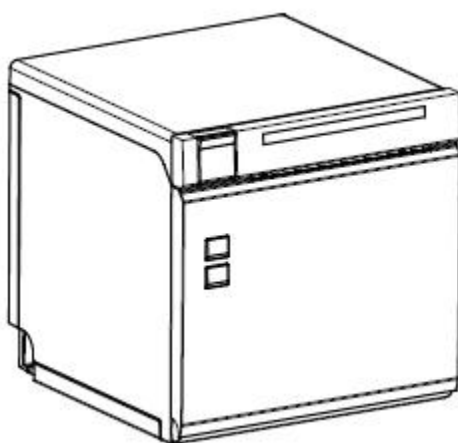




# **MX-55 ENTPlus**

## **User Manual**



---

---

# Content

Statement.....	1
Important Safety Instructions.....	2
1 OVERVIEW.....	4
1.1 Introductions.....	4
1.2 The Main Features.....	4
2 GETTING STARTED.....	5
2.1 Packing List.....	5
2.2 Appearance and Components.....	6
3 SPECIFICATIONS.....	7
3.1 Printer Specification.....	7
3.2 Printing Media Specification.....	9
3.2.1 Continuous Thermal Paper Specification.....	9
3.2.2 Notices.....	9
3.3 Printing and Cutting Position.....	10
3.3.1 Printing Position.....	10
3.3.2 Cutting Position.....	10
4 INSTALLATION AND USAGE.....	11
4.1 Media Loading.....	11
4.1.1 Paper Confirmation.....	11
4.1.2 Paper Installation.....	11
4.2 LED Indicator and Beeper.....	13
4.3 Power Connection.....	14
4.4 Interface Cable Connection.....	16
4.5 Cash Drawer Connection.....	16
4.6 Print Test.....	16
4.6.1 Print Self-Test.....	16
4.6.2 Printing of Windows Driver Program.....	16
5 INTERFACES.....	17

---

---

---

---

5.1 USB.....	17
5.2 Serial Interface.....	18
5.3 Ethernet Interface.....	19
5.4 Cash Drawer Interface.....	20
5.5 Power Supply Interface.....	21
6 TROUBLESHOOTING.....	22
6.1 Printer Not Working.....	22
6.2 LED Indicator and Beeper.....	22
6.3 Troubles Occur During Printing.....	23
6.4 Problems Emerge During the Paper Cutting.....	24
6.5 Removing Jammed Paper.....	24
7 PRINTER CLEANING AND MAINTENANCE.....	25
7.1 Cleaning Head.....	25
7.2 Cleaning Sensors, Roller and/or Paper Path.....	25
8 UTILITY TOOL FOR POS INSTRUCTION.....	26
8.1 Utility Tool Installation.....	27
8.2 Using Utility Tool.....	30
8.2.1 Add/Modify/Delete/Connect Printer.....	30
8.2.2 Functions.....	37
8.3 Firmware Update.....	77
9 WINDOWS DRIVER INSTRUCTION.....	79
9.1 Information.....	79
9.2 Operating System (OS) Environment.....	79
9.3 Windows Driver Preparation.....	79
9.4 Windows Driver Installation.....	80
9.5 Detailed Windows Driver Setting.....	84
9.5.1 Printing Preferences.....	84
9.5.2 Printer properties.....	124
9.6 Uninstall Windows Driver.....	128

---

---

## Statement

This manual content may be altered without permission, and our company reserves the rights to make changes without notice in technology, spare parts, hardware and software of the products. If more information is needed about the products, please contact our company. Without any written permission from the company, any section of this manual is prohibited to be copied or transferred in any form.

### Warnings



This must be complied with in order to avoid any damage to the human body and to the equipment.



This is showing the important information and tips for the printer operating.



***Note: Due to continuous improvement of the products, the specifications, accessories and procedures described in the manual are based on actual machines. And it may be changed without prior notice***

## Important Safety Instructions

### 1. Safety Warning



The print head will become very hot during printing, please do not touch the print head and peripheral parts during printing and printing just finished.



Please do not touch the print head and connectors, in case that static damages print head.

