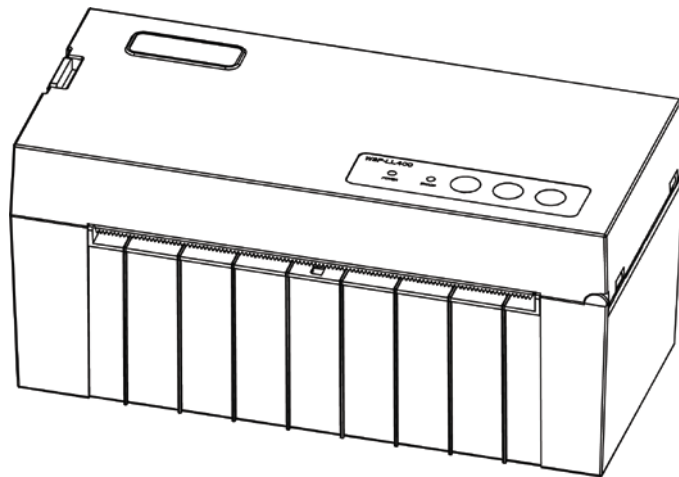


MODEL WSP-LL400

(4inch Linerless Printer)

Rev. 0.1



All specifications are subjected to change without notice.

■ Copyright

WSP-LL400 4inch Linerless printer operator's manual.

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■ Caution

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

If the printer is damaged by the static electricity, you should turn the printer "OFF"

■ Notice

The contents of this manual are subject to change without notice.

■ Introduction

The **WSP-LL400** is the ideal solution for POS system, kitchen printer, Electronic scale, Measuring equipment, Lottery etc.

The general features of **WSP-LL400** printer are as follows:

- ▶ Compact size (154.9 x 71.3 x 72.1mm)
- ▶ Light weight(483g) for true mobility
- ▶ Very silent printing thru direct thermal printing method
- ▶ High speed(200mm/sec, MAX)
- ▶ USB B, Bluetooth V5.2 interface
- ▶ Auto cutting
- ▶ Support text and graphic printing
- ▶ Support Magnetic Stripe Reader [option]
- ▶ Intuitive LED's indicate Power(on/off), Error
- ▶ Easier maintenance with self-diagnostics
- ▶ Easier paper loading by CLAMSHELL design.
- ▶ One touch paper cover
- ▶ In field programming – Update Firmware, Download Fonts and Logos
- ▶ Microsoft Windows/Windows CE, Linux, Android, iOS compatible
- ▶ Flow control : Software (XON/XOFF)

※ Hardware flow control not supported in printer

Microsoft Windows, Linux Microsoft Windows, Linux

► Using the Printer

- Be careful not to drop or bump the printer on a hard surface.
- Do not install the printer in direct sunlight or such areas.

Suitable environment for the use of the printer is as follows:

- ◆ Operating temperature: 0°C to 50°C
- ◆ Relative humidity : 30% to 80%
- Do not install the printer near devices that generate strong electromagnetic fields such as a copy machine.
- Do not open the platen cover during printing .
- Do not remove or reinstall the communication cable during printing or transmission.
- Do not touch the connectors of the communication during printing.
- Switch the POWER OFF when not in use.
- Do not other solvent.

► Thermal Paper Handling

- Store the thermal paper in a cool, dry and dark place.
- Do not rub the paper with hard object.
- Do not leave the paper with hard object.
- Do not allow plastic film, erasers, or adhesive tape to touch the paper for long periods.
- Do not stack the thermal paper with diazo copies immediately after copying or wet-type copies.
- Do not use chemical glue.
- Always use the clean thermal paper.

**Federal Communications Commission
Radio Frequency Interference Statement**

FCC ID : QDDWSP-LL400

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.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

