80MM Portable MINI Thermal Printer Instruction Manual

Version
June, 2017

Notice

Declaration

We have been carefully handling the manual and trying our best to ensure the accuracy of the contents of this manual. But we still can't promise it is always correct due to our products are being improved and updated all the time. The contents of this manual will be updated without notice at any time.

All of our products must be used under environments/locations which are taken care by human being. We are not responsible for any loss or damages caused by any accident while the products are used without taken-care by human being. If there are any products failures caused by human behaviors or natural disaster, we will not provide or just provide partial free maintenance.

Please contact local agents for the latest information of the products.

Notes on safety

This section presents important information intended to ensure safety and effective use of the printer. Please read carefully.

▶ Be sure to use the specified battery and power source provided by our company. Connection to an improper power source may cause fire, explosion or damage to the printer.

▶ Don't put the battery into the fire or water, don't disassemble or modify the battery, don't be short circuit, otherwise may result in injury or fire even explosion.

▶ Please don't open the paper room cover when it is printing or just when printing is over, do not touch the print head with hand or body, overheat may cause scald.

Notes on using

1、Do not store the printer in hot and humid conditions.

2、The lithium battery have a character that if it is not used for several months, it possibly can't be charged ever. So for that, we suggest to use the adapter what less than 1A for charging .

3、The printer's power adapter is to be connected to a stable power 110~220 Volts, please do not use other devices on the same power socket, to avoid voltage fluctuations.

4、Avoid water orconductive material (for example: metal). If water is present on the surface please turn off the power immediately.

5、Please ensure that a thermal paper roll is always inserted in the printer to avoid damaging the printing roller and the printer head.

6、Please ensure that your printer is serviced and repaired by a qualified technician. No responsibility is taken for misuse and/or non-qualified servicing.

7、In order to ensure print quality and longevity of your printer, please ensure that only good quality thermal paper rolls are used.

8、Please keep this manual in a safe place, where it can be accessed easily and used for your reference.

1.Features & Application area

一. **Features**

● It can print 80mm width thermal paper
● Paper dimensions 40mm
● High-speed,Clear printing
● Super power lithium electricity, standby time can reach 5-6 days
● Auto sleep, auto awake, save electricity
● Small size、light weight、reliable performance、simple to connect、 easy to use

二. **Application area**

Relative to the traditional thermal receipt printer, Mini portable printer has smaller body, more reliable capability, more convenient printing and portable advantages. The Mini printer can be worked on a lots of locations, such as the TAXI bill printing, administrative fees receipt printing, post receipt printing, restaurant ordering information printing, online payment information printing, etc. With the rapid popularity of smart-mobile, Mini printer will be more widely used in the near future.

2.Specification

PrintingMethod: Direct Line Thermal
Speed:≤90mm/sec
Reliability TPH Life: 100000000 pulse / dot or 100km
Resolution: 203DPI (8dot/mm)
Printing Width: 72mm (576dot)
Paper Width: 79.5±0.5mm
Paper thickness: 0.06-0.08 mm
Roll Diameter: φ≤40mm
Power: rechargeable lithium battery/NI-MH battery
Battery: 7.4VDC, 2000mAh
Charging method: external charger

