

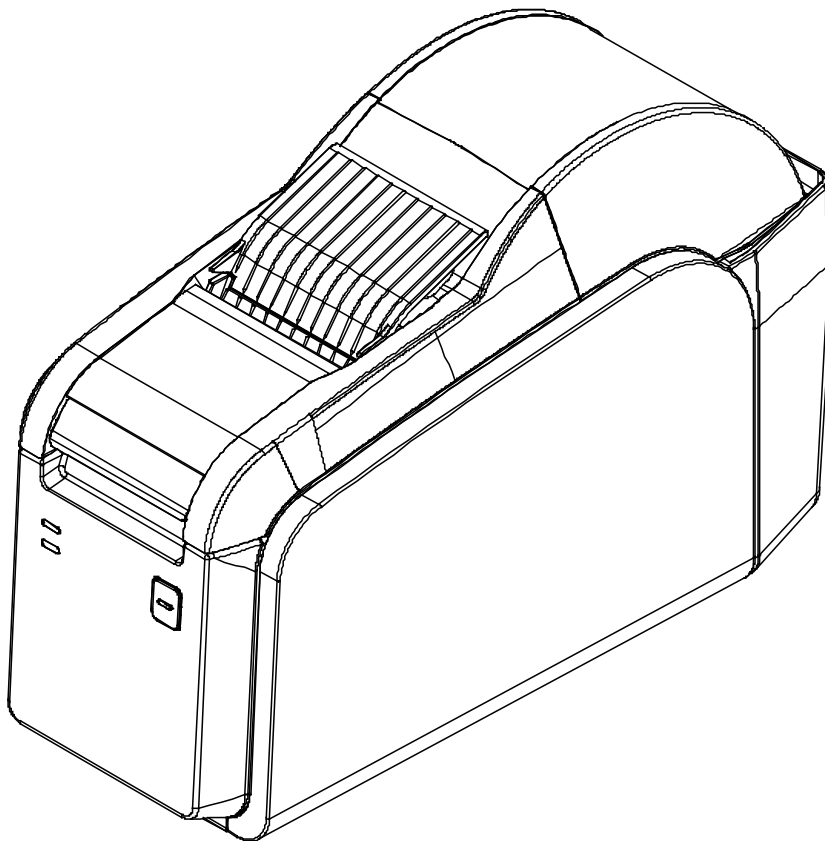
BIXOLON

User Manual

SRP-G300

Thermal Printer

Ver. 1.00



www.bixolon.com

Copyright

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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

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'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.

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 mouvement.



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 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

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

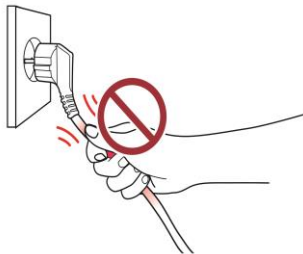
Do not connect multiple products to a single or faulty power outlet. Use only grounded power outlets that meet the industry standard. **Noncompliance may cause electric shock or fire.**



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.



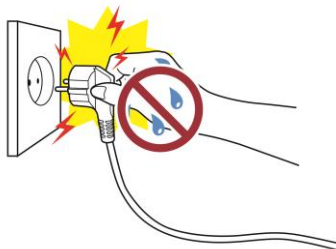
Do not excessively bend or strain the power cord. Securely push the power cord all the way into the power outlet lest it remain loose. Make sure to hold the cord tight when separating it from the power outlet. Do not remove the power cord while the product is in use. **Noncompliance may cause electric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



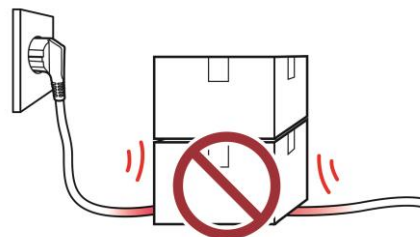
Keep small accessories or other packaging materials away from young children. Beware: choking hazard. **Mishandling the product may incur injuries which may require seeking urgent medical attention.**



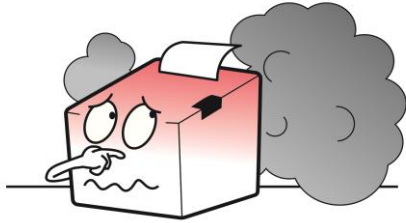
Keep excessive liquids away from the power cord and outlet. If matter is smeared onto the power cords, wipe with a dry cloth. **Noncompliance may cause electric shock or fire.**



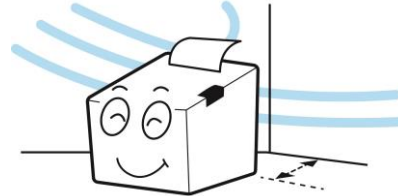
Do not allow the product to be damaged by heavy objects. **Noncompliance may cause electric shock or fire.**



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.**



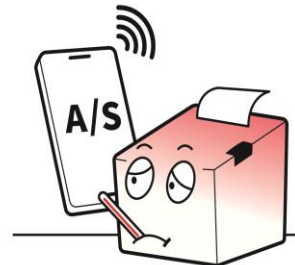
Never independently disassemble, repair, or modify the product as the warranty will become invalid. **When repair is necessary, contact the original place of purchase.**



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 (www.bixolon.com).



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.

Symbol Information

	DC (Direct current)
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Printer Introduction

The SRP-G300 is a gaming printer designed for continuous printing of up to 100 sheets, with each sheet stacking on top of the other.

It also supports large paper rolls (Φ 203 mm, 530 m), extending the paper replacement cycle to 7 times that of standard printers using smaller rolls (Φ 80 mm, 75 m). (The cycle may vary depending on paper thickness.)

The main features of the printer are as follows

1. Thermal printer
2. Maximum print speed of 250 mm/sec and 80 mm print width
3. Printer Dimensions: 154 x 373 x 251 (W x D x H)
4. Continuous printing and stacking of up to 100 sheets
5. Supports large paper rolls up to Φ 203mm
6. Supports USB (standard) and Powered USB (optional)
7. Built-in AC/DC adapter
8. External device (e.g., cash drawers) control via peripheral drive circuits
9. Built-in data buffer that allows reception of print data while printing
10. Printing various types of barcode
Adjustable print density via virtual memory switches

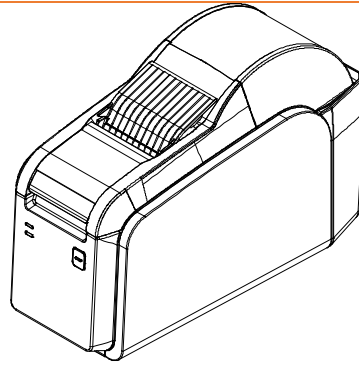
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1. Preparation

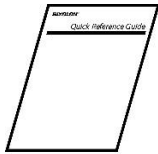


- If there is any part missing, please contact the place of purchase.
- The actual part may look different from the image.

