PP8X PRINTER
USER'S MANUAL

Pinnacle Technology Corp.

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1 Applications

Mobile police management, mobile meter reading, administration execution.

2 Unique Functions and Features

- With endure battery capacity. The product is powered by 7.4V 1400mAh li-battery, which has no memory effect and could be charged at any time. Unique modes of saving power intelligently, standby and sleep lead the printer to keep in the lowest power consumption while it is off printing, so that more receipt could be printed later. And it could continuously print receipt about 80m after a full charge (about 900 pieces of receipt). With high portability, you can take along it by hanging it on your waist, and match it with handheld terminal to make the two work as a mobile sale group.
- RF 2.4G/RF433MHz applies Aclas' patent CSMA power-saving protocol, which is able to establish many-to-many communication. It works below 20 μA while standby.
- Water-proof design. The rubber sticker in the paper outlet is able to prevent from water, oil. This greatly improves the reliability of the printer while it works in rain and polluted area.

3 Advanced Functions and Features

※ Multi-optional wireless communication function: BT/RF2.4G P-tooth/RF433MHz.

※ Original design of translucent cover is practical to check the usage of the paper roll.

※ Print speed: 75mm/s

※ With easy loading configuration, to speed up paper roll replacing.

※ Full of design for human. The designer has considered the convenience fully. Indicator lights and buzzer could clearly indicate the printer’s status: BT communication, standby mode, paper no present and etc.

※ With black mark detector, able to provide black mark locating printing in left and right position.

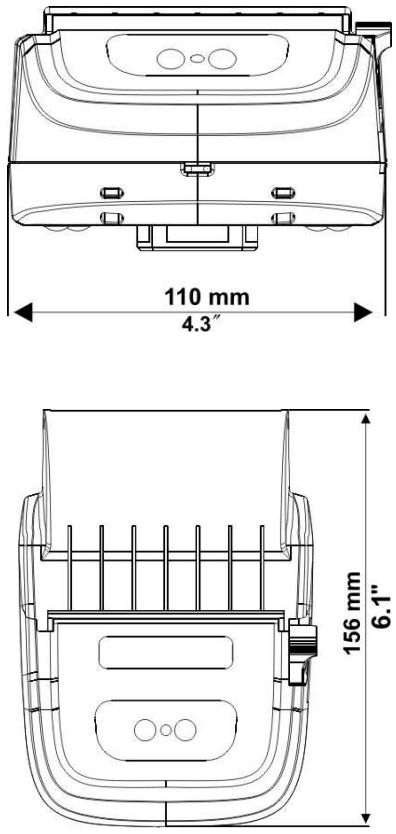
※ Communication ports: BT, RS232, USB, Ethernet.

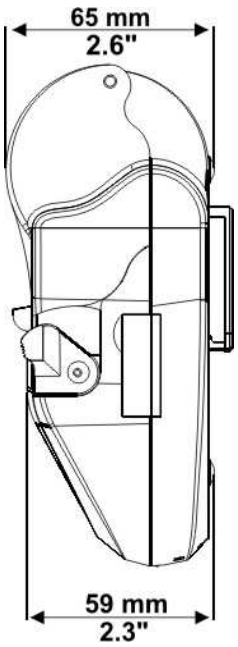
※ Support with ESC/P command.

4 Specifications

Type		**PP86EBWB portable type**	**PP86EUWB desktop type**
Power Supply		DC9V/ 600mA	DC 9V/2A
Power capacity		7.4V 1400mAh, 900 pieces of receipt	/
Print Speed		75mm/s max	
Print Method		Terminal Printing	
Print Resolution		203dpi	
Paper	Paper Type	Terminal Paper	
	Max. Width	79.5±0.4mm	
	Max. External Diameter	Max Φ 56 mm(internal diameter Φ 20 mm)	
Paper Installation Type		With easy loading mechanism to install paper easily.	
Print Font	Character Set	ANK character set, Chinese GB2312, traditional Chinese BIG5, 12*24 dots, 24*24 dots	
	Number of Columns	48 columns	
Barcode Type		UPC-A, UPC-E, Code 39, Code 128, EAN 128. Jan8 Jan13(EAN), Interleaved 2 of 45, Codebar	
Data Receiving Buffer		32Kbyte	
SENSOR		Paper used up; paper will be used up; black mark	
Flash Memory		8Mbit	
Optional function		Battery	
Communication interface		RS232/USB/BT/ Ethernet	
Cash drawer driver		2ports(compatible with EPSON)	
Printer Head Life		50km（recommend to use high quality thermal paper, such as OJI, PD-160R or Aclas paper）	
Paper-cutter		/	
Cash drawer impulse		DC 24V/1A	
Working Temperature		0℃～40℃	
Working Humidity		5%-90%	
Driver		Win9X/WinME/Win2000/WinNT/WinXP, compatible with EPSON	
Print Command		Compatible with ESC/POS Command	
Dimension		110*156*65mm	

