BIXOLON®

User's Manual
SRP-770III

Rev. 1.01

http://www.bixolon.com
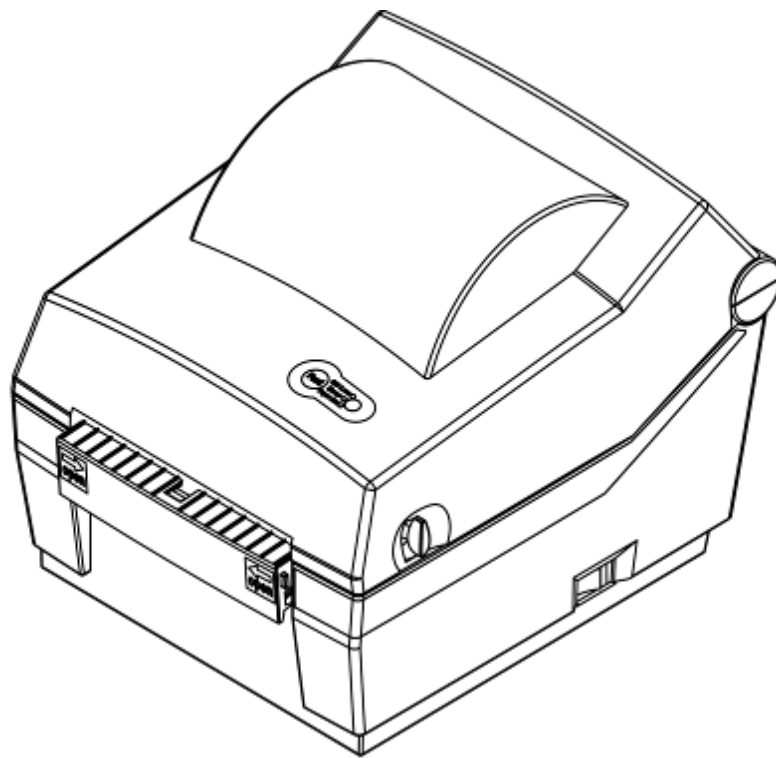
■ Table of Contents

■ Manual Information

This user's guide contains basic information for product usage as well as for emergency measures that may be required.

※ The following separate manuals provide more detailed content on various technological issues and areas.

1. Windows Driver Manual
This manual provides information on the installation instructions and main functions of the Windows Driver.

2. Unified Label Utility-II Manual
This manual provides information on the usage of software for function selection of this product, operating condition modification, etc.

3. Programming (SLCS) Manual
This manual provides information on label printer commands.

4. True Font Downloader Manual
This manual provides information on the usage of the font downloader that can downloade True Fonts and facilitate their usage as Device Fonts.

5. Ethernet interface Manual
This manual provides information on the configuration and usage of Ethernet interface.

6. Label design program Manual
This manual provides information on the usage of the Windows PC program that can make labels by adding text, graphics, or barcodes at desired positions.

We at BIXOLON maintain ongoing efforts to enhance and upgrade the functions and quality of all our products. In following, product specifications and/or user manual content may be changed without prior notice.

■ Safety Precautions

In using the present appliance, please keep the following safety regulations in order to prevent any hazard or material damage.
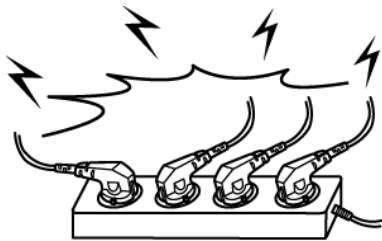
⚠ WARNING

Violating following instructions can cause serious injury or death.

Do not plug several products in one multi-outlet.

• This can provoke over-heating and a fire.
• If the plug is wet or dirty, dry or wipe it before usage.
• If the plug does not fit perfectly with the outlet, do not plug in.
• Be sure to use only standardized multi-outlets.

PROHIBIT

You must use only the supplied adapter.

• It is dangerous to use other adapters.
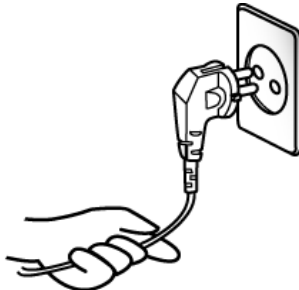
ONLY SUPPLIED ADAPTER

PROHIBIT

Do not pull the cable to unplug.

• This can damage the cable, which is the origin of a fire or a breakdown of the printer.

PROHIBIT

Keep the plastic bag out of children's reach.

• If not, a child may put the bag on his head.

PROHIBIT

Do not plug in or unplug with your hands wet.

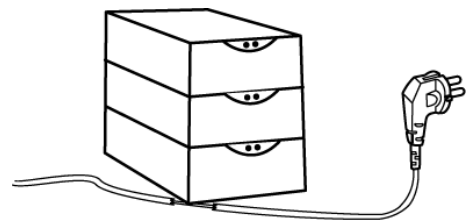• You can be electrocuted.

PROHIBIT

Do not bend the cable by force or leave it under any heavy object.

• A damaged cable can cause a fire.

PROHIBIT

⚠ CAUTION

Violating following instructions can cause slight wound or damage the appliance.

If you observe a strange smoke, odor or noise from the printer, unplug it before taking following measures.
• Switch off the printer and unplug the set from the mains.
• After the disappearance of the smoke, call your dealer to repair it.

TO UNPLUG

PRINTER

Be careful not to get your fingers pinched when opening or closing the paper cover. Also be careful the paper cover does not slip off and drop.
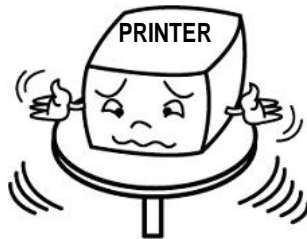
MECHANICAL HAZARD

Install the printer on the stable surface.

• If the printer falls down, it can be broken and you can hurt yourself.
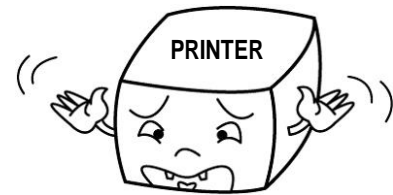
PROHIBIT

PRINTER

Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.

• Call your dealer when you need these services.
• Do not touch the blade of manual cutter.

DISASSEMBLING PROHIBITED

PRINTER

Do not let water or other foreign objects in the printer.

• If this happened, switch off and unplug the printer before calling your dealer.

PROHIBIT

PRINTER

Do not use the printer when it is out of order. This can cause a fire or an electrocution.

• Switch off and unplug the printer before calling your dealer.

TO UNPLUG

PRINTER DEALER

Rev. 1.01

■ Other Precautions

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BIXOLON Co., Ltd. is not legally liable for any damages and/or issues resulting from the use of options and/or parts that are not authentic BIXOLON products or authorized products.
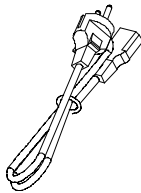
⚠ WARNING
Use of an unprotected interface cable with this printer conflicts with EMC standards.
Users should only use cables approved by BIXOLON.
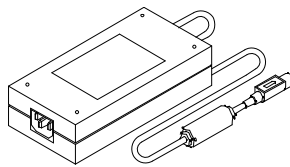
1. Content Confirmation

The following items should all be contained in the printer package.
Contact the dealer from which the purchase was made if any item is damaged and/or missing.
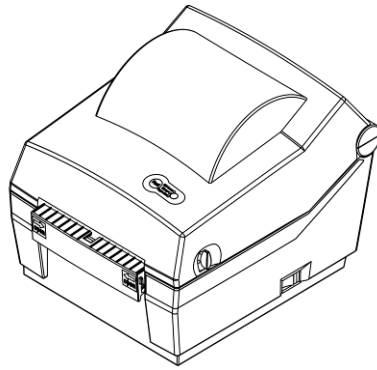
SRP-770III