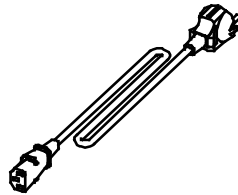


SRP-G300

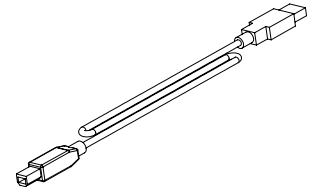
Standard Components



Installation Guide

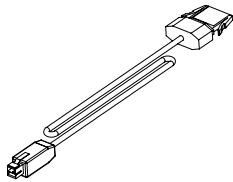


Power Cord



USB A-B Cable

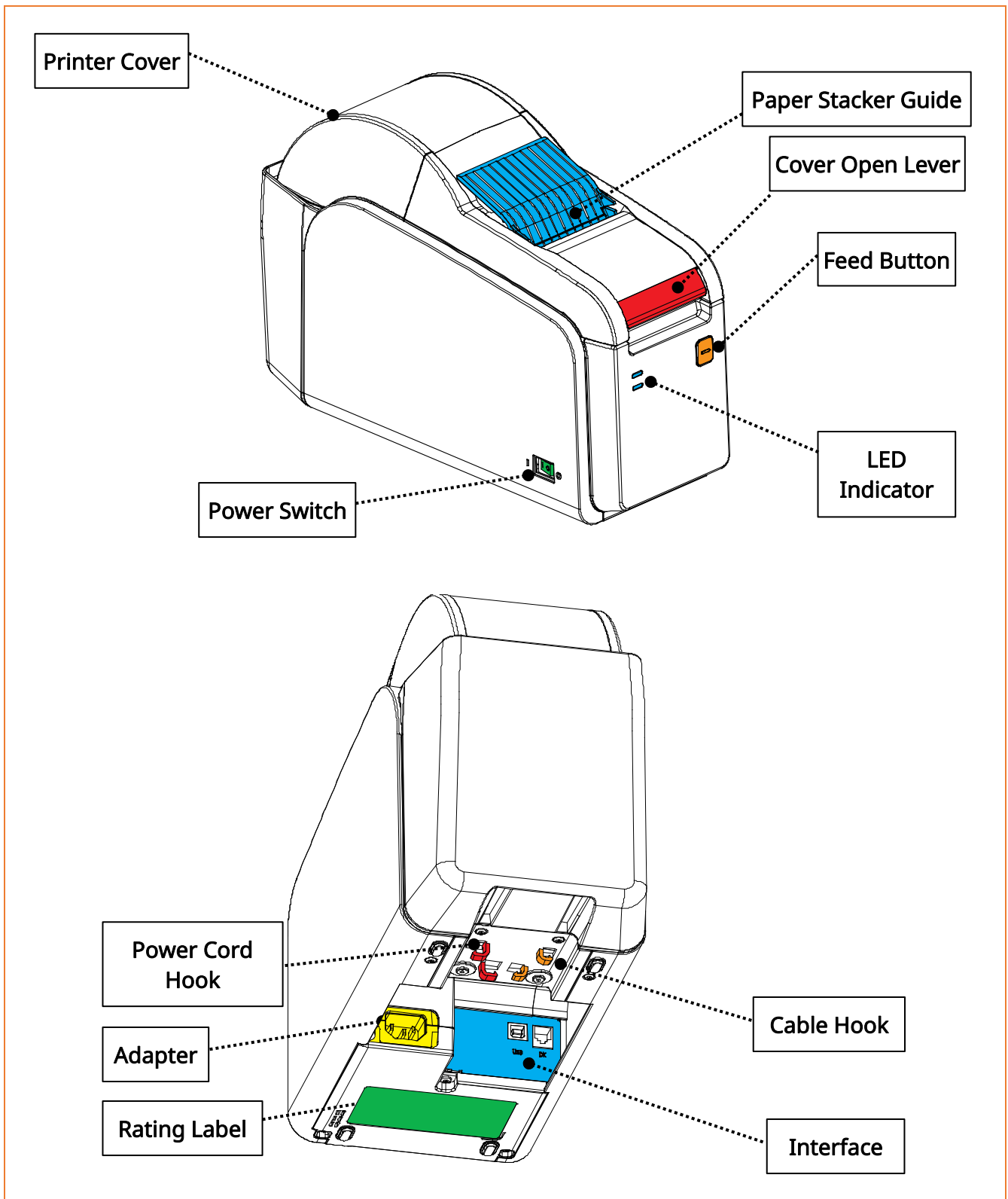
Optional Components

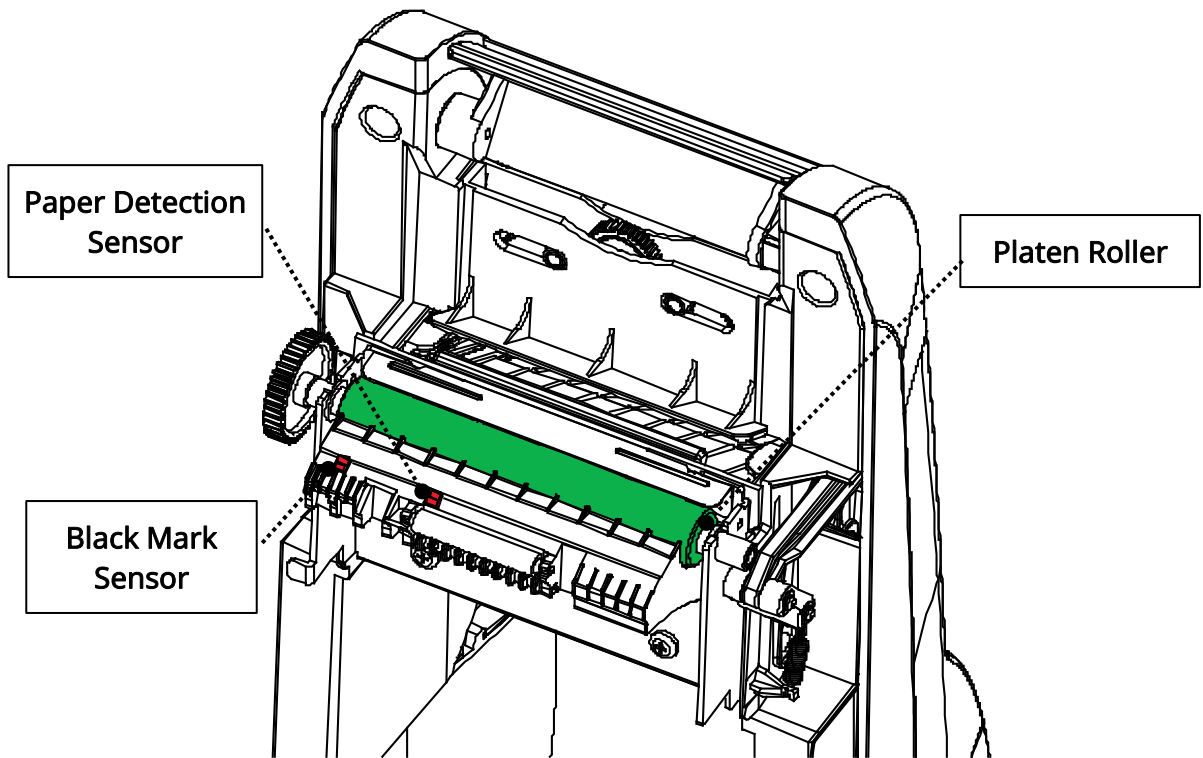
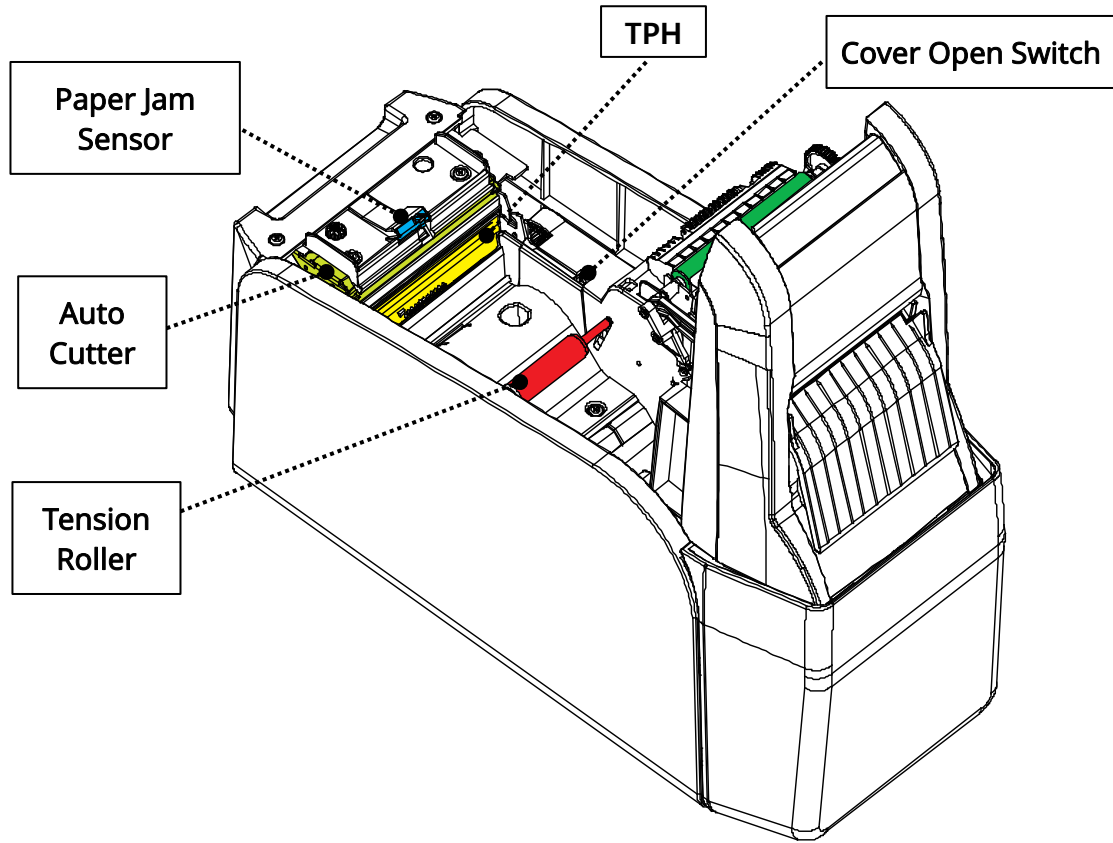


Powered USB Cable
(Standard)

