



**sewoo**

J. STEPHEN Lab., Ltd.

28-6, Gajangsaneopdong-ro, Osan-si, Gyeonggi-do, 447-210 Republic of Korea  
TEL : +82-31-8077-5000 FAX : +82-31-459-8880  
[www.miniprinter.com](http://www.miniprinter.com)



**MODEL : LK-B24**  
LABEL PRINTER

# Table of Contents

1. SAFETY CAUTION	2
2. UNPACKING	4
3. PRINTER IDENTIFICATION	5
4. CONNECTING POWER SUPPLY	7
5. HOOKING UP THE PRINTER AND COMPUTER	8
6. LOADING THE PAPER	9
7. LOADING RIBBON	11
8. THE TREATMENT WHEN YOU RUN SHORT OF PAPER AND ENCOUNTER CUTTER JAM PROBLEM	13
9. SETTING UP THE SENSORS	14
10. SENSOR CALIBRATION	15
11. PAUSE FUNCTION	16
12. PRINTER CLEANING	17
13. CONNECTOR	18
14. STANDARD ROLL MEDIA SPECIFICATION	20
15. STANDARD LABEL SPECIFICATION	21
16. LABEL SPECIFICATION WITH THROUGH-HOLE	22
17. LABEL WITH BLACK MARK	23
18. CONTINUOUS STOCK SPECIFICATION	24
19. SPECIFICATIONS	25



**Disposal of Old Electrical&Electronic Equipment(Applicable in the European Union and other European countries with separate collection systems)**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronics equipment. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

# 1. Safety Caution

For higher reliability and safety, consider the following precautionary measures. Read and follow the instructions carefully before running of the product.

## Indication



Prohibition



Must follow



Do not disassemble



Unplug the power from the outlet



Grounding to prevent electric shock

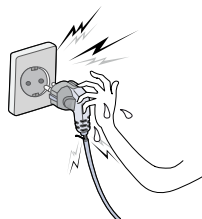


Do not handle the product with wet hands

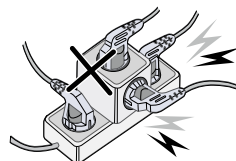


## WARNING

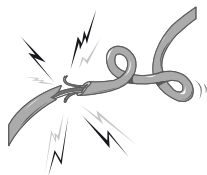
Failure to follow these instructions could result in fire, electric shock, or other injuries, or property damage



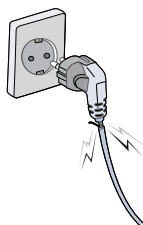
Do not pull or touch the power plug with wet hands.  
(Potential risk of electric shock or fire)



Do not overload the power plug into one outlet.  
(Potential risk of electric shock or fire)



Do not bend the wire and do not allow the wire to be pressed by heavy object.  
(Potential risk of electric shock or fire)

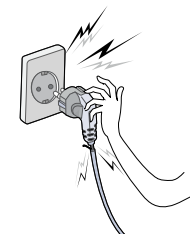


If a power plug is broken or a plug is cut or worn, do not use it.  
(Potential risk of electric shock or fire)

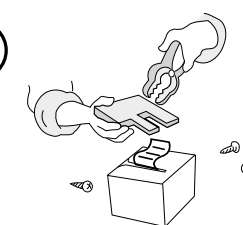


## WARNING

Failure to follow these instructions could result in fire, electric shock, or other injuries, or property damage



Do not pull out the power plug to turn off the product.  
(Turn off the power at installation, transportation, wiring and inspection.)

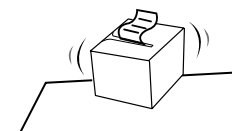


Do not disassemble, repair or modify the product.  
(Potential risk unit malfunction, electric shock or fire. When the product needs to be repaired, please contact in place where you ordered.inspection.)



## WARNING

Failure to follow these instructions could result in fire, electric shock, or other injuries, or property damage



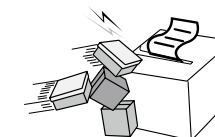
Do not install the product in uneven or inclined surface.  
(You may get hurt and it can be broken when it falls)



Keep product away from the water and other material.  
(Potential risk of discoloration or electric shock)

