BIXOLON

User's Manual

SRP-Q300II

THERMAL RECEIPT PRINTER
Ver. 1.00

www.bixolon.com

Copyright

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 media 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.

Warning

Hazardous moving parts
Keep fingers and other body parts away
Pull the print head lever can be stop all moving parts.

IEC 60417-6057 (2011-05) for other moving parts.

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'utilser 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.

Attention

Pièces mobiles dangereuses
Veillez à ce que vos doigts ou toute partie du corps n'entre(nt) pas en contact avec ces pièces. Tirez le levier de la tête d'impression pour arrêter toutes les pièces en movement.

IEC 60417-6057 (2011-05) pour les autres pièces mobiles.

Compliance information

This device complies with Part 15 of the 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.

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

Caution: Exposure to Radio Frequency Radiation.
To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

Caution: Any Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Class A Digital Device : Wired Device
This Apparatus complies with class "A" limits for radio interference as specified in the Canadian department of communications radio interference regulations.

This Class A digital apparatus complies with Canadian ICES-003.

Appareil numérique de classe A: appareil filaire
Get appareil est conforme aux normes class "A" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

Cet appareil numérique de la classe A 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 is 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

Is described as death, physical injuries, serious financial losses, and damage to data etc. that can be caused to the user.

Do not connect multiple products to a single or faulty power outlet. Use only grounded power outlets that meet the industry standard. **Noncompliance may cause electric shock or fire.**

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

Do not excessively bend or strain the power cord. Securely 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.**
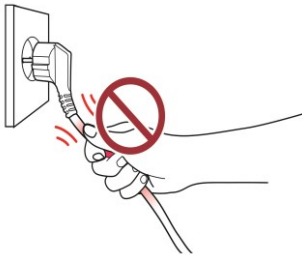
Keep small accessories or other packaging materials away from young children. Beware: choking hazard. **Mishandling the product may incur injuries which may require seeking urgent medical attention.**

Keep excessive liquids away from the power cord and outlet. If matter is smeared onto the power cords, wipe with a dry cloth. **Noncompliance may cause electric shock or fire.**
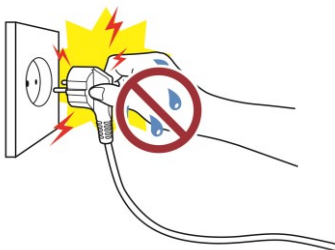
Do not allow the product to be damaged by heavy objects. **Noncompliance may cause electric shock or fire.**
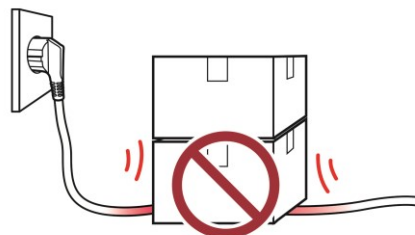
If the product emits a strange sound, burning smell, or smoke, turn off the power immediately and unplug the power cord. If the product is dropped or its exterior is damaged, turn off the power immediately and unplug the power cord. Do not subject the product to shock. **It may start a fire. It may damage the product.**
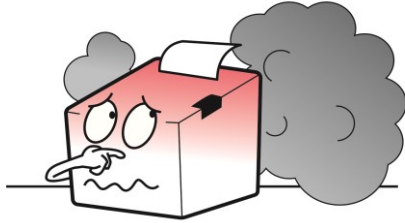
Install the product in a well-ventilated area by keeping it a certain distance from the wall. The product installed in certain places such as where a lot of fine dust is generated, where the temperature is too high or too low, where there is a lot of moisture or water, and at airports or stations that 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.**
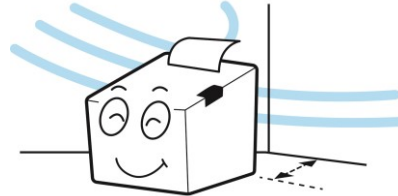
Install the product in a fixed place preventing it from tipping over. When moving the product, turn off the power and disconnect all connected cables, including the power cord. **It may damage the product.**

Never independently disassemble, repair, or modify the product as the warranty will become invalid. **When repair is necessary, contact the original place of purchase.**
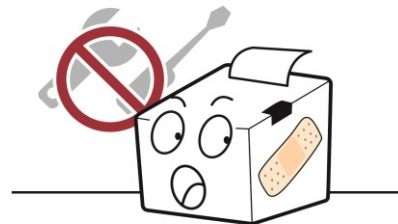
Do not let any foreign substances enter the product. Do not place heavy objects, liquids, or metals on the product. **This could cause damage to the product or a fire.**

If there is a problem with the product, please contact the original place of purchase or through BIXOLON website's product repair page (http://www.bixolon.com).

Ver. 1.00
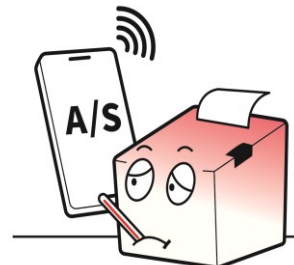
Manual Introduction

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.

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.**

Product Symbol Introduction

▬▬▬	DC (Direct current)
⚠	Error, Warning, Caution
📋✕	Paper Empty
⬆	Paper Feeding
⏻	Stand-By
▯	USB-A
⬡	USB-B
▯	USB-C
品	Ethernet / Lan

Printer Introduction

SRP-Q300II printers have been designed to be connected to various types of electronic devices such as POS (Point Of Sales), and computer peripheral devices.

The main features of the printer are as follows

1. THERMAL RECEIPT PRINTER
2. Thermal transfer method printing
3. Maximum 250mm/s printing speed
4. 128 x 125 x 125 (W X D X H)
5. Interface: USB & Ethernet, Wireless LAN(2.4Ghz/5Ghz), Bluetooth Support
6. Equipped with data buffer (receives print data even while printing)
7. Can print a range of barcodes
8. Range of printing density selectable
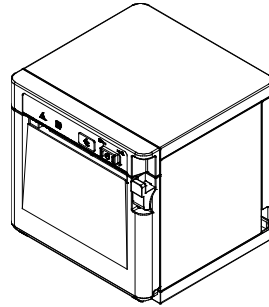(controlled with virtual memory switch management)

Table of Contents

1. Preparation

> • If there is any part missing, please contact the place of purchase.
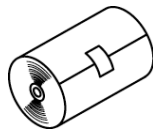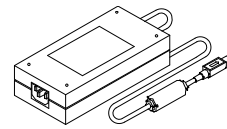> • The actual part may look different from the image.

