

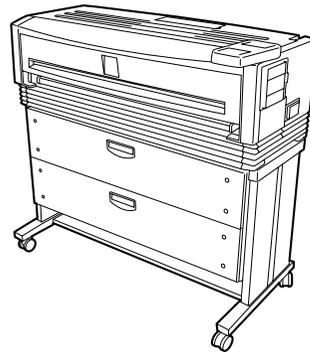


Quick Reference Guide

Black-and-White Raster Plotter

LP-1020

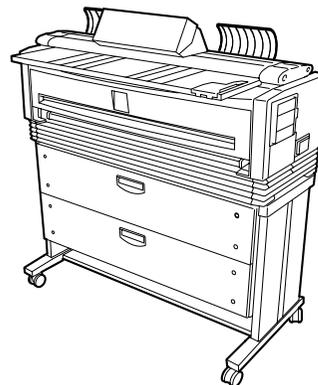
LP-1020L



Network Multi Function Plotter

LP-1020-MF

LP-1020L-MF



Introduction

Thank you for purchasing our LP-1020/LP-1020L Black-and-white Raster Plotter and LP-1020-MF/LP-1020L-MF Network Multi-Function Plotter.

This manual explains the basic operations of LP-1020/LP-1020L and LP-1020-MF/LP-1020L-MF. For details, refer to the respective PDF data saved in CD-ROM.

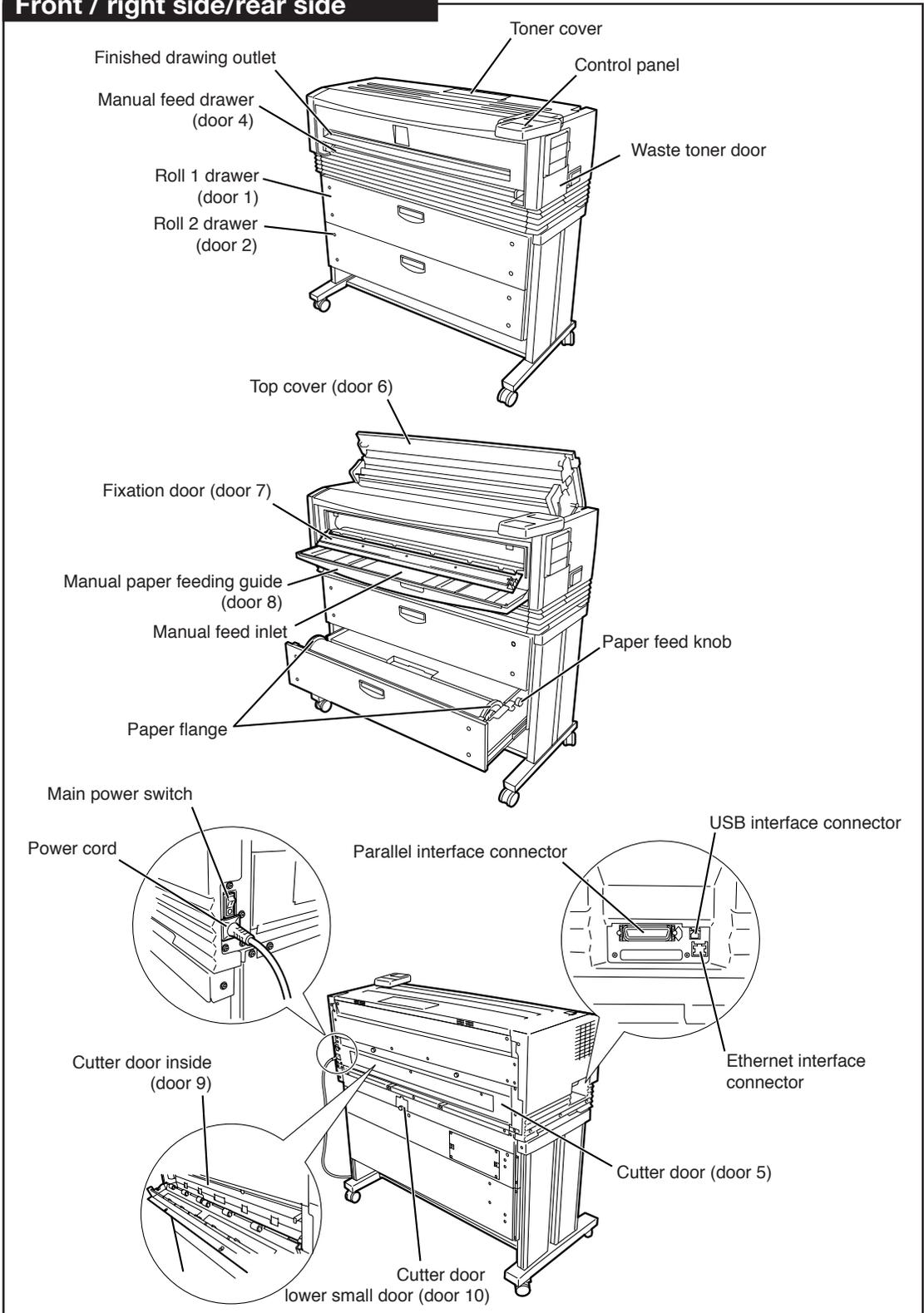
The DSCAN format described in this manual as well as DSCAN that appears on the operation display are for only customers in Japan.

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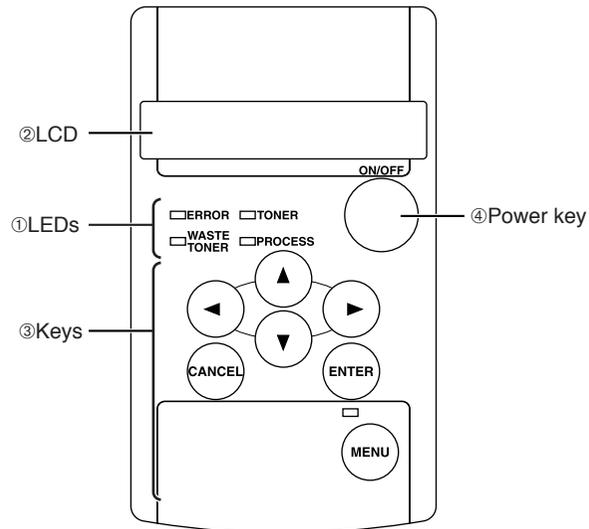
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● Names and functions of each part LP-1020/LP-1020L

Front / right side/rear side



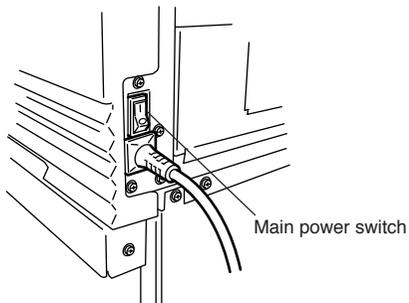
Control panel



Number	Name	Function
①LED's	Error lamp (red)	Indicates the presence or absence of errors. On: Error present Off: No error present
	Toner lamp (green)	Indicates the amount of remaining toner. On: There is sufficient toner. Flashing: Toner is running low. Off: There is no toner (plots cannot be produced without replenishment.)
	Waste toner lamp (green)	Indicates the toner waste bottle replacement time. On: Normal Flashing: Replacement timing is approaching Off: Plots cannot be produced without replacement
	Process lamp (green)	Indicates the process cartridge replacement time. On: Normal Flashing: Replacement time is approaching Off: Process cartridge is not installed.
	Menu lamp (green)	Indicates that this device is ready for setting, receiving data, or printing. On: Setting operations can be performed Off: Ready to receive data and print.
②Display	LCD	Displays a variety of messages in a 20-figure and 2-line display to inform you of the device status.
③Keys	MENU key	Switches the status of the device from setting ready status to data receive and print ready status.
	ENTER key	Inputs the parameters.
	CANCEL key	Cancels parameter input.
	▲ Key	Switches menu items and changes parameters.
	▼ Key	Switches menu items and changes parameters.
	▶ Key	Switches menu items/hierarchy and changes.
◀ Key	Switches menu items/hierarchy and changes.	
④Power	Power key	Turns the device power on and off.

Power on

- 1 Turn on the Main power switch located at the lower-left as seen from the rear of the device.
Press the power switch toward the | symbol (upwards).



