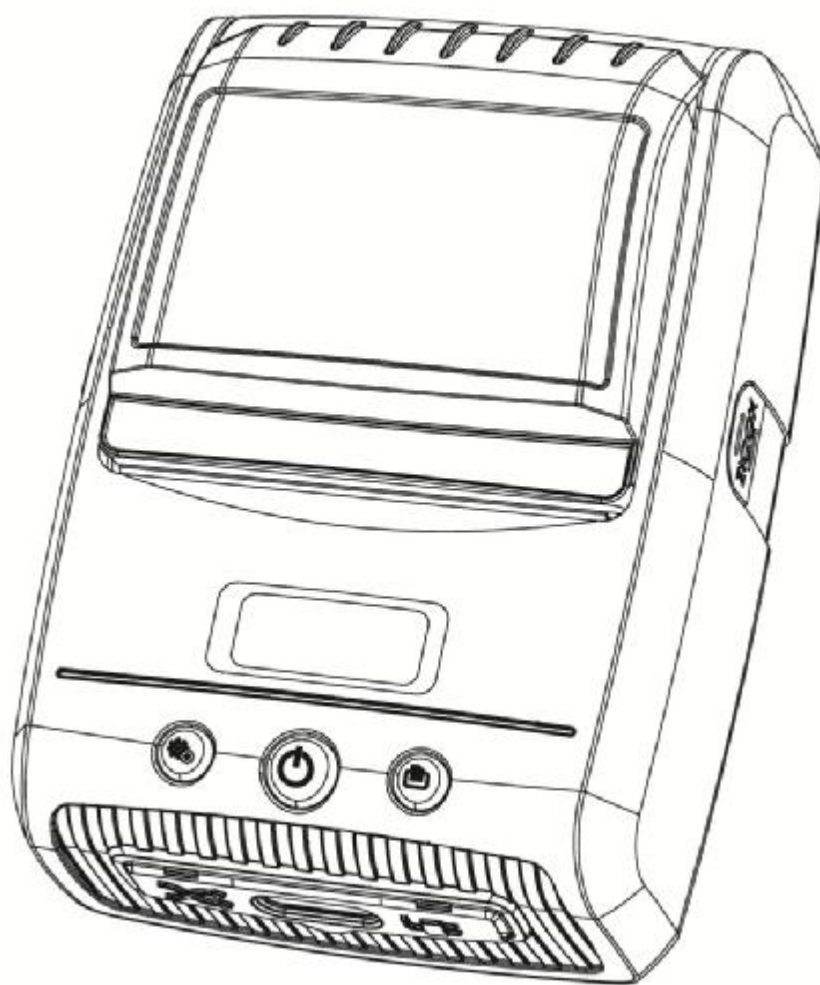


Mobile Printer

User Manual



Introduction

The mobile printer is the ideal solution for Mobile banking system , Retail, point of sales, Credit card Transaction, other traveling and mobile computing etc.

The general features of mobile printer are as follows:

Compact size (113×82×48mm)

Light (246g) for true mobility [standard]

Very silent printing thru direct thermal printing method

High speed ([40 - 60]mm/sec)

High resolution (203dpi : 8dots/mm).

Bluetooth Ver2.0 + EDR, Mini USB

Support Graphic OLED display(128×32dots)

Support text and graphic printing

Indicate Power(on/off), Error

Easier paper roll loading

One touch paper cover

Printer door open & Paper-out sensor

Self-diagnostic, High maintainability.

In field programming – Update Firmware, Download Fonts and Logos

Microsoft Windows XP/VISTA/7/CE/Linux/Android/IOS compatible.

Flow control : Software (XON/XOFF)

※ Hardware flow control not supported in printer.

Free fall: 1 meter onto concrete

Agency Approvals



Operating Precautions

Please follow the precautions below to enjoy and maintain the full performance of the printer.

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 :-20°C to 50°C
 - ◆ Relative humidity : 30% to 80%
- Don't install the printer near devices that generate strong electromagnetic fields such as a copy machine.
- Don't open the platen cover during printing .
- Don't remove or reinstall the communication cable during printing or transmission.
- Don't touch the connectors of the communication during printing.
- Switch the POWER OFF when not in use.
- Don't use other solvent.
- The AC adapter, the battery charger and the battery pack may become warm when in use. This is normal and is not a malfunction.
- When the battery pack is used at low temperature, the length of time the printer can be used may be shortened.