SRP-Q300II

Standard Components
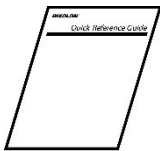
Installation Guide

Paper

AC/DC Adapter
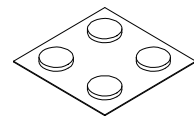
Foot Rubber
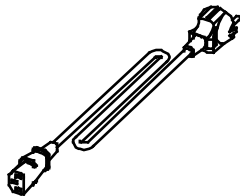
sPower Cord
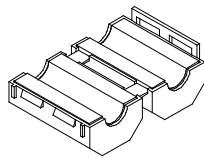
EMI-Core

Option Components
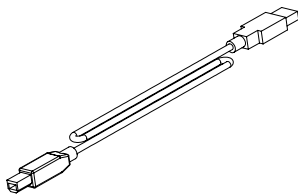
USB A-B Cable
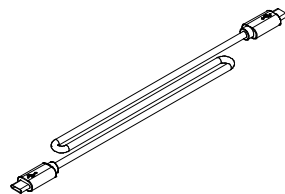
USB C-C Cable

2. Product Part Names

2-1 Printer Part Names

Power Slice Switch

Feed Button

Printer Cover

Cable Cover

Cover-Open Lever
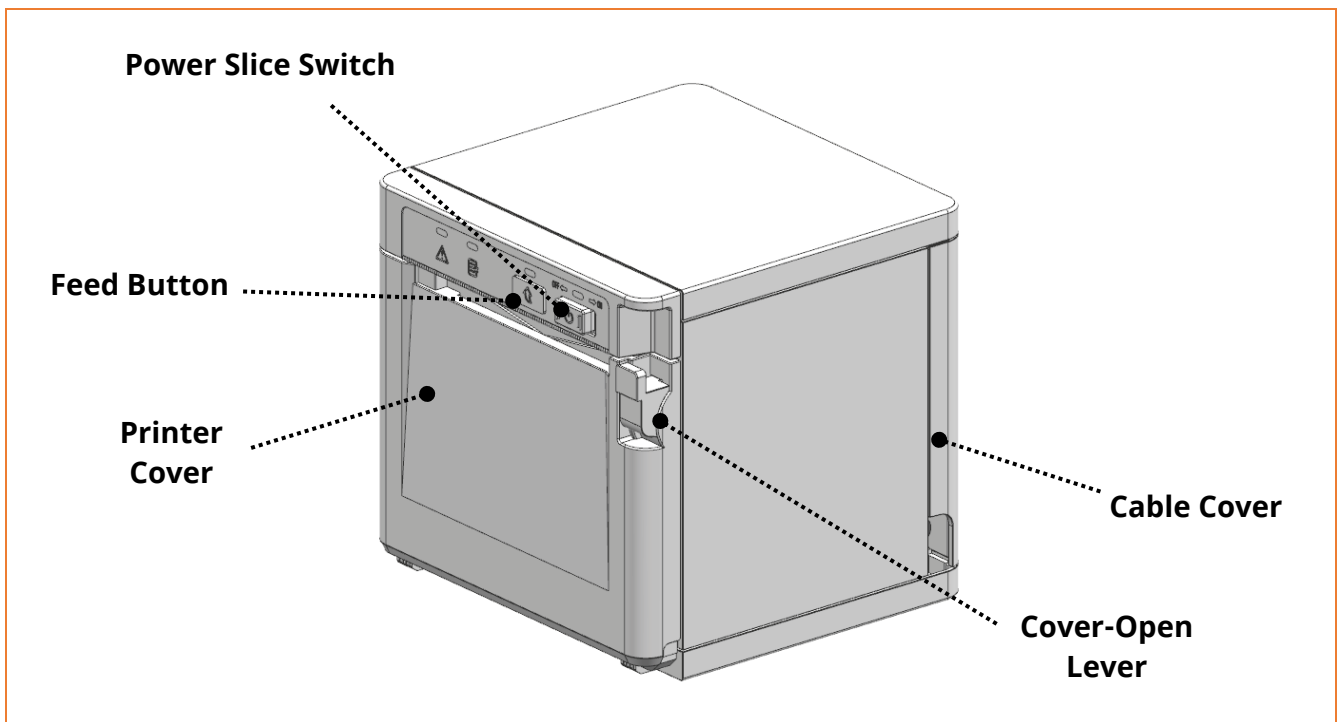
2-2 Interface Part Names

• Connect the printer to the host computer using the right interface cable that complies with the specifications of the interface.

<u>2-2-1 USB Interface</u>

2-2-1-1 USB A-Type Interface (3 Ports)

Compatible USB peripherals (e.g., barcode scanner, customer display) can be connected and used with the printer.
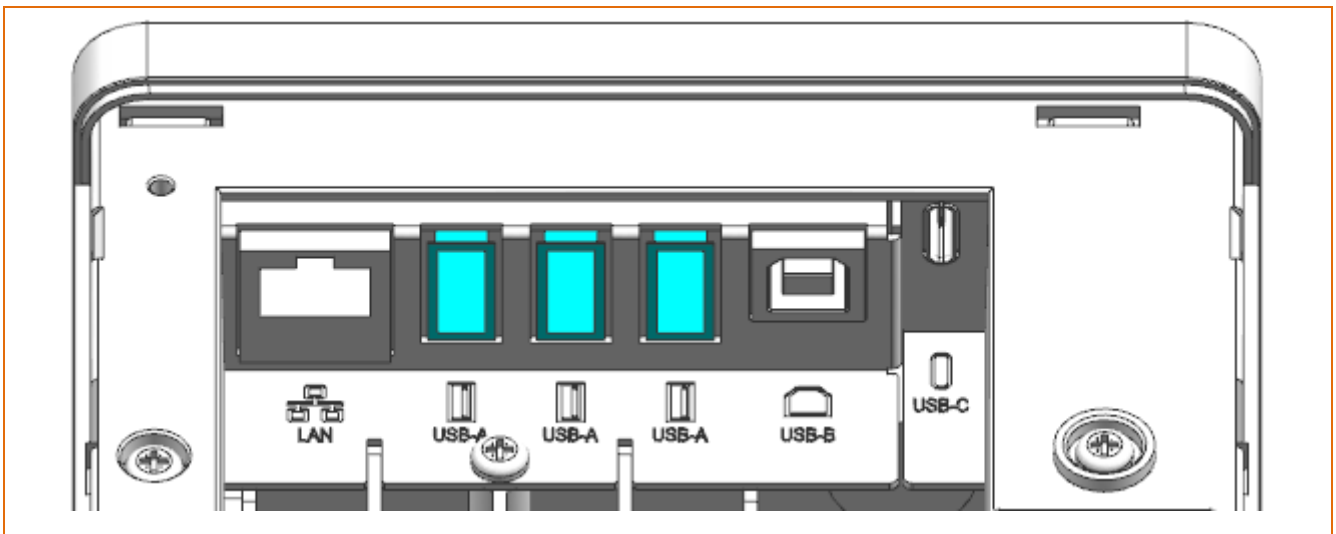
Pin No.	Signal Name	Function
Shell	Shield	Frame Ground
1	VBUS	5V, up to 0.5A
2	D-	Data Line (D-)
3	D+	Data Line (D+)
4	GND	Signal Ground

⚠️ **- Connect or disconnect the communication cable while the printer power is off. If power is on, your data may be lost.**
- Make sure to use standard USB cables.
- USB A to A cables are not supported.