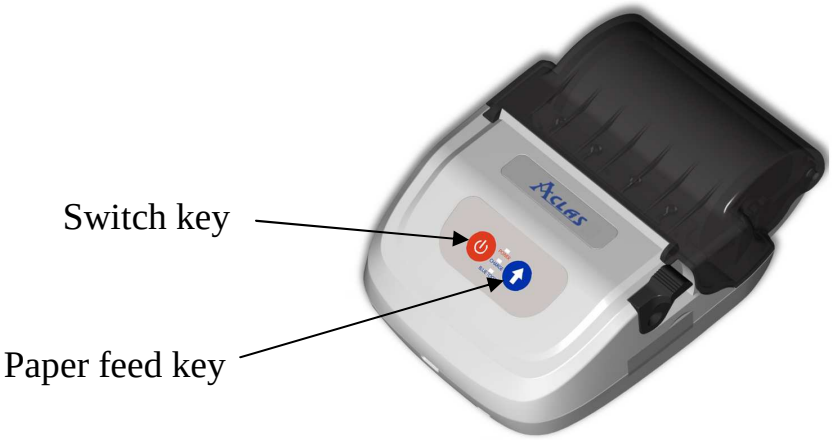
5 Dimension





6 Get to Know the Printer

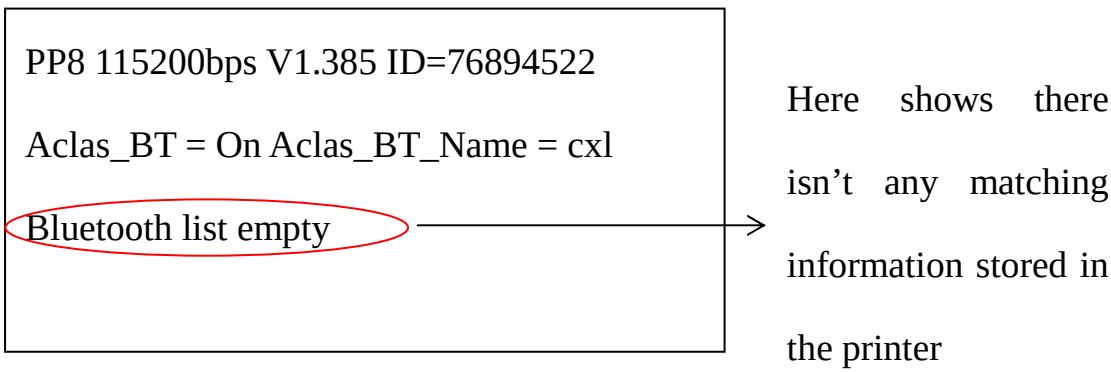
6.1 Start the printer



1. Press the switch key for 3 seconds, and then the printer will send out a ‘beep’, which means the printer has been launched.
2. Restarting the printer by connecting it to power supply (desktop type) or removing and reinstalling its back battery (portable type). After 6 seconds, the printer will auto-print a piece of test page, including startup data, system version, machine code and BT name. This period of time is for BT module starting.

