BIXOLON

User's Manual

LINERLESS PRITNER

Ver. 1.00
SRP-S3000

http://www.bixolon.com
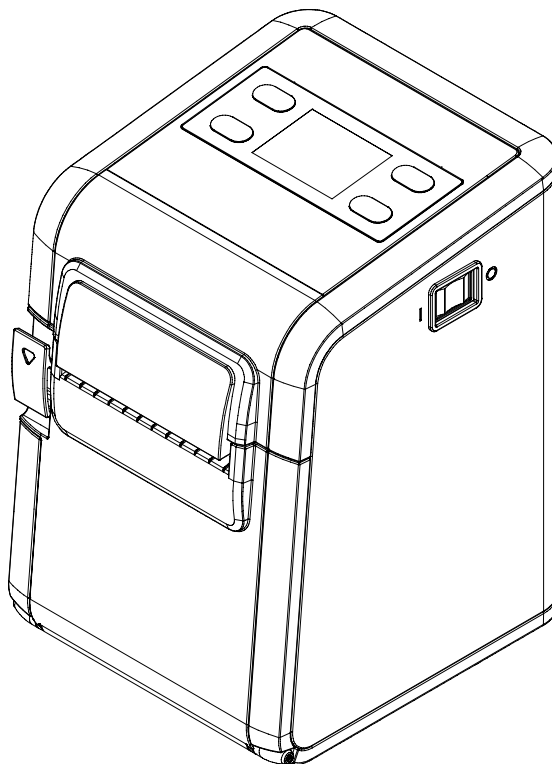
Introduction

SRP-S3000 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. LINERLESS PRINTER
2. Low-noise thermal transfer method printing
3. Maximum 200mm/s printing speed
4. 142 x 210 x 157 (W X D X H)
5. Interface: Serial, USB, Ethernet, WLAN(2.4GHz/5GHz), Bluetooth 5.0
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)

It is advisable to read the contents of this manual carefully before using the printer for the first time.

※ **Use only authorized supplies that can be trusted!**

- We are not responsible for quality and service for damage caused by the use of unauthorized products (or recycled ones).

Safety Information

⚠ *Warning*: Warnings must be heeded carefully in order to prevent serious physical harm.

⚠ *Caution*: Cautions must be heeded in order to prevent minor injuries, equipment damage, or data loss.

Symbol Information

	DC (Direct current)
	Error, Warning
	Paper Feeding
	Stand-By
	USB
	Ethernet

Table of Contents

1. Installing Printer and Getting Started

1-1 Unpacking

• Check the following contents list, and contact your dealer for assistance if any item is missing or incorrect.

- Product
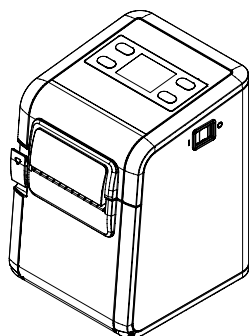
SRP-S3000

- Standard Components
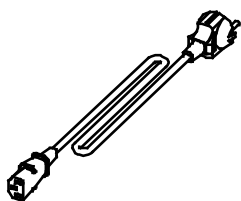
Power Cord
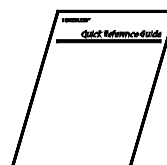
Installation Guide
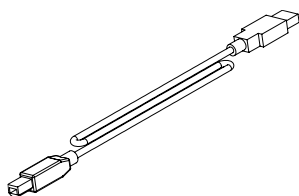
USB A-B Cable
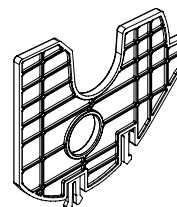
Partition 2ea

- Optional Components
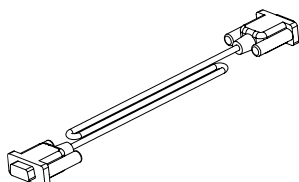
Serial Cable
(9pin - 9pin)

1-2 Interface

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

1-2-1 USB Interface (Device Function USB B Type Connector)
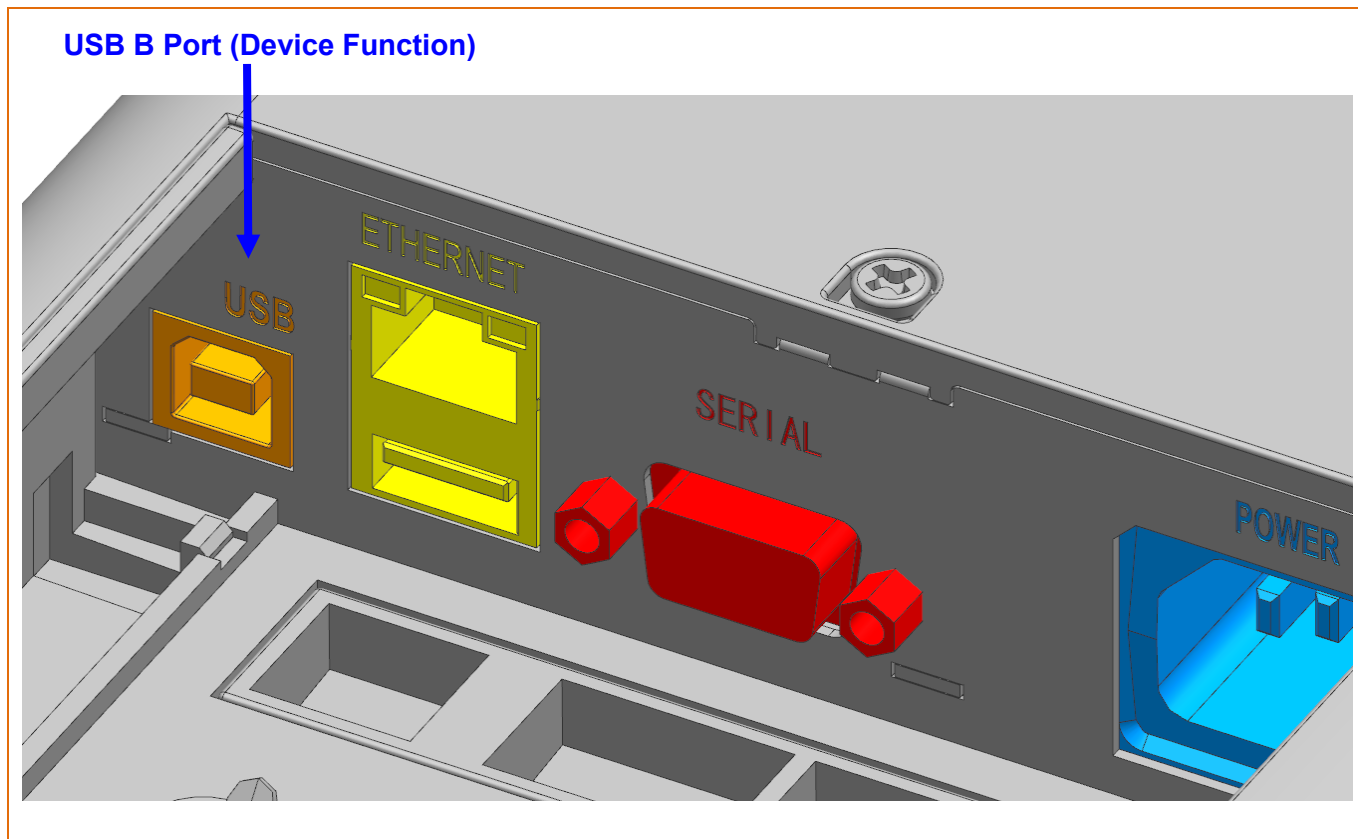
USB B Port (Device Function)

Pin No.	Signal Name	Designation (Color)	Function
Shell	Shield	Drain Cable	Frame Ground
1	VBUS	RED	Host Power
2	D-	WHITE	Data Line (D-)
3	D+	GREEN	Data Line (D+)
4	GND	BLACK	Signal Ground

⚠ *Caution*	After turning off the power switch of printer, connect and disconnect the communication cable.

