SEWOO

MODEL : LK-B230

4″ DESKTOP LABEL PRINTER

All specifications are subject to change without notice

Table of Contents

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

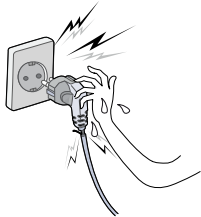⏚ Grounding to prevent electric shock

✋ 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)

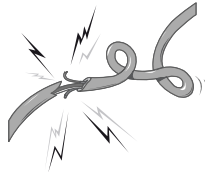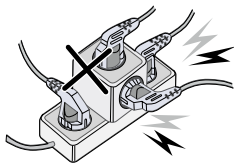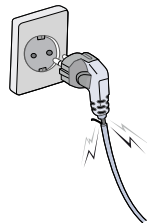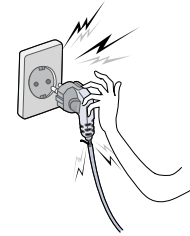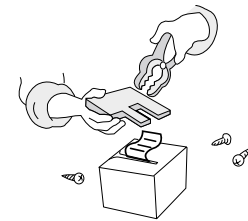⚠ **WARNING**
Failure to follow these instructions could result in fire,electric shock, or other injuries, or property damage

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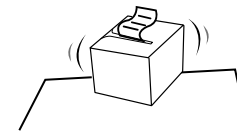
Do not install the product in uneven or inclined surface.
(You may get hurt and it can be broken when it falls)

Dealer

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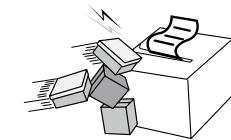
Please do not give excessive shock.
(Potential risk of fire or unit malfunction)

2. Unpacking

Printer

Power Cord(1EA)

Ribbon

Label

Power Supply

Ribbon Spindle (2EA)

