3" Portable Thermal Printer

PTP-III Series

User Manual



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Precautions

♦ Safety Precautions

In using the present appliance, please keep the following safety regulations in order to Prevent any hazard or material damage.

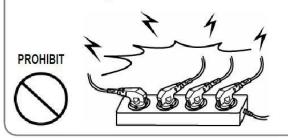


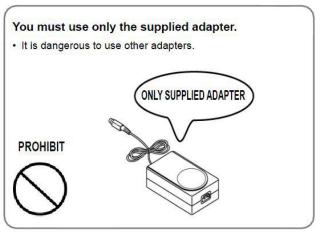
WARNING

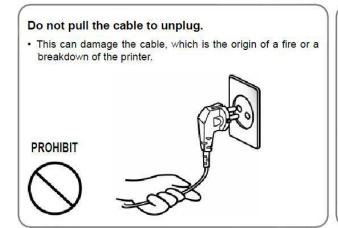
Violating following instructions can cause serious injury or death.

Do not plug several products in one multi-outlet.

- . This can provoke over-heating and a fire.
- If the plug is wet or dirty, dry or wipe it before usage.
- . If the plug does not fit perfectly with the outlet, do not plug in.
- · Be sure to use only standardized multi-outlets.

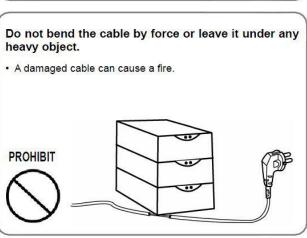














CAUTION

Violating following instructions can cause slight wound or damage the appliance.

If you observe a strange smoke, odor or noise from the printer, unplug it before taking following measures.

- Switch off the printer and unplug the set from the mains.
- After the disappearance of the smoke, call your dealer to repair it.

TO UNPLUG





Keep the desiccant out of children's reach.

· If not, they may eat it.



Install the printer on the stable surface.

 If the printer falls down, it can be broken and you can hurt yourself.





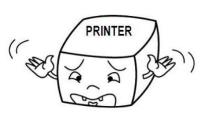


Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.

- Call your dealer when you need these services.
- · Do not touch the blade of auto cutter.

DISASSEMBLING PROHIBITED





Do not let water or other foreign objects in the printer.

 If this happened, switch off and unplug the printer before calling your dealer.

PROHIBIT





Do not use the printer when it is out of order. This can cause a fire or an electrocution.

Switch off and unplug the printer before calling your dealer.

TO UNPLUG





Operation Precautions

Be sure not to print continuously over 1meter, otherwise may cause damage to the printer head.

Water or other liquid should not spill into the printer, also the printer should not be appeared in the rain, or else may cause printer damage.

Please do not open the paper case cover when printing; otherwise the printer may work improperly.

If print with serial interface, should not unplug the interface cable in the course of printing, or else some printing data may be lost.

When print in Ir or IrDA mode, bus sure the Ir window of the host equipment face rightly the Ir window of the printer, the distance should be within the range of 50cm, and the angle should be within the range of 30°.

When print with Bluetooth interface, the communication distance should be within 10 meters, otherwise the printer doesn't print or prints rubbish codes.

Too high(50°C) or too low(-10°C) temperature and too high(80%) or too low (20%) relative humidity both effect the quality.

The print paper in poor quality or stored for too long time also may reduce the print quality even damage the printer.

In the black mark detecting mode, the printer requires that the preprinted black mark is accordant with the black mark specifications (details please refer to 4.2); otherwise the black mark can not be detected correctly.

Be sure to use up the power of the battery before charge it, as it can ensure the using life of the battery.

Storage Precautions

The printer should be placed in such an environment that the temperature is between -20 $^{\circ}$ C and 70 $^{\circ}$ C, and the relative humidity is between 5% and 95%.

If the printer will be stored for a long time, please be sure to take out the battery, otherwise may damage the battery and printer.

Normal thermal paper can't be kept too long time. If you need to keep the receipt for a long period, please choose long term effective thermal paper.

The paper should be keep away from high temperature environment and point-blank sunshine.

♦ Battery Safety Precautions.

Be sure to carefully read the user manual before using the produce.

Ignore the following instructions may cause battery overheating, fire, explosion, damage and/or performance, and reduced product life.

- 1) Risk of explosion if battery is replaced by an incorrect type.
- 2) Dispose of used batteries according to the instructions.
- 3) Do not allow water, sea water from entering or leaking into the battery inside. If the batteries internal safety device burn, when changing it, it may produce any abnormal current and/or voltage, and cause any abnormal chemical reaction, then may cause the battery overheating, fire and/or explosion.
- 4) Do not use or place the battery nearby the stove or other high temperature places. Excessive heat maybe damage the resin shell and/or the insulation materials, and then the battery may be caused overheating, burning and/or explosion.