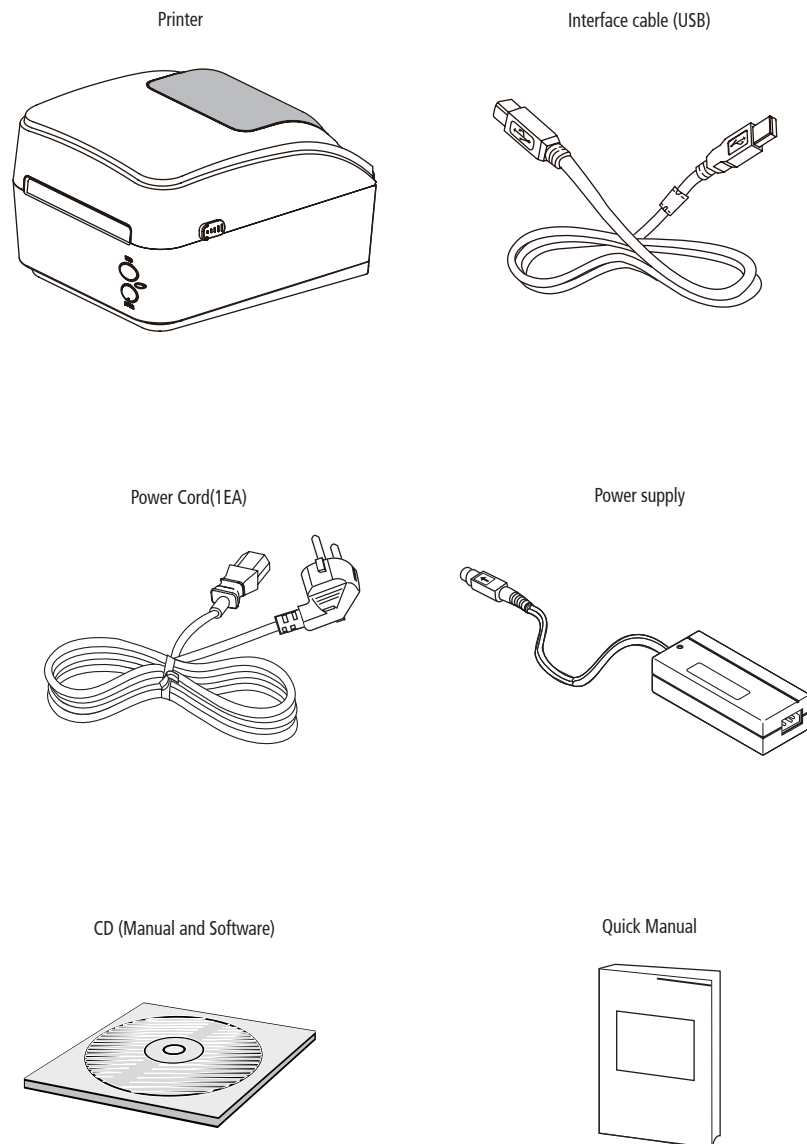


If the product that needs to be repaired, please contact in place where you ordered.  
(Potential risk of fire or unit malfunction)

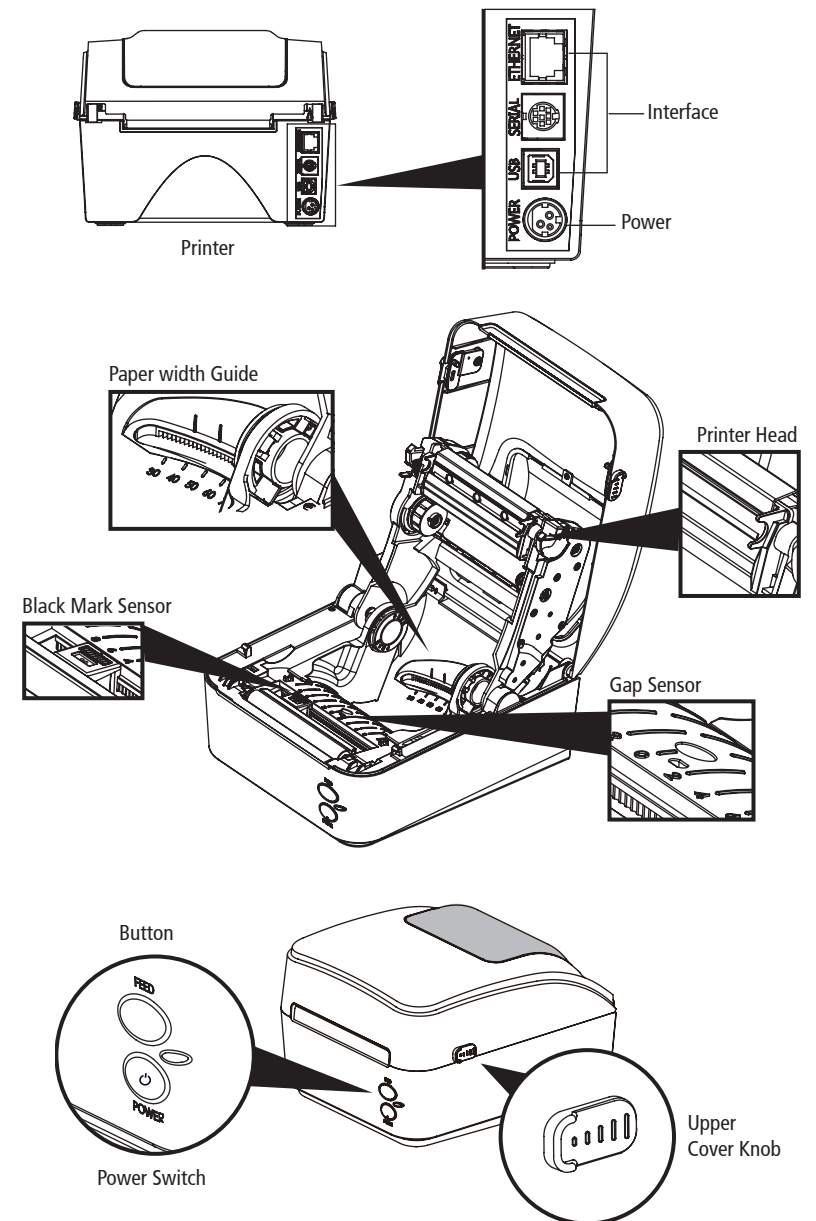


Please do not give excessive shock.  
(Potential risk of fire or unit malfunction)

## 2. Unpacking

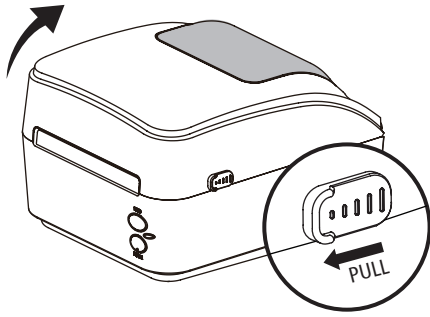


## 3. Printer identification

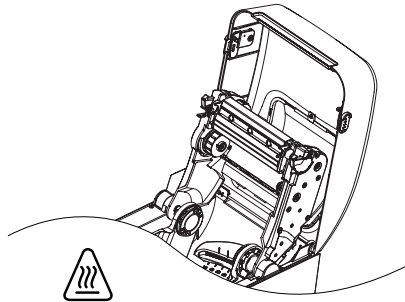


## 4. Connecting power supply

### Opening the printer

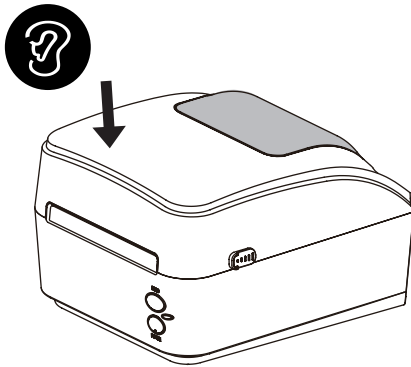


Open the upper cover by pushing the knob in the direction of the arrow.