### 2. Instructions

Carefully read the installation and operating instructions provided with the printer before starting up your printer.

- 1) Place the printer on a flat and stable surface.
- 2) Leave enough space around printer for operation and maintenance.
- 3) Do not place the printer on or near a heat source.
- 4) Never spill liquid into the printer.
- 5) Do not expose the printer to high temperatures, direct sunlight or dust.
- 6) Protect the printer from shock, impact and vibration.
- 7) Be certain the power source is within the voltage rating and frequency listed for the printer.
- 8) Switch off the printer power supply when won't use it for a long time.
- 9) Do not place the power cord where it can be stepped on. If the power cord becomes damaged or frayed, replace it immediately.
- 10) To ensure the print quality and reliability, you are suggested to use the recommended paper or the same quality paper.
- 11) Please switch off the power supply when connect/disconnect all the ports or it will cause damage to the printer control circuit.
- 12) Never carry out maintenance or repair work yourself. Always contact a qualified service technician.
- 13) Keep this User Manual in a place which is easily accessible at all times.

### 3. Other Precautions

The copyright for this user manual and various other manuals is property of our company. Any copying or conversion into electronic form and saving of this material without the express written permission is strictly prohibited. Use of the information contained in this manual is not subject to any patent liability. This manual has been prepared with utmost care and attention to detail but may contain certain errors and/or omissions. Our company is not legally liable for any damages resulting from the use of the information in this manual. Our company and its affiliates are not legally liable (United States excluded) for any damages, loss, costs, and/or expenses that result from the breakdown, malfunction, and/or misuse of the product due to violation or neglect of the operation and maintenance information and instructions provided by our company, as well as from the unauthorized alteration, repair, and/or modification of the product by the user and/or third party. We are not legally liable for any damages and/or issues resulting from the use of options and/or parts that are not authentic or authorized products.

### 4. WEEE (Waste Electrical and Electric Equipment)



This mark shown on the product or its literature indicates that the corresponding item should not be discarded at the end of its working life with other household waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate marked items from other types of waste and recycle them responsibly to promote the sustained reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office for details of where and how they can conduct environmentally safe recycling of such items. Commercial users should contact their suppliers and check the terms and conditions of purchase contracts. This product should not be combined with other commercial waste for disposal.



**Caution: This is a Class A product. In a domestic environment this product may cause radio interference in which the user may be required to take adequate measures.**

# **1 OVERVIEW**

## **1.1 Introductions**

MX-55 ENTPlus is a thermal receipt printer, featured by high print quality, high print speed, high stability, etc. It can be used in commercial POS system, food industry and occasions which need real-time field print receipts.

MX-55 ENTPlus can connect with other equipment through serial, USB and Ethernet interfaces. And the printer drivers are available for the WINDOWS XP/WINDOWS 7/WINDOWS 8/WINDOWS 10/Linux operating system.

## **1.2 The Main Features**

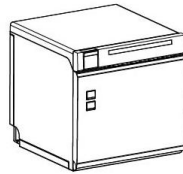
- 1) Low noise
- 2) High print speed
- 3) Easy paper loading
- 4) Support page mode printing
- 5) Compatible with various width paper
- 6) Cash drawer interface
- 7) Communication interfaces optional

## 2 GETTING STARTED

### 2.1 Packing List

After receiving your printer, please check for possible shipping damage:

- 1) Check the outside of the box and the printer for possible damage.
- 2) Check whether you have received the following accessories together with the printer, if there are any items missing, please contact your local dealer.