2-2-1-2 USB B-Type Interface
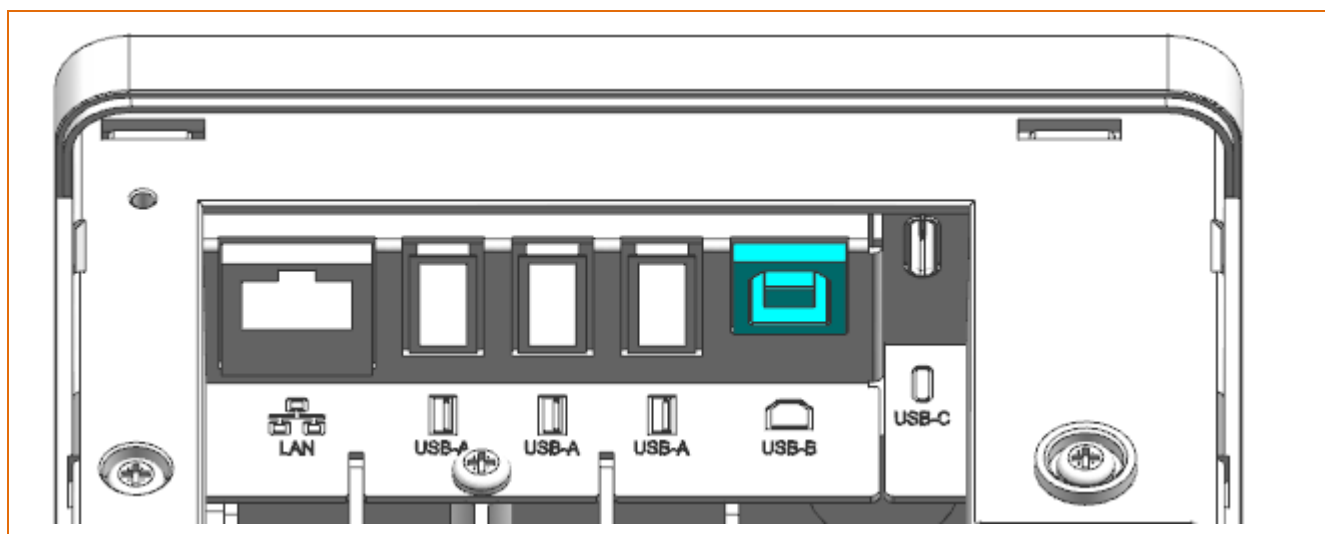
Pin No.	Signal Name	Function
Shell	Shield	Frame Ground
1	VBUS	Host Power
2	D-	Data Line (D-)
3	D+	Data Line (D+)
4	GND	Signal Ground

⚠ **Connect or disconnect the communication cable while the printer power is off. If power is on, your data may be lost.**

2-2-1-3 USB C-Type Interface

The USB-C Type interface supports data communication and charging of a smart device.
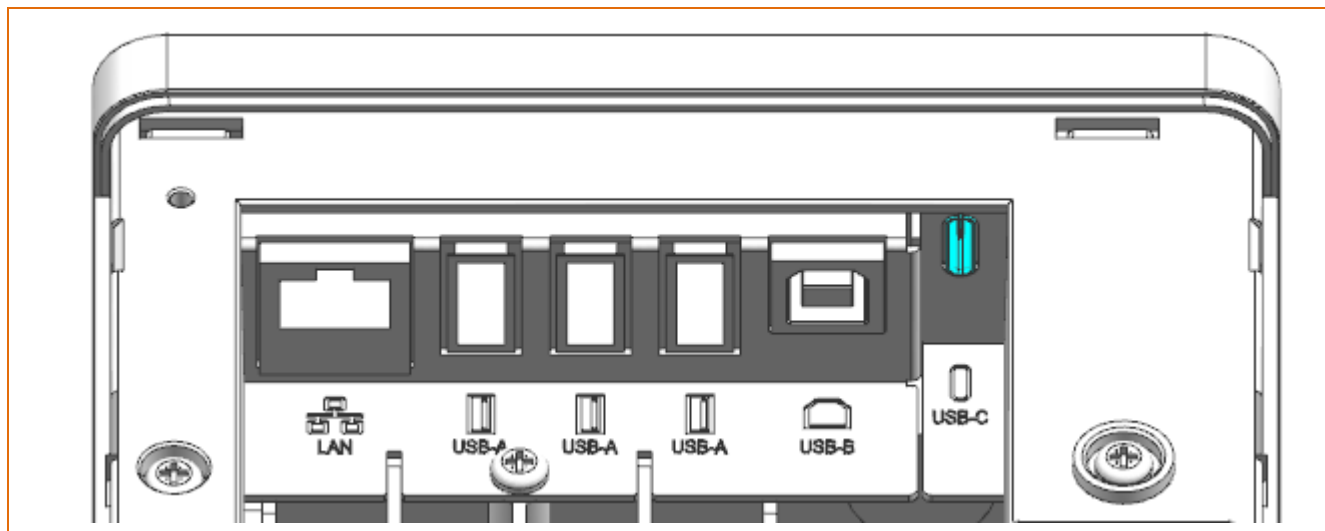
Pin No.	Signal name	Function	Pin No.	Signal name	Function
Shell	Shield	Frame Ground	-	-	-
A1	GND	Signal Ground	B12	GND	Signal Ground
A2	NC	NC	B11	NC	NC
A3	NC	NC	B10	NC	NC
A4	VBUS	Power	B9	VBUS	Power
A5	CC1	Configuration Channel	B8	NC	NC
A6	D+	Data Line (D+)	B7	D-	Data Line (D-)
A7	D1	Data Line (D-)	B6	D+	Data Line (D+)
A8	NC	NC	B5	CC2	Configuration Channel
A9	VBUS	Power	B4	VBUS	Power
A10	NC	NC	B3	NC	NC
A11	NC	NC	B2	NC	NC
A12	GND	Signal Ground	B1	GND	Signal Ground

Check the Smart Device mode settings of the printer before connecting any smart devices. The Smart Device mode can be changed through the Unified POS Utility or Memory Switch Settings mode.