Paper Spindle

Ribbon Core

CD

Manual

Manual
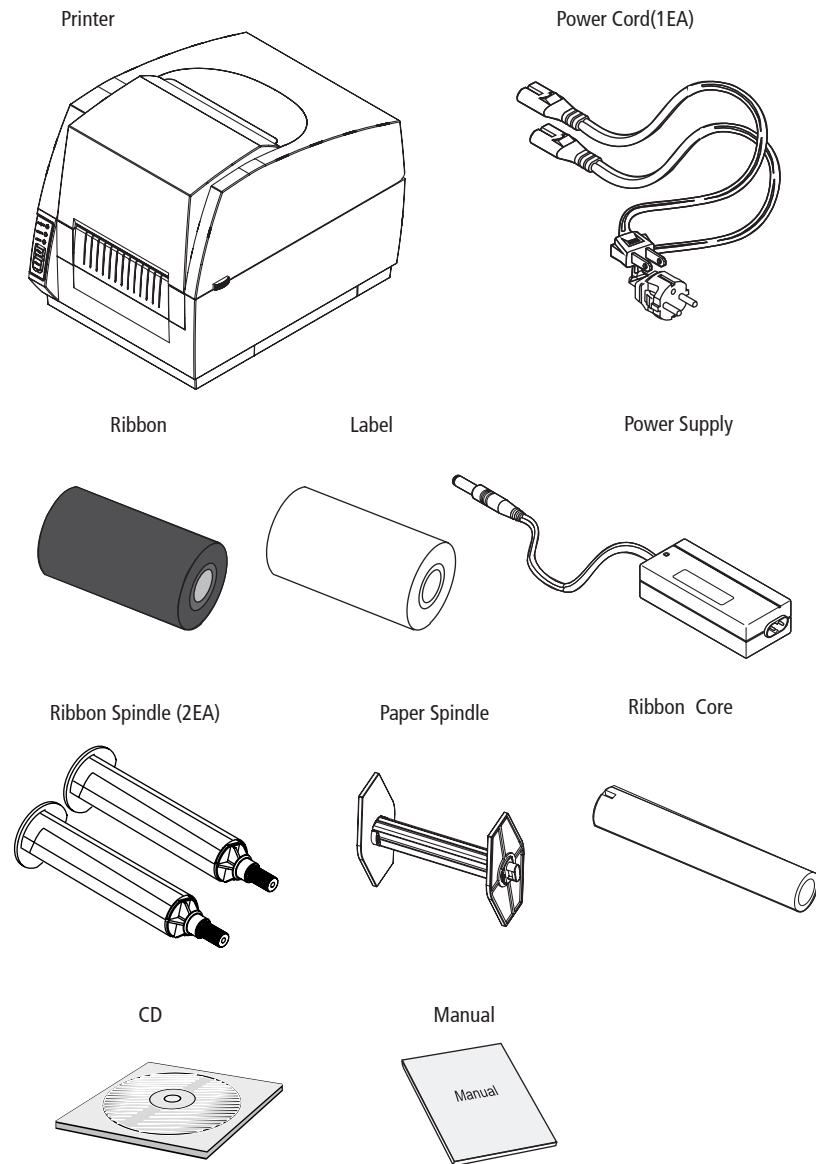
3. Inspecting the printer

ON OFF

Interface Connectors

Power Switch

Printer Head

Notch Sensor

Moving Paper Sensor

Paper width Guide

Head Release Lever

FEED

PAUSE

Button

Power Connector
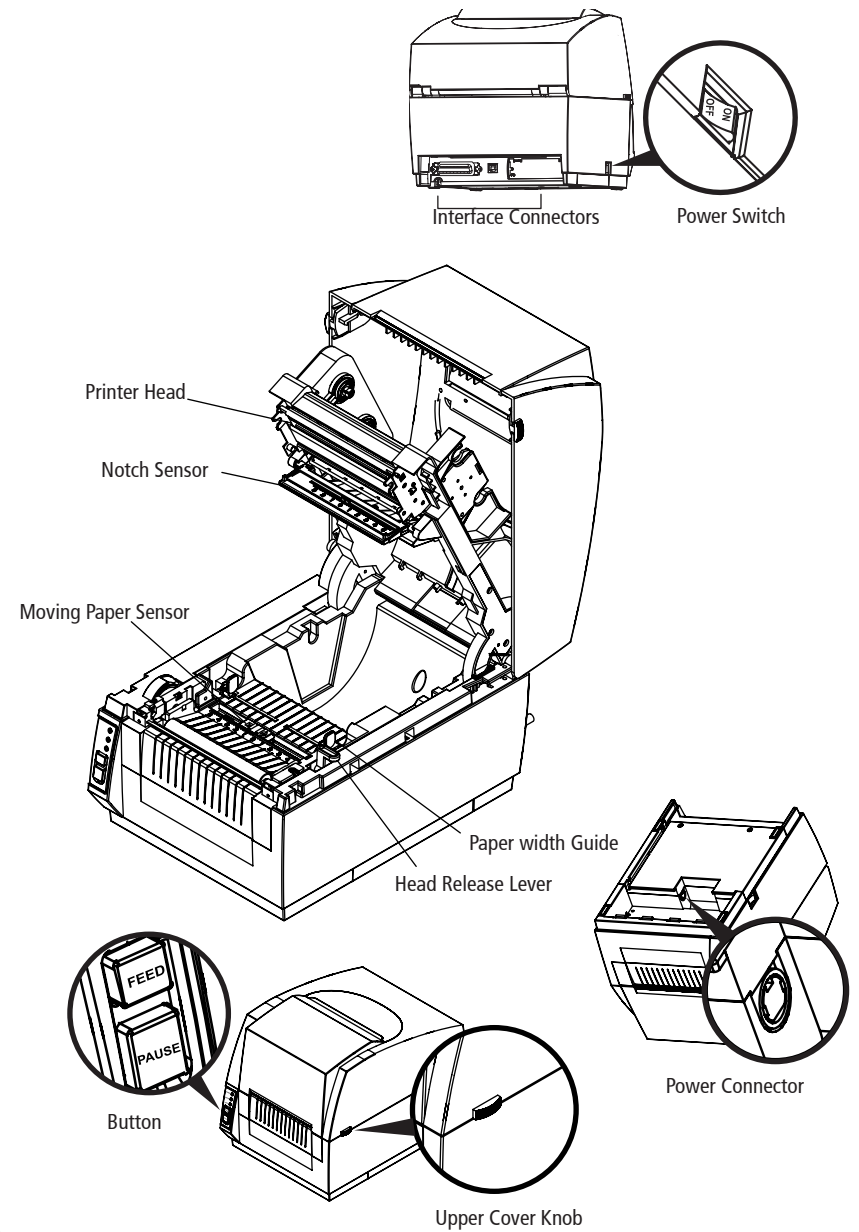
Upper Cover Knob

Opening the printer
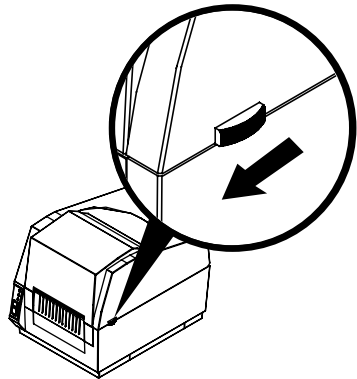
Open the upper cover by pushing the knob in the direction of the arrow
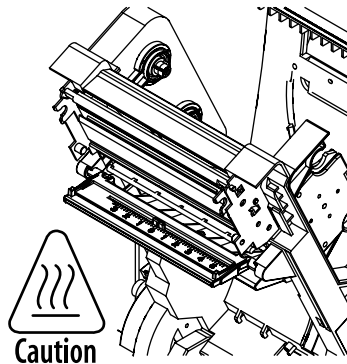
Caution

Make sure to be careful of the HOT head

Closing the paper upper guide
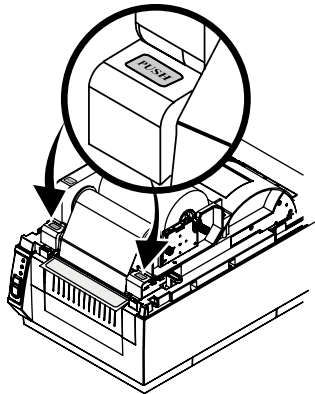
Make sure you hear the closing sound of the paper upper guide.

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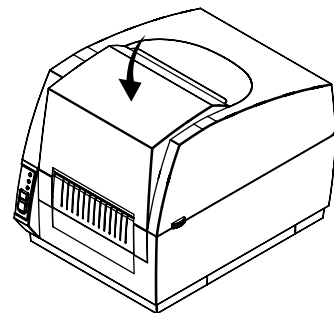
Close the upper cover and make sure you hear the closing sound of the upper cover.