Thermal Paper Handling

- Store the thermal paper in a cool, dry and dark place.
- Don't rub the paper with hard object.
- Don't leave the paper with hard object.
- Don't allow plastic film, erasers, or adhesive tape to touch the

paper for long periods.

- Don't stack the thermal paper with diazo copies immediately after copying or wet-type copies.

- Don't use chemical glue.

- Always to use the clean thermal paper.

Notes

This equipment communication part has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

The 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.



Safely operation under altitude of 2000 meters.



Safely operation in non-tropical climate conditions.

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1. Specifications

1.1. Specifications.

Item	Specifications
Print method	Direct thermal line printing
Characters	32cpl
Character size	ASCII(8x16,12x24); GBK & Big5(16x16,24x24)
Optional Characters	Simplified/Traditional Chinese, Arabic, Cyrillic,Russian, Tukish, Greek, Latin9 and Others upon request
Resolution	203dpi, 8dots/mm
Print width	2 inches (48mm, 384dots)
Paper width	58mm (max)
Paper thick	50um to 150um
Print speed	40mm/s to 60mm/s
Dimension	113 x 82 x 48mm
Weight	191g(not battery & roll paper) 249g(with battery but no roll paper) 305g(with battery & roll paper) [Standard paper: W 58mm; D 40mm]
Interface	Mini USB(RS232), Bluetooth Ver2.0
Paper roll	Width:58mm; Diameter: 40mm;
Paper loading	Clamshell loading
Barcodes	1- dimension: EAN, UPC, Code39, Code93, Code128 etc. 2- dimension: QRCode, PDF417, DataMatrix
Driver	Windows XP/Vista/7 Windows CE, Linux, Android, IOS
Black Mark detection	Support left mark & right mark detection
Label detection	Support Label detection
Support instruction	ESC/Pos CPCL Label

(Continue ...)

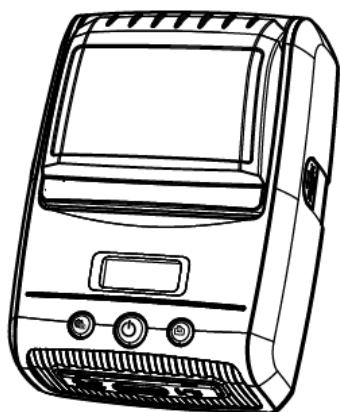
Item	Specifications	
LCD	128 x 32 OLED	
Battery	Rechargeable 7.4V DC, 1300mAh(Li-ion)	
Battery duration	1 hour continuous printing	
Battery changer	Input (100 ~ 240V AC, 50 ~ 60Hz, 0.3A) Output(12V DC/1A) max	
Environment Conditions	Temperature	-20°C - 50°C (operating) -5°C - 35°C (storage)
	Humidity	30% - 80% (operating) 10% - 90% (storage)

<Table 1>

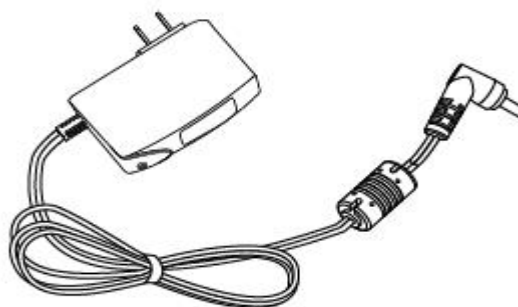
2. Setting up the printer.

