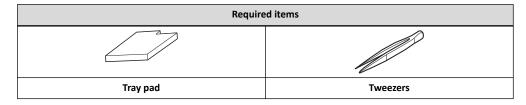
#### **Cleaning the Wiper Tray**

Discharged fluid collects in the wiper tray. The wiper tray must be cleaned periodically. If the following message is displayed, clean the wiper tray, and then replace the tray pad.

#### ⚠ CAUTION

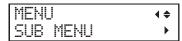
Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Otherwise sudden movement of the machine may cause injury.

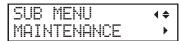


#### **Procedure**

- 1. Press [ENTER].
- 2. Press [MENU].
- **3.** Press [▼] several times to display the screen shown below.



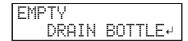
**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



Press [▶] once, and then press [▼] several times to display the screen shown below.



- 6. Press [ENTER].
- 7. When the screen shown below appears, remove the drain bottle and discard the discharged fluid.





#### **IMPORTANT**

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

**⚠** CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE." After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

**⚠** WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause fire.

**⚠** CAUTION

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

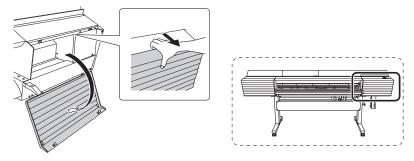
Any spillage or vapor leakage may cause fire, odor, or physical distress.

#### **IMPORTANT**

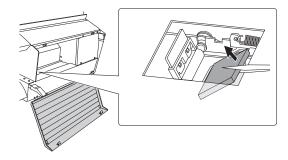
Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

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.

- 8. Quickly attach the emptied drain bottle to the machine once more.
- **9.** Open the right cover.



#### 10. Replace the tray pad.



#### **IMPORTANT**

Place the tray pad with an orientation that matches the shape of the wiper tray. If you place the tray pad with the incorrect orientation, it will not be possible to clean the wiper correctly.

#### 11. Close the right cover.

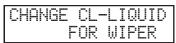
#### 12. Press [ENTER].

The screen shown below appears, and then the machine is filled with TR2 cleaning liquid. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")

FILLING	LIQUID
>>>>	01:40

If the TR2 cleaning liquid runs out during filling, the screen shown below appears. Replace the TR2 cleaning liquid pouch. When you replace the wiper cleaning liquid pouch, the display returns to the original screen.

▶ P. 58 「TR2 Cleaning Liquid Pouch Replacement」



When the following screen is displayed again, the wiper tray cleaning is finished.



 ${\bf 13. \ \ Press\ [MENU]\ to\ go\ back\ to\ the\ original\ screen.}$ 

## Replacing the Blade/Separating Knife

#### Replacing the Blade

## 1. Replace the blade.

If the blade becomes dull, if the edge of the blade is chipped, or if the cutting quality is lowered, replace the blade with a new blade.

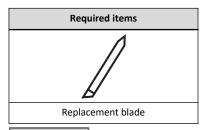
⚠ CAUTION Be sure to perform operations as specified by the instructions, and never touch any area

not specified in the instructions.

Otherwise sudden movement of the machine may cause injury.

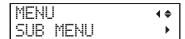
**∴** CAUTION Never touch the tip of the blade.

Doing so may result in injury.



#### **Procedure**

- 1. Remove any media.
- 2. Press [MENU].
- 3. Press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



Press [►] once, and then press [▼] several times to display the screen shown below.



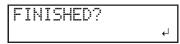
**6.** Press [ENTER].

The cutting carriage moves to a position where blade replacement is possible.

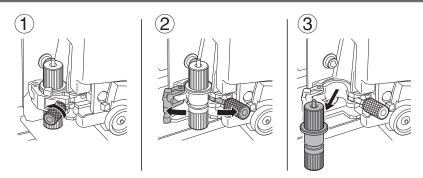
7. When the following screen is displayed, open the front cover.



Preparation is complete once the following screen is displayed.

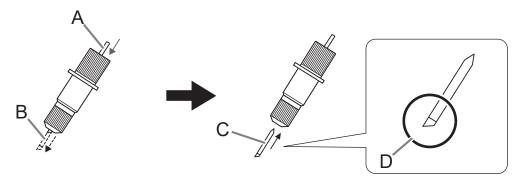


8. Detach the blade holder.

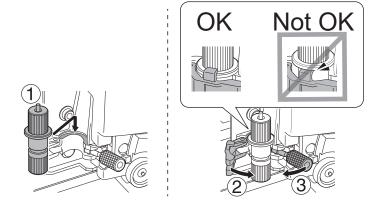


### **9.** Replace the blade.

- (1) Press the pin (A) to push out the old blade (B).
- (2) Insert a new blade (C).
  Orient the tip of the blade (D) correctly.

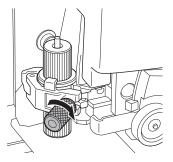


## $\textbf{10.} \ \ \textbf{Install the cutting tool in the cutting carriage}.$



#### 11. Tighten the screw.

Tug the blade holder upward to make sure it does not come loose.



## 12. Close the front cover.

## 13. Press [ENTER].

When the following screen is displayed again, the blade replacement is finished.



14. Press [MENU] to go back to the original screen.

## 2. Make adjustments according to the new blade.

#### Procedure

- 1. Close the front cover.
- **2.** Press [◄], [▶], [▲], or [▼] to move the cutting carriage to the location where you want to carry out the cutting test. You can freely set the location for the cutting test.
- 3. Press [FUNCTION].
- **4.** Press [▼] several times to display the screen shown below.



**5.** Press [▶] to display the screen shown below.



**6.** Press [ENTER].

The test pattern is cut.

- **7.** When the cutting of the test pattern is finished, press  $[\, lackbreaktyrbox]$ .
- **8.** Check the results of the cutting test.

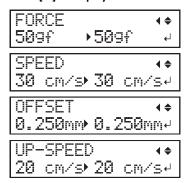


Check item		Result	Setting item	Adjustment
Check the shape.	The cut shape is	distorted.	SPEED	Reduce
Peel off the circle.	The square also	peels off.	FORCE	Increase
	Some uncut are	as remain.	SPEED	Reduce
Peel off the square.	The blade leave	s faint traces on the backing paper.	FORCE	No change
	The blade trace	is indistinct.		Increase
	The blade trace ing paper.	is too deep and cuts into the back-		Reduce
		The corners are not rounded and do not have "horns."		No change
Check the shape of the square you have peeled off.		The corners are rounded.	Offset	Increase
		The corners have "horns."		Reduce

**9.** Press  $[\blacktriangle]$  or  $[\blacktriangledown]$  to select the cutting condition you want to set.

Display screen (cutting conditions)	Setting details	Default set- tings
CUT CONFIG (+) FORCE	Set the force (pressure) of the blade.	50 gf
CUT CONFIG (+ SPEED +	Set the speed of cutting.	30 cm/s
CUT CONFIG (+) OFFSET	Set the blade offset. Enter the listed offset value for the blade. The offset value for the included blade is 0.250 mm (9.8 mil).	0.250mm
CUT CONFIG (+) UP-SPEED	Set the blade's up speed during cutting (the speed at which the blade travels when it moves to the next cutting line after cutting one cutting line). If the media comes loose during no-load feed and the blade damages the surface of the media, reduce the speed.	30 cm/s

10. Press  $[\blacktriangleright]$  to display the screen shown below.

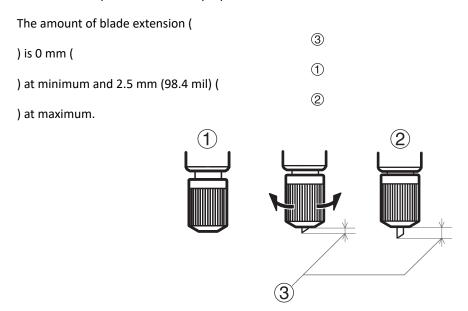


- **11.** Press [▲] or [▼] to select a value.
- 12. Press [ENTER] to confirm your entry.
- **13.** Press [◄] to go back to step 9.