1-2-2 USB Interface (HOST Function, USB A Type Connector)
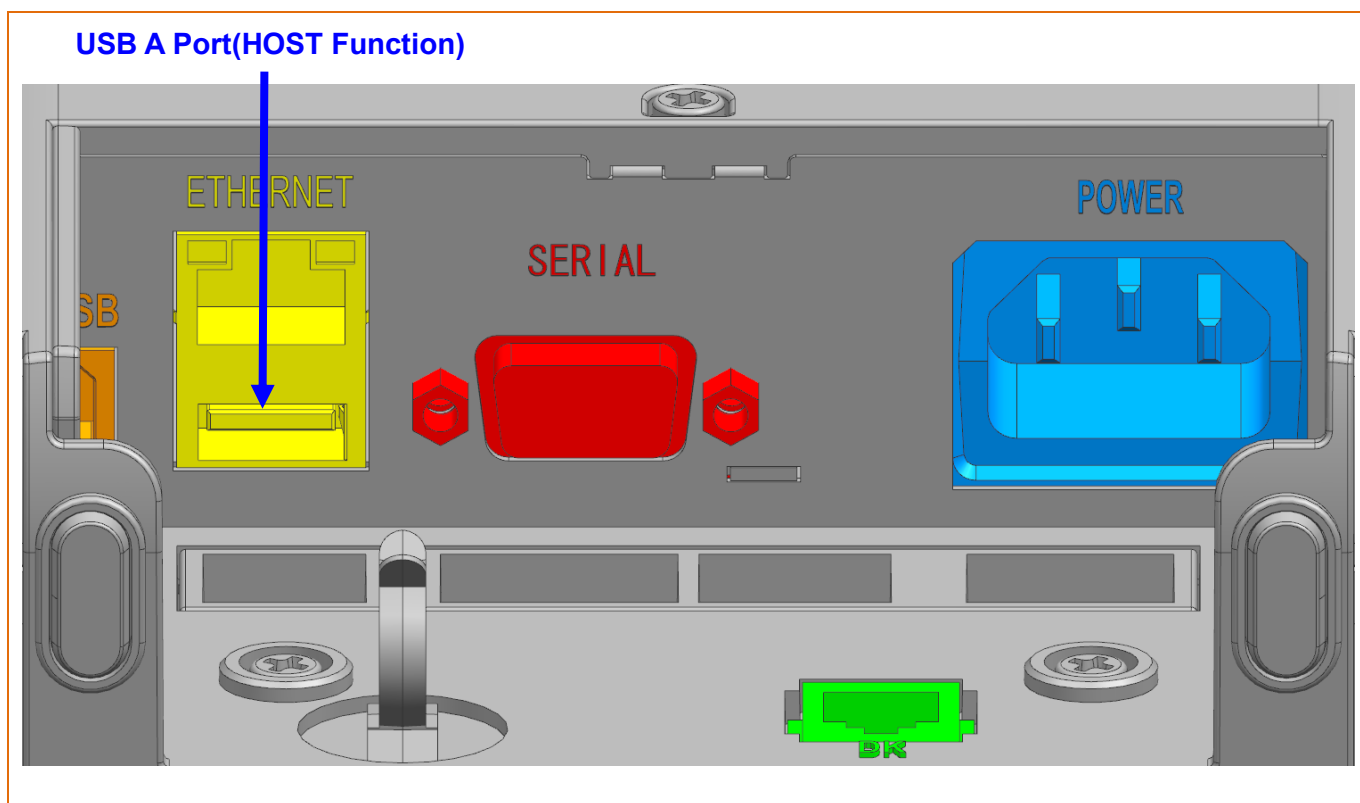
USB A Port(HOST Function)

Pin No.	Signal Name	Designation (Color)	Function
Shell	Shield	Drain Cable	Frame Ground
1	VBUS	RED	Host Power
2	D-	WHITE	Data Line (D-)
3	D+	GREEN	Data Line (D+)
4	GND	BLACK	Signal Ground

USB Interface can connect to the peripheral devices.
(ie. the barcode reader, customer display and WLAN Dongle that is supported by the printer.)

⚠ *Caution*	Do not connect the USB A-A type cable with the Printer and HOST(ex. PC) After turning off the power switch of printer, connect and disconnect the communication cable.

1-2-3 Ethernet Interface

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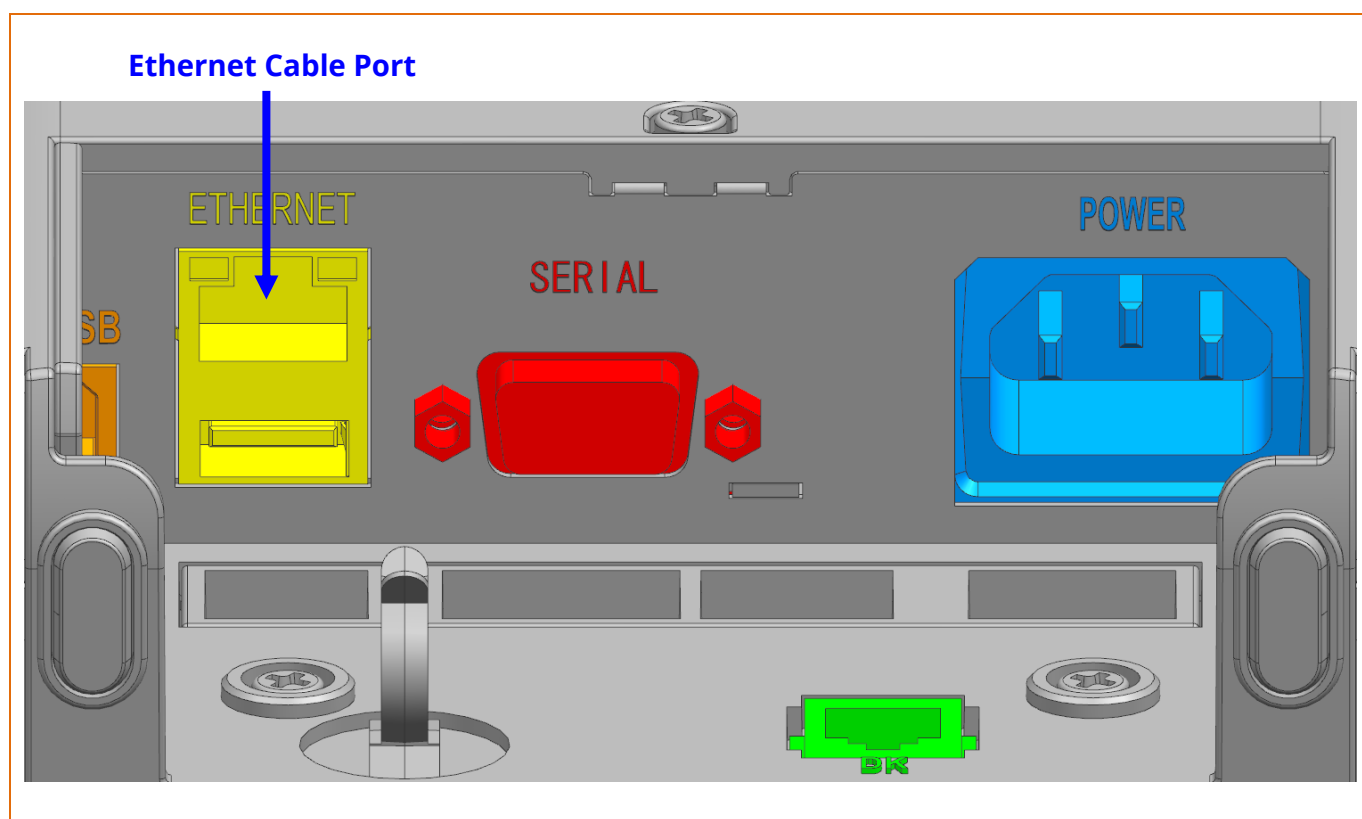
Pin No.	Signal Name	Designation (Color)	Function
1	TD+	WHITE ORANGE	Transmit +
2	TD-	ORANGE	Transmit -
3	CT	WHITE GREEN	Center tap
4	NC	BLUE	-
5	NC	WHITE BLUE	-
6	NC	GREEN	-
7	RD+	WHITE BROWN	Receive +
8	RD-	BROWN	Receive -

📖 *Note*	Refer to the utility and network connection manual for Interface connection information.
⚠ *Caution*	After turning off the power switch of printer, connect and disconnect the communication cable.