- 5) When charging, use a specified charger. Other conditions (high temperature, high pressure/high current, using the modified battery charger, etc) excludes here may result in over-charging the battery and abnormal current and/or voltage, cause abnormal chemical reaction, and may cause the battery overheat, light and/or explosion.
- 6) Battery clearly marks with positive and negative. When connect the battery with the charger and/or printer, be sure to verify the correct battery orientation. Reverse insertion will cause the reverse charging and may cause abnormal chemical reaction, and then may cause the battery overheat, ignite, and/or explosion.
- 7) Do not make the battery contact with the power outlet and/or car cigarette lighter socket. This may cause high pressure and excessive current, and lead to the battery overheat, burning and/or explosion.
- 8) Do not heat the battery or put the battery into fire. This may melt insulation material and/or damage safety devices or safety equipment, then ignite electrolytic solution, and cause the battery overheat, burning and/or explosion.
- 9) Do not use the battery with contrary (+) and (-) Location. In the charging process, this will cause the reverse charging and may cause abnormal chemical reaction. During use, may appear unpredictable current exception, and cause the battery overheat, ignite, and/or explosion.
- 10)Do not make the battery (+) and (-) contact with any metal. Also, do not carry along or store batteries with metal objects, such as necklaces, hair clips and so on. Battery internal short circuit may cause excessive current, and lead to the battery overheats, ignite, and/or explosion and the adjacent metal objects (necklaces, hairpins, etc.) may be overheating.
- 11)Do not throw or heavy attack the battery. If internal safety device of the batteries burn, the battery charging may cause any abnormal current and/or voltage, and abnormal chemical reaction, and lead to the battery overheat, ignite, and/or explosion.

1. Introduction

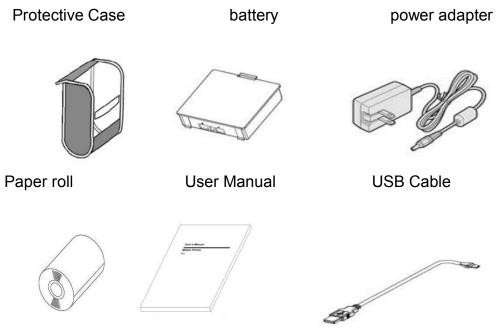
This product is a high efficient portable printers, the weight of the fuselage is small, high durability, long duration printing, widely used in mobile POS, retail, parking tickets, logistics, shipping, warehouse, utility bill, etc.

1.1 Function Features

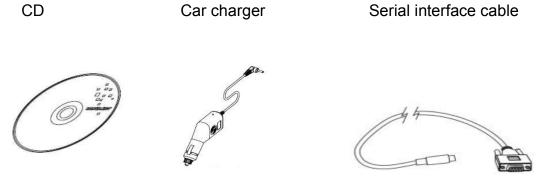
- ※ Equipped with lithium battery, can work continuously for 8 hours
- ※ Portable devices suitable for outdoor use .
- * Waterproof and dustproof up to IP54, even if it rains can still work in the outdoors
- Anti-throw capacity can reach 1.2 m (cement floor)
- Support one dimensional barcode printing, also support QRCODE printing
- * 7.4V/2000mAh large capacity battery with low power design and automatic sleep wake up function, work time longer
- Support Windows
- Support Android and IOS Printing development

2. Accessories introduction

2.1 Standard accessories

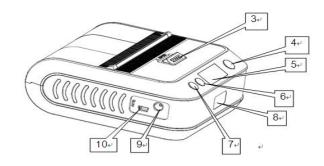


2.2 Optional accessories



3. Components introduction

3.1 Front view



3.2 Back view



- 1.paper roll cover
- 2.paper exit
- 3.open button
- 4.power button
- 5.LED window
- 6.setting button
- 7.paper feed key
- 8.infrared window
- 9.power adapter connector
- 10.Mini USB connector
- 11. Sling hole
- 12. Li-ion battery

4. Function characters

Model	PTP-III	PTP-III/BT	PTP-III/WF
Printing method	Line thermal printer		
Printing speed	50~80mm/s		
Dot pitch	8dots/mm, 384 dots/line		