4. Attaching Power Supply

220VAC

115VAC
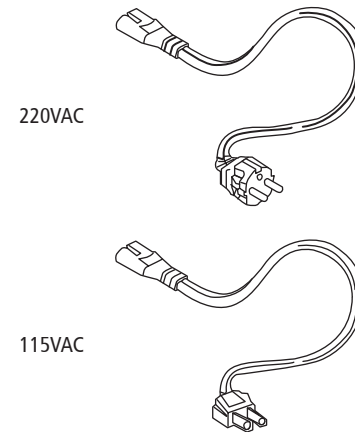
Check the specification of the AC power cord if it is correct with your power system
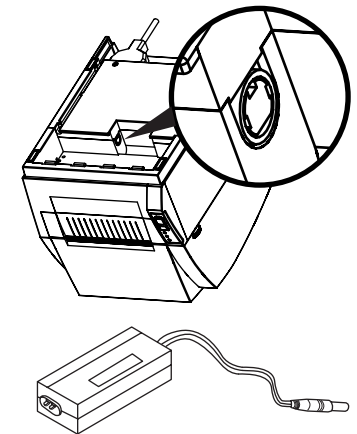
Turn off the power of the printer and connect the power supply to the printer
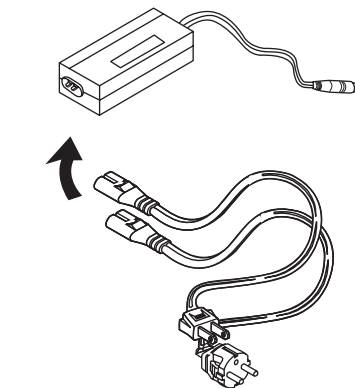
Connect the AC power cord to the power supply
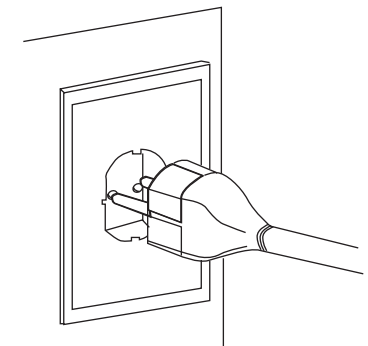
Insert a plug into the outlet

5. Hooking Up the printer and computer

-Printer-

Parallel

USB

-Computer-
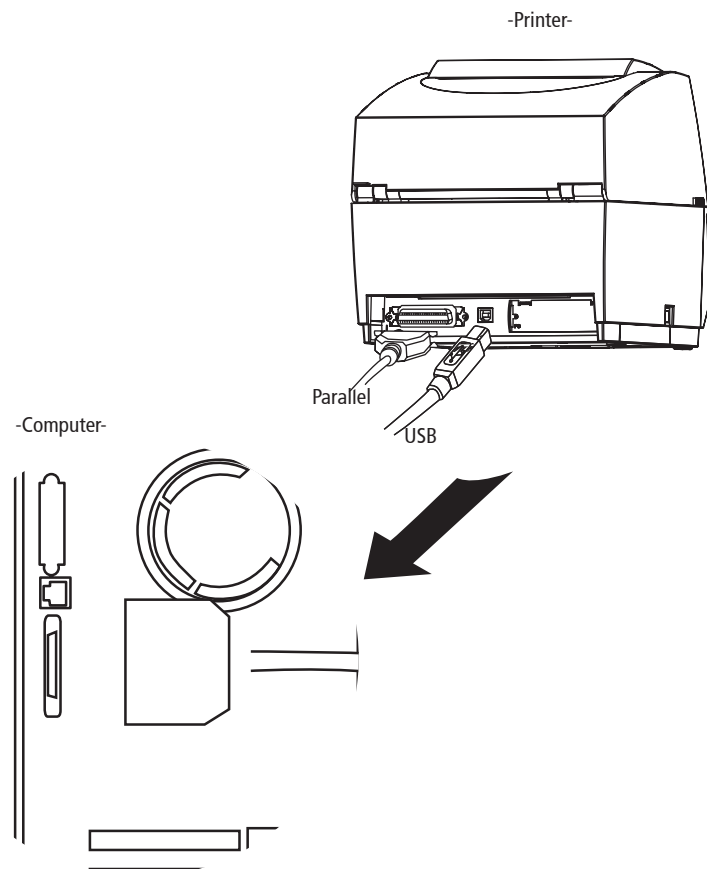
Make sure the printer is turned off then connect the printer to the PC

6. Loading the Paper

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

Rise up the paper upper guide by pulling the head release lever

1	2
3	4

Paper Fixing Tap

Open the paper width guide by pushing it to the right & left sides.