1-2-4 Serial Interface(RS-232C)

Serial Cable Port

ETHERNET

SERIAL

POWER

SB
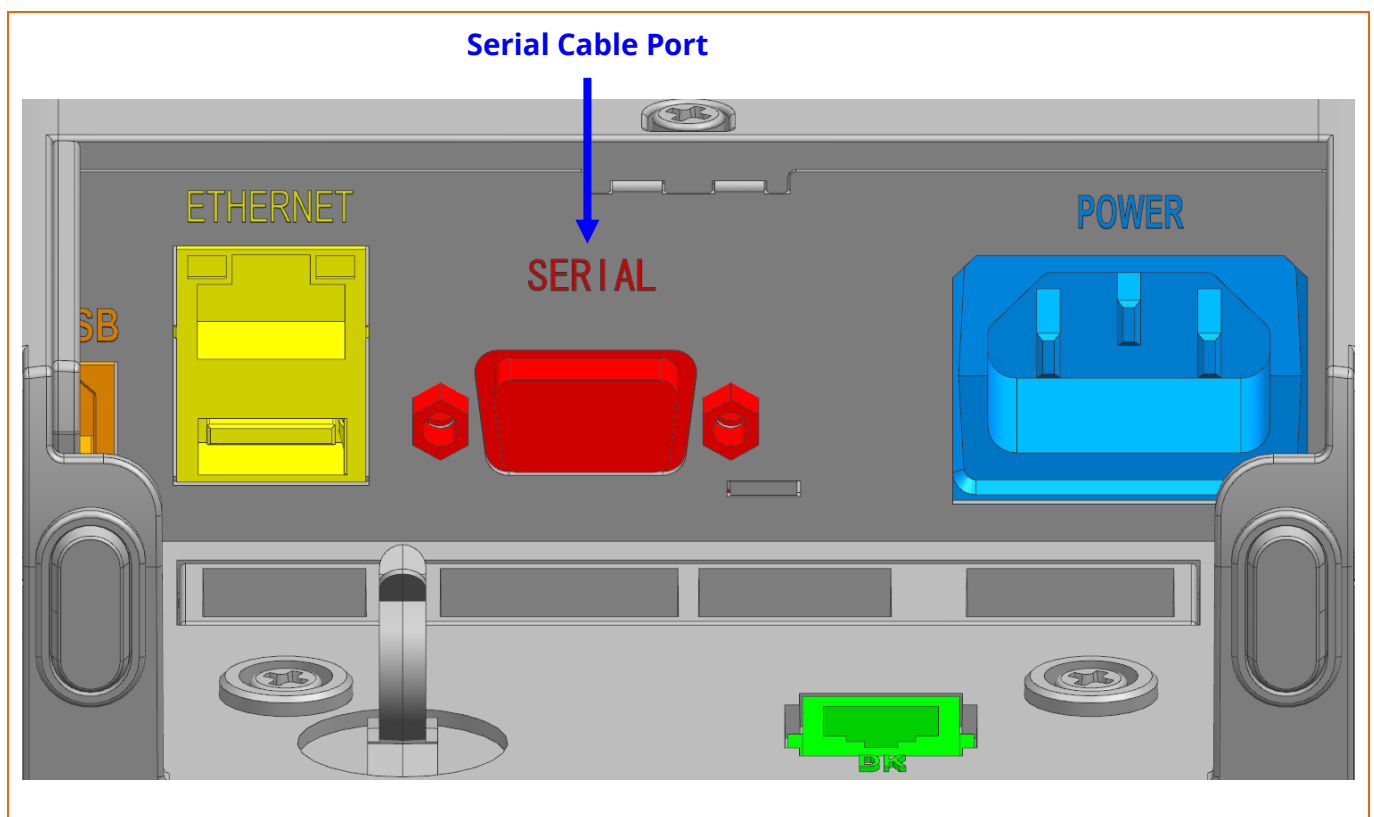
Pin No.	Signal Name	Direction	Function
1	NC	-	-
2	TxD	Output	Transmit Data
3	RxD	Input	Receive Data
6,8	RTS	Output	Ready To Send
4,7	CTS	Input	Clear To Send
5	SG	-	Signal Ground
9	NC	-	-

⚠ *Caution*	After turning off the power switch of printer, connect and disconnect the communication cable.

1-2-5 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 Bluetooth communication
    Capability. (PDA, PC, smartphone, tablet PC, etc.)

📖 *Note*	Refer to the Wireless Wireless LAN Connection Manual for more detailed instructions about how to establish the connection.

1-2-5 Bluetooth Interface (Option)

1) Bluetooth Communication Specifications

Item	Specifications
Frequency	2.402~2.480 GHz
Version	5.0

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

📖 *Note*	Refer to the Bluetooth Connection Manual for more detailed instructions about how to establish the connection.

1-3 Cash drawer Port

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

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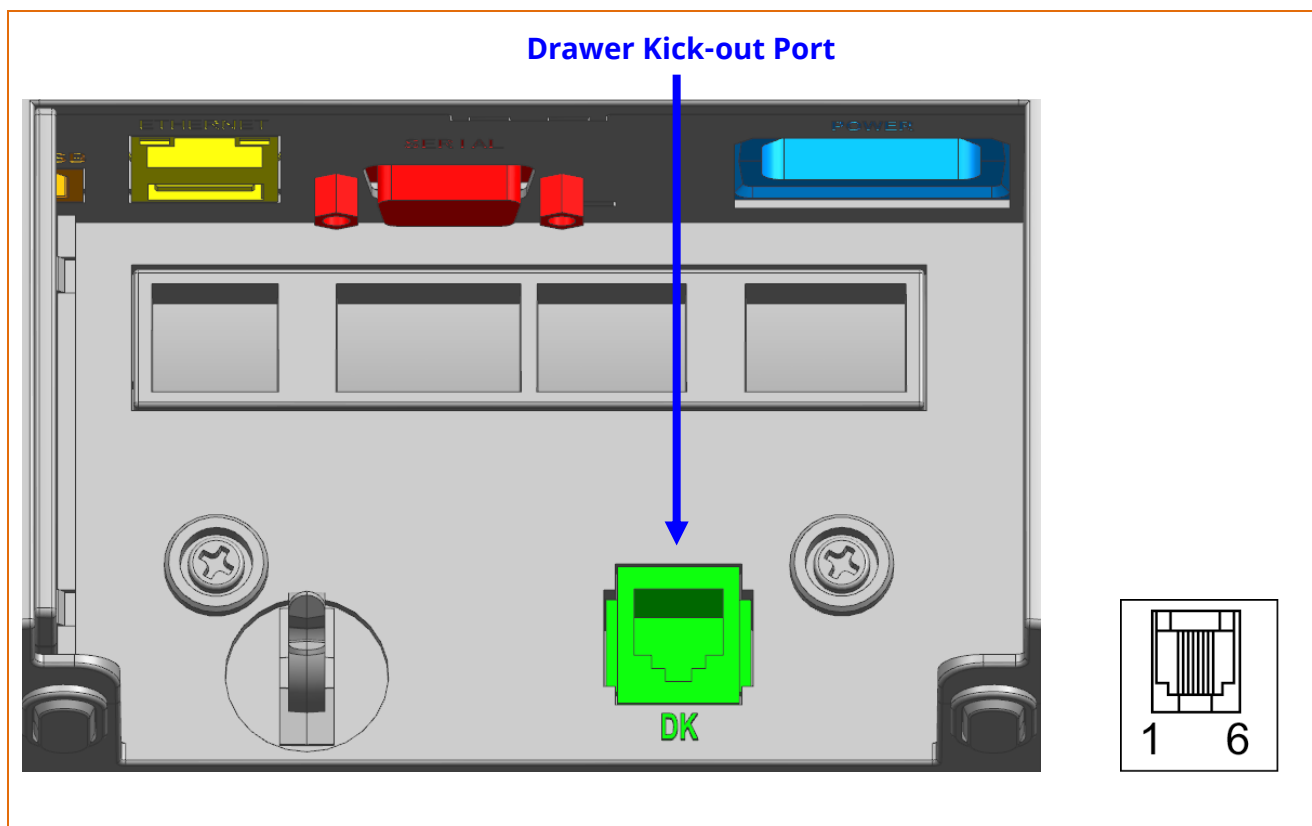
Pin No.	Signal Name	Direction
1	Frame Ground	-
2	Drawer Kick-out Drive Signal 1	Output
3	Drawer Open/Close Signal	Input
4	+24V	-
5	Drawer Kick-out Drive Signal 2	Output
6	Signal Ground	-