  Repeat steps 9 and 10 to adjust the cutting conditions.
- **14.** Press [FUNCTION] to go back to the original screen.

## 3. Accurately Adjusting the Cutting-in Amount

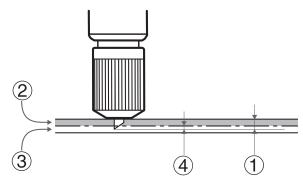
When you want to perform accurate and fine adjustment of the cutting-in amount, such as when cutting media with thin backing paper, you can obtain good results by adjusting the amount of blade extension. Turn the cap portion of the blade holder to adjust the amount of blade extension. Each indicator tick corresponds to 0.1 mm (3.9 mil), and adjustment for 0.5 mm (19.7 mil) can be made by rotating the cap one full turn. Note that making the amount of blade extension too small may cause the tip of the blade holder cap to touch, and may soil and damage the printed surface. It is important to be especially careful about this when you are using media that has poor ink-adhesion properties.



• Rough Estimate for the Amount of Blade Extension (When Creating a Sticker)

Set the amount of blade extension (

1) to an amount that is the sum of the thickness of the material portion (
2) and half (
4) the thickness of the backing paper (
3).

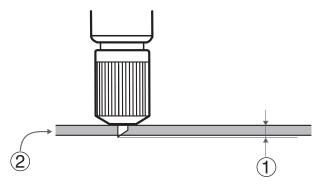


• Rough Estimate for the Amount of Blade Extension (When Cutting Perforated Lines)

Set the amount of blade extension (

1) so that when the cutter pierces the media (
2), the blade extends slightly.

For information about the output settings for cutting perforated lines, refer to the documentation for Versa-Works.



#### **IMPORTANT**

Pushing the blade out too far will damage the blade and blade protector and hasten their deterioration, so exercise caution.

#### **Replacing the Separating Knife**

If the separating knife becomes dull, replace it with the included replacement knife.

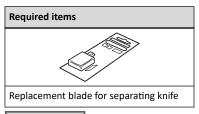
Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Otherwise sudden movement of the machine may cause injury.

**⚠** CAUTION

Do not touch the tip of the separating knife.

Doing so may result in injury.

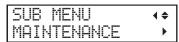


#### Procedure

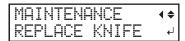
- 1. Remove any media.
- 2. Press [MENU].
- **3.** Press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**5.** Press [▶] once, and then press [▼] several times to display the screen shown below.



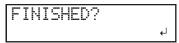
**6.** Press [ENTER].

The cutting carriage moves to a position where blade replacement is possible.

7. When the following screen is displayed, open the front cover.

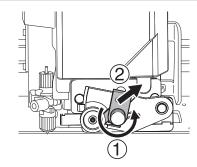


Preparation is complete once the following screen is displayed.



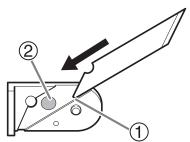
- **8.** Remove the separating knife.
  - (1) Loosen the screw until it slips out.
  - (2) Grasp the screw portion, and slowly pull in the direction of the arrow.

When doing this, do not pull it back toward you.

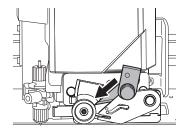


#### 9. Install a new knife.

Slide the knife to align it with the groove ( $^{\textcircled{1}}$ ). The knife is secured in place by the magnet ( $^{\textcircled{2}}$ ).

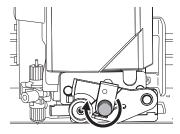


### 10. Slowly insert the knife into the groove.



## 11. Loosen the screw.

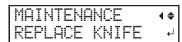
Take care to ensure that the knife does not slip out of position at this time.



### 12. Close the front cover.

#### 13. Press [ENTER].

When the following screen is displayed again, the blade replacement is finished.



#### **14.** Press [MENU] to go back to the original screen.

# **Chapter 5 Troubleshooting Methods**

## 1. Output Quality Problems

Printed Results Are Coarse or Contain Horizontal Stripes	273
Do the print heads cause dot drop-out?	273
Is the print head height appropriate?	273
Have you carried out feed correction?	273
Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?	273
Is the printer installed in a level and stable location?	273
Is the media heating system at a suitable temperature?	273
Is the temperature of the room too low?	274
Is the print mode suitable?	274
Is the media loaded correctly?	274
Are the settings for the [PRESET] menu item appropriate?	274
The Media Becomes Soiled When Printed	275
Do the print heads come into contact with the media?	275
Are the print heads dirty?	275
Are the pinch rollers or the media clamps dirty?	275
Colors Are Unstable or Uneven	
Have you tried mixing the ink by shaking the pouch trays?	276
Is the media wrinkled?	276
Was printing paused partway through?	276
Is the printer installed in a level and stable location?	276
Is the media loaded correctly?	
Are the operating parameters set to appropriate values?	276
Are the settings for the [PRESET] menu item appropriate?	
Cutting Is Misaligned or Skewed	278
Is the media loaded correctly?	
Are the settings for the cutting conditions appropriate?	
Is the length of output too long?	
Are you using media that exhibits large expansion and contraction?	
Is the setting for the [CALIBRATION] menu item (under [CUTTING MENU]) correct?	278
Are the pinch rollers placed on the proper locations?	278
Printing and Cutting Are Misaligned	
Have you corrected the misalignment of printing and cutting?	
,	

## Printed Results Are Coarse or Contain Horizontal Stripes

#### Do the print heads cause dot drop-out?

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

#### **RELATED LINKS -**

- · P. 62 "Printing Tests and Normal Cleaning"
- · P. 231 "When Normal Cleaning Is Not Effective"

#### Is the print head height appropriate?

Printing when the [HEAD HEIGHT] menu item is set to "HIGH" or to "MIDDLE" is coarser than when set to "LOW". Keep this set to "LOW" except when changing it is necessary, such as when you are using thick media.

#### **RELATED LINKS**

• P. 144 "Adjusting Print Head Height to Match Media Thickness"

#### Have you carried out feed correction?

Large misalignment in the amount of feed of the media may result in printing that seems coarse or contains horizontal stripes. Either make the setting in the software RIP to match the type of media you are using, or make the setting for correction on the printer.

#### **RELATED LINKS** ·

P. 142 "Reducing Horizontal Bands (Feed Correction Function)"

#### Have you carried out correction of the ink landing position (MEDIA GAP ADJ.)?

The optimal adjustment value varies depending on the thickness of the media. Set an adjustment value that is suitable for the media. When further correction is required, such as when adjustment made using [SIMPLE SET-TING] does not enhance printing, use [DETAIL SETTING] to make the correction.