- 2 Press the power key located on the control panel of this device (when the main power switch is on).

ON/OFF



INITIALIZING
WAIT A MOMENT

When you first turn on the power after purchasing this device, a guidance display prompts you to set the panel's display language. If this setting has already been completed, this message is omitted.

A "PRINT READY" message indicates that the device is functioning normally.

PRINT READY

Power off

When turning the power off, confirm that the device is in the data receive standby mode.

- 1 Press the Power key on the control panel for about 1 second.

Release the key when the display reads "SHUTTING DOWN."

When a job is present, it is automatically saved and will be printable the next time you turn the power on. (Only when HDD is installed)

Note

- ◆ Even when "SHUTTING DOWN" appears, the power will not turn off until you release the power key.

ON/OFF



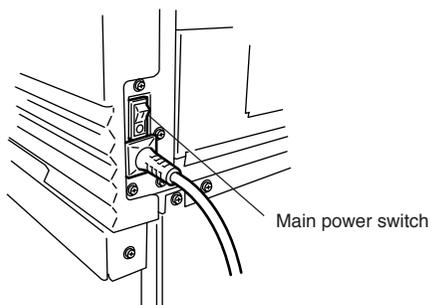
SHUTDOWN
WAIT A MOMENT

This indicates that the device is executing a shut down.

When the shut down process has been completed, the power will turn off.

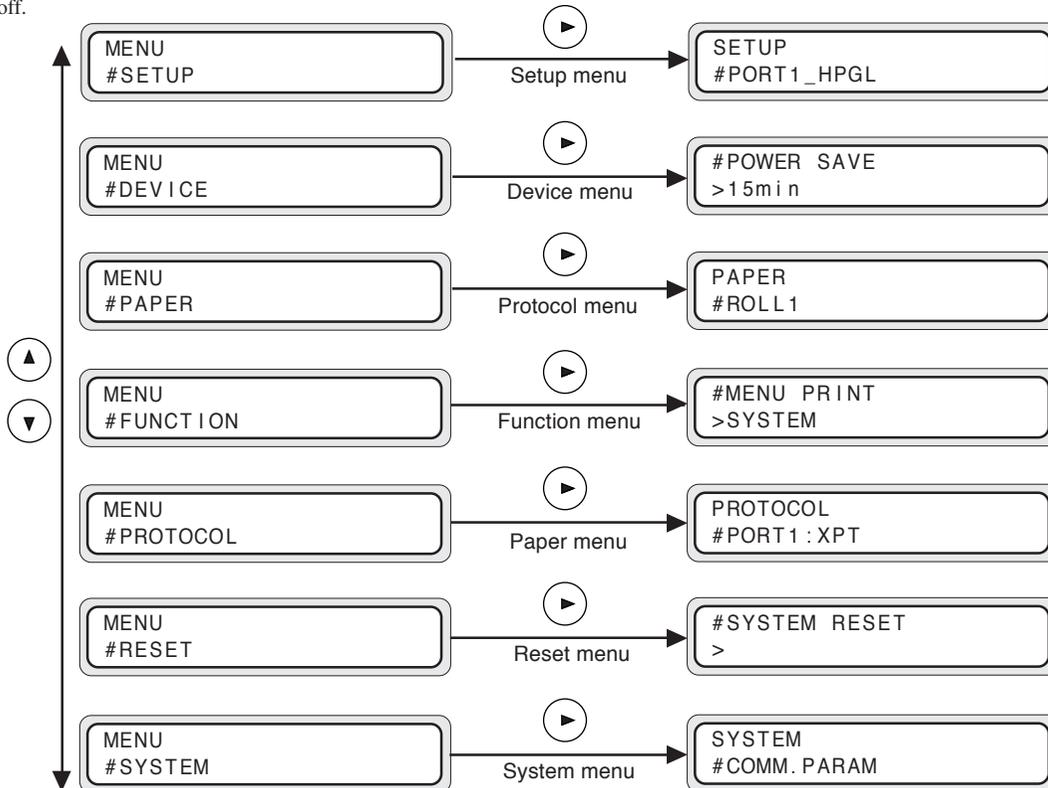
- 2 Turn the main power off when you are not using this device for an extended period of time.

Press the power switch toward the ○ symbol (downwards).



Menu structure

Press **MENU** to set the device offline before performing setting operations. Select a menu using the **▲**, **▼** keys and press the **▶** key to enter each menu. Changed parameters are saved in non-volatile memory and are not lost when the power is turned off.



Note

- ◆ When using our company's printer driver, the printer parameters set for this device are disabled and printing is performed in accordance with the print parameters set for the print driver (printing in accord with the print driver settings). If you wish to enable the PDL menu print parameters using our company's print driver, see Chapter 3 in "User's Guide."

Items which you can set

Menu	Item	Functions
Setup	PORT n_HPGL	Sets the PDL table parameter settings for Ethernet port n. Performs the settings relating to HPGL format printing.
	PORT n_DSCAN	Sets the PDL table parameter settings for Ethernet port n. Performs the settings relating to DSCAN format printing.
	PORT n_TIFF	Sets PDL table parameter settings for Ethernet port n. Perform the settings relating to TIFF format printing.
	PORT n_CALS	Sets PDL table parameter settings for Ethernet port n. Performs the settings relating to CALS format printing.

Menu	Item	Function
Device	POWER SAVE	Sets the time until the device enters the power saving mode.
	EDGE CUT TIMER	Sets the data standby time to automatically have the paper roll end cut before plotting using data received after a data standby status has continued for a while.
	DOOR OPEN CUT	To plot the first data after the roll door is opened and closed, sets whether to start plotting after the end of the roll paper is automatically cut.
	DENSITY	Adjusts the printing density.
	TRACE PAP. MODE	Sets the tracing paper printing mode.
	BOTTLE MAINT.	Sets whether the maintenance of waste toner bottle starts automatically or manually.
Paper	ROLLn	Specifies the paper type and series.
Function	MENU PRINT	Prints the status of consumables, device information, and panel settings.
	HPGL SELF PLOT	Outputs the drawing for the data format (HPGL) built in this device.
	DSCAN SELF PLOT	Outputs the drawing for the data format (DSCAN) built in this device.
	ERROR LOG	Prints error log information.
	JOB LOG	Prints job log information.
	ENGINE LOG	Prints detailed information for the engine.
	SYSTEM DATE	Sets the date (year, month, day).
	SYSTEM TIME	Sets the time (hour, minutes, seconds).
	INIT CHARG. INF	Initializes accounting information.
	PRINT CHARG. INF	Prints accounting information.
	MAINT. INFO	Prints maintenance information.
	DATA DUMP	Outputs a portion of the plotting data in hexadecimal digit onto paper.
Protocol	PORTn : xxx	The Ethernet port PDL selection and protocol name are set here. N indicates the port number, xxx indicates the Ethernet protocol type. Up to 10 ports may be specified. To set the protocol name, XPT sets the XPT port, LPD sets the printer name, and FTP sets the user name.
	PARALLEL	Performs the PDL selection for the parallel channel.
Reset	SYSTEM RESET	System reset Initializes the device to the same status as when the device power is turned on.
	PORT RESET	Ethernet port reset Resets the communication for the selected logical port.
System	COMM. PARAM	Sets the communication parameters.
	WEB LOCK	Sets whether to allow setup privileges from the web browser to User administrator and above.
	ENABLE SERIES	Sets the media series to be used in this device.
	APPLY ROLL	Sets the roll sizes for each media series you use in this device.
	CHINA SIZE	Sets the roll sizes to be used in China in this device.
	INITIAL SET	Sets all parameter settings to their initial values.
	LANGUAGE	Switches the language on the LCD message display.
	LENGTH UNITS	Switches the length unit (millimeter or inch).
ADMIN PASSWORD	Specifies the administrator password. This password prevents the settings of the plotter from being changed.	

Replacing paper rolls

Detach and replace a paper roll when the device has run out of paper rolls or when you change the paper roll size on type. When the paper is used up during printing, the Error lamp will turn on and the LCD will display the following message:

Example:

SET PAPER
A0

Note

- ◆ The display may be automatically switched to the paper menu when the paper roll is reloaded. In such a case, set the type and series and of the paper roll.