⚠ *Caution*	- Use a cash drawer that meets the printer specifications. Using a cash drawer that is inappropriate to the specs or us Ing 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 drawer kick-out 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.

1-4 Connecting Power Supply

1) Make sure the product is turned off before connecting the power supply.

2) Connect the power cable with the flat side pointing to the outside of the printer, as shown in the diagram below.
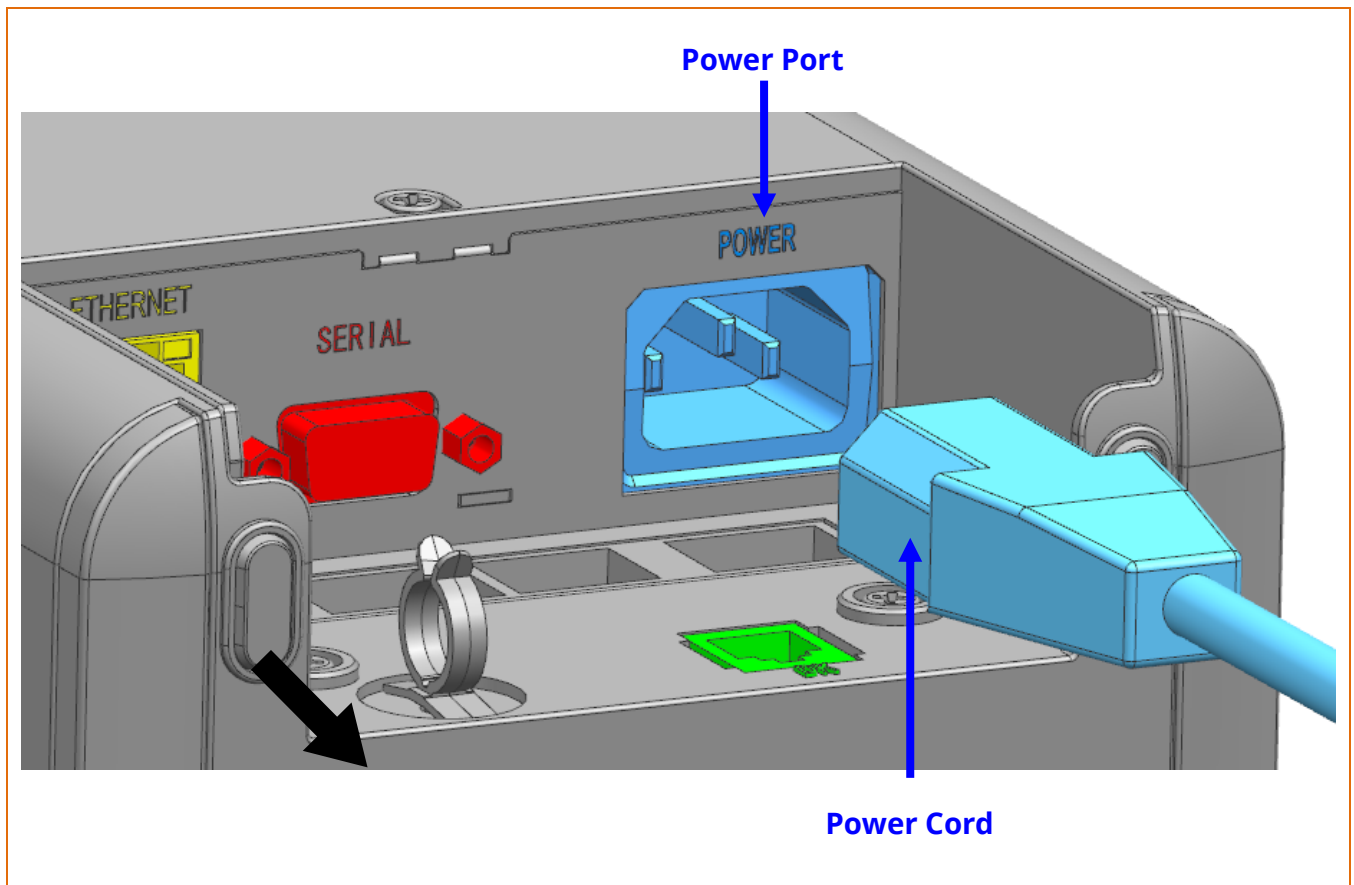
⚠ *Caution*	- Only use a power supply provided by Bixolon. Bixolon shall bear no responsibility for damage caused by using a third-party power supply. - Check the power supply's label to check its electronic specs. - When removing the power supply, make sure you have a firm grasp of the plug terminal 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 cable.
⚠ *Warning*	**Do not connect a voltage out of the specifications of the power supply. It can cause damage to the product or a fire.**
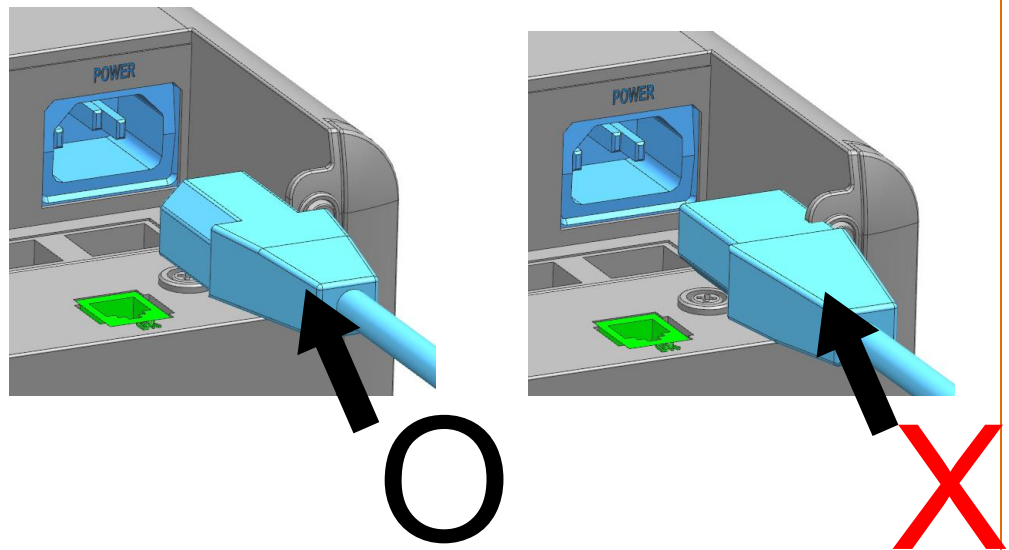
1-5 Reconfiguration of Printer

• This product supports virtual memory switch change the use the virtual memory switch utility. Use virtual memory switch management function for self-diagnosis.

