MS-LP212A user manual

content

Overview

  MS-LP212A is one kind embedded thermal label printer. Which is designed with label auto peeling mechanism and back paper auto re-winder.

- Barcodes ,EAN8,EAN13,CODE39,CODE128,etc and QR code.

- Optional communication interface:RS-232C & USB

- Driver support: Windows XP/Windows7/Windows8/Windows10 Android 4.0 , Linux, Raspberry Pi.

- Support characters:

          FONT A:12*24 dot character;

          FONT B:9*17   dot character;

          Chinese:GB18030 simplified Chinese 24*24 dot

Specification

Model		MS-LP212A
print	Printing method	Dot line thermal printing
	Total dots	448 dots
	Printing width	56mm(max)
	Printing speed	120mm/s
Detection	Thermal head temperature	Thermal sensors
	Platen open	Mechanical switch
	Paper gap	Reflective infrared light sensor
	Cover open	Mechanical photoelectric sensor
	Out of Paper detection	Reflective infrared light sensor
Power	Working voltage	24±10%V/2A
	Power standby	About 17mA
Paper	Paper width	35~60mm
	Paper roll inner core	≥25mm
	Paper roll outer diameter	100mm(max)
environment	Operation temperature	-10～50°C（no condensation）
	Operation humidity	20～85%RH（40℃/85%RH）

	Storage temperature	-20～70°C（no condensation）
	Storage humidity	10～90%RH（50℃/90%RH）
Service life	Activation pulse resistance	100,000000
	Abrasion resistance	100KM
Dimension		W112mm*D217.46mm*H106.43mm (width*depth*height)
Mass		About 1.65kg
Communication interface		RS232 & USB

Interface

Integrated port

12	10	8	6	4	2
11	9	7	5	3	1
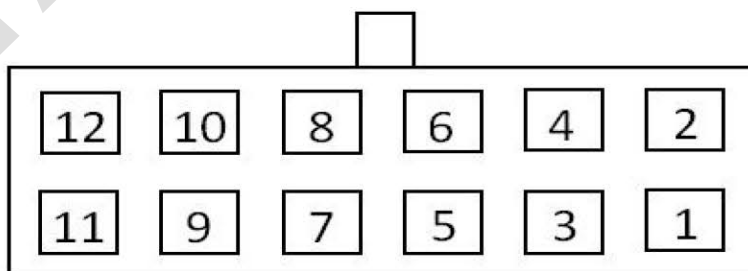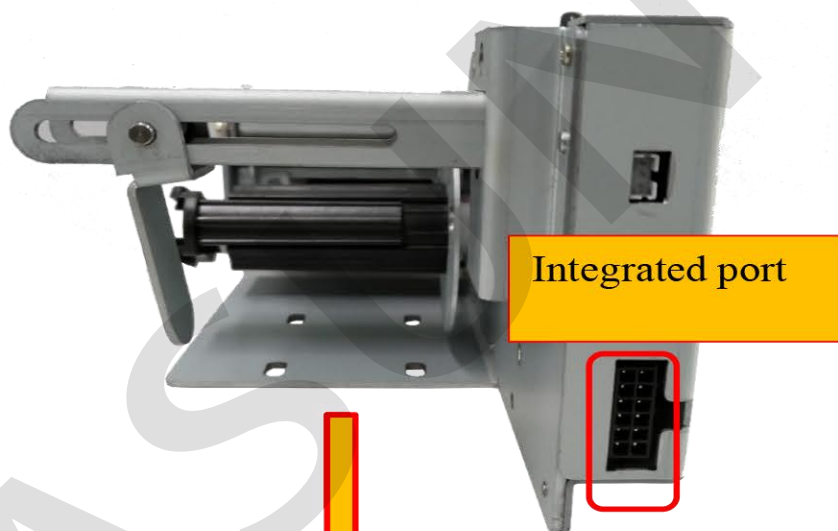
Power + RS-232C connector

Power & RS-232C	Definition
1、2	+24V(DC)
3、7	GND
5	TXD
6	RXD
8	DTR
4	NC

RS-232C port
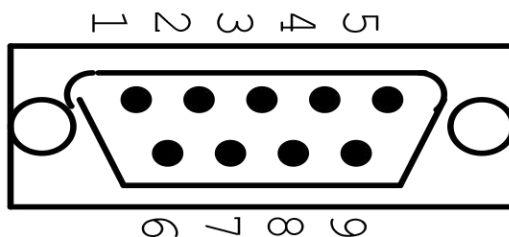
MASUNG RS-232C cable for printer is full cross cable, pins are defined as below:

Pins	Definition
2	RXD
3	TXD
4、7	DTR
5	GND
1、6、8、9	NC

Power + USB connector

Power & USB	Definition
1、2	+24V(DC)
3、11	GND
9	DATA-
10	DATA+
12	VCC(USB)
4	NC

USB port

USB supports USB2.0 high-speed and full-speed .

printer can not be powered by USB cable.
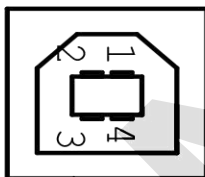
USB pins	definitions
1	VCC(+5V)
2	DATA-
3	DATA+
4	GND

