

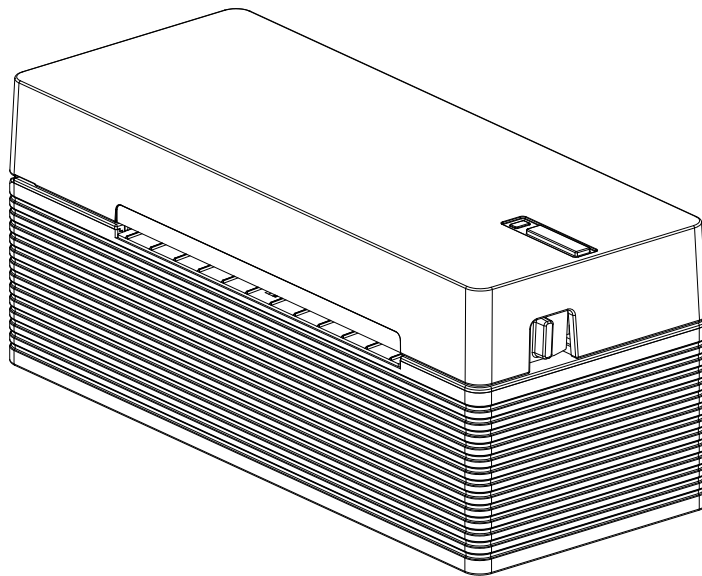
BIXOLON

User's Manual

XF3-40

THERMAL LABEL PRINTER

Ver. 1.00



<http://www.bixolon.com/soho>

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Copyright

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- All other brand or product names are trademarks of their respective companies or organizations.

BIXOLON maintains ongoing efforts to enhance and upgrade the functions and quality of all our products.

In the following, product specifications and/or user manual content may be changed without prior notice.

Caution

Electronics, such as printers, are prone to damage by static electricity. Therefore, to protect the printer from static electricity, be sure to turn off the printer before connecting or disconnecting the cable to the rear of the printer. If the printer is damaged by static electricity, contact your local dealer.

This equipment is not suitable for use in locations where children are likely to be present. When the printer is operating with the cover open, do not wear anything that can touch the drive, such as clothing, necklaces, rings, watches, or employee certificates close to it. Also, keep yourself away from the printer as it is dangerous for some parts of the body to come into contact with it. If an object or part of your body touches the drive, immediately disconnect the power cord or turn off the power switch on the back of the product.

Mise en garde

Les appareils électroniques, tels que les imprimantes, risquent d'être endommagés par l'électricité statique. Par conséquent, pour protéger l'imprimante de l'électricité statique, veillez à l'éteindre avant de connecter ou de déconnecter le câble situé à l'arrière de celle-ci. Si l'imprimante est endommagée par l'électricité statique, contactez votre revendeur local

Cet appareil n'est pas adapté d'utiliser dans des endroits où des enfants sont probablement d'être présents.

Lorsque l'imprimante fonctionne avec le capot ouvert, ne portez rien qui puisse entrer en contact avec le mécanisme, tel que des vêtements, des colliers, des bagues, des montres ou des certificats d'employé à proximité. Éloignez-vous également de l'imprimante car il est dangereux que certaines parties du corps entrent en contact avec celle-ci. Si un objet ou une partie de votre corps entre en contact avec le mécanisme, débranchez immédiatement le câble d'alimentation ou éteignez l'interrupteur situé à l'arrière du produit.

FCC compliance Information

FCC compliance Information

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Information to the User

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and may radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Class B Digital Device: Wired Device

This Apparatus complies with class "B" limits for radio interference as specified in the Canadian department of communications radio interference regulations.

This Class B digital apparatus complies with Canadian ICES-003

Appareil numérique de classe B: appareil filaire

Get appareil est conforme aux normes class "B" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

Cet appareil numérique de la classe B est conform à la norme NMB-003 du Canada.

Waste Electrical and Electric Equipment (WEEE)



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



WARNING & CAUTION

It describes death, physical injuries, serious financial losses, and damage to data etc. that can be caused to the user.

Do not connect multiple products to one single power outlet. Do not connect the product to a loose power outlet. Use only power outlets that meet the standard. Connect the power cord only to a grounded power outlet. **Noncompliance may cause electric shock or fire.**



Use only authentic products from BIXOLON. **The company will not provide post-sale support for damage or other quality issues that any fake (refurbished) products may incur.**



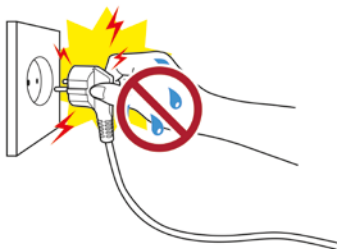
Do not bend or strain the power cord excessively. Push the power cord all the way into the power outlet lest it remain loose. Make sure to hold the cord tight when separating it from the power outlet. Do not remove the power cord while the product is in use. **Noncompliance may cause electric shock or fire.**



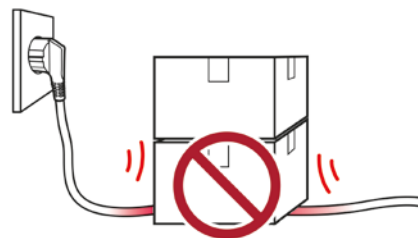
Keep small accessories or other packaging materials away from young children. Beware: children may swallow them. **Mishandling the product may incur injuries. If a child has swallowed any such thing, see a doctor at once.**



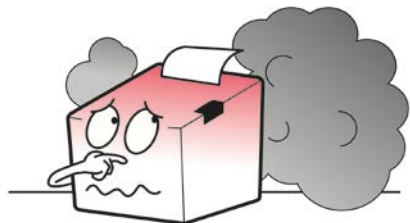
Do not touch the power cord with wet hands when pulling it from a power outlet. If the power plug or outlet is smeared with extraneous matter, wipe it with a dry cloth. **Noncompliance may cause electric shock or fire.**



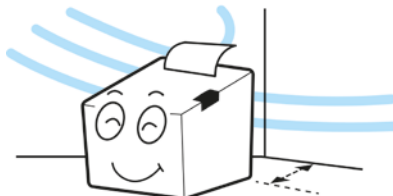
Do not allow the product to be damaged by heavy objects. **Noncompliance may cause electric shock or fire.**



If the product emits a strange sound, burning smell, or smoke, turn off the power immediately and unplug the power cord. If the product is dropped or its exterior is damaged, turn off the power immediately and unplug the power cord. Do not subject the product to shock. **It may start a fire. It may damage the product.**



Install the product in a well-ventilated place by keeping it a certain distance from the wall. The product installed in certain places such as where a lot of fine dust is generated, where the temperature is too high or too low, where there is a lot of moisture or water, and at airports or stations that are used continuously for a long time may suffer serious quality problems due to the influence of the surrounding environment. **An increase in internal temperature may start a fire. Be sure to contact the place of purchase before installing the product.**



Install the product in a fixed place preventing it from tipping over. When moving the product, turn off the power and disconnect all cables connected to the product, including the power cord. **It may damage the product.**



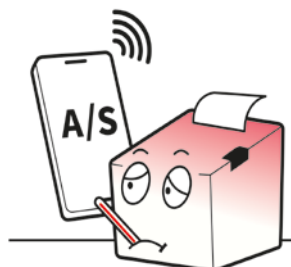
Never disassemble, repair, or modify the product at your own discretion. **When repair is necessary, contact the place of purchase.**



Do not let any foreign substances enter the product. Do not place heavy objects, liquids, or metals on the product. **It may start a fire. It may damage the product.**



If there is a problem with the product, please contact the place of purchase. In addition, Bixelon website (<http://www.bixelon.com/soho>) provides product repair.



