



sewoo

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MODEL : LK-B20
4" DESKTOP LABEL PRINTER



**RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS**



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.

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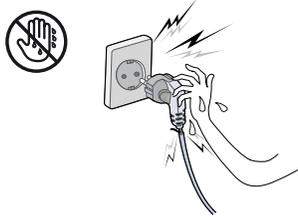
1. Safety Caution

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

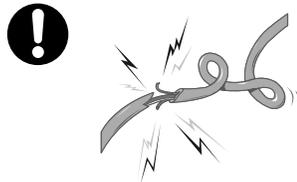
Indication

- | | |
|---|--|
|  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 |

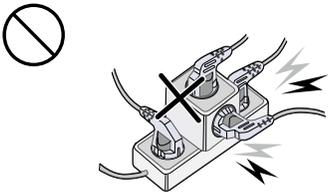
 **WARNING**
Failure to follow these instructions could result in fire, electric shock, or other injuries, or property damage



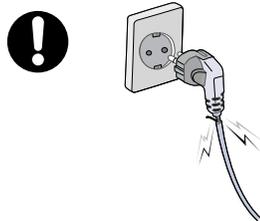
Do not pull or touch the power plug with wet hands.
(Potential risk of electric shock or fire)



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)

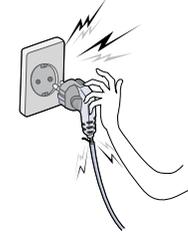


If a power plug is broken or a plug is cut or worn, do not use it.
(Potential risk of electric shock or fire)

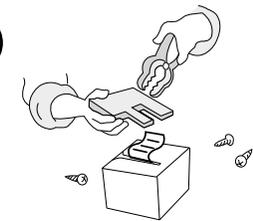


WARNING

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.)

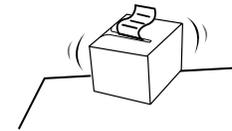


Do not disassemble, repair or modify the product.
(Potential risk unit malfunction, electric shock or fire. When the product needs to be repaired, please contact in place where you ordered inspection.)



WARNING

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



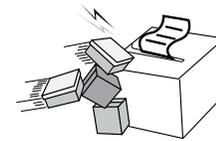
Do not install the product in uneven or inclined surface.
(You may get hurt and it can be broken when it falls)



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

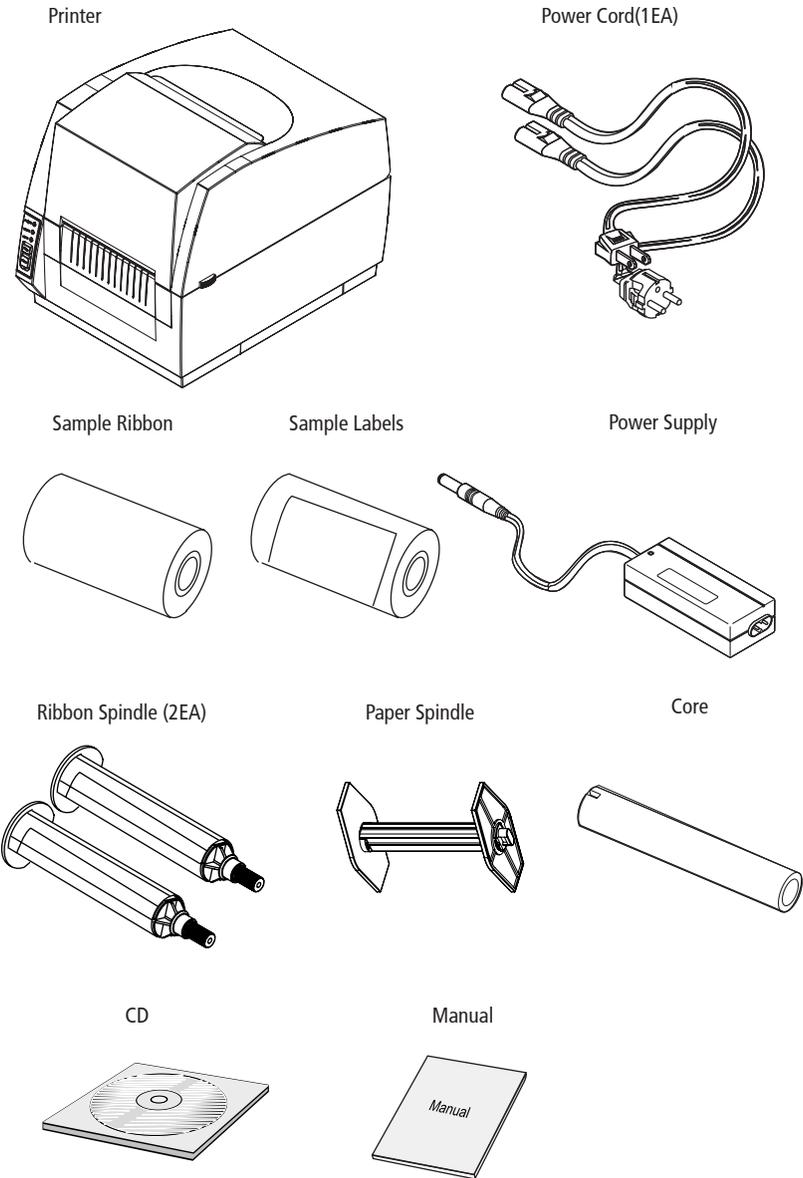


If the product that needs to be repaired, please contact in place where you ordered.
(Potential risk of fire or unit malfunction)