Printing width	72mm		
Paper width	80±0.5mm		
Paper roll outer	10 (11)		
diameter	40mm (Max.)		
Paper roll inner	13mm(Min.)		
diameter			
Paper thickness	60-80um		
Overall	111v112v49mm		
dimension(WxDxH):	111x112x48mm		
Weight (g)	358 (Including battery, paper roll)		
Printing characters	ANK: 8x16,9X17, 9x24,12x24 GBK:24x24		
Characters/line	ANK:48, 42, 32 GBK:24, 16		
Life cycle time	50km(printing density under 12.5%)/100 million pulses		
	1D: UPC-A,UPC-E,EAN-13,EAN-8,CODE39,CODE93,		
Barcode type	CODE128,CODEBAR,ITF25		
	2D: QR CODE, PDF417		
interface	RS232 / USB	Bluetooth V2.0 / V4.0 RS232 / USB	WIFI, RS232 / USB
Power	2000mAh 7.4V rechargeable Lithium battery		
Recharge adapter	12V,0.8A Stand by recharging / AC adapt	er	
Black mark test	Supported		
Paper feeding	Easy paper loading		
Paper cut	By hands		
commands	ESC/POS compatible with order sets		
operate setting	Temperature -10°C~50°C ; Humidity 20%~85%		
Recharge Setting	Temperature 5°C~40°C; Humidity 20%~85%		
Storage Setting	Temperature -20°C~70°C ; Humidity 5%~95%		
Standard accessories	Li-ion battery, AC adapter, USB cable, paper roll , user manual, Protective Case		
Optional accessories	otional accessories Serial interface cable/CD/Car charger		

5. LED Introduction

5.1 Wireless communication/Setting mode

The photos shows the printer is in wireless communication/setting mode. Caption:





5.2 Data transfer status (**)

It is used for date transfer. It blinks when the printer and external device for data transfer

5.3 Print mode



It is used for showing print mode. It shows when it's printing or feeding.

5.4 Paper out status



It is used for showing paper out mode. It shows when printer is paper out or installed paper incorrectly.

5.5 Cover open status



It is used for showing cover open status. It shows when printer is not closed or closed incorrectly.

5.6 Battery Indicator



It is used for showing battery indicator. It's blinking when printer is charging.

5.7 Character area

It shows characters.

6.Before using

6.1 Battery installation and Precautions

Printer and battery are separated in box. Put battery into battery hole.

Note:Please charge fully when you use battery at the first time.And please also

charge fully if you haven't used the battery for a long time. To keep battery in best status.

6.2 Battery charging

Put power adapter plug into power socket, and put DC plug into charge connector of printer.AC:100-240V(50-60Hz)

When charging:battery indicator is blinking.

Charging finished:Battery indicator shows full, and stop blinking.

Note:1. You may destroy printer if you use power adapter, which is not approved or not provided by our company.

- 2.Do not take the battery out when it's charging.
- 3. You can print when it's charging.
- 4. Please keep printer power on when charging, or it can not charge successfully.

6.3 Paper roll installation

PTP-III printer uses 39mm(diameter) x 80mm(width) thermal paper.

- 1. Take down the seal on paper roll.
- 2. Push the open button to open printer cover.
- 3. Put paper roll into it.
- 4. Pull out a few paper and close the printer cover.
- 5. Tear off the rest paper.

Note:1.Please note the direction of the paper roll.You cannot print if put incorrect direction.

2. Please note to pull out a few paper.

6.4 Preprinted black mark specification

If user wants to locate receipt by detecting preprinted black mark, shall accord to the following specification for the black mark. Otherwise it may cause printer can't recognize the black mark.

Printing position: black mark shall preprint at the left side of receipt.

Width rang: ≥7mm

Height: 4mm≤height≤6mm

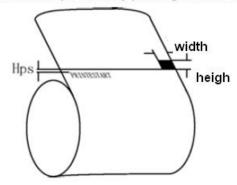
Reflection rate to IR: <10% (reflection rate to the black mark on paper >65%)

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

line.

0mm≤Hps≤1mm

Black mark preliminary printing standard



7. How to use

71 Power on

Press power key 2 seconds.

7.2 Power off

Press power key 3 seconds when it is power on.

7.3 Paper Feed

Press paper feed key:it is feeding 1-2cm paper.

Press persistently feed key:It is feeding 25cm paper.

8.Setting

8.1 Content setting

Press persistently setting key after power on, it shows print quality setting page.

- 8.1.1 setting button
- 0

Switch options

- 8.1.2 feed button

Change options content

8.1.3 save and exit Press the power button or not operating button for 5 seconds, the printer automatically save Settings content and exit the Settings.

8.1.4 Print quality

Two options: High and Normal. You can press paper feed key to change the option.

8.1.5 Print density

Seven options: Option 0-6. You can change different densities according to paper.

8.1.6 Print self-test page

Press paper feed key to start printing self-test paper, self-test page will provide specific models of printers, communication interface configuration, the configuration character, etc.

8.1.7 Automatic shutdown time

Six options:Press paper feed key to choose different automatic shutdown time:0m,30m,60m,90m,120m,240m.

8.1.8 Language option

Two options: Chinese and English.