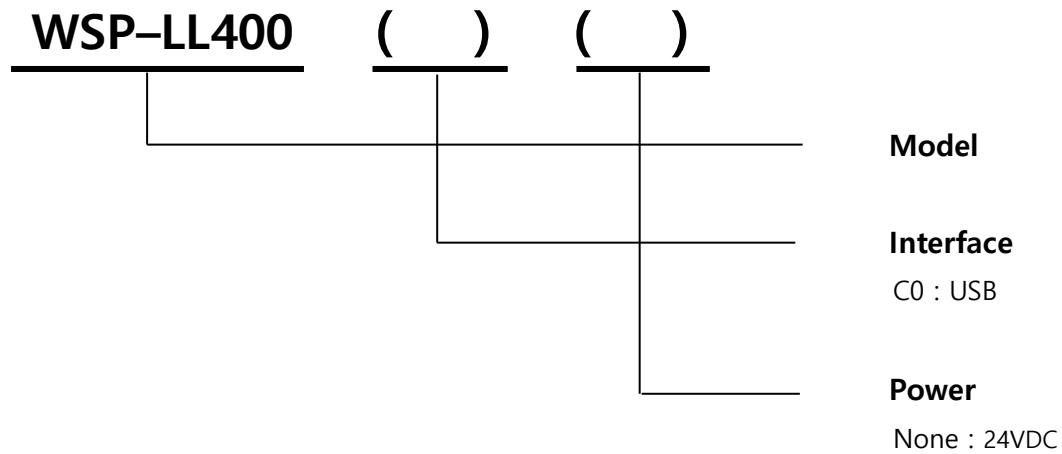
This Device has been evaluated to comply with RF exposure requirement for general use limit in portable condition. It is safe to be used in sold condition.

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1. Outline.

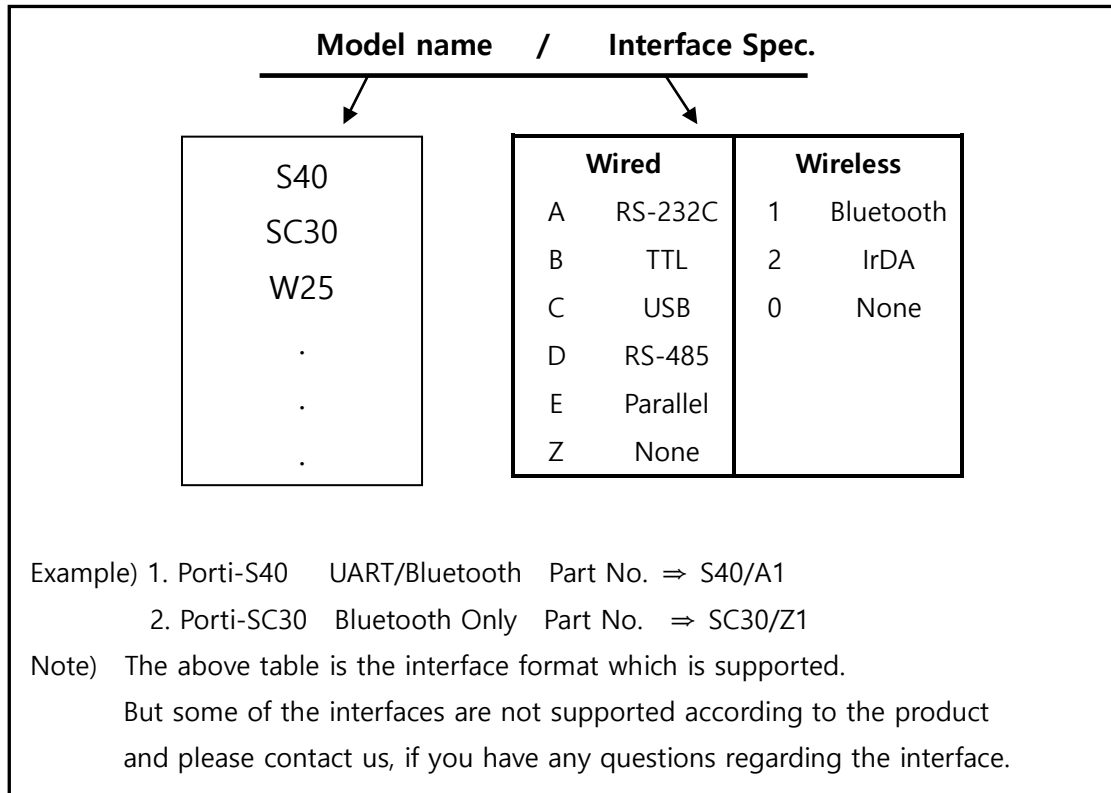
1.1. Model classifications.