2. Product Part Names

2-1 Printer Part Names

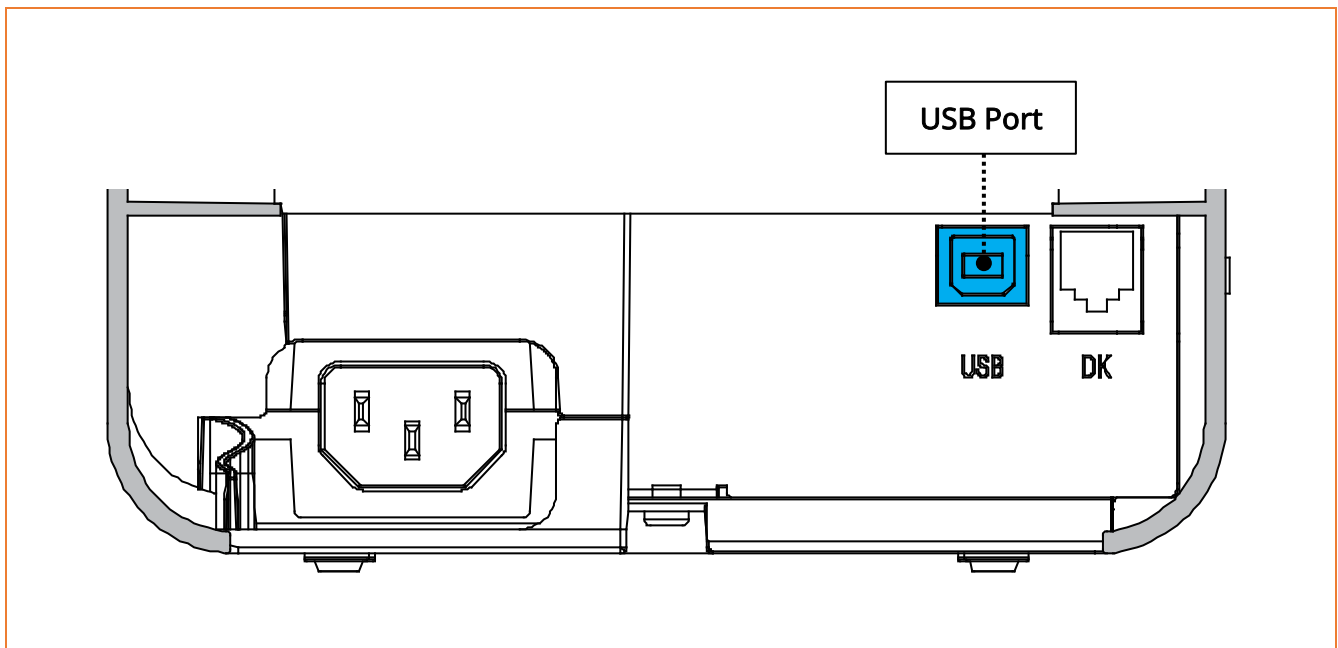




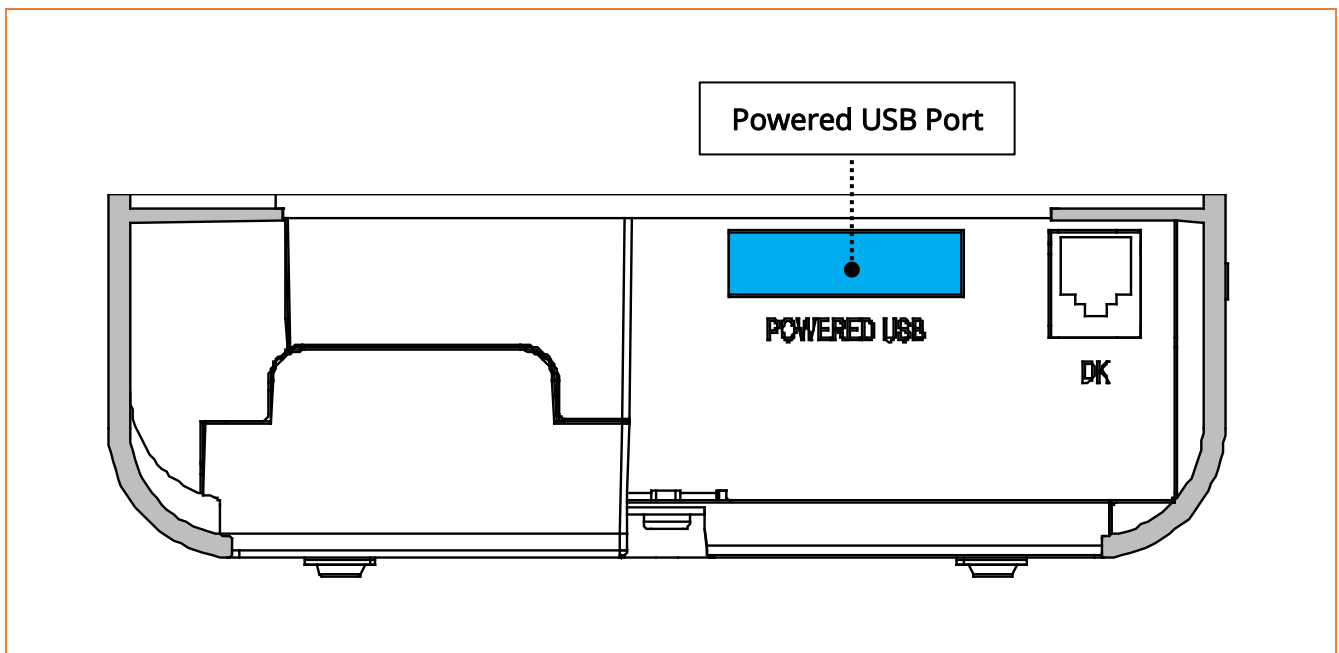
2-2 Interface Part Names

- Connect the printer to the host device using the proper interface cable.

2-2-1 USB



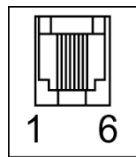
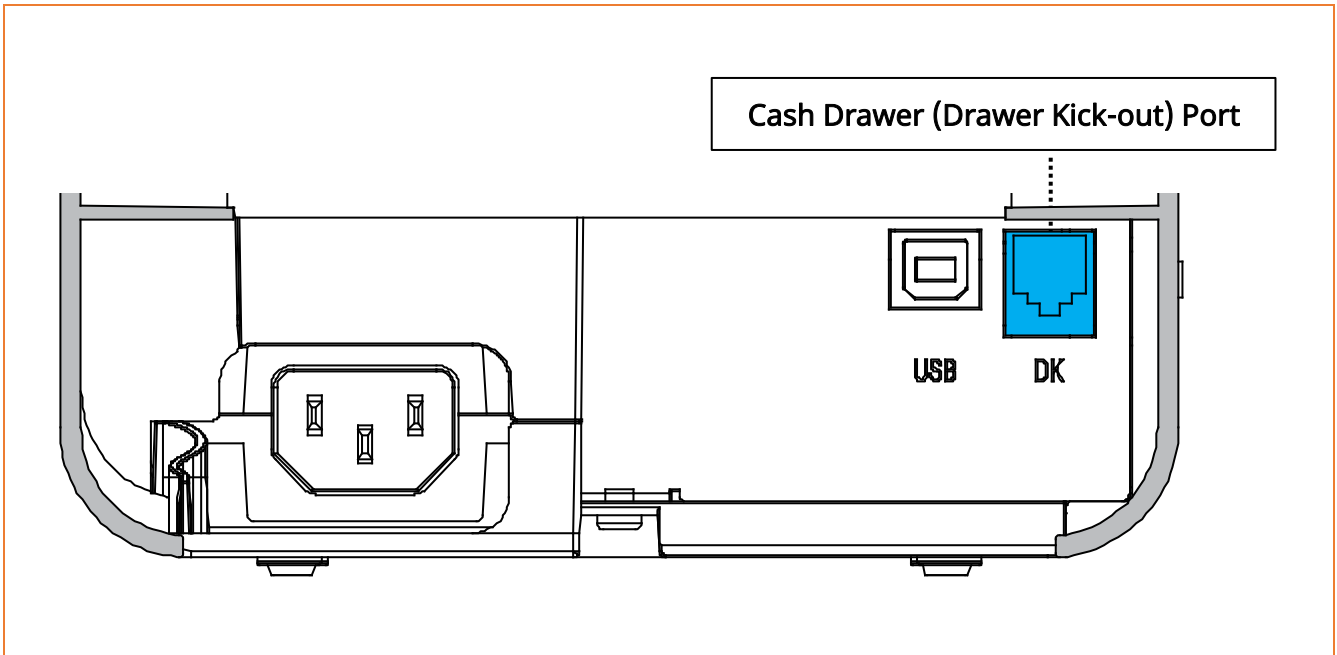
Connect or disconnect the communication cable while the printer power is off. If power is on, your data may be lost.

2-2-2 Powered USB

Please visit www.poweredusb.org for more information about the cables and connectors.