2.1. Printer & Accessories

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



Printer (1)



Charger adaptor(1)

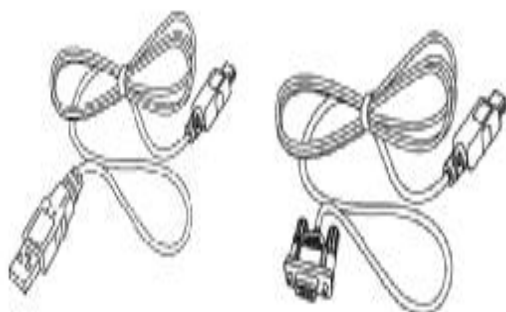


Thermal Paper roll (1)

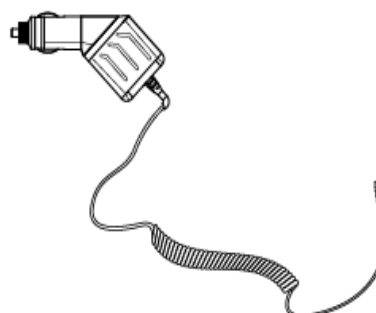


Battery Pack(1)

↓ OPTIONAL



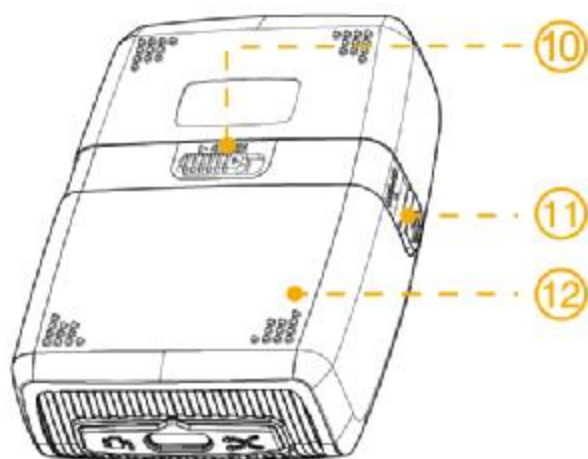
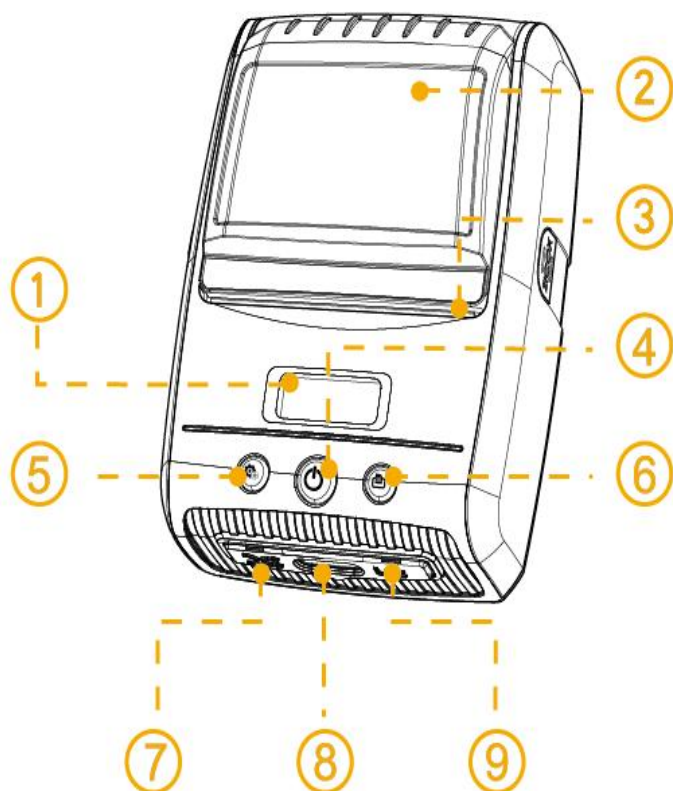
UART/USB cable (1)



Car Charger (1)

