

User Manual

Thermal Label Printer

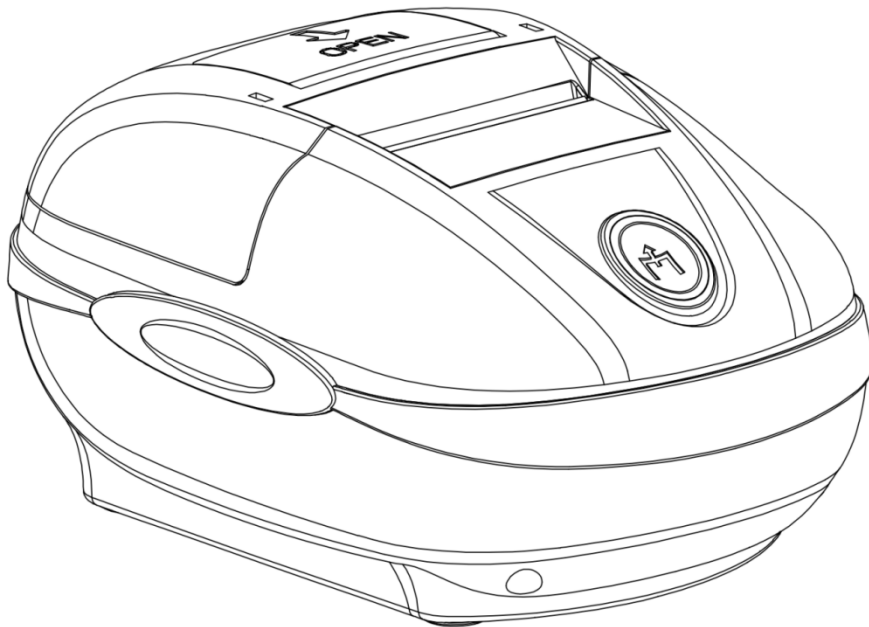


Table of Content

1. Product Introduction	1
1.1 Safety warning	1
1.2 Notes	1
2. Overview	1
2.1 Introduction.....	1
2.2 Main features	2
3. Appearance and components	2
4. Paper roll installation	3
5. Technical data	5
6. Open the printer	7
6.1 Check package	7
6.2 Connect the power cable.....	7
6.3 Connect USB cable	7
6.4 Media installation	7
7. Power-on function.....	7
7.1 Gap sensor calibration	7
7.2. Self Test	8
7.3, restore factory settings	9
7.4, automatic detection of paper position.....	9
8. Indicator light.....	9
9. Maintenance.....	9
9.1 Cleaning	9
9.2 Pls follow the below cleaning steps :.....	10
10. Troubleshooting	10

1. Product Introduction

Thank you for your purchasing of thermal label barcode printer. This printer will provide you with safe, reliable and efficient printing. At the same time, this printer is with full function and easy to operate, it is your best choice. Please strictly follow the manual and operation guide to configure and use the printer, so as to avoid harm to both human and the device.

⚠ Safety instructions: Before operating and using the printer, please read the following precautions carefully.

1.1 Safety warning

⚠ Warning: The printer head is a hot part. Do not touch the printer head and surrounding parts during the printing process or just after printing.

⚠ Warning: Do not touch the surface of the printer head and the connecting part to avoid damage to the print head due to static electricity.

⚠ Warning: Do not touch the tearing blade to avoid injury.

1.2 Notes

- The printer should be installed in a flat and stable place;
- Leave enough space around the printer for operation and maintenance;
- The printer should be far away from water source and avoid direct sunlight, strong light and heat source;
- Donot use and store the printer in places with high temperature, high humidity and serious pollution;
- Avoid placing the printer where there is vibration and shock;
- Avoid Moist air forming dew on the surface of the printer. If it has formed, do not turn on the power of the printer before the dew disappears;
- Connect the power adapter of the printer to an appropriate grounded socket, avoid using the same socket with a large motor or other equipment that can cause power supply voltage fluctuations;
- If the printer will not be used for a long time, please disconnect the power supply of the printer;
- Avoid water or conductive substances (such as metal) from entering the printer. Once it occurs, turn off the power immediately;
- The printer must not print without paper, otherwise it will seriously damage the printer rubber roller and print head;
- When connecting or disconnecting each interface, you must turn off the power to avoid damage to the printer control circuit;
- When the printing effect meets the usage requirements, it is recommended that the user set the low-level printing density as much as possible to avoid affecting the service life of the print head;
- Users are not allowed to dismantle the printer for maintenance.