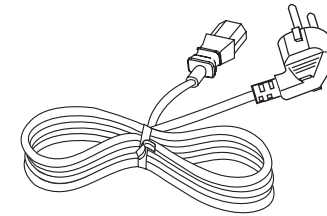


Make sure to be careful of the HOT head after using long time.

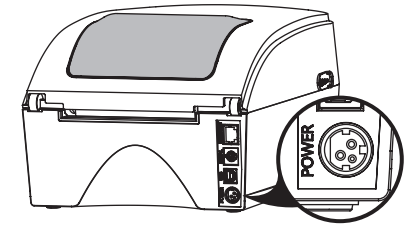
**\*\*If the cover is not shut down completely, the printer may not work properly\*\***



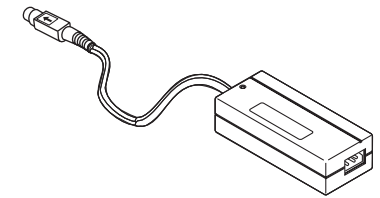
Please make sure you hear the closing sound of the upper cover.



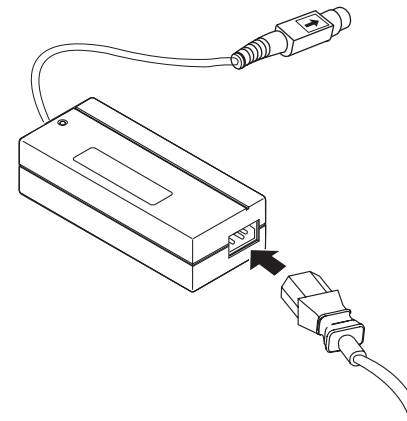
Please check the specification of the AC power cord if it is correct with your power system.



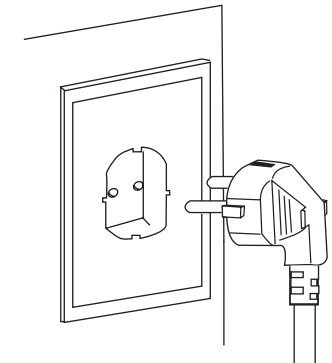
Power Connectors



Turn off the power of the printer and connect the power supply to the printer as shown above.

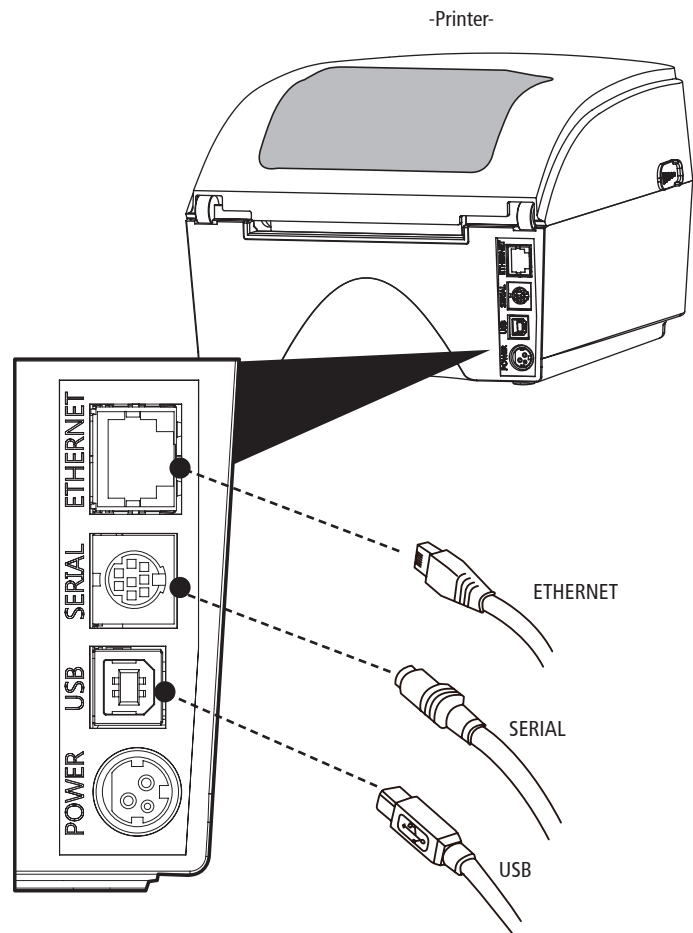


Connect the AC power cord to the power supply

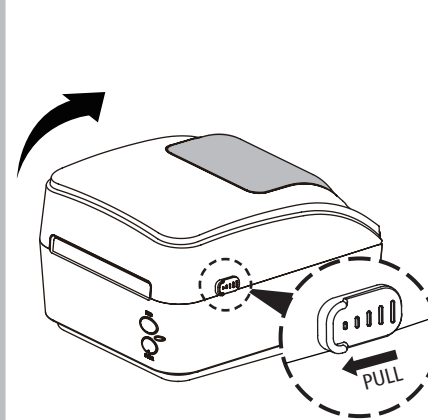


Insert a plug into the electrical outlet

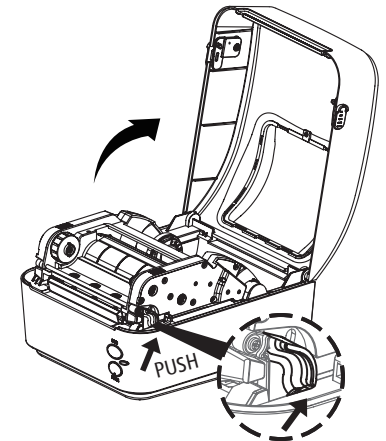
## 5. Hooking up the printer and computer