Power Cord   **AC Adapter**   **Quick Manual**
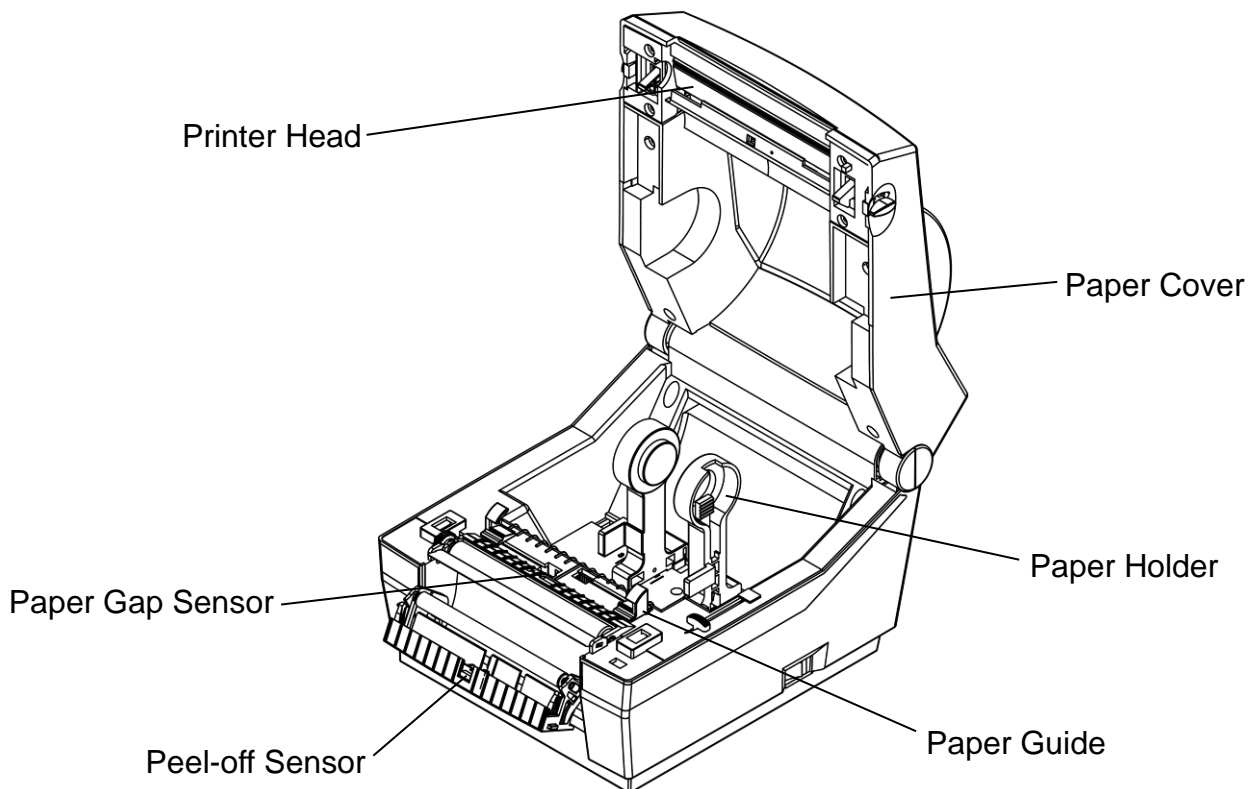
※ **Optional items**

RS-232C(Serial) Cable

IEEE1284(Parallel) Cable

USB Cable

2. Product Part Names

Feed Button

Cover Peel-off

Power Switch

Cover Lever

Printer Head

Paper Cover

Paper Holder

Paper Gap Sensor

Paper Guide

Peel-off Sensor

Fan-Fold

RS-232C (Serial)

Power Jack

IEEE1284 (Parallel)

USB
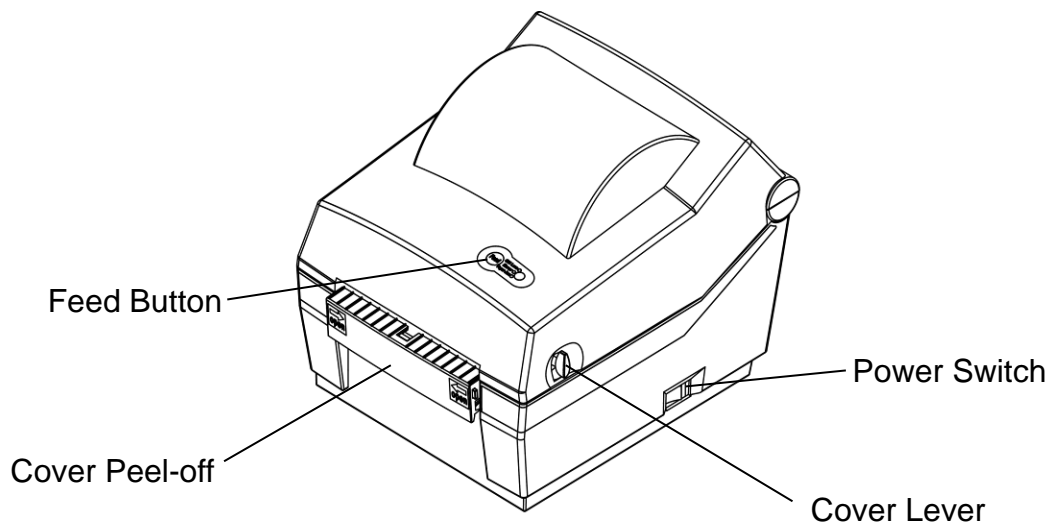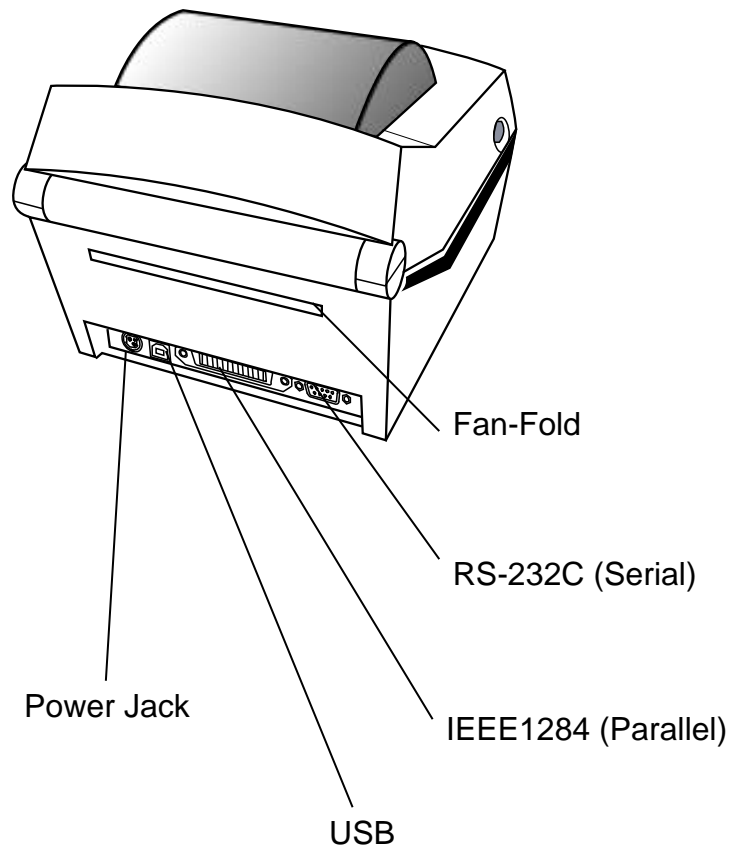
3. Installation & Usage

3-1 Power Connection

Connect power to the printer as shown below.