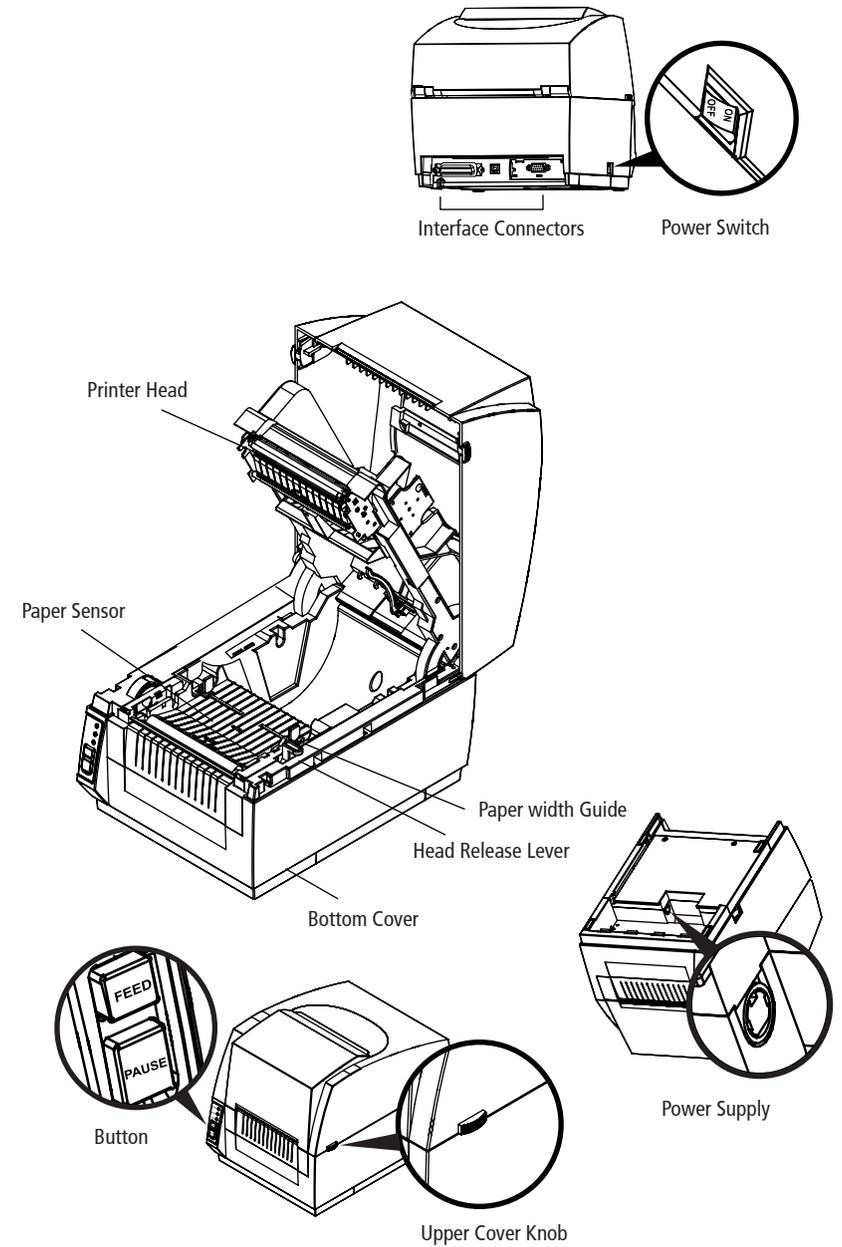


Please do not give excessive shock.
(Potential risk of fire or unit malfunction)