#### **RELATED LINKS -**

- P. 139 "Adjust the misalignment of the ink landing position."
- P. 140 "Accurately Adjusting the Misalignment of the Ink Landing Position"

#### 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 dot drop-out or reduced printing quality.

#### Is the media heating system at a suitable temperature?

If the ink forms lumps or smudges, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

#### **RELATED LINKS**

- P. 153 "Setting the Print Heater Temperature"
- P. 154 "Setting the Dryer Temperature"

#### Is the temperature of the room too low?

The media heating system may not warm up sufficiently when the ambient temperature is less than 20°C (68°F). Also, even when the media heating system reaches its set temperatures, adequate effectiveness may not be apparent if the media is thoroughly chilled. Before printing, allow the media to come to room temperature.

#### Is the print mode suitable?

If attractive printing is impossible even when the media heating system is at a high temperature, try using a high-er-quality print mode. Depending on the media, smudging may occur when using a high-quality print mode, and results may also vary greatly depending on the settings of your software RIP (such as the color-profile selection). Select settings appropriate for the media you are using.

#### Is the media loaded correctly?

If the media is not loaded correctly or the media feed is not smooth, printing may be adversely affected. Load the media correctly.

#### **RELATED LINKS** ·

- P. 30 "Setup of Roll Media"
- · P. 40 "Setup of Sheet Media"

#### 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 for the media you are using.

#### **RELATED LINKS -**

· P. 190 "Using Presets"

## The Media Becomes Soiled When Printed

#### Do the print heads come into contact with the media?

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

#### **RELATED LINKS -**

- · P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"
- P. 144 "Adjusting Print Head Height to Match Media Thickness"

#### Are the print heads 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, clean the print heads manually. We recommend carrying out periodic head cleaning.

· Too low humidity

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

#### **RELATED LINKS -**

P. 235 "Manual Cleaning"

#### Are the pinch rollers or the media clamps dirty?

Periodically clean them.

#### **RELATED LINKS** ·

• P. 223 "Cleaning the Machine"

## Colors Are Unstable or Uneven

#### Have you tried mixing the ink by shaking the pouch trays?

If colors are uneven, remove the pouch trays, and then shake them gently.

If uneven color issues with white ink are not resolved even after shaking the pouch trays to mix the ink, perform "damper cleaning."

If uneven color issues with ink other than white ink (LcLmLk ink or CMYK ink) are not resolved even after shaking the pouch trays to mix the ink, perform super cleaning.

#### **RELATED LINKS -**

- · P. 243 "Mixing the Ink by Shaking the Pouch Tray"
- P. 245 "Damper Cleaning Method"
- P. 247 "Super Cleaning Method"

#### Is the media wrinkled?

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

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- · P. 40 "Setup of Sheet Media"

#### Was printing paused partway through?

When printing is paused, the coloring at the seam may be altered when printing resumes. Avoid pausing printing. Before you perform lengthy printing, check the amount of ink remaining in the ink pouches. 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 heads are not exposed to moving air. These factors may lead to dot drop-out or reduced printing quality.

#### Is the media loaded correctly?

If the media is not loaded correctly or the media feed is not smooth, printing may be adversely affected. Load the media correctly.

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

#### 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.

#### **RELATED LINKS -**

- P. 195 "Speeding Up Output for Narrow Media"
- · P. 150 "Preventing Soiling of the Media, Dot Drop-out, and Dot Displacement"

### 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 for the media you are using.

#### **RELATED LINKS -**

• P. 190 "Using Presets"

## **Cutting Is Misaligned or Skewed**

#### Is the media loaded correctly?

If the media is not loaded correctly or the media feed is not smooth, printing may be adversely affected. Load the media correctly.

#### **RELATED LINKS**

- · P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

#### Are the settings for the cutting conditions appropriate?

Misalignment or skewing may occur if the cutting speed is too fast or the blade force is too high. Try changing the cutting conditions. With media having a strong adhesive layer, the adhesive layer reattaches to itself immediately after cutting. However, if a cutting test shows that the peeling of the media and the blade traces on the backing paper are optimal, the media is being cut properly. Be careful not to make the blade force too high.

#### **RELATED LINKS** ·

P. 163 "Accurately Adjusting the Cutting Settings"

#### Is the length of output too long?

For printing followed immediately by cutting in particular, the longer the page length (that is, the longer the distance the media is returned after printing), the greater the chance of misalignment occurring. It is a good idea to keep the size of each single page to the minimum necessary.

#### Are you using media that exhibits large expansion and contraction?

When you are performing printing followed immediately by cutting, misalignment occurs if the media expands or contracts. If this happens, try performing printing with crop marks, and then setting the base point and align points and performing cutting. This corrects for the expansion and contraction of the media.

#### **RELATED LINKS**

· P. 111 "Preparations before Cutting with Crop Marks"

#### Is the setting for the [CALIBRATION] menu item (under [CUTTING MENU]) correct?

When you are performing printing followed immediately by cutting, go to [CUTTING MENU] and set the [CALIBRA-TION] value to "0.00."

#### **RELATED LINKS -**

P. 166 "Performing Distance Correction during Cutting"

#### Are the pinch rollers placed on the proper locations?

Be sure to place the pinch rollers on the grit rollers. If the pinch rollers are not placed on the proper locations, misalignment of the media may occur.

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

## **Printing and Cutting Are Misaligned**

#### Have you corrected the misalignment of printing and cutting?

Misalignment between the printing and cutting positions may occur due to the thickness of the media or the head height. Make corrections for misaligned printing and cutting for the media you are using.

#### **RELATED LINKS**

· P. 169 "Accurately Adjusting the Settings for Printing and Cutting"

## 2. Problems in Cutting with Crop **Marks**

Automatic Detection of Crop Marks Fails	281
Is the media wrinkled or warped?	281
Is the media size too large?	281
Are you using media that is likely to reflect light?	
Are you using transparent media?	281
Printing and Cutting Are Misaligned	282
Have you corrected the misalignment of printing and cutting with crop marks?	

## **Automatic Detection of Crop Marks Fails**

#### Is the media wrinkled or warped?

Wrinkled or warped media may cause crop mark detection to fail. Avoid using wrinkled or warped media.

If the crop marks cannot be detected automatically, you can perform alignment manually.

#### **RELATED LINKS** ·

- P. 174 "Aligning the Positions of Cutting with Crop Marks Manually"
- P. 187 "Adjusting the Level of the Sensor for Reading Crop Marks According to the Media"

#### Is the media size too large?

Large media may lead to large errors, which may cause crop mark detection to fail.

When you want to use lengthy media, we recommend performing output with the data separated into sizes that are as short as possible.

If the crop marks cannot be detected automatically, you can perform alignment manually.

#### **RELATED LINKS**

• P. 174 "Aligning the Positions of Cutting with Crop Marks Manually"

#### Are you using media that is likely to reflect light?

The machine may not be able to read crop marks from media that is likely to reflect light. Try [CROPSENS CALIB.] (the correction function of the sensor for reading crop marks). If the crop marks still cannot be read, change the media you are using.

#### **RELATED LINKS**

· P. 184 "Correct the sensor for reading crop marks."

#### Are you using transparent media?

The machine cannot read crop marks from transparent media. Change the media you are using.

## **Printing and Cutting Are Misaligned**

#### Have you corrected the misalignment of printing and cutting with crop marks?

Depending on the composition of the media, the positioning of printing and cutting may be misaligned even when you are using crop marks. Make corrections for misaligned printing and cutting for the media you are using.