📖 *Note*	- Use the Unified Utility or LCD to change the virtual memory switch settings. - For more information, refer to the utility and 3. LCD Menu.
⚠ *Caution*	Turn the power ON/OFF after changing the settings using the virtual memory switch utility and LCD.

1-6 Installing & Replacing Paper

1) Open the paper roll cover by Pulling the Cover-Open Lever.
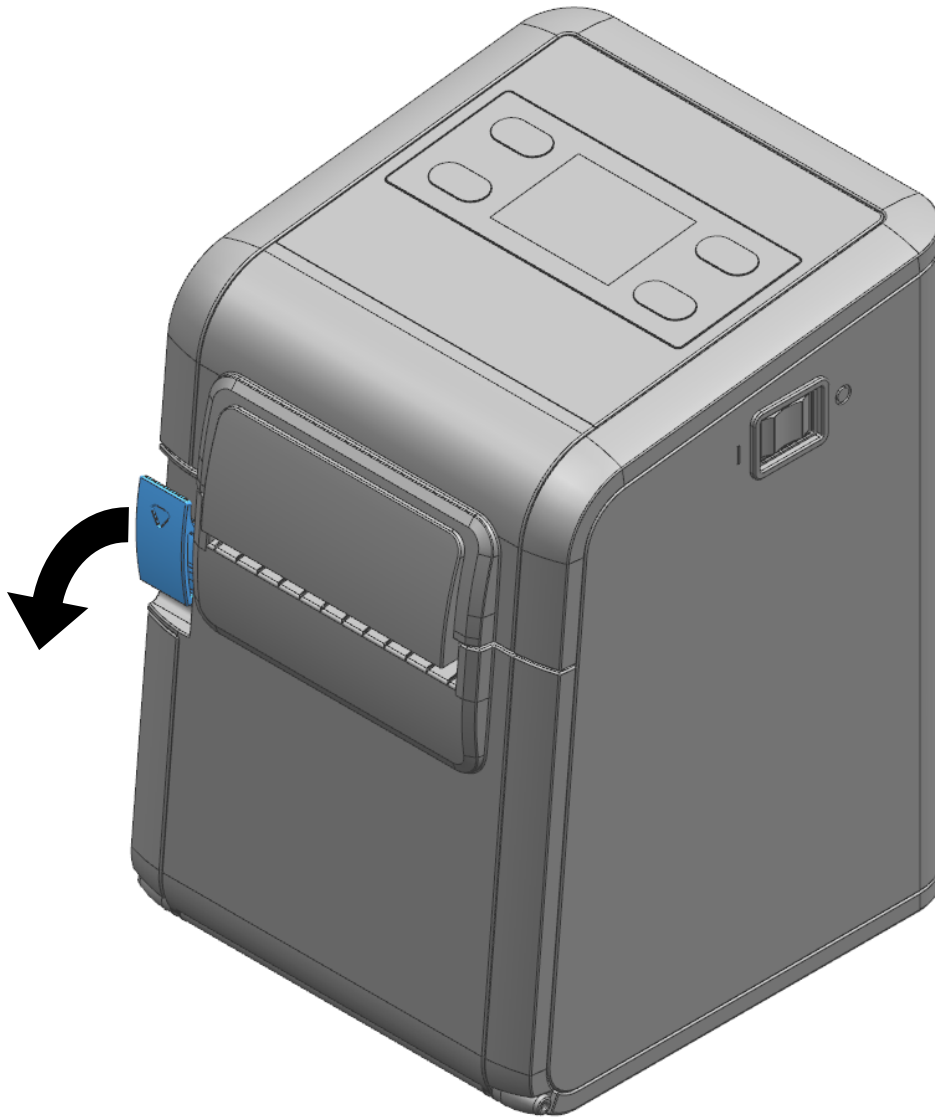
⚠ *Caution*	Do not open the print cover while the printer is operating, otherwise the printer may be damaged.

2) Remove the empty paper roll and replace with a new one as shown in the image.
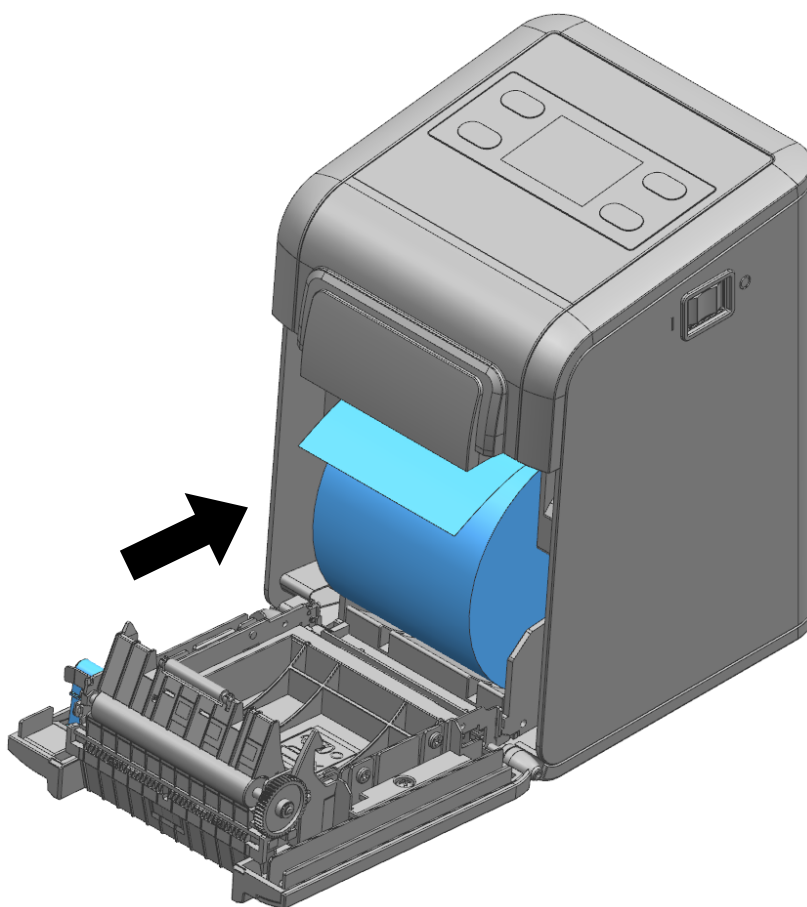
⚠ *Caution*	Check the orientation of the roll paper when inserting it into the printer. O X
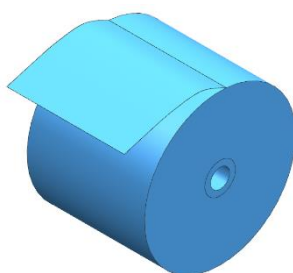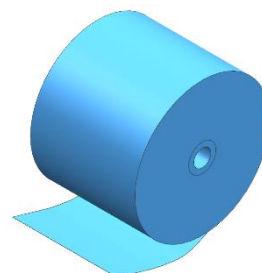
3) Pull out a small amount of paper as shown in the picture, and close the cover.
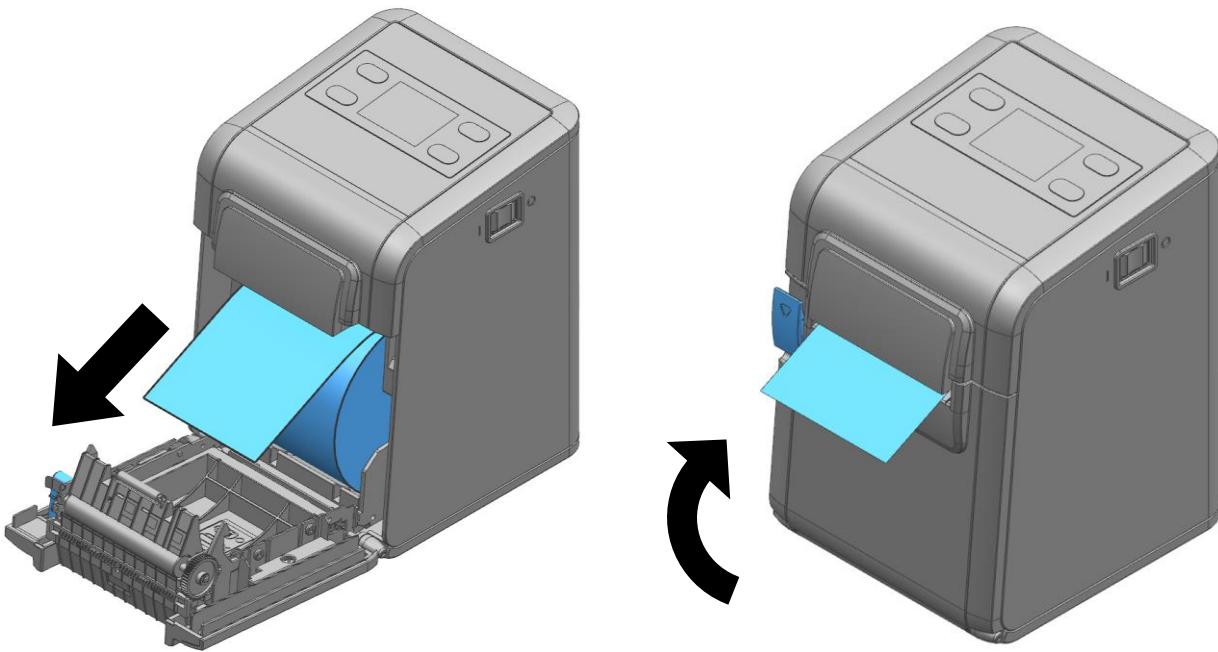
⚠ *Caution*	- When closing the cover, hold down the center of printer cover firmly so that paper roll is loaded correctly. - Make sure to use the specified paper only.