2. Overview

2.1 Introduction

This barcode printer can meet the needs of real-time, batch printing labels, and can be widely used in transportation, postal, commercial logistics and other fields. This barcode printer can be connected to related devices through a standard USB interface (other port optional). For thermal

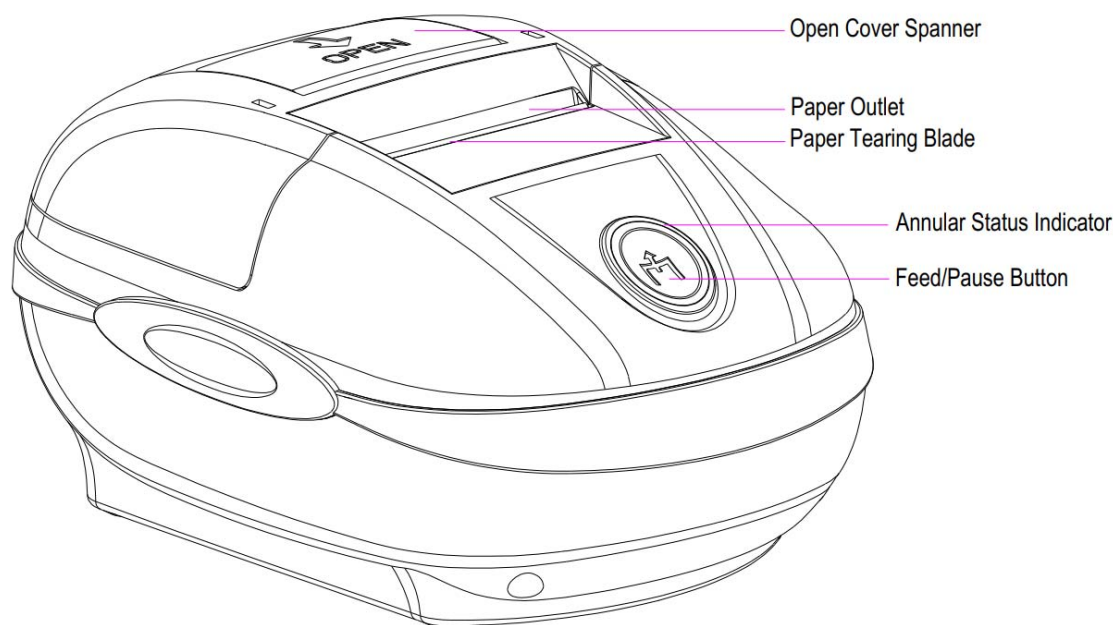
printing channel, a variety of printing papers can be used, including thermal paper rolls, thermal label paper, and self-adhesive thermal paper.

This printer provides thermal printing method. The printing speed max is 3 inch/sec. Various printing materials can be used, including Thermal Label paper, Thermal adhesive paper, etc. In addition, the printer support 1D and 2D barcodes. Support 4 different label printing directions. Through the zoom function, the font can be enlarged 1-10 times. Therefore, you can greatly improve the efficiency of label printing in a short time.