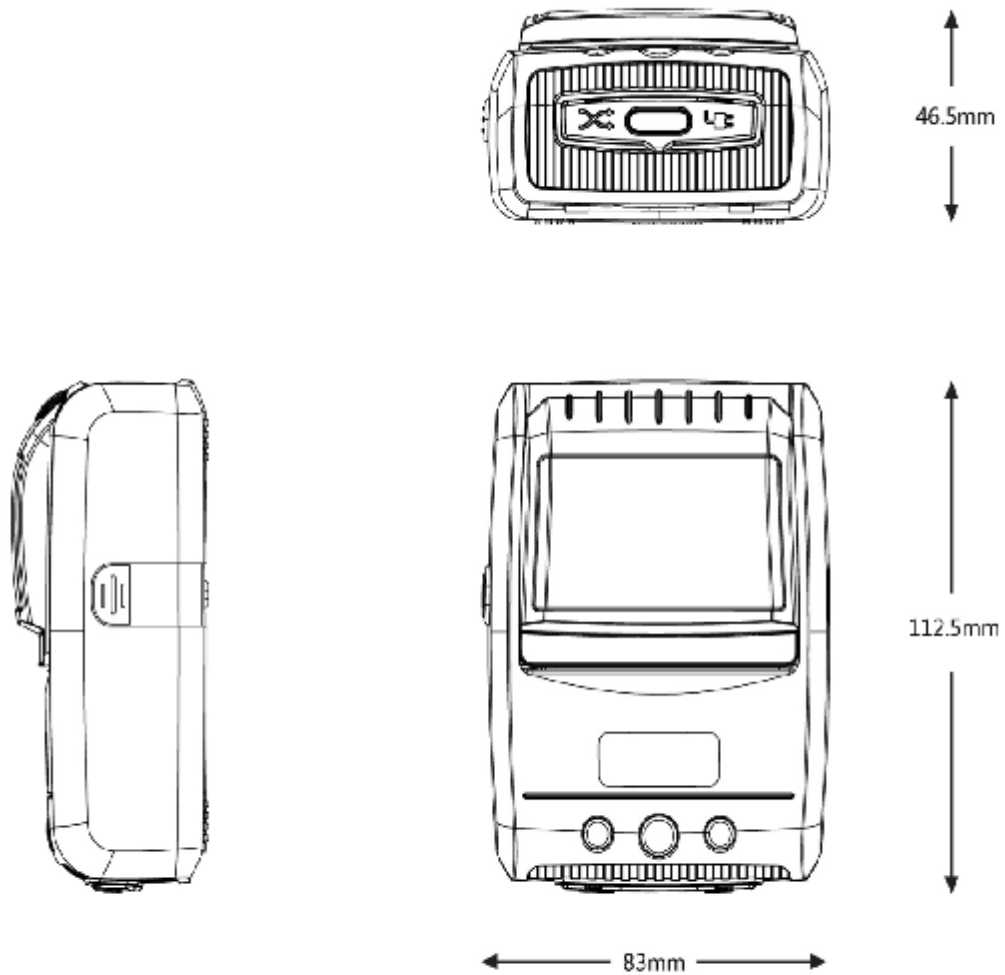
2.2. Printer Features

Part Name



- | | | | |
|-----------------------|------------------------|--------------------------|-----------------------------|
| 1 Display | 4 Power Button | 7 UART Port | 10 Battery Lid Lock |
| 2 Paper Cover | 5 Config Button | 8 Infrared Window | 11 Cover Open Button |
| 3 Paper Outlet | 6 Feed Button | 9 Power Port | 12 Battery Cover |

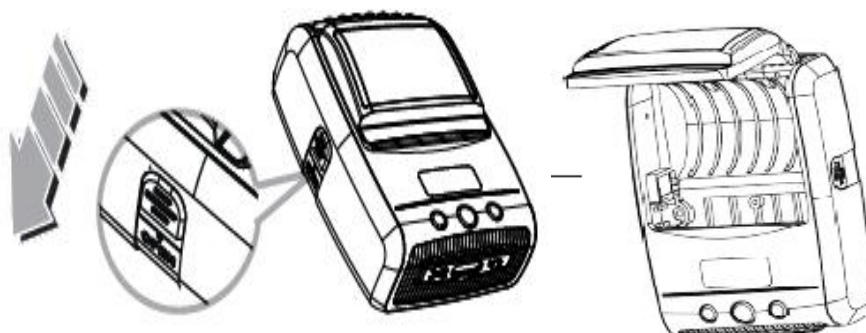
2.3. Dimensions



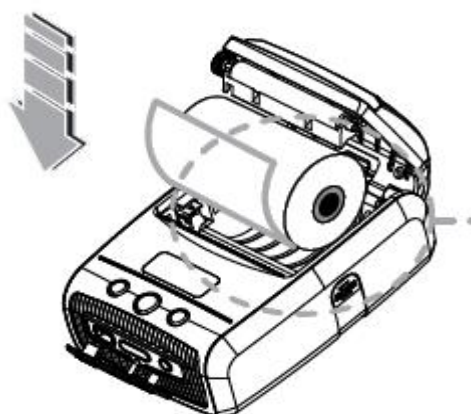
2.4. Replacing paper roll

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't 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 sliding the latch in the arrow direction like the picture.