OFF

Power Switch

AC Adapter
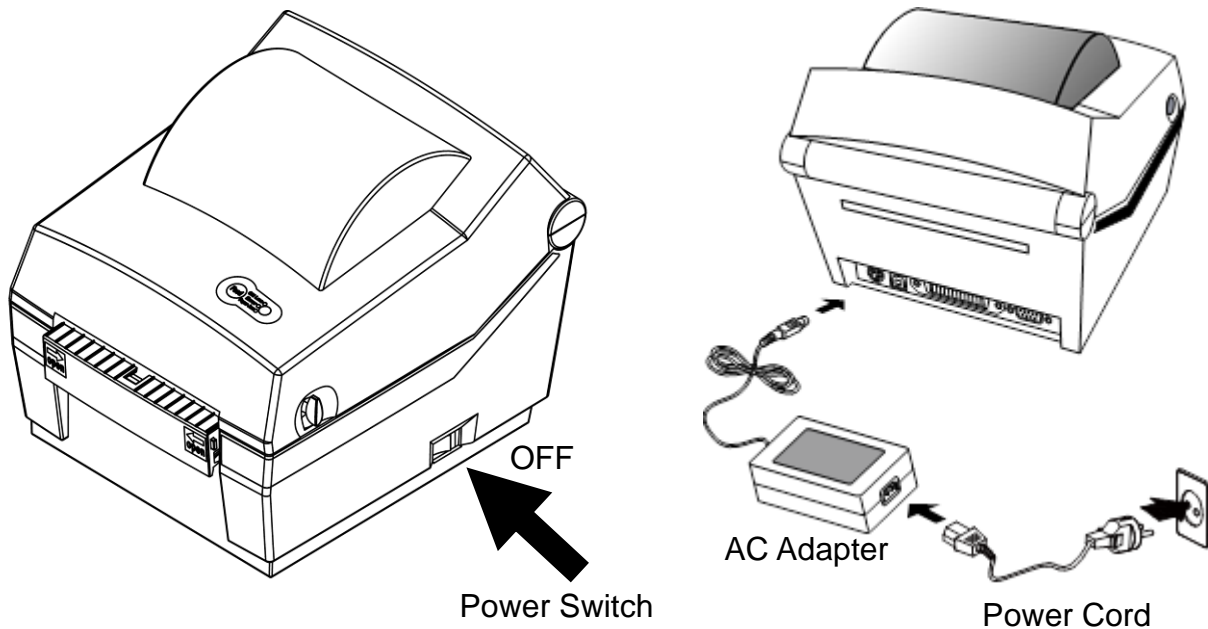
Power Cord

1) Turn off the printer power switch.

2) Check to see that the AC adapter voltage matches that of the power source.

3) Connect the AC adapter jack to the printer power connector.

4) Connect the power cord to the AC adapter.

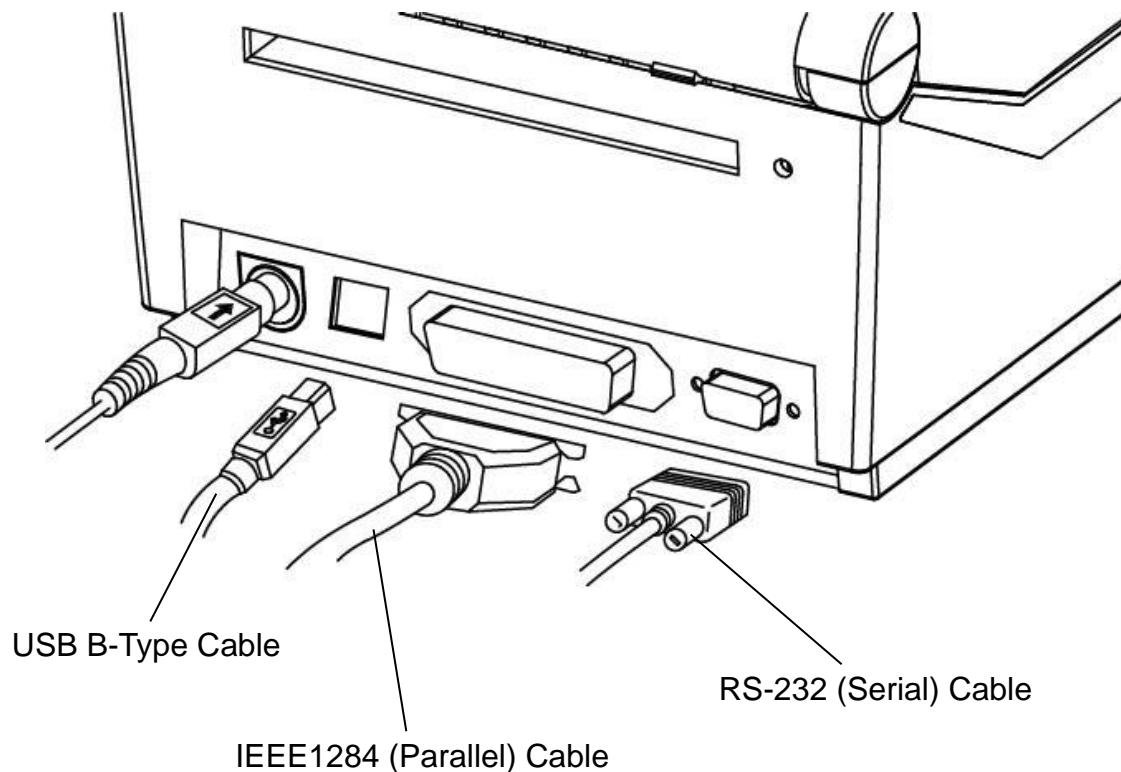5) Connect the power cord to a power source/outlet.

3-2 Interface Cable Connection

3-2-1 Standard Model

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

- RS-232C (Serial)
- IEEE1284 (Parallel)
- USB B-Type Cable

USB B-Type Cable

RS-232 (Serial) Cable

IEEE1284 (Parallel) Cable

1) Turn off the power switch.

2) Connect the communication cable to the printer communication port to be used.
- Connect the RS-232C(Serial) Cable to the SERIAL port.
  and tighten the screw on both sides.
  This port requires a shielded cable less than 1.8m long.
- Connect the IEEE1284(Parallel) Cable to the PARALLEL port.
  and fasten the clips on both sides.
  This port requires a shielded cable with ferrite core less than 1.8m long.
- Connect USB B-Type cable to the USB port.
  This port requires a shielded cable less than 1.8m long.

3-2-2 Ethernet Model

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

- RS-232C (Serial)
- LAN(Ethernet) Cable
- USB Host
- USB B-Type Cable

USB B-Type Cable

USB Host

LAN(Ethernet) Cable

RS-232 (Serial) Cable

1) Turn off the power switch.