◆ Precautions during replacement

⚠ Caution

- ◆ The rolls are heavy so be careful not to hurt yourself by dropping them while you are replacing the rolls.
- ◆ When attaching the rolls, use a cutter to cut the end of the paper roll. While doing this, take care not to cut yourself or damage the device.
- ◆ When opening and closing the paper roll drawers, take care not to get your hands caught in the drawer.
Do not open other paper roll drawers while one paper roll drawer is open. Doing so will increase your chances of getting your hands caught in the drawers.

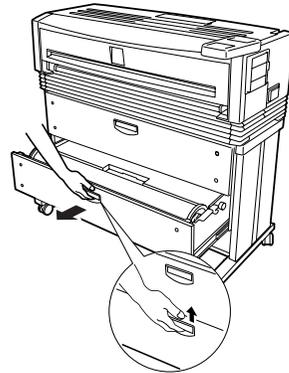
Note

- ◆ If you change the paper type, you must also change the device settings accordingly.
⇒Page 5
- ◆ Use media types specified by our company.
If you use media types which are not specified by our company, we cannot assure printing quality.
- ◆ Store the paper in a cool, dark location with low humidity.

◆ How to detach the paper rolls

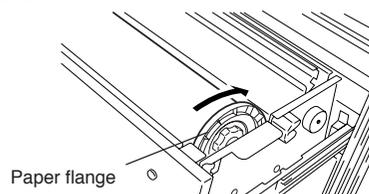
1 Pull out the Roll 1 or Roll 2 drawer.

Use your fingers to grasp the handle in the center of the drawer and pull the drawer out gently. (The diagram indicates a case where the Roll 2 drawer is opened.)



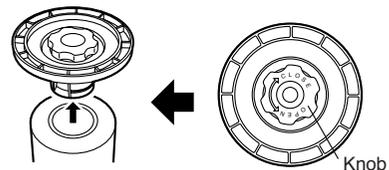
2 Rewind the paper roll and then remove it.

Turn the paper flange in the direction indicated in the diagram and continue to rewind the roll until you see the end of roll. Lift up the paper flange and remove the paper roll.



3 Remove the paper flange and take out the paper roll.

Loosen the paper flange by turning the knobs in the "OPEN" direction and remove both ends of the paper flange.



Note

- ◆ Take care not to use excessive force when you turn the paper flange knobs. The flange ends may come off.

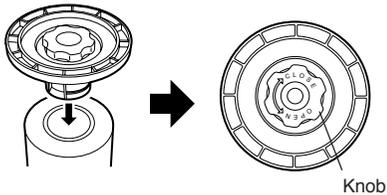
◆ How to attach the paper roll



◆ The paper flange ends do not have a designated right or left side. You can attach them to either side.

1 Attach the paper flange to a paper roll.

Push in the paper flange ends until they contact the paper roll tube, then secure the flange ends by turning the knob in the "CLOSE" direction.

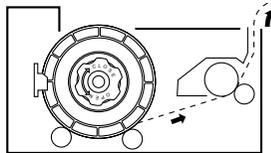
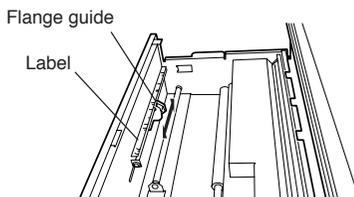


Note

◆ If the paper flange knobs are loosely fitted, the paper roll will move adversely to the right and left and negatively affect the drawing. Make sure that the knobs are tightened securely.

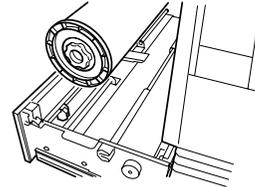
2 Move the flange guide.

The label which is affixed to the inside of the drawer indicates the flange positions for different roll widths. Move the flange guide to match the paper roll size you are using.



3 Load the paper into the drawer.

Hold the paper roll so that the end of the paper is positioned at the bottom facing the back of the device. Then align the paper flange to the depressions in the flange guide and gently insert the flange in place.

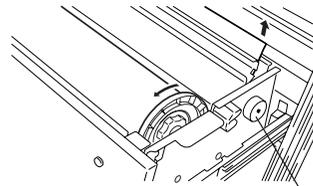


Note

◆ Take care not to drop the paper roll while performing these activities.

4 Insert the end of the paper roll into the paper feed inlet of the device.

Turn the paper flange and insert the end of the paper roll so that it is straight. Turn the paper feed knob so that the end of the paper roll projects about 10 cm.



Paper feed knob

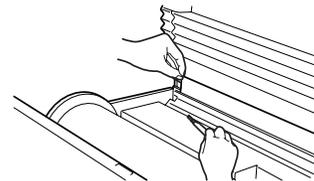
5 Cut the end of the paper.

While holding the end of the paper roll, cut it off with the cutter.

The "Paper cutter position" label is affixed to both ends of the space where the cutter blade should be inserted. Insert the cutter blade into the space beneath where the label arrow is pointing. Slide the cutter blade along the space and cut the paper.



◆ The paper can be cut cleanly when the cutter is inserted in a perfectly sideways direction.



Caution

- ◆ Take care not to hurt yourself and damage the device when handling the cutter.
- ◆ Handle the cutter blade with care so that you do not break it.
- ◆ When sliding the cutter along the space, take care not to cut the back of your hand on the sides of the paper tray.

Note

- ◆ After closing the paper roll drawer, wait until the "WAIT A MOMENT" message disappears before opening the paper roll drawer again. As the device initiates a paper detection just after the paper roll drawer is closed, so opening the paper roll drawer during this operation may cause a paper jam.

6 Close the paper roll drawer.

Gently push in the Roll 1 or Roll 2 drawer. When the paper roll drawer is closed, the following message appears.

WAIT A MOMENT

(It will take about 30 seconds until paper feeding is ready.)

After the replacement, the device will return to the status before the paper roll was replaced.

Note

- ◆ If you change the type of paper roll, you must change the setting of the paper menu.

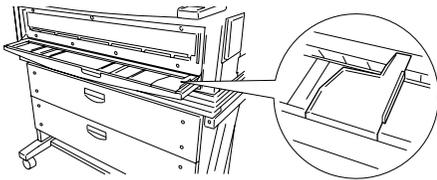
Manual paper feeding (cut paper)

This device offers a manual feeding feature as a service function. As this is a service function, we cannot assure the picture quality and printing accuracy.

◆ Manual feeding procedures

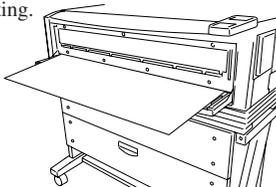
1 Adjust the paper guide.

Adjust the paper guide to the position where you will set the cut paper for manual feeding.



2 Set the paper so that the printing surface is face down.

When you insert the paper into the manual paper feed inlet, the paper is drawn in and the paper is ready for printing.



◆ Manual paper feeding procedure

1 Set the paper feeding mode.

When the PDL setup paper feeding mode is set to the continuous or optimum mode, paper should be manually fed only for the drawings for which the data was processed immediately after the paper was fed into the manual paper feeding unit (this function is called "interrupt manual feeding function".)

When the PDL setup paper feeding mode is the manual feeding mode, paper should be always fed from the manual paper feeding unit. If no paper has been fed into the manual paper feeding unit when data is transferred, paper to be used is indicated on the display (this function is called "continuous manual paper feeding function".)

Refer to the User's Guide for details of the paper feeding mode.

2 Load the cut paper.

For cut paper and its setup method, refer to the respective User's Guide.

Paper jam

If a paper jam occurs, the ERROR lamp lights and the following error message appears on the LCD.

```
OPEN DOOR 9, 4  
REMOVE PAPER
```

According to the paper jam point, the door number from which the corrective measure starts is displayed (plural numbers may be displayed as shown left).

In case of a paper jam, open the door of the displayed door number, and take a corrective measure.

Error messages

◆Operator call

For this error message, the operator can take corrective action. Take measures according to the displayed error message. See Chapter 14 in “User’s Guide” for details.

However, if the same symptom recurs frequently, please contact your dealer or our service center.

```
SETUP IS WRONG
```

```
DELETE JOB?  
Y=ENTER N=CANCEL
```

```
W xxxxxxxx
```

◆Service call errors

This error message may appear if an unrecoverable hardware or firmware failure occurs in the device.