## 6. Loading the paper

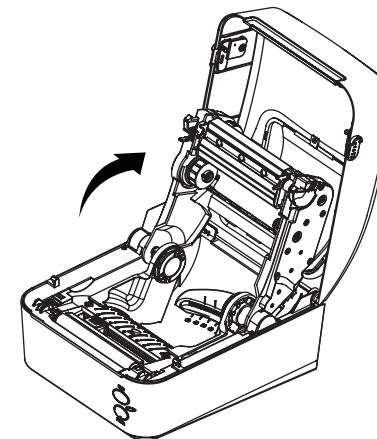


Turn off the printer and open the upper cover by pushing the knob in the direction of the arrow

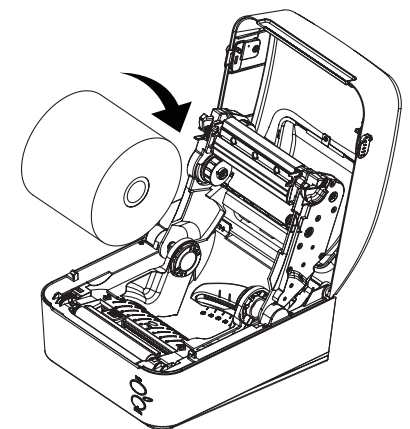


Please open the upper cover as shown above

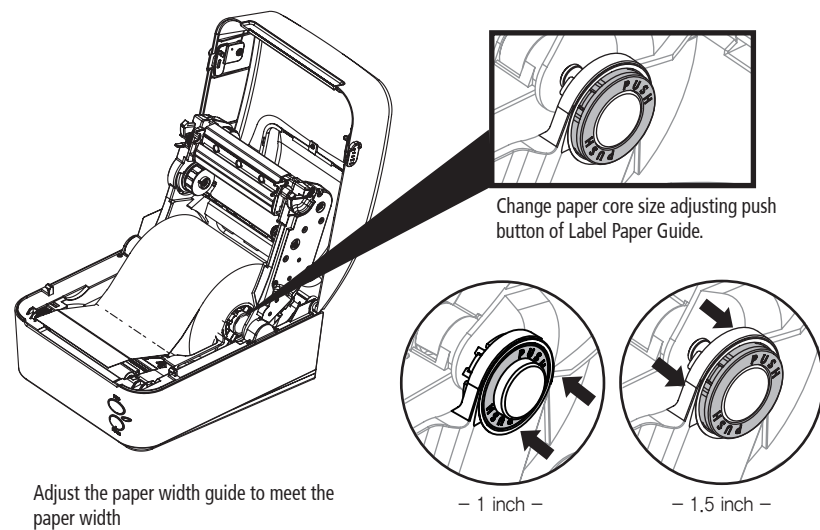
1 2  
3 4



Please open as shown above.

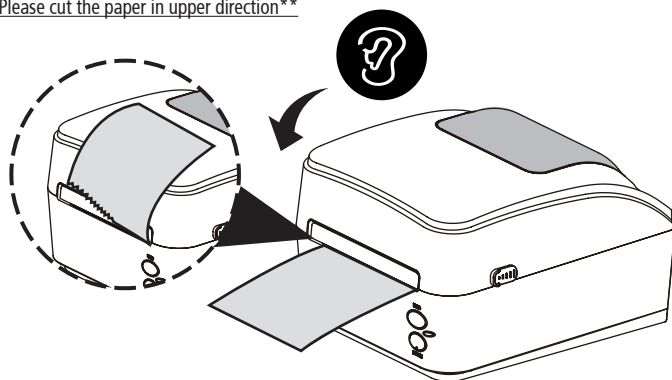


Insert the paper roll into the printer



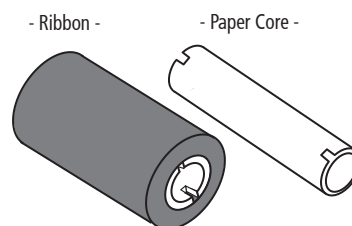
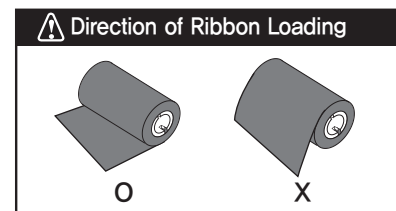
5  
6

**\*\*Please cut the paper in upper direction\*\***



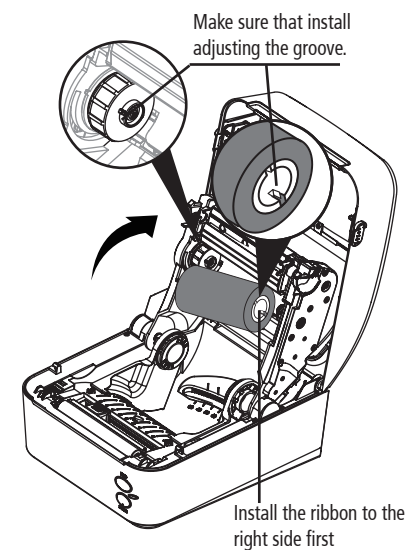
Close the upper cover completely and make sure you hear the closing sound.