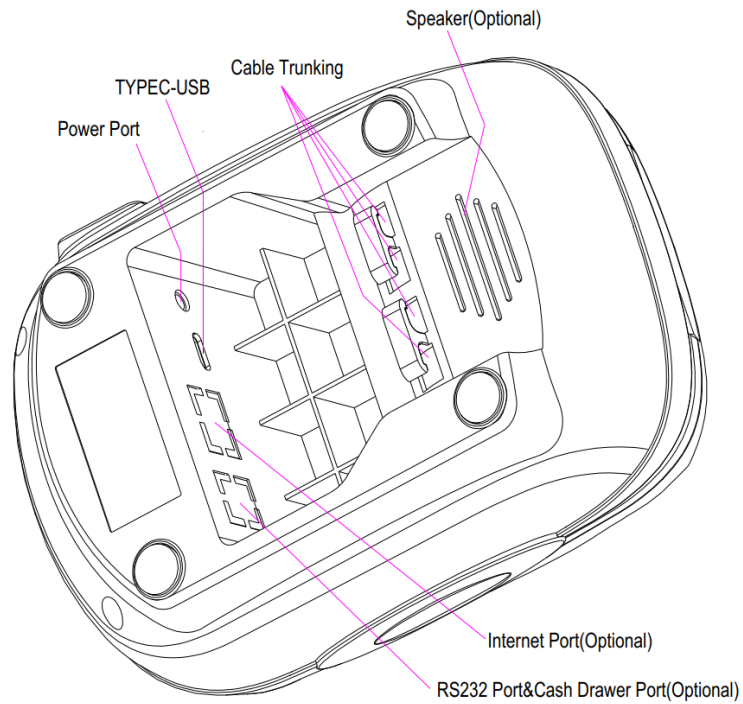
2.2 Main features

- Maximum printing speed 3 inch/sec;
- Support TSPL, ZPL, EPL, DPL multiple command sets;
- Support different sizes of thermal label paper;
- At the same time meet the medium at different range 20mm-57mm(effective printing width is 20-48mm), easy to operate;
- Automatic paper detection and positioning function;
- Interface optional: USB,LAN,COM,Bluetooth,Wifi.(Details pls confirm with our sales)
- Temperature self-adaption control;