8.1.9 Bluetooth setting

9. Communication

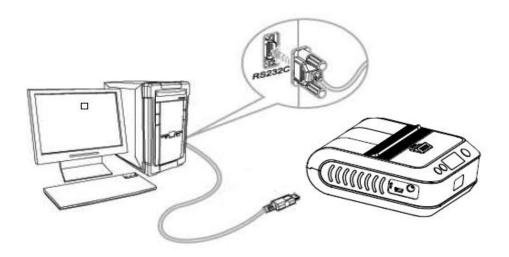
PTP-III printer has two communication ways.

1. Wired: USB/RS232

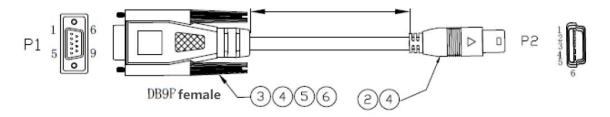
2. Wireless: Bluetooth / WIFI

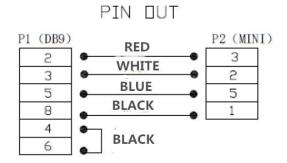
9.1 Serial communication(RS232)

PTP - III printer have a RS232C serial port cable with DB-9 pin (one port connect to the printer, the other connect to 5 pin MINI USB interface)



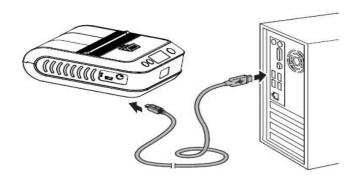
Wiring definition as shown in the below figure



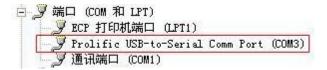


9.2 USB communication

PTP-III printer has a mini USB interface, to achieve it through the mini USB USB2.0 interface.



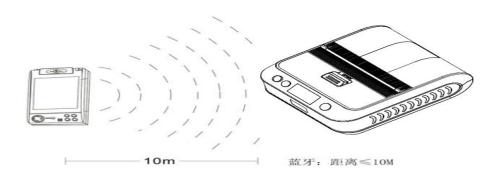
Note: Printer using USB communication, need to install PL2303 driver first. Printer contact computer USB,than open"my printer"—"device manager"—"combo",will see this icon,illustrate that successfully install driver,and use normally.



eg: For instance: If you pull up USB cable, the icon disappear, and it appear reconnection. That shows COM3 is the port connect printer with computer.

9.3Bluetooth communication

PTP-III printer offers bluetooth 2.0/CLASS 2(10m) bluetooth communication way.



Matching method is as follows:

- Power on
- 2. The main equipment for external bluetooth devices,

- 3. If you have more external bluetooth devices, selected inhibits PTP II printer,
- 4. Enter the default password is "0000" or obtained bluetooth password by printer self-test page
- 5. Complete the matching.

9.4 WIFI Communication

Printer can be connected to other sites, such as PDA and PC, support wireless LAN application mode of communication.

Printer can check bluetooth environment(authentication,encryption,connection mode) and wireless local area network(LAN) environment

(IP,SSID,authentication,encryption)by self-test page.

The printer IP address, can't with other terminal IP address conflict.

Combo: Setting by yourself.

Subnet Mask: In accordance with the router.

Gateway: In accordance with the router.

Note: IP and gateway must with routers are on the same network

10. Maintenance

10.1 Daily maintenance

- 1. Please use cloth to clean inside and outside of the printer.
- 2.Please clean printer mechanism regularly. Especially the clean method when print quality turns bad. Please use absorbent cotton with absolute alcohol to clean printer mechanism.
- 3. Please take the battery out when the printer is bilging, and airing printer.
- **4.**Please take the battery out and keep it separated with printer if won't use it for a long time.

10.2 usage and preservation of print paper

- 1.Please avoid to preserve printer paper in high temperature and direct sunlight places. And please do not tear off the package when preserve.
- 2.Please preserve printed paper about 20 degrees Celsius places after printing,to lengthen life-span of printed paper.
- 3. Please choose good quality thermal paper if you want to keep it for long time.

11. Fault diagnosis

Fault phenomenon	Fault cause	Solutions
It beeps two times	Paper out	Please install paper roll correctly.
continuously .		
It beeps two times	Low battery	Please charge
discontinuously,		
It doesn't print when	Install paper roll in	Please re-install.
feeding.	opposite direction.	
	Printer mechanism is	Please clean printer mechanism.
	dirty.	
It prints hazily.	Words in bad quality of	Please set print density and print
	printer paper.	quality or use better quality
		paper.
It beeps three times	Printer cover is open	Close printer cover,
continuously.	when printing.	
Words are blurry in a	Print paper quality is not	Please use good quality paper.
short time.	good.	
	Preservation	Please preserve in about 20
	temperature is too high.	degrees temperature.
Power off automatic	Out of power	Please charge.

Note:It can make words blurry in short time if use bad quality paper.