1.2 Symbol

	Standby symbol IEC 5009, the standby symbol(line partially within a broken circle), Indicates a sleep mode or low power state.
	Direct current symbol This symbol is found on many electronic devices that either require or produce direct current.

1.3. Product Part Number System



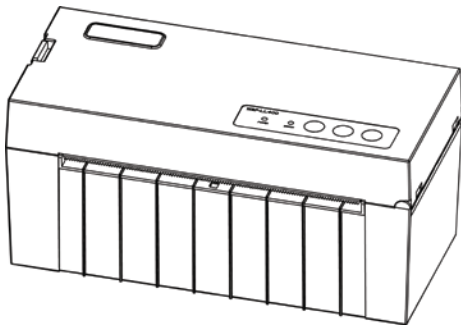
1.4. Specifications.

Item	Specifications	
Print method	Direct thermal line printing	
Character size	- Font Size A: 12X24 / Font Size B : 9X24 / Font Size C : 8X16 - KOR : 24X24(16X24) / CHN, JPN : 24X24	
Characters per line	- Font A : 32cpl / Font B : 42cpl / Font C : 48cpl - KOR : 16cpl(24) / CHN, JPN : 16cpl	
Optional Characters	Alphanumeric:95, Extended Graphics:128X50 pages, International:10, Simplified/Traditional Chinese, Japanese, Korean	
Resolution	0.125 dots/mm	
Print density control	Automatic printing density control	
Print width	4-inch (104mm, 832dots)	
Print speed	200mm / sec (MAX)	
Dimension	154.9 x 71.3 x 72.1 mm	
Weight (w/o paper)	483g	
Interface	USB, Bluetooth V5.2	
Paper roll	Thermal roll paper (59.5~114mm wide)	
Media Thickness	0.06mm ~ 0.12mm	
Auto cutting method	Guillotine, Full/Partial cut	
Barcodes	1-dimension : UPC-A, UPC-E, EAN-8, EAN-13, CODE-39, CODE-93, CODE-128, ITF, CODABAR 2-dimension : PDF417, Micro PDF417, Truncated PDF417, QR-CODE, DATA Matrix, Maxicode Etc :GS1 databar	
Driver	Microsoft Windows, Linux	
H/W Spec	MCU : RX-32bit, RAM : 128Mbits, FLASH : 64Mbits	
Receive buffer size	1M bytes	
Sensor	Support Cover open, Paper empty, Black Mark, Front	
Input Power	24VDC at 2.0A (Adaptor)	
Print-head life	Approximately 150km	
Auto cutter life	1,000,000 cuts or more	
Environment conditions	Temperature	0°C ~ 50°C (operating) -30°C ~ 70°C (storage)
	Humidity (no condensation)	30% - 80% (operating) 10% - 90% (storage)

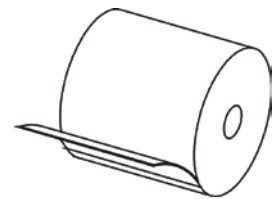
2. Setting up the printer.

2.1. Printer & Accessories

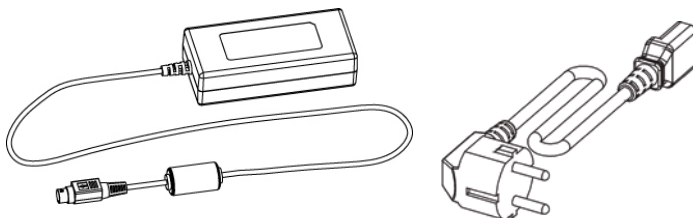
Your printer box should include these items. If any items are damaged or missing, please contact your dealer for assistance.