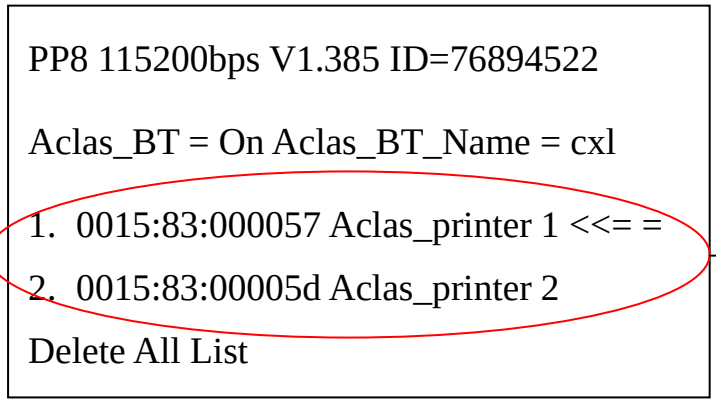
Note:

(1) If there isn’t any matching information stored in the printer (as picture 1), users could perform the printer upon the test page is printed.



picture 1

(2) If there is matching information stored in the printer (as picture 2), users should **wait for 10s** after the test page is printed to perform the printer. The 10s is the time that the printer wait for users to delete the matching information (refer to Chapter 6.2).



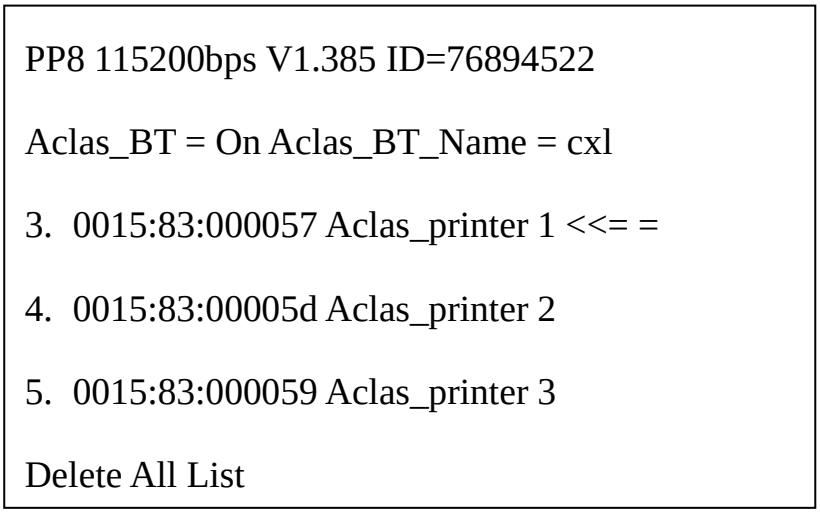
Here shows the matching information stored in the printer.

Picture 2

6.2 Delete the Irrelative Matching Information

Please follow the example below to delete the irrelative matching information.

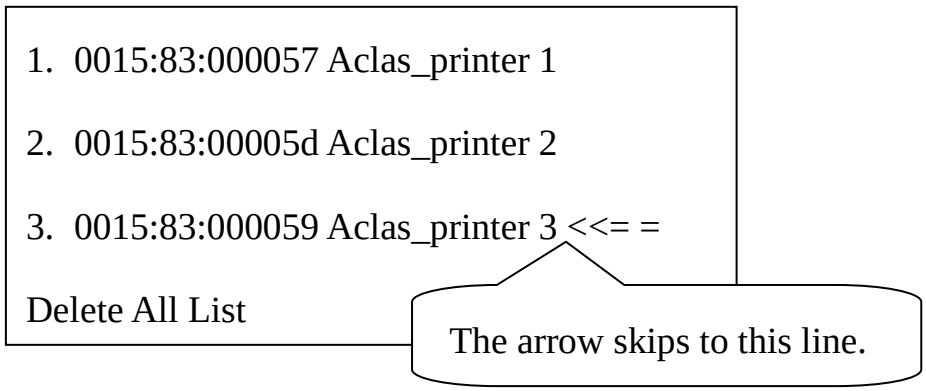
1. Starting the PP8X printer by connect it to power supply (desktop type) or removing and reinstalling its back battery (portable type). Then the printer will print out a list of matching information.



2. Press ‘Paper feed key’ within 10 seconds after the list of matching information is printed. Then, the arrow ‘<<= =’ will move line by line according to the times of pressing ‘Paper feed key’ continuously. And the printer will print out a receipt to show the place of the arrow ‘<<= =’ to indicate the matching information that to be deleted.