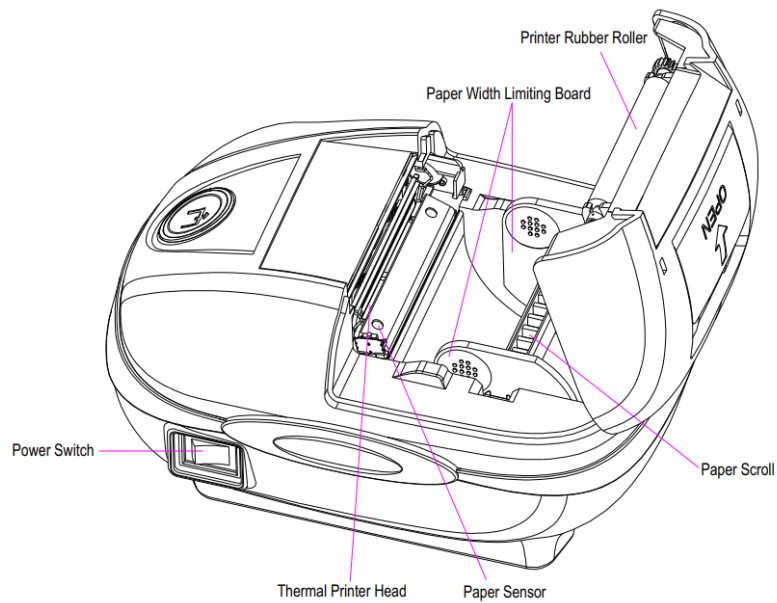
3. Appearance and components



Picture 1



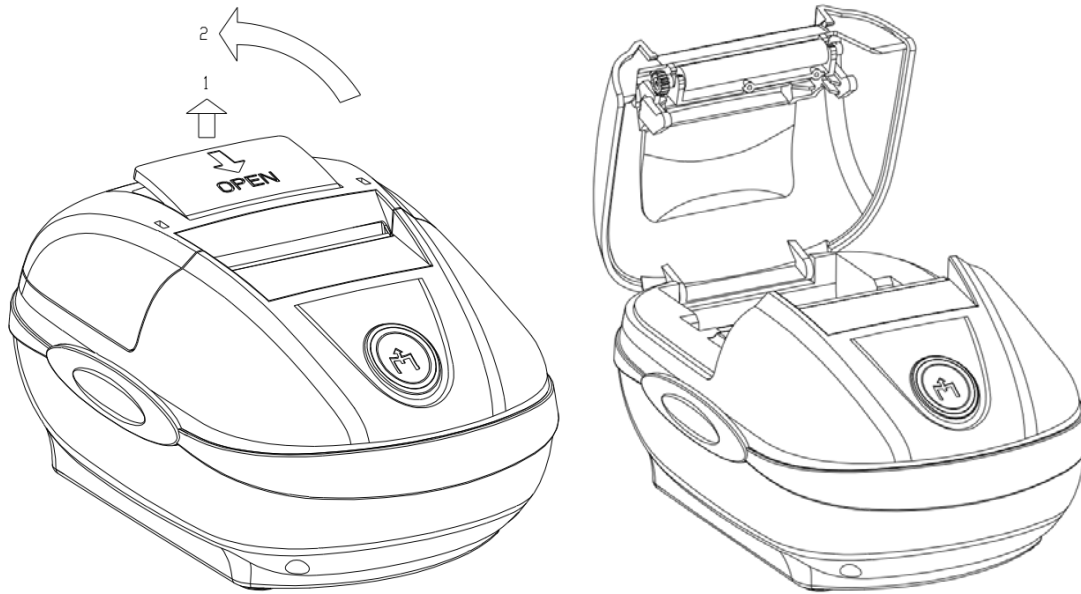
Picture 2



Picture 3

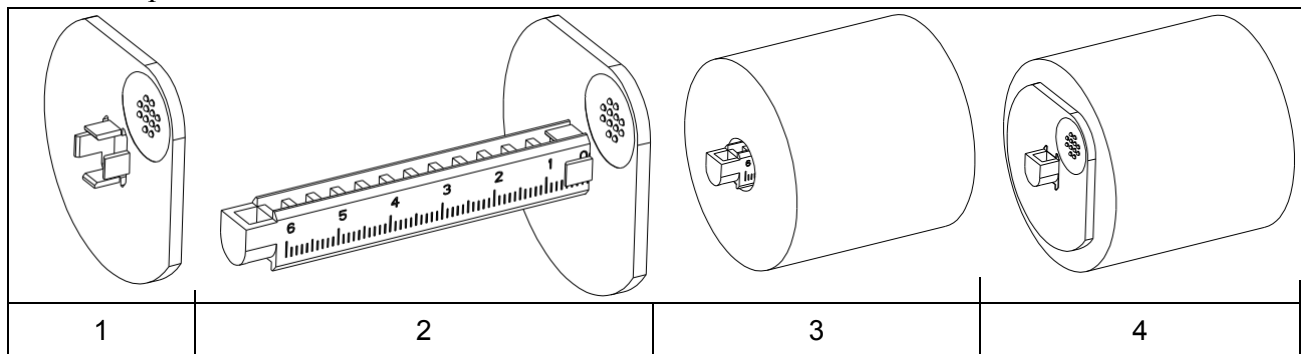
4. Paper roll installation

①As shown in the picture below, pull up the “open” cover.