#### **RELATED LINKS** ·

- P. 176 "Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks)"
- P. 179 "Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)"

## 3. Media Feed Problems

Med	ia Wrinkles or Shrinks	284
	Is the media loaded and set up straight and securely?	284
	Was loaded media allowed to stand for some time?	284
	Are the media clamps attached?	284
	Was the media loaded while the print heater was hot?	284
	Are the media heating system temperatures too high?	284
	Is the temperature of the room too low?	284
	Is the humidity of the room too high?	284
	Is the media sagging?	284
Med	ia Feeding Is Not Straight	285
	Is the media loaded and set up straight and securely?	285
Med	ia Feeding Is Not Smooth	286
	Is some other object coming into contact with the media?	286
	Is the media too thick?	286
	Are the grit rollers dirty?	286
А М	edia Jam Occurs!	287
	Is an error message displayed?	287
	Is the media warped or wrinkled?	287
	Is the height of the print heads too low?	287
	Are the grit rollers dirty?	287
	Are the media clamps attached?	287
	Is the media loaded and set up straight and securely?	287
	Is some other object coming into contact with the media?	. 287
	Is the media too thick?	288

## **Media Wrinkles or Shrinks**

#### Is the media loaded and set up straight and securely?

Feeding is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

#### **RELATED LINKS** -

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

#### Was loaded media allowed to stand for some time?

Media may shrink or wrinkle if it is heated for an extended time. When printing ends, switch off the sub power and remove the media.

#### Are the media clamps attached?

When you are performing printing, be sure to attach the media clamps.

#### Was the media loaded while the print heater was hot?

Loading media after the print heater has warmed up causes the temperature of the media to rise suddenly, which may cause the media to shrink or wrinkle during printing. Before loading media, switch off the sub power and allow the platen to cool.

#### **RELATED LINKS -**

· P. 152 "Adjusting the Ink-drying Method"

#### Are the media heating system temperatures too high?

Set the temperatures to suitable values for the type of media.

#### **RELATED LINKS -**

· P. 152 "Adjusting the Ink-drying Method"

#### Is the temperature of the room too low?

The media heating system may not warm up sufficiently when the ambient temperature is less than 20°C (68°F). Also, even when the media heating system reaches its set temperatures, adequate effectiveness may not be apparent if the media is thoroughly chilled. Before printing, allow the media to come to room temperature.

#### Is the humidity of the room too high?

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

Is the media sagging? If sagging media is used, it may come out wrinkled.

#### Is the media sagging?

If sagging media is used, it may come out wrinkled.

## Media Feeding Is Not Straight

#### Is the media loaded and set up straight and securely?

Feeding is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

## Media Feeding Is Not Smooth

#### Is some other object coming into contact with the media?

Make sure the media does not touch anything else. This may affect output, even when the feed appears to be smooth.

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

#### Is the media too thick?

Media that is too thick may not only cause an unstable feed but may scrape the print heads, resulting in a malfunction. Never use such media.

#### Are the grit rollers dirty?

Check to make sure the grit rollers are free of buildup of foreign material such as media scraps.

#### **RELATED LINKS -**

• P. 223 "Cleaning the Machine"

## A Media Jam Occurs!

#### Is an error message displayed?

If an error message is displayed because the media has jammed, immediately correct the problem. Doing so may damage the print heads.

#### **RELATED LINKS -**

• P. 302 "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.

#### **RELATED LINKS -**

P. 284 " Media Wrinkles or Shrinks"

#### Is the height of the print heads too low?

Try raising the print heads higher. First, try setting the height to "MIDDLE," and if the media is still jammed, change it to "HIGH." Media may inevitably warp or wrinkle slightly, so adjust the height of the print heads to take this into account.

#### **RELATED LINKS -**

P. 144 "Adjusting Print Head Height to Match Media Thickness"

#### Are the grit rollers dirty?

Check to make sure the grit rollers are free of buildup of foreign material such as media scraps.

#### **RELATED LINKS -**

P. 223 "Cleaning the Machine"

#### Are the media clamps attached?

When you are performing printing, be sure to attach the media clamps.

#### Is the media loaded and set up straight and securely?

Feeding is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

#### Is some other object coming into contact with the media?

Make sure the media does not touch anything else. This may affect output, even when the feed appears to be smooth.

#### **RELATED LINKS -**

• P. 30 "Setup of Roll Media"

#### A Media Jam Occurs!

• P. 40 "Setup of Sheet Media"

#### Is the media too thick?

Media that is too thick may not only cause an unstable feed but may scrape the print heads, resulting in a malfunction. Never use such media.

# 4. Machine Problems

The Print Heads Do Not Move	290
What to Do First	290
If the Heads Still Do Not Move	290
The Printer Unit Does Not Run	291
Is the power switched on?	291
Is [SETUP] lit?	291
Are any covers open?	291
Is the top menu displayed?	291
Is [PAUSE] lit?	291
Is a message displayed on the screen?	291
Are the cables connected?	291
Is the LAN routing appropriate?	292
Are the LAN settings correct?	292
Did the software RIP end abnormally?	292
Has the ink run out?	292
The Media Heating System Doesn't Warm Up	293
Is the media loaded?	293
Is the temperature of the room too low?	293
Cannot Separate the Media	294
Is the separating knife installed?	294
Is the cut rail installed?	294
Printer Cannot Be Operated from the Dedicated Application	295
Is the printer's operation panel in use?	295
Is printer-side Bluetooth communication turned on?	295
Is the operation application connected to a different printer?	295
Is the printer-side Bluetooth communication normal?	295
Is the distance between the printer and the mobile terminal too fa	ır? 295
Are there any obstacles between the printer and the mobile termi	nal? 296
Is the mobile terminal's Bluetooth function turned on?	296
Is there a wireless LAN unit or anything else in the vicinity that is cation to be unstable?	· ·

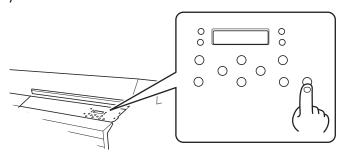
### The Print Heads Do Not Move

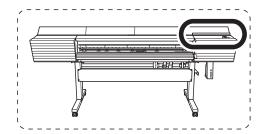
If the print-head carriage stops over the platen, take action immediately to prevent the heads from drying out.

#### What to Do First

Switch the sub power off and then back on again. If the media is jammed, also remove the media.

If the print heads move to the home position (inside the right cover), it means the operation has ended successfully.





#### If the Heads Still Do Not Move

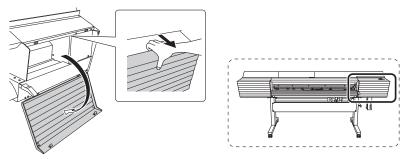
Try switching off the main power, then switching on the main power again, followed by the sub power.

#### If the Heads Still Do Not Move

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

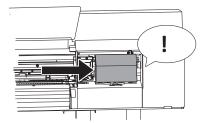
#### **Procedure**

- 1. Switch off the main power, and then open the front cover.
- 2. Open the right cover.



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

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



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

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

### The Printer Unit Does Not Run

#### Is the power switched on?

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

#### **RELATED LINKS -**

· P. 26 "Turning the Power On"

#### Is [SETUP] lit?

Output is not performed when [SETUP] is not lit. After loading the media, lower the loading lever, and then press [ENTER].