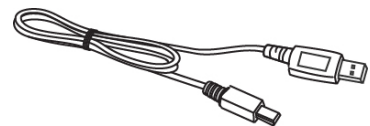
WSP-LL400



Thermal roll paper



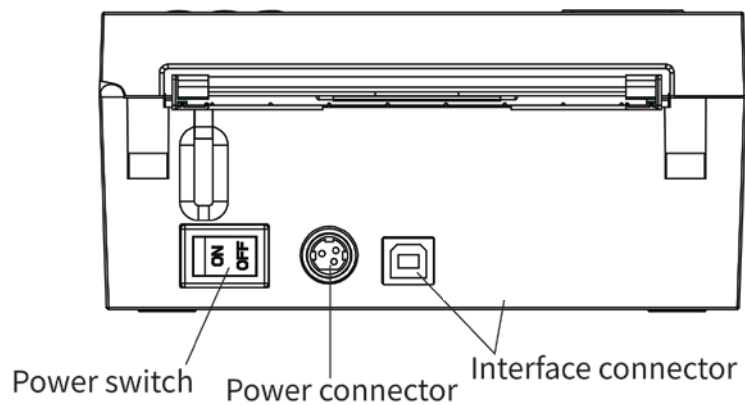
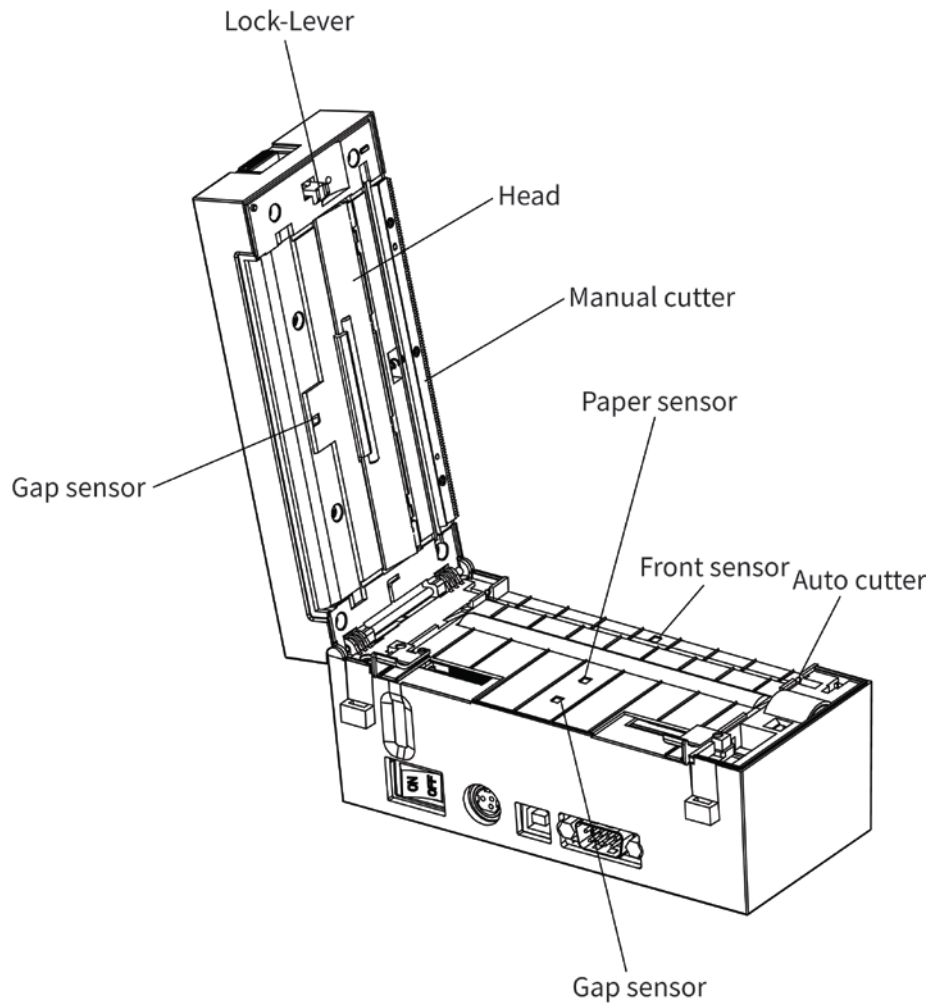
Adapter & AC Cord