2-2-3 Cash Drawer (Drawer Kick-out) Port

Connect the cash drawer (drawer kick-out) cable to the cash drawer (drawer kick-out) port on the back 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	+24 V	-
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 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 24Ω 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

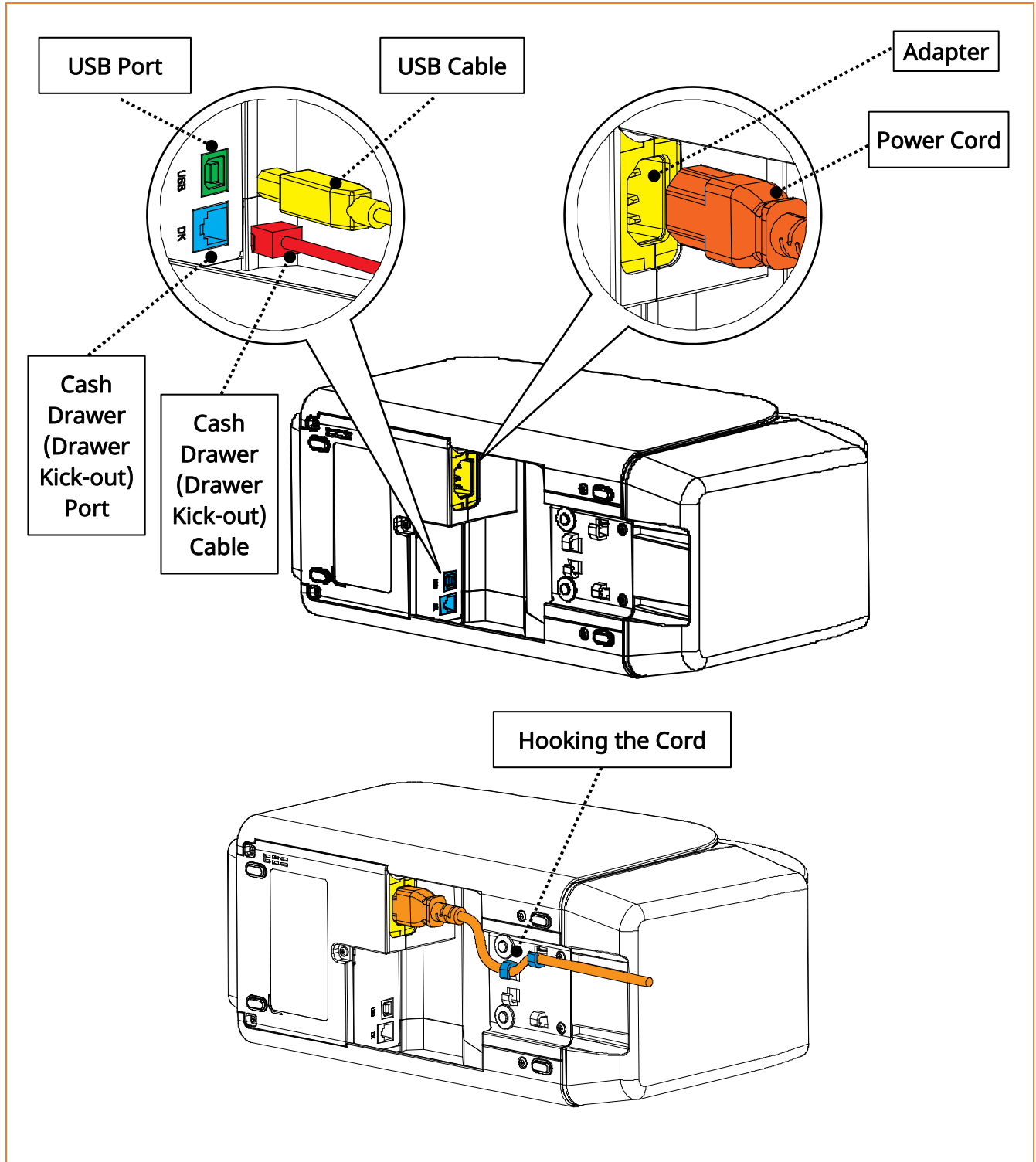
3-1 Printer Installation Placings

- 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.

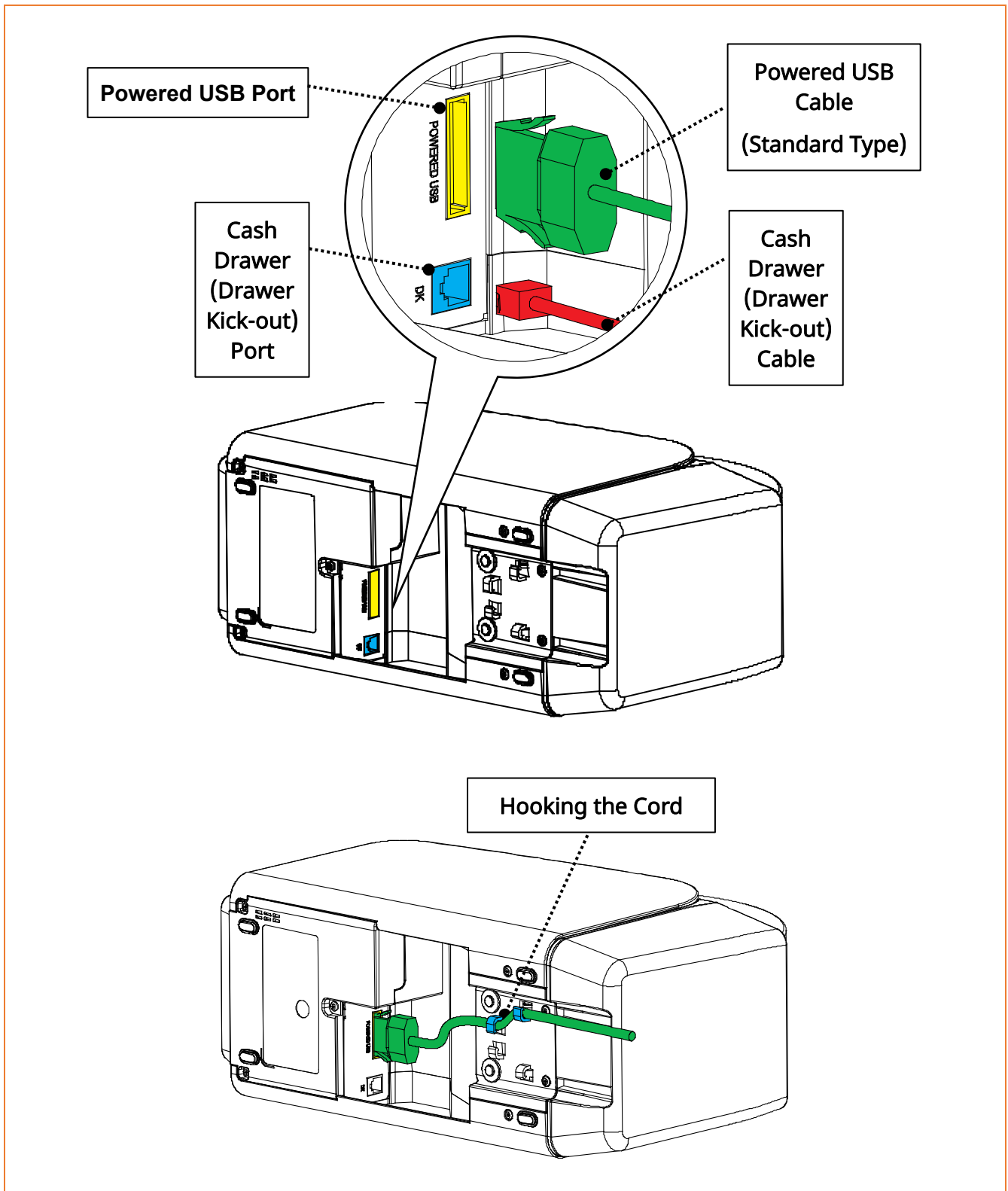
3-2 Connecting Cables

Connect the proper interface cable and power cord according to the requirements.