Smart Device Mode	Remark
iOS Device	Default
Android Device	-
Windows Device	-

> ⚠️
> - **Connect or disconnect the communication cable while the printer power is off. If power is on, your data may be lost.**
> - **Only support USB-C type smart devices.**
>   **(Check the Smart Device mode settings of the printer before connecting it to a USB-C port.)**
> - **Communication may not be possible even if the smart device is USB-PD compatible.**
> - **Use the genuine cable of the smart device or a USB certified cable.**
> - **Charging may not be possible depending on the charging specifications of the smart device.**
> - **We are not liable for any pure economic loss caused by failure to charge your smart device due to failure, error, or malfunction of the printer.**
> - **If both USB-B and USB-C interfaces are connected at the same time, only the USB-B interface will work.**

2-2-2 Ethernet Interface
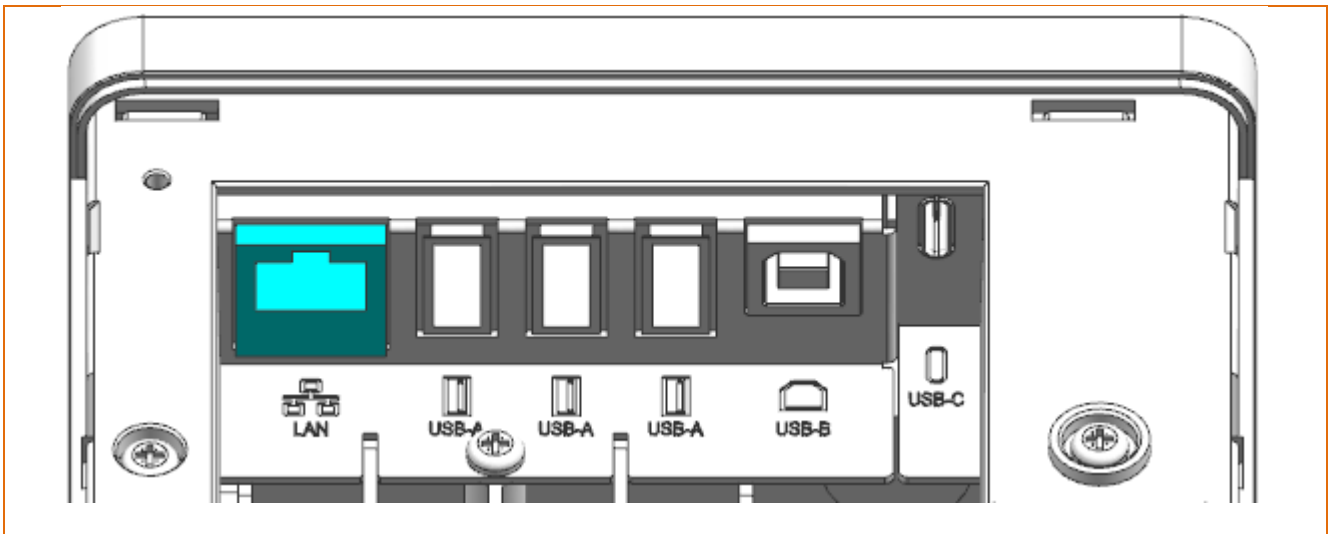
Pin No.	Signal Name	Designation (Color)	Function
1	TD+	WHITE ORANGE	Transmit +
2	TD-	ORANGE	Transmit -
3	CT	WHITE GREEN	Center tap
4	NC	BLUE	-
5	NC	WHITE BLUE	-
6	NC	GREEN	-
7	RD+	WHITE BROWN	Receive +
8	RD-	BROWN	Receive -

- Connect or disconnect the interface cable after the printer powered off.
- Refer to the utility and network connection manual for
  Interface connection information. The network connection manual is
  on the BIXOLON website (www.bixolon.com) we're offering it.
- Use the ferrite core by wrapping it around the cable.
- Attach the EMI-core to the included Ethernet cable before connecting it.
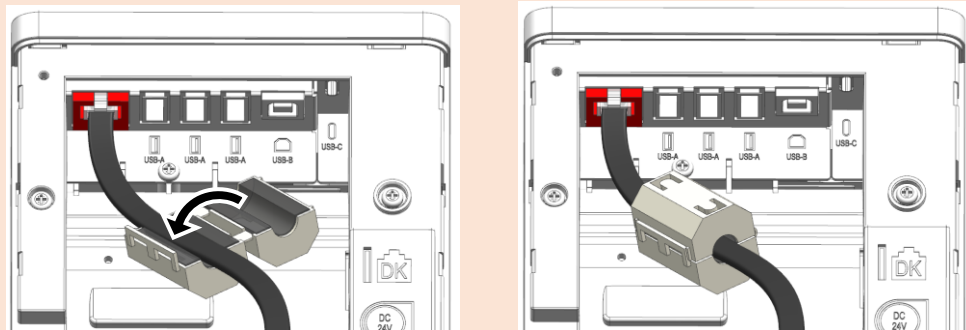
2-2-3 Wireless LAN Interface (Option)

1) Wireless LAN Communication Specifications

Item	Specifications
Frequency	2.4GHz / 5GHz
Protocol	802.11 a/b/g/n

2) Connecting Wireless LAN

Printer can be connected to terminal devices with wireless LAN communication capability (PDA, PC, smartphone, tablet PC, etc.).

> ⓘ Refer to the Wireless LAN Connection Manual for more detailed instructions about how to establish the connection. The network connection manual is on the BIXOLON website (www.bixolon.com) We're offering it.

2-2-4 Bluetooth Interface (Option)