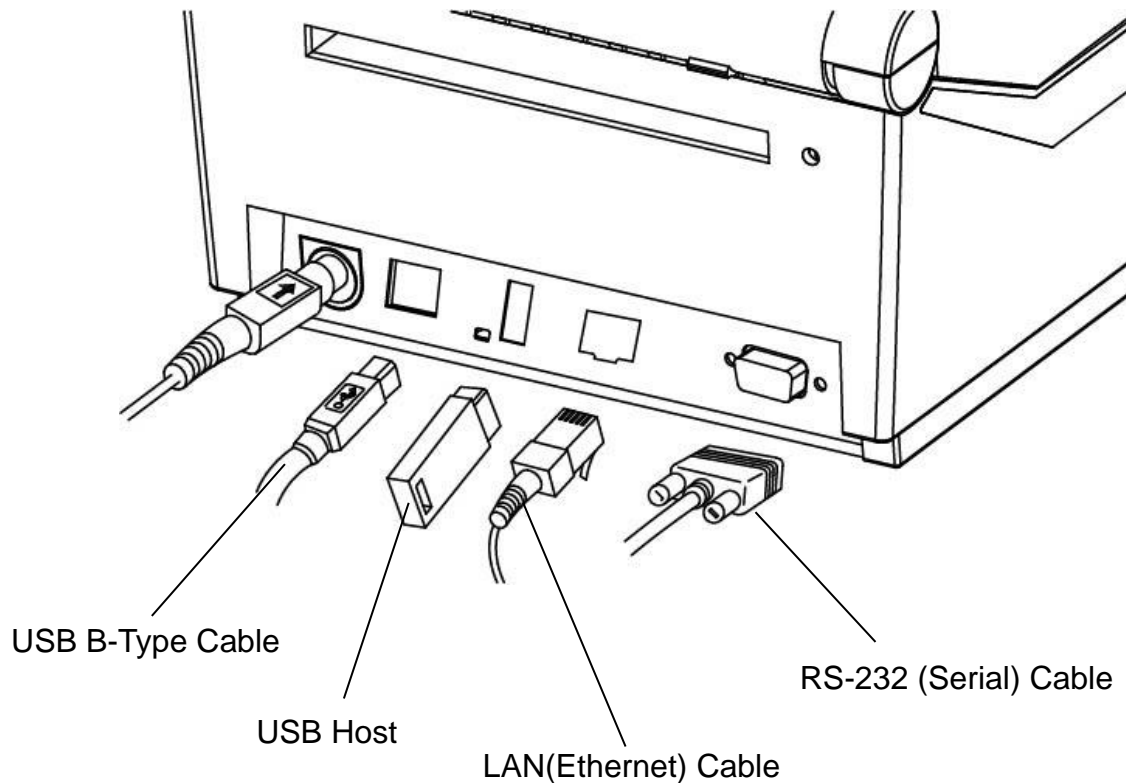2) Connect the communication cable to the printer communication port to be used.
 - Connect the RS-232C(Serial) Cable to the SERIAL port.
  and tighten the screw on both sides.
  This port requires a shielded cable less than 1.8m long.
 - Connect the LAN(Ethernet) Cable to the ETHERNET port.
  This port requires a UTP cable(CAT5 or higher) less than 3.0m long.
 - Connect USB B-Type Cable to the USB port.
  This port requires a shielded cable less than 1.8m long.

3-3 Paper Installation

1) Open the Paper Cover.
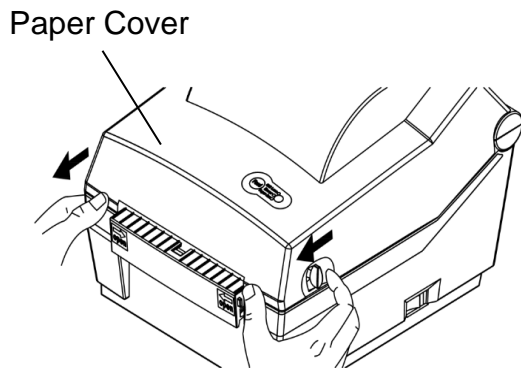
2) Spread the paper holder and insert paper as shown.

Paper Cover
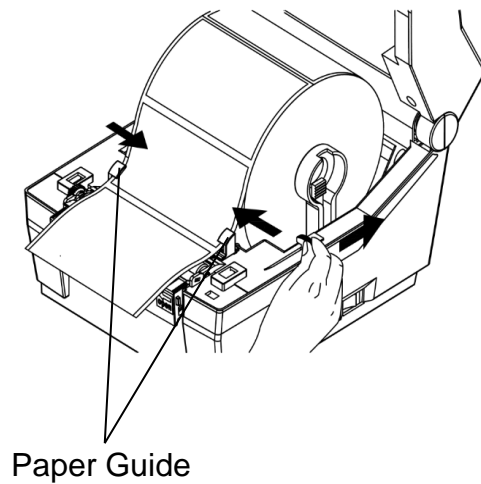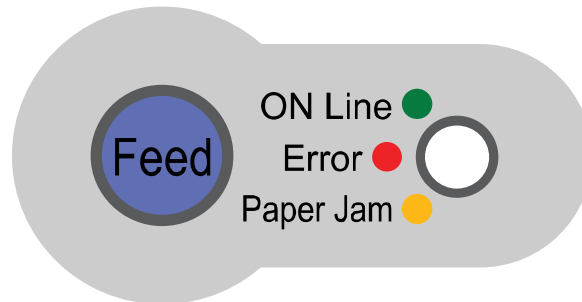
Paper Holder
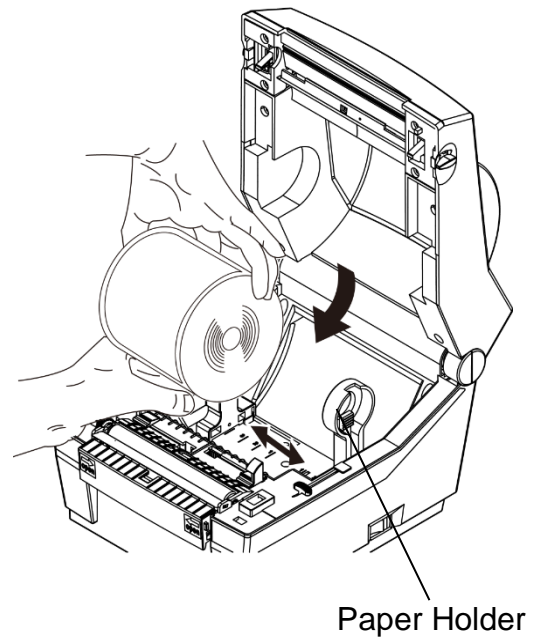
3) Whether the paper label is wound inwards or outwards, its printing surface must face up.
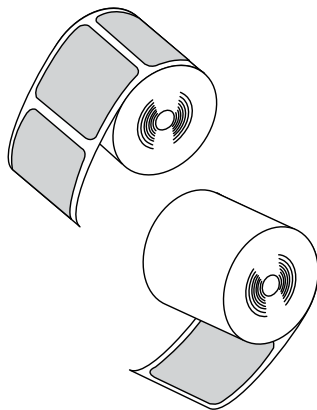
4) Adjust the paper guide to the width of the paper.

Paper Guide

5) Close the Paper Cover until a click sound is heard.

3-4 LED Display

Feed button   Paper feed or cancel the print job.

LED   The current printer status can be viewed. (Refer to below)

The current printer status can be viewed via the printer's LED display.

1) Green LED on
   - The printer waits for the data from Host (PC) in normal mode.

2) Orange LED on
   - It means paper gap sensing error. It becomes on when the printer fails to detect the paper or paper jam occurred. When fails to detect the paper correctly use Auto-Calibration function.

3) Red LED on
   - The printer has stopped by pressing FEED button. It restarts printing when pressed again.

4) Green LED blinking
   - TPH (Thermal Printing Head) overheated or ;
   - The printers is waiting for the button input to run Auto-Calibration function.

5) Orange LED blinking
   - No paper. Make sure the paper is loaded correctly.

6) Red LED blinking
   - The printer cover is open.

3-5 Feed Button Operations

Feed Button can be used for various purposes as follows.

1) Feed Label

In Print Standby mode, pressed for shorter than 3 seconds, the printer feed one label.

2) Stand-alone Configuration Mode

In Print Standby mode, pressed for longer than 3 seconds, the printer enters into Stand-alone Configuration Mode. Please refer to 5-1 for details.

3) Pause and Resume printing

If pressed while printing labels, Printing toggled between Pause and Resume.