1-7 Recommended Papers

- Iconex
  Classic: 9023-1253, 9023-1232(80mm), 9023-1823, 9023-1397(58mm),
          9023-1233, 9023-1818(40mm)
  Classic High Tack: 9023-1254(80mm), 9023-1500(58mm), 9023-1258(40mm)
  Classic High Temp: 9023-1267, 9023-1463 (80mm), 9023-1269(40mm)
  Ultralite: 9023-1866(80mm), 9023-1410(58mm), 9023-1865(40mm)
  Classic High Tack Plus: 9023-1846(80mm)
  Linerless Extreme(Snag Resistant): 9023-1873, 9023-1708(40mm)
  Linerless Extreme(Freshness Labeling): 9016-3227, 9016-3777, 9016-3257(40mm)

- MAXStick
  2GO: MS2142402GO3S(58mm), MS3182402GO4S(80mm)
  PLUSD: MS1732290PLUSD HVHR(40mm), MS214170PLUSD(58mm),
          MS318170PLUSD(80mm), MS3183752GOPLUSD(80mm)
  X2: MS11732270X2HRHT(40mm), MS214150X2(58mm)

- StickyPOS
  40MMRL90-9000(40mm), 2CR-11 58X350(58mm) 2CR-11 80X350(80mm)

- Sato
  Restick: 585006411(80mm)
  Linerless Extreme: 585006451(80mm)

- Blumberg
  Linerless Extreme: A11649(58mm), A12978(80mm)

⚠ *Caution*	- Use of papers other than those recommended above may damage TPH or degrade the printing quality and our company 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.

1-8 Removing Paper Jam

1) When a paper jam occurs, turn the printer OFF and then back ON, open the cover, and remove the jammed paper.

※ **In case of a minor jam, it may be possible that the operating blade returns to the original position and cover can be opened simply by turning the printer OFF and then back ON.**

Follow the steps shown below if the cover does not open after power cycling.

2) Turn the printer OFF.
3) Lift the paper rollout part of the COVER-CUTTER to remove it.
4) Turn the knob and insert the blade that sticks out using a cross-head screwdriver as shown below.
5) Lift the cover-open lever and remove the jammed paper. Put the COVER-CUTTER back in place.
6) Turn the printer ON and use it.

📖 *Note*	- Placing your hand above the printer outlet may cause a paper jam. - In case of a minor jam, it may be possible that the operating blade returns to the original position by turning the printer OFF and then back ON.

COVER-CUTTER
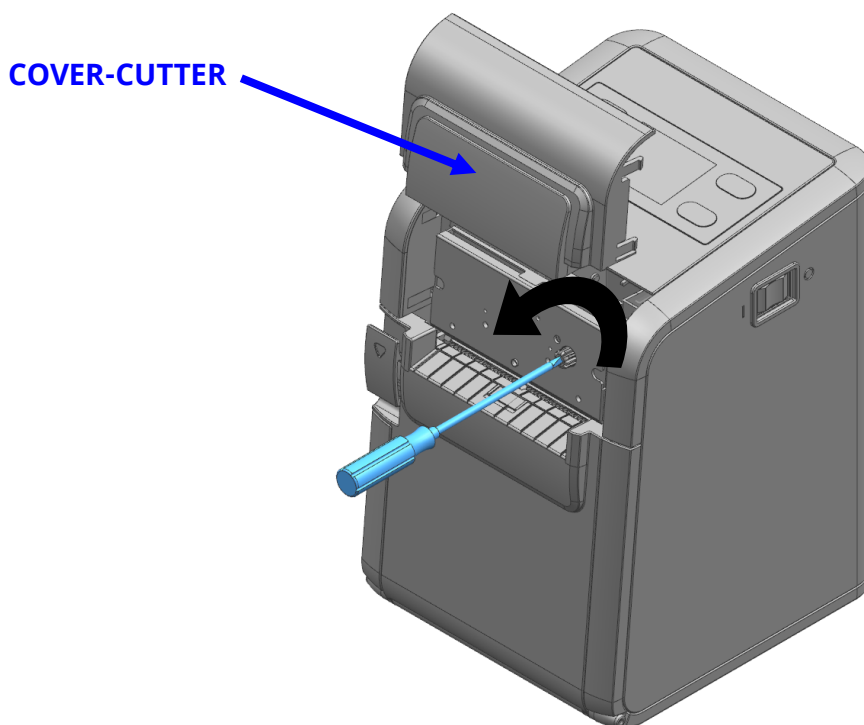
1-9 Using Printer Functions
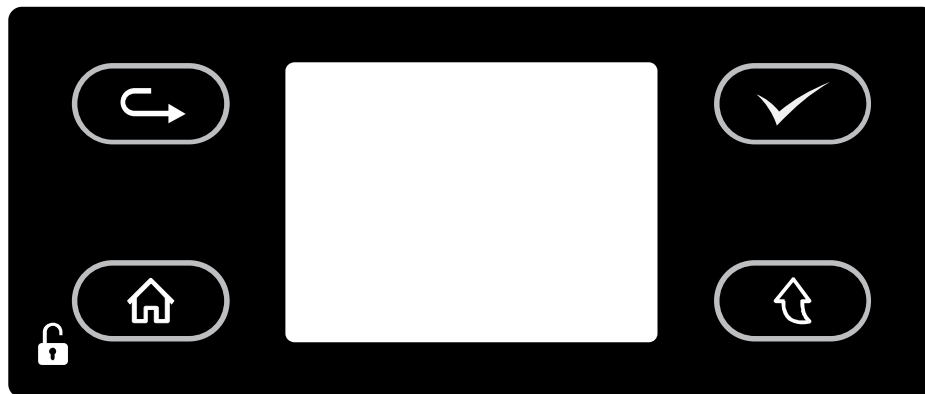
⟳ • Menu Navigation

Navigate the LCD menu

- Press the button to navigate from the top-left to the bottom-right corner.

✓ • Menu Select

Select an item in the LCD menu

- Press the button to select an LCD menu item or save the settings to the printer.