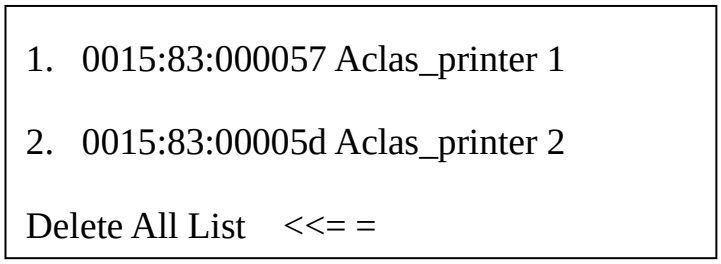
Note: If you press ‘Paper feed key’ over 10s after starting the machine, it will realize the function of paper feeding only.

For example, if you find the third one ‘0015:83:000059 Aclas printer 3’ is the irrelative device, please press ‘Paper feed key’ three times, then the arrow ‘<<= =’ will move to this item.



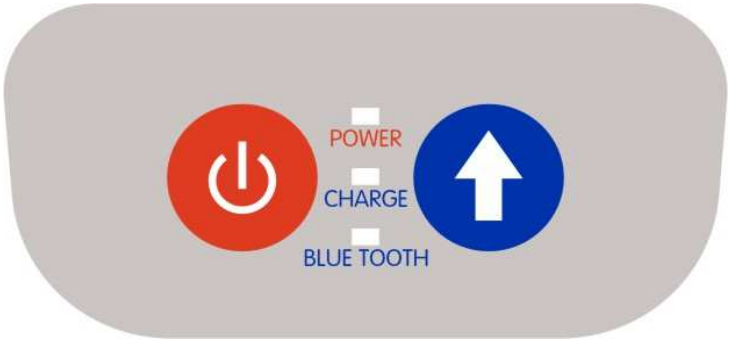
Users can also move the arrow ‘<<= =’ to the item ‘Delete All List’ to delete all the matching information at the same time.

3. Press ‘Switch key’ to delete the selected item. Then the printer will print out a receipt to show the rest matching information as below:



If all the matching information in the printer is deleted, the printer will print out a receipt with the message ‘BlueTooth List Empty’.

6.3 Indicator lights



There are three indicator lights in the above picture.

Indicator lights / Printer status		Bluetooth light (green)	Power light (yellow)	Charge light (yellow)
At work		Glitter in turn		
Sleep mode①		Glittering slowly		
Blue tooth in searching mode②		Glittering quickly	Glittering slowly	
Download program		Glittering slowly	Lighting at intervals	
Charge	ongoing		Constant lighting	Glittering
	finished		Constant lighting	Constant lighting

The power light will be lighting if the printer is powered by the power adapter.

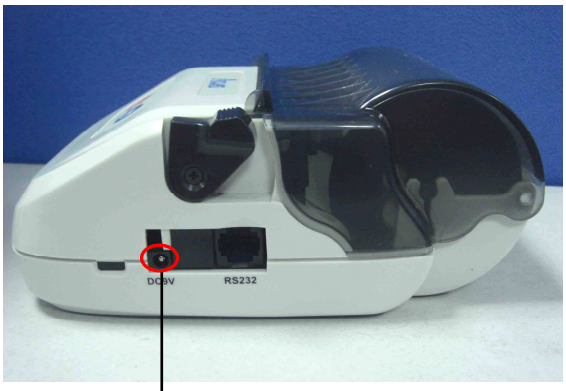
Description:

① If there is not any operation to the printer after starting it for 5 minutes, it will go into sleep mode. At this time, users could press switch key to wake it up.

② To make the blue tooth in searching mode, please press switch key and paper feed key at the same time.

6.4 About charging the battery (portable type)

1. Please full charge the printer for the first time. A full charge usually needs about 2 hours. Please connect the charger to the printer power interface correctly (Please refer to the picture below).
2. As the printer is installed with lithium battery which has not memory effect, please charge the printer at any time if needed.
3. The lithium battery could be fast charged and has the mechanism of overcharge protection, so it will not be destroyed if it is charged repeatedly.
4. The printer could continuously print receipt about 88m after a full charge.