1) Bluetooth Communication Specifications

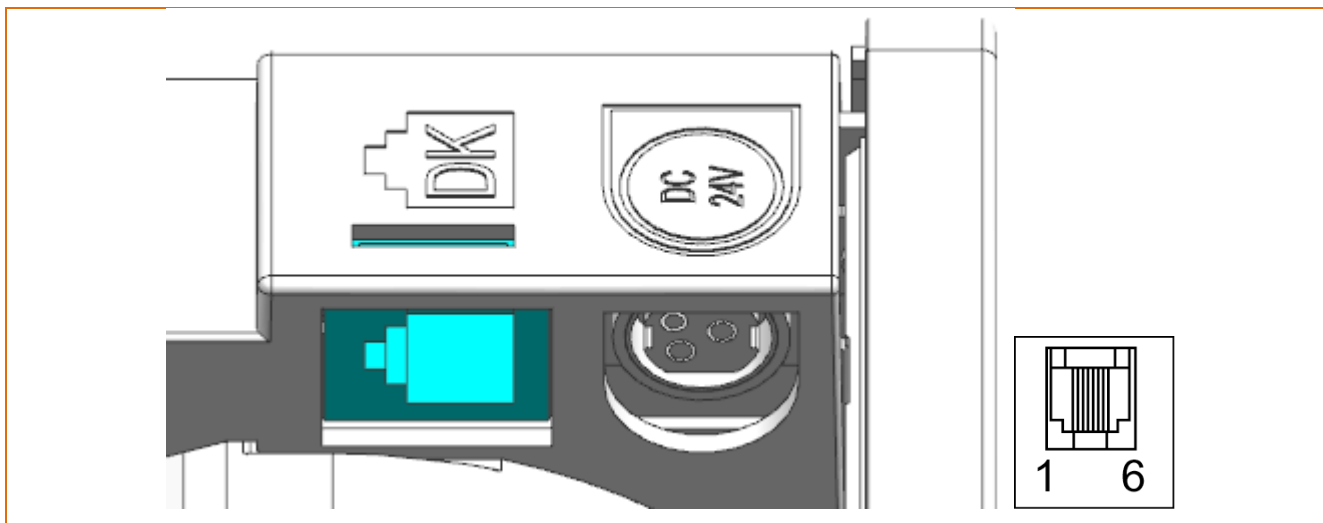| Item	Specifications
Frequency	2.402 ~ 2.480 GHz
Version	5.2

2) Bluetooth Connection

Printer can be connected to terminal devices with Bluetooth communication capability (PDA, PC, smartphone, tablet PC, etc.)

> ⓘ Refer to the Bluetooth Connection Manual for more detailed instructions about how to establish the connection. The Bluetooth connection manual is on the BIXOLON website (www.bixolon.com) We're offering it.

2-3 Drawer Kick-out Port

• Connect the cash drawer connection cable to the drawer kick-out port on the rear side of the printer.

Pin No.	Signal Name	Direction
1	Frame Ground	-
2	Drawer Kick-out Drive Signal 1	Output
3	Drawer Open/Close Signal	Input
4	+24V	-
5	Drawer Kick-out Drive Signal 2	Output
6	Signal Ground	-

⚠️
- Use a cash drawer that meets the printer specifications.
   Using a cash drawer that is inappropriate to the specs or using
   it as a power supply for a separate device may result in damage to
   the product
- Do not connect a telephone line to the drawer kick-out port.
   Otherwise, the telephone line and the computer may be damaged.
- Do not allow a foreign object such as a conductor to touch the cash
   drawer port. This may result in damage to the product
- Make sure to use a cash drawer with an internal coil resistance of
   24 Ω or higher. (The maximum current is 1A.)
- The open signal time for the cash drawer should not exceed 0.8
   seconds. After opening the cash drawer, make sure to idle for at
   least 3.2 seconds (at least 4 times that of the open signal time)
   before operating it.

3. Installation & Usage

3-1 Printer Installation Placings

- 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.
- Install in a place that does not exceed the protocol standard of the wireless communication or the specified maximum distance.
- For stable wireless communication, install in a place where there is no physical obstacle (wall, object, etc.).

3-2 Power Connection

• Face the flat side of the power cable to the bottom of the printer and connect the power cable to the power port.
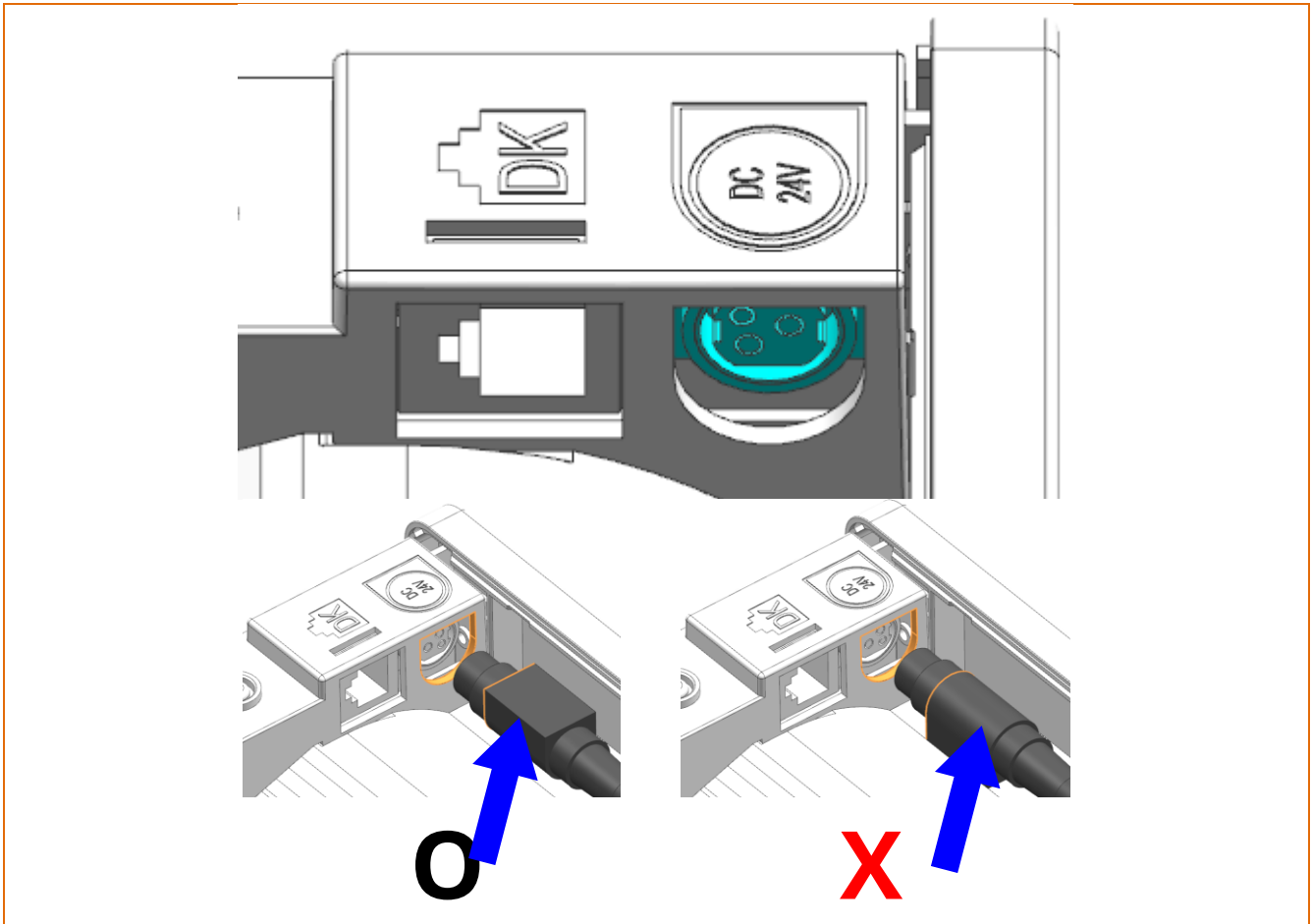
⚠ - **Only use a power supply provided by Bixolon. Bixolon shall bear no responsibility for damage caused by using a third-party power supply.**
- **Be sure to turn off the printer and connect or disconnect the cable.**
- **Check the power supply's label to check its electronic specs.**
- **When removing the power supply, make sure you have a firm grasp of the plug terminal of the power cable and the printer and pull horizontally.**
- **When connecting or disconnecting power, make sure to remove the power supply from the power outlet before removing.**
- **Pay attention to the direction in which you insert the power cord.**
- **Do not connect a voltage out of the specifications of the power supply. It can cause damage to the product or a fire.**