Pull out one of the adjustable width tabs. Insert a paper roll replace the tab and center.
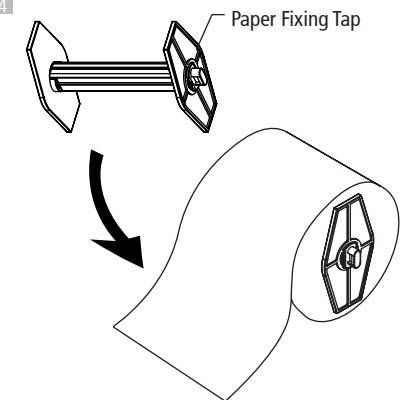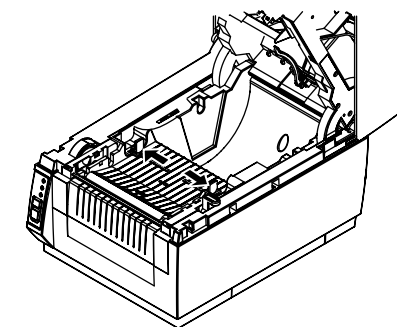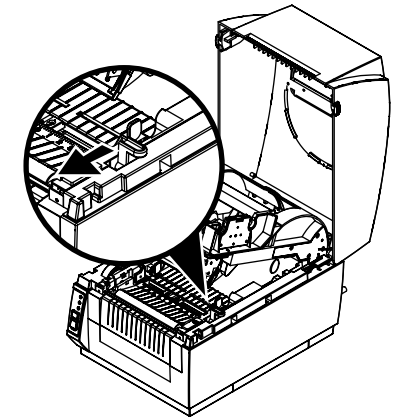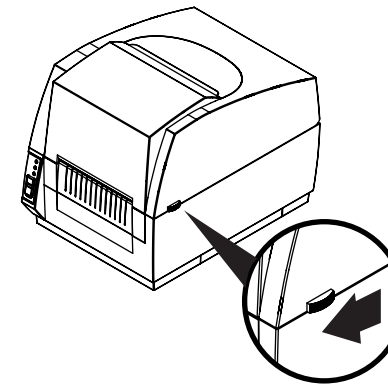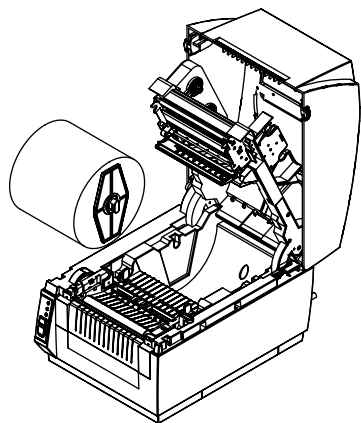
Insert paper roll into the printer
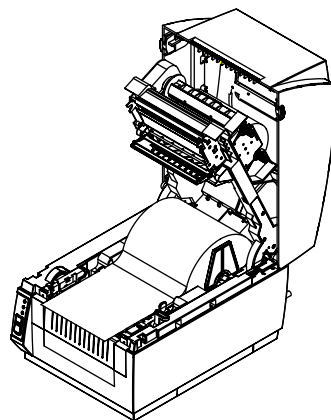
Adjust the paper width guide to meet the paper width
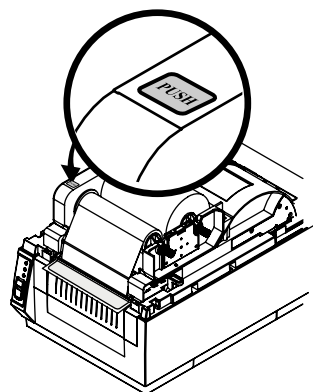
Push the head stopper release lever in the direction of the arrow until the paper upper guide comes down.
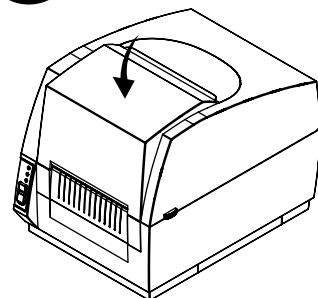
Close the upper cover and make sure you hear the closing sound of the upper cover.

7. Loading Ribbon

Ribbon
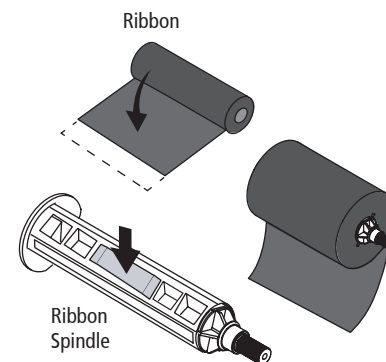
Ribbon Spindle

Remove the vinyl covering on the ribbon. Depress the indicated button on the ribbon spindle while inserting the ribbon roll.
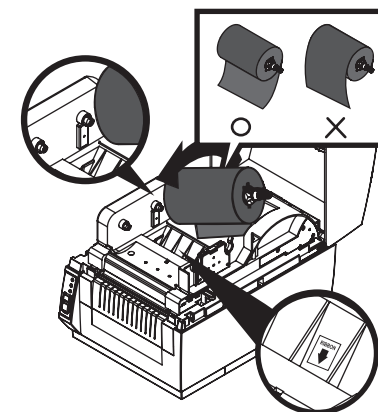
Insert one side of the ribbon spindle
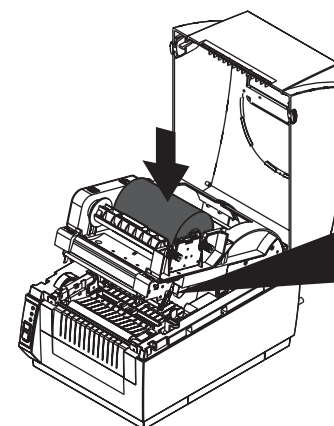
detail A