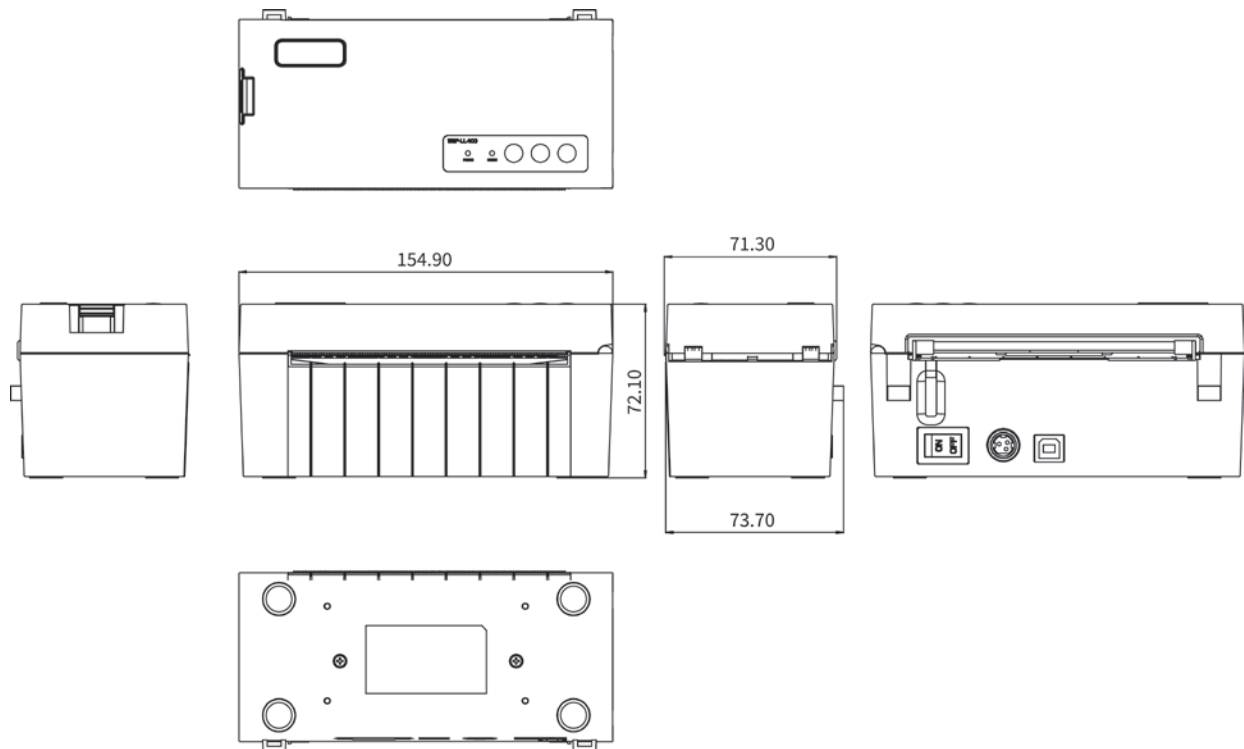
USB A-B Cable

2.2. Printer Features

► Part Name



► Dimensions

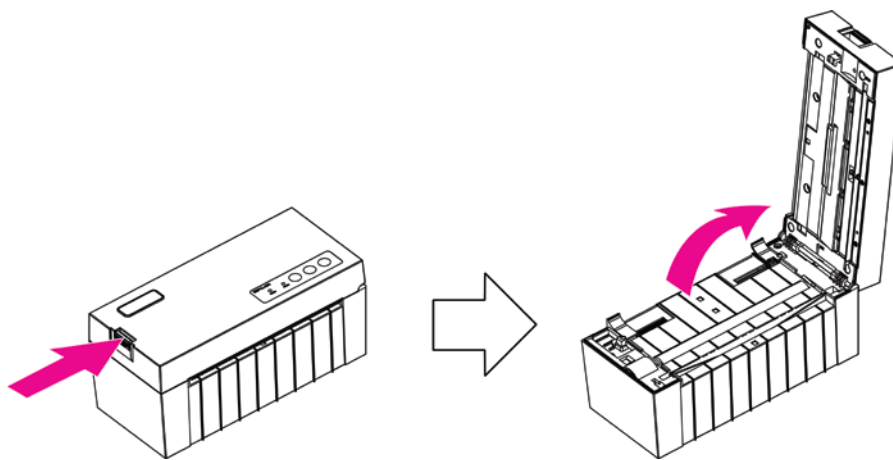


2.3. Replacing paper roll.

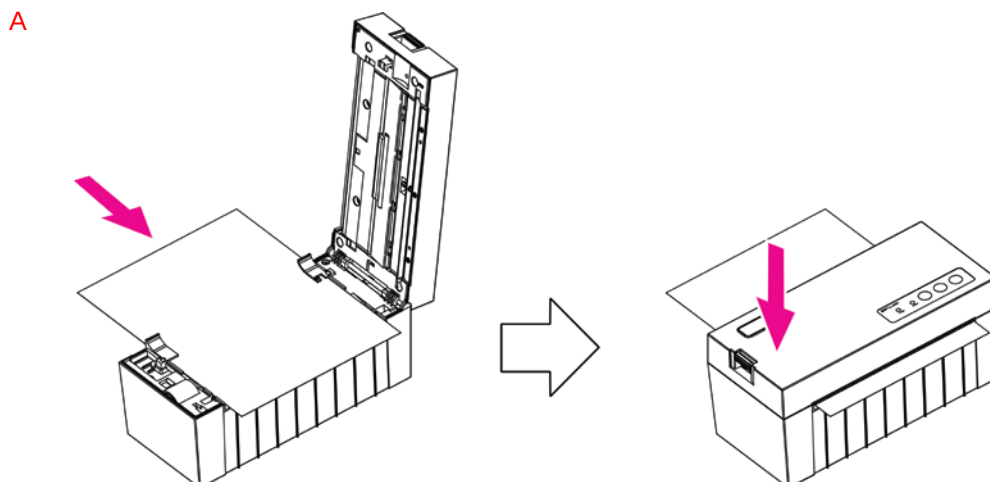
Note : Be sure to use paper rolls that meet the specifications.