4. Self-Test

The self-test checks whether the printer has any problems.
(Users cannot perform this procedure if using the printer's label peel-off option.)
If the printer does not function properly, contact an authorized dealer.

The self-test checks the following;

1) Make sure that the paper roll has been installed properly.

2) Turn on the power while holding down the FEED button.   The self-test begins.
   (It takes about 5 seconds before starting self-test)

3) The self-test prints the current printer configuration information.

4) After the self-test results are printed out, a printer enters into Print Standby Mode.

5. Detailed features

5-1 Stand-alone Configuration Mode

Various modes can be executed by using button and LED status.

Please take following steps to start Stand-alone Configuration Mode and execute each function.

1) Make sure that a printer is in Print Standby Mode.

2) Depress the Feed button for about 3 seconds, then the LED changes to orange color.

3) Release the Feed button, then the printer starts the Standalone Configuration Mode and 6 numbers of LED status changes sequentially.

4) When the Feed button is depressed at specific LED status, the corresponding operation will be executed.

Function List of Stand-alone Configuration Mode.

Sequence Number	LED		Printer Operation
	Color	Status	
1	Green	Blink 3 times	NONE
2	Orange	Blink 3 times	Factory Reset and Gap Calibration
3	RED	Blink 3 times	Factory Reset and Black Mark Calibration
4	Green	Keep On	Toggle Power-up Auto-feed
5	Orange	Keep On	Data Dump Mode
6	Red	Keep On	Demo Mode

* This information can be printed out by printer self-test.

5-2 Media Length Measurement

The printer needs to have the exact length of currently installed paper to make a proper print image.

For this, the printer automatically starts Media Length Measurement Mode in the following conditions.

1) When the printer has no measure length, for example first feeding after installation.

2) When the detected label length differs from the measured value.

In this mode, the printer feeds 2 or 3 labels to measure the exact length of label and saves the measured value on printer's non-volatile memory.

5-3 Pause/Resume

Press FEED button to pause at the middle of labels printing.

1) Press FEED once.

2) Printer stops after on-going printing and Red LED becomes on.

3) Press FEED once again. It resumes printing in a queue.

5-4 Media Sensor Auto-Calibration

Media sensor auto-calibration is used when the printer does not detect a gap or black mark on the label paper correctly.

Generally a printer is set to detect most types of gap or black mark but sometimes it fails to detect and keep feeding the paper without a stop when special paper used. In such case, use media sensor auto-calibration function for a proper detection.

1) Make sure that paper roll has been installed properly.

2) Use Stand-alone Configuration Mode, Sequence Number 2 or 3(refer to 5-1)
   - Sequence Number 2: Gap Media Auto-Calibration
   - Sequence Number 3: Black Mark Media Auto-Calibration.

5-5 Gap Sensor Manual-Calibration

Manual-calibration of media detection can be used when the printer cannot detect a media gap (or black mark) even after auto-calibration has been executed.

Users can calibrate sensor parameters in detail by using the utility program provided by the manufacturer.

The utility can be obtained from the enclosed CD or downloaded from the Internet via the BIXOLON website www.bixolon.com

Please make sure the printer is connected and execute the utility program.
Please the Calibration Setting Manager Button after setting the interface type.
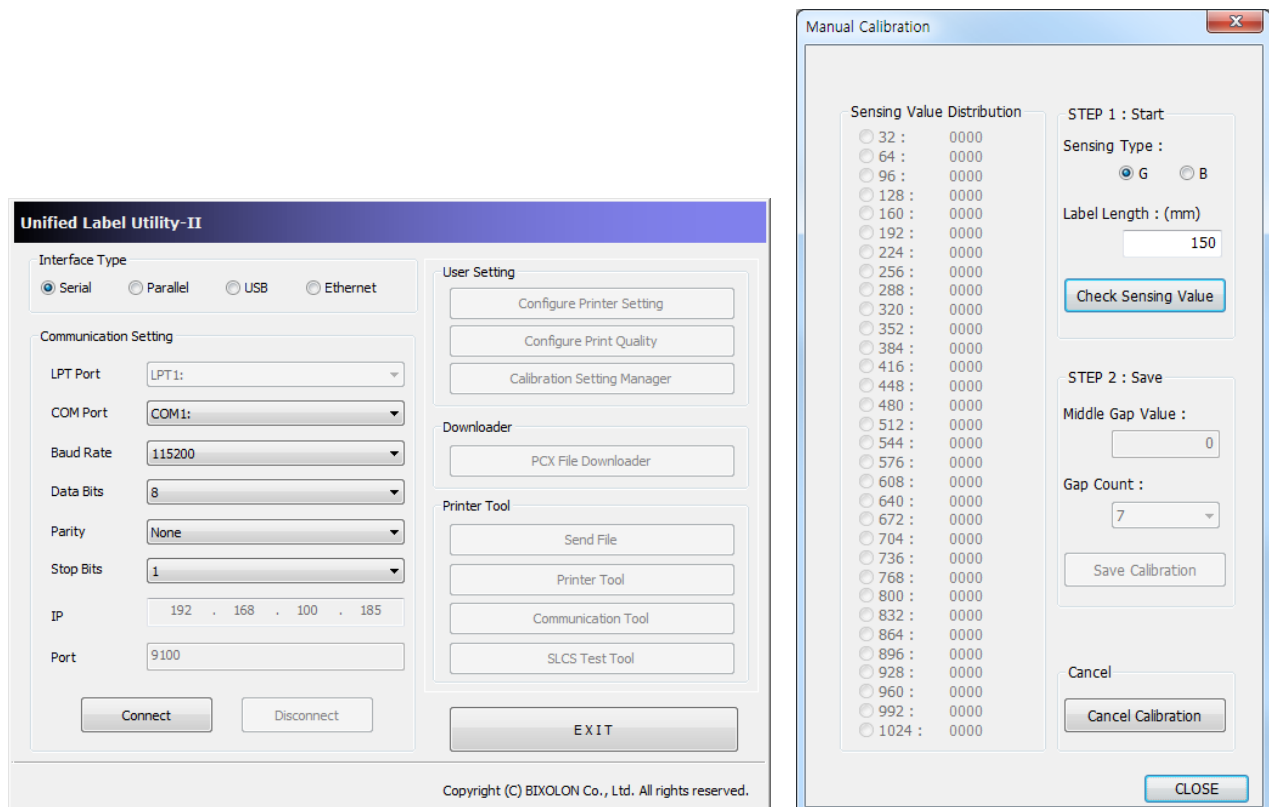
1) Select the sensing type and input the label length by millimeter and click on "Check Sensing Value" tap. Then printer starts to calibrate.

2) Printer will print the scanned values after calibration and the values will appear on the Screen.

3) Optimal sensing values will appear in black bold letters on the left of the utility screen and select one of the values and click on "Save Calibration"

4) If chosen value does not work properly, please try the other values among the black bold letters.

5) To go back to the initial value, please click on "Cancel Calibration"

5-6 Data Dump Mode

This function can be used to diagnose the communication issues when the printer does not work correctly.

In this mode, the received data are not analyzed and printed, instead they are dumped in hex format without processing.

Turn the printer off and on to recover to the Print Standby Mode.