Push the other side of the ribbon spindle down to secure it.
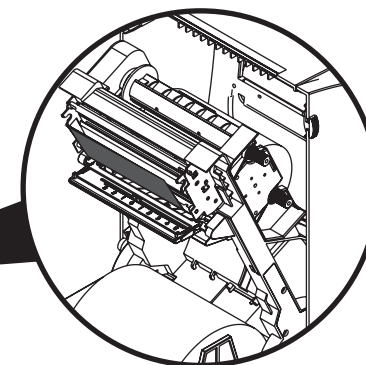
Pull out the ribbon edge through ribbon mechanism as shown in the picture
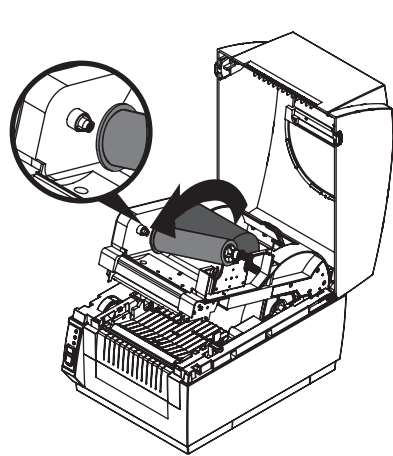
Insert one side of the ribbon spindle
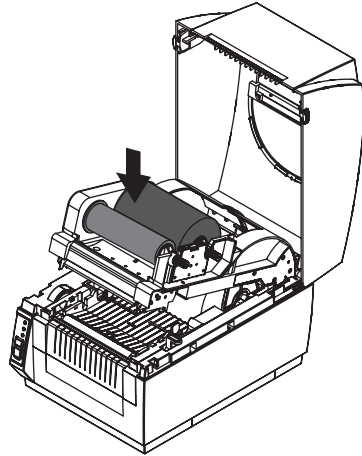
Push the other side of the ribbon spindle down to secure it.
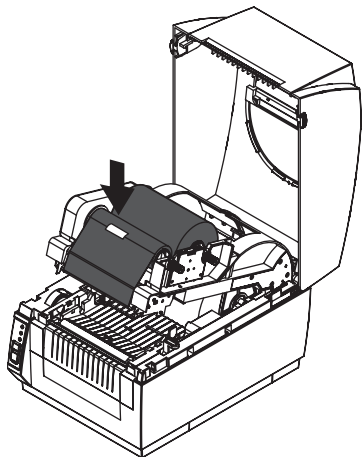
Attach the ribbon to the core with tape as shown.
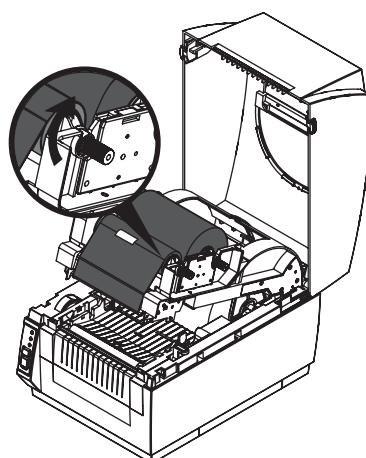
Turn the adjustment knob in the arrow direction to tighten the ribbon.

8. Setting up the sensors
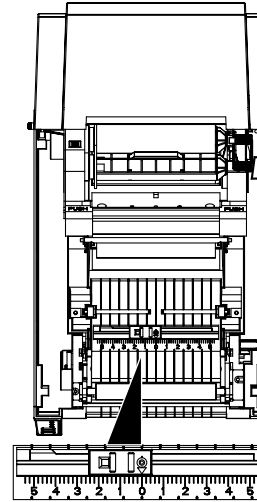
Set Black Mark Sensor right to the size of roll paper
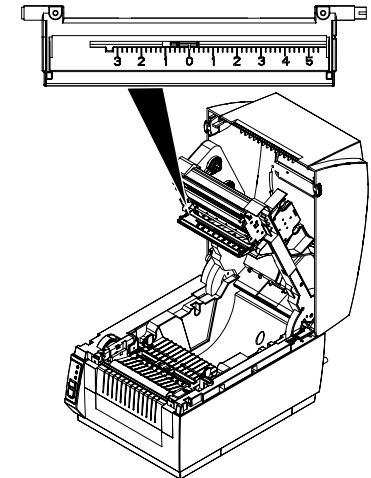
Locate notch sensor on the same number point- as the black mark sensor is indicating on.

0 is the initialization number for sensor of the product.
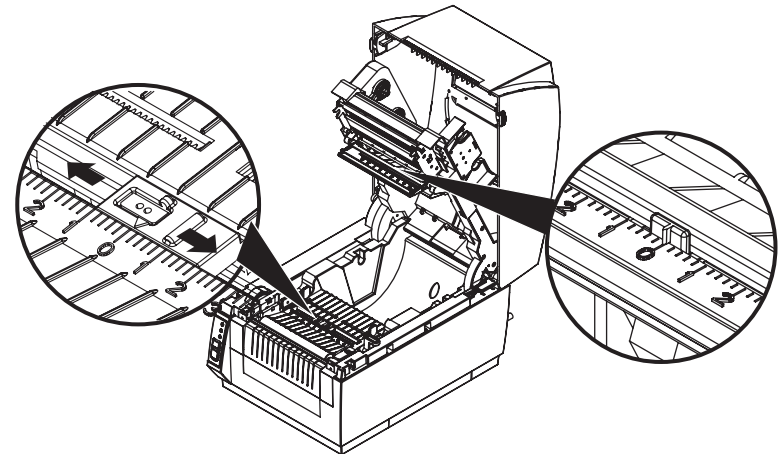
Black Mark Sensor and Notch sensor must always point to the same number