#### **RELATED LINKS -**

• P. 74 "Step 2: Starting Output"

#### Are any covers open?

Close the front, left, and right covers.

#### Is the top menu displayed?

#### Top menu

W1100mm

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 [MENU].

#### **RELATED LINKS -**

• P. 74 "Step 2: Starting Output"

#### Is [PAUSE] lit?

When [PAUSE] is lit, operation is paused. To resume, press [PAUSE]. [PAUSE] turns off and output resumes.

#### **RELATED LINKS -**

P. 52 "Pausing and Canceling Output"

#### Is a message displayed on the screen?

#### **RELATED LINKS -**

- P. 298 "Messages"
- P. 300 "Error Messages"

#### Are the cables connected?

Connect the cable securely.

#### Is the LAN routing appropriate?

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

#### Are the LAN settings correct?

If the cable connections are secure and no problem is found in the network itself, make sure that the IP address and other such settings are appropriate. The settings on both the machine and the computer must be appropriate. Redo the settings, checking to ensure that the IP address does not conflict with the IP address for another device on the network, that the port setting for the software RIP specifies the IP address set on the machine, that the settings have no typing errors, and for other such problems.

#### **RELATED LINKS -**

P. 214 "Viewing System Information"

#### Did the software RIP end abnormally?

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

#### Has the ink run out?



When the screen shown in the figure is displayed, output data cannot be accepted. The error can be resolved by replacing the ink pouch with a new one. If there is data that has not yet been output remaining in the machine, output resumes. If there is unsent data in the computer, output resumes when the data is resent.

#### **RELATED LINKS -**

P. 56 "Ink Pouch Replacement"

# The Media Heating System Doesn't Warm Up

#### Is the media loaded?

The media heating system does not warm up to the set temperature when [SETUP] is off (by default). Load the media and wait for the machine to warm up.

#### **RELATED LINKS -**

· P. 152 "Adjusting the Ink-drying Method"

#### Is the temperature of the room too low?

The media heating system may not warm up sufficiently when the ambient temperature is less than 20°C (68°F). Also, even when the media heating system reaches its set temperatures, adequate effectiveness may not be apparent if the media is thoroughly chilled. Before printing, allow the media to come to room temperature.

# **Cannot Separate the Media**

#### Is the separating knife installed?

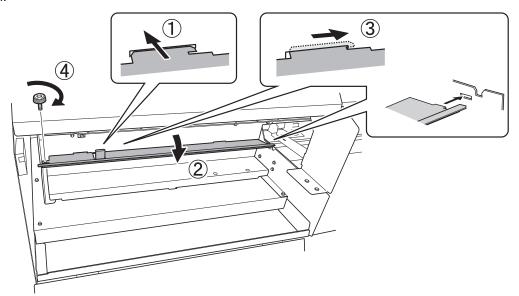
If the separating knife is not installed, you cannot separate the media.

#### **RELATED LINKS -**

• P. 269 "Replacing the Separating Knife"

#### Is the cut rail installed?

If the cut rail is not installed, you cannot separate the media. If the cut rail is not installed, remove the left cover, and then install the cut rail according to the figure shown below. After installing the cut rail, be sure to attach the left cover.



# Printer Cannot Be Operated from the Dedicated Application

#### **RELATED LINKS -**

P. 200 "Important Notes on Using the Operation Application"

#### Is the printer's operation panel in use?

When you are using the printer's operation panel, you cannot perform operations from the dedicated mobile application (hereinafter referred to as the "operation application"). Stop performing operations from the operation panel, and then press [MENU] on the operation panel.

#### **RELATED LINKS** -

· P. 199 "Using the Operation Application"

#### Is printer-side Bluetooth communication turned on?

The printer's Bluetooth communication is turned off in the default settings. When using the operation application, use the printer's operation panel to turn on Bluetooth communication.

#### **RELATED LINKS -**

· P. 213 "Turning on Bluetooth Communication"

#### Is the operation application connected to a different printer?

You can only connect to one printer from a mobile terminal on which the operation application has been installed. If you want to operate multiple printers, use the operation application to select the printer that you will connect to.

#### Is the printer-side Bluetooth communication normal?

The state of the printer's Bluetooth communication is displayed on the screen.

- ENABLE: The printer's Bluetooth communication is on, and the printer is waiting for a connection to be established. If you cannot operate this machine from the operation application that you are using, there is a problem with the connection environment. Check the causes of other problems.
- ENABLE\*: The printer's Bluetooth communication is on, and the printer is connected to the operation application.
- DISABLE: The printer's Bluetooth communication is off.
- ERROR: An error has occurred in the printer's Bluetooth communication. Purchase them from your authorized Roland DG Corporation dealer.

However, when the above screen is displayed, you cannot perform operations from the operation application.

#### **RELATED LINKS** ·

- P. 199 "Using the Operation Application"
- P. 214 "Viewing System Information"

#### Is the distance between the printer and the mobile terminal too far?

The valid range for Bluetooth communication is approximately 10 m. Bring the printer and the mobile terminal on which the operation application has been installed as close together as possible.

#### Are there any obstacles between the printer and the mobile terminal?

If obstacles (such as people, metal, and walls) are present between the printer and the mobile terminal, Bluetooth communication may be unstable. Use the operation application from a location where there are no obstacles between the printer and the mobile terminal.

#### Is the mobile terminal's Bluetooth function turned on?

Check the Bluetooth status of the mobile terminal. For the usage method of your mobile terminal, refer to its user's manual.

# Is there a wireless LAN unit or anything else in the vicinity that is causing Bluetooth communication to be unstable?

The Bluetooth communication status may become unstable if:

- A wireless LAN is in place in the location.
- The devices are in the vicinity of a microwave that is in use.
- Other electromagnetic waves are generated in the location.

# 5. Messages on the Operation Panel

Messages	298
1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■	298
CLOSE COVER (FRONT COVER/COVER L/COVER R)	298
SHEET NOT LOADED PRESS SETUP KEY	298
CLOSE SLOT COVER	298
END OF THE SHEET	298
EMPTY DRAIN BOTTLE	298
INSTALL DRAIN BOTTLE	298
NOW HEATING NOW PROCESSING	298
TIME FOR MAINTENANCE	298
TIME FOR WIPER REPLACE	299
SET CL-LIQUID FOR WIPER	299
CHANGE CL-LIQUID FOR WIPER	299
TIME FOR TRAY CLEANING	299
HEAD PROTECTION ACTIVATED	299
Error Messages	300
ALIGN POINT POSITION INVALID	300
OPTION DRYER IS NOT CONNECTED	300
TEMPERATURE IS TOO LOW **°C	300
TEMPERATURE IS TOO HIGH **°C	300
CROPMARK ERROR NOT FOUND	300
CAN'T PRINT CROP CONTINUE?	300
SHEET TOO SMALL CONTINUE?	301
DATA ERROR CANCELING	301
SHEET SET ERROR SET AGAIN	301
SOME MID.PINCHS NOT SET RIGHT	301
PINCHROLL ERROR LOWER PINCHROLL	301
PINCHROLL ERROR INVALID LEFT(RIGHT)POS	301
WRONG CARTRIDGE	302
CANCELED FOR PUMP PROTECTION	302
AVOIDING DRY-UP TURN POWER OFF	302
SET HEAD HEIGHT TO ****	302
MOTOR ERROR: TURN POWER OFF	302
SERVICE CALL ****	302
CLEANING ERROR	303

## **Messages**

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 • 7 • 8 •

Only a small amount of ink remains.