Print parameters: support to download the Logo trademark
FontA:12*24dots,1.5(W)*3.0(H)mm
FontB: 9*17dots, 1.1(W)*2.1(H)mm
FontC: 9*24dots, 1.1(W)*3.0(H)mm
Simplified/Traditional:24*24dots,3.0(W)*3.0(H)mm
Printing Chinese character: Chinese: simplified Chinese 24x24 point. support
GB18030 font library, support Taiwan and HK traditional(complex font)
ANK: ANK characters
Extended character table:
OEM437/Katakana/OEM850/OEM860/OEM863/OEM865/West Europe/Greek/
Hebrew/EastEurope/Iran/WPC1252/OEM866/OEM852/OEM858/
IranⅠⅠ/Latvian/Arabic/PT1511251/OEM747/WPC1257/Vietnam/OEM864/
Hebrew/WPC1255/Thai
Emulation: ESC/POS command
Line spacing: 3.75mm (Default)
Interface: Serial, USB, Bluetooth 2.0/Two-mode Bluetooth (optional), WIFI
 (optional)
Driver: Win2003/Win2000/WinXP /Win7/WIN8/Win10/LINUX/Android
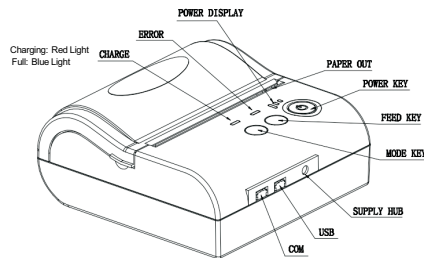Working Temperature: -10～50℃
Humidity: 10～90%
Weight: 260g
Barcode Types:
1DBarcode: UPC-A/UPC-E/JAN13(EAN13)/JAN8(EAN8)/CODE39/ITF/
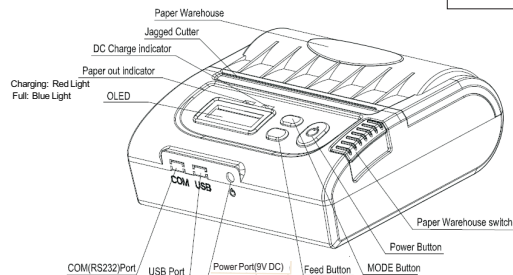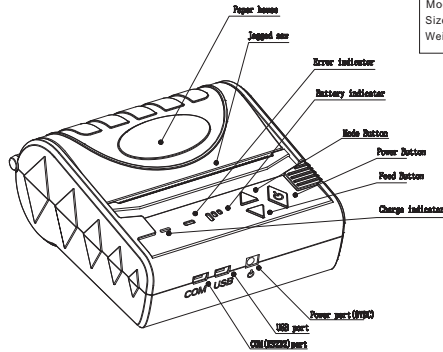CODABAR/CODE93/CODE128
2D Barcode:QR CODE

3.Appearance

POWER DISPLAY
ERROR
Charging: Red Light
Full: Blue Light   CHARGE
PAPER OUT
POWER KEY
FEED KEY
MODE KEY
SUPPLY HUB
USB
COM

Model:8001
Size:103*100*46mm
Weight:260g(with Battery)

Model:8002
Size:102*108*43.5 mm
Weight:285g(With Battery)

Paper Warehouse
Jagged Cutter
DC Charge indicator
Paper out indicator
Charging: Red Light
Full: Blue Light   OLED
Paper Warehouse switch
Power Button
COM USB
Paper Warehouse switch
Power Button
COM(RS232)Port USB Port Power Port(9V DC) Feed Button MODE Button

Paper house

Jagged saw

Error indicator

Battery indicator

Mode Button

Power Button

Feed Button

Charge indicator

Power port(DC5V)

USB port

COM（RS232)port

COM USB
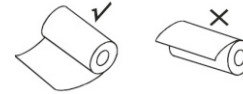
Model:8003
Size:113*109*52 mm
Weight:275g(With Battery)

5.The installation of the paper roll

The printer use 80MM thermal paper, and adopt to easy paper loading. So the paper is very convenient install.

Paper diameter Max 40mm.

Thermal paper installation method is as follows:

（1） Open the printer top cover

（2） Thermal Paper as follow Graph to put into paper storehouse

✔   ✘

（3）Put out a little of the paper outside printer,then close the top cover.

（4）Use paper sawtooth tear off redundant paper

Button Operating Instructions

▮▮▮▮（Blue Light)	ERROR(Red Light)	CHARGE(Red Light / Blue Light)	Printer Status
OFF	OFF	OFF	Printer Close
Flash	OFF	OFF	Printer dormant
ON（Always)	OFF	OFF	Printer open and have paper
ON（Always)	Flash	OFF	Printer Open , without paper
		CHARGE(Red Light)	Charged with Battery
		CHARGE(Blue Light)	Full of Battery
Display 1 or 2 shelf			Low power of Battery
Hold down power for 3 seconds			Printer OPEN/OFF

4.Communication Interface

● 1. RS232(COM) : standard RS232 Communications Protocol

● 2. USB : standard USB Communications Protocol

● 3. Bluetooth 2.0: General Bluetooth2.0 Communication Protocol
   Two-mode Bluetooth: General Bluetooth2.0 / 4.0 Communication
   Protocol