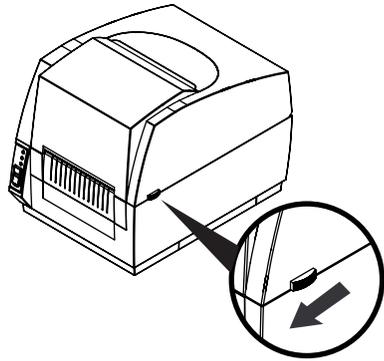
2. Unpacking



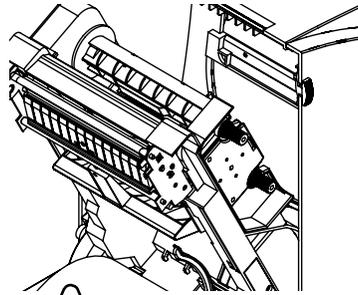
3. Inspecting the printer



Opening the printer

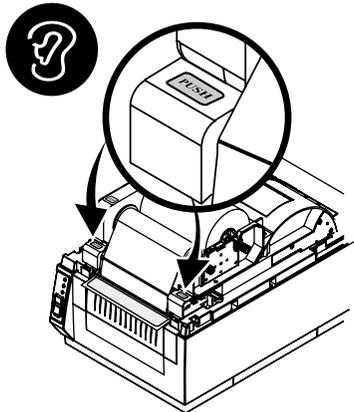


Open the upper cover by pushing the knob in the direction of the arrow



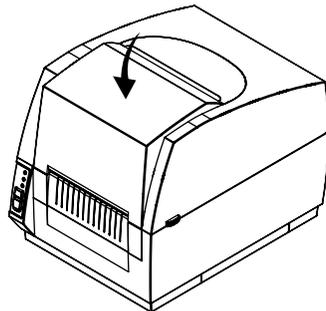
Make sure to be careful of the HOT head

Closing the paper upper guide



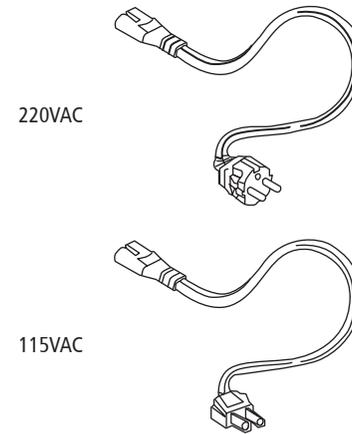
Make sure you hear the closing sound of the paper upper guide.

Closing the upper cover

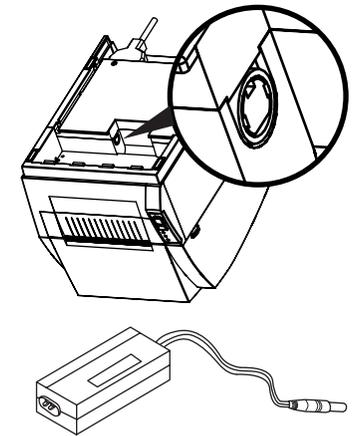


Close the upper cover and make sure you hear the closing sound of the upper cover.

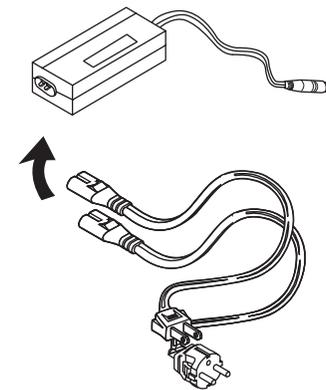
4. Attaching Power Supply



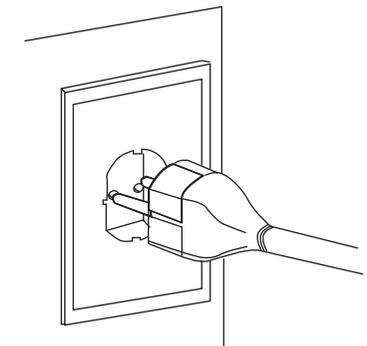
Check the specification of the AC power cord if it is correct with your power system