Manual Introduction

This manual provides basic information on printers and provides ways to install, use, and check them.

In order to protect the safety of users and prevent property damage, be fully familiar with this manual before using the product. Please use it.

※ 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 download true type fonts and facilitate their usage as device fonts.

5. 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.

Manual Symbol Introduction



Precaution & Warning

It describes death, physical injuries, serious financial losses, and damage to data etc. that can be caused to the user.



Note

It provides additional information on the function and performance of the product.




Printer Introduction

XF3-40 printer has been designed to be connected to various types of electronic devices such as computer peripheral devices.

The main features of the printer are as follows

1. 4inch Fanfold Type Thermal Label Printer
2. Max. 6ips(152mm/s) Print Speed
3. Print Width/Length: 108mm/1,000mm
4. Media Width/Thickness: 25~116mm/0.06~0.20mm
5. Transmissive(Gap, Notch) Sensor, Reflective(Black Mark) Sensor
6. Easy Media Loading (Auto Paper Loading)

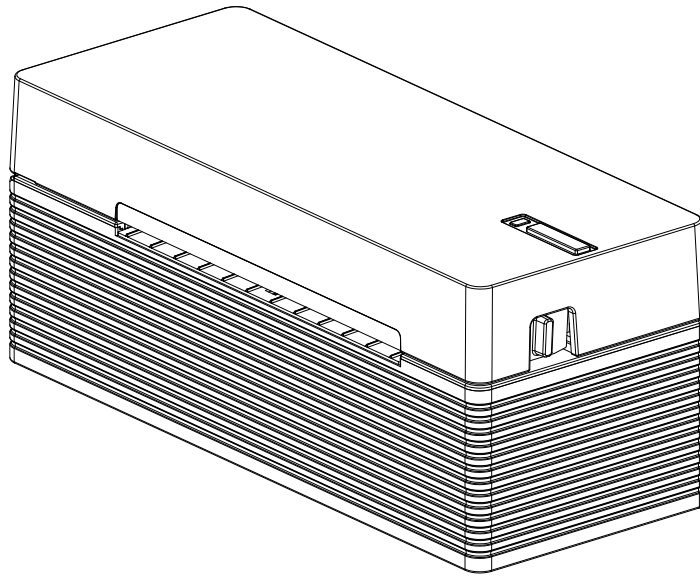
Product Symbol Introduction

	DC (Direct Current)
	USB
	DC (Direct Current) Power Connector

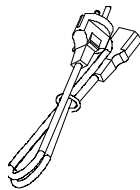
1. Content Confirmation

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.

