SYLVESTER

80mm Series Thermal Receipt Printer

Instruction Manual

SYLVESTER

Version Number

June,2014

Statement

While every precaution has been taken in the preparation of this manual,but we can not guarantee the contents of this manual entirely correct, because our products have been continuously improved and updated, so it can not be amended at any time the company reserves the right to promptly notify the user if necessary with the product-related Further information can be linked with the dealer.

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Safety Precautions

This section presents important information intended to ensure safe and effective use of this printer.

WARMING:

Cautions:

1) Please apply the power adapter to a stable voltage (110-220V), please do not use other devices on the same power outlet to avoid voltage fluctuation.

2) Install the printer on a flat and stable surface to avoid printer suffered from any vibration and shocks.

3) If water or other liquid spills into the printer, unplug the power cord immediately and contact your dealer or service center for advice.

4) Disconnect the power cord if the printer is idle for a long time.

5) Please ensure the switch button is "off"before you plug the power cord.

6) The printer should only be disassembled or repaired by a technician.

7) Please strictly follow the recommended use tips of this manual.

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1.Product Information

Our Newly 80mm Thermal printer possesses following features:

- High-quality printing,High-speed and strong stability;

- Interface (Serial / RJ45 Ethernet / USB /WiFi)

- Android device support if connect with USB /WiFi method;

- IOS device support if connect with RJ45 Ethernet / WiFi method;

1.1 Technical Parameters and Features

Printer Method	Line Thermal
Print Speed	300mm / sec
Fonts	simplified Chinese 24x24 point. support 18030 font library,support Taiwan and HK traditional(complex font), Korean and Japanese
Character Size	576dot/line or 512dot/line ANK Character Font A:12*24dot,1.5(W)*3.0(H)mm Font B:9*17dot,1.1(W)*2.1(H)mm Simplified/Traditional:24*24dot,3.0(W)*3.0(H)mm
Extended Character Table	OEM437/Katakana/OEM850/OEM860/OEM863/OEM865

	WestEurope/Greek/Hebrew/EastEurope/Iran/WPC1252/OEM866/OEM852/OEM858/IranII/Latvian/ Arabic/PT151,1251/OEM747/WPC1257/Vietnam/OEM864/Hebrew/WPC1255/Thai
Logo / Trademark	Download and printing support
Interface	Serial / USB / Ethernet / WiFi
Print Command	ESC/POS Command
Roll Width	79.5±0.5mm(Print Width72mm)
Roll Diameter	80mm
Paper Thickness	0.06-0.08mm
Power Supply	DC24V/2.5A
Auto Cutter	Full / Partial Cut
Temperature	0-45℃
Contrast Humidity	10-80%
Driver	Win2000/Win2003/WinXP/Win Vista/Win7 /win8/Linux

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1.2 Application:

It can be used for all kinds of commercial in retail POS systems, Restaurant system, Industrial control systems in areas such as.

- Light weight and portable

- Beautiful shape

- Low cost and High-quality thermal printing

- Cash drawer drive supported

- Easy paper-roll installation, Easy maintenance and Rational structure

- Low-power waste, low-run cost (without the ribbons, ink cartridges)

- Built-in data buffers (be capable of receiving print data while printing)

- Characters can be amplified,printed in bold optionally,and line spacing

   printing can be adjusted;

- Support different density bitmap graphics printing

- Support NV image downloading and printing

- Support raster bitmap printing

- High-speed printing using embedded soft font for all interfaces.

- Compatible with ESC/POS print instruction set, optional columns and font

(adjusted by DIP switch);

Advantage Characteristics

- Audible and visual alarm supported, best application for kitchen menu

   printing;

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2.Communication Ports

2.1 Universal Serial Bus（USB Port）

Connect the printer with the standard usb cable(usb device types are automatically) , once printer is connected with the PC, install the driver , then choose the corresponding port accordingly.

2.2 RJ45 Ethernet Port

With this port, we can use the network cable and connect the computer

directly, or

connect PC computer and other terminals via a router;

2.3 RS232 Serial Port

RS-232 is developed according to the EIA standard asynchronous transmission,

the specification as following:

- Data transmission: serial interface

- Synchronization: asynchronous

- Signal Level: +5.4V Serial RS232 Level,logic 1:-5.4v, logic 0: +5.4V

- Hardware Flow Control: Hardware

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· Baud Rate:9600bps to 115200bps(Optional)

· Data Length: 8 Bits

· 1bit Stop Bit: 1Bit

· Parity: None

The wiring method of the serial interface printer following the standard rules of Serial Interface EIA standard. Consumer can get the current default baud rate from " Print Test Page "and also can adjust the baud rate via DIP switch (DIP switch is on the bottom of the printer)

2.4 WiFi Port

Standard Certification FCC/CE

Support TCP/IP/UDP network protocol stack

Support 802.11b/g/n wireless standard

Support UART/GPTO Ethernet communication interface

Support wireless work under STA/AP/AP+STA Mode

Transmission   mode:Transparent   Transmission   &   Protocol Transmission mode

Frequency Range: 2.412GHZ–2.484GHZ

Effective Distance: 100M/Outdoor; 50M/Indoor

3.Basic Function Operation

3.1 Indicator Light & Printer Status

The printer has 3 Led Indicators(Power / Error and Paper Out),Power indicator will lights on once power is plugged in. And Error Led will lights on when any error arose (Paper Out / Temperature is too high / mal-position of the carriage unit on the print head); We can press the "FEED" button to test the paper feeding function if the power indicator looks well.

3.2 Printer Operation

· **Switch on:** Ensure the adapter properly connected with the printer, press the switch on the "1"position, printer turns on.

· **Switch off:** Press the switch on the other side "O".

· **Paper Feeding:** Press " FEED" button when powers on, paper will keep running & stop to run when loosen this button.

· **Self Printing Test :** Switch off the printer then press "FEED" button and do not release. Press the "POWER" button at the same time till the " ERROR" indicator on, release the button about 1 second after the "ERROR" indicator off.   Then we can read the current setting from the test page.

· **Hexadecimal printing:** Power off the printer, press "FEED" button &

do not release, press "POWER" button at the same time until the " ERROR" indicator on, release the "FEED" button about 3 seconds after the " ERROR" indicator off ; The way to quit Hexadecimal printing model is just press " FEED" button by three times.

· **Aging model printing:** power off the printer, press " FEED" and hold it until the " Error" indicators turn on and off; repeat this operating if we wish to exit the aging mode.

DIP Switches and Instruction

Item	Function	ON	OFF
1	Cutter	YES	NO
2	Buzzer	YES	NO
3	Print Density	YES	NO
4	CN/EN Convert	CH	EN
5	Empty		
6	Baud Rate Set	YES	NO
7	Baud Rate		
8	Baud Rate		
Baud Rate Selection Instruction			
No.6	No.7	No.8	Baud Rate

ON	ON	ON	115200
ON	ON	OFF	38400
ON	OFF	ON	19200
ON	OFF	OFF	9600

4.Cleaning Of the Printer

We need to clean the print head if problems as below.

① Printing is not clear, but thermal paper is ok;

② Some columns on the printed pages are not clear

③ Noisy paper feeding

Cleaning steps

1. Turn off the power,open the printer cover and take off the paper roll.

2. We have to wait for a while if we just finished the printing.

3. Use a soft brush or wrung-out ethanol immerged cotton to clean the print head. Remember to turn on the gear while lubricating to ensure a completely lubricated;

4. Close the cover once cleaning done and try it later.

Cautions:

· Make sure the power of the printer is turned of during the maintenance.

· 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.

5.Installation Wizard

5.1 Hardware Connection

Ensure all the cables connected correctly(e.g. Adapter / Interface Cables / RJ-11 cable) . Open the cover and load the paper rolls and cartridge (Paper Loading Direction as below)

Jpg-1

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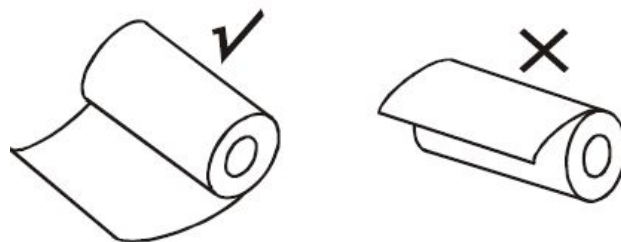
5.2 Driver Installation

1: Insert the driver CD and find the corresponding driver file and install

it.Choose you desired languages as below;

2: Click OK once language selected and now we come to below jpg ,

then click Next.
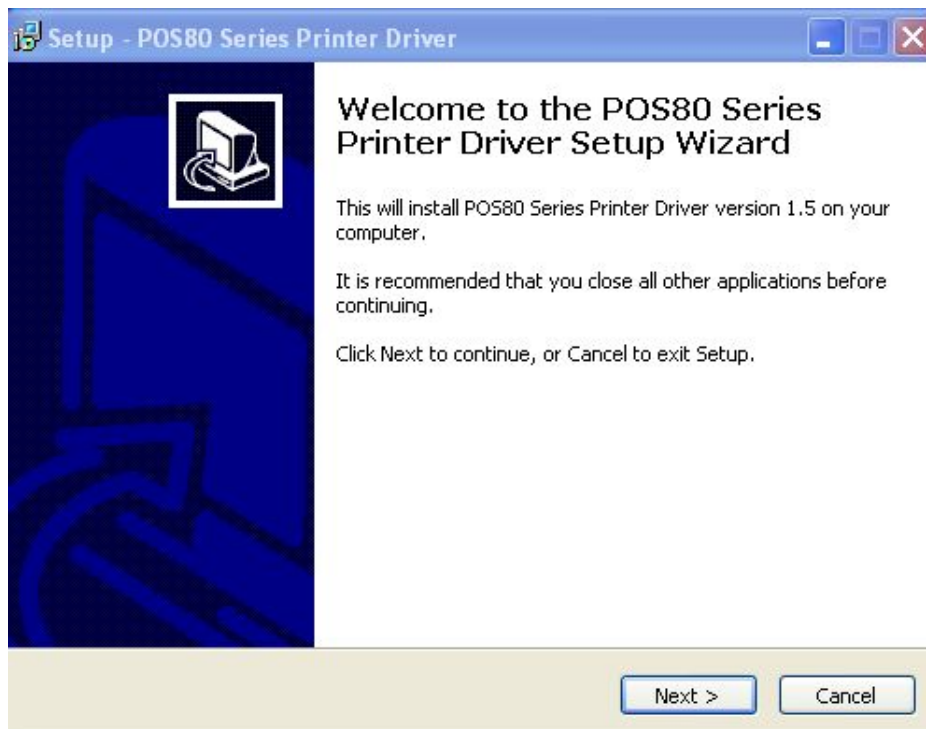
3 :Read the Software License Agreement information carefully and click

Next
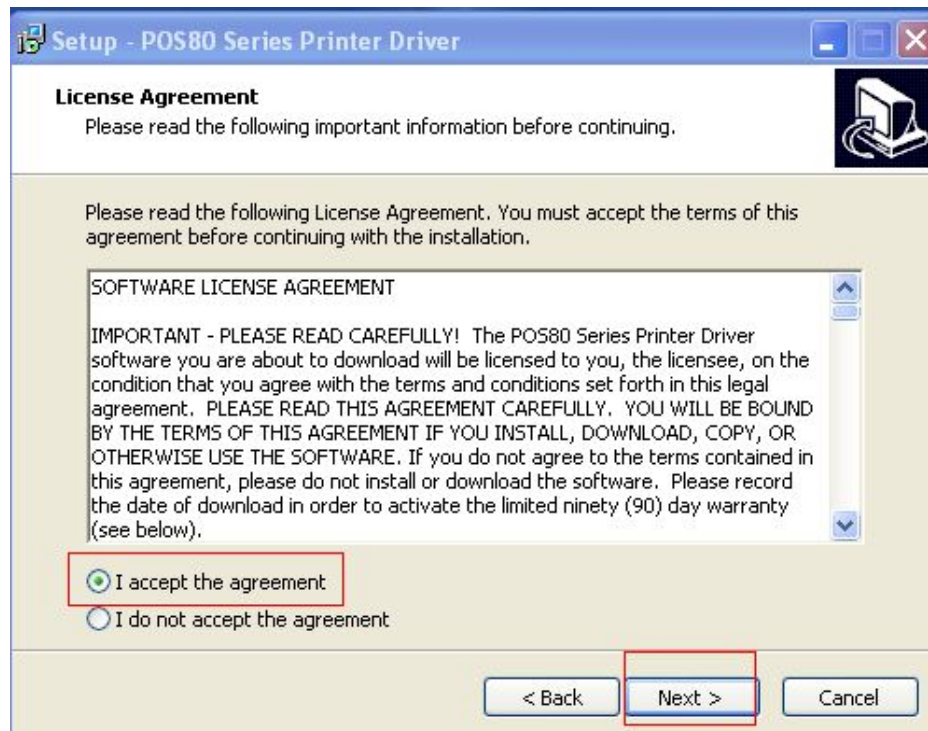
4 : Click Next and we come to below step, please neglect the Warning from your anti-virus software during the installation .
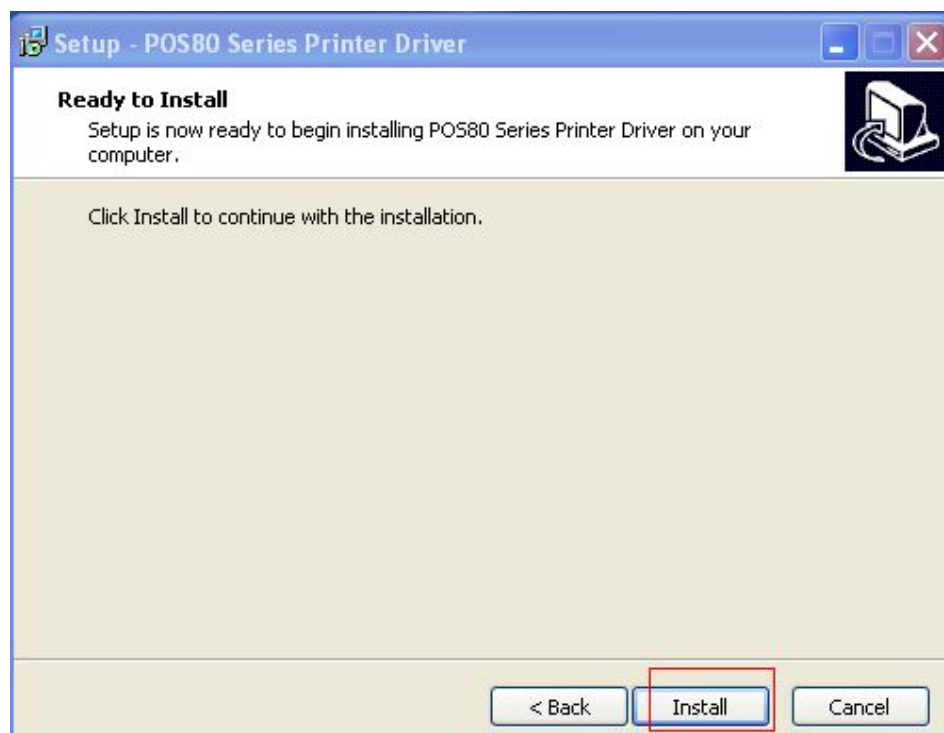
5: Select your desired operating system and click " NEXT"
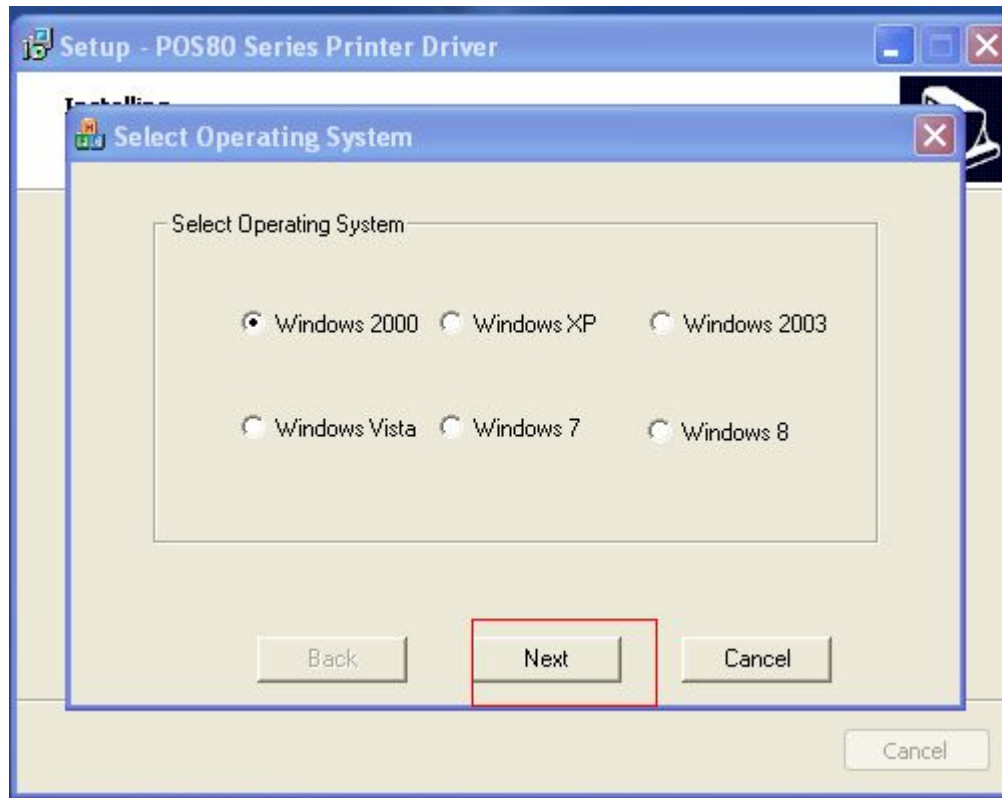
6: Select the corresponding printer type and go next

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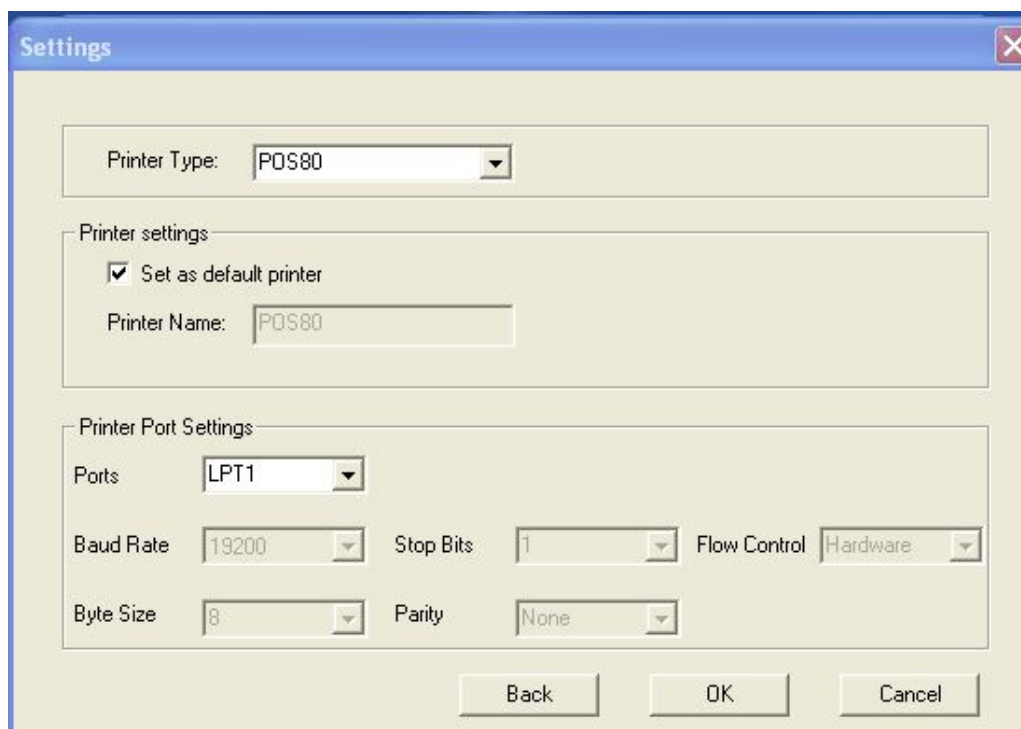
7: Installation Done

5.2.1 Ethernet Connection （ If your desired port is Ethernet ）

1: Get the IP address from a Self Printing Test Paper

Switch off the printer then press "FEED" button and do not release. Press the "POWER" button at the same time till the " ERROR" indicators on, release the button about 1 second after the "ERROR" indicators off. Then we can read the current setting from the self printing page. （Default IP Address is： 192.168.1.100 ）

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Open " Properties" then click " Ports "

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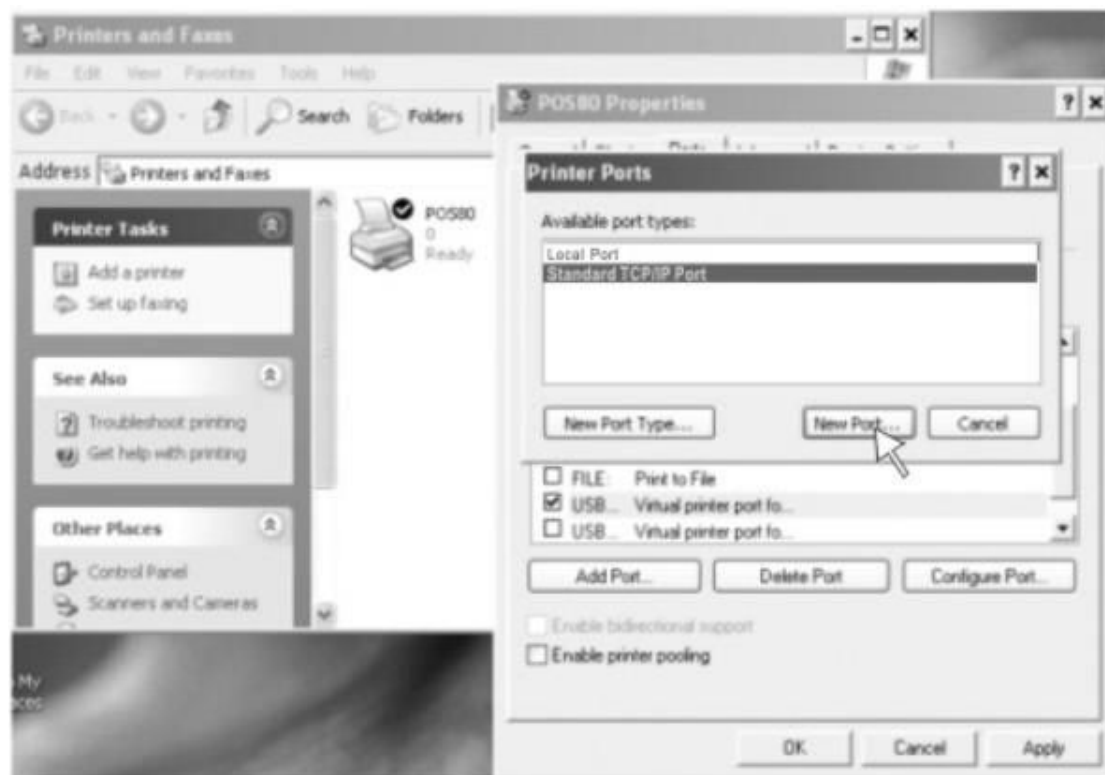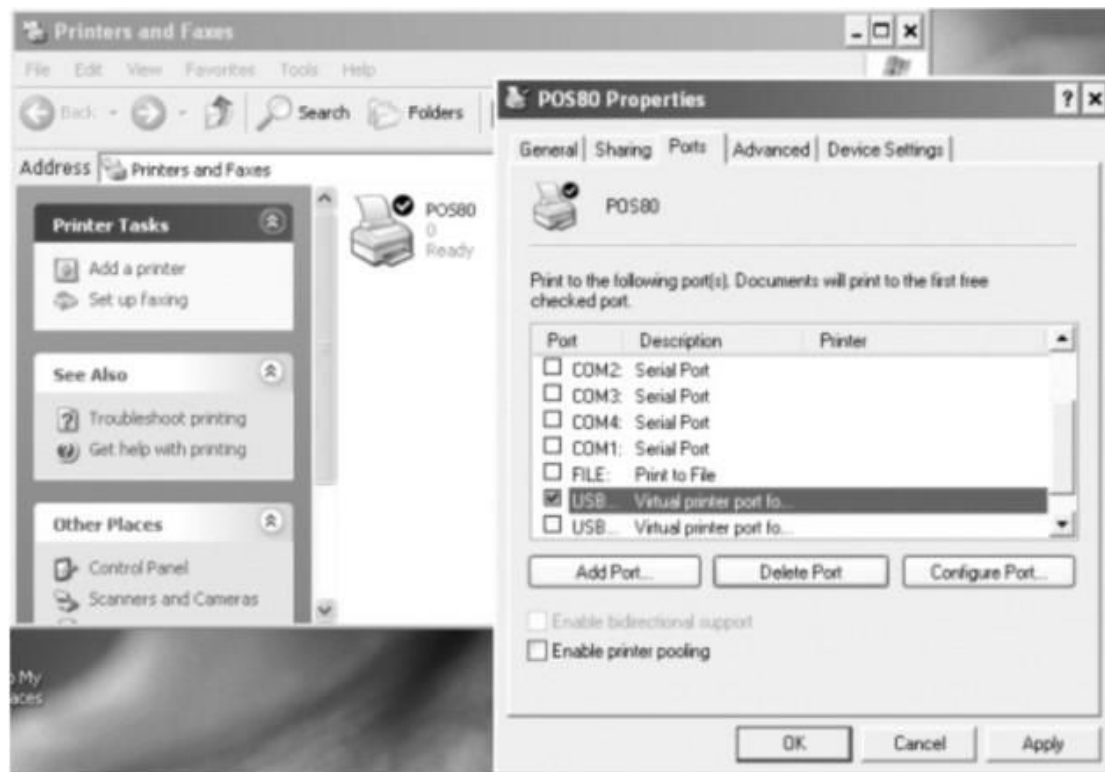
2: Select " Add Port"we can see below jpg

3: Click " Next "

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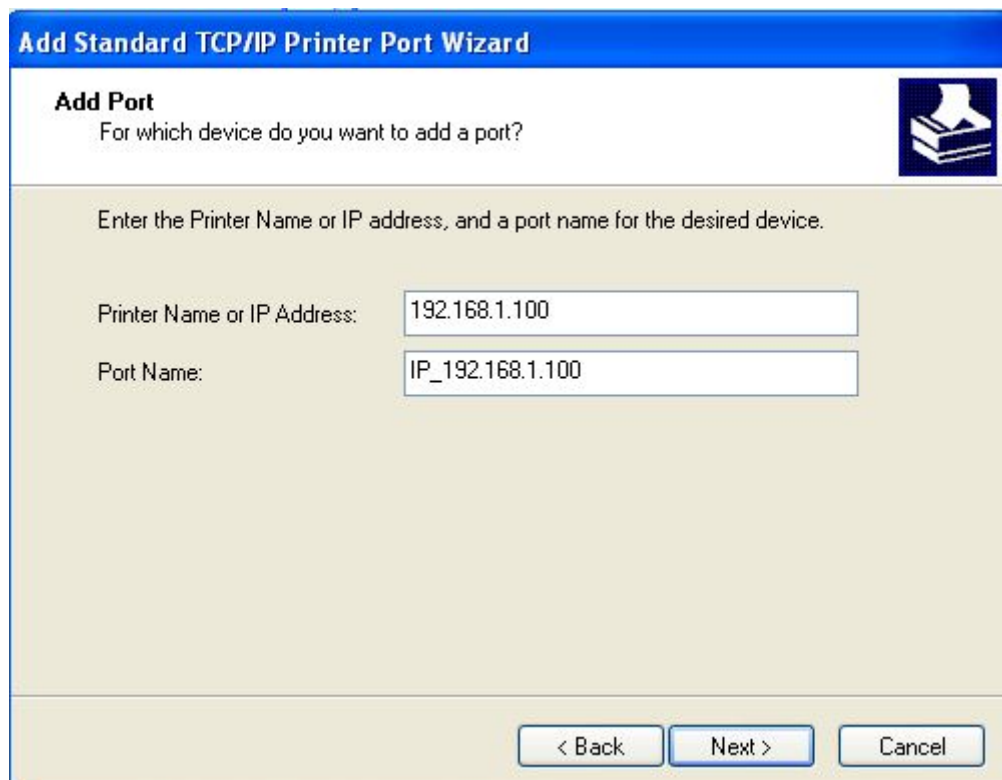
4: Next and choose " Generic Network Card " then click Next
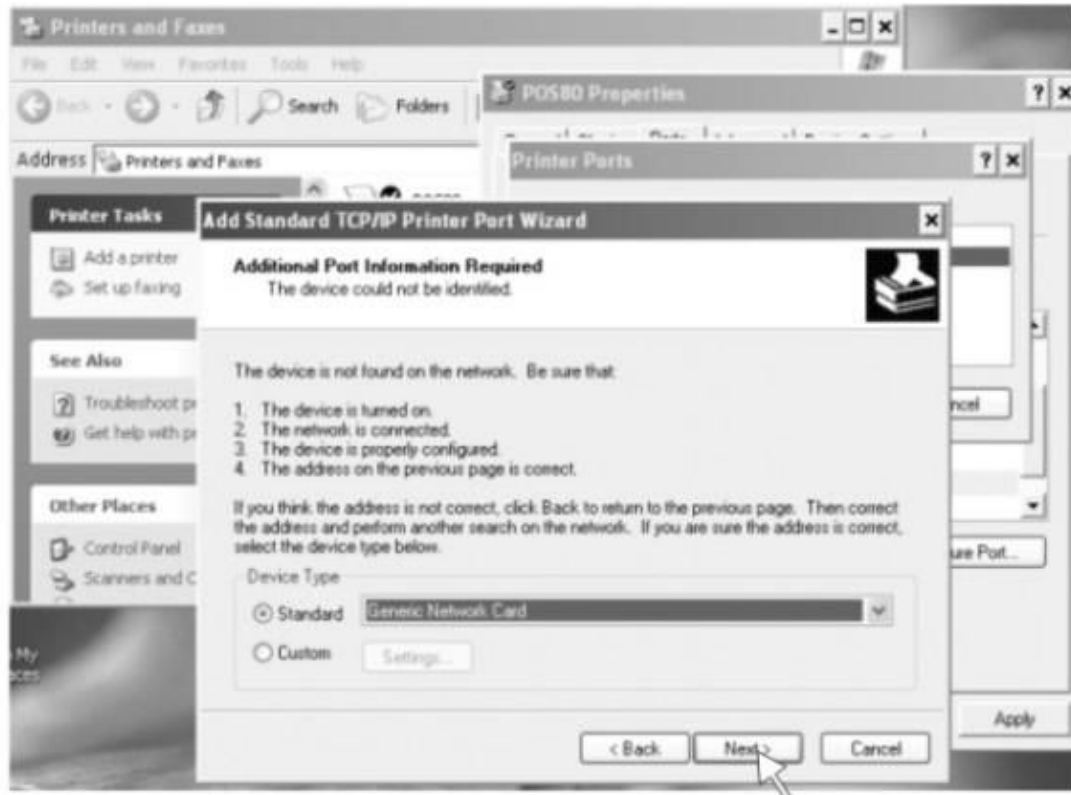
5: Next

6: Click Finished and we can check the added ports as below jpg
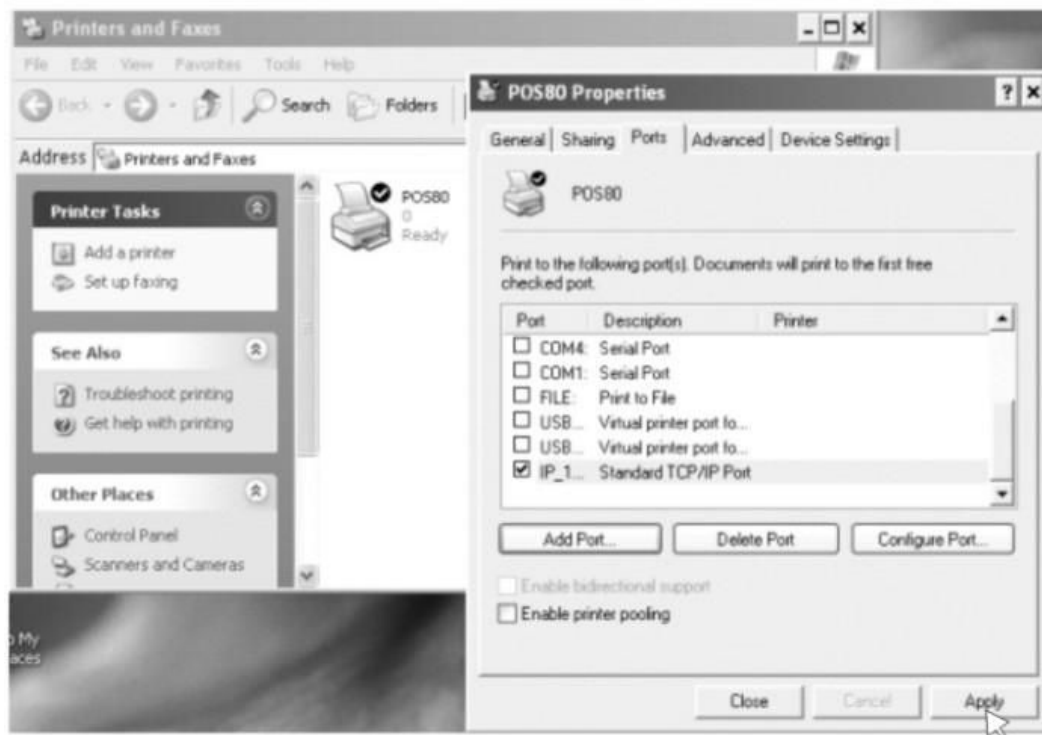
7: Let's back to "General"and click "Print Test Page "
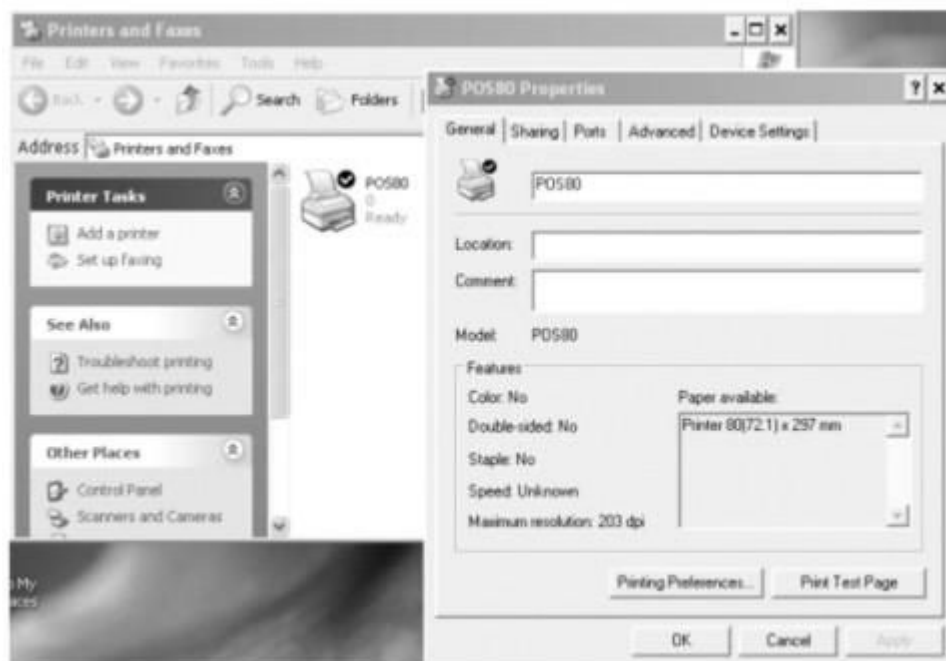
If the print test page works well, that mean all setting is ok.

We can also change the setting by clicking " Device Settings " (print method setting ,cash drawer setting, paper cutter setting etc) - Below jpg for reference ;
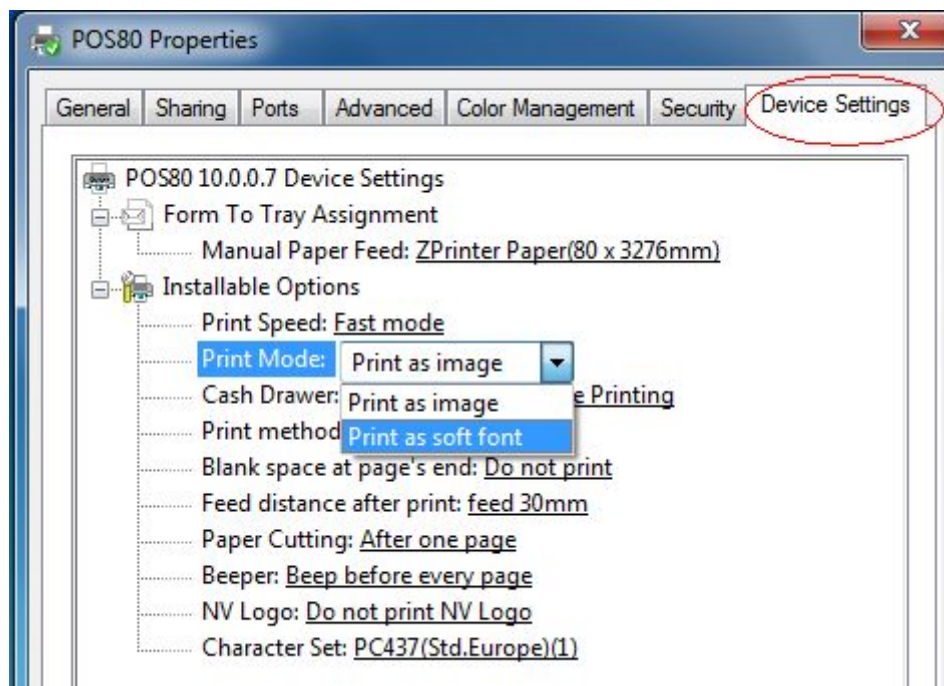
5.2.2 USB Port Connection（ If your desired port is USB ）

1: Open " Properties " then choose " Ports "
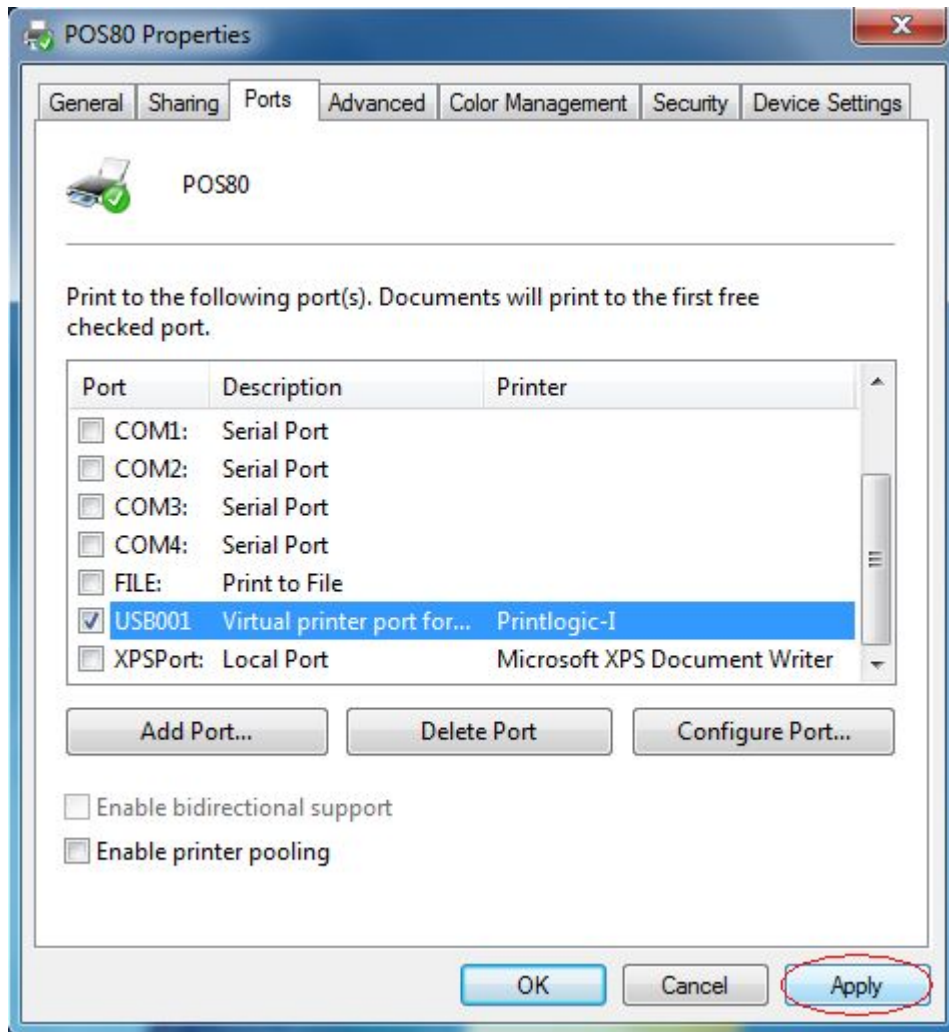
We can see many usb ports if there is other usb printer used in this PC.

Select the unoccupied usb port and click "Apply"

Remarks: Ensure the printer is power on & cable connects to the computer for the 1st time use. Or we can not find " USB001" ; check if we can find " USB Print supporting "in below location：

Path: My Computer – Properties – Management – Devices Manager – Universal Serial Bus Controller), if not , please recheck the cable and printer connecting way.

2: Click " General "and let back to this step then " Print Test Page "
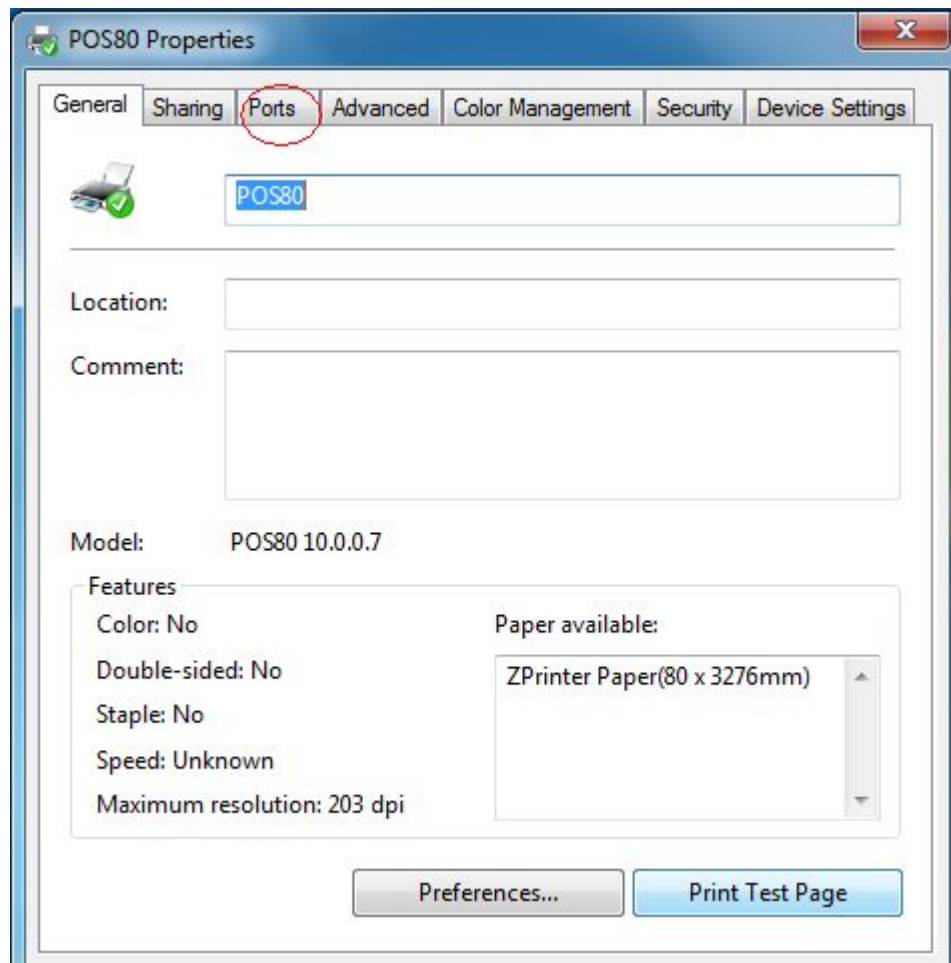
If the print test page works well, that mean all setting is ok.

Remarks: If " Printer Error " , we should back to " Ports" and try the USB

ports one   by one until it is ok.

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5.2.3 Serial Port Connecting（If your desired port is Serial）

1: Following " Printer - Properties – Ports " as below
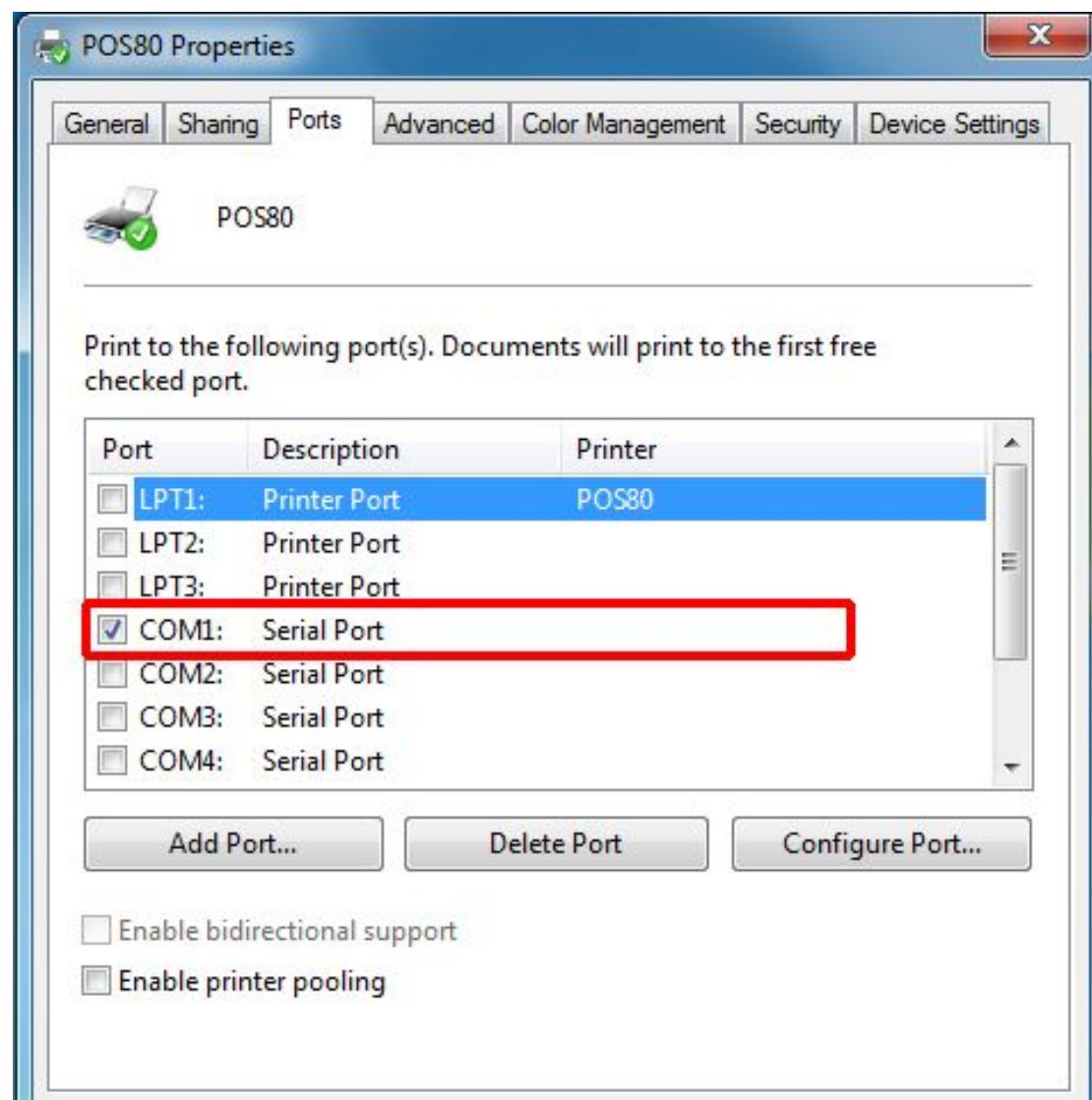
2: Select "COM1" – "Configure Port " – default setting as below jpg
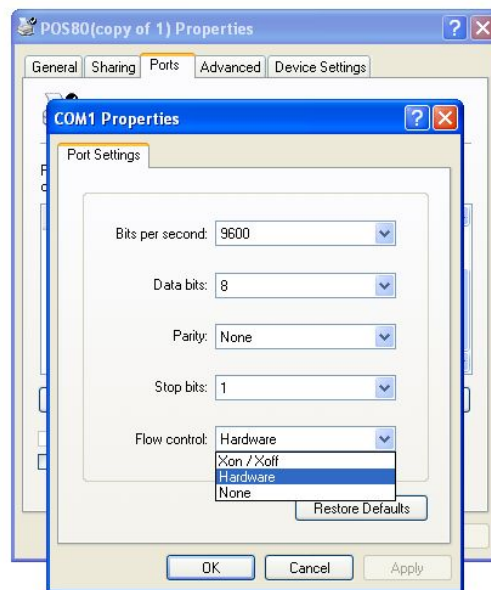
We should refer to the default baud rate from the self test page and input the same baud rate above or there will be error in the printing. Once setting parameters confirm, click " Apply " we come to below jpg;

Click " Apply "

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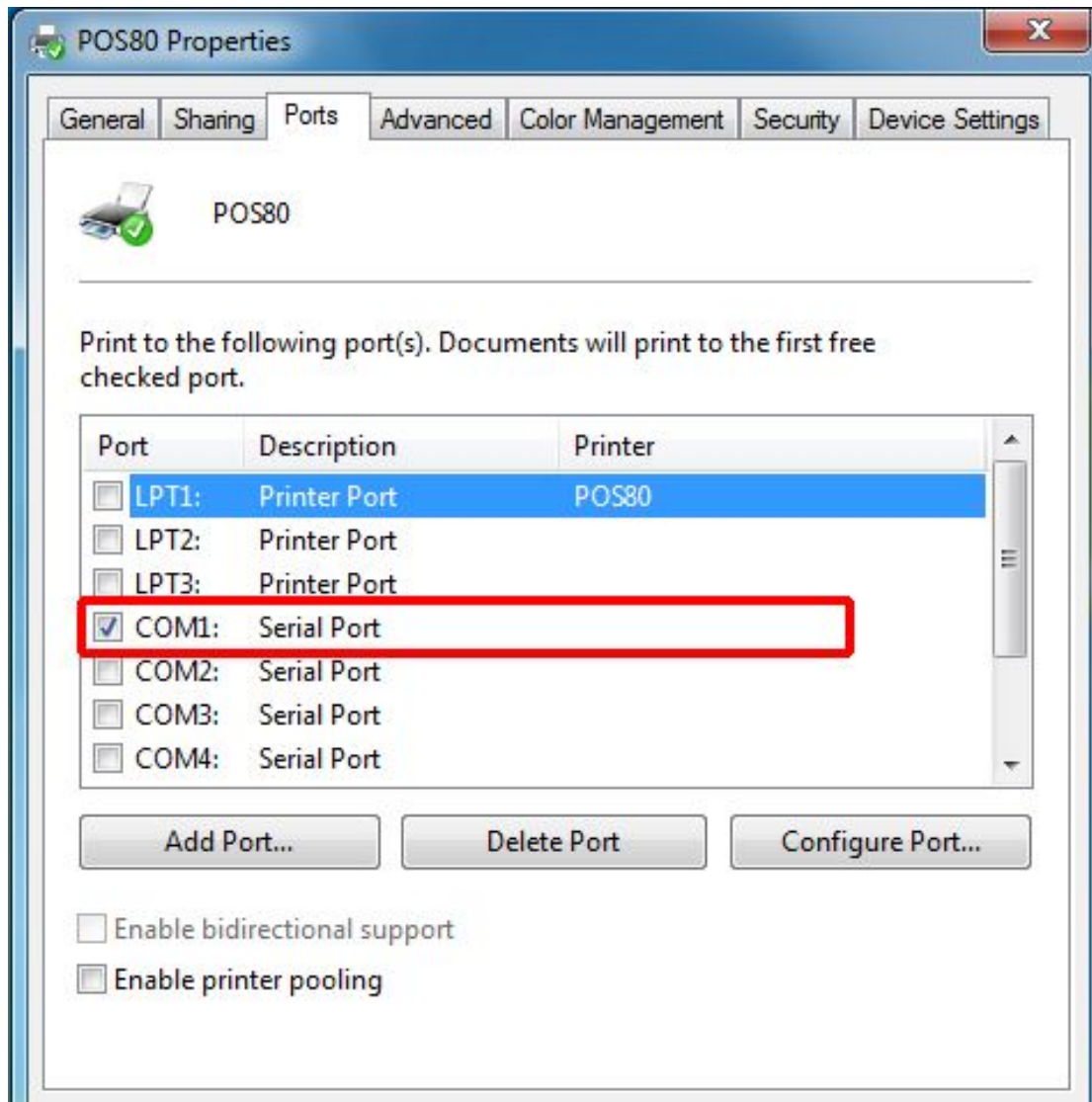
3: Back to " General"and try " Print Test Page"
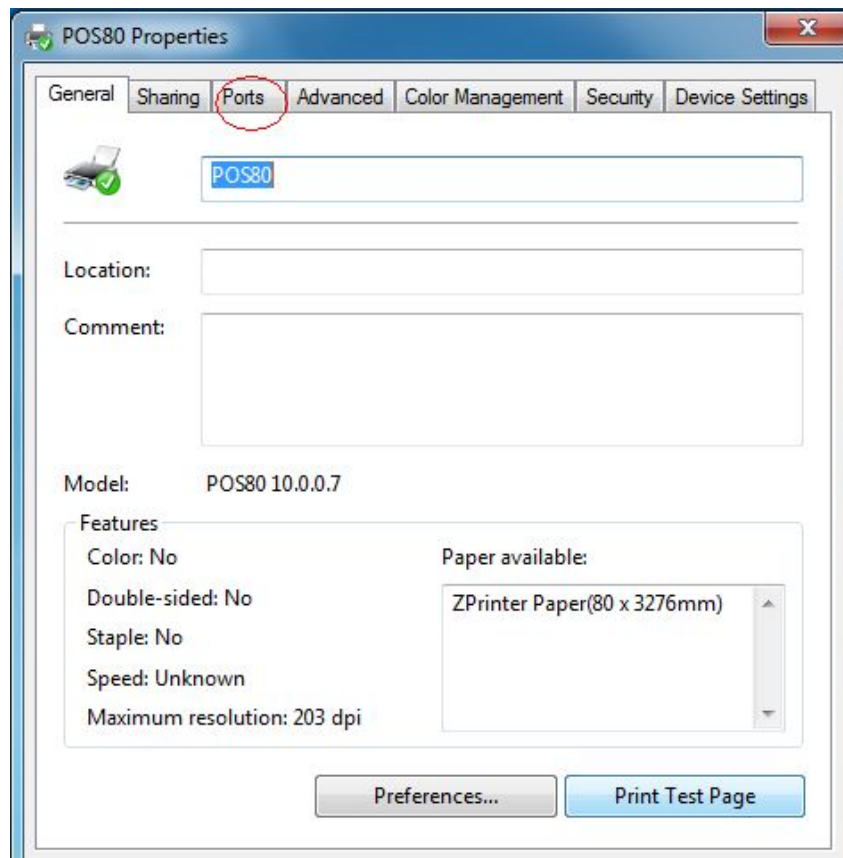
If the print test page works well, that mean all setting is ok.

Try below setting if we the printing speed is too slow:

- Cl ick " Device Settings " ---- "Print Mode" ---- select " Print as soft

font "
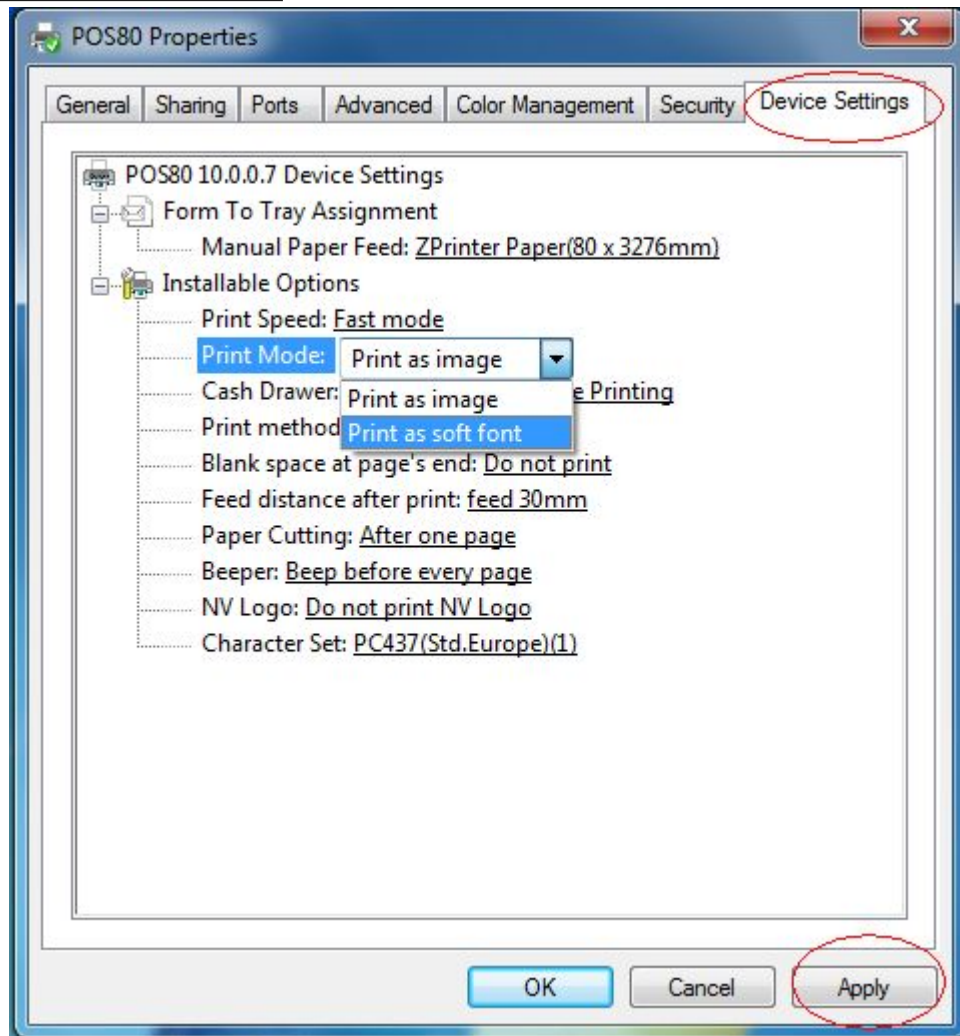
5.2.4 WiFi Connecting（If you selected our WiFi Printer）

Two ways for reference：

1: WiFi connection setting（Wireless network required）

2: Connect the printer and pc with RJ45 ports;

Remark:

Module Default setting for ethernet is disable, we can use AT

command tool to Enable it; 1）AT+FEPHY=on,（ Enable and Saved –

enable automatically when restart next time)。Or 2) AT+EPHY（Enable

but not saved)

    We can also use AT tool to enable AP+STA function；Command is

"AT+FAPSTA=on" then restart, next time the AP mode will works at the

same time when we choose to use STA mode.

    We can find the AT Command Tool in the CD driver

> If Wifi connection method , we should refer to following steps（step 1

to step 9)

> RJ45 connection method, we have to follow from step 3 to step 9;

 1. Plug and switch on the printer;

 2. Find the wireless network and link it. Then find the file named

"HF-A11" and link it – Next；

 3. Put the IP address（10.10.100.254）into the browser address bar,

press enter we can see below window;

Choose admin for the user name and default password is also admin.

Press ok and then Next.
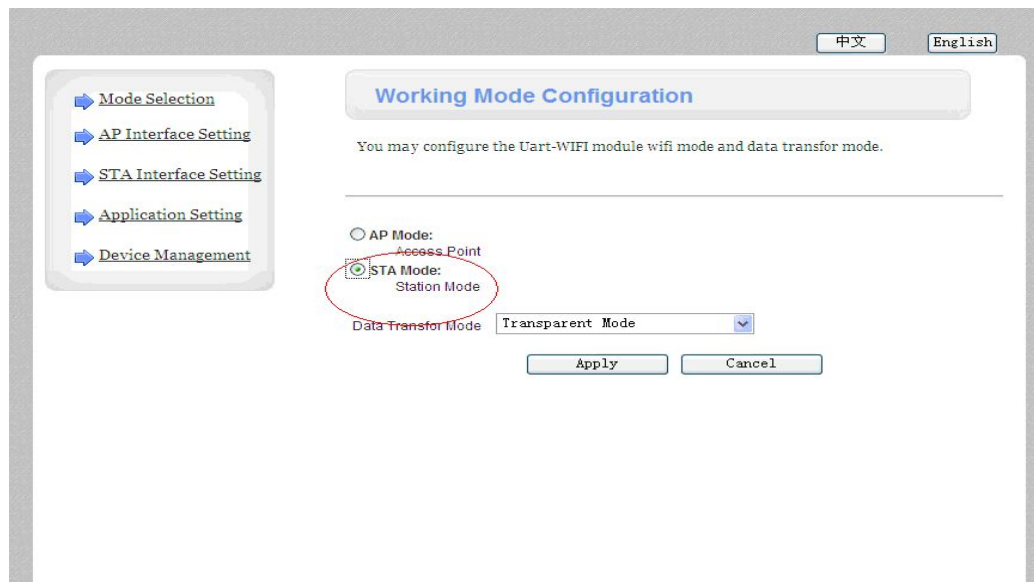
> Select " Station Mode ", Choose transparent mode. Refer to

above jpg.

4. Select " STA interface Setting " as below;
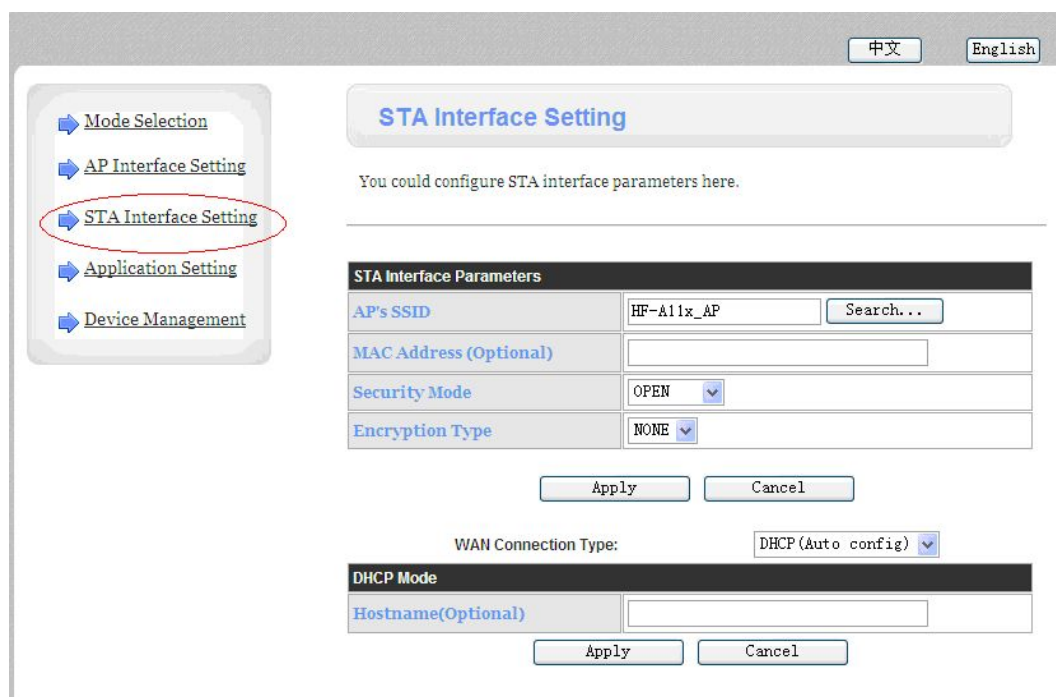
Then click "Search" and we can see and choose the wireless devices
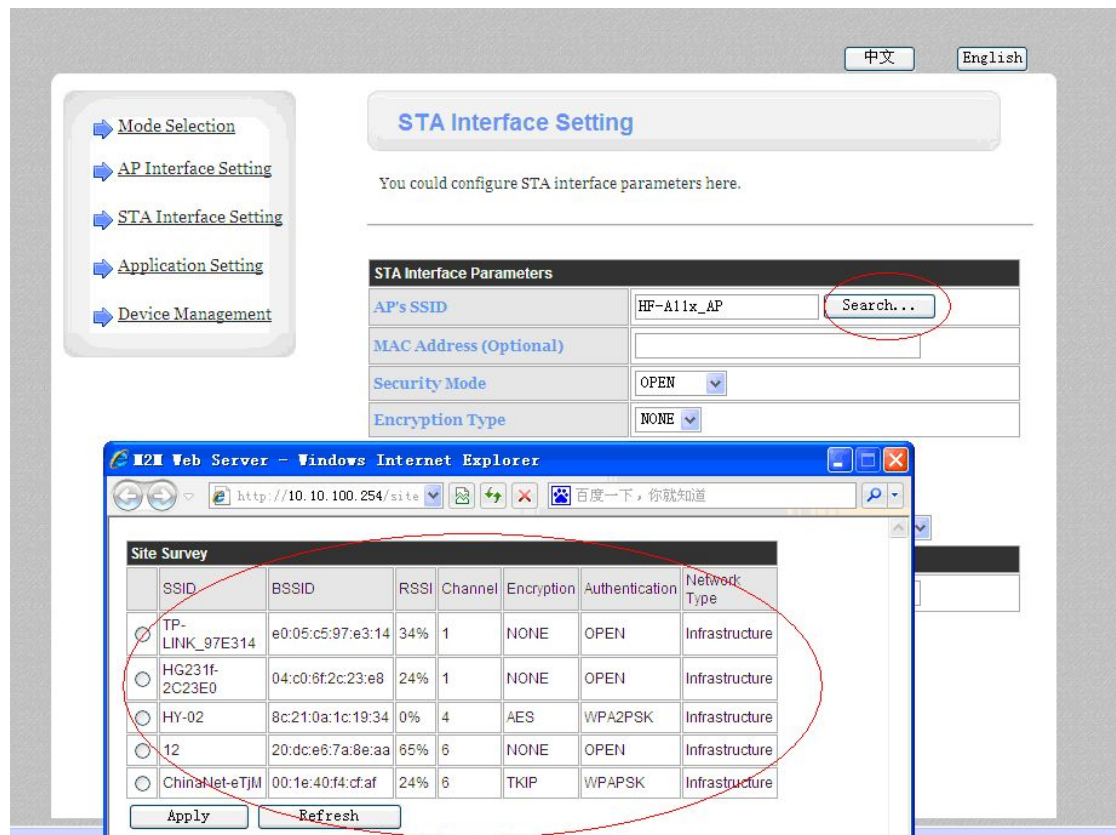
> Here is the wireless devices available for use.

5. Choose the desired device as below

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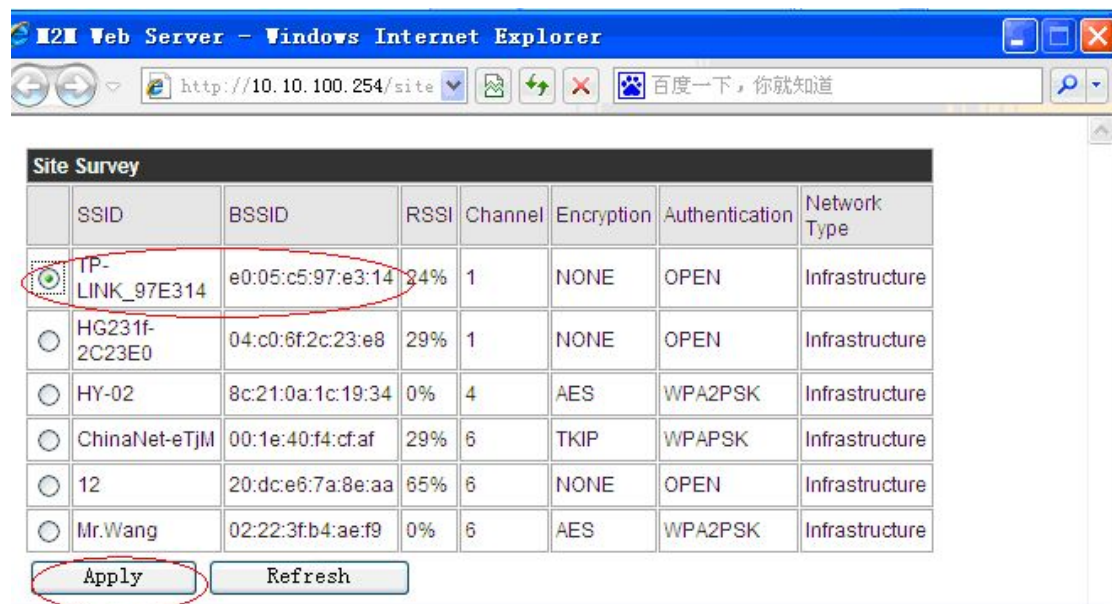
> Click " Apply"

6. Enter the correct configuration in the dialogue as below jpg shows.

> Click " Apply " after all these configuration steps ;

7. Select " Serial and other settings " as below;

> Click "Apply" after all setting done.

8. Restart the module as below;
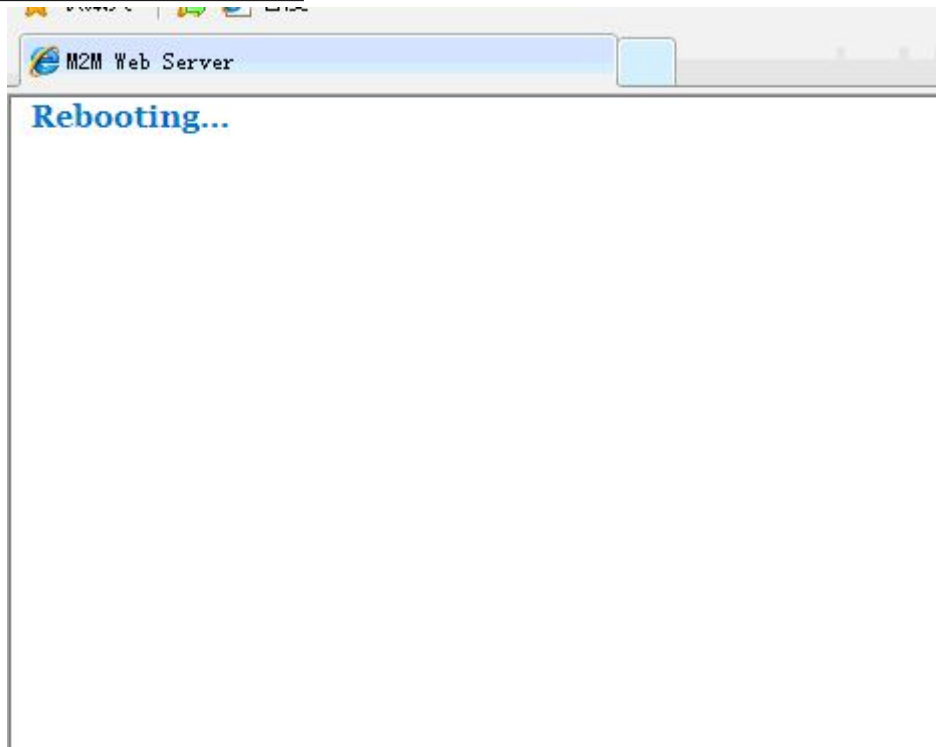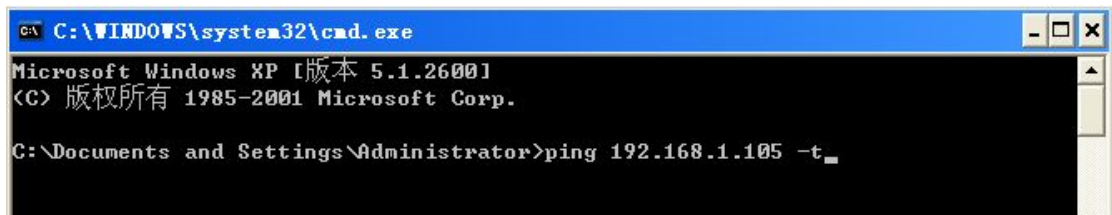
> Module configuration done

9. Computer "Start"   " Run" Input word "CMD"，we have below
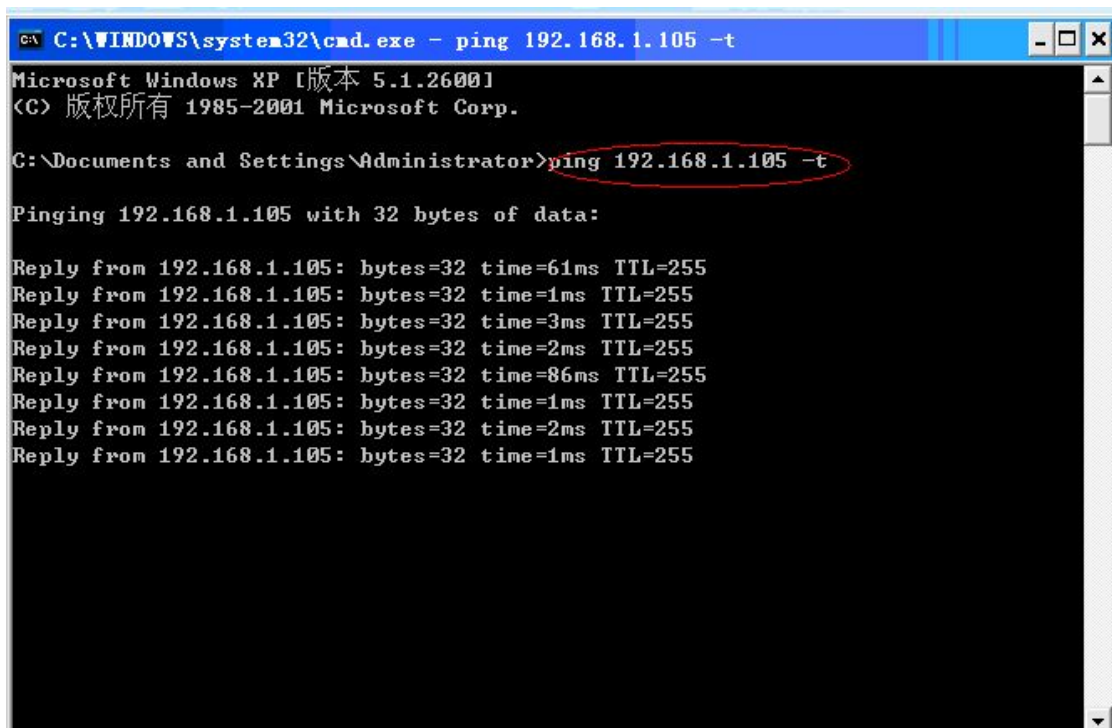
dialog：
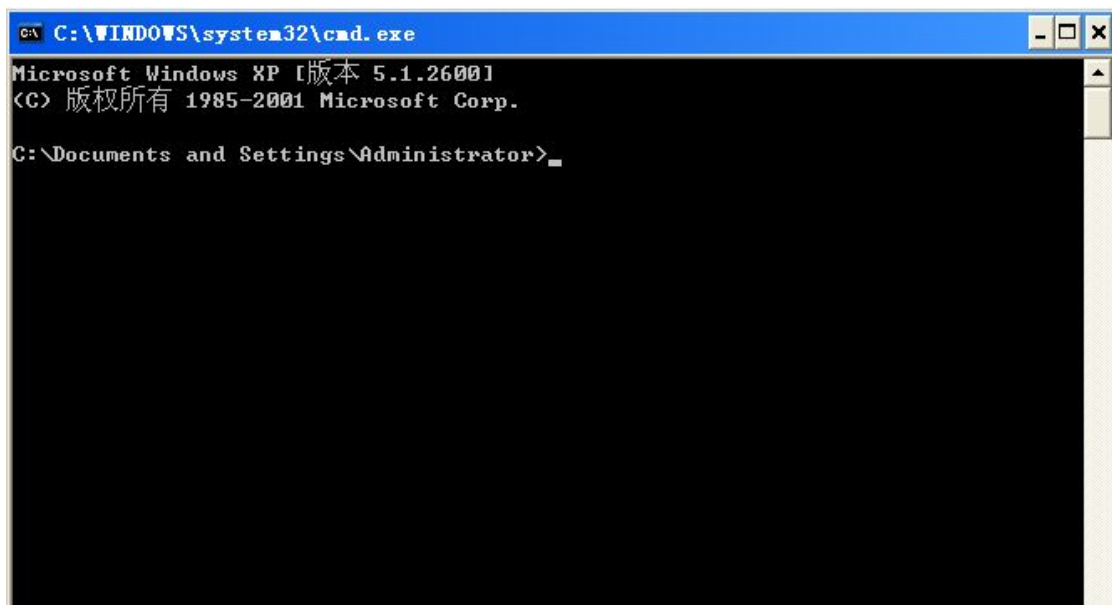
> Input "ping 192.168.1.105 –t" as below

> Press "Enter"

If details shows as below , means connection is Ok ;

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6.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: Cash drawer does not open?

A: *Please enable the cash drawer function from device settings and check the cable connecting way or contact service center for advice if needed.*

4: 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.*

5: Messy code printing after a period of time

A: *Interface board damaged , please replace or repair it.*

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6: 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.*

7: Ethernet printer does not printer after linked with a router.

A: *Make sure the network cable and router port works well, does the printer IP and router IP are on the same network segment? Is the printer IP occupied by other device ? We can modify the ip with our ip setter software attached in the cd driver. Test once modify the ip : Start – Run – input the 8printer IP – see if any response; or contact our service center for repair.*

8: Messy code printing except Arabic numeral printing.

A: *language switching incorrectly,please turn on the SW-4 switch on the DIP switches.*

9: Fuzzy printing of Chinese character

A: *ON Please turn on the SW-3 switch (DIP switches on the bottom of the printer)*

10: Malfunction of the auto paper cutting

A: *See if the SW-1 is off and ensure the cutting function is Enabled or contact the service center for repair.*

11: 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.*

12: How to install a network shared printer driver?

A: *Find the driver file of the shared printer from network neighborhood and click it.*

13: Communication interrupts and can not print if multiple ethernet printers works simultaneously, How to solve this problem?

A: *First check if the network then get the printer ethernet ID, to see if any conflicts of the ethernet ID. Give a specified Ethernet ID to each printer to avoid this problem.*

14: 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*

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15: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)*

16: Print page without any content (White)

A: *1.Connect printing is ok but self printing test is white*

2.Without any contents for both printing method

Solution for 1. Font damaged & replace the font chips.

Solution for 2.   Please replace the printer head and try again. Contact service center for repair if same problem after replace the printer head.

17: How can we reset to default setting?

A: *Find the card slot on the bottom of the printer.Press the black key (just press and release ---Reset the IP to default Only)*

18: How to reset the WiFi default setting?

A:*Find the card slot on the bottom of the printer.Press the black key & Hold on (about 10 seconds ---Reset the WiFi to default)*