Replace the ink pouch indicated by the flashing number with a new pouch.

#### CLOSE COVER (FRONT COVER/COVER L/COVER R)

The front, left, or right cover is open. For safety, some carriage operations are limited while a cover is open.

Close the front, left, or right cover.

#### SHEET NOT LOADED PRESS SETUP KEY

This message appears when an attempt to perform a printing test was made while no media was loaded.

Load media.

#### **CLOSE SLOT COVER**

This message appears if the ink slot cover is open when output starts.

Close the ink slot cover.

#### **END OF THE SHEET**

The trailing edge of the media was detected during operation.

Press any key on the operation panel to clear the message. Load new media.

#### **EMPTY DRAIN BOTTLE**

This message appears when a certain amount of discharged fluid collects in the drain bottle.

Discard the discharged fluid in the bottle.

#### **RELATED LINKS -**

• P. 226 "If the Discharged Fluid Disposal Message Appears"

#### **INSTALL DRAIN BOTTLE**

Check whether the drain bottle is installed correctly.

Install the drain bottle, and then press [ENTER].

#### **RELATED LINKS -**

· P. 225 "Disposing of Discharged Fluid"

#### NOW HEATING... NOW PROCESSING..

The media heating system did not reach the set temperature.

Wait until the set temperature is reached. Printing starts when [HEATER] lights. You can stop output by holding down [PAUSE] for one second or longer while this is displayed. Pressing [PAUSE] makes printing start immediately without waiting to reach the preset temperature.

#### **TIME FOR MAINTENANCE**

It is time to perform manual cleaning.

After verifying the message, press [ENTER], and then perform manual cleaning.

#### **RELATED LINKS -**

• P. 235 "Manual Cleaning"

#### TIME FOR WIPER REPLACE

It is time to replace the wipers..

After verifying the message, press [ENTER], and then replace the wiper.

#### **RELATED LINKS -**

P. 256 "Replacing the Wiper and the Tray Pad"

#### **SET CL-LIQUID FOR WIPER**

No TR2 cleaning liquid pouch has been inserted.

Quickly insert a TR2 cleaning liquid pouch.

#### **RELATED LINKS** —

P. 58 "TR2 Cleaning Liquid Pouch Replacement"

#### **CHANGE CL-LIQUID FOR WIPER**

The TR2 cleaning liquid pouch is empty.

Quickly replace it with a new TR2 cleaning liquid pouch.

#### **RELATED LINKS -**

· P. 58 "TR2 Cleaning Liquid Pouch Replacement"

#### **TIME FOR TRAY CLEANING**

It is time to clean the wiper tray.

After verifying the message, press [ENTER]. Clean the wiper tray, and then replace the tray pads.

#### **RELATED LINKS -**

- P. 256 "Replacing the Wiper and the Tray Pad"
- P. 259 "Cleaning the Wiper Tray"

#### **HEAD PROTECTION ACTIVATED**

The ink in use may not be a product specified by Roland DG Corporation.

To clear the message, press [ENTER]. To obtain optimal performance, we recommend that you use ink specified by Roland DG Corporation. To purchase ink, contact your authorized Roland DG Corporation dealer.

## **Error Messages**

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

#### ALIGN POINT POSITION INVALID

An attempt was made to set an align point at a location where the setting cannot be made.

No align point can be set such that the angle between the base point and the align point is too large. Reload the media correctly, so that the angle is minimized, and then set the base point and the align points again to match the crop marks.

#### RELATED LINKS

• P. 110 "How to Cut with Crop Marks"

#### OPTION DRYER IS NOT CONNECTED

When [OPTION DRYER] is set to "ENABLE" with no auxiliary drying unit connected to the printer.

Switch the sub power and main power off, and then connect the auxiliary drying unit to the printer.

#### TEMPERATURE IS TOO LOW \*\*\*C

The temperature of the location where the machine is installed has fallen below the ambient temperature at which the machine can operate.

Operation cannot be continued. Turn off the sub power. The displayed temperature is the current ambient temperature of the installation location. Bring the installed location to a temperature at which operation is possible (20 to 32°C [68 to 90°F]), allow the machine to come to room temperature, and then turn on the power.

#### **TEMPERATURE IS TOO HIGH \*\*°C**

The temperature of the location where the machine is installed has risen above the ambient temperature at which the machine can operate.

Operation cannot be continued. Turn off the sub power. The displayed temperature is the current ambient temperature of the installation location. Bring the installed location to a temperature at which operation is possible (20 to 32°C [68 to 90°F]), allow the machine to come to room temperature, and then turn on the power.

#### **CROPMARK ERROR NOT FOUND**

Automatic detection of crop marks could not be accomplished.

Load the media at the correct position and perform detection of crop marks again. If repeating automatic crop-mark detection results in an error again, perform manual crop-mark detection. If crop marks cannot be detected even manually, try using [CROP SENSOR ADJ.] (the correction function of the sensor for reading crop marks) to perform the correction. Depending on the media, it may not be possible to detect crop marks automatically.

#### **RELATED LINKS -**

- P. 110 "How to Cut with Crop Marks"
- P. 174 "Aligning the Positions of Cutting with Crop Marks Manually"
- P. 184 "Correct the sensor for reading crop marks."
- · P. 281 "Automatic Detection of Crop Marks Fails"

#### **CAN'T PRINT CROP CONTINUE?**

- 1. The size of the data including the crop marks is larger than the printing area of the loaded media.
- 2. The size of the data being output is too small.

- 1. To continue performing output without correcting this, press [ENTER]. At this time, the crop marks and the portion extending beyond the printing area are not output. To stop output, stop sending data from the computer, and then raise the loading lever. Make the printing area wider, for example, by replacing the media with a larger piece of media, and then send the data again.
- 2. Make the horizontal-direction (scan-direction) 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, and then raise the loading lever. Change the size of the data, and then send the data again. There is no limitation on the size of the data in the media-feed direction.

#### **SHEET TOO SMALL CONTINUE?**

#### The size of the data is larger than the printing area of the loaded media

To continue performing output without correcting this, press [ENTER]. At this time, the portion extending beyond the printing area is not output. To stop output, stop sending data from the computer, and then raise the loading lever. Make the printing area wider, for example, by replacing the media with a larger piece of media, and then send the data again.

#### DATA ERROR CANCELING...

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

Operation cannot be continued. Completing the data cancellation will clear the message. Check for a problem with the connector cable or the computer, or if the printer data has any defects (a color is designated that cannot be output, etc.). Once the problem or defect has been corrected, send the data again.

#### SHEET SET ERROR SET AGAIN

- 1. [ENTER] was pressed even though the loading lever was not lowered.
- 2. [EDGE DETECTION] is set to "ENABLE", but transparent media was loaded.
- 1. Lower the loading lever, and then press the [ENTER] key.
- 2. Raise the loading lever, set the [EDGE DETECTION] menu item to "DISABLE", and then reload the media.

#### **RELATED LINKS -**

- P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"
- · P. 146 "Using Transparent Media"

#### **SOME MID.PINCHS NOT SET RIGHT**

Although the user has forgotten to place the middle pinch rollers, [ENTER] was pressed after lowering the loading lever.