3. Insert a new paper roll as shown



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



2.5. Power supply

2.5.1. Specified power supply

The following specification is requested for Power supply

Battery Charger: DC 12V/1A

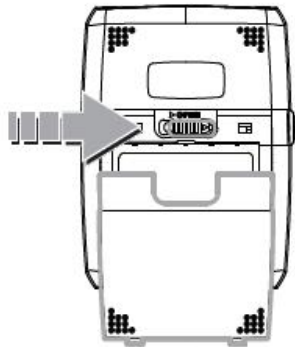
Avoid using power supply which its power capacity of power current is extremely high.

2.5.2. Installing the battery

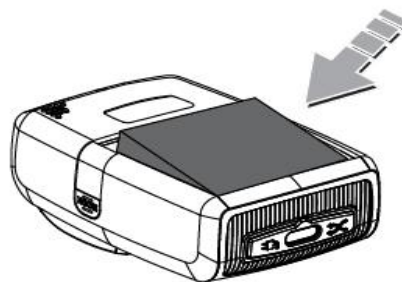
NOTE: Before installing or removing the battery pack, ensure the printer is OFF.
If the printer is not used for long period of time, remove the battery pack from the printer.

To install Battery Pack, proceed as follows:

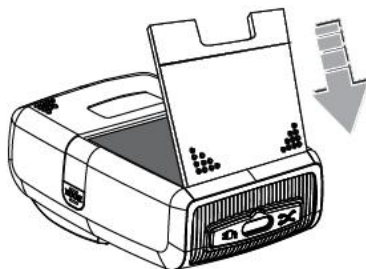
1. Slide the latch to right to open the battery cover