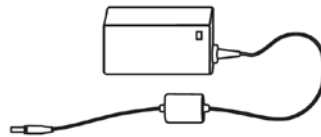
Product



Basic Components



Power Cord



AC/DC Adapter



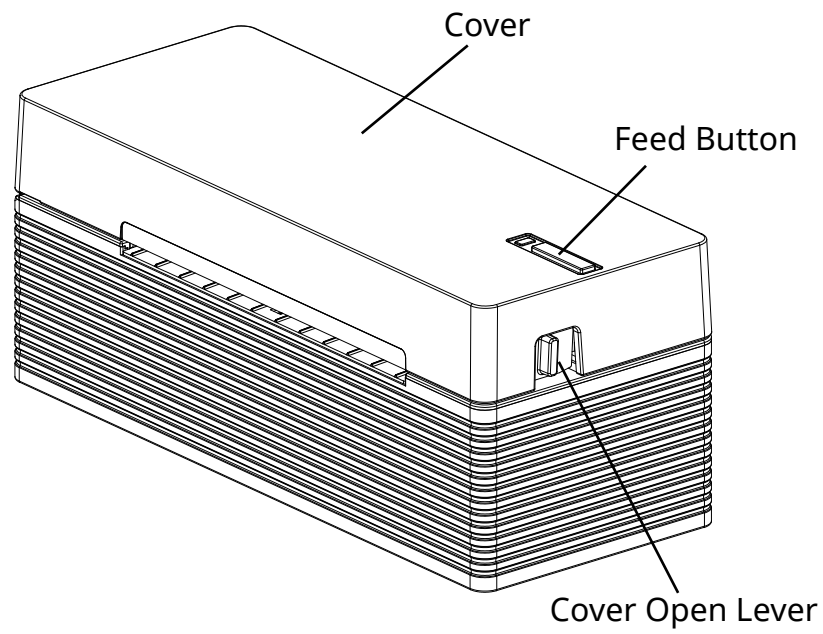
USB Cable



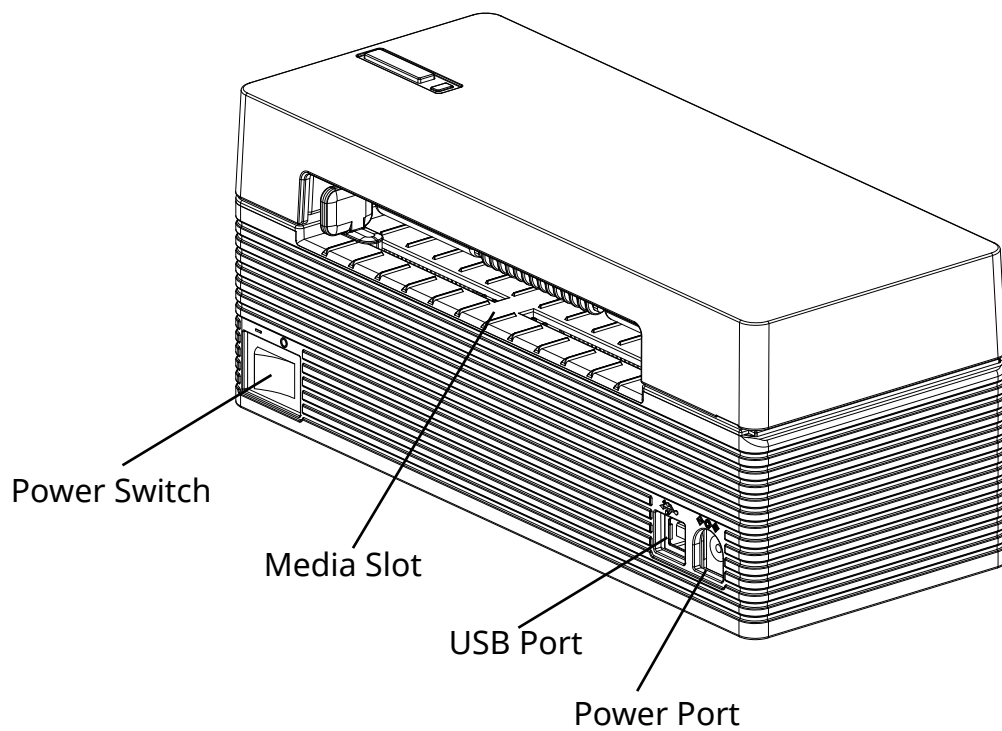
Quick Manual

2. Product Part Names

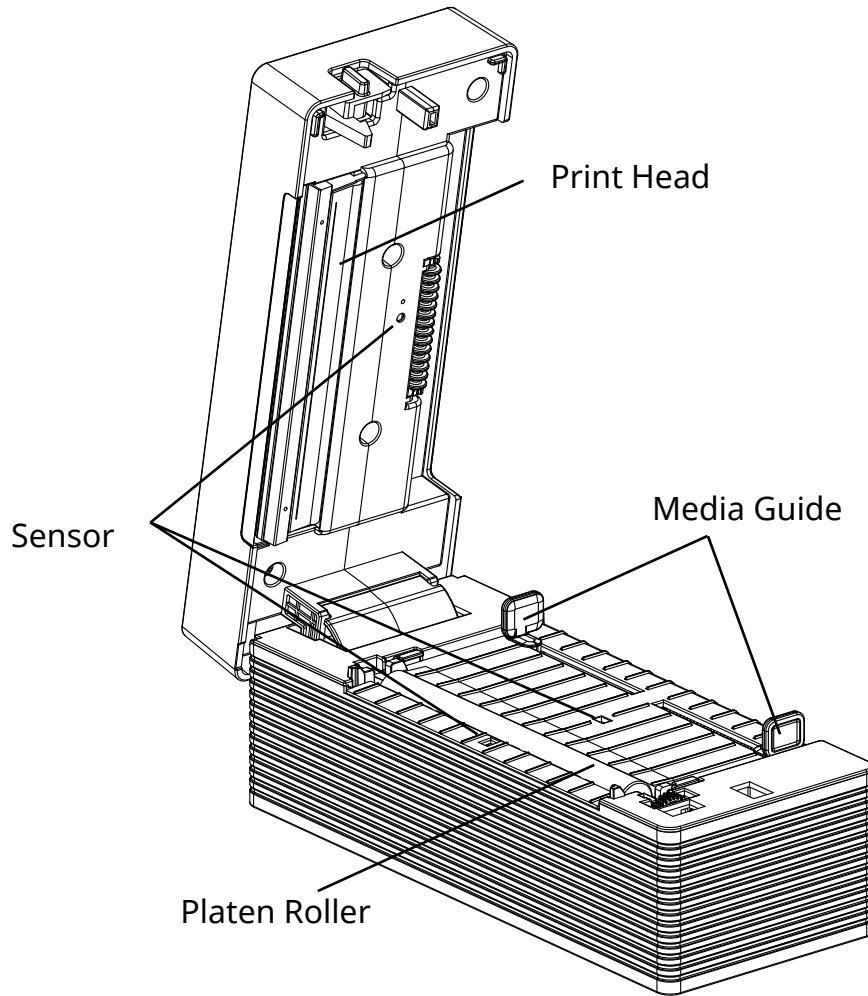
Front



Back



Inner



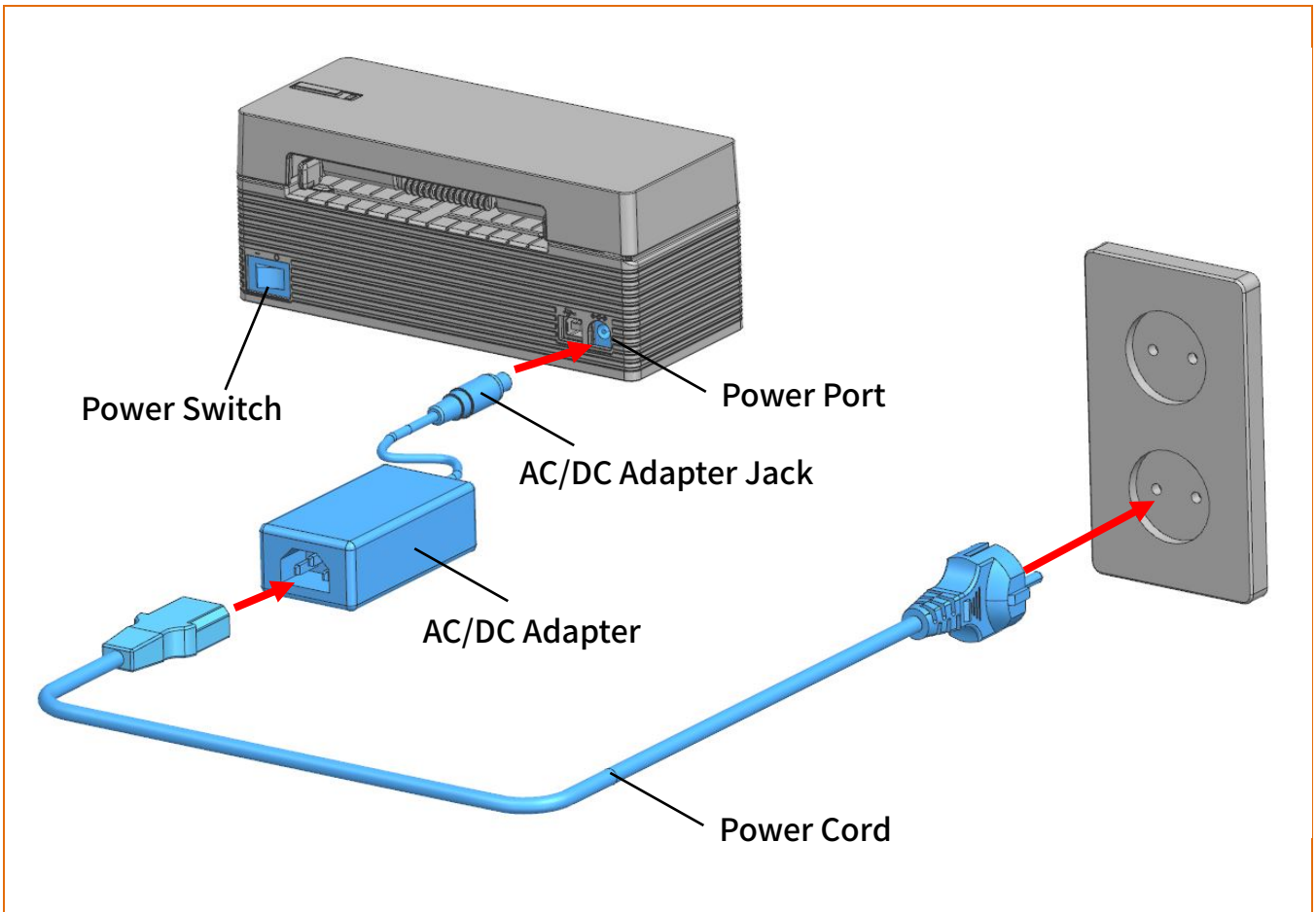
3. Installation & Usage

3-1 Printer Installation Placings

- Install the printer in a location that meets the following conditions.
 - Allow sufficient space around the printer for proper ventilation.
 - Do not place objects close to the back or bottom of the printer, which may hinder the air circulation.
 - Install the printer on a flat and level surface.
 - Avoid humid environment.

3-2 Power Connection

- Connect power to the printer as shown below.



- 1) Turn off the printer power switch.
- 2) Check to see that the AC/DC adapter voltage matches that of the power source.
- 3) Connect the AC/DC adapter jack to the printer power connector.
- 4) Connect the power cord to the AC/DC adapter.
- 5) Connect the power cord to a power source/outlet.



- For the safety of people and equipment, please use the appropriate power cord for your country or region.
