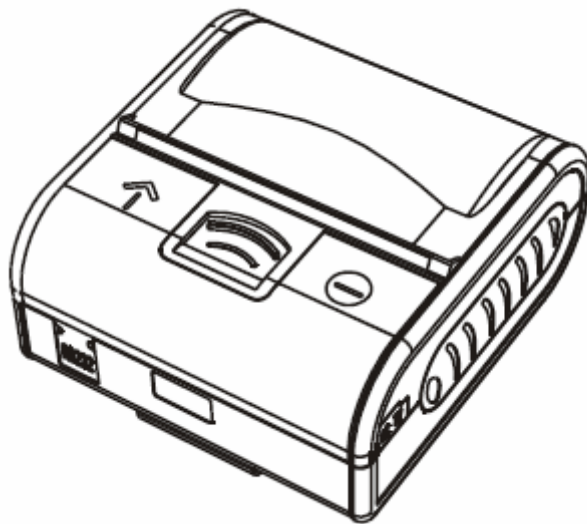


"PRT"

"PRT" Mobile thermal printer

MPT-III Serial

User Manual



Cautions and warning

1. Safety cautions

Only use li-ion battery and power adapter fit for this printer, otherwise it may cause the losses to printer, leakage, fire or explosion.

Don't throw li-ion battery into fire, make battery short circuited, tear it apart or heat, otherwise it may result in leakage, fire or explosion.

For the causticity of electrolyte in li-ion battery, please clean it with water if the electrolyte sticks to your skin or clothes, which resulted from misplay. In case electrolyte into your eyes, wash our eyes with lots of clean water and then turn to the doctor for help.

Don't open the cover while printing or just finishing printing. Don't touch the printer head with any part of body to avoid scald for high temperature.

2. Operation Cautions:

Don't throw the printer into water, or expose to rain for a long time, which may cause the loss to printer.

Don't open the printer cover, otherwise there will be some problems to printing.

Don't plug out the serial cables in serial printing and it may cause the integrity of printing data.

When printing through infrared ray, make sure the infrared ray of facility right towards to that of printer. Distance should be less than 50 CM, and the angle should be less than 30 ° , otherwise there will be some messy code or no printing.

Printer work stably under -10℃~ 50℃, Higher temperature (more than 50℃) or lower temperature (less than -10℃) will bring some bad effect to printing quality.

Higher humidity (more than 80%) or lower temperature (less than 20%) will bring some bad effect to printing quality.

Paper which are bad or stored for such long time will cause the bad effect to printing quality, even loss to printer.

The black mark printed on the Paper roller should be meet the printing standards of black mark. Otherwise the printer can not detect the black mark.

Before charging, make sure the battery runs out of all of power, by which battery can maintain the long lifespan.

3. Storage Cautions

It is better to store printer under temperature : -20℃ ~ 70℃ & storing humidity: 5% ~ 95%

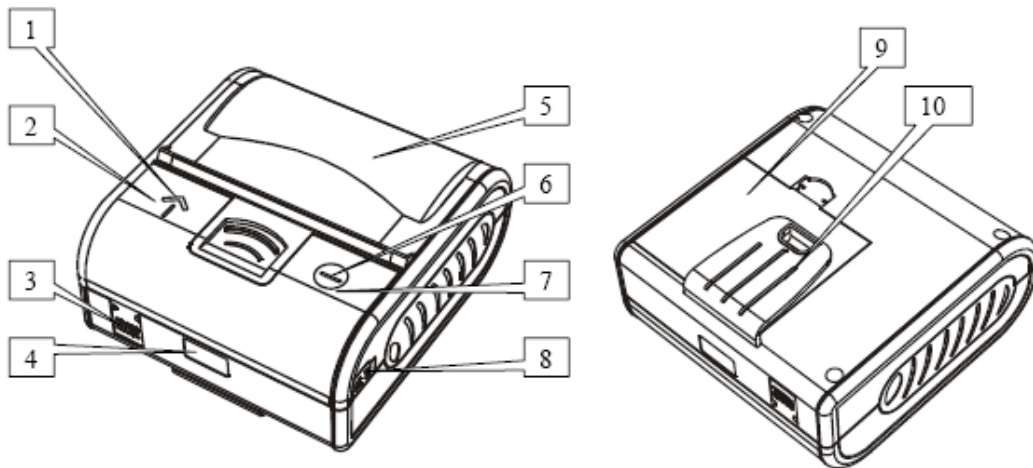
When storing the printer for the long term, please get the li-ion battery out of printer and store it separately. Otherwise, there will be invalid battery, leakage or loss to printer.