Turn off the power of the printer and connect the power supply to the printer

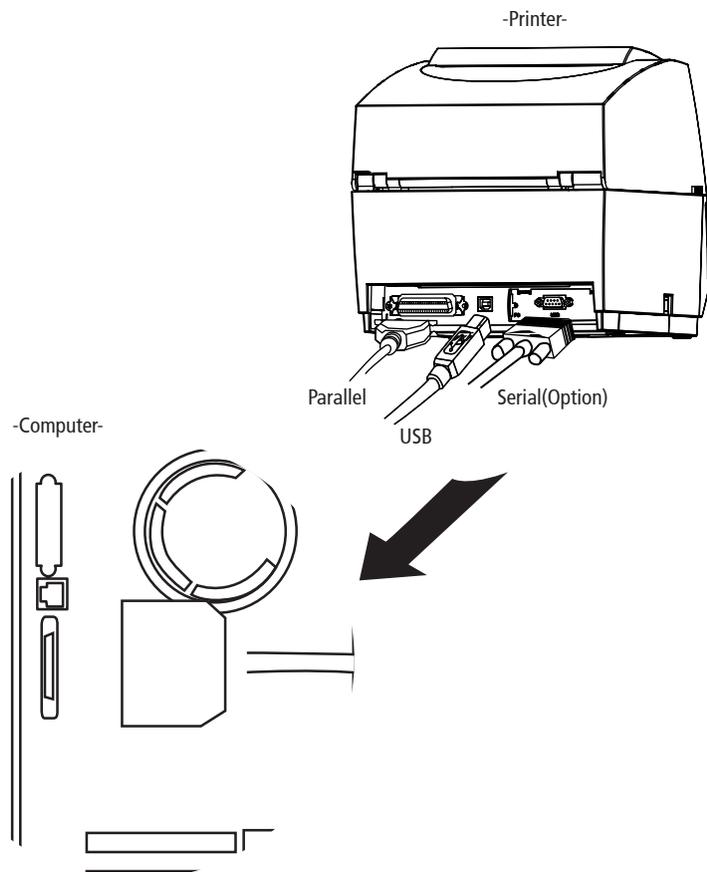


Connect the AC power cord to the power supply



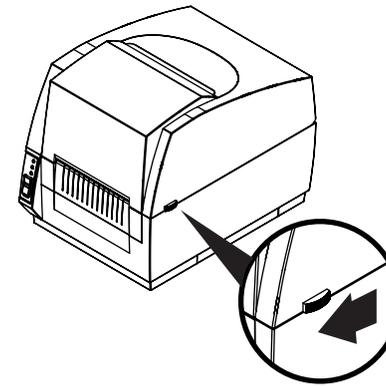
Insert a plug into the outlet

5. Hooking Up the printer and computer

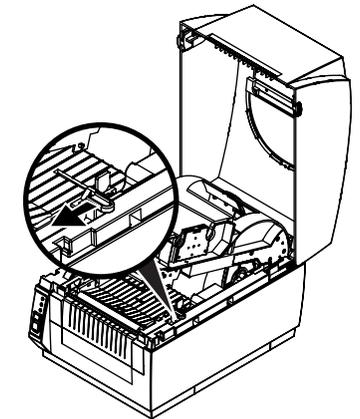


Make sure the printer is turned off then connect the printer to the PC

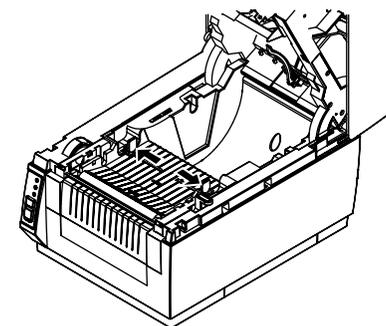
6. Loading the Paper



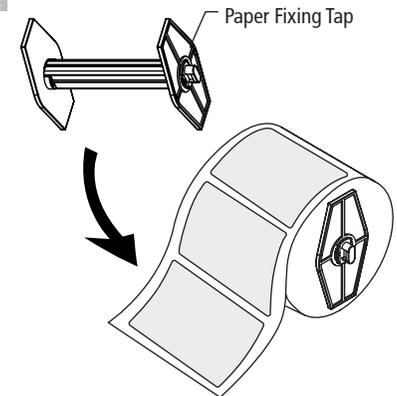
Turn off the printer and open the upper cover by pushing the in the direction of the arrow.



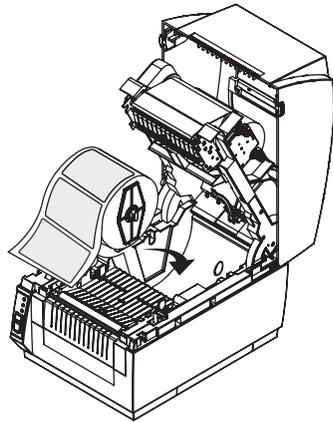
Rise up the paper upper guide by pulling the head release lever



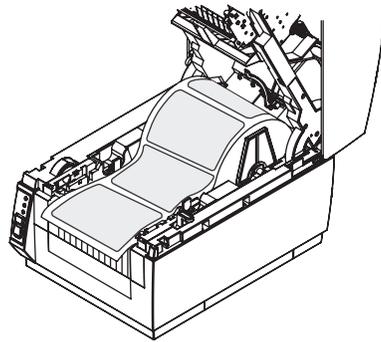
Open the paper width guide by pushing it to the right & left sides.



Pull out one of the adjustable width tabs. Insert a paper roll replace the tab and center.

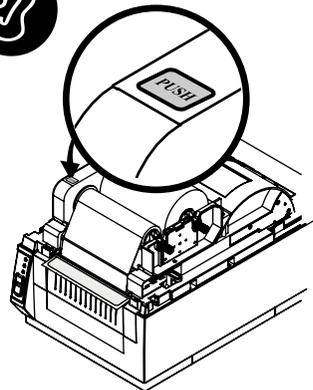


Insert paper roll into the printer

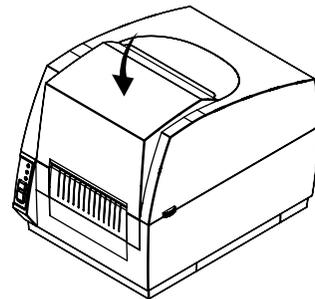


Adjust the paper width guide to meet the paper width

5 6
7 8

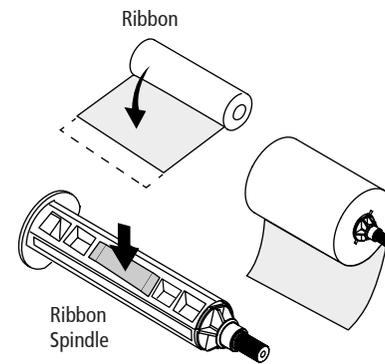


Make sure you hear the closing sound of the paper upper guide.