Printer



USB Cable



Power Cord



Serial Cable



Power Adapter



Roll Paper



CD



Quick Start Guide

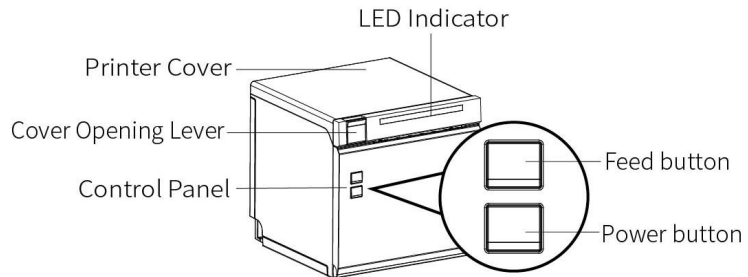


**Note: The power adapter and power cord vary by country or region.**

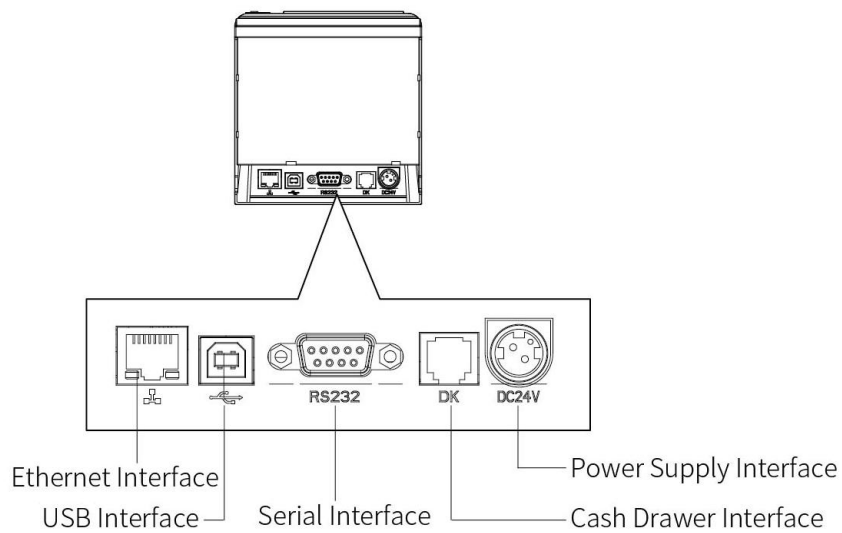


## 2.2 Appearance and Components

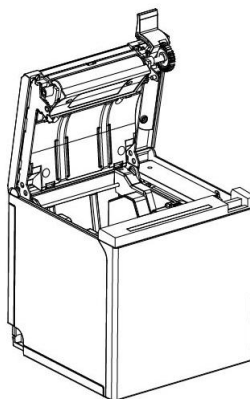
### ■ Front



### ■ Rear



### ■ Inside



## 3 SPECIFICATIONS

### 3.1 Printer Specification

**Table3-1 General Specification**

Item		Parameter
Printing Parameter	Printing Method	Direct thermal line printing
	Resolution	203dpi, 8dots/mm
	Printing Width	72mm
	Print Speed	260mm/s
	Interface	USB, Serial, Ethernet, Cash drawer
	Print density	Adjustable from level 1 to level 4
Page Mode		Support
Memory	RAM	2MB
	Flash	4MB
Fonts	Chinese	GBK 24×24
	Alphanumeric	ASC II 9×17,12×24.
	User-defined	Support
	Code page	Optional international character sets: PC437(std.Europe), Katakana, PC850(Multilingual), PC860(Portuguese), PC863(Canadian), PC865(Nordic), PC857(Turkish), PC737(Greek), ISO08859-7(Greek), WPC1252, PC866(Cyrillic #2), PC852(Latin 2), PC858(Euro), KU42(Thai), TIS11(Thai), TIS18(Thai), PC720(Arabic), WPC775(Baltic Rim), PC855(Cyrillic), PC862(Hebrew), PC864(Arabic), ISO8859-2(Latin2), ISO8859-15(Latin9), WPC1250(Latin 2), WPC1251(Cyrillic), WPC1253(Greek), WPC1254(Turkish), WPC1255(Hebrew), WPC1256(Arabic), WPC1257(Baltic Rim), WPC1258(Vietnamese), MIK(Cyrillic), PC755(Latin 2), Iran, Iran II, Latvian, ISO-8859-1(WestEur), ISO-8859-3(Latin 3), ISO-8859-4(Baltic), ISO-8859-5(Cyrillic), ISO-8859-6(Arabic), ISO-8859-8(Hebrew), ISO-8859-9(Turkish), PC856, PC3848(ABICOMP), MONGOLIAN, VISCII