## 7. Loading Ribbon

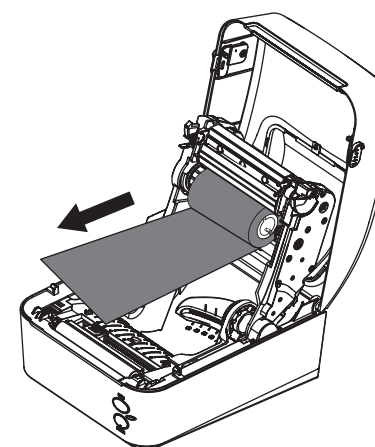


Prepare a ribbon and paper core

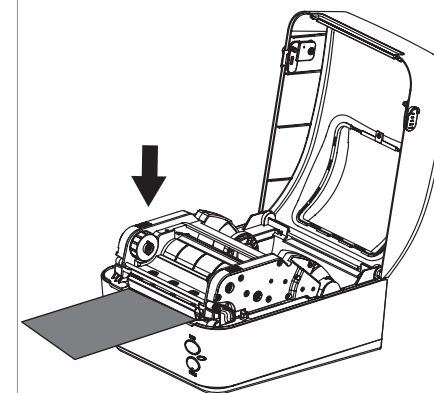
1 2  
3 4



Install the ribbon adjusting the groove after lifting following picture.



Release the ribbon forward enough.



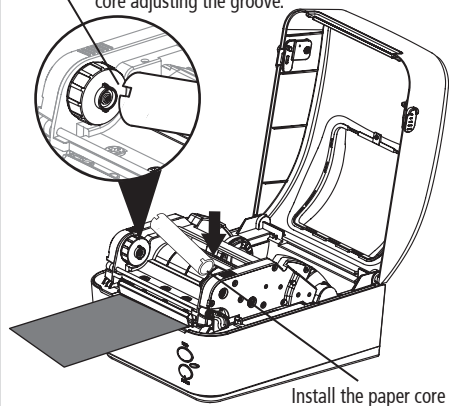
Close in condition that the ribbon is released.



## 8. The treatment when you run short of paper and encounter cutter jam problem

Install a paper core adjusting the groove, otherwise a paper core can be fallen.

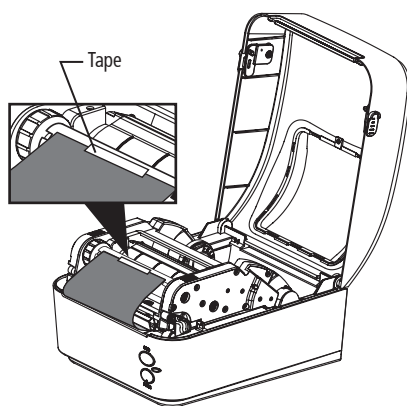
Make sure that install a paper core adjusting the groove.



Install the paper core to the right side first

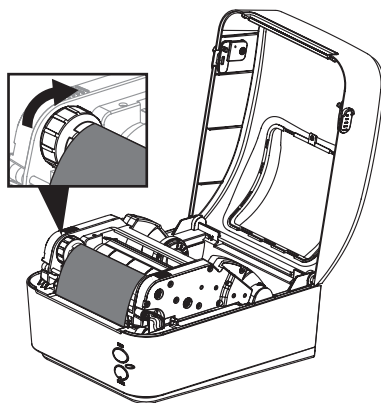
Install a paper core adjusting the groove as picture.

New ribbon has sticker in the end, so that tape is not necessary. In case that ribbon doesn't have sticker, please use tape.

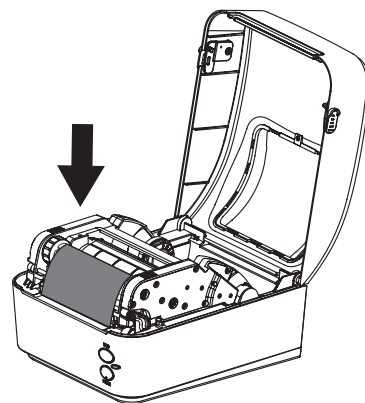


Attach the ribbon using tape to a paper core as picture.

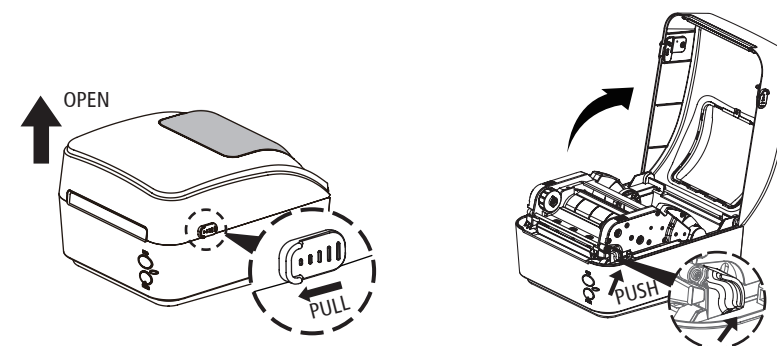
5 6  
7 8



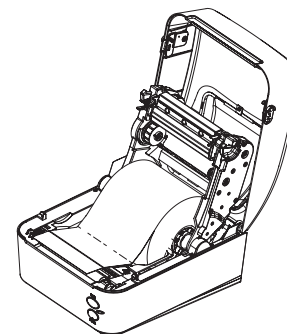
Spin the roller tight in order that only black side of the ribbon is appeared



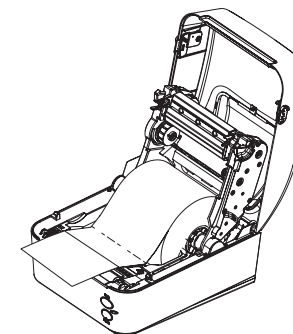
Close exactly with click sound.