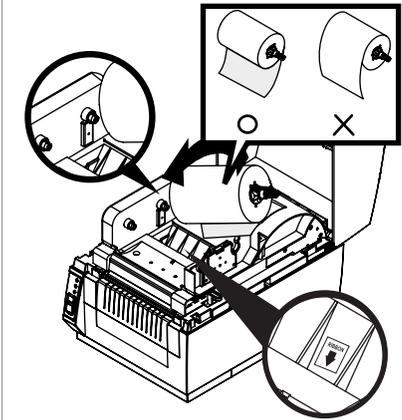


Close the upper cover and make sure you hear the closing sound of the upper cover.

7. Loading Ribbon

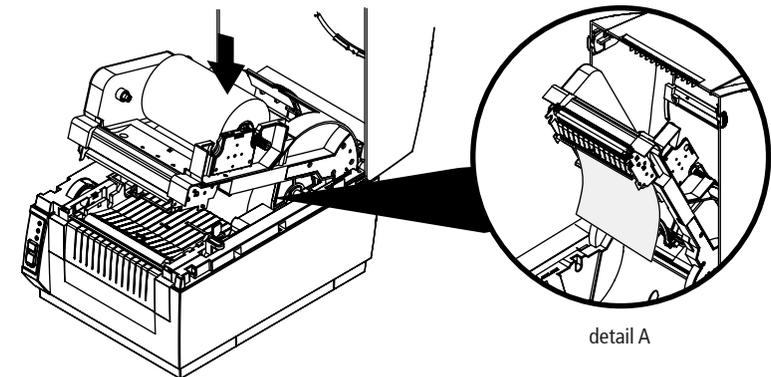


Remove the vinyl covering on the ribbon. Depress the indicated button on the ribbon spindle while inserting the ribbon roll.



Insert one side of the ribbon spindle

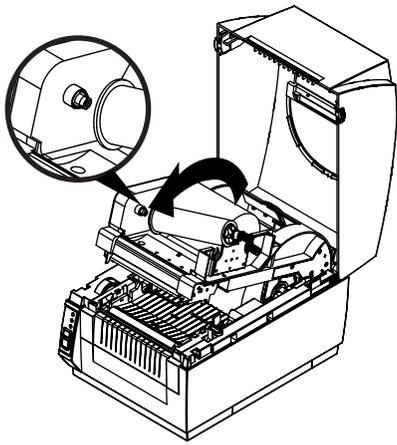
1 2
3



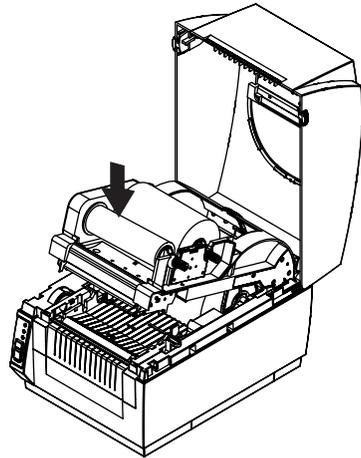
Push the other side of the ribbon spindle down to secure it.

Pull out the ribbon edge through ribbon mechanism as shown in the picture

8. Self Test

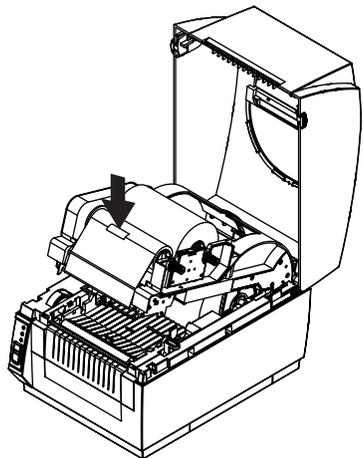


Insert one side of the ribbon spindle

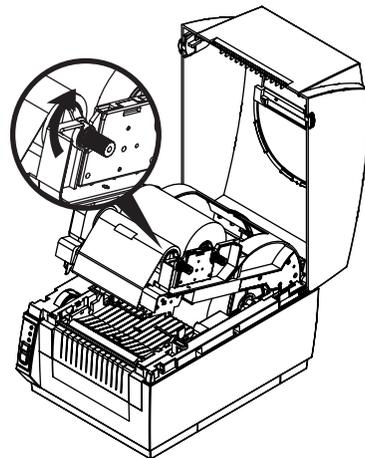


Push the other side of the ribbon spindle down to secure it.