In this case, you need call a service person to take measures. See Chapter 14 in User’s Guide for details.

If the device does not recover from this error after turning the power off and on, please notify your dealer or our service center of the displayed error message and error condition.

```
E xxxxxxxx
```

Symptom and corrective measure

◆Items to be checked

Symptom	Items to be checked	Corrective measure
No power	Power cable connection	Plug the power cable into the outlet correctly.
	Power supply to the outlet	Supply the power to the outlet.
Failure to start or operate correctly	ERROR lights and LC message display	Take appropriate measures according to the error message. ⇒Chapter 14 in User's Guide
Failure to plot	Interface cable connection	Connect the interface cable correctly.
	ERROR lights and LC message display (See "Note" below)	Take appropriate measures according to the error message. ⇒Chapter 14 in User's Guide
Failure to plot transmitted data immediately	DATA lights (on or flashing?)	Review the time-out setting.
Frequent paper jam	Paper type	Check whether the paper type setting matches the type of the loaded paper. ⇒Chapter 7 in User's Guide Use our recommended paper. ⇒Chapter 1 in User's Guide
	Paper roll	Load the paper correctly. ⇒Chapter 2 in User's Guide
	Check whether there is any foreign material in the paper path	Remove any foreign material. ⇒Chapter 14 in User's Guide

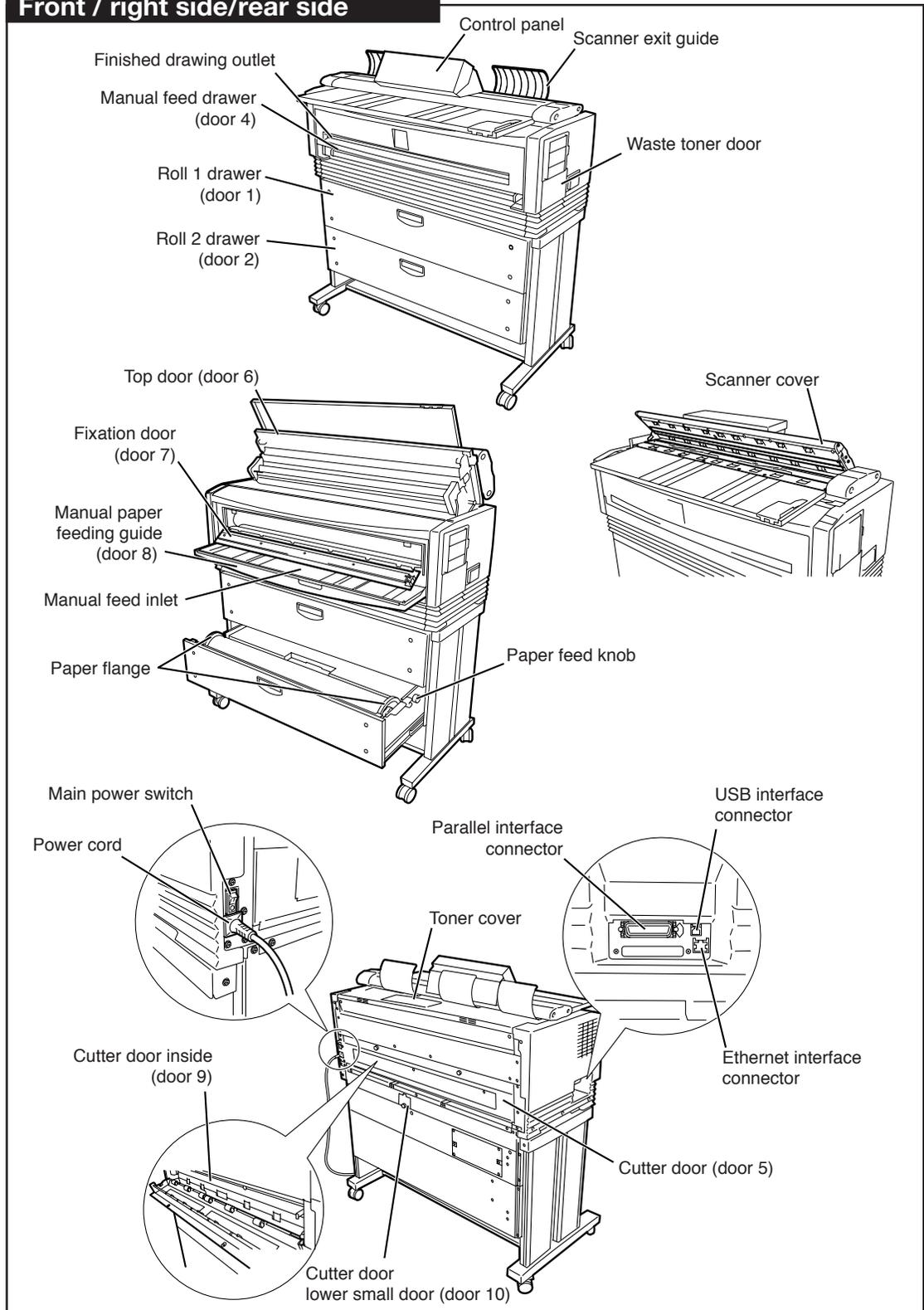
◆Measures to solve print quality problems

Symptom	Cause	Corrective measure
Plotting is light/dark	-----	Adjust the density. ⇒ Chapter 6 in User's Guide
Plotting is locally deleted	The type of loaded paper does not match the type of paper specified on the panel.	Replace the paper, or change the setting. ⇒ Chapter 2 or 7 in User's Guide
	Paper contains moisture.	Cut the end of the rolled paper and retry plotting. ⇒ Chapter 14 in User's Guide
	The recommended paper is not used.	Use our recommended paper. ⇒ Chapter 1 in User's Guide
Plotting is locally streaked	Process cartridge reached its life.	Replace the process cartridge. ⇒ Page 26

Refer to User's Guide for other symptoms and appropriate measures.

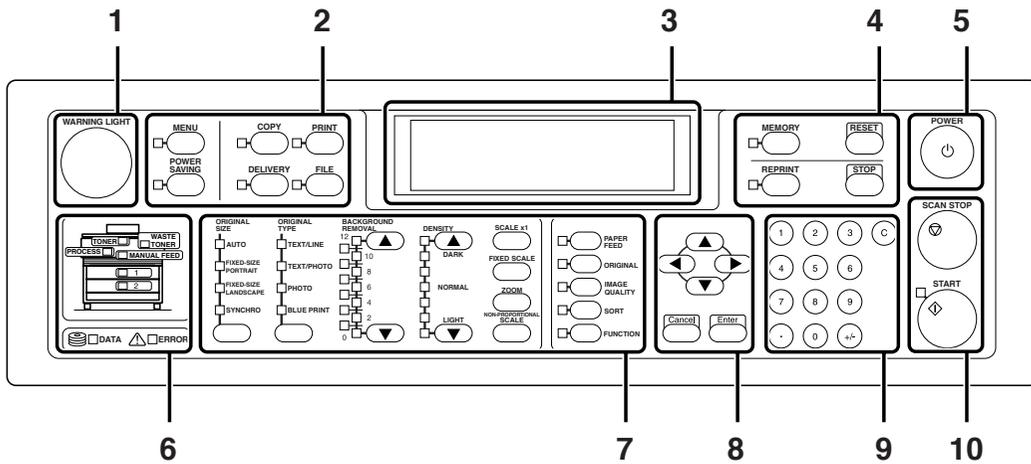
● Names and functions of each part LP-1020-MF/LP-1020L-MF