Do not use paper rolls that have the paper glued to the core because the printer can not detect the paper end correctly.

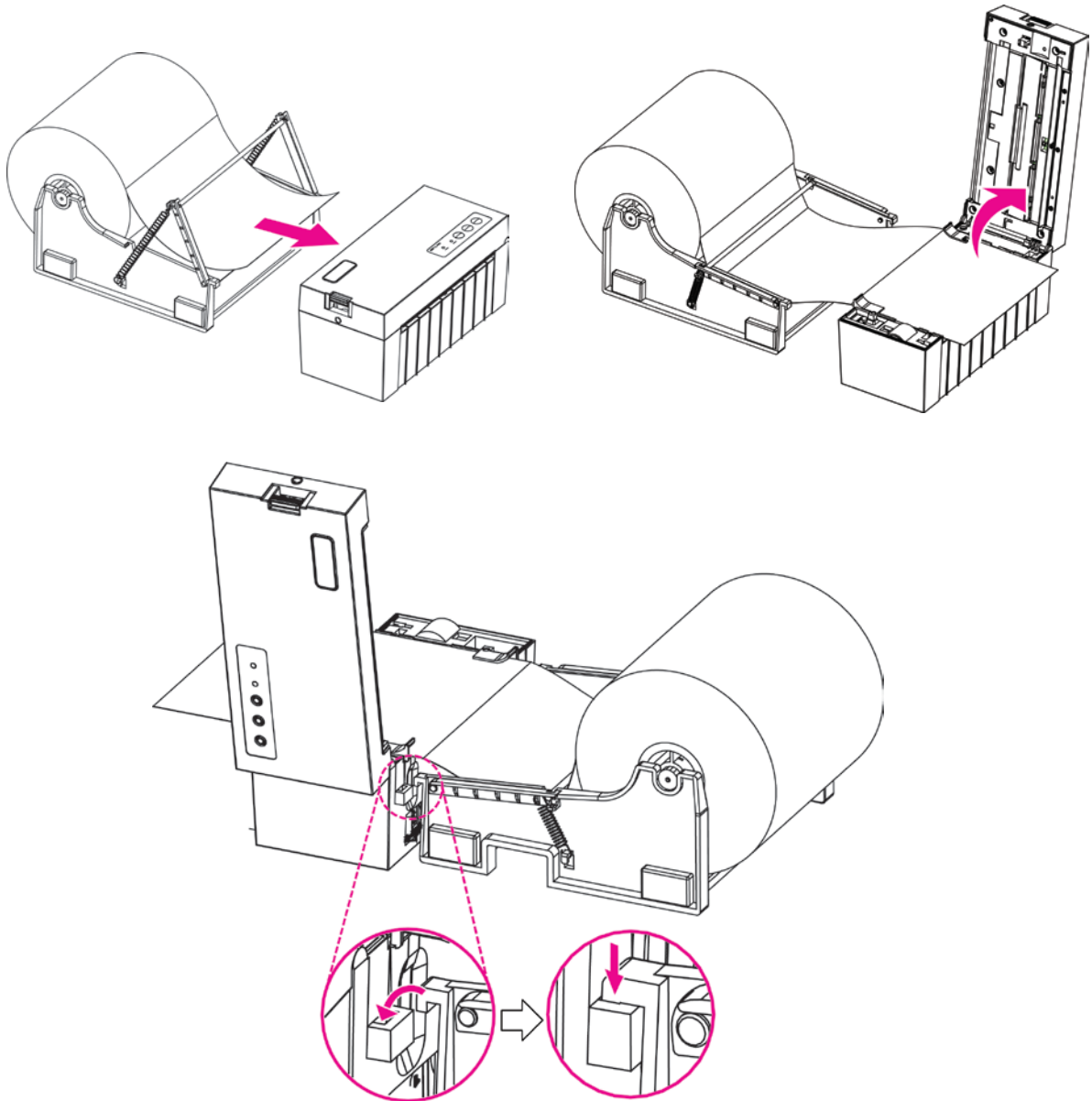
1. Make sure that the printer is not receiving data; otherwise, data may be lost.
2. Open the paper cover as the "One-Touch" way by pressing the button in the arrow direction like the picture.