Standard thermal paper has the short term preservel. For long-term preservel, please use highly sensitive paper.

Don't store Paper roller in some place where there are some high temperature and direct light. If open Paper roller, make sure that it should be stored to avoid direct light.

Chapter 1 Brief Introduction

1. Appearance



1. Feed on/off
2. Led indicator
3. RS232 serial socket
4. Infared ray (IR) interface
5. Top cover
6. Power on/off
7. Charging indicator
8. Power input
9. Li-ion battery cover
10. Buckle

Note: two LED indicators are under button with different definition

1.2 Model definition

MPT-III Serial

MPT III /IR-D

D: display
Blank: no display

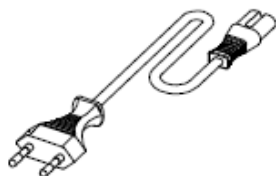
1.3 Accessories

Standard accessories

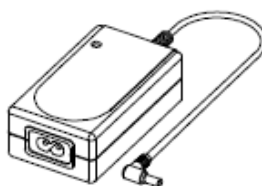
Li-ion battery



Power cable



Adapter



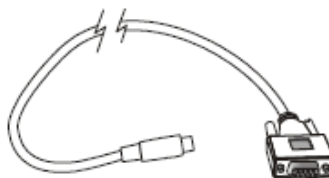
Paper roller



Optional accessories



Leather coat



Serial interface cable

Chapter 2 Function features

2.1 Printing feature

Printing way: Thermal sensitive line dot method

Paper width: 76/80mm

Paper thickness: 60 ~ 80 μ m

Valid printing width: 72 mm

Resolution: 8 dot/mm (230 dpi)

Dot /line: 576 dots

Printing speed: 50-80 mm/s

Printing content: Support any language

Physic parameters

Outer dimension: Outer dimension: 102*108*50mm

Weight: 340g

Paper roller Diameter: \leq 45mm

Interface: Interface: Original IR(RAW_IR), VIR, IrDA (IrCOMM)RS232 port, blue tooth, interfaces varied with different models.

Environment parameters:

Working temperature: -10℃ ~ 50℃

Working humidity: 20% ~ 85%

Storing temperature : -20℃ ~ 70℃

Storing humidity: 5% ~ 95%

Other features.

Paper feeding method: Easy paper loading

Mark position: detecting mark position

Paper sensor: LED indicator flashes when come to paper end meanwhile alarm.

Printing control indication: ESC/POS compatible with commands set

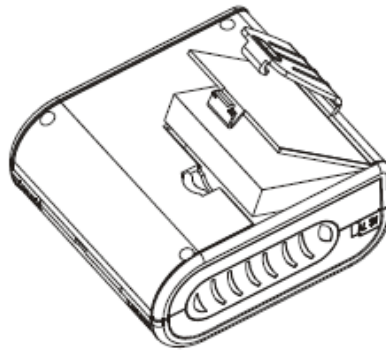
Power: 1600 mAh rechargeable li-ion battery

Power alarm: indicator flashes when printer will run out of power and give out two short hoots. When running out of power, buzzer will give out interval warning to indicate charging.