Front / right side/rear side



2 LP-1020-MF/LP-1020L-MF

Control panel

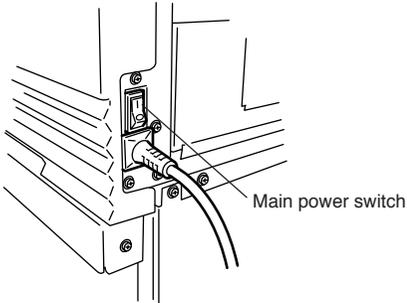


No.	Name	Function
1	WARNING LIGHT	Indicates a print mode or standby status of the device. ON (green): Normal Flashing (orange): An error occurred ON (orange): A warning event occurred OFF: A status other than print mode and standby (OFF also in power saving status)
2	[MENU] key/LED	Switches to the MENU mode for various settings of the device. For details, see Page 4.
	[POWER SAVING] key/LED	Switches to the POWER SAVING mode.
	[COPY] key/LED	Switches to the COPY mode. For details, see Page 15.
	[DELIVERY] key/LED	Switches to the DELIVERY mode. For details, see Page 16.
	[PRINT] key/LED	Switches to the PRINT mode for printing.
6	[TONER] LED	Indicates the amount of remaining toner. On: There is sufficient toner. Flashing: Toner is running low. Off: There is no toner.
	[WASTE TONER] LED	Indicates the toner waste bottle status. On: Normal. Flashing: Replacement time is approaching. (Even after the Waste toner lamp starts flashing, you will be able to produce about 120 m of plots.) Off: Plots cannot be produced without replacement

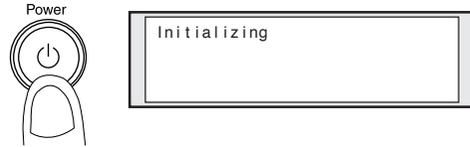
No.	Name	Function
6	[PROCESS] LED	Indicates the process cartridge replacement time. On: Normal. Flashing: Replacement timing is approaching. Off: Process cartridge is not installed.
	[MANUAL FEED] LED	Indicates whether the paper to be fed manually has been set. On: Paper has been set. Off: No paper.
	[1], [2] LEDs	Indicate whether the paper has been set in the roll 1 and roll 2 drawers respectively. On: Paper has been set. Off: No paper.
	[DATA] LED	Indicates the data receiving status. On: A job is waiting for the processing. Flashing: Data are being received. Off: No received data.
	[ERROR] LED	Indicates whether an error exists in the device. On: An error exists. Off: No error.
7	[ORIGINAL SIZE] key	Selects the original size.
	[ORIGINAL TYPE] key	Selects the type of image quality according to the original.
	[REMOVAL] key	Removes the background color.
	[DENSITY] key	Adjusts the copy density.
	[SCALEx1] key	Takes a copy in same size as the original without enlargement or reduction.
	[FIXED SCALE] key	The enlargement or reduction ratio to the same fixed-size series as original can easily be selected.
	[ZOOM] key	Enlarges or reduces the original at same scale in vertical and horizontal directions.
	[NON-PROPORTIONAL SCALE] key	Enlarges or reduces the original at different scale in vertical and horizontal directions.
	[PAPER FEED] key	Makes the paper feed related settings such as paper type, margin, frameless, etc.
	[ORIGINAL] key	Sets the media series of original set in the device.
	[IMAGE QUALITY] key	Sets the image quality according to the ORIGINAL TYPE.
	[FUNCTION] key	Inactive on this device.
8	[Enter] key	Inputs the parameters.
	[▲][▼][◀][▶] key	Switches menu items and changes parameters.
	[Cancel] key	Cancels parameter input.
9	Ten keys	Enter the number of copies or to set values.
10	[SCAN STOP] key	Stops the scanning of original.
	[START] key	Starts the scanning of original in the manual start mode.

Power on

- 1 Turn on the Main power switch located at the lower-left as seen from the rear of the device.**
Press the power switch toward the | symbol (upwards).

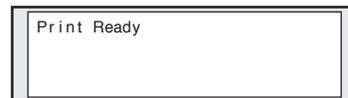


- 2 Press the power key located on the control panel of this device (when the main power switch is on).**



When you first turn on the power after purchasing this device, a guidance display prompts you to set the panel's display language. If this setting has already been completed, this message is omitted.

The message indicates that the device is now online ("Print Ready").



In the "Print Ready" status, press the PRINT key or send data. The PRINT mode will be active and the print will be ready.

Power off

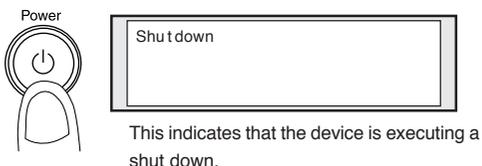
When turning the power off, confirm that the device is in the data receive standby mode.

- 1 Press the Power key on the device panel for about 1 second. Release the key when the display reads "Shutdown."**

When a job is present, it is automatically saved and will be printable the next time you turn the power on. (Only when HDD is installed)

Note

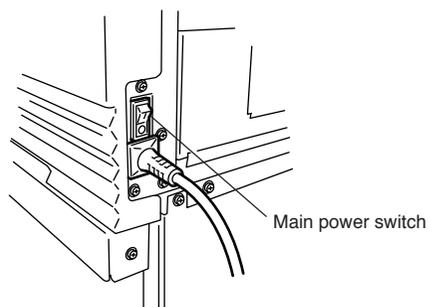
- ◆ Even when "Shutdown" appears, the power will not turn off until you release the power key.



When the shut down process has been completed, the power will turn off.

- 2 Turn the main power off when you are not using this device for an extended period of time.**

Press the power switch toward the ○ symbol (downwards).



PRINT mode

Press the [MENU] key during stand-by or in the PRINT mode and enter OFLINE. The menu message will appear. The setup method and setting items are the same as those of LP-1020/LP-1020L. Refer to page 4.

COPY mode

◆ Copy function overview

Function list	Description
Original Size	Sets the original size.
Original Type	Selects the image type according to the original.
Background Removal	Removes the background color.
Density	Adjusts the copy density.
Scale	Enlarges or reduces the original.
Auto	Reduces the original automatically so that it can be accommodated in the paper.
Paper Location	Selects which paper among the paper loaded into the device is used for copy.
Paper Type	Selects what type of paper is used for copy among those set in the device.
Copy Count	selects the number of copies.
Margin	Sets the margin at the top and bottom edges of an original.
Move	Adjusts the position where an original is copied.
FramErase	Takes a copy by erasing the surrounding of an original.
Original Series	Selects the media series of an original.
Original Reject Direction	Sets the location to which an original is output.
Sharpness	Adjusts the sharpness of outline of an original.
Contrast	Adjusts the contrast of an original.
Mirror	Copies the mirrored original.
Reverse	Copies the reverse original.
Long Original	Copies a long original.
Sort	Sorts multiple originals and copies them.

◆ Basic Operation

1 Select the original size.

Select the original size.

2 Select the original type.

Select what image type the original is.

3 Adjust the background.

Adjust the background color if the original has uneven density.

4 Adjust the density.

Adjust the copy density.

5 Set the scale.

Set the scale if the original is enlarged or reduced.

6 Select the location of paper feed.

Select which paper loaded into the device is to be used for printing.
(For details, see "User's Guide, Copy Part.")

7 Enter the number of copies.

8 Input the original.

Input the original to the device.

9 Press the [START] key.

Press the [START] key.
If the SCAN START has been set to the ORIGINAL SET in the system menu, the copy/delivery starts automatically without pressing the [START] key.
(For details, see "User's Guide, Plotter Unit.")
See "User's Guide, Copy part" for the copy operation.

■ Manual feed copy

1 through 5

Perform the procedures described above.

6 Load the paper onto the manual paper feeding holder.

Open the manual paper feeding holder, and load the paper.

7 Set the location of paper feed to "MANUALS."

Set so that the original can be copied on the paper set on the manual paper feeding holder of the device. (For details, see "User's Guide, Plotter Unit.")

8 through 9

Perform the procedures described above.

DELIVERY mode

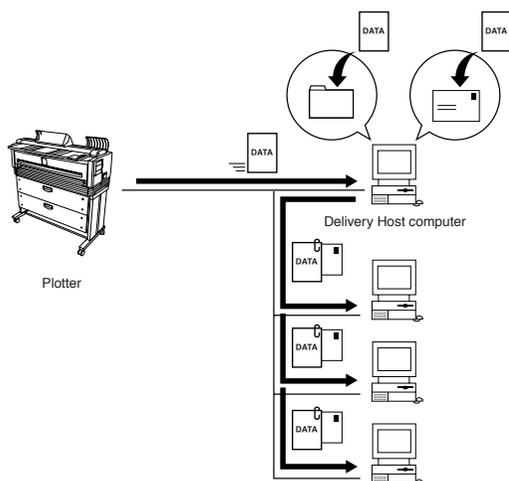
◆ Delivery function

In the DELIVERY mode of the device, the scanned data can be saved in the delivery host computer connected via network, or the data can be transferred to other computers on the same network. To use the delivery function, plotshare must be installed beforehand in the delivery host computer used and various settings must be made with this application software.