- Be sure to turn off the printer before connecting the power cord to the printer. This can cause serious electrical damage and bodily injury.
- Do not operate the printer and power supply in a humid environment. This can cause serious electrical damage and bodily injury.
- Do not connect an input voltage beyond the specifications of the power supply. This may result in product damage and fire.

3-3 Interface



Shielded cables must be used to prevent radiation and reception of electrical noise. Use the shortest possible communication cable to minimize the detection of electrical noise in the cable.

- USB B-Type Cable (1.8m or less recommended)

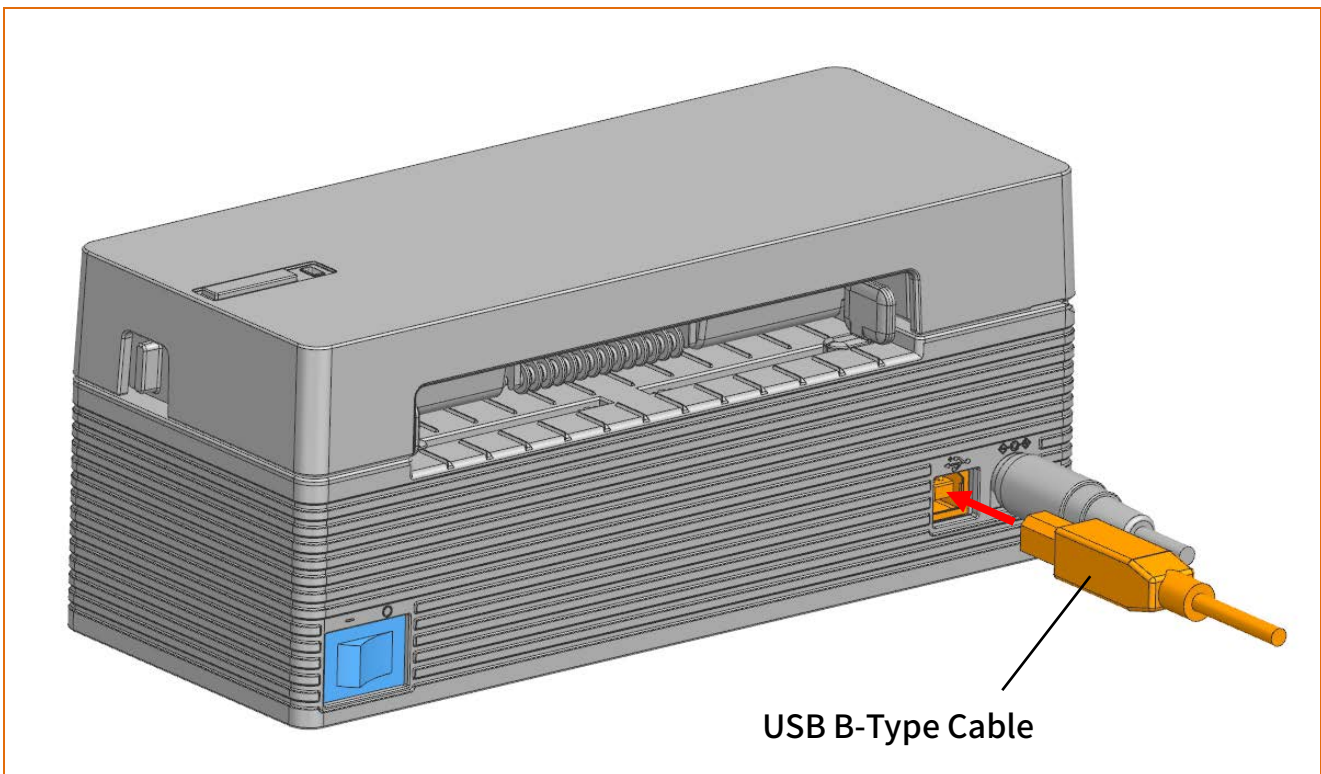


- **Connecting unshielded communication cables is in violation of EMC standards. Use the cable approved by us.**

- **Do not bundle the communication cable with objects that may cause electrical noise and interference. The printer may be damaged.**
- **After turning off the power switch of printer, connect and disconnect the communication cable.**

This can cause serious electrical damage and bodily injury.

This printer can use USB B-Type Cable for communication.



- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used.
 - Connect the USB B-Type cable to the USB port.