Use Stand-alone Configuration Mode, Sequence Number 5(refer to 5-1) to start Data Dump Mode

5-7 The Peel-Off

This function is used to automatically separate labels from the liner.
- The peeler is for Label Paper only.
- When the peeler switch is on, labels are not printed if previous printed labels have been removed from the peeler.
- When the peeler function is not required, turn the peeler switch off.
- When the peeler switch has been changed, the printer should be turned off and back on.
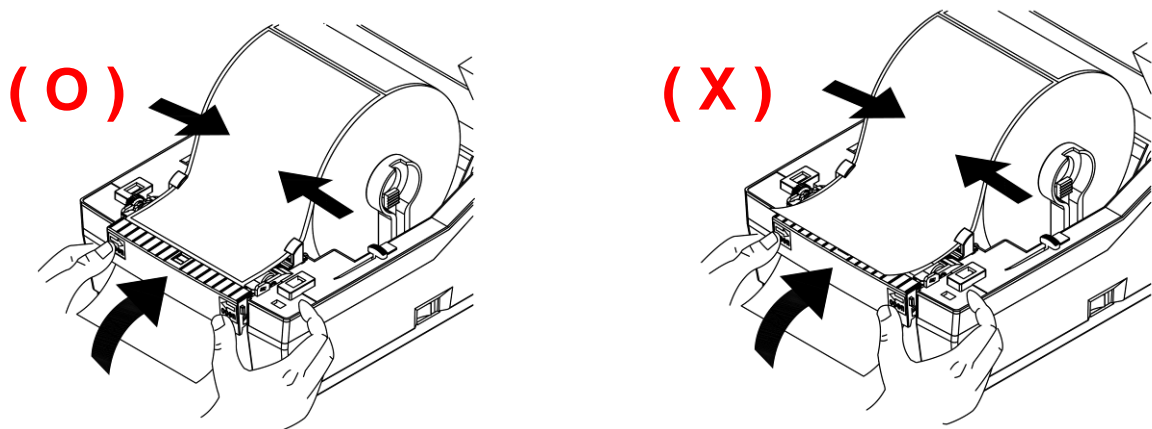
1) Open the paper cover.

2) Open the peel-off cover and turn on the peeler switch.
    - Check if the peeler LED is on.

LED
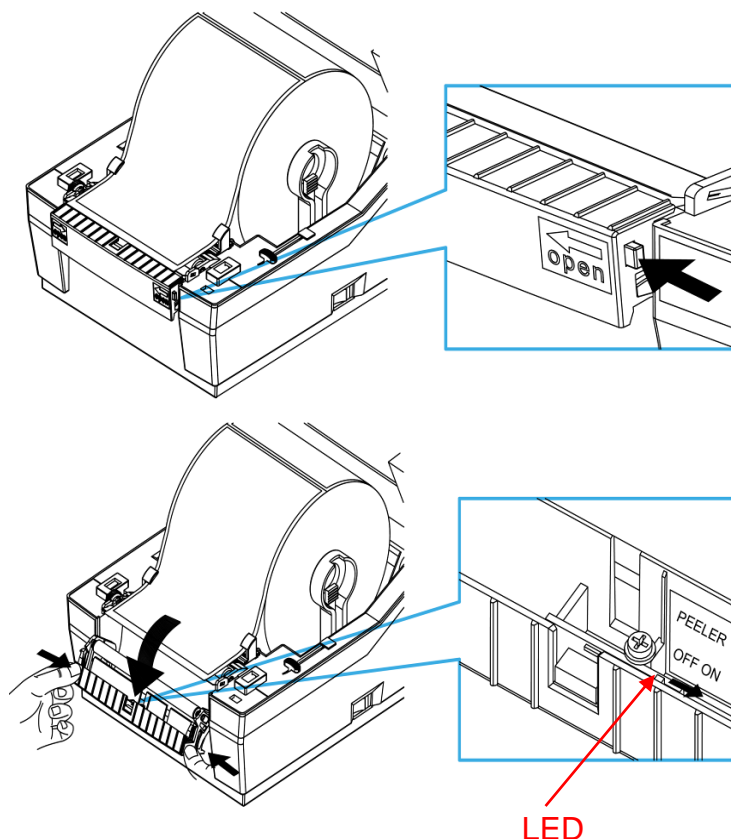
3) Remove the paper and insert the paper through the slot.
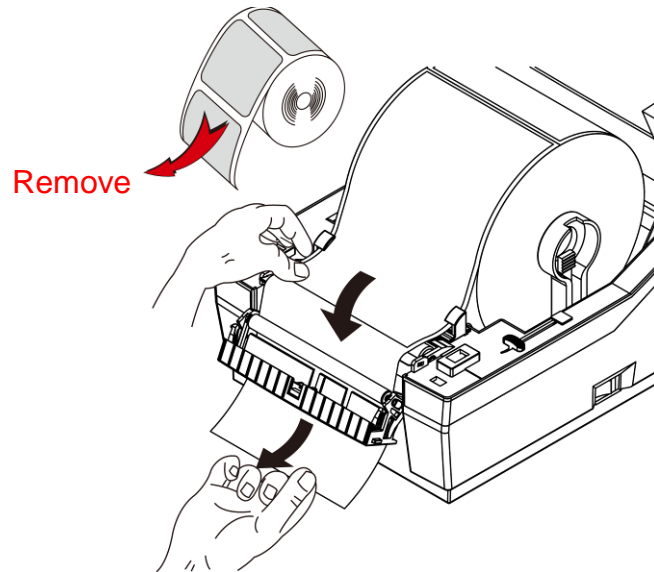
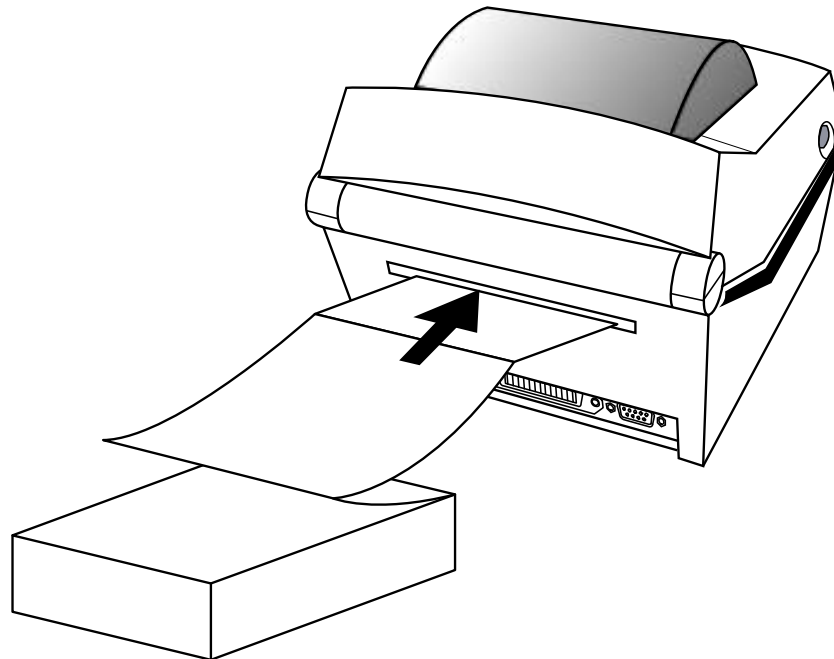
4) Adjust the paper guides and close the cover.

5) Close the Paper Cover until a click sound is heard.