● 4. WIFI: Standard 802.11b/g/n Protocol

Under power on, the paper feeding begins when press 【FEED】button	the printer paper feed
Power off the printer, then hold down the 【FEED】button and press the power button at the same time. Wait 2 seconds ,then loosen the 【FEED】button, the current setting will be printed out.	The printer Self test
Power off the printer, then hold down the 【FEED】button and press the power button at the same time. Wait until the power indicator & 【ERROR】led are both on, and then 【ERROR】led goes off, then loosen the 【FEED】button, the language setting status will be printed out.	Transformation in both English and Chinese
Power off the printer, then hold down the 【FEED】button and press the power button at the same time. Wait until the power indicator & 【ERROR】led are both on, and then 【ERROR】led goes out, after, 【ERROR】led goes on again ,then loosen the 【FEED】button, the density setting status will be printed out. (It has three levels setting for printing density, it is a circle Low levelMiddle levelHigh levelLow level…, Please switch the density status by repeating operation presented above.)	Set printing density
Power off the printer, hold down the 【MODE】button and press the power button at the same time. Wait until the power indicator & 【ERROR】led are both on, and then 【ERROR】led goes out, then loosen the 【MODE】button. The printer turns into the hexadecimal printing mode and print the presentation.Way to quit hexadecimal printing : The way to quit hexadecimal printing mode is switch off the printer .	Hexadecimal printing

6.Operating Manual for Android OS

This manual applies to all of our android OS compatible printers (both 58mm & 80mm width printer)Currently, the common communication ports we used for android OS are (USB、Ethernet、Bluetooth and WiFi)

If you want to use Android Device connected with our printer, filf you want to use Android Device connected with our printer, first of all make sure that printers can be supported Android Operate System, proceed as follows (Bluetooth as example):

Step 1:

- Insert the CD driver disc into the CD-ROM, connect your Android device with your computer;

Step 2:

- Find the File Named " SDK" from the CD driver, Then follow the path : " Android SDK--- BLUETOOTHDEMO ---bin---BT-POSPrinter.APK ", and install it into your Android device.

Step 3:

- Connect your Android device with our printer once the installation done .

Step 4:

- Find this icon　　　　 on the Android device, and click "Connect Printer" to search the Bluetooth printer, (Default pairing password for Bluetooth connection is " 1234") . After the connection successfully, click on the " Print Test Page", the printer will work

If you use the "Ethernet interface", "USB", "WIFI" communication, replace "BLUETOOTHDEMO" from "Step 2" into the corresponding "NETDEMO", "USBDEMO" and "WIFIDEMO".

Please noted, the customers can get all the original code from below path if you need to develop your own APK (Path is: src ▸ com ▸ zj ▸ printdemo)

7.Operating Manual for IOS APP

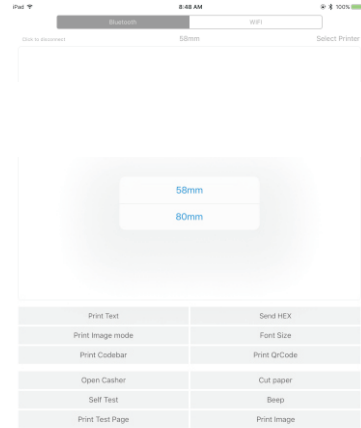1. Download the Test Tools "POS-PrinterV1.0" from App Store,as below:

（Image1）

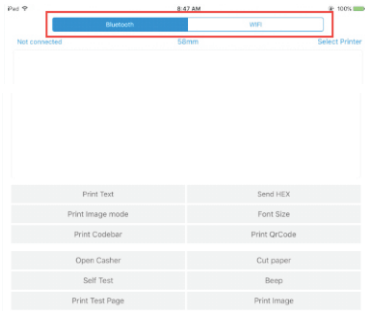2. Turn on the Bluetooth setting of IOS device , then click "POS-Printer":

（Image 2）

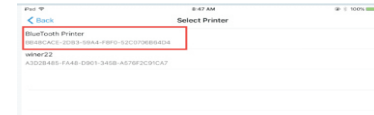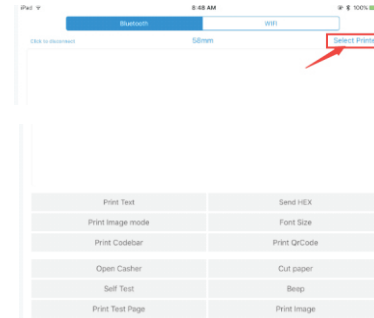3. Into the App of "POS-Printer", select the paper width as below:
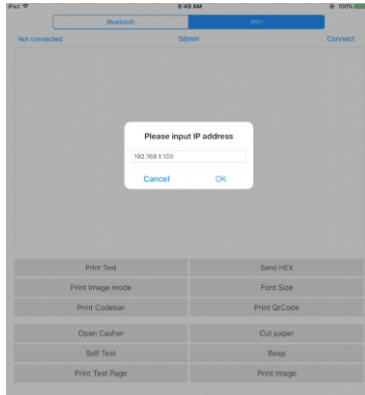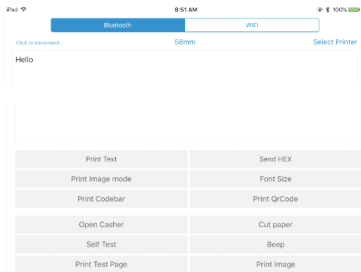

（Image 3）

4. Select the way of communication of printers, "Bluetooth" or "WIFI":

5, If connect with Bluetooth, then you can click " Select Printer" first, you will search the "Bluetooth Printer" (the default name of printer is Bluetooth Printer), click it to be connected.