3-2-1 USB Type

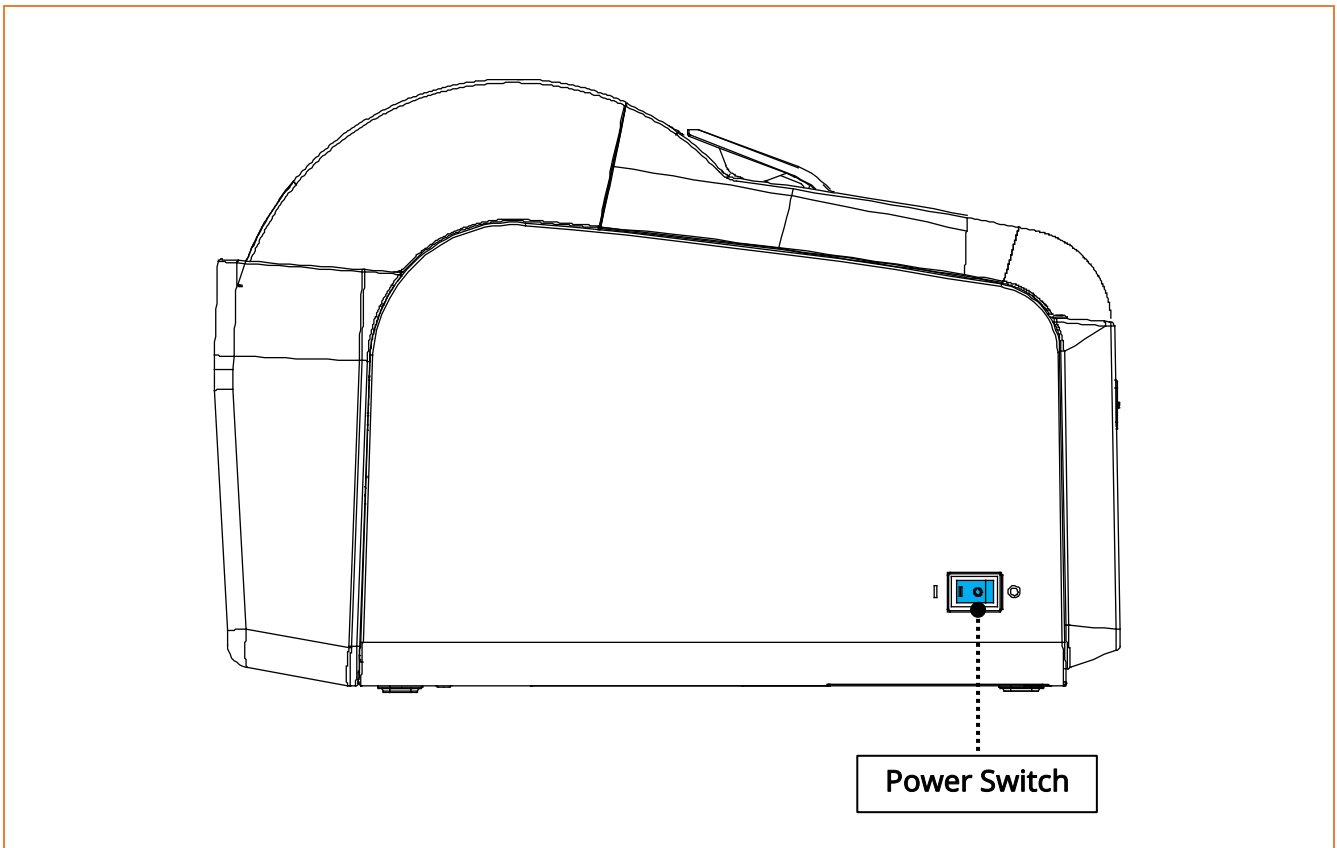


3-2-2 Powered USB Type



3-3 Turn on the Power

1) Press the power switch on the side of the printer to turn it on.



- Be sure to turn off the printer and connect or disconnect the cable.
- 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 jack 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 jack.
- Do not connect a voltage out of the specifications of the power supply. It can cause damage to the product or a fire.

3-4 Inserting and changing the paper roll



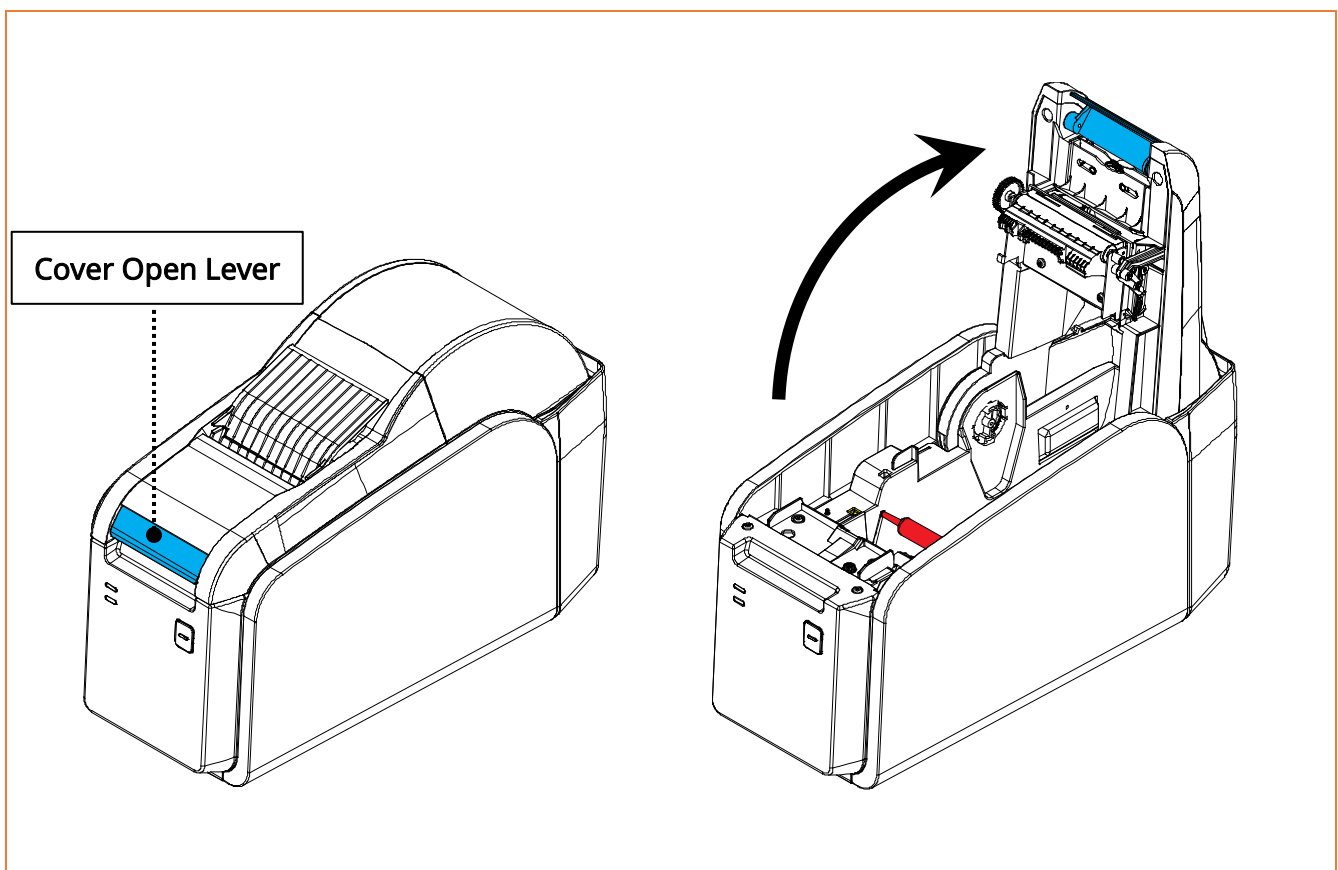
Use paper roll that complies with the specifications

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.



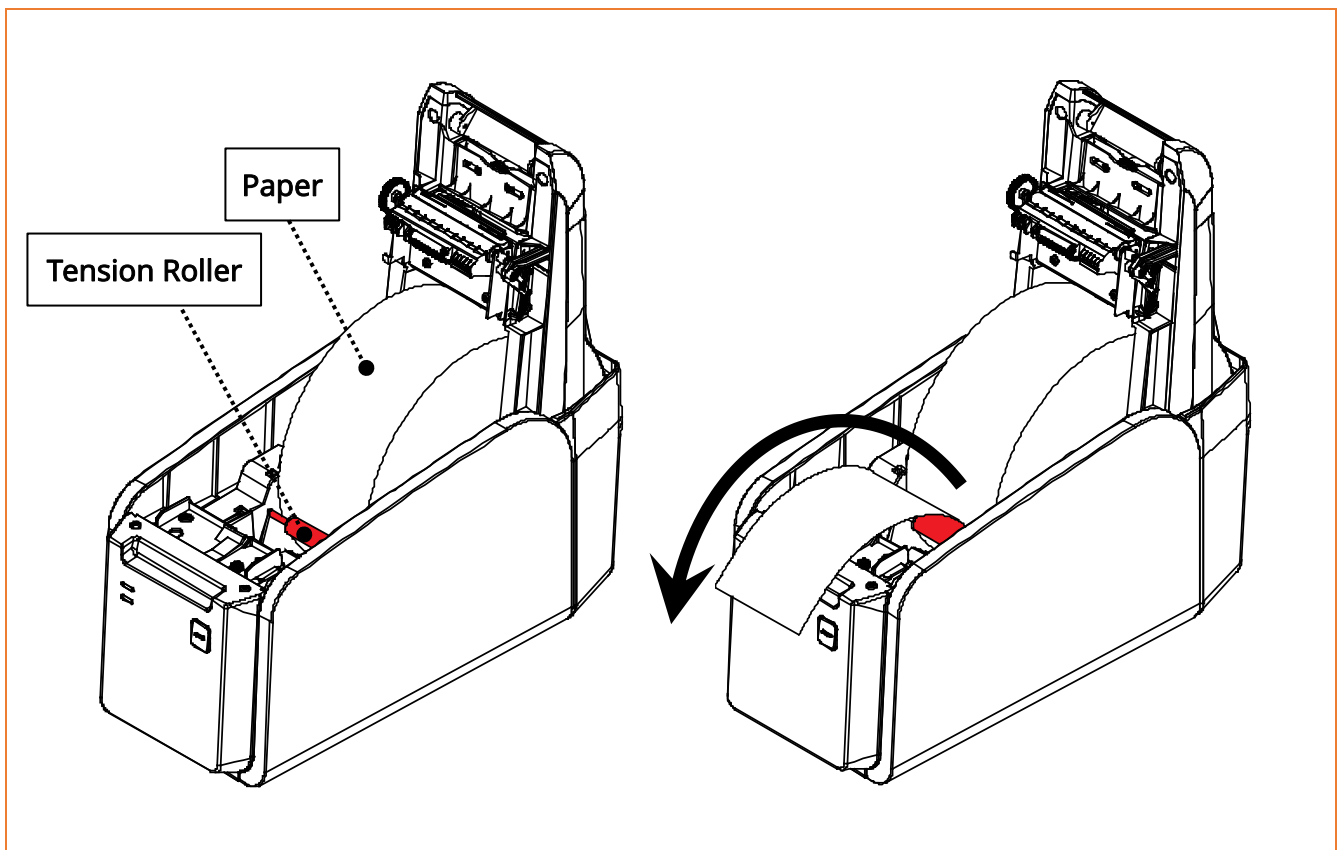
- When opening or closing the cover, be careful not to pinch your fingers.
- Do not open the print head levers while the printer is printing. The printer may be damaged.
- Change the paper when the printer is not receiving data, or data may be lost.
- While the printer is operating, the printer head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

1) Open the paper roll cover by pull the cover-open lever.