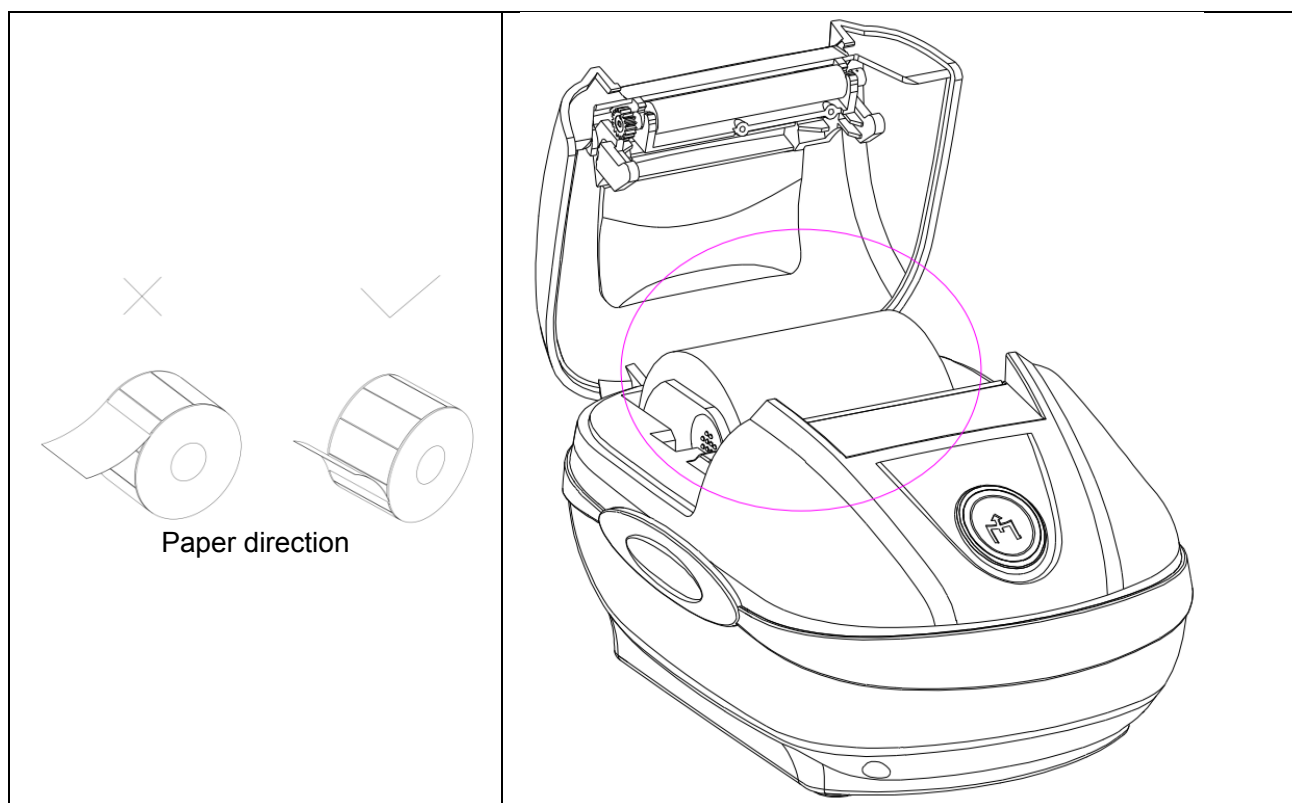
Picture 4

②Please follow below instructions: 1, take one clapboard; 2,insert the paper loading shaft into the central circular hole of this clapboard; 3,adjust the paper position to the loading shaft; 4,take another clapboard in other side.



Picture 5

③As shown picture below, put the well installed label paper roll and paper loading shaft into the slot, pls note the direction of label paper roll.



Picture 6

5. Technical data

Resolution	203 DPI
Print Method	Thermal Print
Print Speed(Max)	76.2 mm (3") / s.
Print Width(Max)	48mm(2")
Print Length(Max)	1770 mm (70")
Printer Size	165 mm (D) x115 mm (W) x88 mm (H)
Printer Weight	0.33KG
Label Paper Roll Diameter	25-60mm
Paper Direction	Paper Up
Processor	32-bit CPU
Memory	8M Flash memory 8M SDAM
Interface	■ USB (Standard) ■ COM(Optional) ■ Bluetooth (Optional) ■ WIFI(Optional) ■ LAN(Optional)
Power	Adaptor ■ Input: AC 100-240V ■ Output: DC 8.5V-3A
Sensor	■ Gap Sensor ■ Cover Opening Sensor ■ Printer Head Temperature Sensor
Paper Type	Thermal Label paper, Thermal adhesive paper, etc
Media Type	Continuous Gap
Media Width	20 mm ~ 48 mm
Media Thickness	0.06 mm ~ 0.25 mm
Label Length	10 mm ~ 1770 mm
Paper off type	Tear off