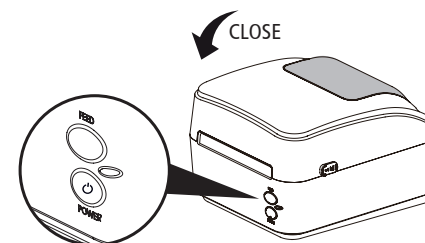
While you are printing with continuous media, please press PULL lever to the direction of the arrow.



**\*\*Installation of the new paper when the printer is short of it \*\***



**\*\*Remove of the paper seized by paper jam \*\***



After the treatment has been done as picture above, the printer function normally once you press FEED button.



**Caution**

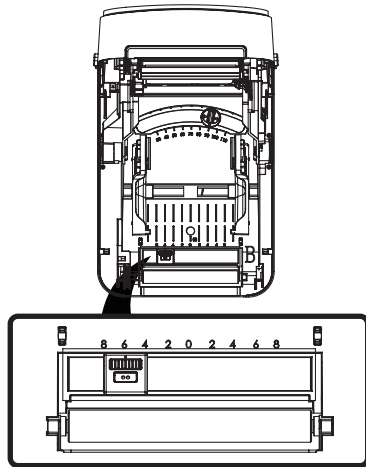
When the power is on, the ordered data will be printed without any data lost after installation of the new paper roll or treatment for paper Jam.

However, if these action has been done in the case the power is off, there can be some data lost since the printer buffer will not save them while the printer power is off.



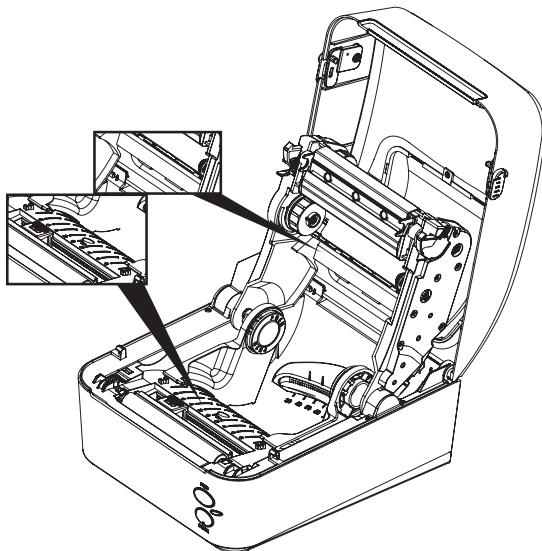
## 9. Setting up the sensors

### Black Mark Sensor



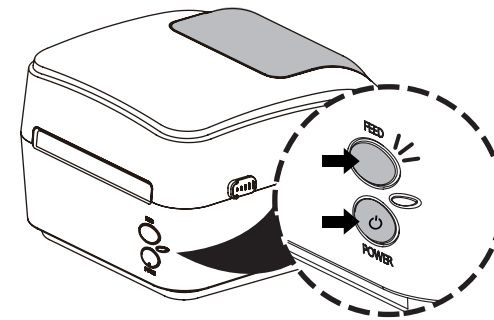
Set Black Mark Sensor right to the size of roll paper

### GAP Sensor



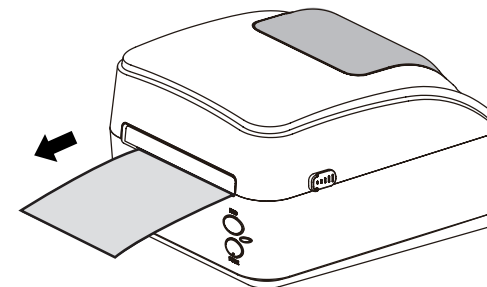
## 10. Sensor Calibration

**✓ Note**  
Power switch sig    **ON** Press once.  
                                 **OFF** during 2~3 seconds.



Sensor Calibration should be proceeded by pressing button power and feed for 2~3 seconds at the same time regardless power status ( Power On or Off )

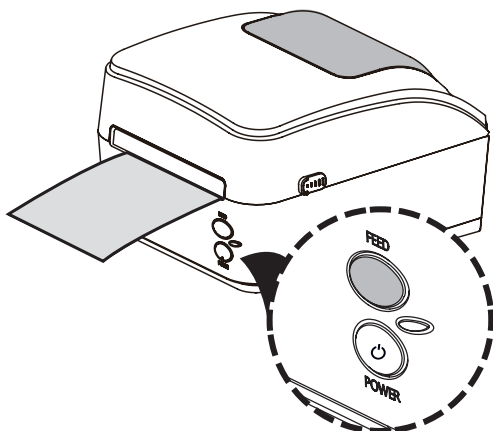
1  
2



Feeding will be performed automatically after general information is printed, then now printing is possible.

## 11. Pause function

- ✓ **Note**      **Pause & Restart**  
Press FEED KEY Once.