Power supply port
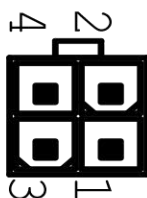
Power supply interface	definition
1	24V(DC)
2	GND
3	GND
4	NC

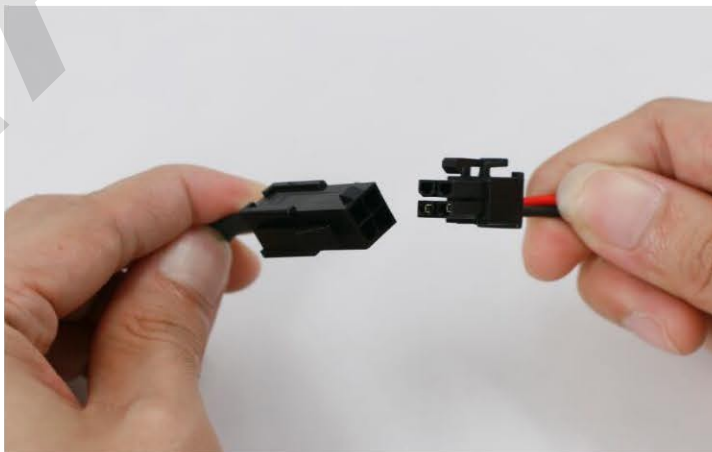Kiosk Terminal power connector standard reference, as

Power connector

Housing — Molex, 4 Position Mini-Fit Jr, p/n: 39-01-2040
Terminal — pin, 18-24 AWG, Molex p/n: 39-00-0059
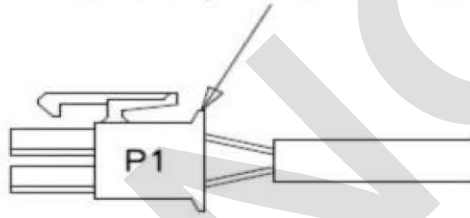
## Terminal power connector as picture

Power supply

Attention: Before plug in or plug out any interface and sockets, please make sure the the printer power switch is off.