Gap Height	Minimum 2 mm
Printout deviation	Vertical: 1 mm maximum. Horizontal: 1 mm maximum.
Internal font	1 set of alphanumeric fonts
Barcode	1D bar code Code128 subsets A,B,C, Code128UCC, EAN128, Interleave 2 of 5, Code 39, Code 93, EAN-13, EAN-8, Codabar, POSTNET, UPC-A, UPC-E, EAN and UPC 2(5) digits, MSI, PLESSEY, China Post, ITF14, EAN14, Code 11, TELPEN, PLANET, Code 49, Deutsche Post Identcode, Deutsche Post Leitcode, LOGMARS 2D bar code CODABLOCK F mode, Data Matrix, Maxicode, PDF-417, Aztec, MicroPDF417, QR code, RSS Barcode (GS1 Databar)
Code Page	Codepage 437 (English - US) Codepage 737 (Greek) Codepage 850 (Latin-1) Codepage 852 (Latin-2) Codepage 855 (Cyrillic) Codepage 857 (Turkish) Codepage 860 (Portuguese) Codepage 861 (Icelandic) Codepage 862 (Hebrew) Codepage 863 (French Canadian) Codepage 864 (Arabic) Codepage 865 (Nordic) Codepage 866 (Russian) Codepage 869 (Greek 2) Codepage 950 (Traditional Chinese) Codepage 936 (Simplified Chinese) Codepage 932 (Japanese) Codepage 949 (Korean) Codepage 1250 (Latin-2) Codepage 1251 (Cyrillic) Codepage 1252 (Latin-1) Codepage 1253 (Greek) Codepage 1254 (Turkish) Codepage 1255 (Hebrew) Codepage 1256 (Arabic) Codepage 1257 (Baltic) Codepage 1258 (Vietnam) ISO-8859-1: Latin-1 (Western European) ISO-8859-2: Latin-2 (Central European) ISO-8859-3: Latin-3 (South European) ISO-8859-4: Latin-4 (North European) ISO-8859-5: Cyrillic ISO-8859-6: Arabic ISO-8859-7: Greek ISO-8859-8: Hebrew ISO-8859-9: Turkish ISO-8859-10: Nordic ISO-8859-15: Latin-9 UTF-8
Rotation on font, Bar code	0°, 90°, 180°, 270°
Command	TSPL-EZ emulation, ZPL, EPL, DPL
Environment	Operation Environment: -10~50°C (14~122 °F), Humidity: 10~90% No condensing Storage Environment: -40~60°C (-40~140 °F), Humidity: 10 ~ 90% No condensing

Accessories	<ul style="list-style-type: none"> ■ CD include Windows label editing software, Driver and User Manual ■ Fast installation guide ■ Power adaptor ■ Power cable ■ USB cable
Reliability	<ul style="list-style-type: none"> ■ One year warranty ■ Printer head 50KM or One year warranty. Depends on which reach first. ■ Printer roller 50KM or One year warranty. Depends on which reach first.

This printer supports continuous paper and non-continuous paper.

- Continuous paper types include: Non-adhesive strip roll paper.
- Non-continuous paper types include:
 - Non-Adhesive label paper
 - Self-adhesive paper stickers

6. Open the printer

6.1 Check package

Open the printer package and check whether the items are missing or damaged. If the items are missing or damaged, please contact your agent or manufacturer.

6.2 Connect the power cable

- Make sure the printer power switch is off;
- Connect well the power adaptor and the power cable,

Then let one of its side match the printer port, and other side connect with the socket, and then turn on the power switch;

note:

- When plugging and unplugging the power cord, you should hold the connector shell of the plug, do not pull the cable forcibly;
- Avoid pulling the power cord, otherwise it will damage the cable, causing fire and electric shock;
- Avoid placing the power cord around overheated equipment to prevent the cable surface from melting, causing fire and electric shock;
- If the printer will not be used for a long time, disconnect the printer from the power source.

6.3 Connect USB cable

- ① Confirm that the printer's power switch is off;
- ② Connect the USB data cable into the related interface;
- ③ Connect the other side of the USB data cable to the host computer.

6.4 Media installation

Install self-adhesive thermal paper

For the installation of self-adhesive thermal paper, please refer to “4. Paper roll installation” of this manual

7. Power-on function

7.1 Gap sensor calibration

This function is used to measure the sensitivity of the label gap sensor after the printer turned on.

When user use a different specification paper roll or initializes the printer, just follow these steps, the printer will automatically detect the paper position, and save the calibration values for printing tasks.

To calibrate the gap sensor, please follow the steps below:

① Install the driver: In the driver, we can set label paper specification and the gap between the two label papers. After settings, you can print a paper, then the printer will automatically calibrate the sensitivity of the gap sensor and write parameters into the memory.

② Using Command: send parameters to printer, the parameter include: specifications of label paper, the gap between the labels. Then you print a label, the printer will automatically calibrate the sensitivity of the gap sensor and write the parameters into the memory.