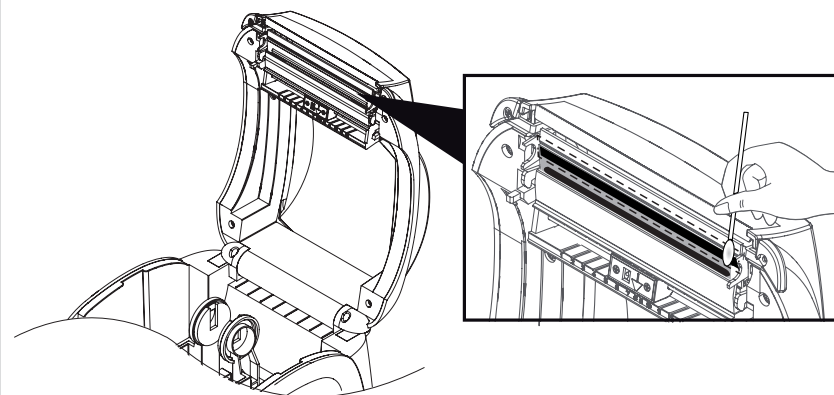
When you would pause on the printing process, press the 'FEED' key.

## 12. Printer cleaning

If the interior of the printer is dusty, printing quality can lowered.  
In such a case, follow the instructions below to clean up the printer.

✓ **NOTE**

1. Make sure to turn the printer power off prior to cleaning
2. Regarding print head cleaning, as the print head sets very hot during printing, turn off the printer power and wait approximately 10 minute before commencement.
3. When cleaning the print head, take care not to touch the heated portion of the print head. The print head subject to be damaged by static electricity.
4. Take care not to allow the print head to become scratched and /or damaged in any way.



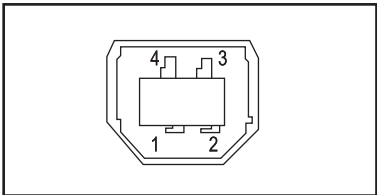
1. Use an applicator swab moistened with an alcohol solution to clean the print head and remove any dusts.
2. Once the cleaning is completed, insert paper roll into the printer few minutes later and close the printer cover.

✓ **Preventing Overheating**

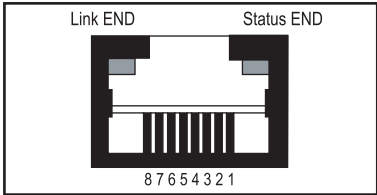
To prevent the motor from overheating, continuous driving of the printer should be 1.5 m or less in print length. Set the pause time for 30 seconds or more after driving the printer.

# 13. Connector

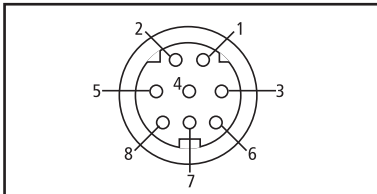
## Interface Connectors



<USB " B " TYPE>



<Ethernet>



<8 Pin Serial>

## Ethernet Interface

Pin	Signal	I/O
1	Data Out +	Output Data +
2	Data Out -	Output Data -
3	GND	Ground
4	Data IN +	Input Data +
5	Data IN -	Input Data -
6	N.C	
7	N.C	
8	N.C	

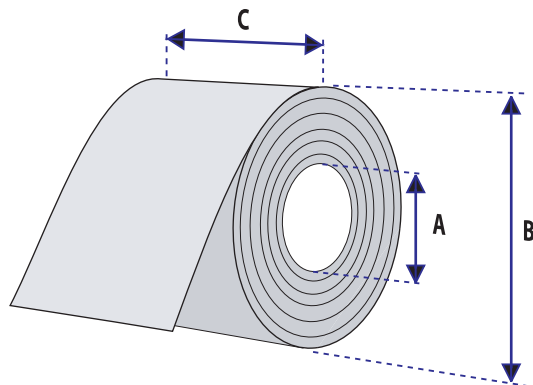
## USB Interface

Pin	Signal	I/O	Description
1	+5V	-	+5V
2	DATA-	-	Printer transmit data line
3	DATA+	-	Printer transmit data line
4	GND	-	System Ground

## DIN 8Pin Serial Interface

Pin	Signal	I/O	Description
1	RXD	Input	Printer receive data line RS-232C level
2	TXD	Output	Printer transmit data line RS-232C level
3	DTR	Output	Printer handshake to host line RS-232C level
4	GND	-	System Ground
5	DSR	Input	Data Send Ready
6,8	NC	-	

# 14. Standard roll media specification



Core	
Diameter(A)	25.4 or 38.1 mm
Max. width	114 mm
Roll	
Max.diameter(B)	127 mm
Max.media width(C)	114 mm
Min.media width(C)	18 mm
Max.media thickness	0.18 mm
Min.mdeia thickness	0.06 mm

NOTE

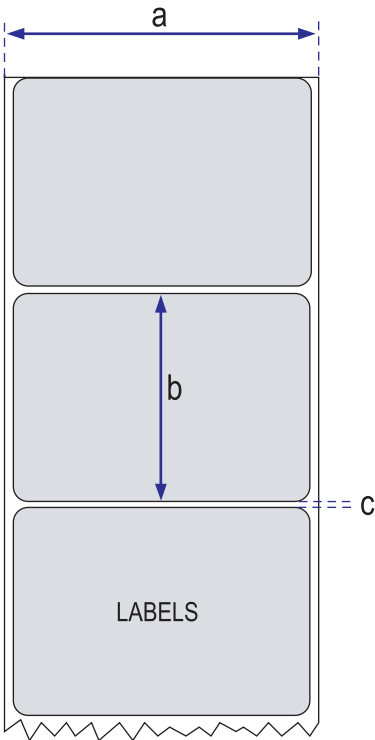
1. If the label thickness is more than 0.18mm, adjust the printing speed to 127mm/s.
2. When the paper width is less than 25.4 (1inch), please print 101.6 mm/s  
When the paper width is between 25.4 (1inch) to 76.2 (3inch), please print 127mm/s



Protect the media against sand, grit, and other hard particles during printing and storage. Keep the cover closed. Even very small foreign particles may cause severe harm to the delicate printhead.