6, If connect with WIFI, please make sure that your device WIFI is connected with printer (both of them in the same Network segment). And then click the " Connect", enter into the printer IP :

7, If above steps are successful, then you can print text to have a test:

8, Other features of this APP:

① Send HEX: In the text box, enter the hexadecimal data, click "Send HEX",
   then can send text box hexadecimal data to the printer.

② Print Image mode: input data in the text box, click "Print Image mode",
   you will be able to convert the contents of the text box into a image printed

③ Open Casher: If your printer is connected with the cash drawer, click "
   open casher", the drawer will be opened (portable printers without drawer
   interface, this feature does not work).

④ Cut paper: After click on it, the paper will be feed out and cut (portable
   printers, 58 series of printers without cutter, this feature does not work).

⑤ Self Test: Click the "self-test", the printer will print out a self-test page
   (because the Bluetooth printer has been connected to the device, then]
   the Bluetooth name or MAC address will be not displayed in the self-test
   page).

⑥ Beep: Click the "Beep", the printer will beep sound (portable printers,
   58 series of printers without buzzer, this feature does not work).

⑦ Print test page: Click the "Print Test Page", the text will print a section
   of the test, to confirm that the printer is connected and normal print
   successfully.

9.The applicable version: can be compatible with IOS6.0 or above versions.

8.The Bluetooth configuration

Step1: Make sure your device（like PC, Note Book）has Bluetooth function,
then once the Bluetooth for your device is activated, you will see the Bluetooth
sign   showed in the right bottom side of your device(like PC) screen.

Step2:Power on the Bluetooth printer.

Step3:To add the Bluetooth printer, please left-click the [✳] → click "Add a Bluetooth Device" ,then you will enter wizard screen , please choose "My device is set up according and ready to be found"click "Next"(showed as below).
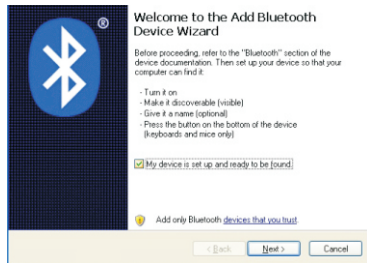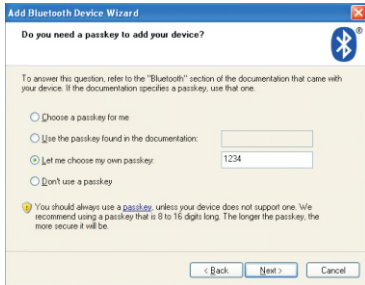

Step4:if you can see screen as below,then the device is searching the bluetooth printer,please wait.

Step5:Once the Bluetooth printer is found. You can see it listed on the screen, click "Next"
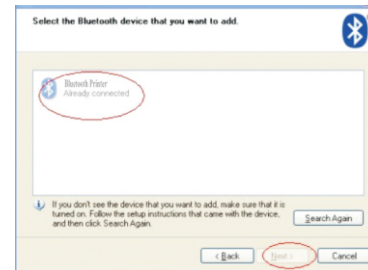
Step6:Choose "Let me choose my own passkey", then enter "1234"(this is factory default passkey, if you want to change it, you have to inform us to set the new passkey for you in our factory before shipping),then click "Next".

Step7:if you can see the screen as below, that means the Bluetooth printer
is already connected. Please notice the assigned COM ports ,then Click"Finish".

（Note: The Bluetooth device will automatically assign a COM port.)

Step8: Now if you want to test if the printer is OK to print, you could use a
com tool , and send printed data to Outgoing COM port(just as above image
shown: COM5).
(Com tool setting is 9600,N,8,1.)