③ Press button calibration method: Under power off status, press and hold the button until the indicator light to flash pink and then turn to red and pink flash alternately. Release the paper feed button, then the printer will automatically calibrate the label paper.

7.2. Self Test

If you want to have a self-test page, please follow the steps below, Under power off status, make sure that the paper is installed correctly and the upper cover is closed, press and hold the FEED button, and turn on the printer. Wait for the indicator light to change from: pink light flashes twice → red and pink flashes alternately → pink indicator light flashes continuously, release the button and the printer will print out a self-test test page as shown in the figure. The content of the power-on self-test page is as follows:

PRINTER INFO	
Printer Version: 2.005 EZ	..... 版本号
MILAGE(m): 0	..... 使用里程
CHECKSUM: EA2C80EC	..... 校验码
CODE PAGE: 850	..... 代码页
COUNTRY CODE: 001	..... 国家代码
SPEED: 2 INCH	..... 打印速度
DENSITY: 6.0	..... 打印浓度
SIZE: 1.89 , 1.57	..... 默认标签尺寸
BLINE: 0.10 , 0.00	..... 间隙长度
TRANSPARENCE: 2	..... 间隙检测传感器发射强度
BT: YES	..... 是否有蓝牙接口
BT NAME: Printer	..... 蓝牙名称
BT PIN: 0000	..... 蓝牙配对码
BT MAC: 001122334455	..... 蓝牙地址
BT VERSIONS: BRxyxxxxxxxxxxxxxx	..... 蓝牙版本

FILE LIST:	..... 文件下载信息
DRAM FILE: 0 FILE(S)	
PHYSICAL DRAM: 2048 KBYTES	
PHYSICAL FLASH: 0 KBYTES	
AVAILABLE FLASH: 0 KBYTES FRE	
END OF FILE LIST	

7.3, restore factory settings

The printer initialization function is to clear the downloaded data memory (DRAM) and restore the printer parameters to the factory default settings. Please re-calibrate the gap sensor after initialization.

Please follow the steps below to initialize the printer

Under power off status, make sure that the paper is installed correctly and the upper cover is closed, press the paper feed button, and wait for the indicator light to change from: pink flashing -> red and pink flashing alternately -> pink flashing -> blue and pink flashing alternately, Release the button and wait for the machine to restart automatically, and its indicator turns blue when the setting is complete.

7.4, automatic detection of paper position

Under power off status, make sure that the paper is installed correctly and the upper cover is closed, press and hold the paper feed button, and wait for the indicator light to change from: pink flashing -> red and pink flashing alternately -> pink flashing -> blue and pink flashing alternately -> blue indicator light flashes, release the button, and the printer will automatically calibrate the label paper and feed the paper to the accurate printing position.

8. Indicator light

There is a button and a three-color indicator light [red, blue, pink] on the printer.

When there is an error during printing process, pls press feed button to make it re-print. And by how long you press the feed button when powered on, you will get into some setting options. Indicator light and its related description show as following:

Indicator light status	Description
Blue Light On	Printer power on and in normal printing status
Blue and Pink light flash alternately	Printer stops
Red Light on	Printer open cover
Red and Pink light flash alternately	Detect label gap mistake or Lack of paper or Printer head over heated

9. Maintenance

9.1 Cleaning

Take this simple printer maintenance procedure not only to ensure the printing quality, but also extend the life of the printer. The following are some of our recommended maintenance.

Please use the tools listed below to clean and maintain your printer:

- Cotton swab
- Cotton
- Air spray gun or vacuum tool
- 100% alcohol (industrial alcohol)

9.2 Pls follow the below cleaning steps :

Printer parts	method
Print head	①Please turn off the printer ②Let the print head cool for at least one minute ③Wipe the surface of the print head with cotton 100% alcohol
Rubber roller	①Please turn off the printer ②While turning the rubber roller, carefully wipe the rubber with 100% alcohol on cotton cloth or cotton
Outside	Wipe the outside with a damp cloth
Inside	Use an air gun or vacuum cleaner to remove dust from the machine

▲ Attention:

- The daily maintenance of the printer must ensure that the power is turned off;
- It is not allowed to touch the surface of the print head with hands and metal objects, and do not use tools such as tweezers to scratch the surface of the print head, printing roller and sensor
- Do not use gasoline, acetone and other organic solvents to wipe the print head and rubber roller, medical alcohol may damage the print head;
- After the gap sensor is cleaned, the paper gap check should be re-checked;
- Wait for the alcohol to completely evaporate before turning on the power to continue printing.