6) Turn the printer off and back on.
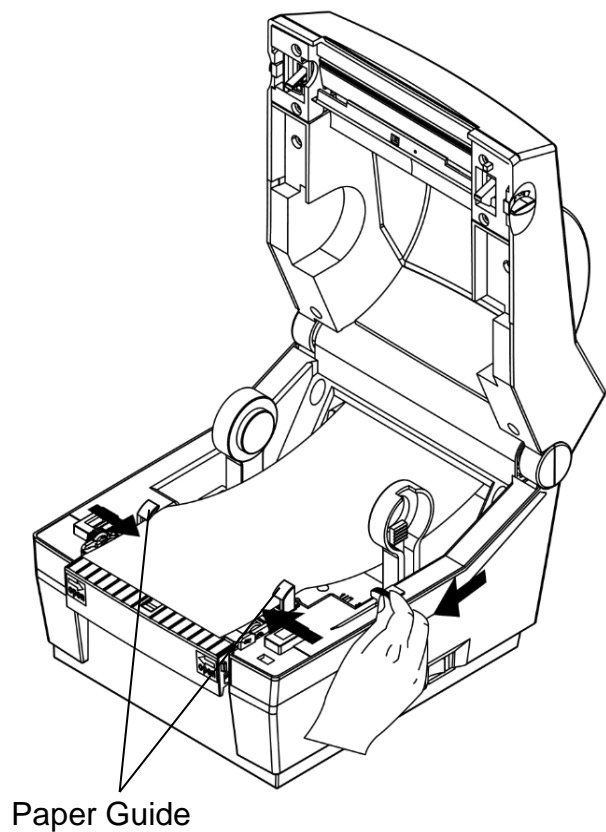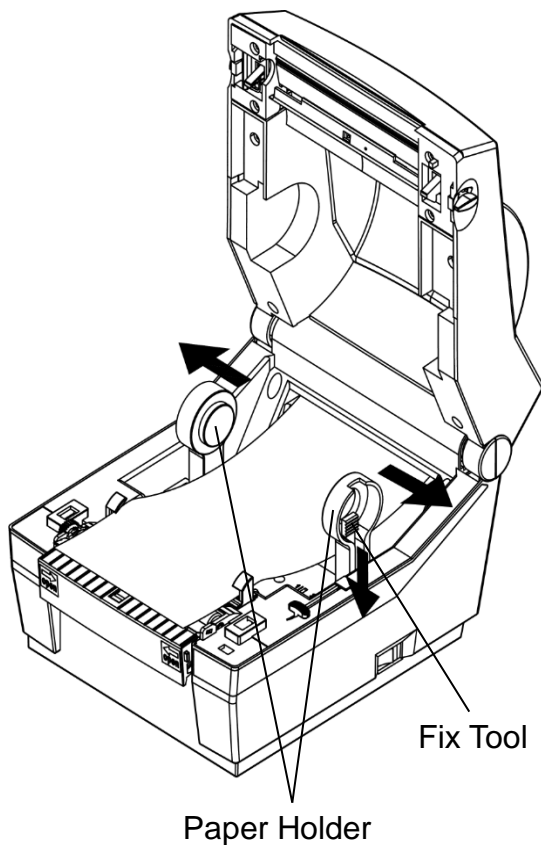
5-8 Using Fan-Fold Paper

Supplying paper to the printer externally is done as follows.

1) Insert the paper at the rear of the printer and then open the Paper Cover.

2) Adjust Paper Holders to the paper width by using the Fix Tool.

3) Adjust Paper Guides and close the Paper Cover until a click sound is heard.

Fix Tool

Paper Holder

Paper Guide

6. Cleaning Head

Printing quality might be degraded by dust, foreign substance, adhesive substance, or other pollution materials stuck in the printer head or inside the printer.

When dirty, clean the print head as follows:

※ **CAUTION**
- Make sure to turn the printer power off prior to cleaning.
- As the print head gets very hot during printing, if intending to clean the print head, turn the printer power off and wait approximately 2~3 minute before commencement.
- When cleaning the print head, take care not to touch the heated portion of the print head.
  → Printer Head is susceptible to damage from static electricity, etc.
- Take care not to allow the print head to become scratched and/or damaged in any way.
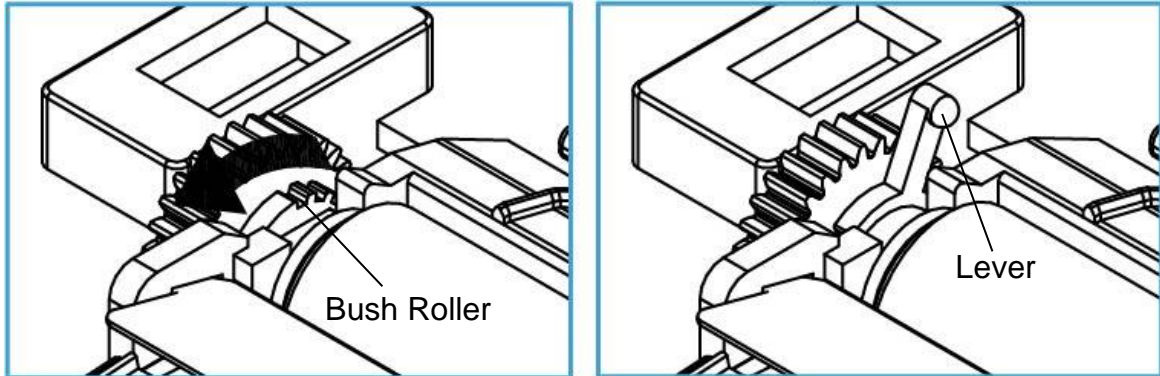
6-1 Cleaning Head

1) Open the paper cover and clean the printhead using the cloth or cotton swab soaked in alcohol for medical.

2) After cleaning the head, do not use the printer until the alcohol used for cleaning evaporates completely (1~2 min) and the printer has completely dried.

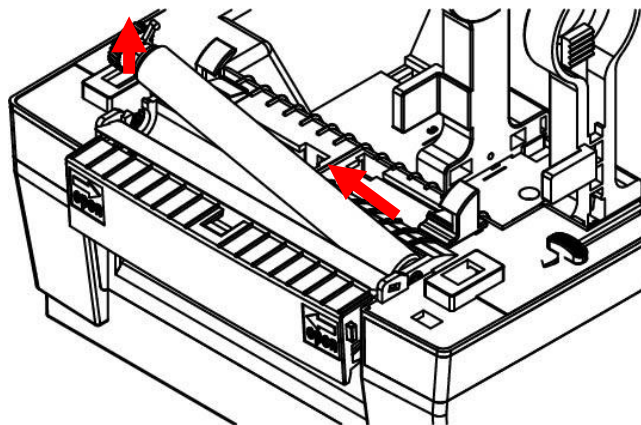※ Perform the cleaning process each time the paper roll is replaced to prevent print quality deterioration.
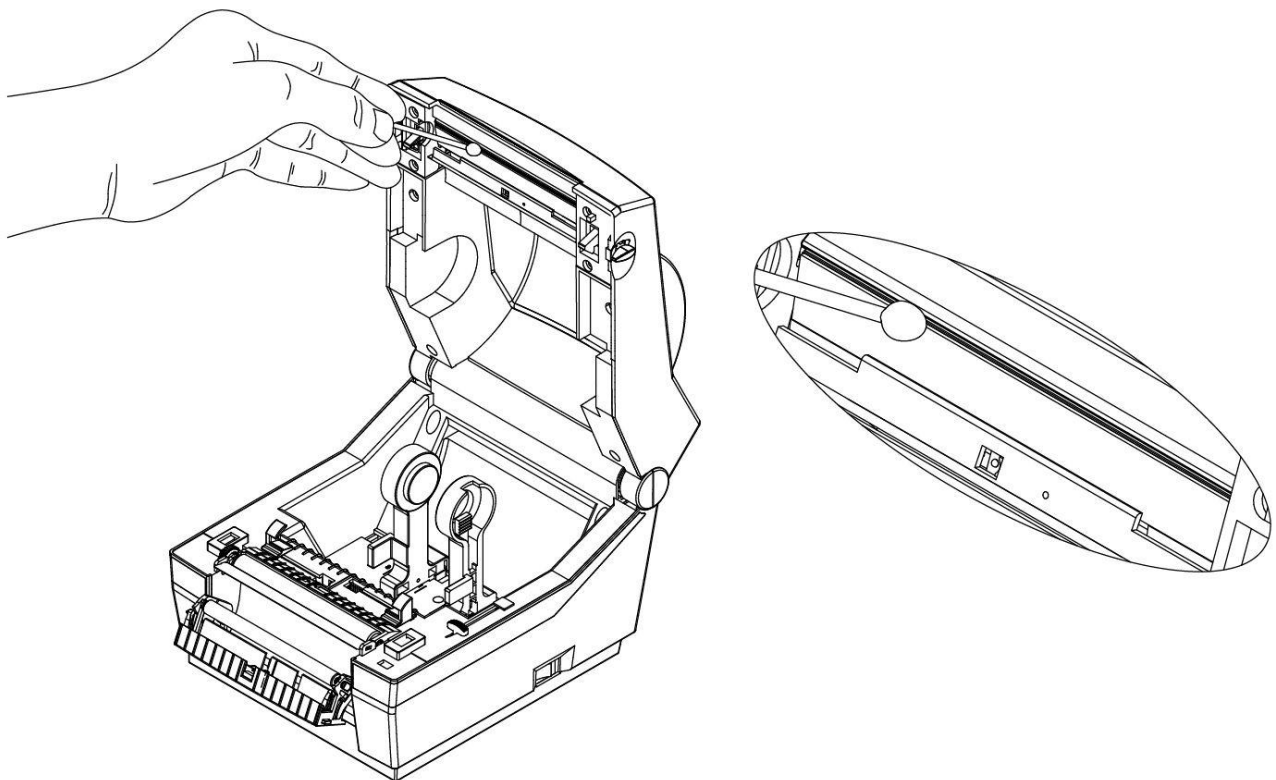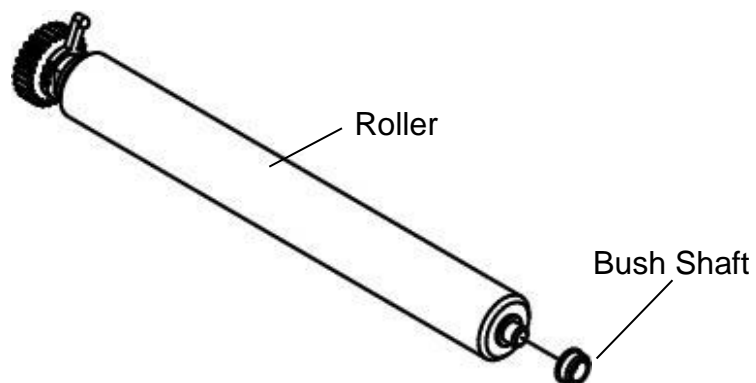
6-2 Replacing Roller