⌂ • Home & Unlock

Return to the LCD main menu/activate a function

- While navigating the LCD menu, press this button to return to the main menu or activate a selected item.
- Hold the button to unlock the system. (2 seconds)

⇧ • Feed

Feed media or return to the previous menu

- Hold this button while the printer boots up to print a self-test page.
- Once booted up, press this button to feed media.
- In the LCD menu, press this button to return to the previous menu.

 ※ **Use LCD function or virtual memory switch utility to change and check printer settings.**
 ※ **For more information, refer to the "3.LCD Menu" and Utility Manual in the User Manual.**

1-10 Mounting Partition(40,58mm)

• Install the Partition in the direction of the arrow as shown below.
   The Partition shape is the same and is used separately for each paper size (40,58mm).

The position to secure the partition varies depending on the type of paper.
(Refer to the picture below.)

1. 58mm (2") roll paper: mount 1 partition at Position #1.
2. 40mm roll paper: mount 2 partitions at Positions #1 and #2.

※ **The shape of the partition is the same for each type of roll paper.**
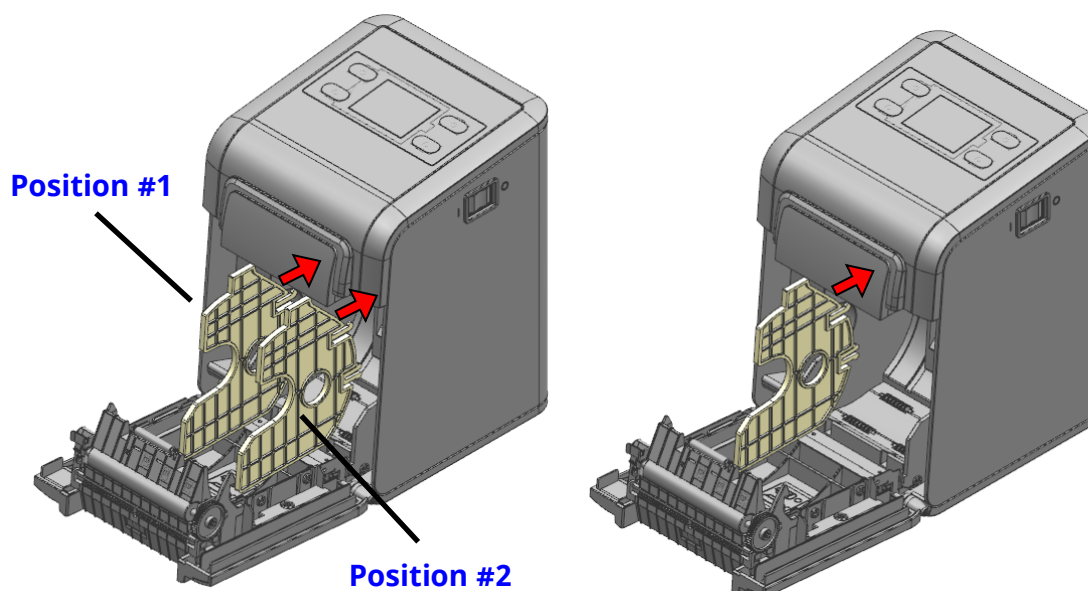
⚠ *Caution*	After using narrower papers (e.g. 40, 58 width) than the maximum paper width of 80mm, please do not use any wider ones as it might affect printing quality due to uneven platen roller abrasion.

2. Self-Test

The self-test checks whether the printer has any problems. If the printer does not function properly, contact your dealer. The self-test procedure is as follows:

How to self-test
   1) Turn on the printer. Go to Tool > Print Printer Settings on the LCD screen.
   2) Press the Home button (Print) to start self-testing.
   3) The printer settings will be printed on the first page followed by interface information.
   4) The self-test process ends automatically after printing wireless interface information.

• **Self-test print page sample**

```
BIXOLON SRP-S3000 CONFIGURATION


FIRMWARE VERSION : V01.00 STD 010118
EMULATION          : SLCS & BPL-Z & BPL-C
PRINT DARKNESS     : 0/30
PRINT SPEED        : 5 IPS
TEAR OFF VALUE     : +000 DOT
TEAR OPTION        : TEAR-OFF
PRINT OFFSET       : +0000 DOT
POWER-UP ACTION    : NO ACTION
MEDIA TYPE         : BLACKMARK MEDIA(REAR)
SENSOR TYPE        : REAR REFLECT
PRINT METHOD       : DIRECT THERMAL
LABEL LENGTH       : 1013 DOT
LABEL WIDTH        : 576 DOT
BAUD RATE          : 115200
PARITY             : NONE
DATA BIT(S)        : 8
STOP BIT(S)        : 1
HAND SHAKING       : HARDWARE
USB SERIAL NUMBER  : 0000000000001
BPL-Z CODEPAGE     : CP-850(SBE. USA-1 CHARSET)
SLCS CODEPAGE      : WCP1252-LATIN1
SLCS ICS           : U.S.A


CONFIGURATION CONTROL STATUS


PRINT SPEED        : COMMAND
PRINT DARKNESS     : COMMAND
PRINT WIDTH        : COMMAND
PRINT OFFSET       : COMMAND
TEAR OFF           : COMMAND
MEDIA TYPE         : COMMAND
LANGUAGE           : COMMAND
```

```
RF INTERFACE STATUS (BT)


BLUETOOTH F/W VER      : 2.0.4
MAC ADDRESS

        ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖
              74F07DE3D121

FRIENDLY NAME          : SRP-S3000
MODE                   : CLASSIC
AUTH & ENCRYPT         : ENABLED
CONNECTION MODE        : 2
```

(Bluetooth)

```
RF INTERFACE STATUS (WLAN)


WLAN F/W VER              : 02.02(4002)
MAC ADDRESS

        ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖
              74F07DE3D121

SYSTEM NAME              : SRP-S3000
NETWORK MODE             : SOFT AP
FREQUENTY                : (PRIORITY)2.4GHZ/5GHZ
AUTHENTICATION           : OPEN
ENCRYPTION               : NONE
ESSID                    : PRINTER_E3D121
DHCP                     : DISABLED
IP ADDRESS               : 192.168.1.1
NETMASK                  : 255.255.255.0
GATEWAY                  : 192.168.1.2
PORT                     : 9100
INACTIVITY TIME          : 10 SEC
```

(WLAN)

3. LCD Menu

You can check the printer's status and settings on the LCD screen.

• **Icons on top**

Icon	Description
Bluetooth (unfilled)	Bluetooth enabled, host device not connected
Bluetooth (filled)	Bluetooth enabled, host device connected
Wireless LAN	Wireless LAN enabled, wireless LAN signal strength
Wireless LAN crossed	Wireless LAN enabled, AP not found
Wireless LAN error	Wireless LAN enabled, AP connection authentication error
Wired LAN	Wired LAN enabled
Data reception	Data reception, print, media transfer
No media	No media
Media cover	Media cover open
TPH	TPH overheated
Key lock	Key locked

・**Main manu icons**

Icon	Description
	View/change printer settings 1) Communication 2) Media 3) Sensor 4) Language 5) Sound 6) Brightness

	Media settings
	1) Print speed
	2) Print density
	3) Headlock
	4) Position
	   - Cut
	   - Printing position
	   - Orientation

	Tool 1) Hex dump 2) Print printer settings → Self-test 3) Print test pattern 4) Factory reset 5) TPH cleaning mode 6) Emulation mode

	View/change interface settings
	1) Bluetooth
	   - SSP (Secure Simple Pairing) / PIN code
	   - BLE / Classic mode
	   - Information (name, MAC address)
	2) Wireless LAN
	   - Information (SSID, Mode, encryption, IP, port, MAC address, inactivity time)
	   - Smart connection (use APP to connect to AP)
	   - Factory reset
	3) Wired LAN
	   - IP address, port
	4) Serial
	   - Set baud rate
	   - Set data bit, parity, flowcontrol

Icon	Description
	Taken sensor settings 1) Turn ON/OFF Taken sensor 2) Set Taken sensor operation pages
	Printer information 1) Version - Printer, WLAN, Bluetooth 2) Bluetooth 3) Wireless LAN 4) Wired LAN 5) Serial 6) Use 7) Repair
	View/change sensor settings 1) Media type - Auto-detect / Black mark / GAP - Continuous media
	LCD screen locked

4. Cleaning Printer

Paper dust inside the printer may lower the print quality.
In this case clean the printer as follows.