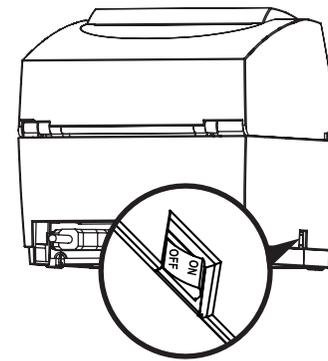
4 5
6 7



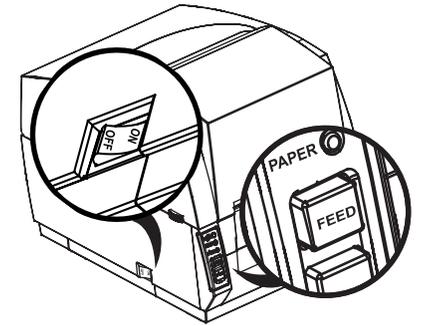
Attach the ribbon to the core with tape as shown.



Turn the adjustment knob in the arrow direction to tighten the ribbon.

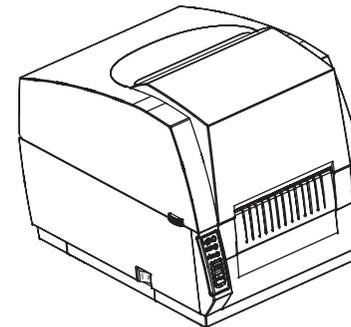


Turn off the printer

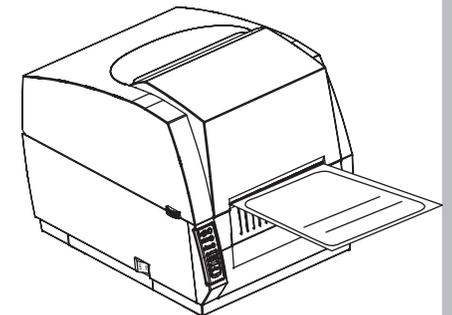


While holding down the feed button, turn on the printer

1 2
3 4



Set free the feed button

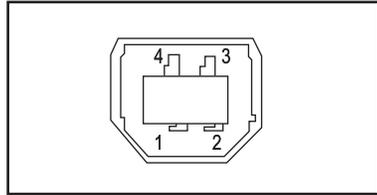


The printer starts printing some basic information

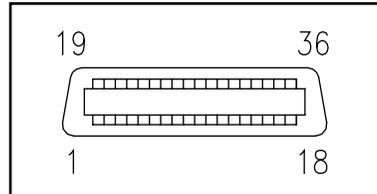
9. Interface

Interface Connectors

Standard

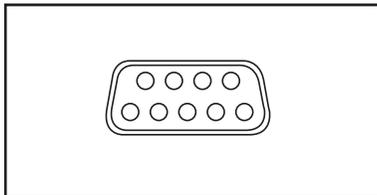


<USB "B" Type>

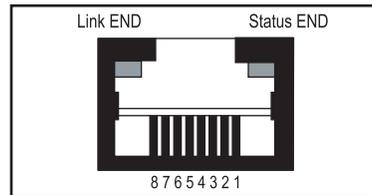


<Centronics Parallel>

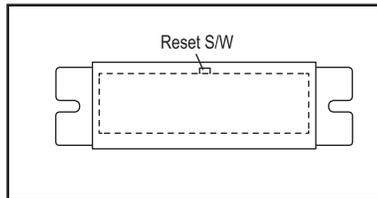
Option



<9 Pin Serial>



<Ethernet>



<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 |

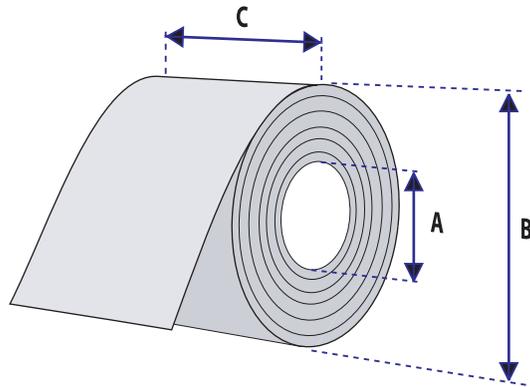
USB Interface

| 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 | |

10. Media Roll Size



| Core | | |
|---------------------|-----------------|---------------------|
| Diameter(A) | 25.4 or 38.1 mm | (1.0 or 1.5 inches) |
| Max. width | 118 mm | (4.65 inches) |
| Roll | | |
| Max.diameter(B) | 125 mm | (5 inches) |
| Max.media width(C) | 118 mm | (4.65 inches) |
| Min.media width(C) | 18 mm | (0.7 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 side facing inwards and unroll from the bottom of the roll as long as they are not used for cut-off operation.