1) Open the Paper Cover and remove the paper.

2) Use some tool such as a flat-head screwdriver to rotate 'Bush Roller' to forward direction until seeing lever.

Bush Roller

Lever

3) Remove 'Bush Roller' from a printer by holding up lever on it.

4) Disassemble 'Bush Shaft' from 'Roller', and then replace 'Roller Assy' with new one.

Roller

Bush Shaft

5) Assemble 'Roller' in reverse order.

6-3 Cleaning Sensors, Roller or/and Paper Path

1) Open the Paper Cover and remove the paper.

2) Remove any dust or foreign substance using dry cloth or cotton swab.

3) Soak the cloth or cotton swab in alcohol for medical use and use it to remove adhesive foreign substances or other pollution materials.

4) After cleaning the parts, do not use the printer until the alcohol evaporates completely (1~2 min) and the printer has completely dried

※ Clean the parts when there is a degradation of performance in printing quality or paper detection.
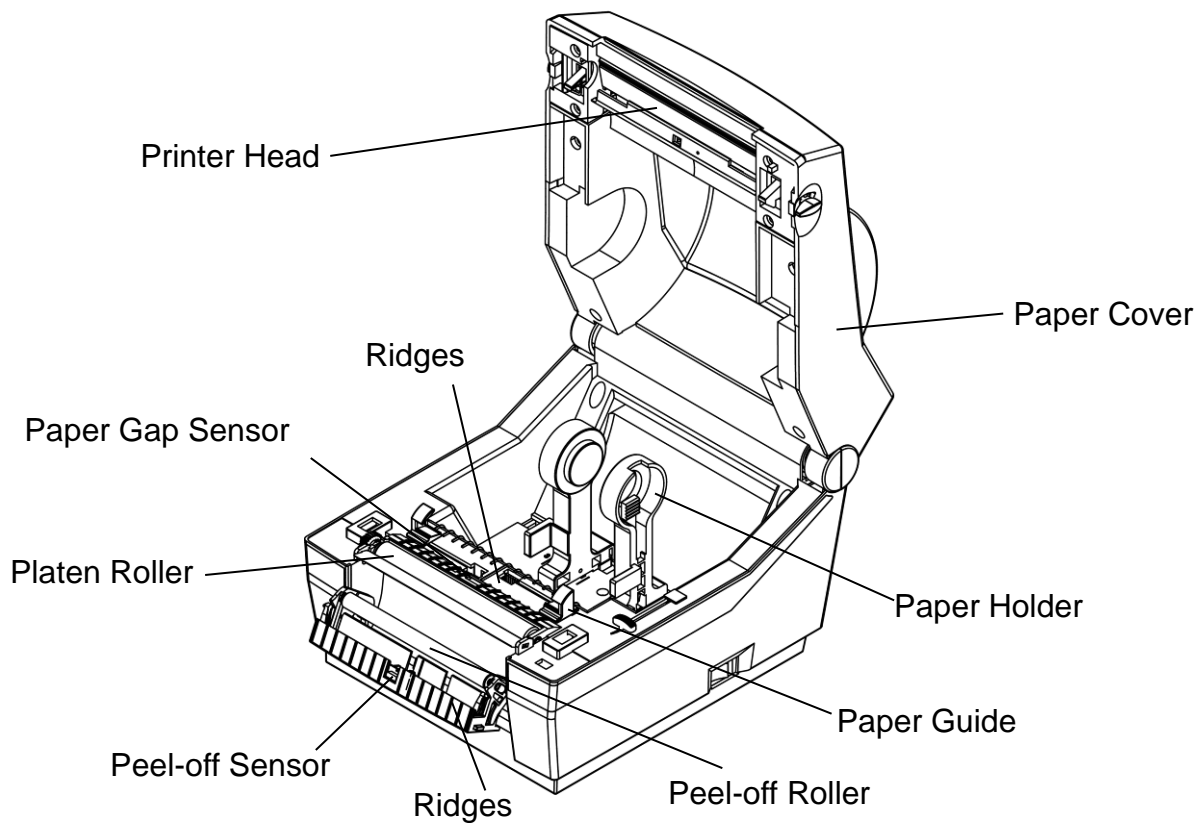
7. Appendix

7-1 Specifications

Item		Description
Printer	Printing Method	Direct Thermal Printing
	Dot Density	203 dpi (8 dot/mm)
	Printing Width	Max. 104 mm(Max. 4.09")
	Printing Speed	Max. 127 mm/sec(Max. 5ips)
Paper	Roll Width	42 ~ 106mm(1.65 ~ 4.17")
AC Adapter	SMPS Input Voltage	AC 100~240V
	Frequency	50/60 Hz
	SMPS Output Voltage	DC24V±5%
	SMPS Output Current	2.5A
Usage Conditions	Temperature	0 ~ 40 ℃ (Operating) -20 ~ 60 ℃ (Storage)
	Humidity (except for paper)	10 ~ 80 % RH (Operating) 10 ~ 90 % RH (Storage)

※ **Note**

- Printing speed can vary depending on the data transmission speed and combination of control commands.

- This equipment is for indoor use and all the communication wirings are limited to inside of the building.

- The switch is the disconnecting device. Turn off switch from any hazard.

7-2 Label Types

The label types used with this printer are as follows.
- Control Labels: PP
- Other Labels: PET