## 3-3 Inserting and changing the paper roll

> ❗ Use paper roll that complies with the specifications.
> If you use a paper roll including paper core attached to paper, the paper may not be properly recognized as paper Empty due to not proper releasing of paper.

> ⚠️ **- When opening or closing the cover, be careful not to pinch your fingers.**
> **- Do not open the print head levers 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 printer head gets very hot, so turn off the power and let it cool down completely. The hot printer head can cause serious burns.**
> **- This printer should be used in Front Exit orientation. We don't guarantee any of issue by Vertical Exit orientation.**

1) Open the printer cover by pulling the Open Cover lever forward.

Printer Cover   *Cover-Open Lever*
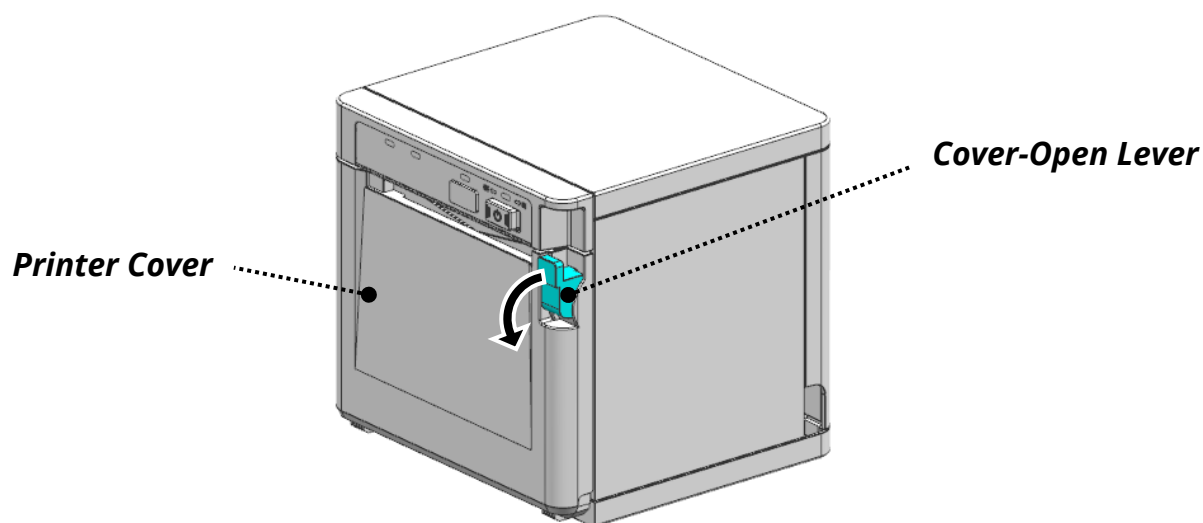
> ❗ When you change the paper, remove the used paper roll.

2) Replace with a new one as shown in the image.
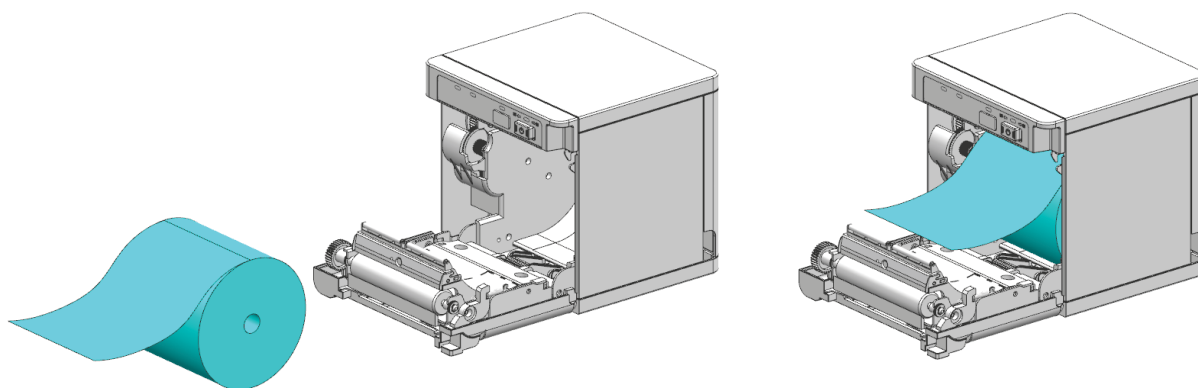
3) Check the orientation of the roll paper when inserting it into the printer.