9.How to use the ports of USB/Serial(RS232)

Note:
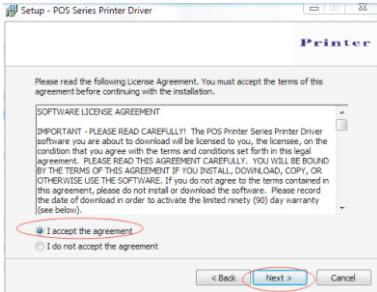Ensure the printer is working before using,and paper is put on the warehouse.
1、Enter the DC driver,click the related files(printer driver software of 58mm/
80mm series)and install.the installation language will be shown as below:
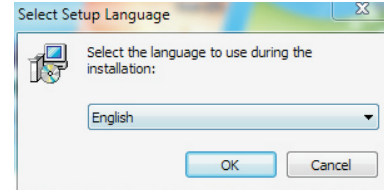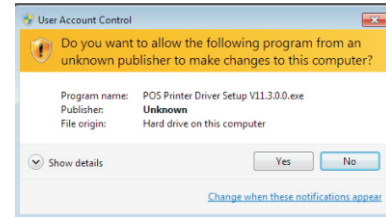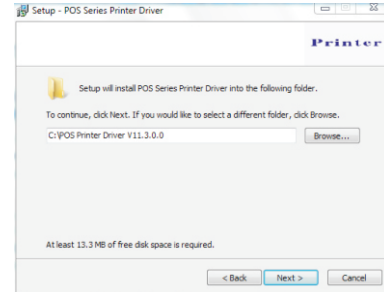
2、Select the language you need and click the button"Confirm",and show
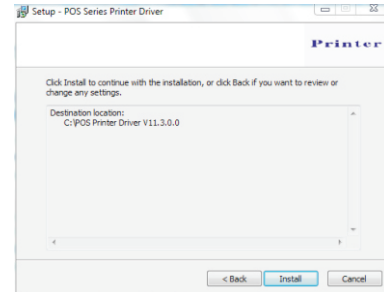the imgae as below,then click the button"next step

4、Click"next step" ans show as below(customer is available for modifying
channel of driver installation or default one)

3、please read the related terms carefully,and install it as agreement as
below

5、Click the button"next step"again and show as below and install it:

6、After installation,the related interface will be shown as below,select operation system of your computer and printer model,click"USB port for testing", if you communication with USB port, USB port of computer will be identified automatically .Click he button"next step"and install continuously as below :
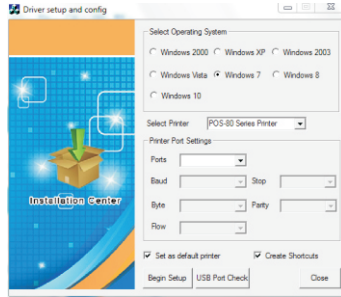
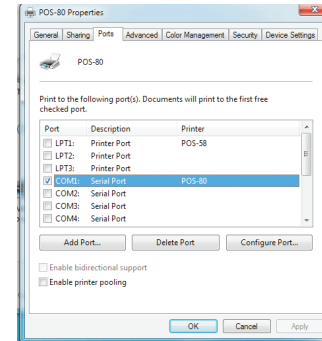7、Click the button"Start Installation" and shown as below. And select installation:
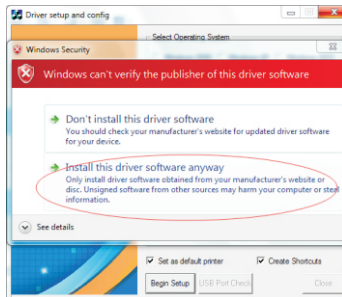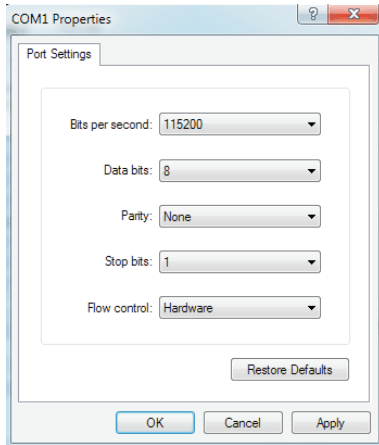

8.Finish the driver installation as below:
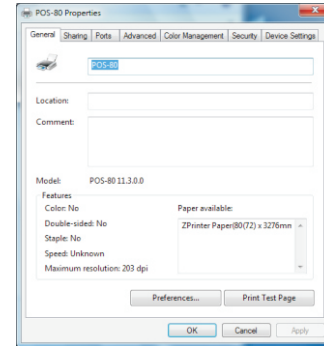
9.2 Serial port to be used (if you choose a serial print)

1. Open the Printer Properties screen, and then select the "Port" item, as shown below:

2. Select the list of ports "COM1" → "Configure Port", the printer factory
   default settings as shown below:

You can see the setting parameters of serial port from self-test page, Click
"Apply", then click "OK" (Note: This setting must consistent with the setting
parameters of serial port from the printer self-test page, otherwise it will be
garbled case) appears as shown below:
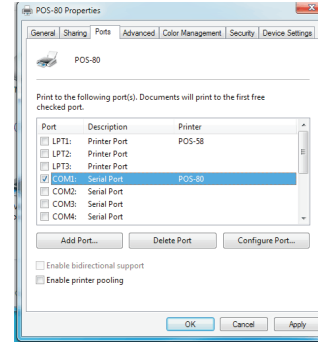
Click "Apply" again.