2. Install the battery

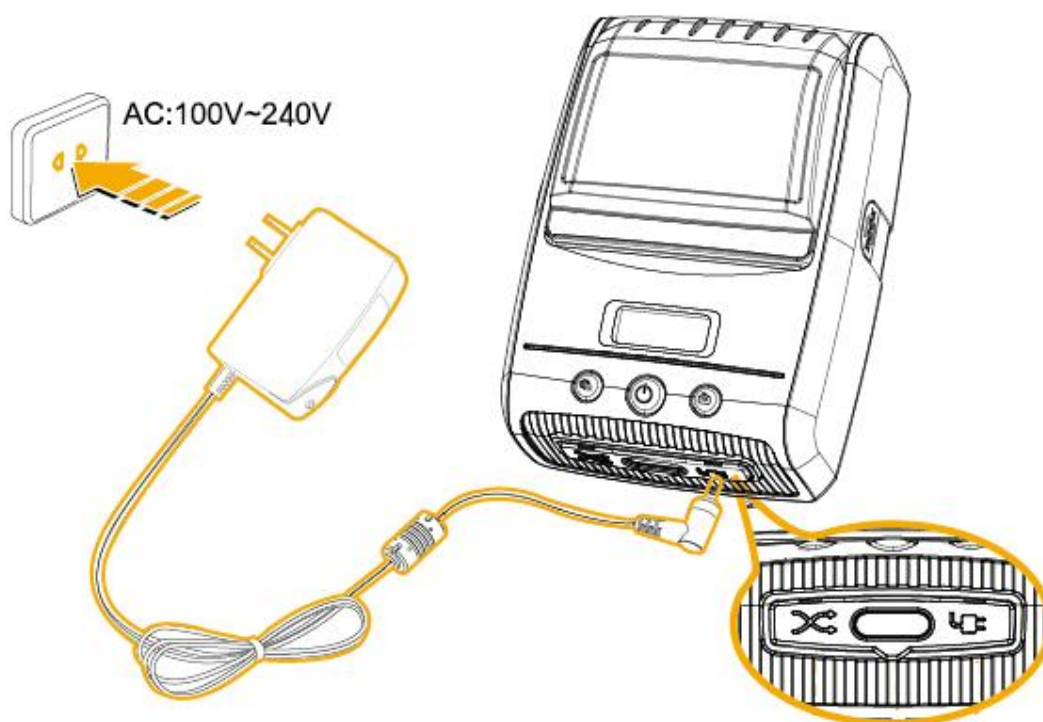


3. Install the battery cover



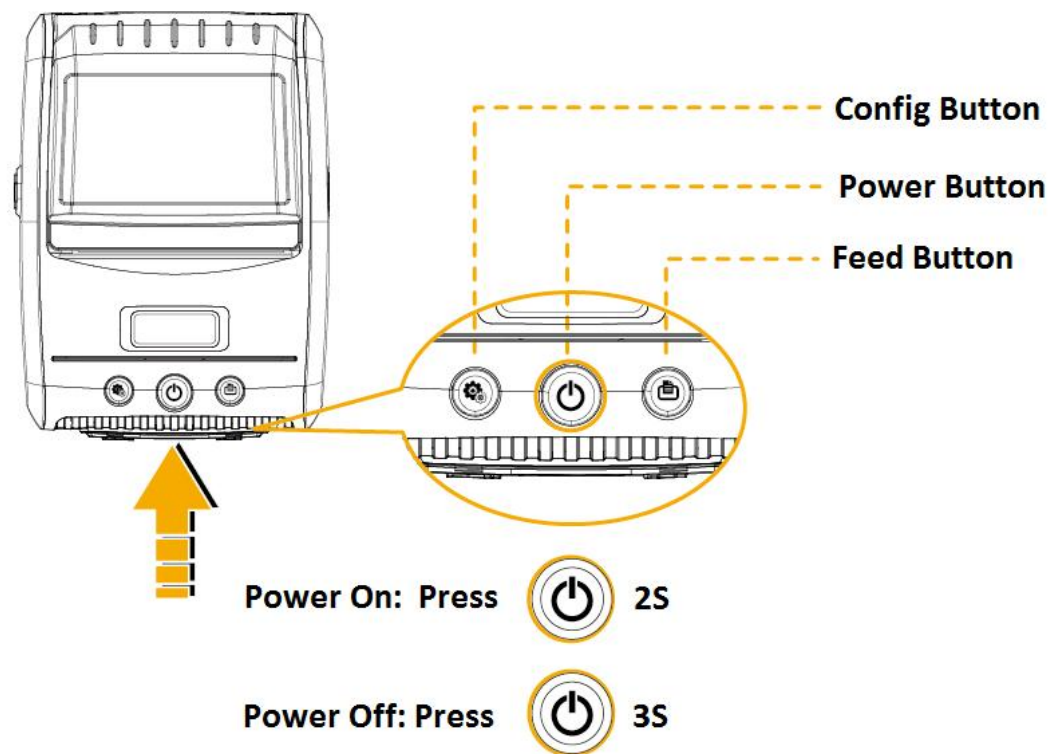
2.5.3. Recharging the battery pack

For recharging the battery pack, install the battery pack in the printer. Insert the Battery Charger to the charge connector of the printer.



NOTE: Do not remove the battery during charging.
The battery is consumable parts and when purchasing, compared to the use hour is decrease gradually.
The recharging time depends on the voltage level and ambient temperature of the battery. Normally, it takes about 2 to 3 hours to recharge a battery pack.
You must use the supplied adapter.

2.6. Set operation mode



2.6.1. Turn on

Keeping on press the power button 2s, turn on the printer.

2.6.2. Turn off

Keeping on press the power button 3s, turn off the printer while the printer is on.

2.6.3. Sleep/Wakeup

If no any operation and no data input, the printer will enter sleep mode.

Pressing the power button or receiving the printing data, the printer will be wakeup.

2.6.4. Configuration

Keeping on press set button 2s enter the config mode.

In config mode, pressing set button will change config option; pressing the feed button will change config content.



print blackness:


- 1 
- 2 
- 3 
- 4 
- 5 

According to the different types of paper adjust the print blackness



Press feed button  printer will print selftest



Press feed button  You can switch interface language

3. Interface

The Mobile Printer has 2 printing interface: mini usb & bluetooth.