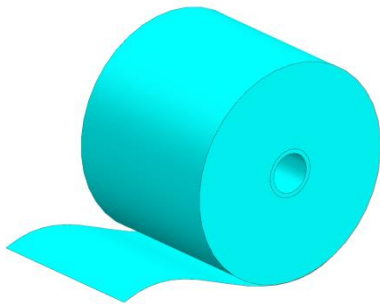


When you change the paper, remove the used paper roll.

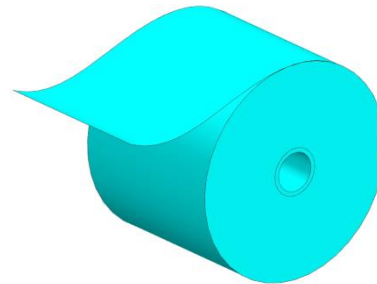
2) Insert the paper so that it passes over the tension roller as shown below.



3) Check the orientation of the roll paper when inserting it into the printer.

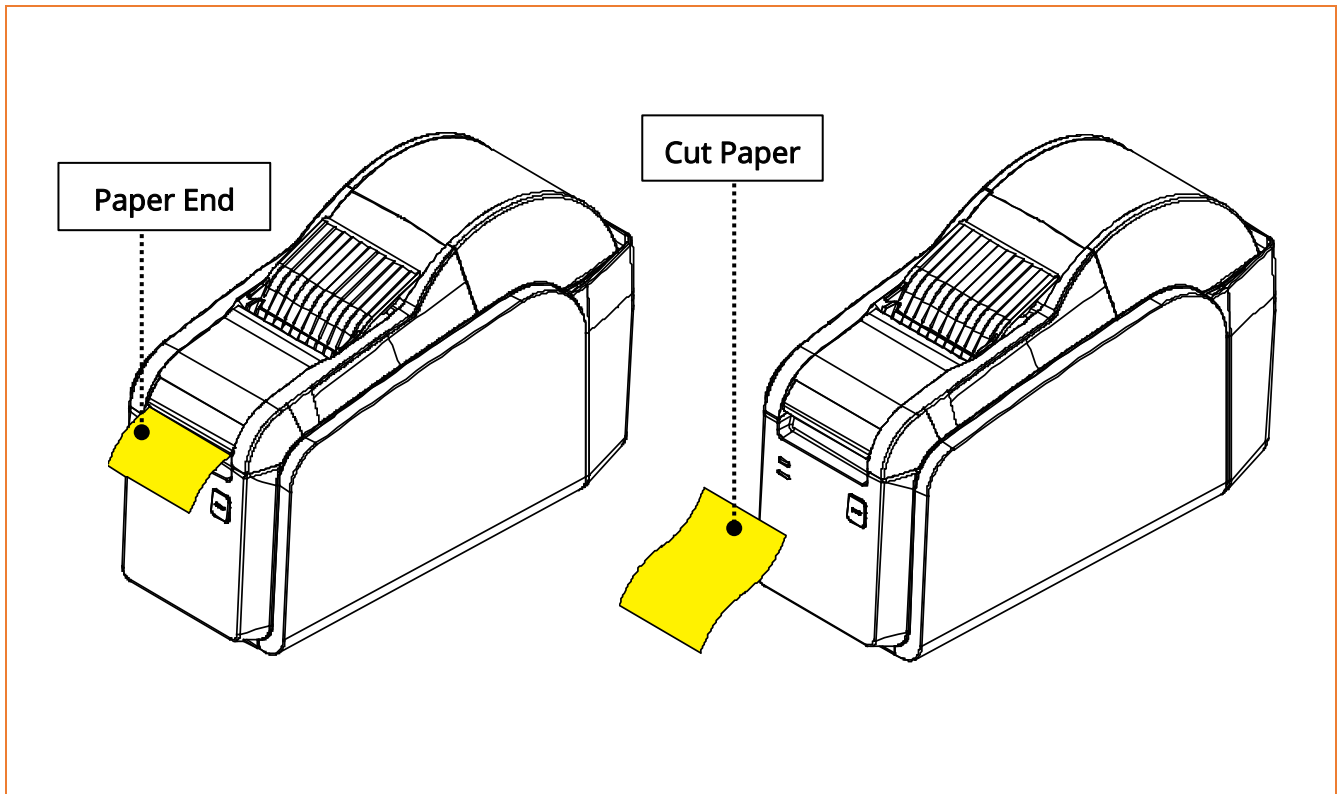


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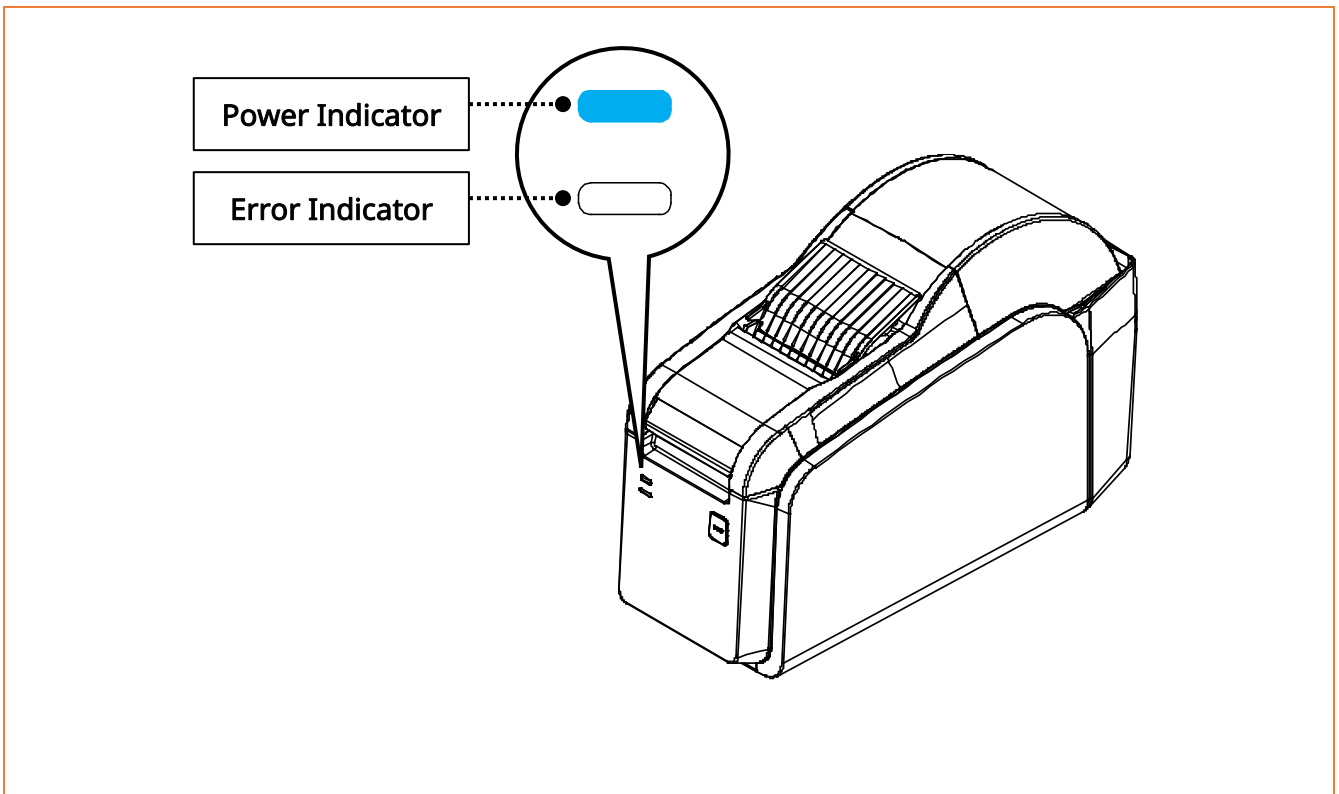
X

- 4) Pull the paper end slightly forward, then close the printer cover as shown below.
Remove the cut paper end. The printer is now ready for printing



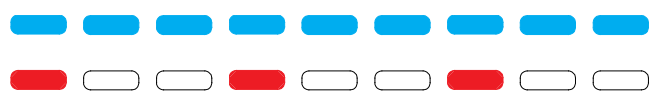
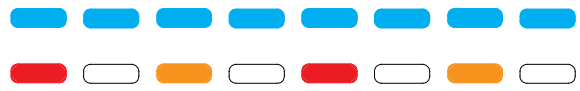
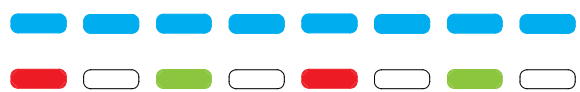



When closing the cover, hold down the center of printer cover firmly so that paper roll is loaded correctly.