1. Make sure the printer power switch is off

2. Supplying power voltage should be 24±10%V

3. Plug in power cable

Switch on the power switch，in the meantime，look at green LED on printer head panel, it will light on normally, or please switch off printer power immediately．
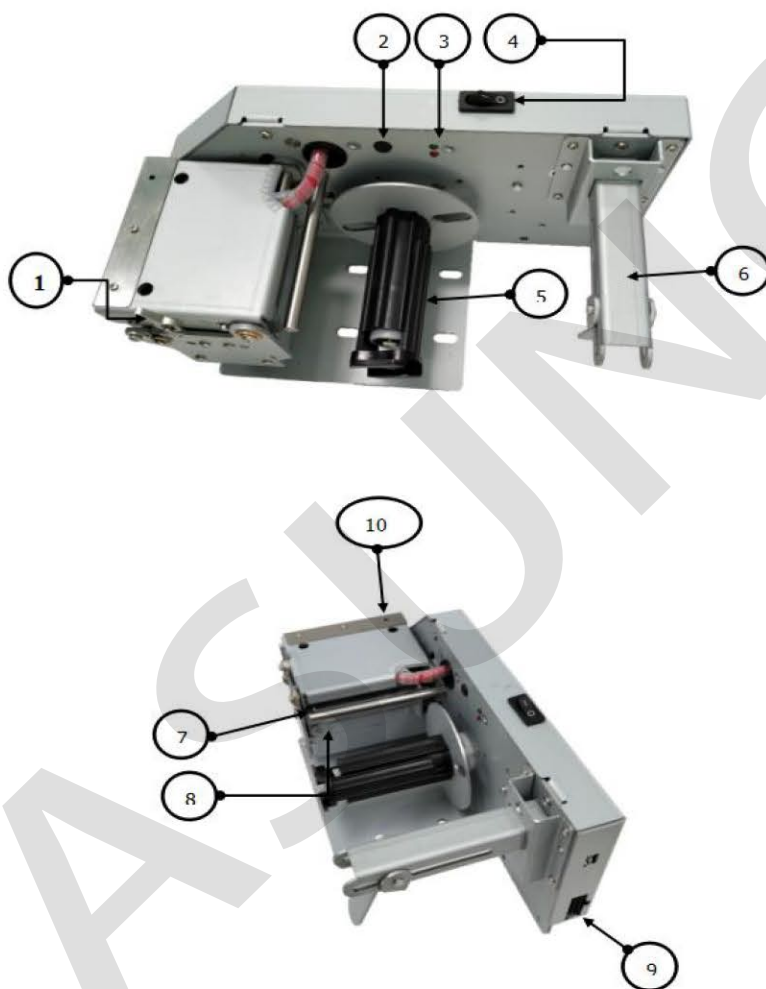
Dimension
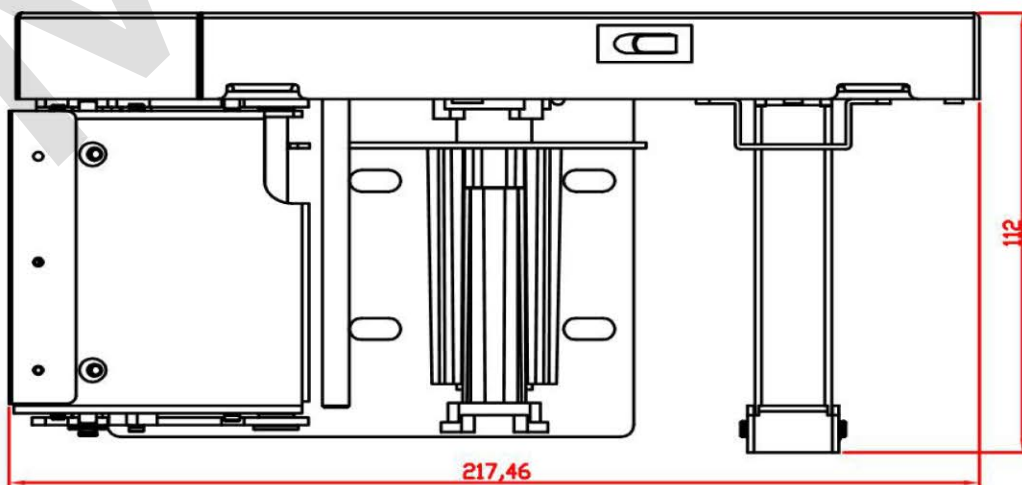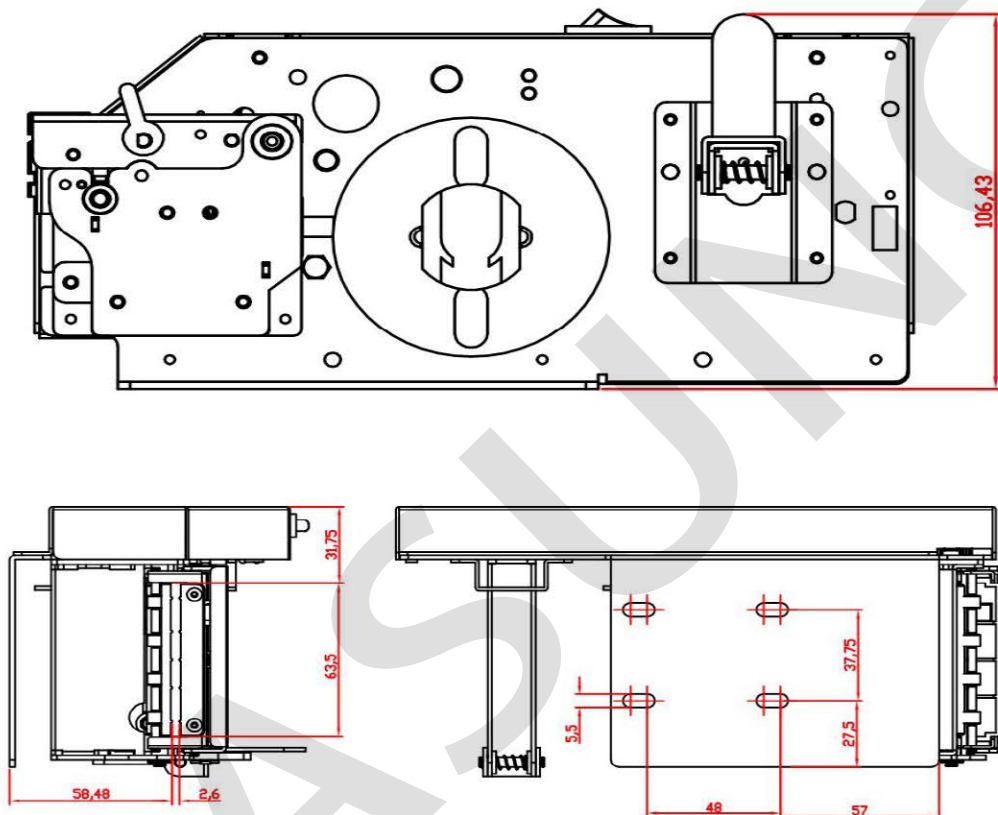
Install & Operation

Appearance introduction

Introduction :