Without further action, the setup will not be completed. Place the middle pinch rollers over all the grit rollers within the media width. After that, lower the loading lever, and then press [ENTER]. Failing to place the middle pinch rollers correctly may cause unstable transport of media, leading to reduced printing quality.

When you press [ENTER], the message disappears and the operation continues.

#### PINCHROLL ERROR LOWER PINCHROLL

This message appears when the loading lever was raised during initialization or after the media was loaded.

Press any key to clear the error. Alternatively, the error is cleared automatically after a short wait. Never move the loading lever while output is in progress.

#### PINCHROLL ERROR INVALID LEFT(RIGHT)POS

The left (right) pinch roller is positioned at a location where it cannot pinch the media.

Raise the loading lever and move the pinch roller to the correct location.

#### **RELATED LINKS -**

- · P. 30 "Setup of Roll Media"
- P. 40 "Setup of Sheet Media"

#### WRONG CARTRIDGE

Has an ink pouch that cannot be used been installed?

Remove the pouch tray to clear the error. Use an ink pouch of the specified type.

#### **CANCELED FOR PUMP PROTECTION**

The printer made an emergency stop because a state in which ink was not present continued for 10 minutes or longer while cleaning (normal, medium, powerful, damper, super, or automatic cleaning while sub power was switched off) was in progress or during the first ink filling procedure for the machine.

Operation cannot be continued. Turn off the sub power. After turning the power off, contact the your authorized Roland DG Corporation dealer.

#### **AVOIDING DRY-UP TURN POWER OFF**

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

Operation cannot be continued. Switch the sub power off, and then back on.

#### **SET HEAD HEIGHT TO \*\*\*\***

Is the height of the print heads lower than the height specified in the software RIP?

This warning indicates that the height of the print heads is too low for the media thickness specified in the software RIP. The print heads move to a location where you can operate the height-adjustment lever. Adjust to the displayed height, and then press [ENTER].

#### **RELATED LINKS -**

• P. 144 "Adjusting Print Head Height to Match Media Thickness"

#### **MOTOR ERROR: TURN POWER OFF**

- 1. A motor error occurred.
- 2. The media has jammed.
- 3. Has the media been pulled with excessive force?
- 1. Operation cannot be continued. Turn off the sub power. Next, eliminate the cause of the error, then immediately switch on the sub power. If the machine is allowed to stand with the error uncorrected, the print heads may dry out and become damaged. This error may be caused by such factors as a mistake in loading the media, a media jam, or an operation that pulls the media with excessive force.
- 2. Carefully remove the jammed media. The print heads may also be damaged. Perform head cleaning, and then perform a printing test and check the results.
- 3. Excessive tension was applied to the media, and additional action is necessary to recover from this state. First, raise the loading lever and adjust the media to create a small amount of slack, and then switch on the sub power.

#### **SERVICE CALL** \*\*\*\*

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

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

#### **CLEANING ERROR**

The printer made an emergency stop for one of the following reasons.

- Ink ran out during "damper cleaning."
- · A pouch tray was pulled out during "damper cleaning."
- A pouch tray was pulled out during the first ink filling procedure for the machine.

Operation cannot be continued. Switch the sub power off by holding down the switch for one second or longer, and then switch the sub power back on again. Afterward, redo the "damper cleaning" or ink filling from the start. However, if the printer stopped partway through "damper cleaning," first execute the "SUPER CL." menu item, and then redo the "damper cleaning."

#### **RELATED LINKS -**

• P. 247 "Super Cleaning Method"

# **Chapter 6 Appendix**

# 1. Operations When Moving the Unit

Pre	eparing to Move the Machine	306
	Step 1: Removing Media and the Blade Holder	
	Step 2: Circulating the Ink (Only When Using White Ink)	308
	Step 3: Discharging the Wiper Tray Cleaning Liquid	309
	Step 4: Securing the Print Heads in Place Using the Retainer	311
	Sten 5: Reinstalling the Machine	312

# **Preparing to Move the Machine**

Before moving the machine, dispose of the discharged fluid and secure the print heads in place. Attempting to move the machine without first performing these preparations may result in damage to internal components due to leaking ink or damage to the print heads.

#### **IMPORTANT**

- Once the preparations for moving the machine are complete, move the machine promptly and turn on the machine as soon as possible after the machine is relocated. If you leave the machine alone without turning it on, the precipitated ink will coagulate and result in problems such as the clogging of the print heads.
- When moving the machine, keep it at a temperature from 5 to 40°C (41 to 104°F) and at a humidity from 20 to 80% (with no condensation). Failure to do so may result in a breakdown.
- · Handle the machine with care when moving it, keeping it level (not tilted at an angle) and preventing it from striking other objects.
- After the printer is reinstalled, the media holder adjuster must be adjusted by a suitably qualified worker. This work must be performed by a Roland DG worker. Contact your authorized Roland DG Corporation dealer.

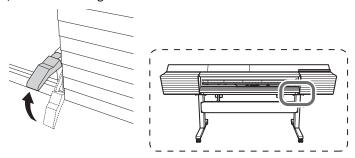
#### Step 1: Removing Media and the Blade Holder

#### Procedure

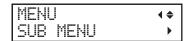
1. Remove any media.

If any media has been loaded, remove it.

If no media is loaded, raise the loading lever.



- 2. Press [MENU].
- Press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



5. Press [▶] once, and then press [▼] several times to display the screen shown below.



Press [ENTER].

The cutting carriage moves to a position where blade replacement is possible.

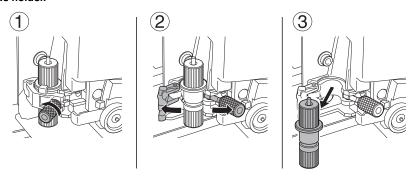
7. When the following screen is displayed, open the front cover.



Preparation is complete once the following screen is displayed.



#### 8. Detach the blade holder.

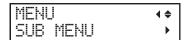


#### Step 2: Circulating the Ink (Only When Using White Ink)

This work is not necessary when using eight colors (CMYKLcLmLkOr) or four colors (CMYK). Proceed to step 3. ("Discharging the Wiper Tray Cleaning Liquid").

#### Procedure

- 1. Press [MENU].
- **2.** Press [ $\blacktriangledown$ ] several times to display the screen shown below.



**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.

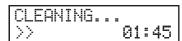


5. Press [ENTER].

The screen shown below appears, and then the ink circulation starts. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



Depending on the timing with which the ink circulation is started, the following screen may be displayed and cleaning may start. When cleaning is complete, the ink circulation will start, so wait for the ink circulation to complete. (The display shown below is an example. "01:45" = "1 minute and 45 seconds")



When finished, the screen shown below appears again.



#### Step 3: Discharging the Wiper Tray Cleaning Liquid

#### **Procedure**

- 1. Press [MENU].
- 2. Press [▼] several times to display the screen shown below.



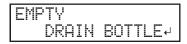
**3.** Press [▶] once, and then press [▼] several times to display the screen shown below.



**4.** Press [▶] once, and then press [▼] several times to display the screen shown below.



- Press [ENTER].
- 6. When the screen shown below appears, remove the drain bottle and discard the discharged fluid.



#### **IMPORTANT**

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

**⚠** CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE." After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

⚠ WARNING

Never place discharged fluid or ink near an open flame.