<div align="center">

X **O**

</div>
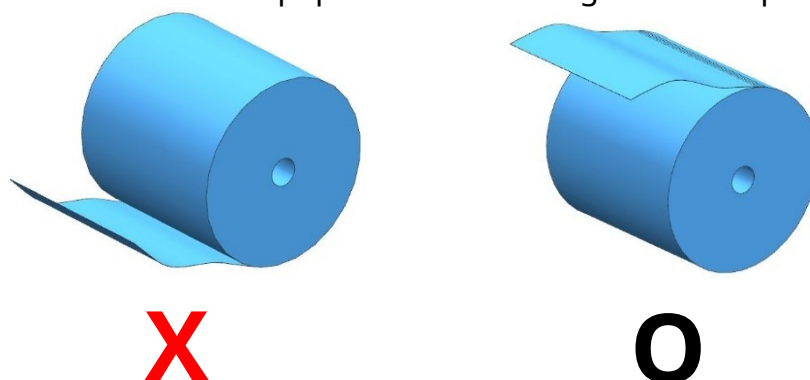
4) Pull out a small amount of paper as shown in the picture, and close the Pinter Cover.
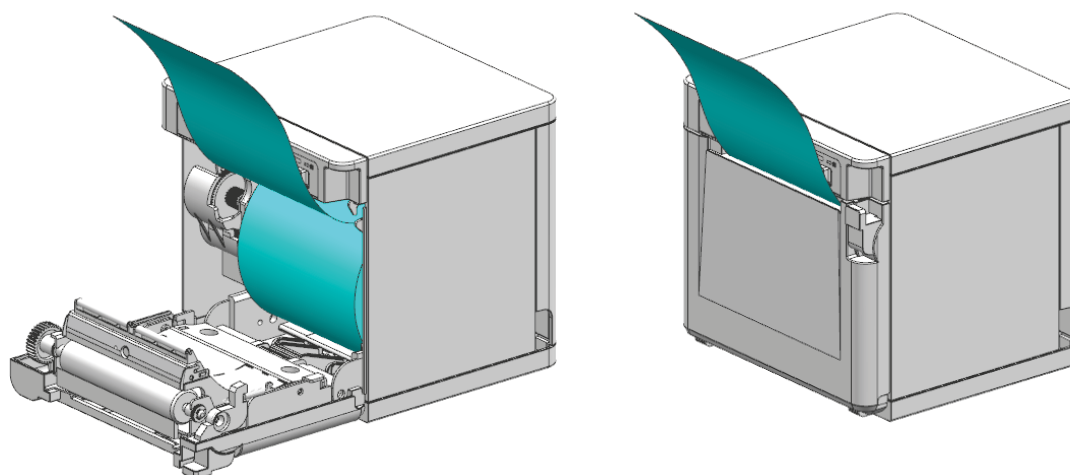
> ⓘ When closing the cover, hold down the center of printer cover firmly so that paper roll is loaded correctly.

5) Cut the paper as shown in the following picture.

3-4 Using Controller

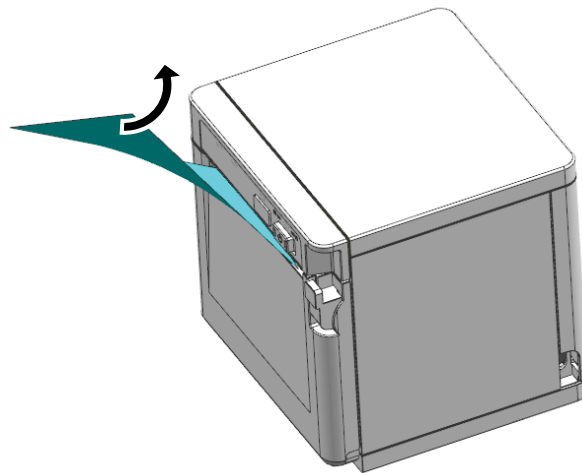| Explanation		
	Error LED	Error LED is on when there is an error such as no paper roll, open cover, etc.
	Paper LED	Paper LED is on when the paper roll is almost used up or there is no paper roll inside. Paper LED flickers when the machine is in a self-diagnosis stand-by or macro execution stand-by state.
	Feed Button	Press the Feed button once to output one line of the paper roll. Press the Feed button for more than 3 seconds to output the paper roll continuously.
	Power Slide Switch	Power On To turn on the printer, slide the power switch to the ON direction(right side). Power Off To turn off the printer, slide the power switch to the OFF direction(left side).

- The error light and paper light bilnk alternately when the printer is turned on, but both go off after booting is completed.
- If the printer does not power on, check that the adapter LED indicates "ON" If the adapter LED is "OFF", connect the adapter power.

4. Self-Test

The self-test checks whether the printer has any problems.
If the self-diagnostics reveal no error in the printer, please see other device or software.
If the printer does not run normally, please contact the place of purchase.

> ⚠️ **Do not open the top cover while the printer is running.**

1) After the printer boots up, open the printer cover.

2) Self-test is started when paper is loaded, the FEED button is pressed, and the printer cover is closed.

3) The printer stops after printing the version information and setting status as shown below. (Paper error light keeps blinking.)

> **SELECT MODE BY PRESSING THE FEED BUTTON**
> **Exit SELF-TEST   : Less than 1 second**
> **Mode Selection : 1 second or more**

4) To select the Exit SELF-TEST mode, press the FEED button less than 1 second quickly.
   To select the Mode Selection, press the FEED button more than 1 second.

4-1 If "Exit SELF-TEST" is selected

① The Self-Test ends automatically as it prints the following line and cuts the paper.

- COMPLETED -

② The printer goes into normal print mode upon completion of the Self-Test.

4-2 If "Mode Selection" is selected

① The printer is on standby after print out as shown below.

Mode Selection **0 : Exit** **1 : VMSM Selection Mode** **2 : Interface Setting** **3 : Hexadecimal Dumping**

② Press the Feed button to run the above function.
   ▶ Step 1(Select Options): press the button a number of times as shown by each menu.
   ▶ Step 2(Enter Options): hold down the button for at least one second to apply each item selected.

> ❗ If you select any items not listed above, the list of "Setting Mode Selection" will be printed again. Setting the mode will be canceled if no item is selected in Step 1.

4-2-1 If "VMSM Selection" is selected

① The following lines will be printed when the VMSM opens.

```
                  ** VMSM Selection **
                  0 : Save Setting and exit
                  1 : Print current settings
                  2 : Set Print Density
                  3 : Set Print Speed
                  4 : Set Cutting mode
                  5 : Set Internal Buzzer control
                  6 : Set Buzzer control after cutting
                  7 : Set Code Page
                  8 : Set International Character set
                  9 : Set USB PD
                  10 or more : None
```

② Press the Feed button to run the above function.

▶ Step 1(Select Options): press the button a number of times as shown by each menu.

▶ Step 2(Enter Options): hold down the button for at least one second to apply each item selected.

> - If you select any items not listed above, the list of "VMSM Selection" will be printed again. Setting the mode will be canceled if no item is selected in Step 1.
> - If the "0: Save settings and exit" function is not executed, The setting information is not stored in the printer.

③ Hold down the Feed button for at least 1 second to save the changes. The following line will be printed before cutting the paper.

```
                  - COMPLETED -
```

5. Maintenance

5-1 Paper Jam

1) Power cycling the printer will return the movable blade to its home position and clear minor paper jams.

2) Open and close the printer cover if power cycling does not solve the problem.

⚠️	**- If a paper jam occurs, do not use force to pull the paper out.** **- Forcing the printer cover open may damage the printer.** **- If paper jam persists, contact your local seller.**
🛈	Placing your hand over the paper exit may cause a paper jam.

5-2 Cleaning Printer

- The presence of dust, foreign matter, adhesive matter, or other pollutants inside the printer's head and internal capacity may undermine printing quality.
  Periodic cleaning (every 3 months at minimum) is recommended to maintain print quality.