3.Return to the "General" tab, click "Print Test Page" as shown below:
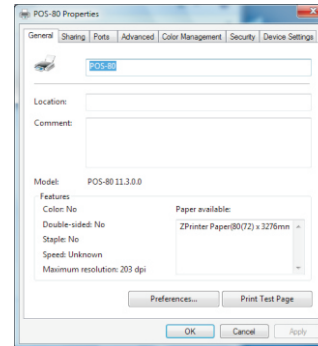
If the printer prints a normal page, then it shows that the work was successful.
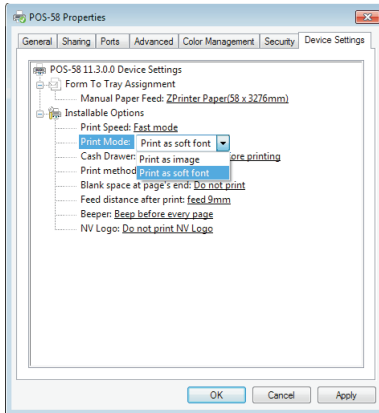If you feel the print speed is slow, please click on the "Device Settings" →
"Print Mode" → Choose "soft font" button as shown below:

10.The WIFI configuration

80mm MINI Portable Bluetooth Printer WIFI parameters configured
through a Browser, the steps are as follows:
1, Connect the printer with PC and switch on the printer.
2, Find the wireless network and link it. Then find the file named"HF-LPB100"
   and link it – after successful connection , go to next step.
3, Enter the IP address (10.10.100.254) into the PC browser, press Enter we
   can see as below:
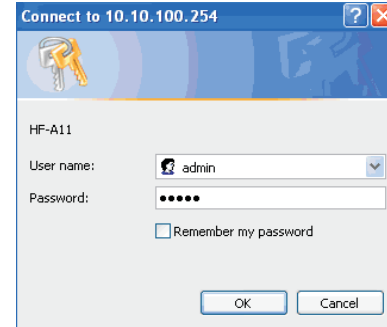
Enter " admin" for the user name and default password is also "admin".
Press ok and then Next:
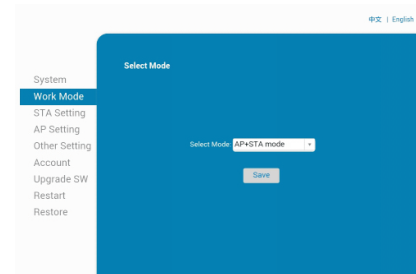
Select "AP+STA mode" , and save.
Note: When the module is selected to STA mode (NIC), then re-start the
module, you can not reuse the wireless configuration, SSID number can not
be found.

4, Select " STA Setting " as below;

中文 | English

Network Name（SSID）
Note: case sensitive   HF-LPB100-AP   Scan

System
Work Mode
STA Setting
AP Setting
Other Setting
Account
Upgrade SW
Restart
Restore

Encryption Method   Disable
Obtain an IP address automatically   Enable
IP Address   10.0.0.
Subnet Mask
Gateway Address
DNS Server Address   10.10.100.254

Save

5, Then click "Scan", it will appear selection as below:

中文 | English

Please select your current wireless network
Site Survey

System
Work Mode
STA Setting
AP Setting
Other Setting
Account
Upgrade SW
Restart
Restore

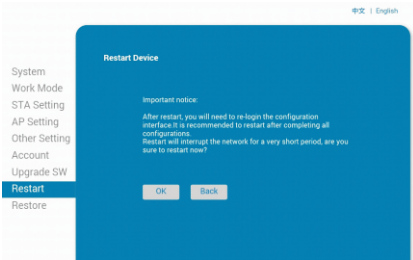| SSID	BSSID	RSSI	Channel
ChinaNet-iApS	D4:5E:5C:76:39:44	33	1
libo	C0:61:18:60:E5:64	0	1
WiFi-21	B0:D5:9D:2C:65:21	78	6
	5C:63:BF:96:73:C	52	6
TP-LINK_E5977A	28:2C:B2:E5:97:7A	4	6
TP-LINK_F901D1	A8:57:4E:F9:1:D1	82	11
tianyuxin	EC:5C:9F:A1:D6:D2	9	11
ChinaNet-Lb74	01:E:40:F4:A2:78	11	11

OK   Refresh

Above are all your current wireless network, select one of your wireless device
available to be used, then click " OK ".