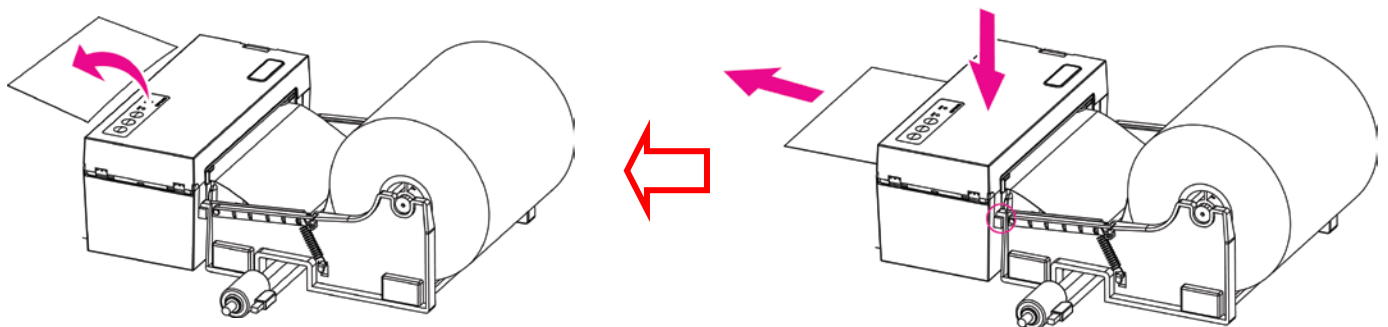
3. Insert a new paper roll as shown.



B



4. Tear the excess paper off using the edge of paper door as a tear bar.



2.4. Power supply

2.4.1. Specified power supply.

The following specification is requested for Power supply.

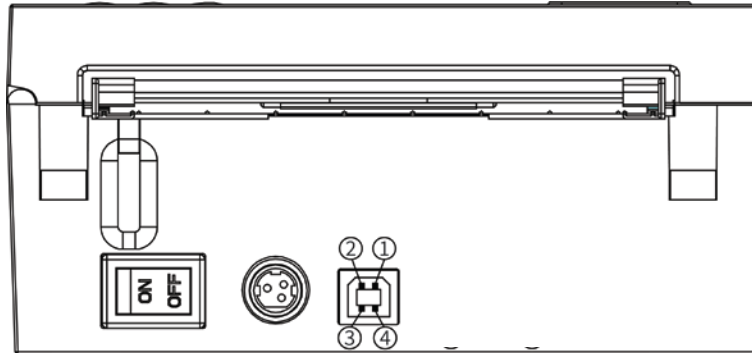
Input : Rated Voltage : AC 100-240V, 50-60Hz

Capable of Supplying : +24VDC at 2.0A

Avoid using power supply which its power capacity of power current is extremely high.