3-5 LED Indicator



3-6 LED Indicator List

Type	No.	LED Status
		Printer Status
General	1	
		Power on, standby
Function	2	
		Self-test mode
Function	3	
		Firmware / NV image download VMSM select mode / Hexadecimal dump mode
Warning	4	
		Paper near-end detected
Warning	5	
		Stacker full
Error	6	
		Cover open
Error	7	
		Auto cutter error (See 7-1)

Type	No.	LED Status
		Printer Status
Error	8	
		Printer head overheated
	9	
		Out of paper
	10	
Paper jam before cutting (See 7-2)		
11		
	Cut paper not removed after loading Paper jam after cutting & stacker operation (See 7-2)	
12		
	Stacker operation error (See 7-2)	
13		
	Black mark detection error (in Black mark mode)	

4. Self-Test

The self-test can be performed to verify the printer's settings during initial printer setup or if issues occur. If the self-test indicates that there are no issues with the printer, check other devices or software.



- Do not open the top cover while the printer is operating.
- If the printer is not functioning properly, please contact the seller.

- 1) Make sure that the paper is properly installed.
- 2) To start the self-test, turn on the power while pressing and holding the Feed button.
- 3) The printer version information and settings are printed. Then, it stops after printing the following message. (The error indicator lights green.)

Use the button to perform the following actions.

Exit Test Print: Press the button.

Select Mode: Press and hold the button.

- 4) To exit the self-test mode, press the Feed button once. To select a mode, press and hold the Feed button for more than 1 second.

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

- ① The self-test mode ends automatically. The printer prints the following message, and then cuts the paper.

- Complete -

- ② After the self-test, the printer is ready for use.

4-2 If "Mode Selection" is selected

- ① It prints the following message and then stops.
(The error indicator blinks green.)

Select Mode

1 : Memory switch setting mode
2 : Hexadecimal dump mode
3 or more: Exit

- ② Use the Feed button to perform the action.
- ▶ Select the Settings menu: Press the Feed button the same number of times, as displayed in front of each menu.
 - ▶ Enter the Settings menu: Press and hold the button for more than 1 second to apply the selected option.



If an option not listed above is selected, the Select Mode ends.

4-2-1 Hold the button to select [Memory switch setting mode]

- ① When entering [Memory switch setting mode], the following message is printed.

**** Memory switch setting mode ****
0 : Save and exit the settings
1 : Print current memory switch settings
2 : Set print density
3 : Set print speed
4 : Set print width
5 : Disable internal buzzer on error
6 : Enable buzzer (melody) after paper cut
7 : Set code page
8 : Factory reset
9 or more : None

- ② Use the Feed button to perform the action.
- ▶ Select the Settings menu: Press the Feed button the same number of times, as displayed in front of each menu.
 - ▶ Enter the Settings menu: Press and hold the button for more than 1 second to apply the selected option.



- If an option not listed is selected, the [Memory switch setting mode] list is printed again. If no option is selected in Step 1, mode setting will be canceled.
- If [0: Save and exit the settings] does not run, the settings will not be saved in the printer.

- ③ After making changes, select [0: Save and exit the settings] and hold the Feed button for more than 1 second to save the changes.
- ④ Once the settings are saved, the following message is printed, the paper is cut, and the printer reboots.

- Exit -

4-2-2 Hold the button to select [Hexadecimal dump mode]

When entering [Hexadecimal dump mode], the following message is printed.

Select Hexadecimal dump mode

1. Save mode: Press the button
2. Print mode: Press and hold the button

4-2-2-1 Hold the button to select [Save mode]

- ① When entering [Save mode], the following message is printed.

Hexadecimal dump save mode

- Hexadecimal dump starts.
- To exit, press the Feed button 3 times.

- ② Run the program that sends data to the printer.
- ③ To exit the hexadecimal dump, press the Feed button 3 times.
- ④ When exiting hexadecimal dump mode, the following message is printed.

The data has been saved in the printer.
Run the BIXOLON Utility to export the data from the printer to the PC.
Exit the hexadecimal dump mode.

- ⑤ Use the BIXOLON Utility to check the data.



Data will not be saved if the printer is turned off during operation.

4-2-2-2 Press the button to select [Print mode]

- ① When entering [Print mode], the following message is printed.

**Hexadecimal dump starts.
To exit, press the Feed button 3 times.**

- ② Run the program that sends data to the printer.
The printer will print all data in 2 columns.
The first column displays the hexadecimal codes,
and the second column shows the corresponding ASCII codes.

```

1B 21 00 1B 26 02 40 40 40 40    . ! . . & . @ @ @ @
02 0D 1B 44 0A 14 1E 28 28 28    . . . D . . . ( ( (
00 01 0A 41 0D 42 0A 43 43 43    . . . A . B . C C C

```

- If a corresponding ASCII code does not exist, a period (.) is printed.
- In hexadecimal print mode, all commands are disabled.

- ③ To exit the hexadecimal dump, press the Feed button 3 times.
- ④ When exiting hexadecimal dump mode, the following message is printed.

Exit the hexadecimal dump mode.



If hexadecimal dump mode cannot be accessed, please contact the seller.

5. Automatic Black Mark Sensor Calibration

The printer is designed to detect black marks on most types of black mark paper. However, when using special media, the printer may fail to recognize the black marks. In this case, perform automatic sensor calibration to ensure proper detection.

The black mark sensor can be calibrated as follows:


- 1) With the printer powered off, remove the paper and close the cover.
- 2) While holding down the Feed button, turn on the power.
 - The printer enters calibration mode when the buzzer sounds twice.
 - If no action is taken within 20 seconds, then the mode will automatically exit.
- 3) Open the cover, load the paper, and then close the cover.
- 4) The printer begins automatic black mark sensor calibration.
 - The paper is fed in the print direction. While the sensor sensitivity is adjusted, the distance between black marks is measured.
- 5) Once calibration is completed, the printer will automatically reboot.



- Calibration is supported only when the printer is set to Black mark mode.
- Automatic black mark sensor calibration is required in the following cases:
 1. When installing the printer for the first time
 2. When replacing the paper with a different type
 3. When printing does not align properly or the printer does not stop at the proper position

6. Maintenance

6-1 Auto Cutter Error

Type	No.	LED Status
		Printer Status
Error	7	
		Auto cutter error

If the LED indicator flashes as shown, follow the steps below:

- 1) Turn the printer off and then on again.
- 2) Open the printer cover and check for any jammed paper.
- 3) Remove the jammed paper.
- 4) Load new paper and close the printer cover.
- 5) Turn the printer on and see if the paper is cut properly at the edge.


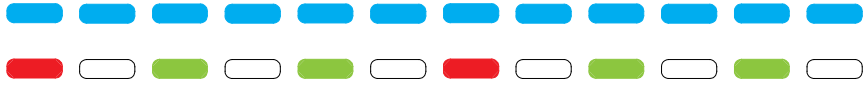



- Do not open the printer cover by force.
- If the printer is not functioning properly, please contact the seller.



Simply turning the power off and on may return the jammed cutter blade to its position and resolve minor paper jams.

6-2 Paper Jam

Type	No.	LED Status
		Printer Status
Error	10	
		Paper jammed before cutting
	11	
Cut paper not removed after loading Paper jammed after cutting and stacker operation		
12		
	Stacker operation error	

If the LED indicator flashes as shown, follow the steps below.

- 1) Turn the printer off.
- 2) Open the printer cover and remove any jammed paper from the stacker.
- 3) Load new paper and close the printer cover.
- 4) Turn the printer on and see if the paper is cut properly at the edge.



- Do not open the printer cover by force.
- If the printer is not functioning properly, please contact the seller.