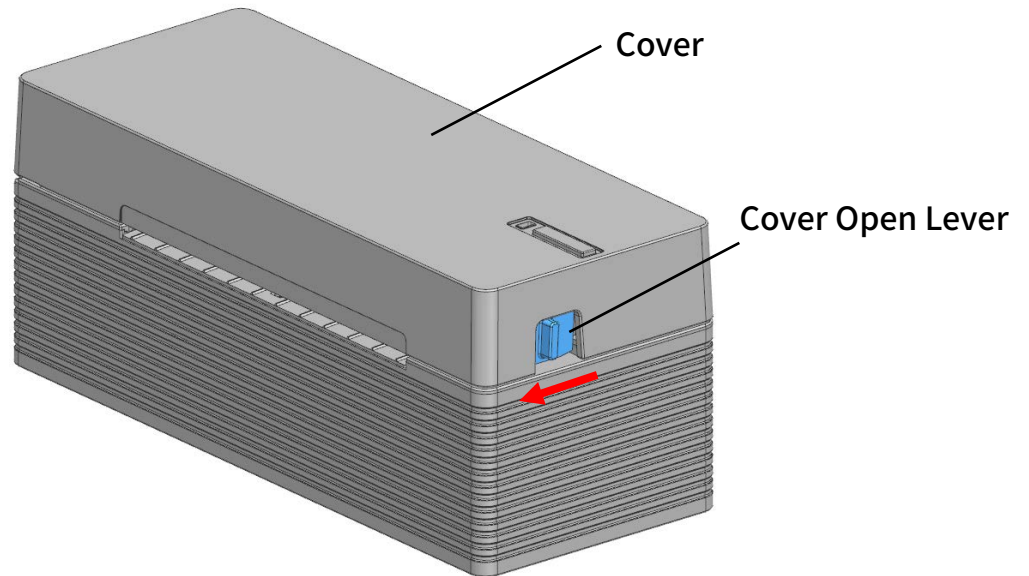


Be aware that the product's electronic components may be damaged due to discharging of electrostatic energy that accumulates on the surface of the body or other objects.

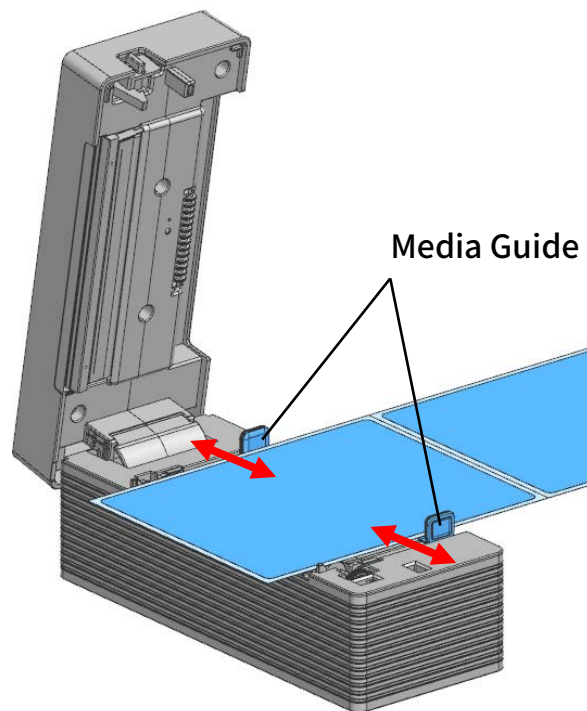
3-4 Media Installation

3-4-1 Manual Installation

1) Pull the cover open lever of the cover and open the cover.



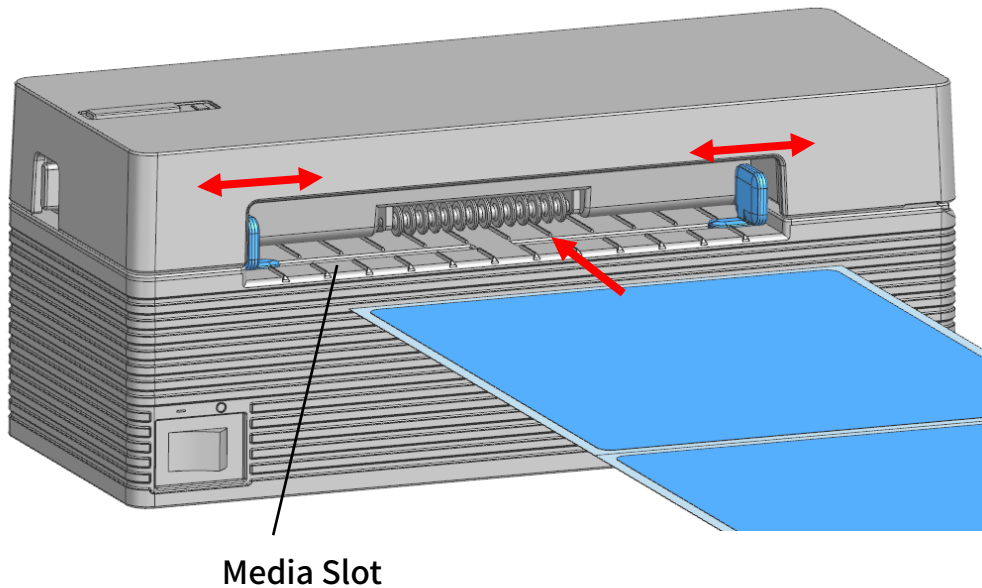
2) Adjust the media guides to the width of the media.



3) Close the cover.

3-4-2 Auto Installation

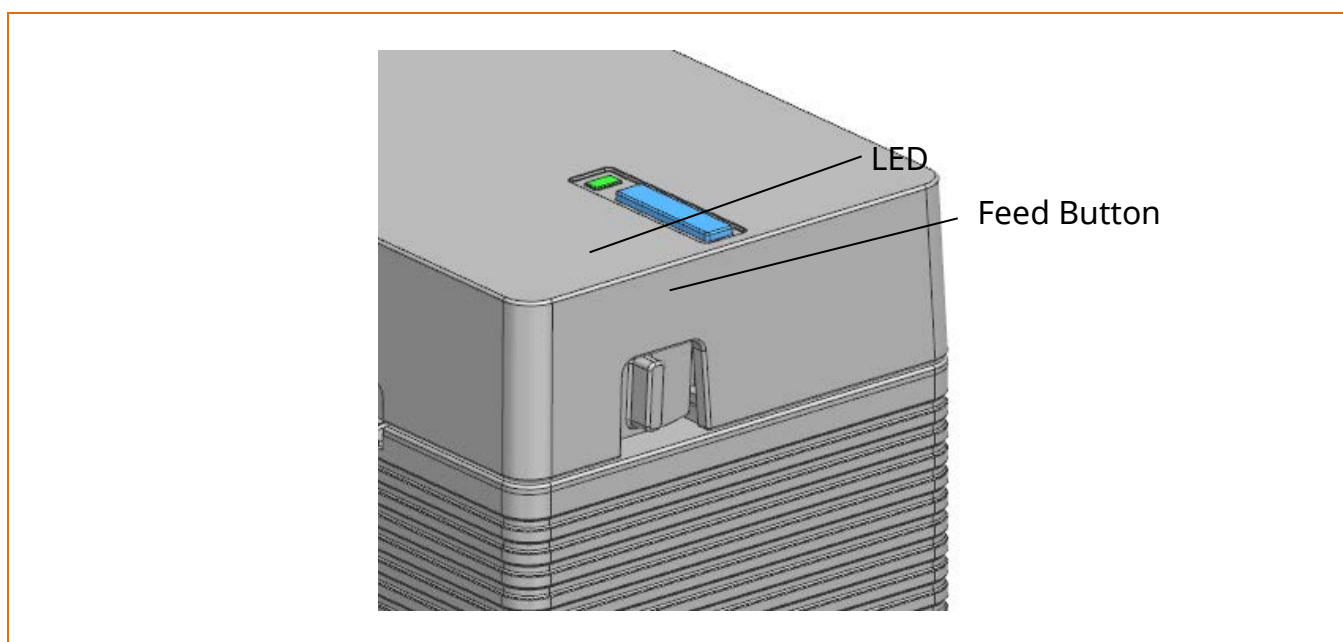
1) Adjust the media guides and put the media into the slot.