**Table3-1 General Specification (Continued)**

Item		Parameter
Barcode	1D	UPC-A, UPC-E, EAN8, EAN13, CODE39, ITF, CODEBAR, CODE128
	2D	PDF417, QR code
Graphics		Support downloading and printing bitmaps of different density and user-defined. The total memory for bitmap is 256K.
Detection	Sensors	Paper out detection, Cover open detection
LED Indicator		There are different light colors: blue, green, red and purple, depending on different statuses of printer.
Power	Input	AC100V-240V
Supply	Output	24V $\overline{\text{---}}$ 2.5A
Paper	Paper type	Specified Thermal Paper
	Paper width	58 $^{+0}_{-1}$ mm/ 80 $^{+0}_{-1}$ mm
	Paper thickness	0.056 ~ 0.13mm
	Roll paper diameter	Max. OD $\phi$ 83mm
	Paper load	Easy-loading structure of forward open cover or upward open cover
	Paper cut	Partial cut or full cut
Physical Spec.	Operating condition	0°C ~ 40°C, 20% ~ 85%RH
	Storage condition	-20°C ~ 70°C, 5% ~ 95%RH
	Dimensions	136.8(L)*132(W)*130.5(H)mm
	Weight	1.33kg
Command		ESC/POS
Software	Driver	Windows2000/XP/Vista/Win7/Win8/Win10/POSReady/Linux CUPS/OPOS/JavaPOS
	SDK	WinCE, Win Mobile, Android, iOS

## 3.2 Printing Media Specification

### 3.2.1 Continuous Thermal Paper Specification

Paper Type : Specified Thermal Paper

Paper Width :  $58^{+0}_{-1}$  mm /  $80^{+0}_{-1}$  mm

Paper Outer Diameter : Max. 83 mm

Paper Thickness : 0.056 ~ 0.13mm

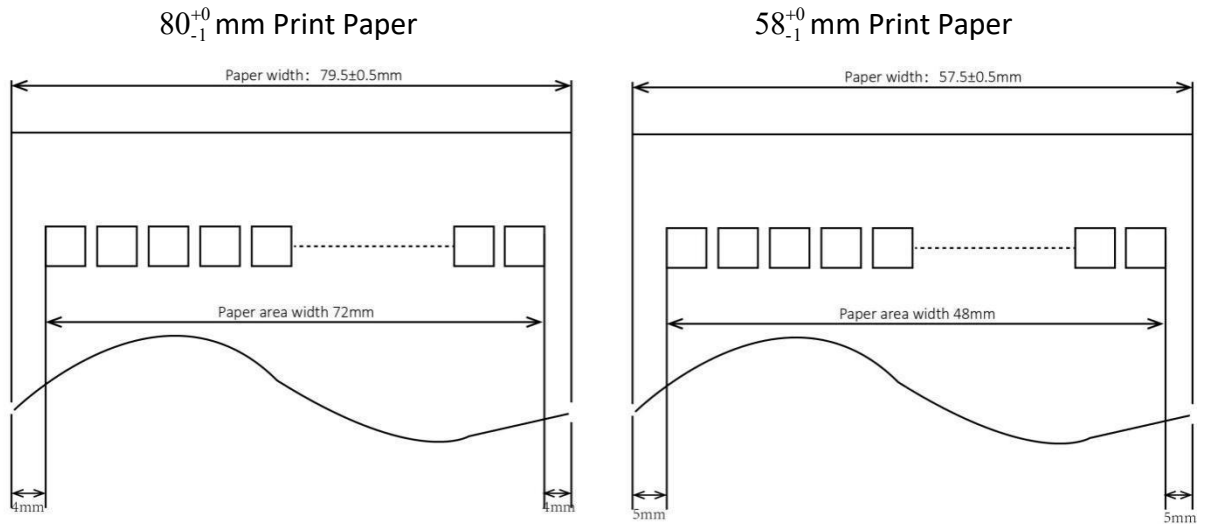
Paper Type	Manufacturer
FD210, PD150R, PD160R	OJI Paper CO., LTD.