Doing so may cause fire.

**⚠** CAUTION

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

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

#### **IMPORTANT**

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.

- $7. \,$  Quickly attach the emptied drain bottle to the machine once more.
- 8. Press [ENTER].

After some time, the sub power turns off.

- **9.** Turn off the main power switch.
- 10. Remove the drain bottle and discard the discharged fluid.

#### IMPORTANT

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

#### **Preparing to Move the Machine**

Doing so may cause fire.

 $\triangle$  CAUTION To store discharged fluid temporarily, place it in the included drain bottle or in a du-

rable sealed container such as a metal can or polyethylene tank, and cap the con-

tainer tightly.

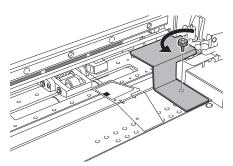
Any spillage or vapor leakage may cause fire, odor, or physical distress.

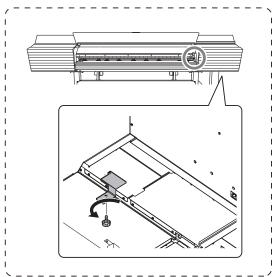
11. Re-attach the emptied drain bottle.

### Step 4: Securing the Print Heads in Place Using the Retainer

#### Procedure

 $\textbf{1.} \ \ \textbf{Use the retainer that was attached to the bottom of the machine during its installation}.$ 



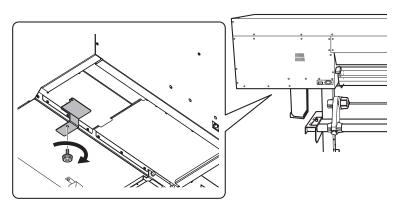


#### **Step 5: Reinstalling the Machine**

#### **Procedure**

- 1. Once the preparations are complete, move the machine with as little delay as possible.
- 2. Reinstall the printer immediately, and then remove the retainer securing the print heads in place.

For storage, attach the retainer in the position indicated in the figure.



3. Turn on the main power switch.

#### **IMPORTANT**

To prevent the print heads from being damaged, move the machine with as little delay as possible and switch on the main power as soon as possible after moving the machine. To install the machine again, follow the procedure in the Setup Guide.

**4.** Press the sub power button.

The screen shown below appears, and then the machine is filled with TR2 cleaning liquid. The (approximate) remaining time for the procedure is displayed on the screen. (The display shown below is an example. "01:40" = "1 minute and 40 seconds")

FILLI	NG L	IQUID
>>>>	+	01:40

#### MEMO

If the cleaning liquid pouch is empty, or is not attached, the following screen will be displayed. Install a cleaning liquid pouch and press [ENTER].

Once the machine is filled with TR2 cleaning liquid, the following screen is displayed and the power turns on.



#### **MEMO**

After the printer is reinstalled, the media holder adjuster must be adjusted by a suitably qualified worker. This work must be performed by a Roland DG worker. Contact your authorized Roland DG Corporation dealer.

#### **RELATED LINKS -**

• P. 58 "TR2 Cleaning Liquid Pouch Replacement"

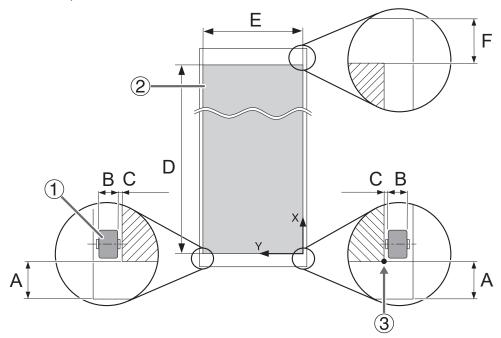
# 2. Main Specifications

Printing/Cutting Area	314
Maximum Area	
Maximum Printing Area When Using Crop Marks	31!
Media Separation Location during Continuous Printing	310
About the Blade	31

# **Printing/Cutting Area**

#### **Maximum Area**

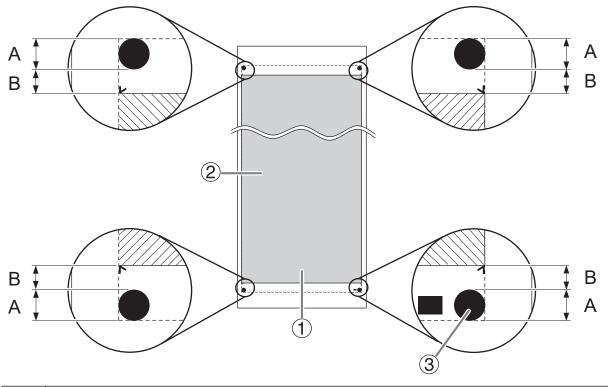
The printing or cutting area along the horizontal plane (the direction in which the carriages move) is determined by the position of the pinch rollers.



1	Pinch roller
2	Printing or cutting area
3	Printing or cutting coordinates origin (0,0)
Α	75 mm (3 in.)
В	10 mm (0.4 in.)
С	1.5 mm (0.06 in.)
D	Max. 24,998 mm (984.2 in.)
Е	64-inch model: Max. 1,600 mm (63 in.) (54-inch model) Max. 1,346 mm (53 in.)
F	105 mm (4.13 in.)

### **Maximum Printing Area When Using Crop Marks**

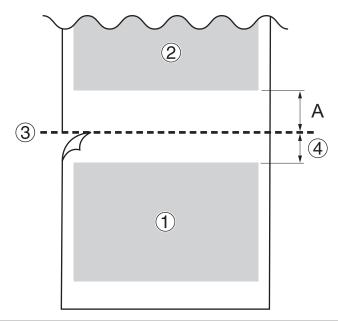
The maximum printing area when crop marks are used is reduced from the maximum printing area when crop marks are not used by an amount equal to the crop marks.



1	Maximum printing area
2	Printing area
3	Crop mark
А	12.5 mm (0.5 in.)
В	10 mm (0.4 in.)

#### **Media Separation Location during Continuous Printing**

When a command for separating the media is sent from the computer, the separation location on the media is as shown in the figure below.



1	First page
2	Second page
3	Separation location
4	Margin (software RIP value)
Α	75 mm (3 in.)

# **About the Blade**

The cutting conditions and the service life of the blade change according to the media and the operating environment, even when you're using identical blades. The service life also differs according to the type of blade. A rough guide is shown below.

Blade	Media	Blade force	Amount of blade offset (amount of blade tip cor- rection)	Blade life (general guide) <sup>*1</sup>
ZEC-U1005	General Signage Vinyl	50 to 150 gf	0.25 mm (0.01 in.)	8,000 mm (26,246.7 ft.)
	General Signage Vinyl	30 to 100 gf	0.25 mm (0.01 in.)	4,000 mm (13,123.4 ft.)
ZEC-U5025	Fluorescent Vinyl	120 to 200 gf	0.25 mm (0.01 in.)	4,000 mm (13,123.4 ft.)
	Fluorescent Vinyl	100 to 200 gf	0.25 mm (0.01 in.)	4,000 mm (13,123.4 ft.)

<sup>\*1</sup> The values for "Blade life" are estimates for when an identical type of media is used.

When uncut areas remain even when the blade force is increased to a value that is higher than the values shown in this chart by 50 to 60 gf, replace the blade.

# 3. MEMO

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URL:https://www.rolanddg.com/gpl/

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