- When opening or closing the cover, be careful not to pinch your fingers.
- Do not open the cover while the printer is printing.
The printer may be damaged.
- Change the media when the printer is not receiving data, or data may be lost.
- While the printer is operating, the print head gets very hot, so turn off the power and let it cool down completely.
The hot print head can cause serious burns.















3-5 Control Panel



3-5-1 Button Operations

Printer state before operation	Feed Button	Operation procedure	Printer operation
Power OFF	Press	Apply power while pressing the button (Hold the button until the printer starts self-test printing)	Self-test Printing
Print Ready Mode	Press	Press the button	Feed
Print Ready Mode	Press	Press the button for two seconds	Stand-alone Configuration Mode (Refer 5-1)
During Printing	Press	Press the button	Print Pause Mode
Print Pause Mode	Press	Press the button	Print Resume

3-5-2 LED Indicator For Various Printer Statuses

LED		Printer Status	
Color	Status		
Green 	On 	Print Ready Mode	Print Ready
Green 	Blink 	Error Mode	Print Head Overheated
Yellow 	On 	Error Mode	Media Jam (gap/black mark is not recognized)
Yellow 	Blink 	Error Mode	No Media
Red 	On 	Printing Pause Mode	Wait For Button Input
Red 	Blink 	Error Mode	Cover Open

4. Self-test

The self-test checks whether the printer has any problems.

Self-Test instructions

- 1) Make sure that the media has been installed properly.
- 2) Turn on the power while holding down the Feed button. The self-test begins.
(It takes about 3 seconds before starting self-test)
- 3) The self-test prints the current printer configuration information.
- 4) After the self-test results are printed, a printer enters into print ready mode.



- **Do not open the cover while the printer is printing.
The printer may be damaged.**
- **If the printer does not function properly, contact an authorized dealer.**

5. Detailed Features

5-1 Stand-alone Configuration Mode

5-1-1 Start Stand-alone Configuration Mode and execute each function

- 1) Make sure that a printer is in print standby mode.
- 2) Press the feed button for about 2 seconds, then the LED changes to yellow color.
- 3) Release the feed button, then the printer starts the stand-alone configuration mode and 3 numbers of LED status changes sequentially.
- 4) When the Feed button is pressed at specific LED color combination, the corresponding printer operation will be executed.

5-1-2 List of Stand-alone Configuration Mode

Sequence Number	LED		Printer Operation
	Color	Status	
1	Green	Blink4 times	Gap Sensor Auto Calibration
2	Yellow	Blink4 times	Black Mark Sensor Auto Calibration
3	Red	Blink4 times	Factory Reset



Contact the customer center if the printer does not enter stand-alone configuration mode.

5-2 Pause/Resume Function

- During multiple-page print jobs, Feed button can be used to pause printing.

- 1) Press feed button once while printing.
- 2) Printer stops after printing and LED will be changed to red.
- 3) Press feed button once again. It resumes printing in a queue.



Contact the customer center if the printer does not execute pause/resume function

5-3 Gap Sensor Auto Calibration Mode

- Gap sensor auto calibration mode is used when the printer does not detect a gap on the label media correctly.

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

- 1) Make sure that media has been installed properly.
- 2) Using stand-alone configuration mode, press the Feed button at sequence number 1 gap sensor auto calibration mode (refer to 5-1).



Contact the customer center if the printer does not execute gap sensor auto calibration mode function

5-4 Black Mark Sensor Auto Calibration Mode

- Black mark sensor auto calibration mode is used when the printer does not detect a black mark on the label media correctly.

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

- 1) Make sure that media has been installed properly.
- 2) Using stand-alone configuration mode, press the Feed button at sequence number 2 black mark sensor auto calibration mode (refer to 5-1).



Contact the customer center if the printer does not execute black mark sensor auto calibration mode function

5-5 Media 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.