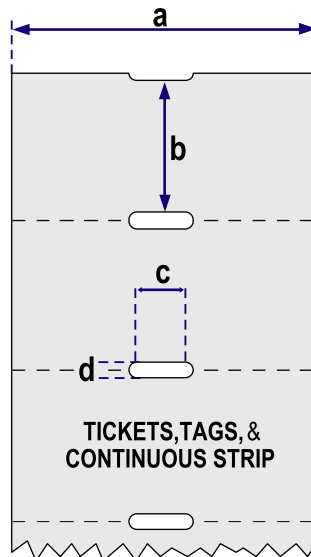
# 15. Standard label specification

<- a -> Media width (inch, liner)	
Maximum	114 mm
Minimum	18 mm
<- b -> Label length	
Minimum	10 mm
<- c -> Label gap height	
Maximum	10 mm
Minimum	2 mm
Liner	
Opacity	50~75%



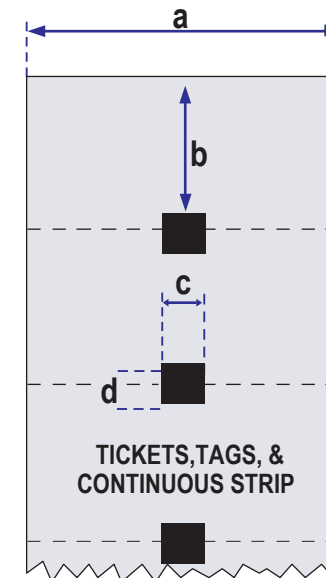
## 16. Label specification with Through-hole

<-- a --> Tag or strip width	
Maximum	114 mm
Minimum	18 mm
<-- b --> Tag length	
Minimum	10 mm
<-- c --> Detection slot width	
Minimum	14 mm
<-- d --> Detection slot height	
Maximum	10 mm
Minimum	2 mm



## 17. Label with Black Mark

<-- a --> Tag or strip width	
Maximum	114 mm
Minimum	18 mm
<-- b --> Tag length	
Minimum	10 mm
<-- c --> Black mark width	
Minimum	14 mm
<-- d --> Black mark height	
Maximum	10 mm
Minimum	3 mm

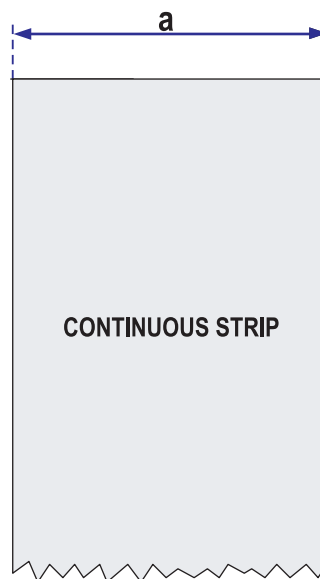


## 18. Continuous stock specification

The printer can use continuous paper without any detection gap or black marks.

Continuous paper cannot be used in the Test (Dump) Mode.

<-- a -->	
Maximum	114mm
Minimum	18 mm



## 19. Specifications

### Product Specifications

Print method		Direct Thermal
Print speed(max)		127mm/sec
Print width(max)		104mm
Print length(max)		1000 mm
Resolution		203dpi, 8 dots/mm
Paper Width(min~max)		18~114mm
Paper roll size(max)		Ø 25.4mm ~ Ø 127mm
Paper thickness		0.06~0.18mm
Paper Type		Label , Tag, Continuous, Fanfold
Paper sensor		Label gap, Black Mark, Ribbon Encoder
Ribbon width(outside diameter)		110mm
Ribbon length		74M, Ø 33 mm
Ribbon diameter		0.5 inch
Interface		Serial(RS-232C), Ethernet, USB
Memory	Standard	1MB Flash, 16MB SDRAM, 8MB Font Flash
Serial baud rate		115,200 bps (max)
Programming Language		EPL II (Eltron Programming language) ZPL II (Zebra Programming language)
Barcode	1D	Code39, Code128 A/B/C, UCC/EAN-128, Code93, Codabar, Interleaved 2 of 5, UPC-A, UPC-E, UPC-A and E with 2 and 5 add on, EAN-8, EAN-13, EAN-8 and 13 with 2 or 5 digit extentions, Postnet, Plessey(MSI-1), MSI-3, German Post Code
	2D	PDF 417, QR Code, MaxiCode, Data matrix, Code 49(ZPL II)
Font Specification	EPL II	6bitmapped Font
	ZPL II	7bitmapped Font, 1 Smooth Font
Weight		1.92kg
Size (W x D x H)		207mm x 250.50mm x 160.65mm
Temperature	Operation	0~40℃
	Storage	-20~60℃
Humidity	Operation	10 ~ 90%
	Storage	10 ~ 90%

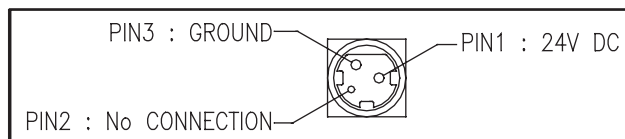
### Certification

- (1) FCC PART15 CLASS A
- (2) CE EMCD (CE-EMCD Class B)
- (3) UL/cUL (UL 60950-1)

♣ "This equipment is indoor use and all the communication wiring are limited to inside of the building" or similar text.

### Electrical Characteristics

- (1) Input Voltage            DC 24V  $\pm$  10%
- (2) Current Consumption    Operating: Approx. 2.9 A (at ASC II printing)  
Peak : Approx. 17 A  
(at print duty 100%, For 10 seconds or less)  
Stand-by : Approx. 0.15 A
- (3) Power Connector



PATENT