9. Self Test
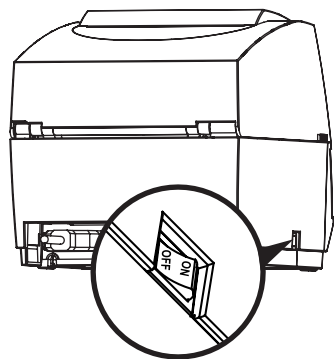
Turn off the printer
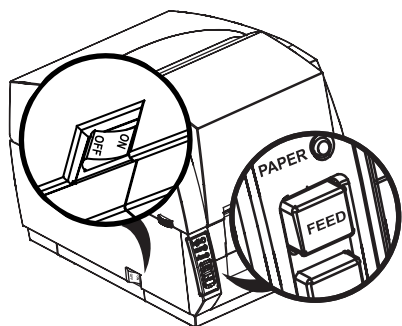
While holding down the feed button, turn on the printer
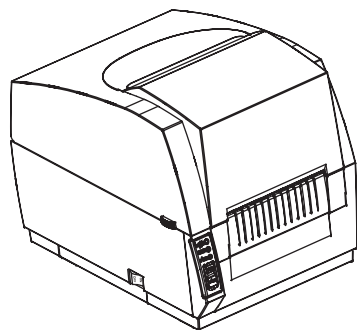
Set free the feed button
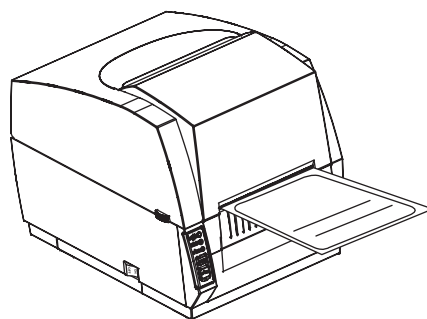
The printer starts printing some basic information

10. Interface

Interface Connectors

Standard

<USB "B" Type>

19   36

1   18

<Centronics Parallel>

Option

<9 Pin Serial>

Link END   Status END

8 7 6 5 4 3 2 1

<Ethernet>

Reset S/W

<Wi-fi>
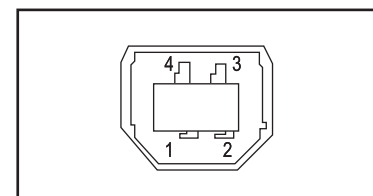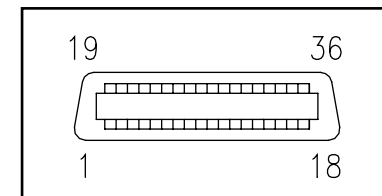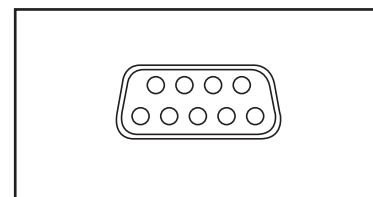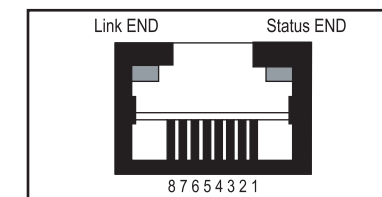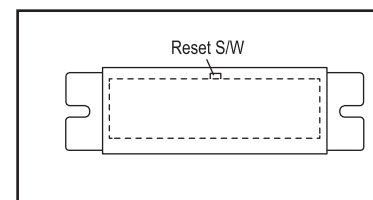
9Pin Serial Interface

Pin	Signal	I/O	Description
3	RXD	Input	Printer receive data line RS-232C level
2	TXD	Output	Printer transmit data line RS-232C level
6,8	DTR	Output	Printer handshake to host line RS-232C level
5	GND	-	System Ground
4	DSR	Input	Data Send Ready
1,7,9	NC	-	

Centronics Parallel Interface

Pin	Signal	I/O	Description
1	STROBE-	Input	Synchronize signal Data received
2~9	DATA0~7	Input/Output	Data bit Transmitted 0~7
10	ACK-	Output	Data receiving completed.
11	BUSY	Output	Impossible to print of data receiving.
12	PE	Output	Paper empty
13	SELECT	Output	Printer status for ON/OFF line
14	AUTO FEED-	Input	Paper auto feed signal
15	GROUND	-	System ground
16	GROUND	-	System ground
17	NC	-	
18	LOGIC-H	-	+5V
19~30	GROUND	-	System ground
31	INIT-	Input	Initialize
32	ERROR-	Output	Printer error
33	GROUND	-	System ground
34	NC	-	
35	+5V	-	+5V
36	SELLECT IN-	Input	Printer select signal

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

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	

11. Media Roll Size
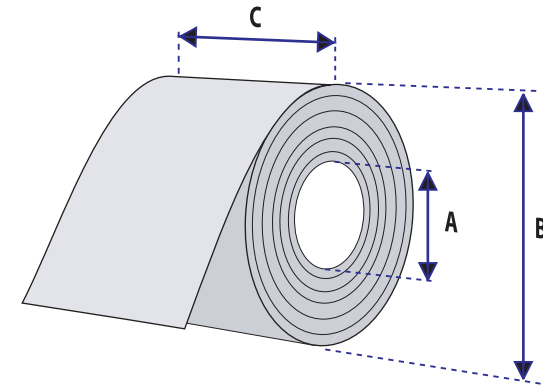
Core		
Diameter(A)	25.4 or 38.1 mm	(1.0 or 1.5 inches)
Max. width	118 mm	(4.65inches)
Roll		
Max.diameter(B)	125 mm	(5 inches)
Max.media width(C)	116 mm	(4.57 inches)
Min.media width(C)	38.1 mm	(1.5 inches)
Max.media thickness	0.15 mm	(0.006 inches)
Min.mdeia thickness	0.06 mm	(0.003 inches)

All types of media should normally be wound with the printable side facing outwards and unroll from the top of the roll.
However tags and continuous strip can optionally be wound with the printable sidefacing inwards and unroll from the bottom of the roll as long as they are not used for cut-off operation.

⚠️ **Caution** 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.