### 3.2.2 Notices

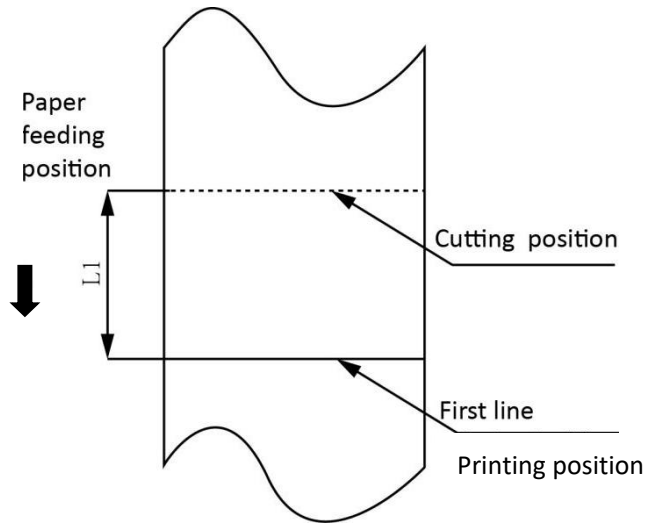
- Please use the recommended thermal paper or same quality paper, otherwise it will influence the printing quality and decrease the thermal printer head life.
- Do not stick the paper on the roll paper mandrill.
- If the thermal paper is polluted by chemical or oil, the thermal paper heat sensibility decreases, which will influence the printing quality.
- Do not use finger nail or hard articles to touch the surface of thermal paper, otherwise it will cause color fading.
- When the environment temperature is higher than 70°C, the thermal paper color will fade, so pay attention to the influence of temperature, humidity and sunlight.

### 3.3 Printing and Cutting Position

#### 3.3.1 Printing Position



#### 3.3.2 Cutting Position



Type	Paper Cutting Position(L1)
MX-55 ENTPlus	11.6mm

## 4 INSTALLATION AND USAGE

### 4.1 Media Loading

#### 4.1.1 Paper Confirmation

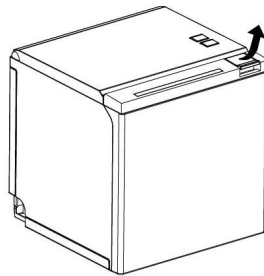
- 1) When using 80mm(width) roll paper, take down the paper guide of both sides.
- 2) When using 58mm(width) roll paper, insert the paper guide to each side.



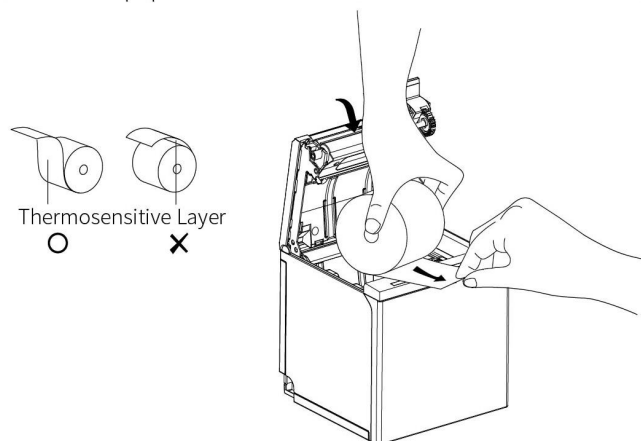
**Note:** Roll paper should be placed in the middle.

#### 4.1.2 Paper Installation

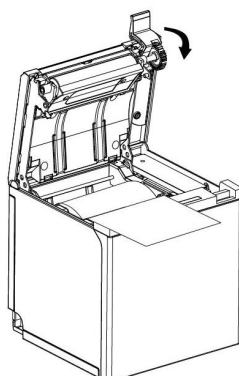
- 1) Pull the cover open lever to open the printer cover.
- 2) Remove the used roll paper core, if any.