1. **Print head open switch**   2.   Paper feed button

3. LED indicators   4.   Power switch

5. Paper re-winder   6.   Paper roll holder & adjuster

7. Paper feed mouth   8.   Paper width adjuster

9. printer ports   10. Paper presence LED

Fix printer

Refer to printer mechanical drawing, please pay much attention on screw holes . there are four holes located on its chassis.
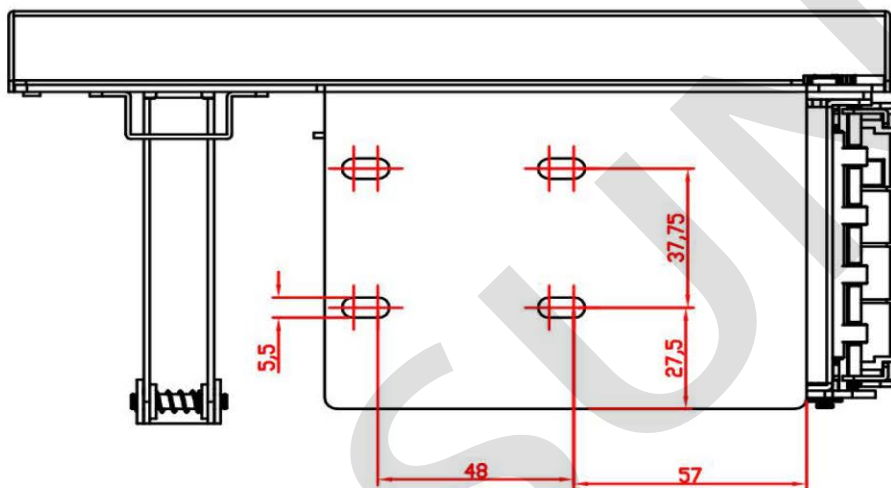
Load paper roll

MS-LP212A label printer requests label roll specification standard, as below:

Backing paper width: 35mm < A < 60mm

Unit label width: 35mm< C < 58mm

Unit label length: 20mm < B

Label gap distance: 2mm < D < 5mm

Label roll inner core diameter: ≥ 25mm

Label roll complete diameter: ≤ 100 mm
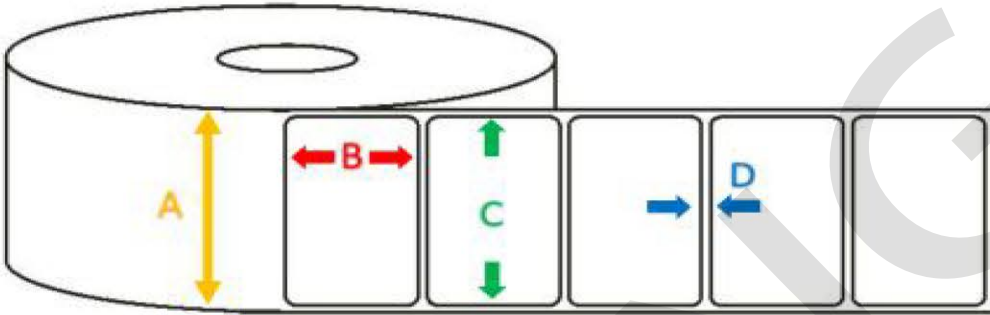
Step 1 :open roll adjuster to load label paper roll
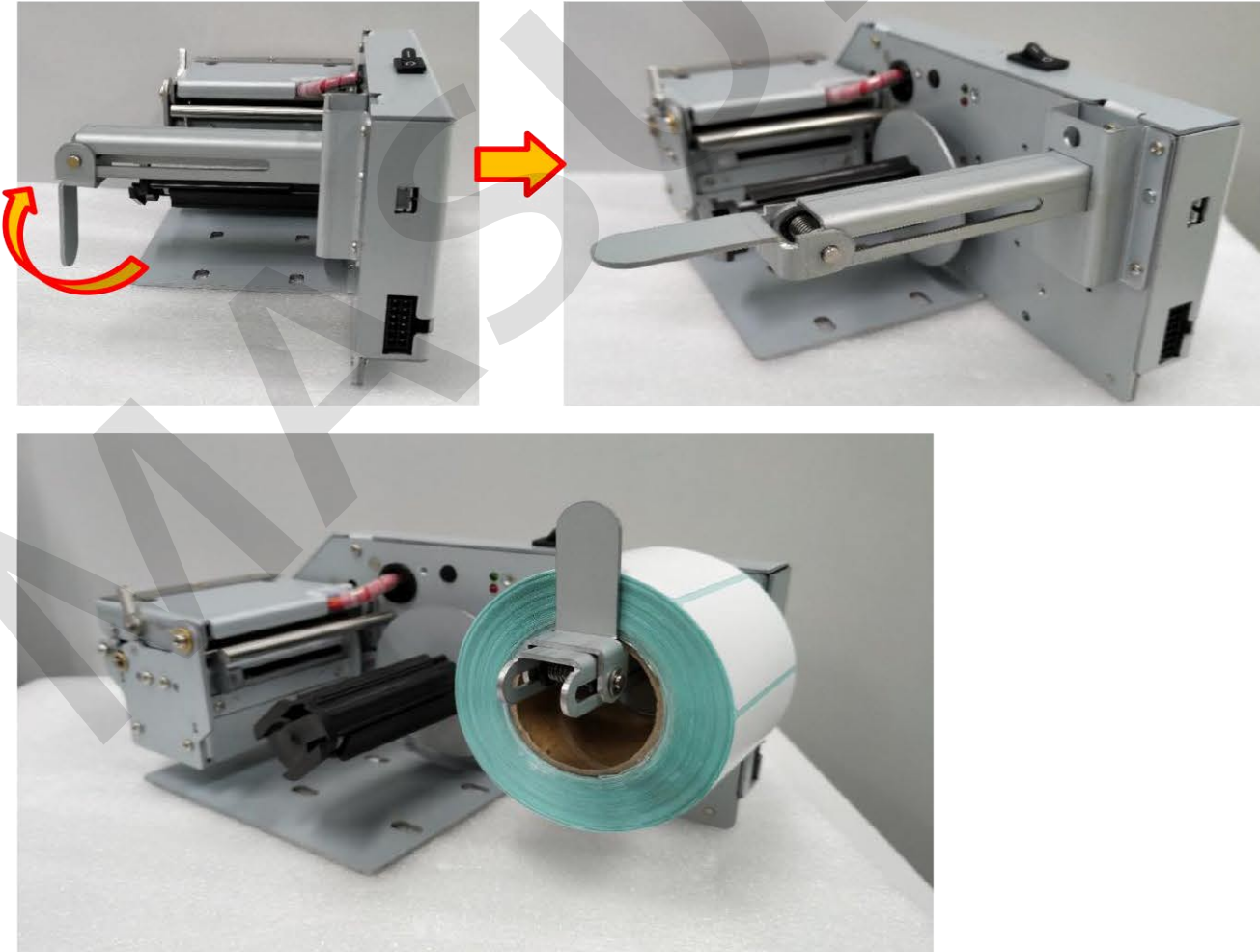
Step 2: Open printer head