1) Open the Printer Cover and remove the paper currently in use.
2) Residue or contamination of TPH should be wiped out by alcohol for medical.
3) Insert a paper roll and close the Printer Cover.
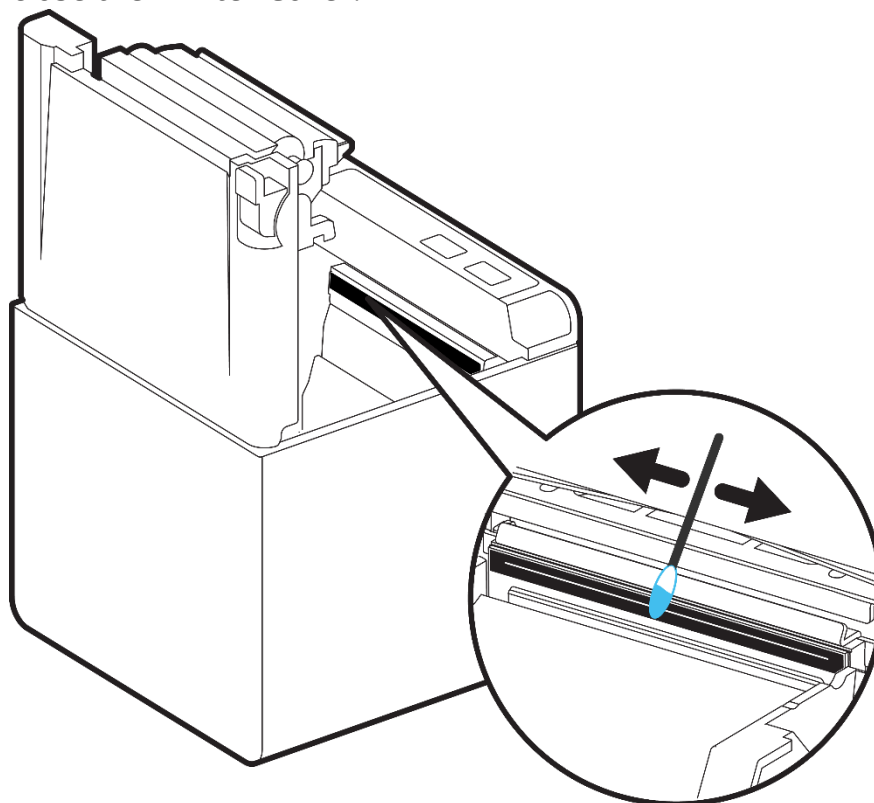
4) When printer foot rubber becomes dirty not to work it properly, please replace it with enclosed foot rubber.

Foot Rubber

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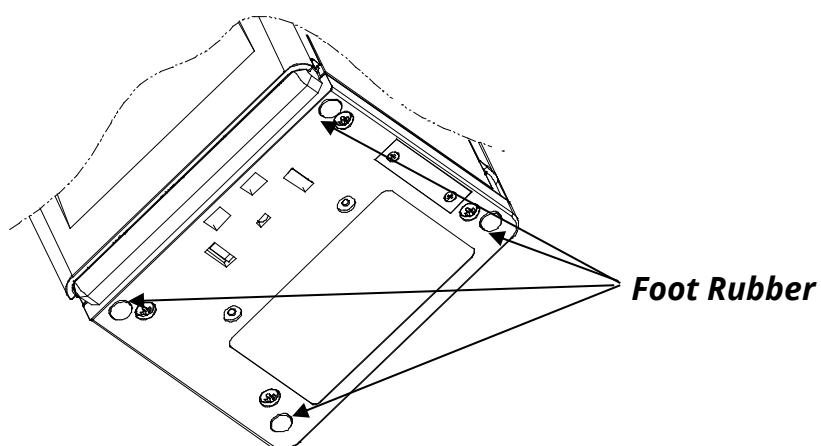
⚠️ - Be sure to clean after turning the printer off.
- Be careful not to leave scratches in the print head
  The printer may be damaged.
- Print head is very hot while the printer is printing, so clean the
  printer after cooling it sufficiently with power off.
- Do not touch heated area of print–head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

6. Specifications

6-1 Printer Specifications

Printing Method		Thermal printing
Dot Density		203 dpi (8dots/mm)
Printing Width		72 mm
Roll Width		79.5±0.5 mm
No. of Characters per Line (Default Value)		48 (Font A) ,64 (Font B) ,64 (Font C)
Printing Speed		Max. 250 mm/sec
Interface	LAN	10BASE-T/100BASE-TX
	USB-A	USB 2.0 High Speed Supplies up to 5V/0.5A
	USB-B	USB 2.0 High Speed
	USB-C	- USB-PD (USB Power Delivery) - USB 2.0 High Speed - Delivers up to 18W (5V/3A or 9V/2A or 12V/1.5A)
	WLAN	802.11 a/b/g/n
	Bluetooth	Bluetooth V5.2 Classic/LE
Cash Drawer		2port with Y-type cable
AC/DC Adapter	Input Voltage	100~240 VAC
	Frequency	50/60 Hz
	Output Voltage	24 VDC ± 5%
	Output current	2.5A
Environment Condition	Temperature	Operating: 0 ~ 40 ℃ Storage: -20 ~ 60 ℃
	Humidity	Operating: 10 ~ 80 % RH Storage: 10 ~ 90 % RH Paper excluded
Life Span	Printer Head	180Km
	Auto Cutter	1,500,000cuts

> ❗ The specifications were determined based on operation at normal temperature using designated paper on default settings.
> They are subject to change depending on temperature or printing level.
> Printing speed may become slightly slower depending on
> the data transmission speed and the combination of commands.

6-2 Recommended Papers

- TF50KS-E (Paper Thickness: 65µm): Nippon Paper Industries Co., Ltd.
- PD 150R (Paper Thickness: 75µm): New Oji Paper Mfg. Co., Ltd.
- PD 160R (Paper Thickness: 75µm): New Oji Paper Mfg. Co., Ltd.
- P350 (Paper Thickness: 62µm): Kansaki Specialty Paper, Inc. (USA)
- P220AG (Paper Thickness: 65µm): Mitsubishi Paper Mills Limited
- P220A (Paper Thickness: 65µm): Mitsubishi Paper Mills Limited
- F5041 (Paper Thickness: 65µm): Mitsubishi HitecPaper Flensburg Gmbh
- P5047 (Paper Thickness: 60µm): Mitsubishi Paper Mills Limited

⚠️ - **The use of papers other than those recommended above may cause damage to the printer's TPH or degrade the printing quality. BIXOLON is not responsible for the damage caused by non-recommended papers.**
- **If you have to use other products, we recommend that you use papers with a similar level of quality to the recommended ones.**

Revision history

Ver.	Date	Description
1.00	27-12-2023	New

Ver. 1.00