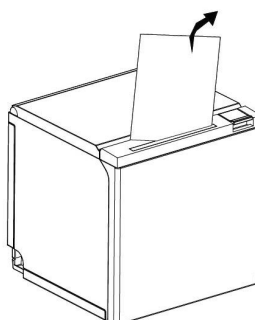
- 3) In the correct direction of the roll paper, load the paper.



4) Pull out some roll paper and close the printer cover.



5) Tear the extra paper in the direction of printer.



**Notes:**

**1) Adjust the paper guide according to the paper size.**

**2) Make sure the paper inside is at tight status, or it will cause paper jam or other fault.**

## 4.2 LED Indicator and Beeper

Function specification of indicator light and beeper.

LED Indicator	Printer Status
Red (Flash)	Wrong status (cutter jam, over temperature, paper end and so on)
Purple (On)	Paper near end, and printer is working normally
Blue (On)	Printer is busy
Green (On)	Printer is ready and in idle status

Printer Status	LED Indicator	Beeper
Printer cover is open	Red (Flash)	"Beep, Beep—, Beep"
Paper sufficient	Green (On)	Silent
Paper end	Red (Flash)	"Beep Beep Beep".
Cutter jam	Red (Flash)	"Beep—, Beep—"

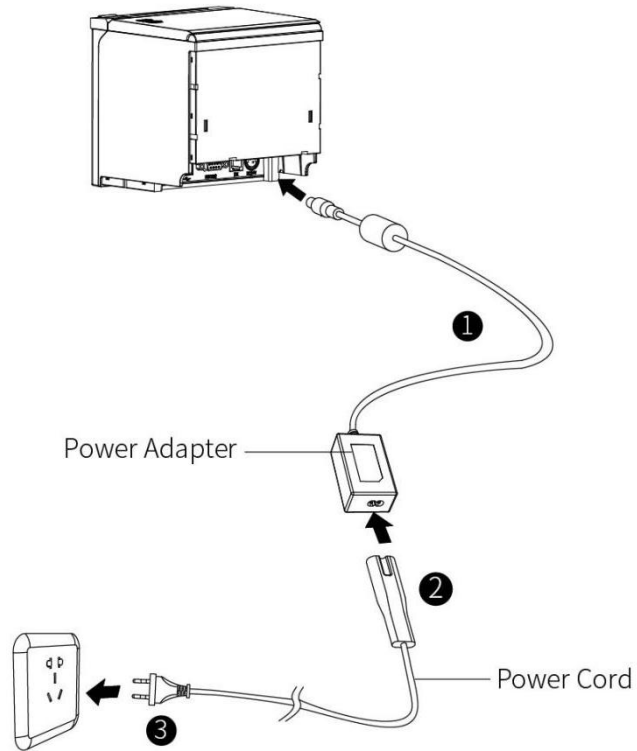


**Note:** The printer uses a thermistor to detect the temperature of the print head. If the temperature of print head is more than 65 °C, printer will send a warning. If the temperature of print head is more than 80 °C, printer will stop working until the temperature is less than 60 °C.



### 4.3 Power Connection

- 1) Connect power adapter to printer.
- 2) Connect power adapter to the power cord.
- 3) Plug the other side of power cord into the socket outlet.



**Notes:**

- 1) *The power adapter and power cord vary by country or region.*
- 2) *Disconnect or connect the power adapter by correct method, or damage may be caused.*

When pulling out the adapter, please pinch the shell of power adapter and pull the switch up, when the switch is fully opened then pull out the power adapter.

Don't put forth your strength to pull the plug by squeezing any place of power adapter. Because it is more difficult to pull it out and easy to damage the cable.



**Notes:**

- 1) Please only use the power adapter recommended by supplier or equivalent products.**
- 2) When disconnecting the power adapter plug, handhold plug connector housing and avoid pulling on the cable in force.**
- 3) Avoid dragging the power adapter cable, otherwise it will damage the cables, causing fire and shock.**
- 4) Avoid putting power adapter around a heating device, otherwise the cable may melt, causing fire and shock.**
- 5) If you do not use the printer in a long time, disconnect the power supply of printer power adapter.**

## 4.4 Interface Cable Connection

- 1) Make sure the printer's power switch is turned off.
- 2) Put the interface cable into the matched interface and fixed with screws (or spring) on the plug.
- 3) Connect the other end of the interface cable to the host.