12. Labels

<-- a --> Media width (inch, liner)		
Maximum	116.0 mm	(4.57 inches)
Minimum	38.1 mm	(1.5 inches)
<-- b --> Label length		
Minimum	10 mm	(0.39 inches)
<-- c --> Label gap height		
Maximum	10 mm	(0.39 inches)
Minimum	2 mm	(0.08 inches)
Liner		
Opacity	75%	
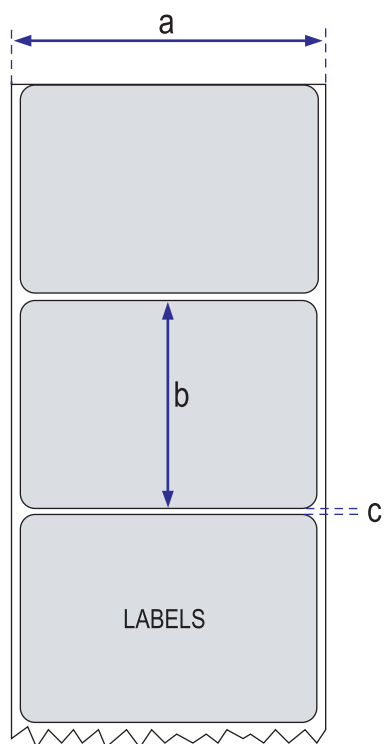
13. Tags and Strip with Slots

<-- a --> Tag or strip width		
Maximum	116.0 mm	(4.57 inches)
Minimum	38.1 mm	(1.5 inches)
<-- b --> Tag length		
Minimum	10 mm	(0.39 inches)
<-- c --> Detection slot width		
Minimum	14 mm	(0.55 inches)
<-- d --> Detection slot height		
Maximum	10 mm	(0.39 inches)
Minimum	2 mm	(0.08 inches)

The label gap sensor is offset 4.5 mm(0.177 inches) to the right of the center fo the media path.
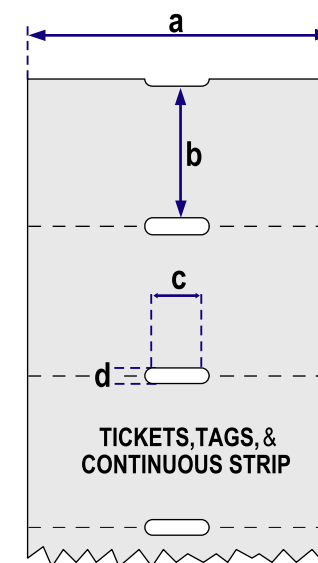
14. Tags and Strip with Black Marks

<-- a --> Tag or strip width		
Maximum	116.0 mm	(4.57 inches)
Minimum	38.1 mm	(1.5 inches)
<-- b --> Tag length		
Minimum	10 mm	(0.39 inches)
<-- c --> Black mark width		
Minimum	14 mm	(0.55 inches)
<-- d --> Black mark height		
Maximum	10 mm	(0.39 inches)
Minimum	3 mm	(0.12 inches)

The black mark sensor is offset 10 mm (0.394 inches) to the right of the center of the media path.
Max. reflectance 5% at 940 nanometer. Carbon black.

**TICKETS,TAGS, &
CONTINUOUS STRIP**
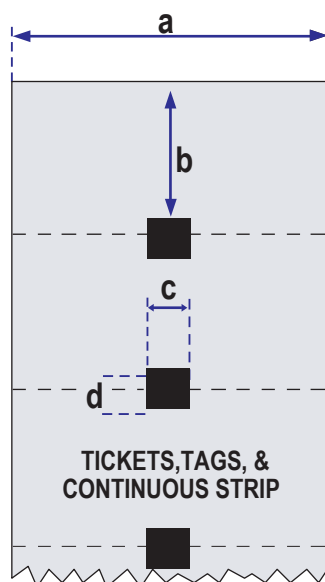
15. Plain Continuous Stock

The printer can use continuous stock without any detection slots or black marks.
The printer must be set for continuous stock by the Q command.
The length of each copy is decided by the size of the print image and any additional media feed is decided by the Q command.

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

<-- a --> Tag or strip width		
Maximum	116.0 mm	(4.57 inches)
Minimum	38.1 mm	(1.5 inches)