　　　Press printer head switch to open the printer head.

Step 3 : Feed paper through printer head
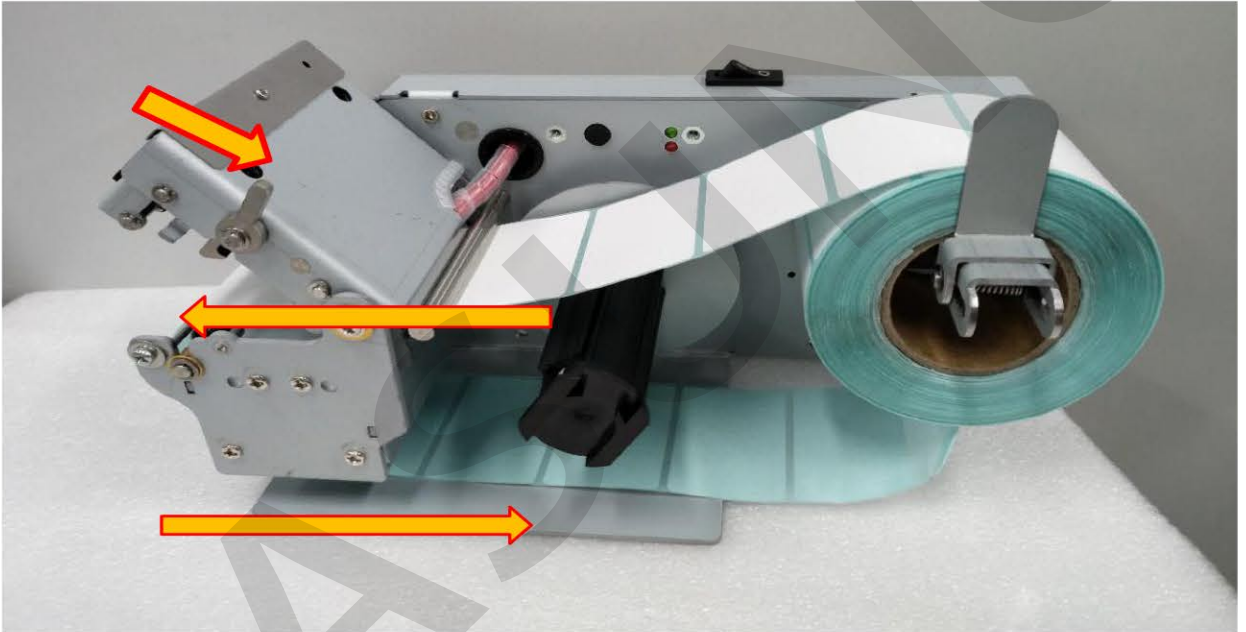
Step 4: Take off the clamp from the roll re-winder
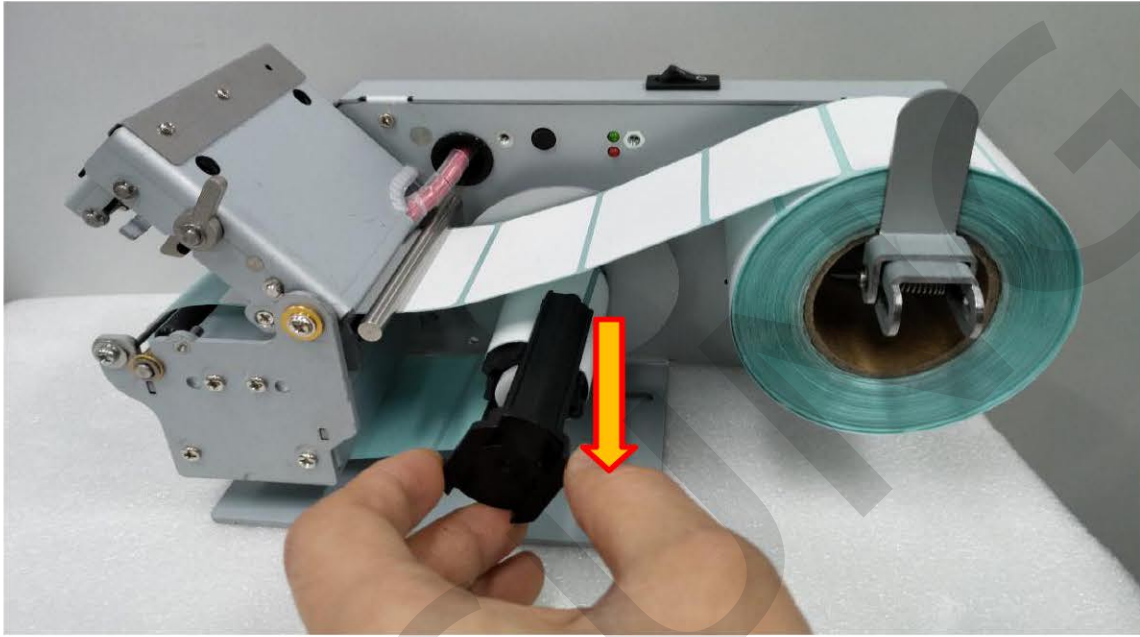
Step 5: reel useless layer paper of label roll on the re-winder roll and use the clamp part to fix it. Then press the printer head cover to finish loading paper.