## 4.5 Cash Drawer Connection

- 1) Make sure the printer's power switch is turned off.
- 2) Connect the cash drawer cable into the cash drawer interface on the rear side of the printer.



### **Warning:**

Cash drawer interface can only be connected to a voltage of 24V cash drawer device (can't connect to the phone line, etc.)

## 4.6 Print Test

### 4.6.1 Print Self-Test

The self-test checks the printer's current settings, status and whether the printer has any problem.

- 1) Make sure the power is connected and paper is loaded properly.
- 2) Make sure the printer is power off and top cover is closed properly.
- 3) Press the paper feed button and power button simultaneously to turn the printer on. The printer is ready to receive data as soon as it completes the self-test.

### 4.6.2 Printing of Windows Driver Program

- 1) Install the Windows Driver program. (Please refer to the Windows Driver Instruction at Chapter 9)
- 2) Please set the "Interface" as the type you use.
- 3) Use the Windows Driver Program to print out the "Print Test Page".

## 5 INTERFACES

MX-55 ENTPlus supports cash drawer interface and many other various communicate interfaces, such as Serial interface, USB interface, Ethernet interface.

### 5.1 USB

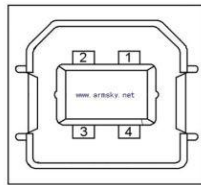


Figure 5-1

PIN	SIGNAL NAME
1	VBUS
2	D-
3	D+
4	GND

## 5.2 Serial Interface

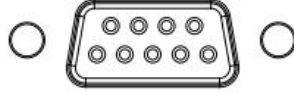
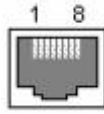


Figure 5-2

PIN	SIGNAL NAME
1	-
2	TXD
3	RXD
4	-
5	GND
6	RTS
7	CTS
8	RTS
9	-

### 5.3 Ethernet Interface



PIN	SIGNAL NAME
1	TX+
2	TX-
3	RX+
4	-
5	-
6	RX-
7	-
8	-



**Note:** The printer is equipped with an Ethernet interface, and use the network connection router, switch and other network communication equipment which meet RJ45 interface standard. When connecting directly with PC, it is suggested that the cross network line in accordance with RJ45 interface standard should be adopted.

## 5.4 Cash Drawer Interface

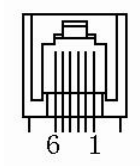


Figure 5-4

PIN	SIGNAL NAME
1	FG
2	Drawer 1
3	DRSW
4	VDR
5	Drawer 2
6	GND

### Electrical characteristics

- Driving voltage: DC 24 V
- Driving current: Maximum 0.8 A (In 510 ms)

Drawer check signal: “L” = 0 ~ 0.5 V      “H” = 3 ~ 5 V

## 5.5 Power Supply Interface

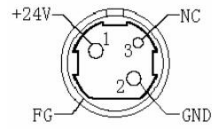


Figure 5-5

PIN	SIGNAL NAME
1	+24V
2	GND
3	N.C
SHELL	F.G

Printer end-Unetop DC-002 or similar products, user end-Unetop DC-002 or similar products.



## 6 TROUBLESHOOTING

Your printer is very reliable, but occasionally problems may occur. This chapter provides information on some common problems you may encounter and how to solve them. If you encounter problems that you can not resolve, contact your dealer for assistance.