3.1. Mini USB

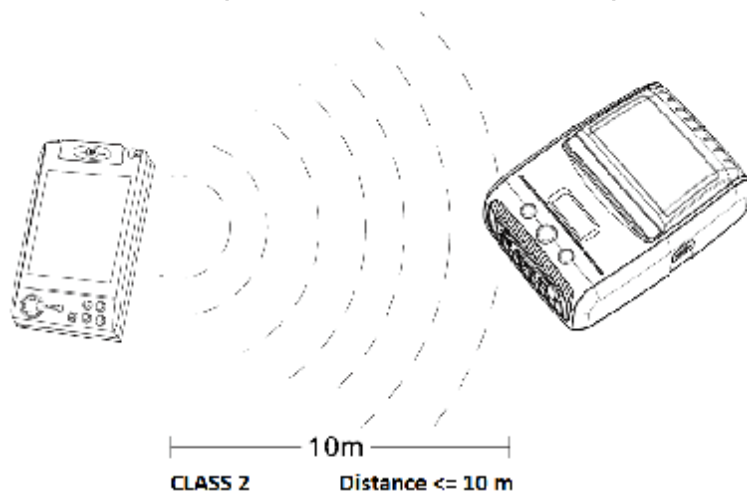
The Mobile Printer has a mini USB interface (It is a UART port also). If you want to print data through the PC standard USB port, you need install the usb device drive first.

USB/RS232 Pin:

Pin No.	Mini USB	RS232
1	VCC [+5V]	RXD
2	DM [D-]	
3	DP [D+]	
4	NC.	TXD
5	GND	GND

3.2. Bluetooth

The Mobile Printer support Bluetooth 2.0 / Class 2 (10m). You can print through the bluetooth port in the Notebook, mobile phone, PDA etc.



4. Using the printer

4.1 Control panel

There are 3 buttons and 1 OLED screen on the control panel.

FEED Button:

Pressing the button, the printer will feed paper.

If the printer is in config mode, pressing the button will change the config option content.

Power Button:

Keeping on press the button, the power comes on or off.

If the printer is in sleep mode, pressing the button will wake up the printer.

If the printer is in config mode, pressing the button will exit config mode.

Set button:

Keeping on press the button, the printer will enter config mode.

In config mode, pressing the button to change the config option.

OLED Screen:

OLED will display most of the printer status information.

(i.e. current printer status, paper out, indication remaining battery, Bluetooth status ...)

4.2 Self-test

The self-test procedure will check most of the printer functions.

Enter the config mode, pressing the set button to select the self-test option then press the feed button. The printer will print out the test result.



Page Title

System information

Communication mode

barcode

2-dimension code

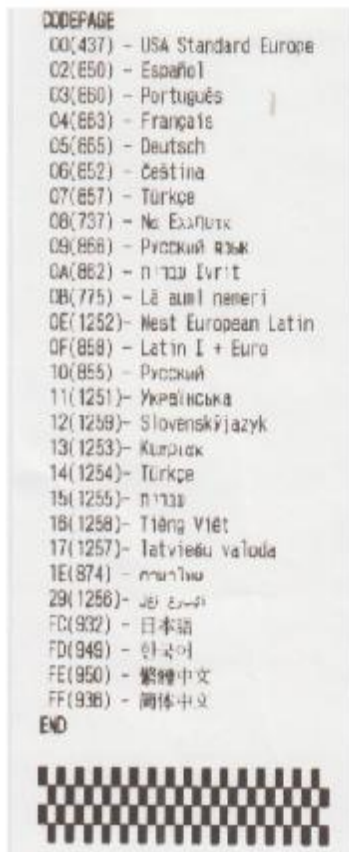


Fonts

International Code
[ASCII code 0 - 127]

Part 1.

Part 2.



Multi-Language
Codepage

Dots test.

Part 3.

5. Consumable Parts

Recommended paper

Type	: Thermal paper, Thermal Label paper
Paper width	: 58mm
Paper thickness	: 50um – 150um
Paper diameter	: 40mm



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.

6. Revision History

Ver 2.2: Changing the Mini USB / RS232 pin description table.