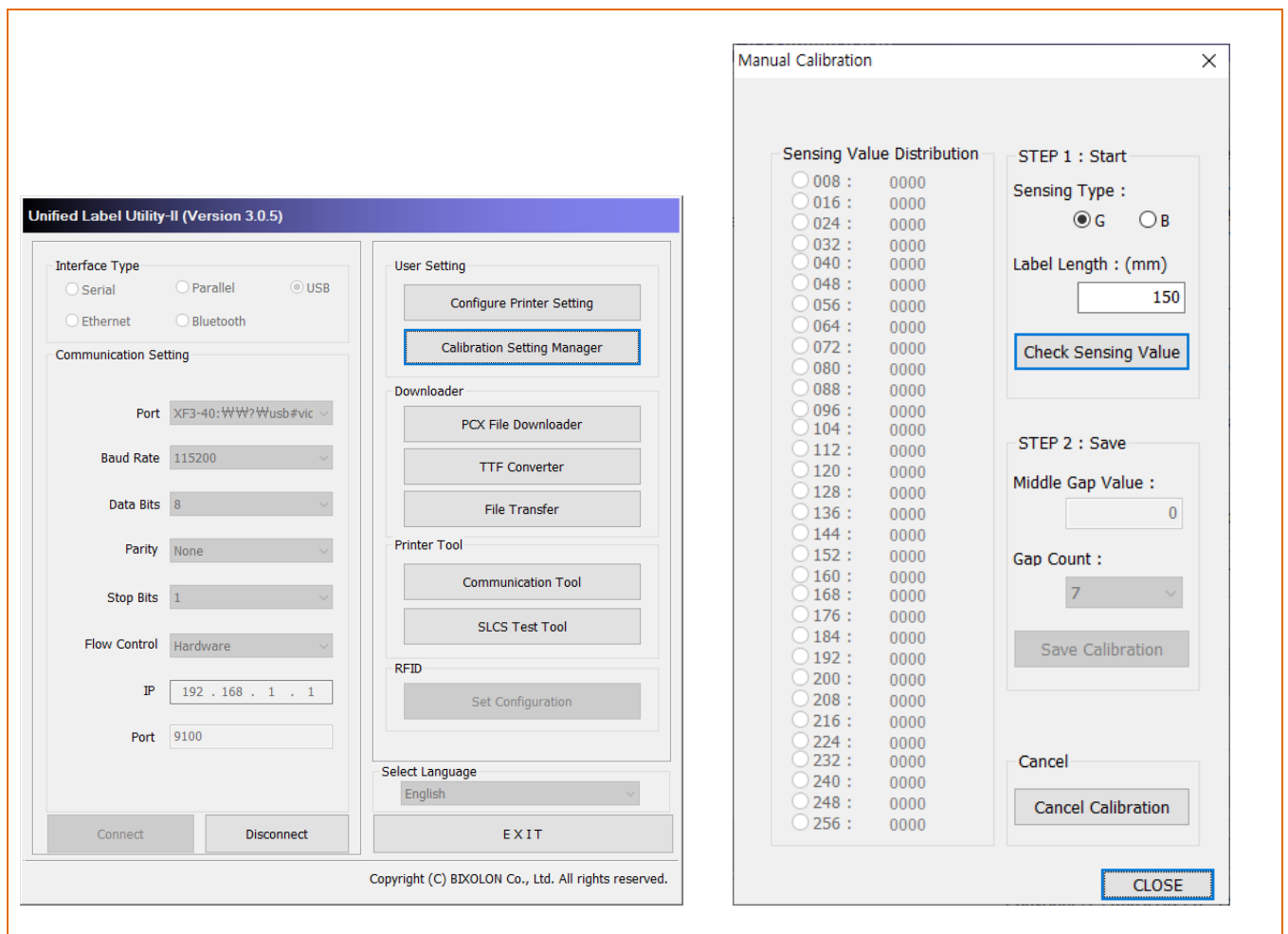
Users can calibrate sensor parameters in detail by using the Unified Label Utility-II program provided by the manufacturer.

The Unified Label Utility-II can be downloaded from the BIXOLON website. (www.bixolon.com/soho)

Users can calibrate printer to detect gap (or black mark) manually by using the Unified Label Utility-II.

For More information, please refer Unified Label Utility-II manual.

Please make sure the printer is connected and execute the Unified Label Utility-II 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 “Check Sensing Value” button. Then printer starts calibration.
- 2) Once the calibration is done, scanned values will appear on the screen after calibration.
- 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”



Contact the customer center if the printer does not enter media sensor manual-calibration mode.

5-6 Data Dump Mode

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

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 ready mode.

Press the feed button once within 2 seconds after printing the self-test to run dump mode.



Contact the customer center if the printer does not enter data dump mode.

5-7 Factory Reset

- This function is used to factory reset the printer settings.

- 1) Make sure that media roll has been installed properly.

- 2) Using stand-alone configuration mode, press the Feed button at sequence number 3
Factory reset mode (refer to 5-1).

The printer will reboot and restore the printer to its factory state.



Contact the customer center if the printer does not enter factory reset function.

6. Maintenance

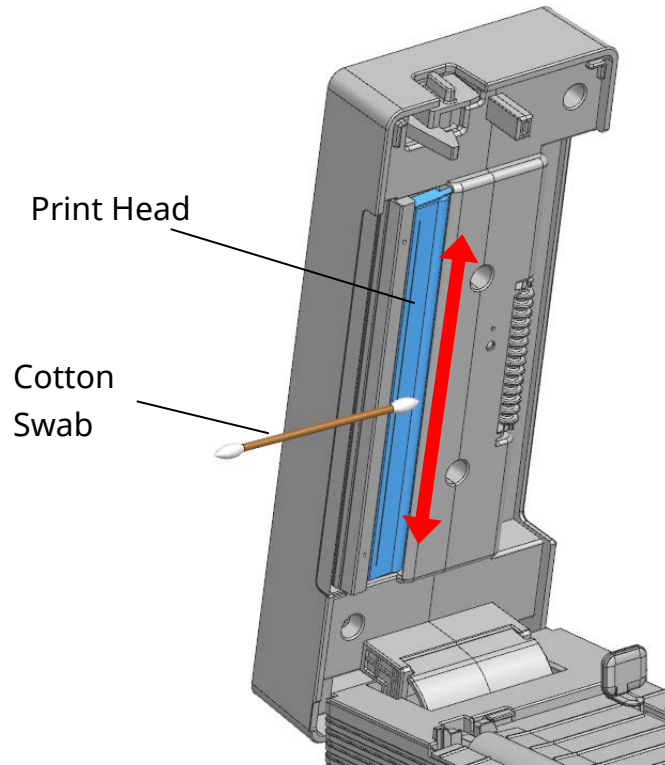
6-1 Cleaning Printer

• Due to dust, foreign substances, adhesives, and other contaminants on or inside print head, print quality may be reduced. In this case, clean the printer using the cleaning tools for each area as indicated in the following table.

Area	Tools	Interval
Print Head	Cotton swab dipped in medical alcohol solution	When changing media
Platen Roller	Cloth dipped in medical alcohol solution (Cotton swab)	
Media Sensor		
Media Feed Path	Cloth dipped in medical alcohol solution (Cotton swab)	