6, Input the correct configuration within the dialog, as below:

中文 | English

System
Work Mode
STA Setting
AP Setting
Other Setting
Account
Upgrade SW
Restart
Restore

Network Name（SSID）
Note: case sensitive   TP-LINK_F901D1   Scan
Encryption Method   WPA2PSK
Encryption Algorithm   AES
Password   ●●●●●●●●
☐ Show passwords
Obtain an IP address automatically   Disable
IP Address   192.168.1.105
Subnet Mask   255.255.255.0
Gateway Address   192.168.1.1
DNS Server Address   10.10.100.254

Save

STA setting is complete, click "save".
7, Select "Other Setting", setting as below:

中文 | English

System
Work Mode
STA Setting
AP Setting
Other Setting
Account
Upgrade SW
Restart
Restore

Serial Port Parameters Setting
Baud Rate   9600
Data Bit   8
Parity Bit   None
Stop Bit   1
CTSRTS   Enable

Save

Network Parameters setting
Protocol   TCP-Server
Port ID   9100
Server Address
TCP Time Out Setting   300

Save

Web Ver:1.0.14

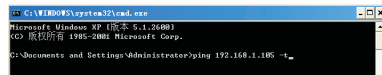After finish the setting, click " Save".
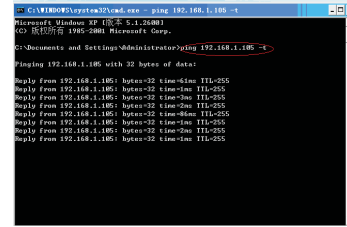8,Restart the module, as below:

Module configuration is complete
9, Click computer "Start"⟶ " Run", Input word "CMD"，as below：
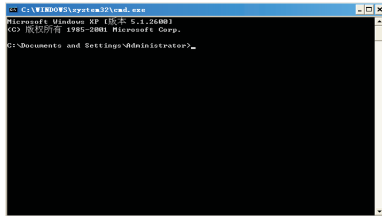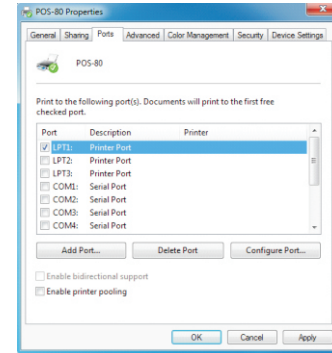

Input "ping 192.168.1.105 -t" as below

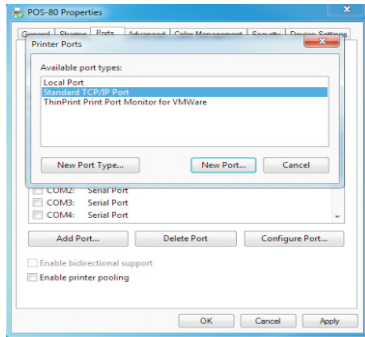If details shows as below , means connection is Ok

Return to the driver -" properties " - " port "-" add port ", consistent with the
add ports :

WIFI port choose：
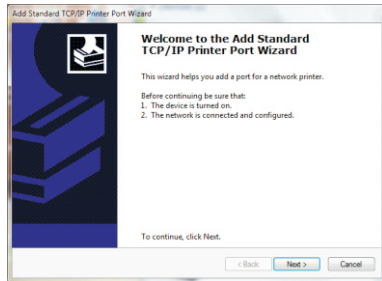
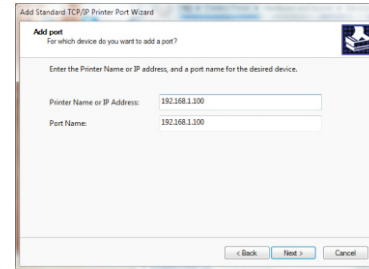1,Open the Printer Properties screen, then select the "Port" item, as shown
below:

2,Click "Port" to Select "Add Standard TCP/IP Printer Port Wizard", click "Next" to continue the installation.
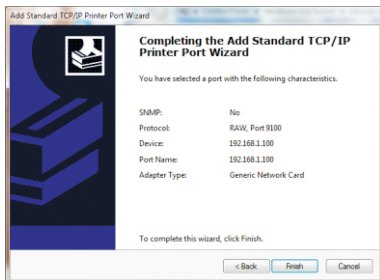

3,Enter the IP address into "Printer Name" dialog, and click "Next" to continue the installation.

4,Add the standard TCP / IP Printer Port Wizard, select the device type, and then click "Next" to continue the installation, See the following image:
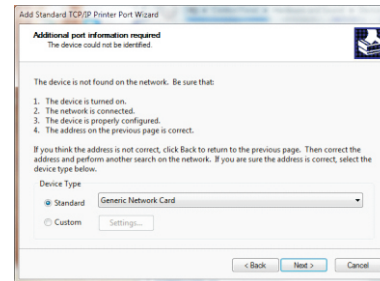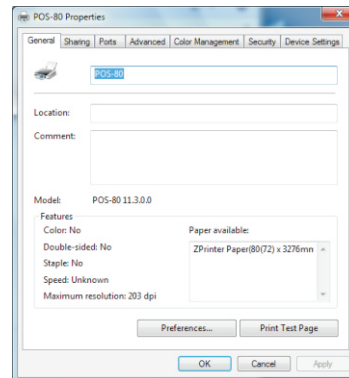

5,Click "Finish" to complete the installation, see the following image:

6, Installation will return to "Properties" interface, and then select the correct IP port, click "Apply", you can now print a test page. See the following images:
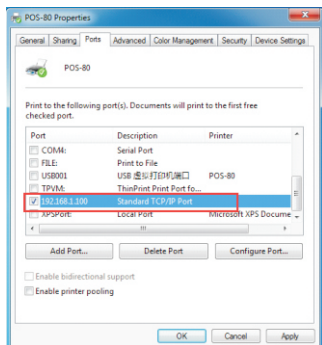
7, Return to " General " and click " Print Test Page " as below:

11.Cleaning of printer head

Cleaning of printer

When the printer has the following conditions, you should clean the printer head:

① The printer does not print clearly and the thermal paper is Ok.

② The printer Print pages lengthways is not clear

③ It's getting too noisy while feeding paper or printing.

Printer head cleaning steps are as follows:

1. Power off the printer and open the paper room cover. Remove the thermal paper roll.

2. If the printer just finished printing , please wait for the print head to cool down.

3. With a soft cotton cloth dipped in ethanol (please make sure there is no dripping), wipe the thermal printer head gently and remove any dust or stains.

4. Wait for the complete evaporation of any ethanol, then place the thermal
   paper roll back in the printer and close the paper room cover, then print a
   test page.

Notes :

- When the printer maintenance must ensure that the power is shut down
- Hands or other metal tools away from the surface of the printer head,do not
  use tweezers to scratch the surface of the printer head and other sensitive
  parts.
- Do not use gasoline,acetone and other organic solvents for printer head
  cleaning.

12.General Troubleshooting

1: Why serial port printer printing messy code?

A: Ensure the baud rate setting in the PC is same as the printer baud rate.

(we can see printer baud rate from self test page)

2: Self printing test is ok,but printer does not work after driver installation.

A: Recheck the installation according to above installation wizard and see if
 we selected the right port or ask service center for advice if needed.

3: Malfunction of paper feeding?

A: Use soft brush to clean the paper sensor and try again or send it to the
service center for repair.

4. Malfunction of the indicator light

A: Check the cable connecting way / adapter / power cord / switch on or off?
Or contact the service center for repair.

5. Messy code printing except Arabic numeral printing.

A: language switching incorrectly, please use our tool "IPrinter" (you can find it
   on the enclosed CD) to change the language what you want print.

6. Red indicator keep flashing during the printing.

A: Usually it is due to the high temperature of the print head. If printing
stopped,please contact the service center for repair.

7. Printing speed is very slow for serial printer

A: follow this path and change the set accordingly : Driver -- Properties --
Device Settings -- Print Mode -- Print as soft font.

8. Water or other liquid spills into the printer

A: Cut off the power,we can dry the main board or printer head with a hair
dryer, careful of the temperature (average 50 degree is ok)

9. The printer can't work

A : The battery maybe without electricity,   please use power adapter to
charge. Then you try to star the printer, if the printer has same problem, please
send to service center for repair.

10. Can not search the Bluetooth printer

A : Please check the equipment "Bluetooth" function whether opened, the
communication whether normal, then replug the printer "Bluetooth Module"
try to connect and search "Bluetooth" again, if the problom are still existed,
please send the specified location repair.