Exclusive application:

• TeriostarDelivery (standard application attached)

This application provides the function that saves the image data transferred from the device in the designated folder in the delivery host computer.



◆ Delivery function overview

Function list	Description
Original Size	Sets the original size.
Original Type	Selects the image type according to the original.
Background Removal	Removes the background color.
Density	Adjusts the scanning density.
Original Series	Selects the media series of an original.
Original Eject Direction	Sets the location from which an original eject.
Sharpness	Adjusts the sharpness of outline of an original.
Contrast	Adjusts the contrast of an original.
Reverse	Copies the reverse original.
Resolution	Selects the resolution of scanning.
File transfer	Selects a transfer method of the scanned image.

For details, see Chapter 3 in "User's Guide, Copy part."

◆ Basic Operation

1 Obtain the delivery list.

Obtain the delivery list from the delivery host computer. For details, refer to the respective "User's Guide, Copy part."

2 Select the original size.

Select the original size.

3 Select the original type.

Select what image type the original is.

4 Adjust the background.

Adjust the background color if the original has uneven density.

5 Adjust the density.

Adjust the copy density.

6 Input the original.

Input the original to the device.

7 Press the [START] key.

Press the [START] key.

If the SCAN START or ORIGINAL SET has been set in the system menu, the copy/delivery starts automatically without pressing the [START] key.

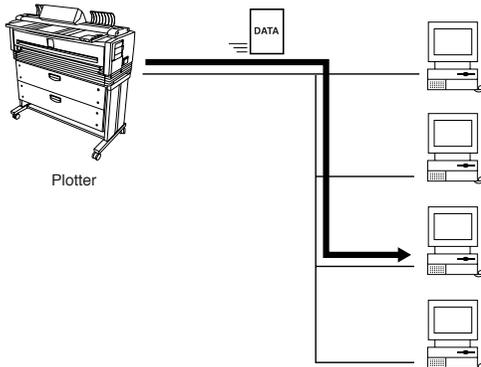
(For details, see “User’s Guide, Plotter Unit.”)

See “User’s Guide, Copy part” for the delivery operation.

FILE mode

◆File Function

Change the mode of the device to “FILE,” and the original data is read from a computer connected via network. To use this function, the exclusive application PlotShareOneDX (standard application attached) is installed in advance in the computer connected via network and one of the functions of that application “ScanToFile” is used.



◆Screens of file function

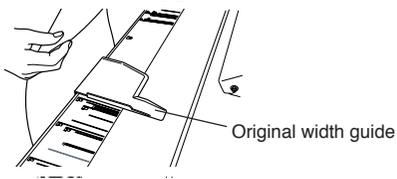
The file function is ensured via a network-connected computer. For details, refer to the User’s Guide for Application Side.

● How to input an original/Routine maintenance LP-1020-MF/LP-1020L-MF

How to input an original

1 Adjust the position of the original width guide.

Adjust the original width guide to the applicable line according to the original size.

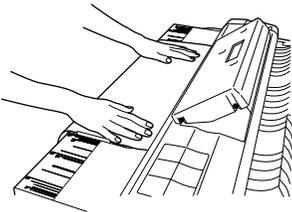


Note

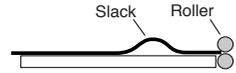
- ◆ This device allows you to select whether the original is returned to the front or the rear of the scanner. In case of front return, the original could be damaged if the original width guide is in its way. Accordingly, move the original width guide to the right end if selecting this option.
- ◆ In this device, the original must be positioned in the center. The non-fixed size original must also be positioned in the center.

2 Input the original.

Input the original facedown along the original width guide. The inserted original is automatically pulled in the device and set in position.



- ◆ **Tip** Butt the original against the front roller and give it a slack, so that the original can be inserted straight.



Note

- ◆ If you selected the front reject of the original, set the original, aligning with correct size line.



- ◆ If a carrier sheet is used, do not select the front outlet of the original. The carrier could get stuck, causing the original to be damaged.

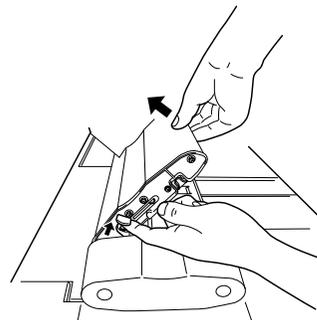
Removing scanner exit guide

◆ Removing scanner exit guide

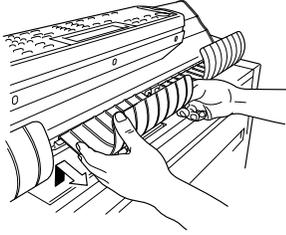
When scanning a long original or rounded original from the rear, remove the scanner exit guide before scanning.

1 Open the scanner cover.

Lift the scanner cover up to its stop position. Pull the stopper towards the arrow direction and raise the scanner cover. The scanner cover will be held.



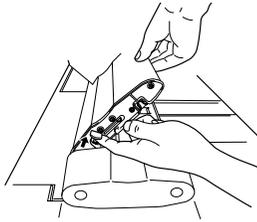
2 Remove the scanner exit guide.



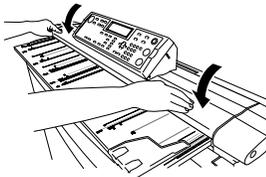
Lift and pull the guide toward the rear to remove.

3 Close the scanner cover.

While supporting the scanner cover with your right hand, release the stopper with your left hand and close the scanner cover slowly.

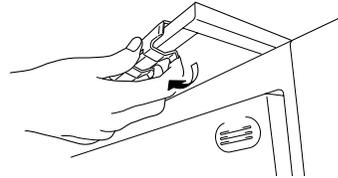


Close the scanner cover completely until it clicks.



◆ Removing original width guide

If the return of the original is changed between front and rear exit frequently, remove the original width guide in advance. Hook your finger on the claw at the bottom and while opening the claw, pull toward you, and the original width guide will be removed.



Note

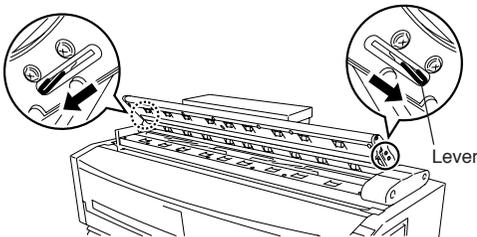
◆ Take care that you pull toward you. Pulling down on the claw could damage the claw.

How to scan originals with a crease

If a creased original is scanned, switch the lever in advance.

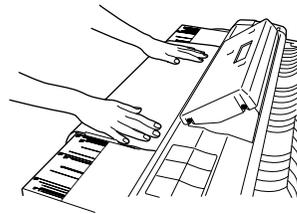
1 Move the lever toward the rear of the device.

Open the scanner cover, and switch each lever on both sides toward the rear.



2 Input the original.

Close the scanner cover, and set the original facedown.



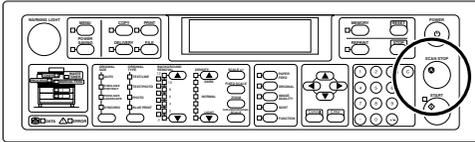
◆ If the shadow of the crease still appears in the scanned output, the shadow may be reduced by reversing the inputting direction of the original.

Cancel the scanning of original

To cancel the scanning because of the feed isn't straight or the original jams, do the following:

1 Press the [SCAN STOP] key

Press the [SCAN STOP] key on the control panel, and the scanning is then stopped.

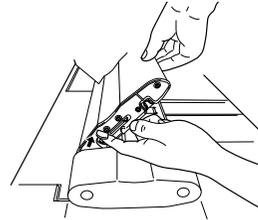


2 Remove the original.

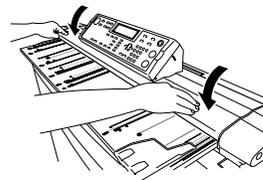
Open the scanner cover and remove the original.

3 Close the scanner cover.

While supporting the scanner cover with your right hand, release the stopper with your left hand and close the scanner cover slowly.



Close the scanner cover completely until it clicks.