charger interface

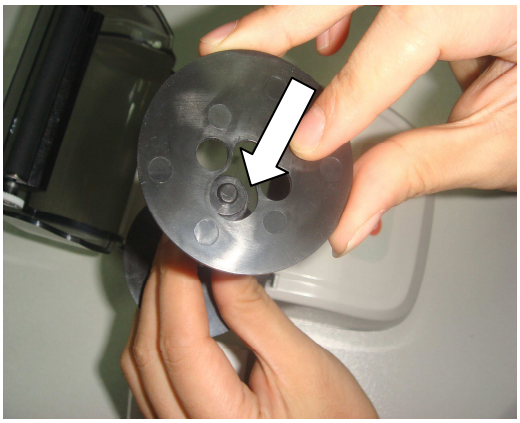
7 Installation

7.1 Paper Installation

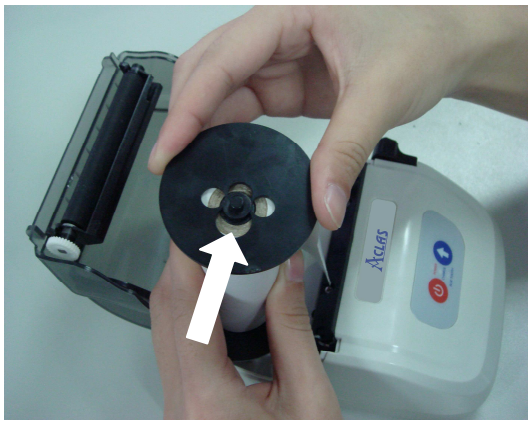
When there is no paper in the printer, it will give you a warning by ‘beep’, and you need to install paper immediately.

1. Press the button to open the cover.

2. Take out the paper roller from the printer.



3. Remove the plate as the arrow shows.



4. After installing the paper roll, reinstall the plate as the picture shows.

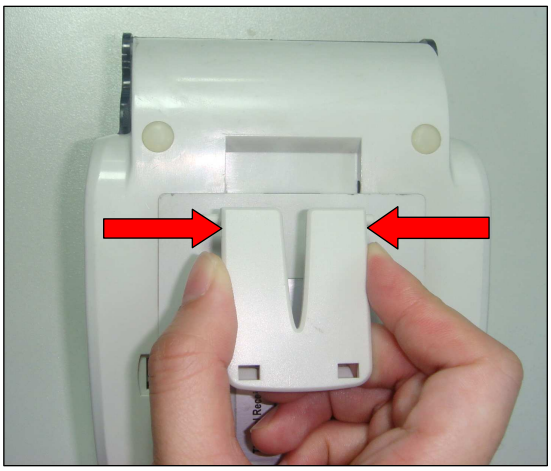
5. Place the paper roll in the slot and pull out the paper for about 3~4cm.

6. Close the printer cover.

7.2 Suspender Installation

The printer is designed with excellent potable function. You can hang it on your waist or on the wall.

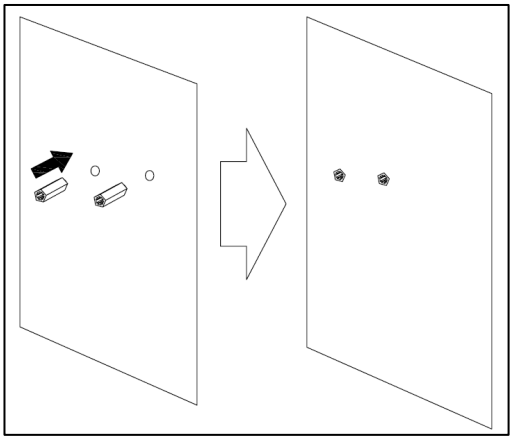
- **Portable type**



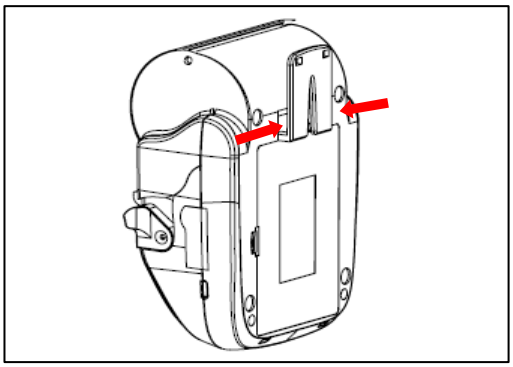
Down towards the buckle and install it to the printer.

Hang it on the waist.