10. Troubleshooting

The contents below are some common problems and their solutions for users. Usually it will be work, but if it still not work after the following suggestions, pls contact the customer service department of our dealer or manufacture to get more help.

Problems	Possible Reasons	Solutions
Online Indicator is off	■ The cable connection is not well connected to printer port ■ Printer Power switch is not turned on	■ Check the socket, power cable, adaptor cable is well connected with printer. ■ Turn on power switch
	■ The printer cover is not closed well	■ Please close the cover well
	■ Run out of Label Paper ■ The label installation path is	■ Put new label paper inside ■ Please refer to label paper installation

	incorrect	steps, re-install, re-adjust the specifications and print
	<ul style="list-style-type: none"> ■ Incorrect detection of gap sensor ■ There may be label paper or debris stuck inside the printer 	<ul style="list-style-type: none"> ■ Clean the inside of the machine
The printer cannot print	<ul style="list-style-type: none"> ■ Check if the transmission line has connected to the machine 	<ul style="list-style-type: none"> ■ Reconnect the transmission line ■ If you are using a USB cable, please confirm that the port in the computer drive is selected correctly ■ Replace new transmission line ■ Clean the print head ■ The printer density setting is incorrect
Storage is full (FLASH/DRAM)	<ul style="list-style-type: none"> ■ FLASH/DRAM full of storage 	<ul style="list-style-type: none"> ■ Clear unnecessary files inside FLASH/DRAM ■ DRAM can store up to 256 files, the maximum capacity is 1024KB, the number of file is related to the content size of a single file ■ FLASH can store up to 256 files, The maximum capacity is 1024KB, the number of file is related to the content size of a single file
Poor print quality	<ul style="list-style-type: none"> ■ Incorrect label paper installation ■ Dust or adhesive accumulation on the print head ■ Improper setting of printing density ■ Printer head damaged 	<ul style="list-style-type: none"> ■ Re-install the paper roll ■ Clean the print head ■ Clean the rubber roller ■ Adjust the printing density and speed of the printer ■ Print out the self-test page, check and judge whether the print head is damaged. If the print head is damaged, please return to the factory to replace ■ Replace the appropriate label paper ■ If the thickness of the label exceeds 0.22 mm, the printing quality may be reduced ■ Close the printer cover in place
Paper skipping occurs when printing	<ul style="list-style-type: none"> ■ Incorrect or incomplete label size setting ■ The label sensor is covered by obstacle, which results in incorrect detection 	<ul style="list-style-type: none"> ■ Re size and print ■ Moderately reduce the gap value and print it ■ Clean the obstacle on the sensors
Content on left and right sides to be	<ul style="list-style-type: none"> ■ Incorrect label size setting ■ Exceeded maximum print width 	<ul style="list-style-type: none"> ■ Set the correct label size ■ Change the paper roll within the

printed are lost		maximum width
There are wrinkles in printing	<ul style="list-style-type: none"> ■ uneven pressure on printer head ■ incorrect label paper installation ■ printing density setting is incorrect ■ incorrect label paper feed 	<ul style="list-style-type: none"> ■ Please select the appropriate label printing density ■ Please adjust the label width limiter to fit the current label
Gray lines appears on black label paper	<ul style="list-style-type: none"> ■ Printer head is dirty ■ Rubber roller is dirty 	<ul style="list-style-type: none"> ■ Please clean the print head ■ please clean the rubber roller <p>(Refer to the method recommended in Article 9 for specific operation methods and steps)</p>
Unstable printing	<ul style="list-style-type: none"> ■ Printer in hex dump mode 	<ul style="list-style-type: none"> ■ Turn the printer off and on again, and jump out of dump mode



Warning:

The contents of this manual cannot be changed at will without consent. Our company reserves the right to change the product on technology, parts, software and hardware. If users need further information about the product, they can contact the dealer. Without permission, no section of this manual can be copied or transmitted in any form or by any means.