Notice: there is only one direction when user plug in clamp part.

There is only one direction for the clamp !
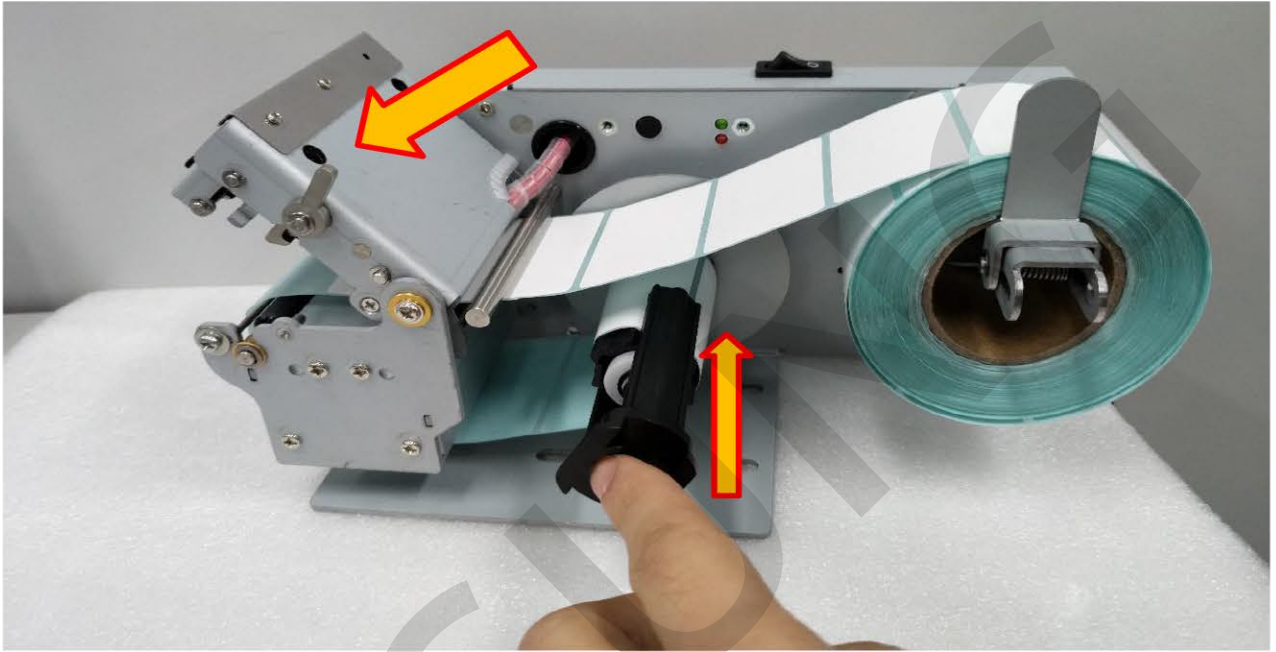
Step 6: rotate the roll re-winder at anticlockwise direction. This aims to retract label roll tightly. Then user can power on printer.