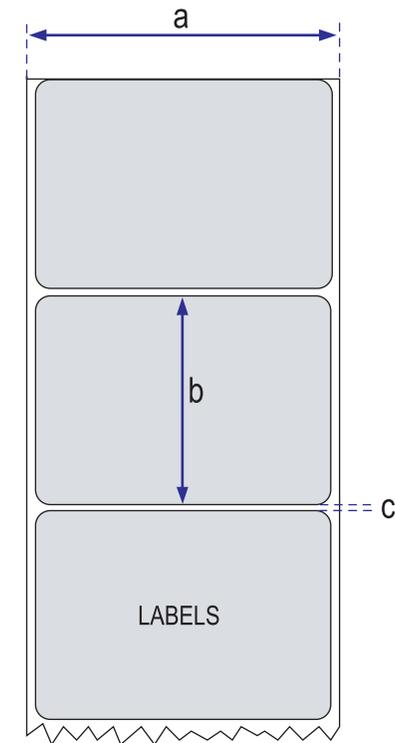


Caution

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.

11. Labels

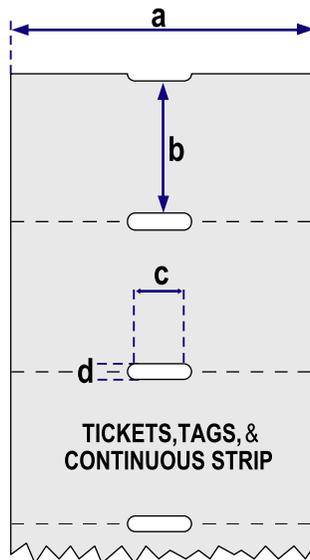
| <- a -> Media width (inch, liner) | | |
|-----------------------------------|----------|---------------|
| Maximum | 118.0 mm | (4.65 inches) |
| Minimum | 18 mm | (0.7 inches) |
| <- b -> Label length | | |
| Minimum | 10 mm | (0.39 inches) |
| <- c -> Label gap height | | |
| Maximum | 10 mm | (0.39 inches) |
| Minimum | 2 mm | (0.08 inches) |
| Liner | | |
| Opacity | 75% | |



12. Tags and Strip with Slots

| <- a --> Tag or strip width | | |
|--------------------------------|----------|---------------|
| Maximum | 118.0 mm | (4.65 inches) |
| Minimum | 18 mm | (0.7 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) |

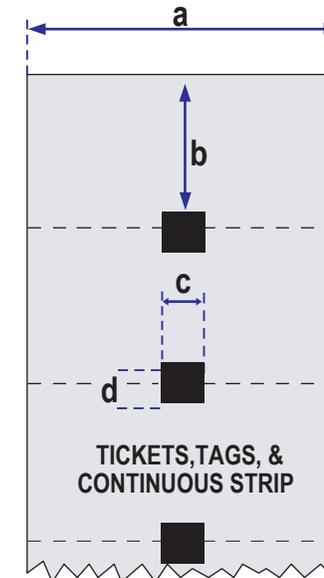
The label gap sensor is offset 4.5 mm(0.177 inches) to the right of the center for the media path.



13. Tags and Strip with Black Marks

| <- a --> Tag or strip width | | |
|-----------------------------|----------|---------------|
| Maximum | 118.0 mm | (4.65 inches) |
| Minimum | 18 mm | (0.7 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.



14. Plain Continuous Stock

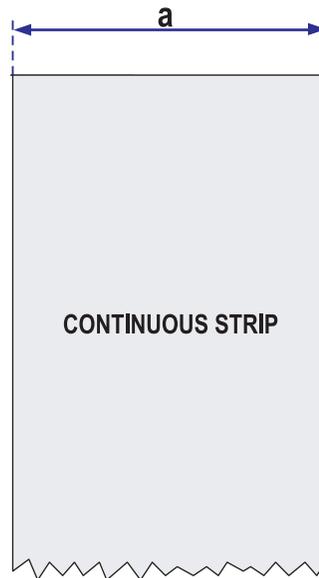
The printer can use continuous stock without any detection slots or black marks.

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 | 118.0 mm | (4.65 inches) |
| Minimum | 18 mm | (0.7 inches) |