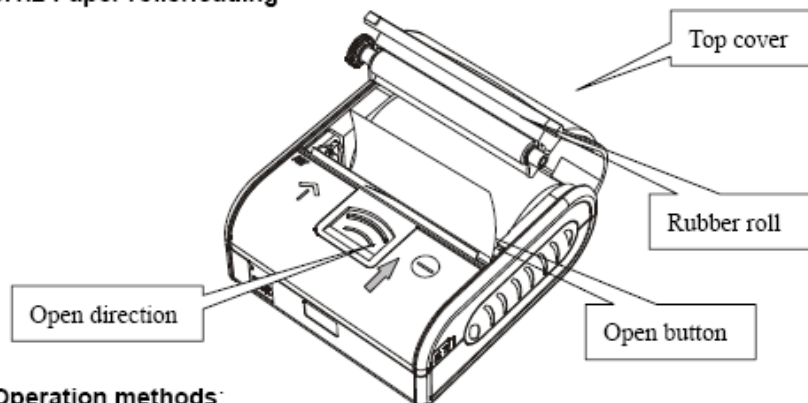
Chapter 3 Operation Methods

3.1 Preparation before using

3.1.1 li-ion battery loading



3.1.2 Paper rollerloading



Operation methods:

- 1、 Push open button and open the top cover.
- 2、 Load the Paper roll as directed in picture. If loaded reversely, it won't print.

- 3、 Pull Paper rollerout of paper unit;
- 4、 Make sure Paper rollerin the center and then close top cover

3.2 Basic Function

3.2.1 Power on

When power off, please push the power button for 2 seconds and then standby, power LED indicator is red.

Note: If green LED indicator is flashing slowly, it means printer will run out of the power and please charge it or replace li-ion battery if you want to continue use it.

3.2.2 Power off

When standby, push power button for 2 seconds, power off, all LED indicators dark.

3.2.3 Self-test

Self-test to test current setting and status.

Methods: When power off, push FEED button, and then push Power on, it print the testing page automatically, including current status and testing samples.

3.2.4 Paper loading

When standby, push FEED button, start feeding, will stop when feeding 50mm paper. User can change the feeding length according to software MPT-III_CONFIG in computer. Feeding length is 0mm, must push FEED button for continuous feeding, stop feeding once loosen button.

If there is the black mark (the detecting mark) recognized by printer on roll paper, printer will stop printing when meeting black mark. If feeding paper length is 0mm, feeding will not be effected by black marks.

3.2.5 Charge

When li-ion battery runs out of power, green LED indicator flash slowly and buzzle will give out warning. It will power off automatically when continues printing. If you want to go on, please charge it.

3.3 Interfaces

3.3.1 Serial interface

Optical accessory DB-9 serial cable (other end is Mini din plug).

3.4 LED indicator and Buzzle definition

There are one buzzle and two LED indicators to indicate the status. LED indicators indicate current status and buzzle indicates the changes of status.

LED indicator (green)	LED indicator (red)	Status	Buzzle
Flash quickly	Dark	Charging	
Flash slowly	Dark	Insufficient power	
Continuously bright	Dark	Charging end	
Dark	Bright continuously	Standby	
Flash slowly	Flash slowly	Paper end	Warning
Dark	Flash slowly	Rest	

Chapter 4 Other information

4.1 Printer manual (Please refer to MPT-III manual)

4.2 Black mark (the detecting mark)

If user wants to locate receipt by detecting mark preprinted, testing mark should meet the testing print regulation. Otherwise it may cause printer can't recognize the detecting mark.

Width rang: $\geq 7\text{mm}$

Height: $4\text{mm} \leq \text{height} \leq 6\text{mm}$

Reflection rate to IR: $< 10\%$ (reflection rate to the black mark on paper $> 65\%$)

Hps: Hps indicates the distance from down edge of detecting mark from beginning line.

$0\text{mm} \leq \text{Hps} \leq 1\text{mm}$

FCC Requirement

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.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

This device can be expected to comply with part 15 of the FCC Rules provided it is assembled in exact accordance with the instructions provided with this kit.

Operation is subject to the following 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.

M/N: MPT-III

FCC ID: Z5GMPT-III