3. Interface

3.1. USB



Pin No.	Signal Name	Function
1	USB_VCC	+5V
2	DM	DATA '-'
3	DP	DATA '+'
4	GND	Ground

< USB (B TYPE) >



WARNING

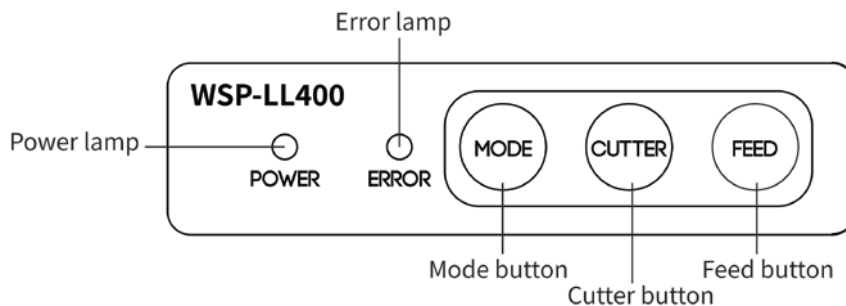
A wrong connection of power supply connector could be damage the printer.
In the printer power off state Please connect the power supply.

3.2. Bluetooth

Category	Specification
Bluetooth Spec.	V5.2 / Class2 (10m)
Frequency band	2402~2480 MHz
Protocol	L2CAP, RFCOMM, SDP
Profile	GATT, GAP, SDAP, SPP

4. Using the printer.

4.1. Control panel.



► BUTTON

- **FEED** : When the printer is on, paper can be feed manually by pressing and holding the FEED button for more than one second.
- **CUTTER Button** :
Cutter Button is used when once cutting the paper.
- **MODE Button** :
Mode Button is used to change the mode of the printer.

► PANEL LAMP

- **POWER (GREEN)** : Printer is ON and ready to receive data.
- **ERROR (RED)** : Indicates a fault condition or a printer error.
(details: no paper, paper cover opened. etc.)

4.2. The self test.

Self-Test prints out the current setting value of printer. The way of self-test is as follows.

1. Insert proper paper into the printer.
2. Power on while pressing feed button to start self-test.
3. Printer will print out the current status. (F/W version and set contents)
4. And then pattern of characters will be printed out.
5. Self-test will be finished automatically and turned to the standby status.

※ In case printer does not work properly, please contact Woosim customer service center.

5. Consumable Parts

5.1. Recommended paper

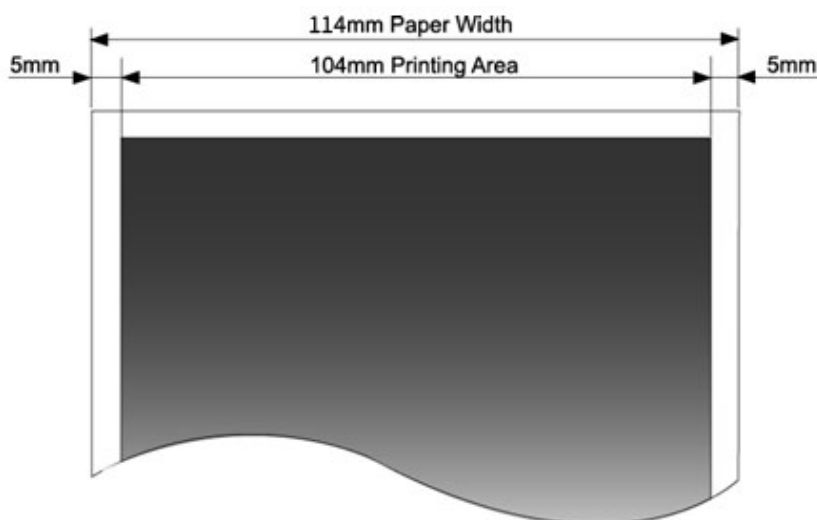
Type	: Thermal Paper
Paper width	: 59.5~114mm
Paper thickness	: 0.06mm~0.12mm
Recording side	: Outside of roll



Cautions

1. Do not paste the paper to the core. And the roll paper which has near end mark printing on its near end is recommended.
2. Chemicals or oil may change the color of paper, or printed characters may fade.
3. Change of paper color starts from approx. 70°C.
Pay attention to heat, humidity and sun light.
4. Color of paper may be changed by being scratched by nail or hard metal, etc.

5.2. Printing position.



6. Revision History

Date	Version	Comments
Aug. 04. 2025	0.1	Initialize