CONTINUOUS STRIP
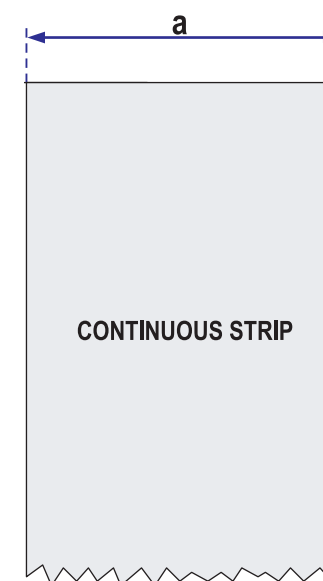
16. Specifications

Product Specifications

Print method		Thermal Transfer and Direct Thermal
Print speed(max)		102mm/sec
Print width(max)		104mm (4.1")
Print length(max)		650mm (25.59")
Resolution		300dpi, 11.8 dots/mm
Paper Width(min~max)		18~118mm (0.7~4.64")
Paper roll size(max)		127mm (5.0")
Paper thickness		0.06~0.20mm
Paper Type		Label , Tag, Continuous, Fanfold
Paper sensor		Label gap, Notch, Black Mark
Ribbon width(outside diameter)		33mm to 110mm (1.3~4.3")
Ribbon length		360M, Φ 67mm (2.5")
Interface	Standard	USB, Parallel (IEEE-1284)
	Option	Serial(RS-232C), Ethernet, Wireless LAN 802.11b
Memory	Standard	8MB SDRAM, 5MB Flash
	Option	16MB Flash
Serial baud rate		115,200bps(max)
Auto Cutter (Option)	Life	0.06~0.15mm:500,000cuts / 0.15~0.18mm:300,000cuts
	Type	Guillotine
Peeler		Optional
Programming Language		ZPL II Command Compatible
Barcode	1D	Code39, Code128, with subsets A/B/C, Code93, Codabar, Interleaved 2 of 5, UPC-A and UPC-E with 2 or 5 digit extensions, EAN-8 and EAN-13 with 2 or 5 digit extensions, Postnet, Plessey, German Post Code, MSI-3, UCC/EAN-128
	2D	Aztec, PDF 417, QR Code, Data matrix Code49

Font Specification	7bitmapped (5x9, 7x11, 10x18, 15x28,13x26, 40x60, 13x21) 1 smooth scalable
DRIVER	Windows Printer Driver(7, XP, 2000, 2003, 2008, Vista (32 & 64bit)
Weight	7.9lbs (3.6kg)
Size (W x D x H)	215x287x231

Certification
(1) FCC PART15 CLASS A
(2) CE EMCD (CE-EMCD Class B should use Parallel shield Cable complied with IEEE-1284 standards),CCC

Electrical Characteristics
(1) Input Voltage   DC 24V ± 10%

(2) Current Consumption

        Operating: Approx. 1.5 A (at ASC Ⅱ printing)
        Peak : Approx. 10 A
        (at print duty 100%, For 10 seconds or less)
        Stand-by : Approx. 0.15 A

(3) Power Connector

```
PIN3 : GROUND            PIN1 : 24V DC

PIN2 : No CONNECTION
```
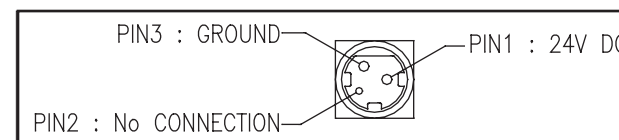
17. Command List

ZPL Command List

No.	Command	Description
1	^A	Scalable/Bitmapped Font
2	^B1	Code 11 BarCode
3	^B2	Interleaved 2 of 5 BarCode
4	^B3	Code 39 BarCode
5	^B4	Code 49 BarCode
6	^B5	Planet Code BarCode
7	^B7	PDF417 BarCode
8	^B8	EAN-8 BarCode
9	^B9	UPC-E BarCode
10	^BA	Code 93 BarCode
11	^BC	Code 128 BarCode(Subsets A, B, and C)
12	^BD	UPS MaxiCode BarCode
13	^BE	EAN-13 BarCode
14	^BF	Micro-PDF417 BarCode
15	^BI	Industrial 2 of 5 BarCode
16	^BJ	Standard 2 of 5 BarCode
17	^BK	ANSI Codabar BarCode
18	^BL	LOGMARS BarCode
19	^BM	MSI BarCode
20	^BP	Plessey BarCdoe
21	^BQ	QR Code BarCode
22	^BS	UPC/EAN Extensions
23	^BU	UPC-A BarCode
24	^BX	Data Matrix BarCode
25	^BY	BarCode Field Default
26	^BZ	POSTNET BarCode
27	^CC	~CC Change Carets
28	^CD	~CD Change Delimiter
29	^CF	Change Alphanumeric Default Font
30	^CI	Change International Font/Encoding
31	^CT	~CT Change Tilde
32	^DF	Download Format
33	~DG	Download Graphics
34	^FB	Field Block
35	^FC	Field Clock(for Real-Time Clock)
36	^FD	Field Data
37	^FH	Field Hexadecimal Indicator
38	^FN	Field Number
39	^FO	Field Origin

No.	Command	Description
40	^FP	Field Parameter
41	^FR	Field Reverse Print
42	^FS	Field Separator
43	^FT	Field Typeset
44	^FV	Field Variable
45	^FW	Field Orientation
46	^FX	Comment
47	^GB	Graphic Box
48	^GC	Graphic Circle
49	^GD	Graphic Diagonal Line
50	^GE	Graphic Ellipse
51	^GF	Graphic Field
52	^GS	Graphic Symbol
53	^ID	Object Delete
54	^IL	Image Load
55	^IM	Image Move
56	^IS	Image Save
57	^LH	Label Home
58	^LL	Label Length
59	^LR	Label Reverse Print
60	^LS	Label Shift
61	^LT	Label Top
62	^MC	Map Clear
63	^MD	Media Darkness
64	^MM	Print Mode
65	^MN	Media Tracking
66	^MT	Media Type
67	^PM	Printing Mirror Image of Label
68	^PO	Print Orientation
69	^PQ	Print Quantity
70	^PR	Print Rate
71	^PW	Print Width
72	^SC	Set Serial Communications
73	~SD	Set Darkness
74	^SN	Serialization Data
75	^ST	Set Date and Time(for Real-Tiime Clock)
76	^XA	Start Format
77	^XF	Recall Format
78	^XG	Recall Graphic
79	^XZ	End Format

RFID Command

No.	Command	Description
80	^HL or ~HL	Return RFID Data Log to Host
81	^RF	Read or Write RFID Format
82	^RI	Get RFID Tag ID
83	^RR	Specify RFID Retries for a Block
84	^RS	Set Up RFID Parameters
85	^WT	Write(Encode) Tag