1) Open the printer cover and remove the paper currently in use.

2) Residue or contamination of printer head should be wiped out by alcohol for medical.
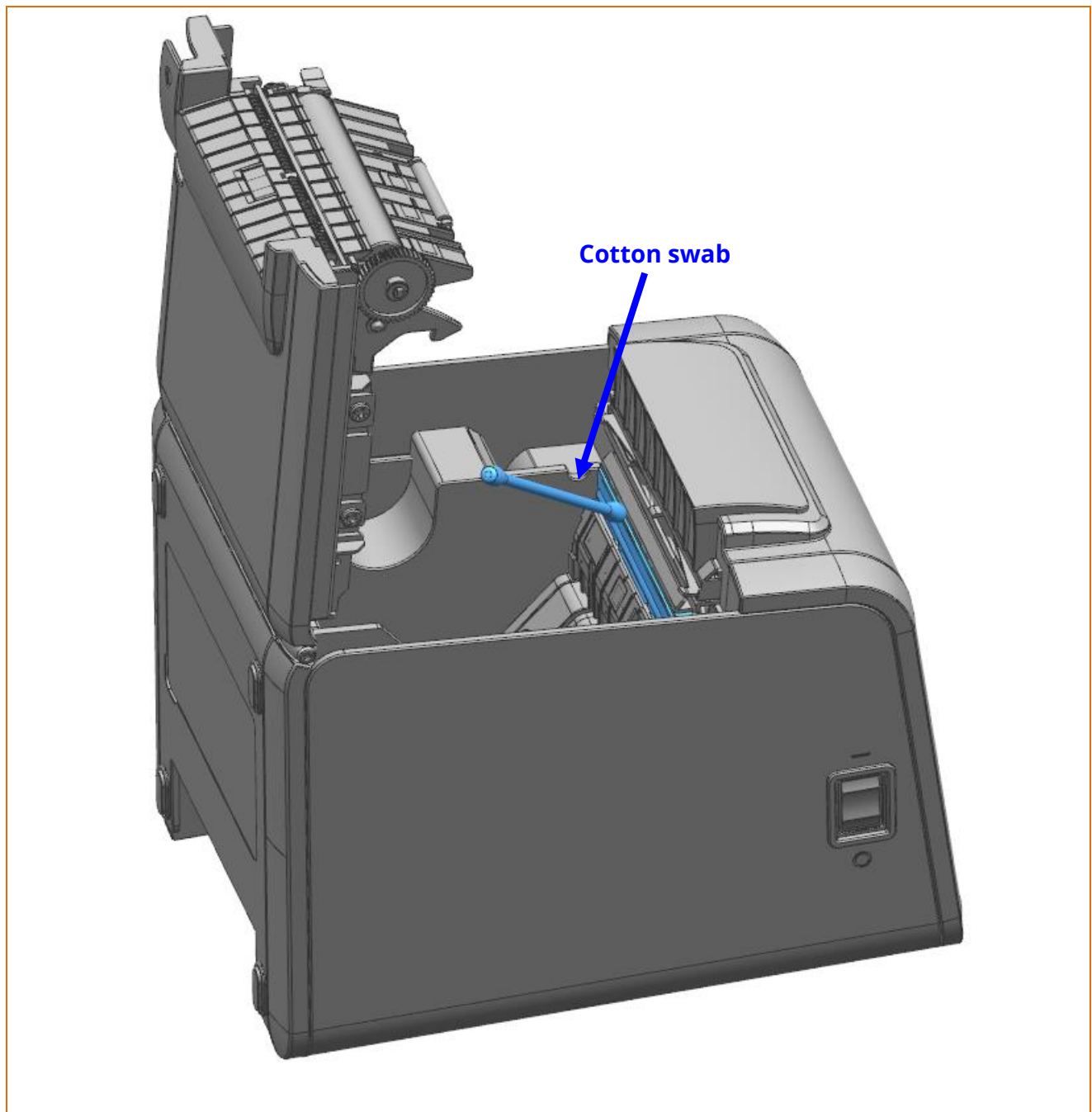
Cotton swab

3) Clean the paper sensor and paper roller with a cotton swab or a dry cloth.

4) Clean the auto-cutter blade with a cloth wet with medical alcohol.

5) Insert a paper roll and close the printer cover.

⚠ *Caution*	When cleaning the printer head, make sure that cleaning solutions such as alcohol for medical do not penetrate the printer.
⚠ *Warning*	**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.**

5. Specifications

Printing Method	Thermal printing	
Dot Density	203 dpi (8dots/mm)	
Paper Width	72mm, 48mm, 32mm	
Printing Width	80mm, 58mm, 40mm	
Application	BXL/POS	SLCS, BPL-Z™, BPL-C™
Font	Font A : 12x24(48CPL) Font B : 9x17 (64CPL) Font C : 9x24 (64CPL)	10 SLCS Resident Bitmap Fonts One SLCS Resident Scalable Font 16 BPL-Z™ Resident Bitmap Fonts One BPL-Z™ Resident Scalable Font 7 BPL-C™ Resident Bitmap Fonts 23 Code Page Unicode supported (UTF-8, UTF-16LE, UTF-16BE)
Bar Code	1D: Codabar, Code 11, Code 39, Code 93,Code 128, EAN-13, EAN-8,Industrial 2-of-5, Interleaved 2-of-5, Standard 2-of-5, UPC-A, UPC-E 2D:, Data Matrix, PDF417, QR code	1D: Codabar, Code 11, Code 39, Code 93,Code 128, EAN-13, EAN-8, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Plessey, Postnet, GS1 DataBar (RSS-14), Standard 2-of-5, UPC/EAN extensions, UPC-A, UPC-E, IMB 2D: Aztec, Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF417, PDF417, QR code,TLC 39
Sensor	Gap Sensor, Black Mark Sensor, Taken Sensor, Cover Switch	
Cutting Type	Auto Cutter	
Printing Speed	Max. 200 mm/sec	
Receiving Buffer Size	64KB Byte	
Interface	S3000K: Serial, USB, Ethernet S3000B5K: Serial, USB, Ethernet, Bluetooth 5.0 S3000WDK: Serial, USB, Ethernet, WLAN (2.4GHz, 5GHz)	
Cash Drawer	2ports with Y-type cable	
Supply Voltage	SMPS Input Voltage	100~240 VAC
	Frequency	50/60 Hz
	SMPS Output Voltage	24 VDC

Environment Condition	Temperature	Operating: 0 ~ 40 ℃ Storage: -20 ~ 60 ℃
	Humidity	Operating: 10 ~ 80 % RH Storage: 10 ~ 90 % RH Paper excluded
Life Span	Printer Head *)	Label: 30 Km Restick, Linerless Extreme: 100 Km
	Auto Cutter	Label, Linerless Extreme: 300,000 Cuts Restick: 1,000,000 Cuts

*) 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.

⚠ *Caution*	Printing speed may become slightly slower depending on the data transmission speed and the combination of commands.

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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

Some semiconductor devices are easily damaged by static electricity. You should turn the
printer "OFF", before you connect or remove the cables on the rear side, in order to guard
the printer against the static electricity. If the printer is damaged by the static electricity,
you should turn the printer "OFF".

Notice - EU
This wireless device is class A that is considered to be used in an industrial environment.

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.

Revision history

Ver.	Date	Page	Description
1.00	28.01.21	-	New