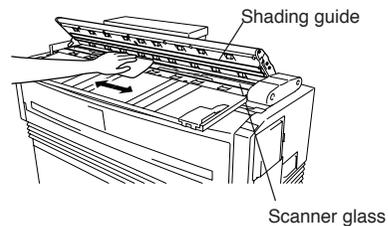
Then, close the scanner cover, and the device will become ready for operation.

Cleaning the scanning area and scanner glass

Note

- ◆ Never use volatile solvents such as thinner, benzene, and alcohol.

Wipe the shading guide and scanner glass with a dry cloth. If extremely dirty, use the cloth dampened with water or neutral detergent diluted with water and then wrung dry.



Replacing paper rolls

Paper roll replacement is the same as that of LP-1020. Refer to page 6.

Copy/scan cannot be performed clearly

Q. Streaks appear in the copy/scan result

- A.**
- **The shading guide or scanner glass is dirty.**
→ Clean the shading guide or scanner glass (⇒ page 20).

Note

- ◆ Copying/scanning the original stained with the toner, ink, or dust makes the inside of scanner dirty. Remove stains on the original before starting the copy/scan.
- ◆ When copying/scanning a long original, be careful that the original does not touch the floor.
- ◆ Use a carrier sheet for copy/scan, if the stains on original cannot be removed completely.

Q. A fold of original appears on the copy/scan result.

- A.**
- **The shadow of a fold is read.**
→ Open the scanner cover and change over the levers on both sides toward the rear and then retry to scan (⇒ page 19).
 - Change the original setting direction (turn 90° and then retry to scan).
 - Set the BACKGROUND REMOVAL to larger value (⇒ User's Guide, Copy part).

Q. Back side of an original is seen through original and copied/scanned.

- A.**
- **In case of a thin original, characters on the back are seen through the original and may be read.**
→ Set the BACKGROUND REMOVAL to larger value (⇒ User's Guide, Copy part).

Q. Dust attaches to background.

- A.**
- **The BACKGROUND REMOVAL is set to smaller value.**
→ Set the BACKGROUND REMOVAL to larger value (⇒ User's Guide, Copy part).
 - **The SHARPNESS setting is too strong.**
→ Reduce the SHARPNESS setting (⇒ User's Guide, Copy part).

Q. Moire occurs.

- A.**
- **When an image processing is executed, regularly-arranged dots and lines overlap, causing the moire.**
→ Change the original setting direction.
→ Reduce the SHARPNESS setting (⇒ User's Guide, Copy part).
 - Change the ORIGINAL TYPE to TEXT/PHOTO (⇒ User's Guide, Copy part).

Q. Blue print cannot be copied clearly.

- A.**
- **For a blue print original with dark background and thin lines, it may not be copied or scanned clearly only by setting the original type to "Blue Print".**
→ Set the contrast adjustment to BRIGHT.
(⇒ User's Guide, Copy part).

Copy/scan cannot be performed satisfactorily

Q. Original jammed and copy/scan failed.

- A.**
- **A folded original or strongly curled original causes a paper jam.**
→ Change the original setting direction.
→ Use a carrier sheet.

Refer to User's Guide for other symptoms and appropriate measures.

Maintenance

Panel messages used in this manual refer to those used in LP-1020/LP-1020L.
Kanji is also used in LP-1020-MF/LP-1020L-MF to improve the ease of reading messages.

Replacing the toner cartridge

When there is no more toner available, the Toner lamp will go out, the Error lamp will come on, and plotting will no longer be possible. The following message appears on the LCD.

Set Toner Cartridge
Open Lever

If the Toner lamp starts flashing or The ERROR message appears, replace the toner according to the procedures indicated below.



Tips

- ◆ When you open the toner door, you will find a "Toner replacement" label affixed to the inside surface. Refer to this when replacing toner.
- ◆ After the Toner lamp starts flashing, approximately 50 m of plots can be produced at normal size and density.

Note

- ◆ If plots with a high printing rate—such as drawings containing many solid print areas and inversed (black and white inverted) drawings—are printed just before the toner runs out, the toner may be used up and the device may be damaged.

To avoid such a case, refill toner as soon as possible when the toner lamp is flashing.

Precautions on handling



Warning

- ◆ Do not throw empty toner cartridges into fire. Doing so may cause accident and fire. Put the waste cartridge into the wrapping contained in the toner cartridge package and dispose of it as non-burnable garbage.



Caution

- ◆ Do not drop and tap the toner cartridge with force. Doing so may cause the toner to leak from the cartridge.
- ◆ Do not directly touch the toner. If the toner gets on your skin or clothing, quickly wash it off with water.
- ◆ Take care not to get toner in your eyes or breathe it in. If the toner gets in your eyes, wash your eyes out with lots of water and consult your physician.

Note

- ◆ If you move the toner cartridge from a cold to a warm location, leave it in room temperature for over three hours before using it.
- ◆ After replacing the toner, try to use it up within a six month period. A toner cartridge installed for an extended period of time will degrade the drawing quality.
- ◆ Keep toner cartridges in a cool, dark place.
- ◆ Use only genuine toner cartridges.

Toner replacement procedures

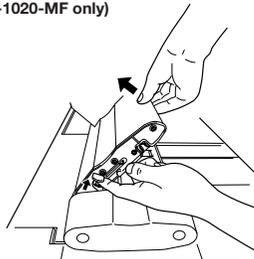
Note

- ◆ Toner should be replaced only when the device power is On. If the toner is replaced while the power is Off, the device will not be able to detect the amount of toner and an error status will not be cancelled even when toner has been replaced correctly.
- ◆ Replace toner after plotting finishes. Replacing the toner during plotting may cause the operation to stop and the plotting data to be lost.

1 Open the scanner cover.

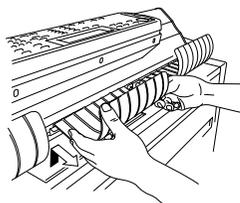
Lift the scanner cover up to its stop position. Pull the stopper towards the arrow direction and raise the scanner cover. The scanner cover will be held.

(for LP-1020-MF only)



2 Remove the scanner exit guide.

(for LP-1020-MF only)

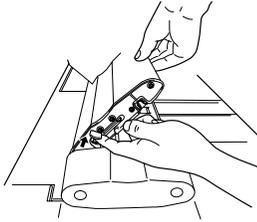


Lift and pull the guide toward the rear to remove while the cover is open.

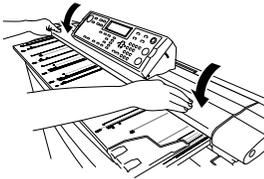
3 Close the scanner cover.

(for LP-1020-MF only)

While supporting the scanner cover with your right hand, release the stopper in the middle with your left hand and close the scanner cover slowly.



Slowly close the scanner cover completely until it clicks.



4 Open the toner cover.



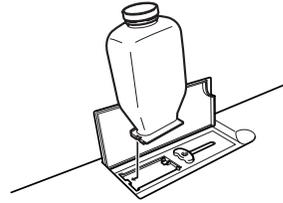
5 Take out the new toner cartridge from the package.

6 Mix the toner by shaking the new toner cartridge.



Shake it strongly up, down, left and right, five or six times.

7 Set the toner cartridge into the main unit.



8 Pull the lever to the right end.



At this time, the following message appears on the LCD. After performing the procedure 9 operation, return the lever and remove the toner cartridge.

CLOSE LEVER
REMOVE CARTRIDGE

If the above message does not appear, check to see that the lever has been pulled up to the right end.

9 Tap the cartridge to allow toner to drop down.



10 Return the lever to the left.



11 Remove the toner cartridge and close the cover.

At this time, the following message appears on the LCD.

WAIT A MOMENT

12 Close the scanner cover and attach the scanner exit guide.

(for LP-1020-MF only)

Follow procedures ① to ③ and attach the original reject guide.

Replacing the waste toner bottle

When the waste bottle becomes full with waste toner, the Waste toner lamp will go out. The Error lamp will turn on and plotting will not be possible. The following message appears on the LCD.

CHANGE
WASTE BOTTLE

If the Waste toner lamp starts flashing or goes out, replace the waste bottle in accordance with the procedures outlined below.

- ◆ A “Waste bottle replacement” label is affixed to the side of the waste toner bottle. Refer to this when replacing the waste bottle.
- ◆ Even after the Waste toner lamp starts flashing, you should be able to produce about 120 m of plots.