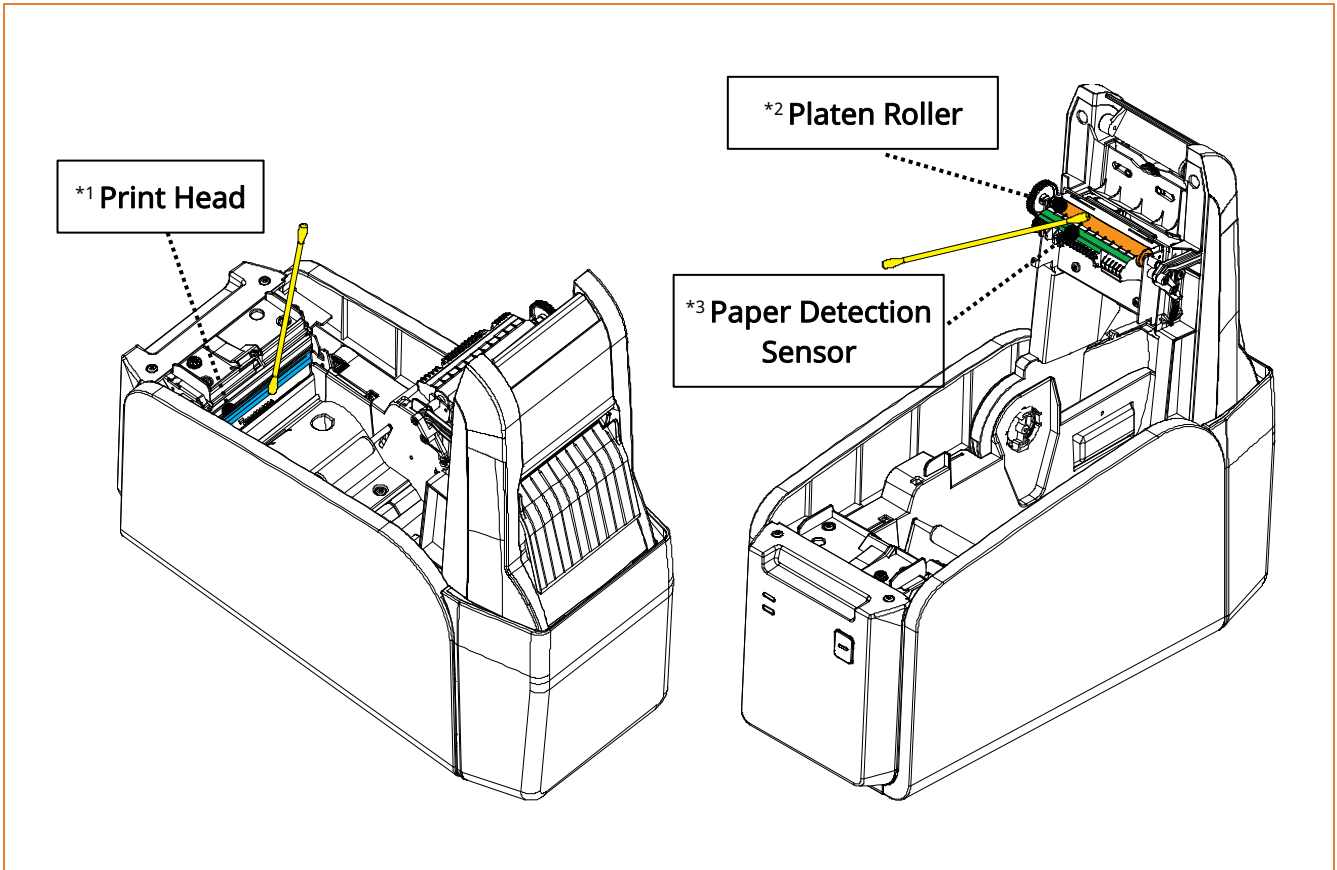


- Placing your hand over the paper exit may cause paper jams.
- Simply turning the power off and on may return the jammed cutter blade to its position and resolve minor paper jams.

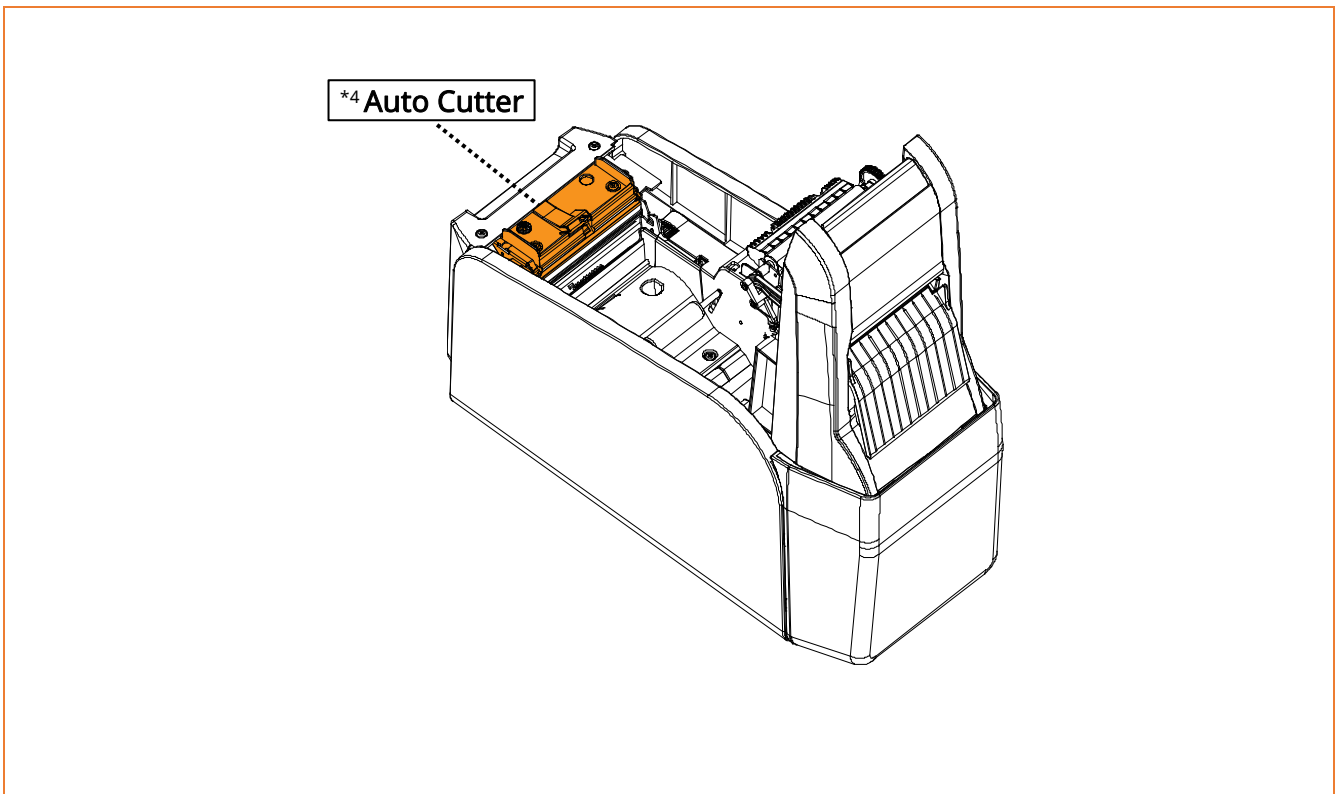
6-3 Cleaning Printer

Dust, foreign substances, adhesive residues, or other contaminants on the print head or inside the printer can degrade print quality.

To maintain the print quality, regular cleaning is recommended.



- 1) Open the printer cover and remove any paper that is currently loaded.
- 2) Clean the *1 print head and *2 platen roller using a cotton swab or cloth soaked with medical alcohol.
- 3) Clean the *3 paper detection sensor with a dry cotton swab or dry cloth.



- 4) Use an air compressor to remove dust from the auto cutter and inside the printer.
- 5) Reload the paper and close the printer cover.



- 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.



- If print quality declines, clean the print head first.
- Clean the printer once a month or every tenth roll of paper replacement.
- Clean the printer more frequently when using it in dusty environments.

7. Specifications

7-1 Printer Specifications

Printer	Printer Dimensions	154(W) x 373(D) x 251(H)
	Printer Weigh	3kg
Roll	Roll Width	82.5 ±0.5mm
	Roll Size	Max. Φ203mm
	Roll Thickness	50gsm ~ 90gsm(60μm ~ 90μm)
Printing Specifications	Printing Method	Thermal printing
	No. of Characters per Line (Default Value)	53(Font A), 71(Font B), 71(Font C)
	Printing Width	80mm
	Dot Density	203 dpi(8 dots/mm)
	Printing Speed	Max. 250 mm/sec
	Buffer size	4Kbytes
AC Input (SRP-G300)	Input Voltage	100~240 VAC
	Frequency	50/60 Hz
DC Input (SRP-G300PW)	Output voltage	+24 VDC/2.5A
Environment Condition	Temperature	Operating: 0 ~ 40 °C Storage: -20 ~ 60 °C
	Humidity	Operating: 10 ~ 80 % RH Storage: 10 ~ 90 % RH Paper excluded
Life Span	Printer Head	100km
	Auto Cutter	2,000,000 cuts



- Print speed may vary depending on the data transfer rate and command settings.
- The specified value was measured under standard temperature, using designated paper, and with factory default settings. Actual performance may vary with temperature or print density.
- This value has been verified according to our standard reliability specifications. For conducting life cycle tests, please contact the seller and follow the standard reliability specifications.

7-2 Recommended Papers

- Koehler
KT72TC PF (72gsm)
- KANZAN
KLS46 (76gsm)



- Other paper types may cause damage to the auto cutter or TPH, resulting in print quality issues. In this case, we are not responsible for the consequence.

- For other types of paper, make sure that they are of the same quality as the recommended paper.



If the printer will remain unused for more than 1 day while powered off, open the printer cover and reload the paper before using it again.