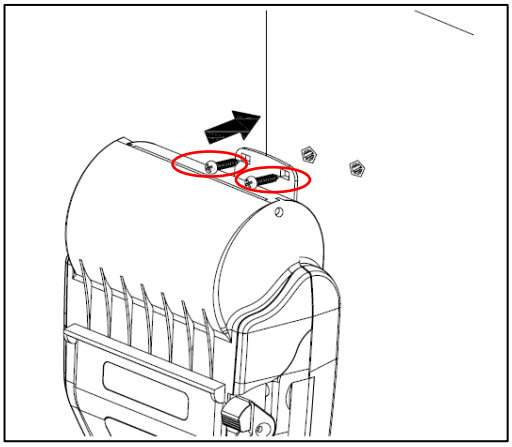
- **Desktop type**



(1) Drill the plastic plug into the wall with percussion drill.

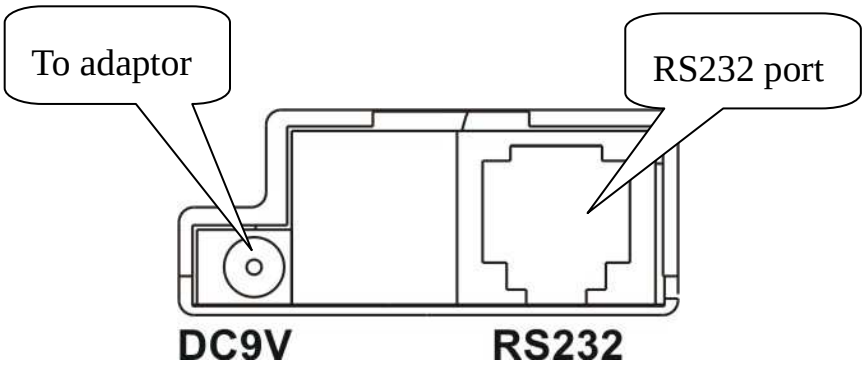


(2) Install the hook to the printer.



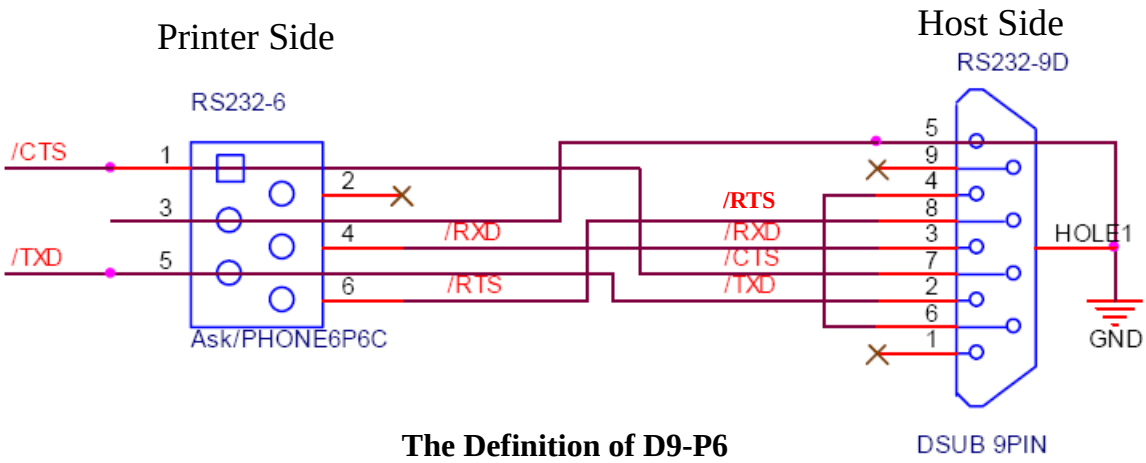
(3) Install the two screws from the hook to the plastic plug with screw driver to fix the printer on the wall.

7.3 Communication Interface



7.4 Cable connection

NOTE: Before connecting any of the cables, make sure that both the printer and the host are turned off.



The Definition of D9-P6

Pin No.	Signal Name	Direction	Function
1	CTS	Input	Clear to Send
3	GND	———	Frame Ground
4	RXD	Output	Receive Data
5	TXD	Output	Transmit Data
6	RTS	Output	Ready to Send