15. Specifications

Product Specifications

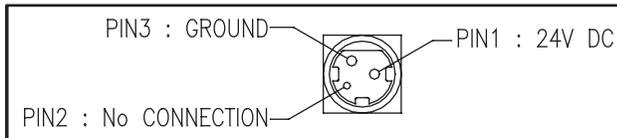
| | | |
|--------------------------------|--|--|
| Print method | Thermal Transfer and Direct Thermal | |
| Print speed(max) | 102mm/sec | |
| Print width(max) | 104mm (4.1") | |
| Print length(max) | 630mm (24.8") | |
| Resolution | 203dpi, 8 dots/mm | |
| Paper Width(min~max) | 18mm ~118 mm (0.7" ~ 4.64") | |
| Paper roll size(max) | 127mm (5.0") | |
| Paper thickness | 0.06~0.18mm | |
| 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 | 300M, Ø 64 mm (2.5") | |
| Interface | Standard | Serial(RS-232C), Parallel(IEEE-1284) |
| | Option | USB, Ethernet, Wireless Lan 802.11b |
| Memory | Standard | 8MB SDRAM, 1.5MB Flash |
| | Option | 8MB Flash |
| Serial baud rate | 115200bps | |
| Auto Cutter (Option) | Life | 0.06~0.15mm: 500,000 cuts / 0.15~0.18:300,000 cuts |
| | Type | Guillotine |
| Peeler | Option | |
| Programming Language | EPL II (Eltron Programming language) | |
| Barcode | 1D | Code39, Code128 with subsets A/B/C, Code Interleaved 2 of 5, UPC-A and UPC-E with 2 EAN-8 and EAN-13 with 2 or 5 Digit Extens Postnet, Plessey, German Post Code, MS |
| | 2D | MaxiCode, PDF417, DATAMATRIX, QR CO |
| Font Specification | 6bitmapped 8x12, 10x16, 12x20, 14x24,32x48, 24x24(KSC5601) | |
| 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)
- (3) UL/cUL (UL 60950-1)
- (4) MIC CLASS A
- (5) RoHS (TUV)
- (6) CCC

Electrical Characteristics

- (1) Input Voltage DC 24V \pm 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



16. Command List

| No. | Command | Description |
|-----|---------|---------------------------------------|
| 1 | A | ASC II Text |
| 2 | AUTOFR | Automatic Form Printing |
| 3 | B | Bar Code |
| 4 | B | RSS-14 Bar Code |
| 5 | b | Data Matrix MaxiCode PDF417 |
| 6 | C | Counter |
| 7 | C | Cut Immediate |
| 8 | D | Density |
| 9 | EI | Print Soft Font Info. |
| 10 | EK | Delete Soft Font |
| 11 | eR | User Definable Error Response |
| 12 | ES | Store Soft Font |
| 13 | f | Cut/Peel Position |
| 14 | FE | End Form Store |
| 15 | FI | Print Form Info. |
| 16 | FK | Delete Form |
| 17 | FR | Retrieve Form |
| 18 | FS | Store Form |
| 19 | GG | Retrieve Graphics |
| 20 | GI | Print Graphics Info. |
| 21 | GK | Delete Graphic |
| 22 | GM | Store Graphic |
| 23 | GW | Direct Graphic Write |
| 24 | I | Character Set Selection |
| 25 | JB | Disable Top Of Form Backup |
| 26 | JC | Disable Top Of Form Backup –All Cases |
| 27 | JF | Enable Top Of Form Backup |
| 28 | LE | Line Draw Exclusive OR |
| 29 | LO | Line Draw Black |
| 30 | LS | Line Draw Diagonal |
| 31 | LW | Line Draw White |
| 32 | M | Memory Allocation |
| 33 | N | Clear Image Buffer |
| 34 | o | Cancel Customized Settings |
| 35 | oB | Cancel Customize Bar Code |
| 36 | oE | Line Mode Font Substitution |
| 37 | oH | Macro PDF Offset |
| 38 | oM | Disable Initial Esc Sequence Feed |
| 39 | oR | Character Substitution(Euro) |
| 40 | oW | Customize Bar Code Parameters |

| No. | Command | Description |
|-----|-----------|---|
| 41 | O | Options Select |
| 42 | OEPL1 | Set Line Mode |
| 43 | P | Print |
| 44 | PA | Print Automatic |
| 45 | Q | Set Form Length Transmissive(Gap)Sensor Black Line Sensor Continuous Stock |
| 46 | q | Set Form Width |
| 47 | r | Set Double Buffer Mode |
| 48 | R | Set Reference Point |
| 49 | S | Speed Select |
| 50 | TD | Define Date Layout(& Print Date) |
| 51 | TS | Set Real Time Clock |
| 52 | TT | Define Time Layout(& Print Time) |
| 53 | U | Print Configuration |
| 54 | UA | Enable Clear Label Counter Mode |
| 55 | UB | Reset Label Counter Mode |
| 56 | UE | External Font Information Inquiry |
| 57 | UF | Form Information Inquiry |
| 58 | UG | Graphic Information Inquiry |
| 59 | UI | Host Prompts/Codepage Inquiry |
| 60 | UM | Codepage& Memory Inquiry |
| 61 | UN | Disable Error Reporting |
| 62 | UP | Codepage& Memory Inquiry/Print |
| 63 | UQ | Configuration Inquiry |
| 64 | US | Enable Error Reporting |
| 65 | V | Define Variable |
| 66 | W | Windows Mode |
| 67 | xa | Sense Media |
| 68 | X | Box Draw |
| 69 | Y | Serial Port Setup |
| 70 | Z | Print Direction |
| 71 | ? | Download Variables |
| 72 | ^ @ | Reset Printer |
| 73 | ^ default | Set Printer to Factory Defaults |
| 74 | ^ ee | Status Report – Immediate |