Please rotate the clamp anticlockwise to make sure the retract in a proper tight state !
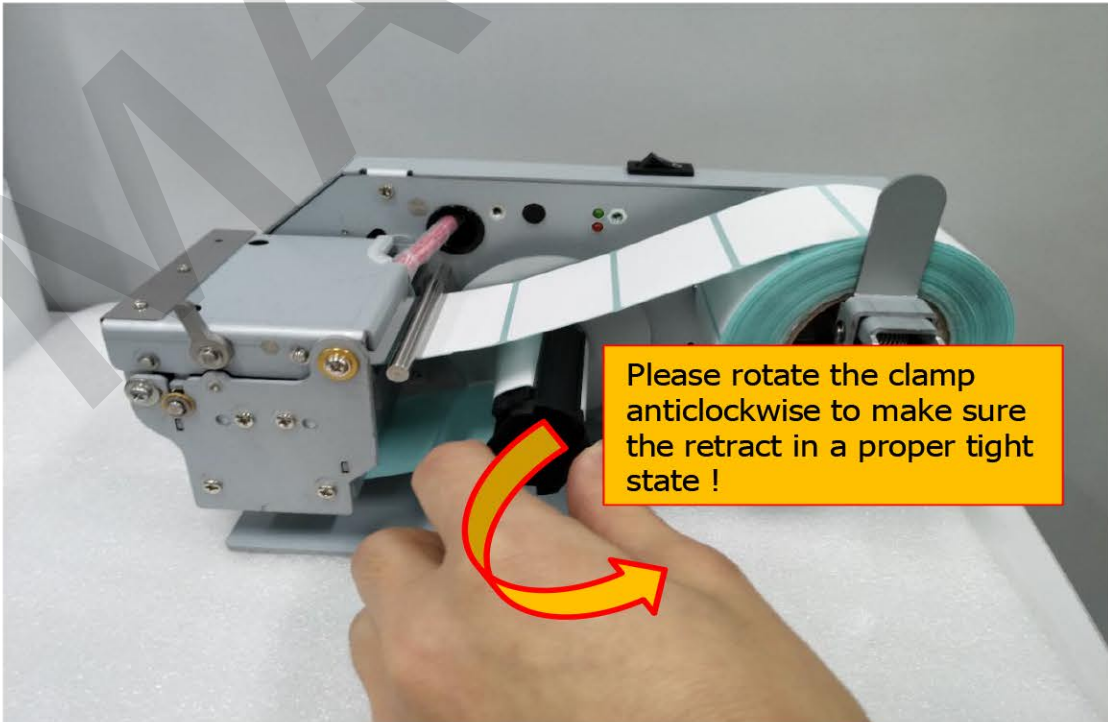
LED indicators & buzzer

Green Power LED:

ON : normal

OFF: Power off

Paper presence LED:

ON : Paper presence at printer month

OFF: label is taken

Red Error LED :

Flash (squeal) times	Problems	Solutions
6	Printer head open	Close the printer head
4	No paper	load new paper
3	Paper jam	clear jam paper
Every other 320ms	Print head overheat	Cool down the print head

Buzzer:

buzzing times	Problems	Solutions
6	Printer head open	Close the printer head
4	No paper	load new paper
3	Paper jam	clear jam paper
Every other 320ms	Print head overheat	Cool down print head

Self test page

how to print self-test page:

Method A:

➢ After loading paper successfully

➢ Turn off power

➢ Press paper feed button on printer

➢ Then power on printer and Wait 2～3 seconds,release finger out of feed button,then printer will go with a test-page.
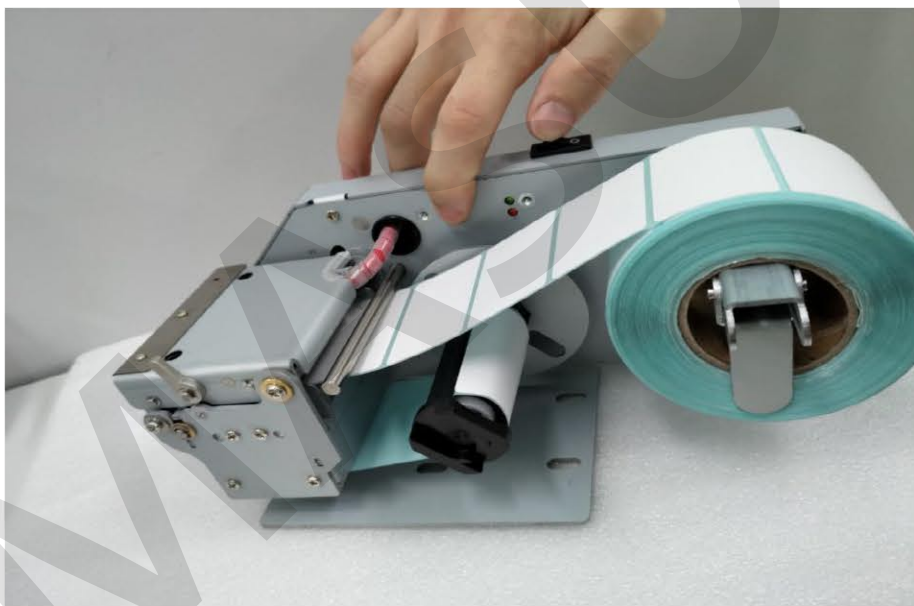
Mode 2:

    Send command: 1D 28 41 02 00 00 02 ,somebody can also get the self-test page.

```
Model:LP212
Printer ID:20170902001
Version:APP18-01-10
Width:384 dots/line
Print Density:100%
Serial: 115200,N,8,1   CTS/RTS
USB:Printer Class
```

Solutions to matters

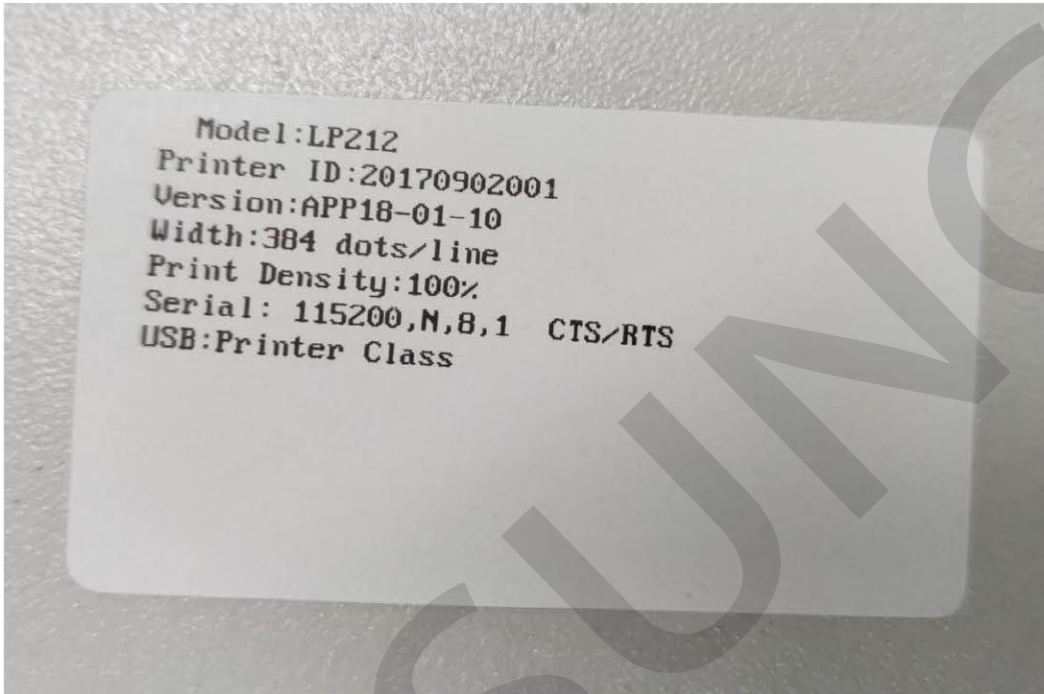1. When paper jam occurred,please turn off the power,then open the paper container to take away the shredded paper,reload paper and self test again to check if the problem has been solved.

2. Paper feed is not smooth,please turn off the power,open the paper container to adjust the paper roll.

3. Not print clear,please turn off the power,and set aside for a while to cool down,then clean the printer head and sensor with soft brush, which is wetted by anhydrous alcohol.

Matters need attention

Safety matters

1. Do not apply voltage or current to any pins excess of the absolute maximum ratings.If voltage or current in excess of the absolute maximum ia applied,excess current will flow through the device,which may result in heat damage.

2. Do not short-circuit any output pins with the power supply.

3. Do not drop conductive material onto the circuit board.Short circuiting pins on the board may cause heat damage due to excess current or may melt the bonding wire.

4. Be sure to connect the device with the specified cables.

5. Improper connection may cause fire or shock

6. Never disassemble or modify this product.Tampering with this product may result in injury,or electric shock.

Usage matters

1. User should use standard thermal paper, or it will influence our printer ,moreover ,it can damage thermal head gradually.

2. The width, inner diameter, outer diameter of paper roll have to meet standard requirements, or it can make paper sensor unable to work and paper jam.

3. Never use hard tools to clean the cutter, or it may result in unrecoverable damage to the cutter.

4. Never pull out the signal cable (serial) or power wire when the printer is power on.

5. Never touching the printer head or motor driver at once directly after the printer has been working a long time, or will get scald.

6. There is great friction between the rubber roll and thermal head, so user cannot press feed button or print anything when there is no paper, or it can damage thermal sheet. Also cannot print when the platen open.

7. User should clean thermal head regularly with anhydrous alcohol to ensure the printer perform better and service life.

8. If the printer works outside, it needs to be cleaned regularly to ensure the sensors work reliability.

9. When the printer is working, block up the paper mouth is forbidden.

Storage matters

1. Be sure to set this equipment on a firm, stable, horizontal platform.

2. During transport or storage, protect the device by storing it in conductive sponge, aluminum foil, etc.

3. If the equipment falls, it may break or cause injury.

4. Excess of humidity and dust may destroyed the equipment。

5. Do not place heavy objects on top of this product. Never stand or lean on this

product.

6. Equipment may fall or collapse, causing breakage and possible injury.

7. To ensure safety, please unplug this product if it unused for a long time.

*MASUNG has the right to change the contents of the manual

without advanced statement!