◆Precautions during replacement

⚠ Warning

Do not throw waste bottles containing waste toner into fire. Doing so may cause an accident and fire.
Dispose of waste bottles as non-burnable garbage.

⚠ Caution

- ◆ Do not drop and hit waste bottles containing waste toner. Doing so may cause toner to leak.
- ◆ Take care not to directly contact the waste toner. If the toner gets on your skin or clothing, quickly wash it out with water.
- ◆ Take care not to get the waste toner into your eyes or breathe it in. If waste toner gets into your eyes, wash your eyes out with plenty of water and consult a physician.

Note

- ◆ Replace the waste bottle after plotting has been completed.
If replacement is attempted during plotting, the plotting data may be lost.
- ◆ The toner inside the waste bottle cannot be re-used.

◆Waste toner bottle replacement procedures

1 Take out a new waste toner bottle from its package and remove the cap.

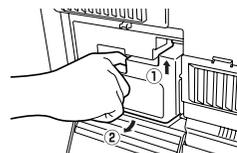
- ◆ This cap should be used to cover the waste toner bottle which you are removing, so keep it at hand. ⇒ procedure ④.

2 Open the waste toner bottle door.

The waste bottle door is located at the right side of the device.

3 Remove the waste toner bottle from the main unit.

- ①Lift up the waste bottle,
- ②Remove it by pulling it out from the bottom end toward you.

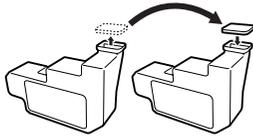


When you have removed the waste toner bottle, the LCD will display the following message.

SET
WASTE BOTTLE

4 Attach the cap to the waste toner bottle.

Attach the cap which you have removed in procedure ① to the waste bottle containing waste toner.



New bottle Bottle containing waste toner

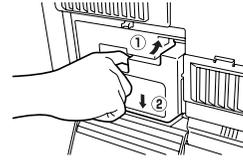
Dispose of the waste bottle containing waste toner as non-burnable garbage.

Note

- ◆ Attach the cap securely as it may come off.

5 Attach a new waste toner bottle.

- ① Insert the mouth of the waste toner bottle onto the waste toner discharge port of the main unit by slightly lifting it.
- ② Set it onto the bottom surface and position it so that it is stable.



After the following message appears, the device status will return to the status before the waste bottle was replaced.

WAIT A MOMENT

6 Close the waste door.

Replacing the process cartridge

When the Process cartridge approaches the end of its life, the Process lamp flashes and the following message appears. It is still possible to continue to produce plots in this condition, but you must replace the cartridge soon.

PRINT READY
REPLACE PROCESS

Note

- ◆ Above message may not appear in certain cases.

If a new process cartridge is not installed soon, the Process lamp goes out, Error lamp comes on and plotting becomes impossible. The following error message appears on LCD.

SET
PROCESS CARTRIDGE

When the Process lamp flashes or goes out, follow the procedures indicated below to replace the Process cartridge.

◆Precautions during replacement

⚠ Warning

- ◆ Do not throw the process cartridge into fire. Doing so may cause accident and fire. Dispose of process cartridge as non-burnable garbage.

Note

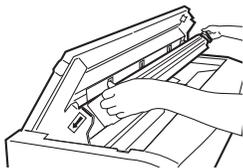
- ◆ Until you are ready to install the Process cartridge, do not unpack it and store it in its cardboard container.
- ◆ Firmly hold the handles on both sides with both hands when handling the Process cartridge.
- ◆ Take care not to scratch the surface of the photoconductor drum during handling.
- ◆ With the exception of the handle area, take care to avoid contacting the surface of the photoconductor drum.
- ◆ Except when you install the Process cartridge into the device body, keep the cover on the Process cartridge to protect the photoconductor drum and to prevent optical deterioration.
- ◆ Some black developing toner may be visible on the photoconductor drum of a new Process cartridge. This is to ensure that the cartridge is kept in a ready-to-use condition at all times, so you may use it as it is. After the cartridge is mounted on the device body, cleaning will automatically start so you need not worry about the liquid affecting printing quality.
- ◆ Since waste toner remains in the used Process cartridge, take care not to shake it strongly, tilt it sharply, or hit it with force as this may cause waste toner to spill out.

◆ Process cartridge replacement procedures

- 1 Turn off the device power and open the top cover.**

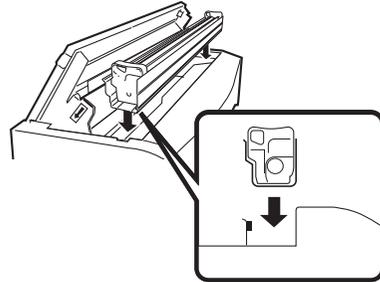
- 2 Take out the Process cartridge.**

Pull the Process cartridge out by holding onto its handles.



- 3 Place a new Process cartridge on the top of the device.**

- ① Remove the Process cartridge from the box together with its protective case.
- ② Place the Process cartridge on the top of the device together with the protective case.

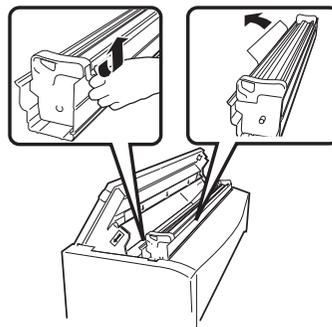


Two types of filters for replacement use are contained in the process cartridge packaging box. Replace the filter after replacing the process cartridge.

- 4 Remove the orange tape.**

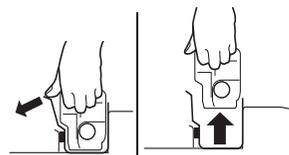
Remove the orange tape affixed to the Process cartridge (4 points).

A sheet is attached to the tape at (2 points) on the inside. Remove the sheet together with the tape.



- 5 Remove the Process cartridge from its protective case.**

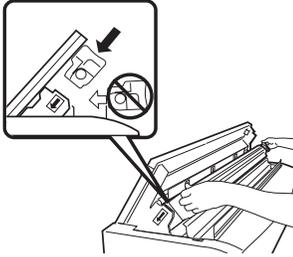
While holding onto the handles, open the protective case while pushing with your thumbs and remove the Process cartridge from the protective case.



6 Insert the Process cartridge.

To insert the Process cartridge, align the Process cartridge with the angle of the open top cover and insert it in the direction of the alignment arrows (three points/ green).

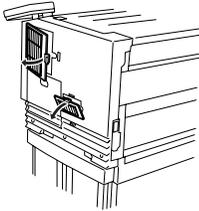
After insertion, remove the protective cover from the top of the cartridge.



7 Close the top cover.

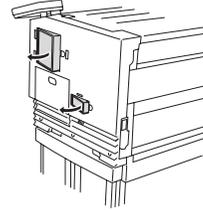
8 Remove the filter cover.

Pull out the filter covers at 2 points on the right side of the main unit as it faces you, and remove them.



9 Replace the filter.

Pull out the filters toward you and remove, and replace with the two filters contained in the process cartridge packaging box.



10 Attach the filter covers and turn ON the device.



Seiko I Infotech Inc.

8, Nakase 1-chome, Mihamaku, Chiba-shi.
Chiba 261-8507, Japan

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This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Durch die Kennzeichnung dieses Produktes mit dem CE-Zeichen erklärt Seiko den folgenden Direktiven der Europäischen Union zu entsprechen (mit Wirkung vom siehe Datum):

Januar 1996:- EG-Direktive 73/23/EEC ergänzt durch EG-Direktive 93/68/EEC, Angleichung der Gesetze der einzelnen Mitgliedsstaaten bezüglich Geräten mit niedriger Betriebsspannung.

Januar 1996:- EG-Direktive 89/336/EEC, Angleichung der Gesetze der einzelnen Mitgliedsstaaten bezüglich elektromagnetischer Kompatibilität.

Den vollständigen Text dieser Erklärung einschließlich der Definition der entsprechenden Direktiven sowie der jeweiligen Standards erhalten Sie von Ihrem Seiko Colorgrafx Systems Kundendienst oder Ihrem Seiko Engineering Systems Kundendienst.

This Perchlorate warning applies ONLY in California USA
"Perchlorate Material - special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate"