UNYKA CH

## 80 mm Series Thermal Receipt Printer

**(56005)**

# Instruction Manual

## Version
## Jul, 2016

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# 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.

# Safety Precautions

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

**WARNING:**

**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.

# 1. Product Information

**The main features of our Newly 80mm Thermal printers:**

- High-quality printing, High-speed and strong stability;
- Interface (Serial RS232 / RJ45 Ethernet / USB / Bluetooth/ WiFi)
- Android device can be supported if connect with USB /Bluetooth/WiFi methods;
- IOS device can be supported if connect with RJ45 Ethernet / Bluetooth/WiFi method;

## 1.1 Technical Parameters and Features

| | |
|---|---|
| **Printer Method** | Line Thermal |
| **Print Speed** | 300 mm / sec (80-III type); 250 mm / sec (80-II type) |
| **Fonts** | Simplified Chinese 24x24 point. Support 18030 font library, support Taiwan and HK traditional(complex font), Korean and Japanese |
| **Character Size** | 576 dot / line or 512 dot / line ANK Character<br>Font A: 12 x 24 dot, 1.5(W) x 3.0(H) mm<br>Font B: 9 x 17 dot, 1.1(W) x 2.1(H) mm<br>Simplified/Traditional: 24 x 24 dot, 3.0(W) x 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 / Bluetooth / WIFI (option) |
| **Print Command** | ESC/POS Command |
| **Roll Width** | 79.5 ± 0.5 mm (Print Width 72 mm) |
| **Roll Diameter** | 80 mm |
| **Paper Thickness** | 0.06-0.08 mm |
| **Power Supply** | DC 24V/2.5 A |
| **Auto Cutter** | Full / Partial Cut |
| **Codes type** | UPC-A / UPC-E / JAN13 (EAN13) / JAN8 (EAN8) / CODE39 / ITF / CODABAR / CODE93 / CODE128 / |
| **2D Barcode** | QR CODE |
| **Temperature** | 0-45 Degree |

| | |
|---|---|
| **Contrast Humidity** | 10-80% |
| **Driver** | Win2000/Win2003/WinXP/Win Vista/Win7 /Win8/Win10/Linux |

## 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;

## 1.3 Packing and Accessories

The body of printer
USB Cable
CD Driver & Manual
Power Cable & Adapter
Thermal Roll

**Note**: Each package cannot ensure that all of the accessories listed above are always provided at any time, depending on different models (different interfaces) and different customer needs.

# 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 (10M/100M) (suitable for 80-III type)

With this port, we can use the network cable and connect the computer directly, communication and the port number is 9100;

## 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
- 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)

# 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 “PAPER OUT” indicator on, release the button 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 “PAPER OUT” indicator on, release the “FEED” button about 3 seconds after the “ PAPER OUT” indicator off, then the printer run into Hexadecimal printing model. The way to quit Hexadecimal printing model is just restart the printer.

**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.

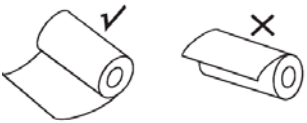
• Hands or other metal tools away from the surface of the printer head, do not use tweezers to scratch the surface of the printer head and other sensitive parts.

• Do not use gasoline, acetone and other organic solvents for printer head cleaning.

# 5. Installation Wizard

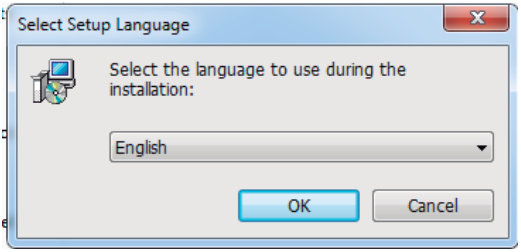
## 5.1 Hardware Connection

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)

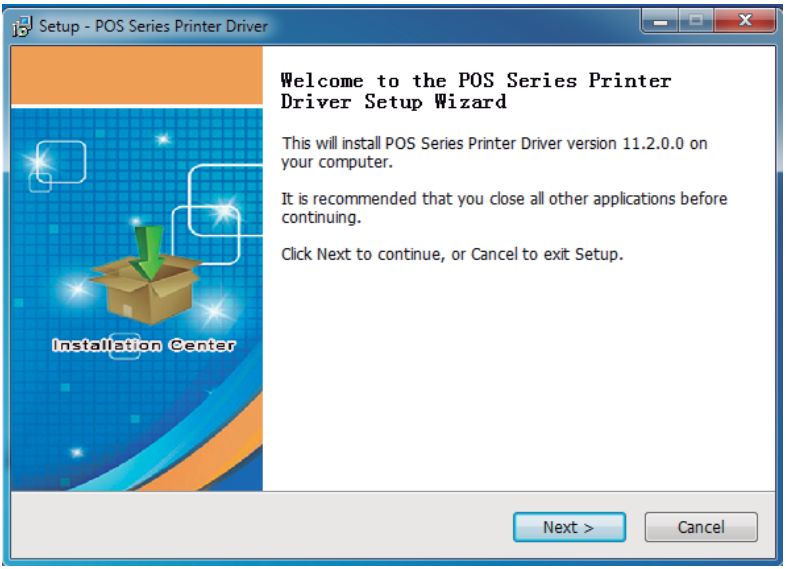


## 5.2 Driver Installation

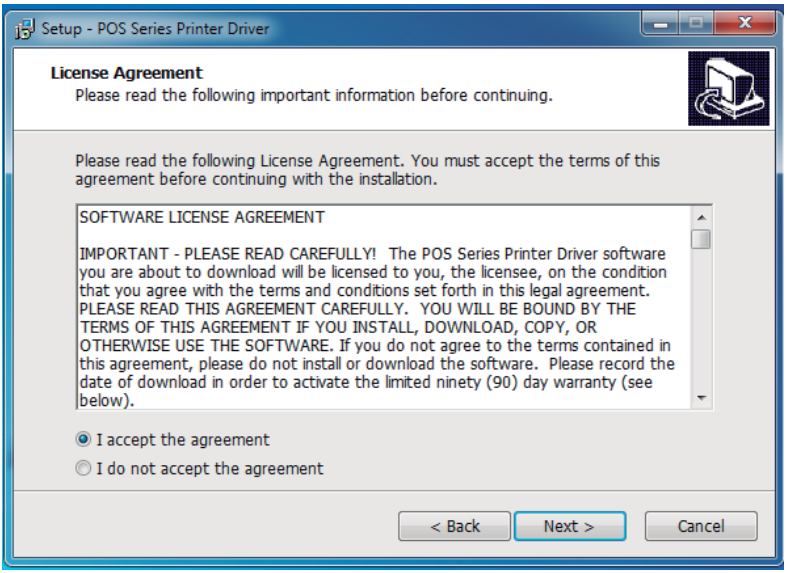
**1. Enter the CD driver, click the related files (printer driver software of 58mm/80mm series) and install. The installation language will be shown as below:**



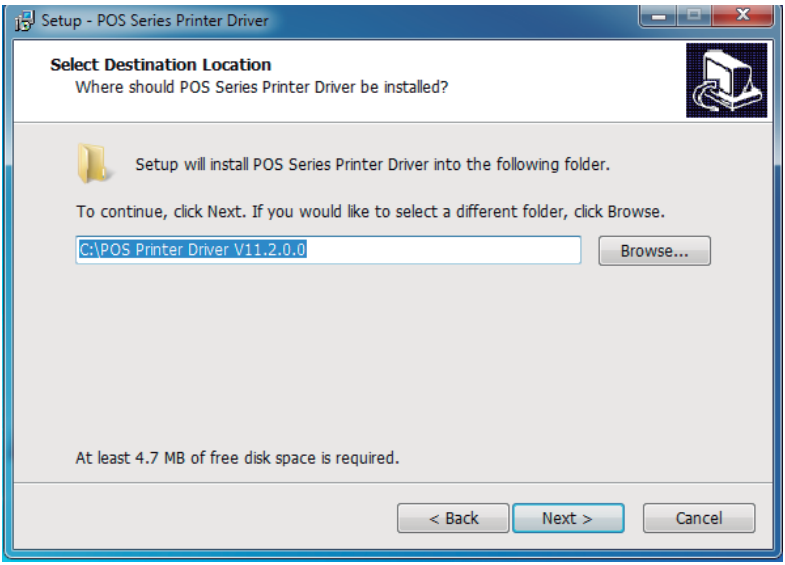
**2. Select the language you need and click the button “Confirm”, and show the image as below, then click the button “next step”**



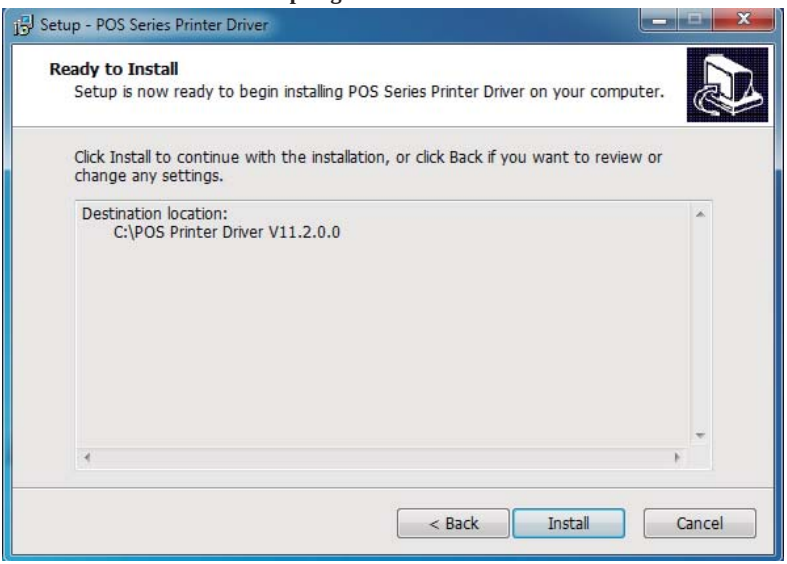

**3. Please read the related terms carefully, and install it as agreement as below**



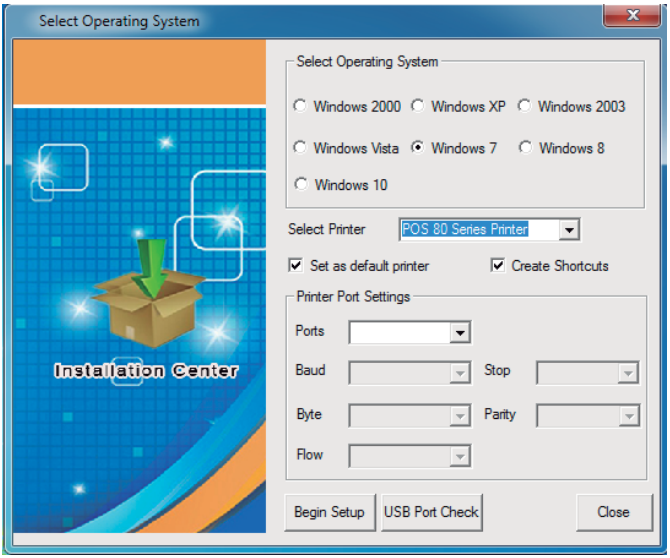
**4. Click “next step” and show as below (customer is available for modifying channel of driver installation or default one)**



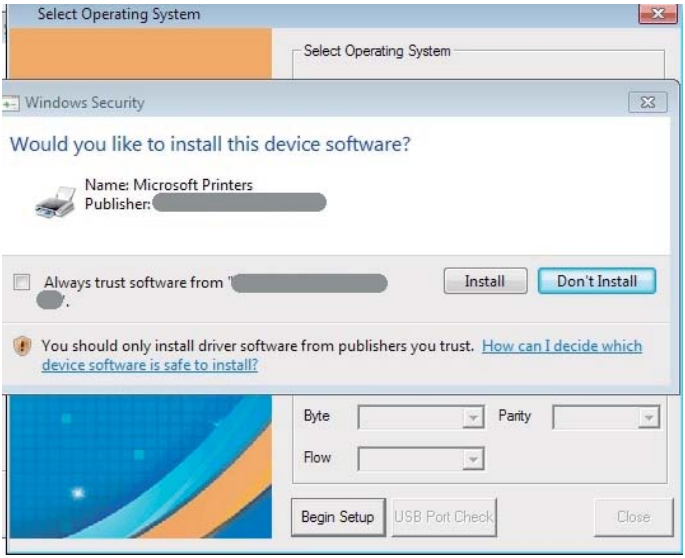

**5. Click the button “next step” again and show as below and install it:**



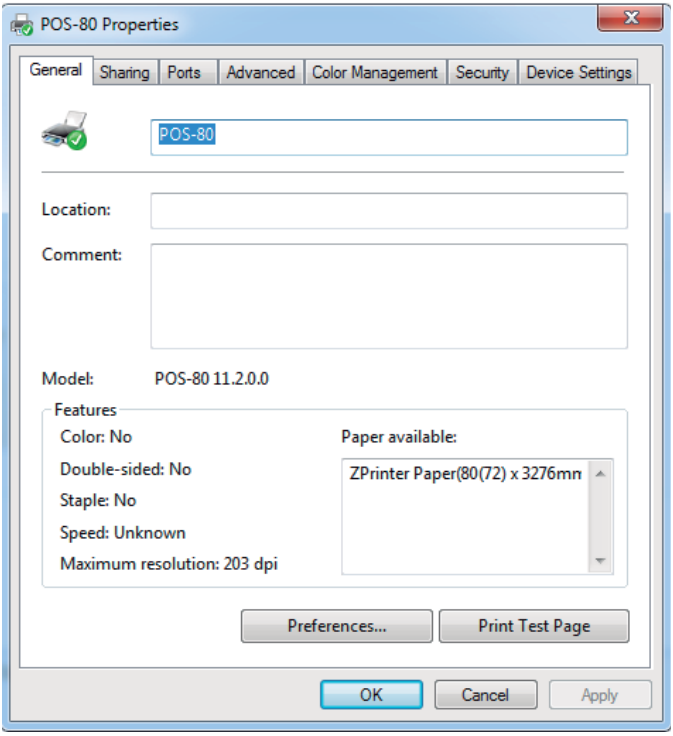
**6. After installation, the related interface will be shown as below, select operation system of your computer and printer model, click "USB port for testing", if you communication with USB port, USB port of computer will be identified automatically. Click the button "next step" and install continuously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




**7. Click the button "Start Installation" and shown as below. And select installation:**

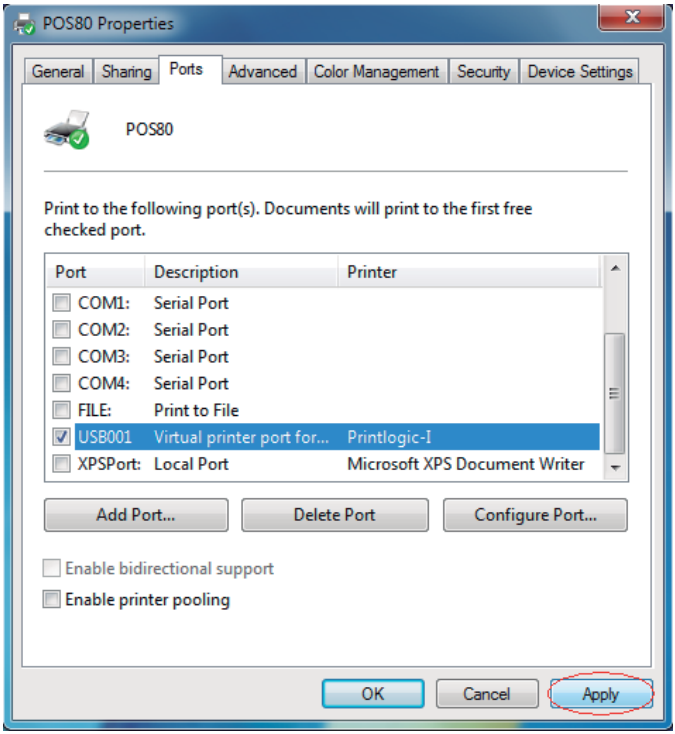


**8. Finish the driver installation as below:**



## 5.2.1 USB Port Connection (If your desired port is USB)

**1:** Open “Properties“ then choose “Ports”

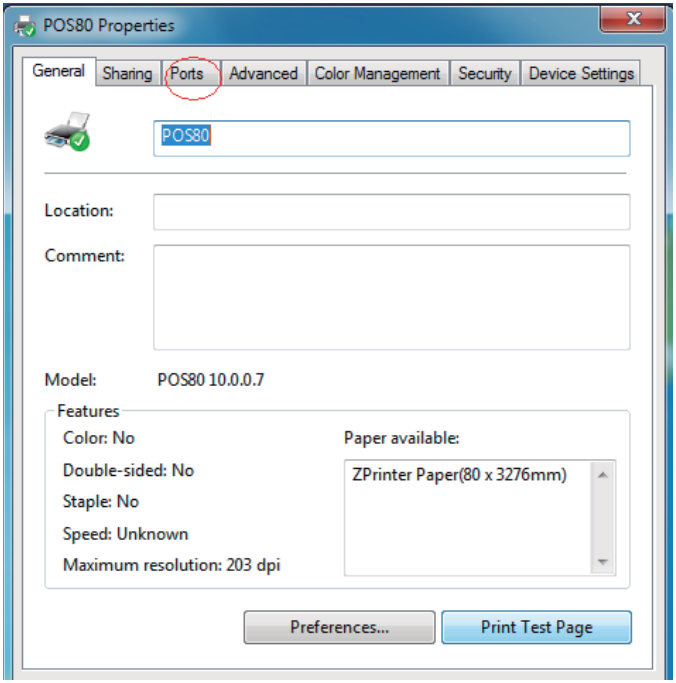



We can see many usb ports if there is other usb printer used in this PC. Select the unoccupied usb port and click “Apply”

Remarks: Ensure the printer is power on & cable connects to the computer for the 1st time use. Or we cannot 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.

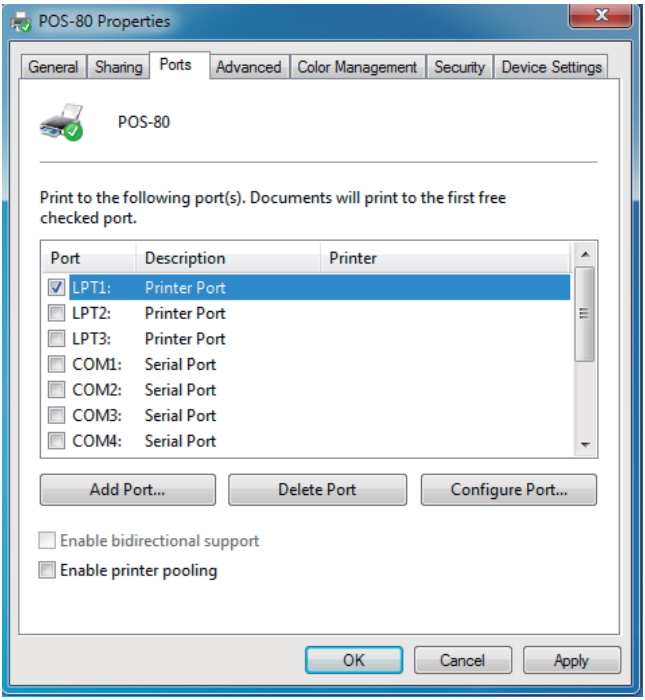
Remarks: If “Printer Error“, we should back to “Ports” and try the USB ports one by one until it is ok.

## 5.2.2 Ethernet Connection (If your desired port is Ethernet)

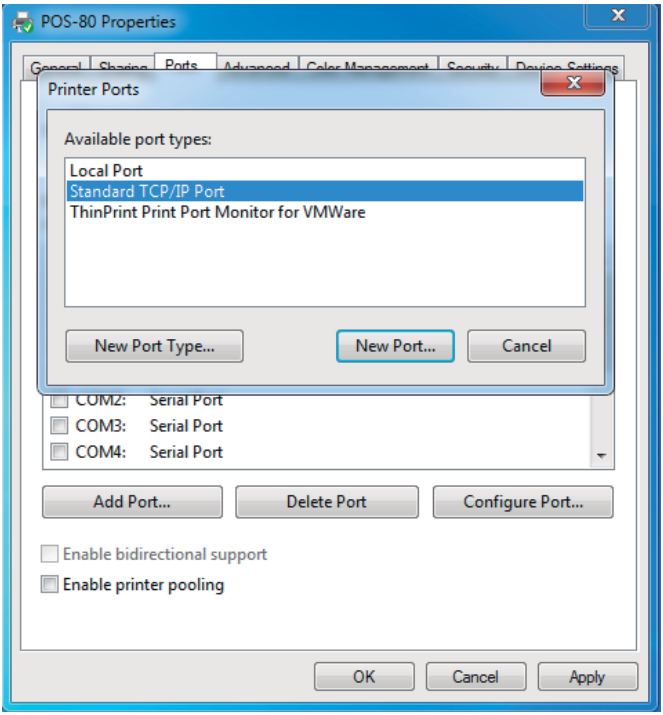
**1:** Get the IP address from a Self Printing Test Paper

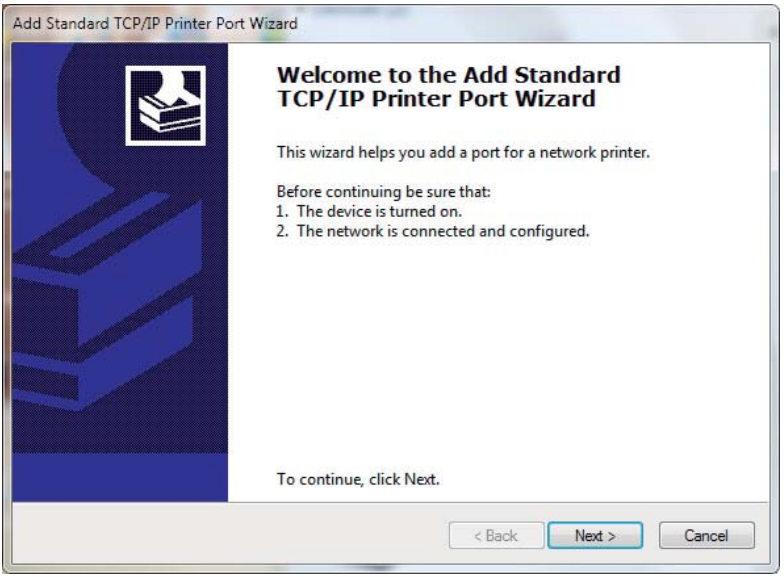
Switch off the printer then press “FEED” button and do not release. Press the “POWER” button at the same time till the “ ERROR” indicators on, release the button about 1 second after the “ERROR” indicators off. Then we can read the current setting from the self printing page. （Default IP Address is：192.168.1.100）

Open “Properties” then click “Ports”, as below images shown:

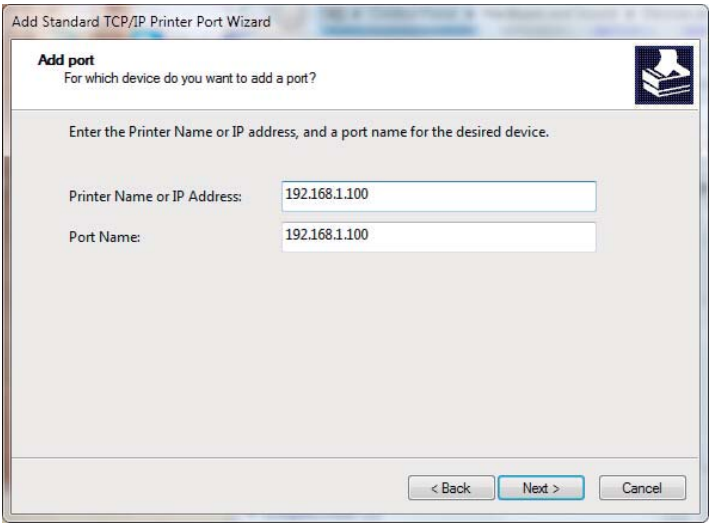



**2:** Select “Add Port” and click “New port”, we can see below image:

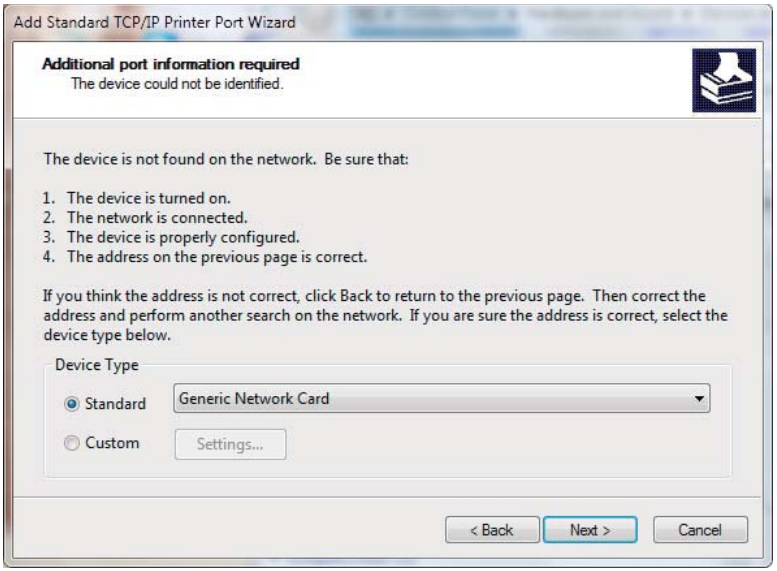

POS-80 Properties
Printer Ports
Available port types:
Local Port
Standard TCP/IP Port
ThinPrint Print Port Monitor for VMWare
New Port Type...
New Port...
Cancel
COM3: Serial Port
COM4: Serial Port
Add Port...
Delete Port
Configure Port...
Enable bidirectional support
Enable printer pooling
OK
Cancel
Apply


Add Standard TCP/IP Printer Port Wizard
Welcome to the Add Standard TCP/IP Printer Port Wizard
This wizard helps you add a port for a network printer.
Before continuing be sure that:
1. The device is turned on.
2. The network is connected and configured.
To continue, click Next.
< Back
Next >
Cancel

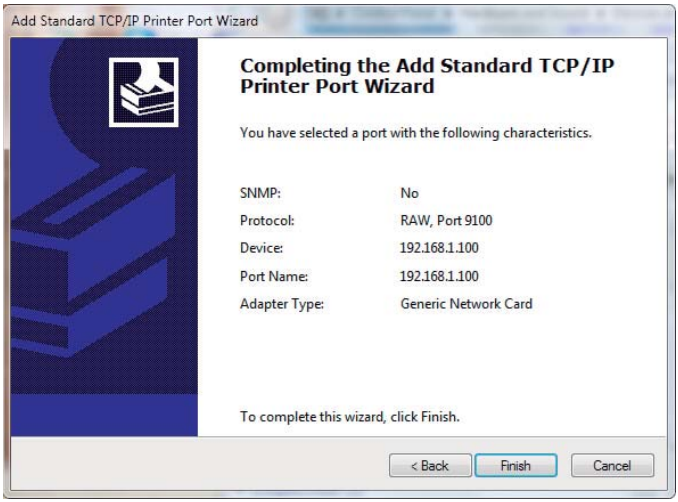
**3:** Click “Next”, and enter into the printer IP address:



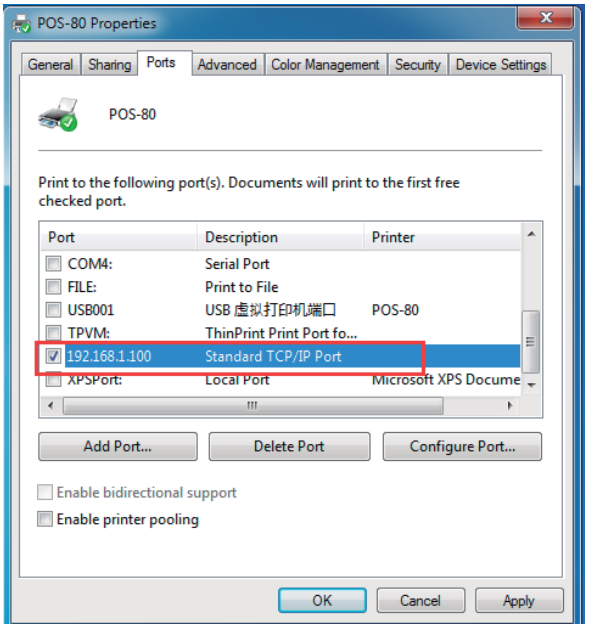

**4:** Next and choose “Generic Network Card“ then click “Next”:



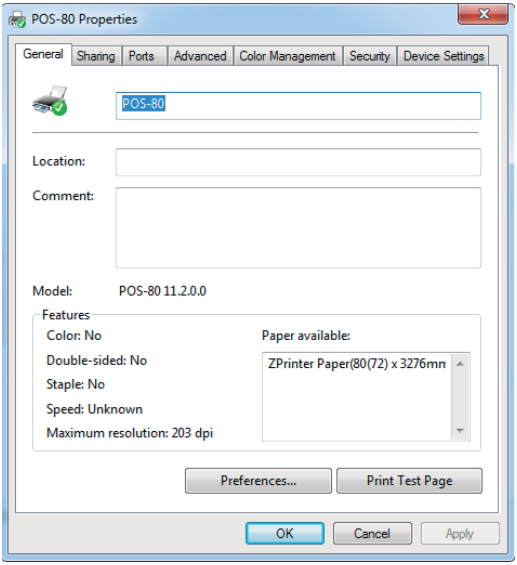
**5:** Then you can check the image as below:




**6:** Click “Finish” and we can check the added ports as below image:

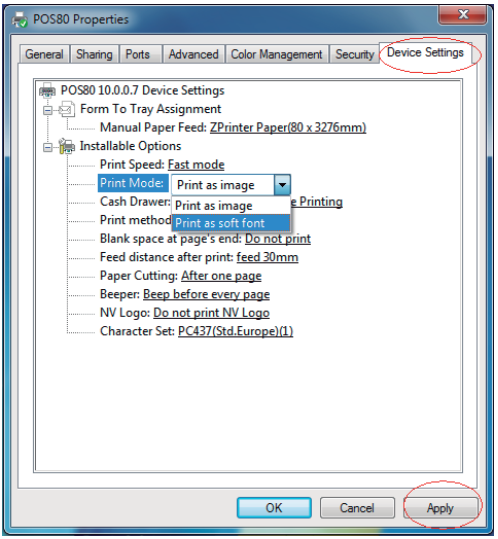


**7:** Let's back to "General" and click "Print Test Page"



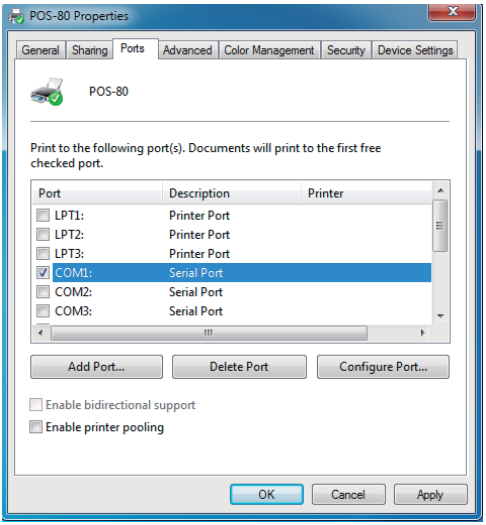

If the print test page works well, that mean all setting is ok.

We can also change the setting by "Device Settings" (print method setting, cash drawer setting, paper cutter setting etc) - As below image shown;

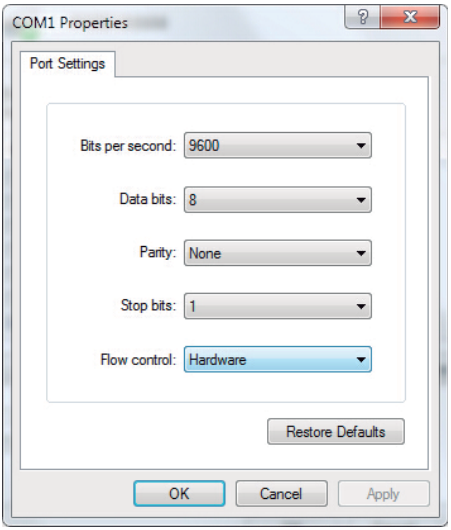


## 5.2.3 Serial Port Connecting (If your desired port is Serial)

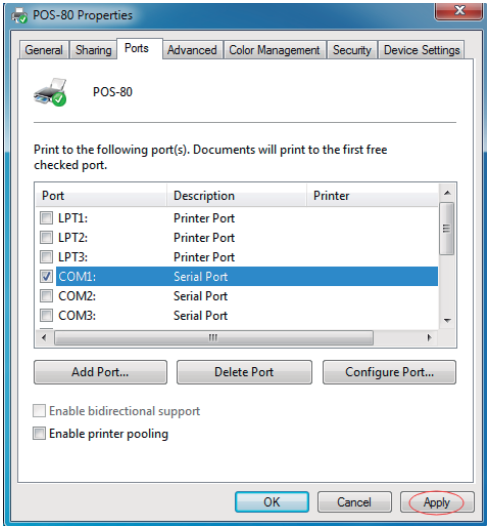
**1:** Following “Printer - Properties - Ports” as below



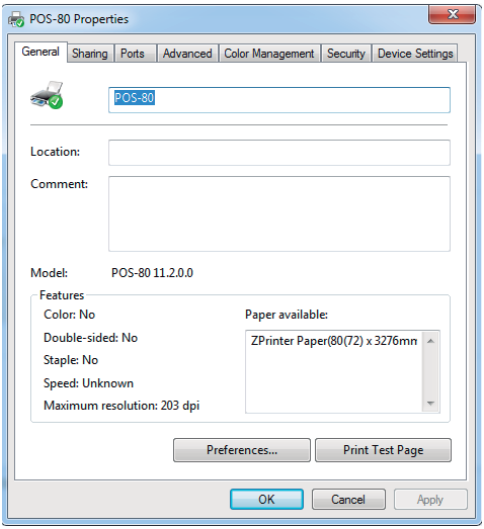

**2:** Select “COM1” - “Configure Port” - default setting as below image:




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, and then click “Apply“ we come to below image;




**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 the printing speed is too slowly:

- “Device Settings“ ---- “Print Mode” ---- select “Print as soft font“

# 6. Ethernet IP Address Setting

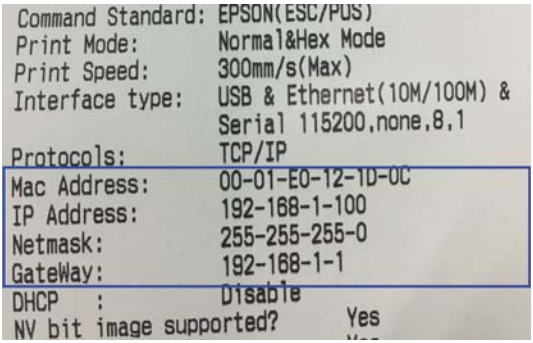
According to the self-inspection page title selection method of IP Settings:

1. **Applicable to 80 - and 80 - IV IV - E**

If print by Ethernet interface, the printer needs to be modified Mac, IP, subnet mask, gateway, we can do it online, please check the steps as follows:

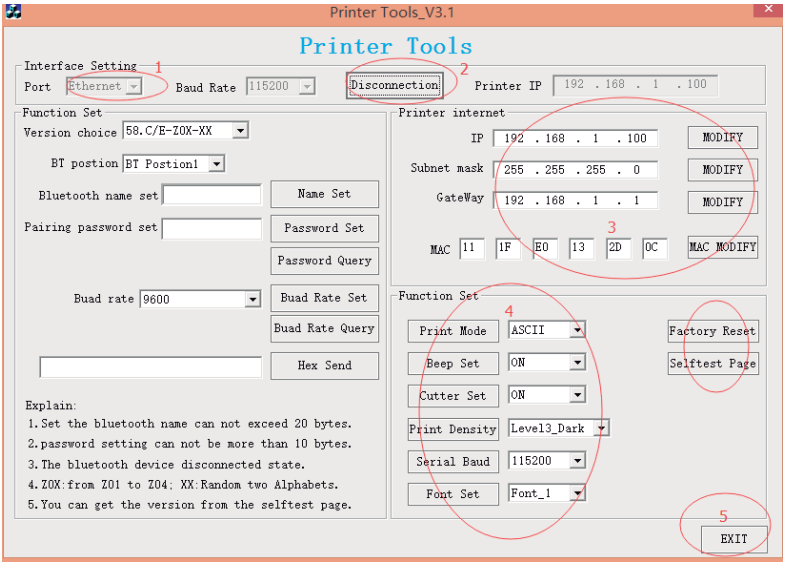
1.1 Connect the printer with computer by crossover cable, such as a router connection, printer and computer are both connected to the router.

1.2 Press the "FEED" button while turn on the printer power switch, and when "PAPER OUT" indicator light, release the "FEED" button, the printer will be printed a self-test page, then you can check the relevant information of printer as below image shown:




1.3 Modify the IP address of the computer, make sure that the printer is in the same network segment, and the subnet mask and gateway should be the same as printer.

1.4 open the CD to find "tool" -- "tool" for setting up the printer, open the software below:




**Step 1:**

Select the port " Ethernet", and get the printer IP from Self-test page.
(the default IP address is 192.168.1.100)

**Step 2:**

Click the "Connection", if success, it will be shown " Disconnection".

**Step 3:**

Can be modified the relevant parameter of printers (IP, Subnet mask, Gateway, MAC). After all the setting are done, please power off and restart the printer.

**Step 4:**

About the printer "Function Set", you can set Print Mode (Chinese/ASCII), Beep Set (ON/OFF), Cutter set (ON/OFF), Print Density (Level 1 to Level 4), Serial Baud Rate (9600, 19200, 38400, 57600, 115200), Front set (Front_1, Front_2 and Front_3).
After all the setting are done, please power off and restart the printer.

**Step 5:**

You also can do the "Factory Reset" and print the "Self-test page" by this tool.
If all is done, please click " EXIT" to close the tool.

# 7. 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.*

**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 printer 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*

**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)*

Protect our environment: do not dispose of electrical equipment in your domestic waste. Please return any electrical equipment that you will no longer use to the collection points provided for their disposal. These simple steps can help to avoid the potential effects that incorrect waste disposal can cause on the environment and human health. This will contribute to recycling and other forms of re-use of electrical and electronic equipment. Information concerning where the equipment can be disposed of can be obtained from your local authorities.

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