6-2 Cleaning Print Head

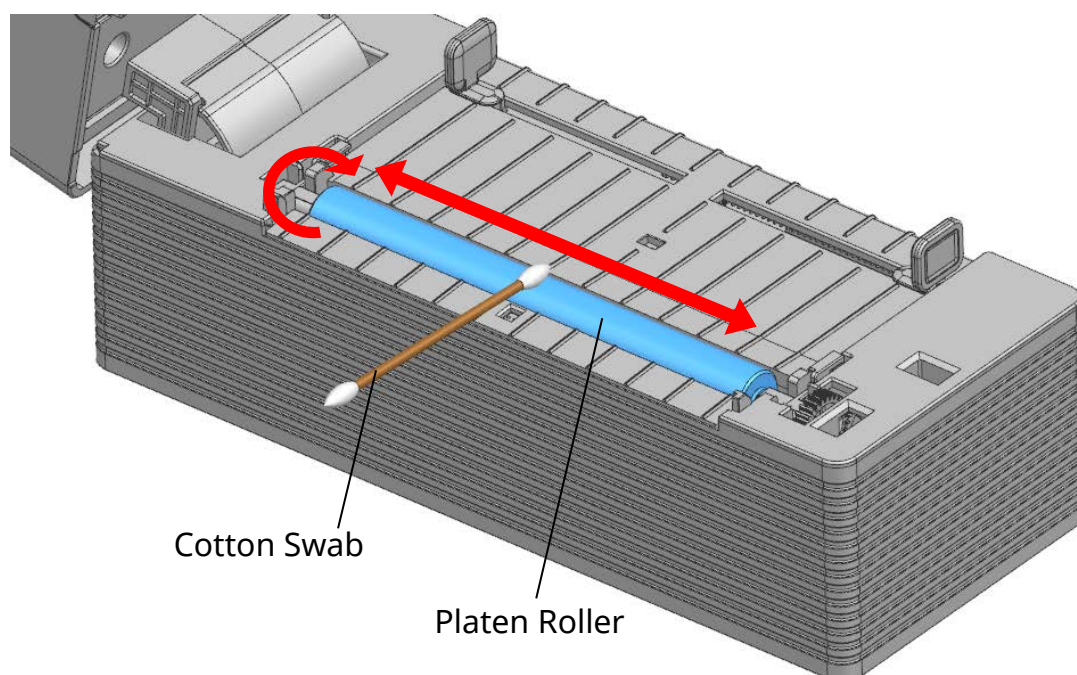
- 1) Open the cover and remove the media.
- 2) Clean the print head toward both sides from the center using a cotton swab dipped in medical alcohol.
- 3) After cleaning, use the printer after alcohol has evaporated sufficiently (1 to 2 minutes) and the surface of print head has completely dried up.



- Be sure to clean after turning the printer off.
- Be careful not to leave scratches in the print head
The printer may be damaged.
- Print head is very hot while the printer is printing, so clean the printer after cooling it sufficiently with power off.
- Do not touch heated area of print head when cleaning.
Personal injury may result from static electricity, etc.

6-3 Cleaning Platen Roller

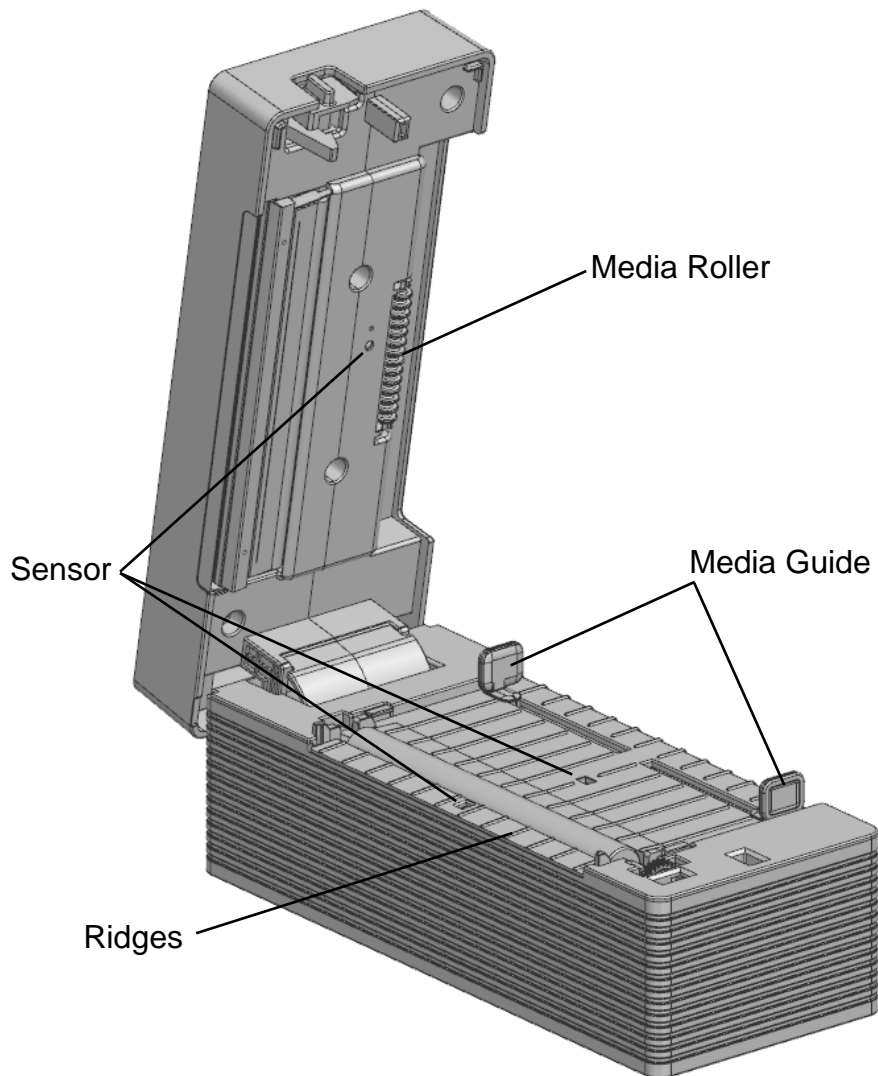
- 1) Open the cover and remove the media.
- 2) While rotating the roller, remove dust or foreign substances using a dry cloth or cotton swab.
- 3) In case that adhesive substances or other contaminants remain, remove it using a cloth or cotton swab dipped in medical alcohol solution while rotating the roller.
- 4) After cleaning, use the printer after alcohol has evaporated sufficiently (1 to 2 minutes) and the surface of platen roller has completely dried up.



- Be sure to clean after turning the printer off.
- Be careful not to scratch the roller. The printer may be damaged.

6-4 Cleaning Sensors, Roller and media Path

- 1) Open the cover and remove the media.
- 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.



Be sure to clean after turning the printer off.

7. Specifications

7-1 Printer Specifications

	Item	Description
Printer	Printing Method	Direct Thermal Printing
	Dot Density	203dpi (8 dot/mm)
	Print Width	Max. 108mm (Max. 4.25")
	Print Speed	Max. 6ips (Max. 152mm/sec)
	Print Length	Max. 1,000mm
Media	Width	25 ~ 116mm
	Thickness	0.06 ~ 0.2mm
AC/DC Adapter	Input Voltage/	AC 100 - 240V
	Input Frequency	50/60 Hz
	Output Voltage	DC 24V \pm 5%
	Output Current	2.5A
	Model	P60EB240250
	Manufacturer	Something High Electric (Xiamen) Company Inc.
Usage Conditions	Temperature	0~ 40 °C (Operating)
		-20 ~ 60 °C (Storage)
	Humidity (except for Media)	10 ~ 80 % RH (Operating)
		10 ~ 90 % RH (Storage)



Print speed may vary depending on the data transfer speed and the combination of command.



- **In case of danger, turn off the power to cut the connection.**
- **The power cord must be grounded to ensure safety and reduce electromagnetic interference**

7-2 Label Types Specifications

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