### 6.1 Printer Not Working

Problem Description	Probable Reason	Solution
LED indicator is off, printer is not working	Printer has no power	Connect printer to power supply
	Printer is turned off	Turn on the printer
	Circuit board is broken	Contact with the dealer

### 6.2 LED Indicator and Beeper

Problem Description	Probable Reason	Solution
Purple LED is always on	Paper near end	The roll paper is near end, the printer can work normally
Red LED flashes and beeper alarms	Paper end	Load the roll paper
	Thermal print head is overheated	Turn the printer off and resume when it cools
	Over-voltage	Print with specified voltage
	Cutter jam	Open the printer cover and the cutter would go back to home position
	Cover is open	Close the cover

### 6.3 Troubles Occur During Printing

Problem Description	Probable Reason	Solution
Coloured stripe in the paper	Paper near end	Reload the paper roll
Blurred printing or spot	Incorrect paper roll loading	Check if the paper roll is loaded
	Unqualified paper roll	Use recommended thermal paper roll
	Thermal head or print roller is dirty	Clean the thermal head or print roller
	Low print density	Increase the print density level
Paper is not feeding normally	Paper jam	Open the printer cover, check the paper path and remove jammed paper
Vertical print words are missing	Thermal head or print roller is dirty	Clean the thermal head or print roller
	Thermal head is damaged	Contact with your dealer for assistance



**Note:** About the density setting, please refer to chapter 8.

## 6.4 Problems Emerge During the Paper Cutting

Problem Description	Probable Reason	Resolution
Cutter jam, the movable cutter cannot go back	Cutter abrasion, insufficient cutting	Replace the cutter
	Worm gear and worm wheel abrasion	Replace the worm gear and worm wheel
	Motor is burnt	Replace the motor
	Paper scraps	Clean the paper scraps on the transmission system
Insufficient cutting	Cutter edge abrasion, paper is too thick	Replace the cutter
Paper jam	Thermal printer head is over-heated	Reduce the density of printing
	Driving is too fast	Reduce the printer speed to the limit of thermal printer head
	Wrong paper feeding position	Put the paper parallel with the paper mount and insert into the space between platen roller and the thermal printer head.



**Note:** About the density setting, please refer to chapter 8.

## 6.5 Removing Jammed Paper



**Warning:** Do not touch the thermal print head because it becomes very hot after printing.

If the printer cover can be opened, operate it according to the next steps.

- 1) Turn off the printer and pull open cover button.
- 2) Remove jammed paper, reinstall the roll, and close the printer cover.

## 7 PRINTER CLEANING AND MAINTENANCE

Print quality might be degraded by dust, foreign substance, adhesive substance, or other pollution materials stuck in the printer head or inside the printer.

When dirty, clean the print head as following steps:

※ **CAUTION**

- 1) Make sure to turn off the printer prior to cleaning.
- 2) As the print head gets hot during printing, turn the printer off and wait approximately 2~3 minutes before starting to clean.
- 3) When cleaning the print head, take care not to touch the heated portion of the print head.  
Print Head is susceptible to damage from static electricity, etc.
- 4) Take care not to allow the print head become scratched and/or damaged in any way.

### 7.1 Cleaning Head

- 1) Open the printer cover and then use cotton stick with medical alcohol to clean the head in the direction from the center of the head to the edges.
- 2) After cleaning the head, do not use the printer until the alcohol used for cleaning evaporates completely (1~2 min.) and the printer has completely dried.

### 7.2 Cleaning Sensors, Roller and/or Paper Path

- 1) Open the printer cover and then remove the paper.
- 2) Remove any dust or foreign substance using dry cloth or cotton swab.
- 3) Soak the cloth or cotton swab in alcohol for medical use and use it to remove adhesive foreign substances or other pollution materials.
- 4) After cleaning the parts, do not use the printer until the alcohol evaporates completely (1~2 min.) and the printer is completely dry.

※ ***Clean the parts whenever print quality or paper detection degraded.***

---

## **8 UTILITY TOOL FOR POS INSTRUCTION**

Utility Tool is applicable to the following operating system:

- Microsoft Windows 10 (32 bit/64 bit)
- Microsoft Windows 8 (32 bit/64 bit)
- Microsoft Windows 7 SP1 (32 bit/64 bit)
- Microsoft Windows Vista SP2 (32 bit/64 bit)
- Microsoft Windows XP Professional SP3 (32 bit)
- Microsoft Windows Server 2012(64 bit)
- Microsoft Windows Server 2008 R2

## 8.1 Utility Tool Installation

The following screens take Win 7 for example.

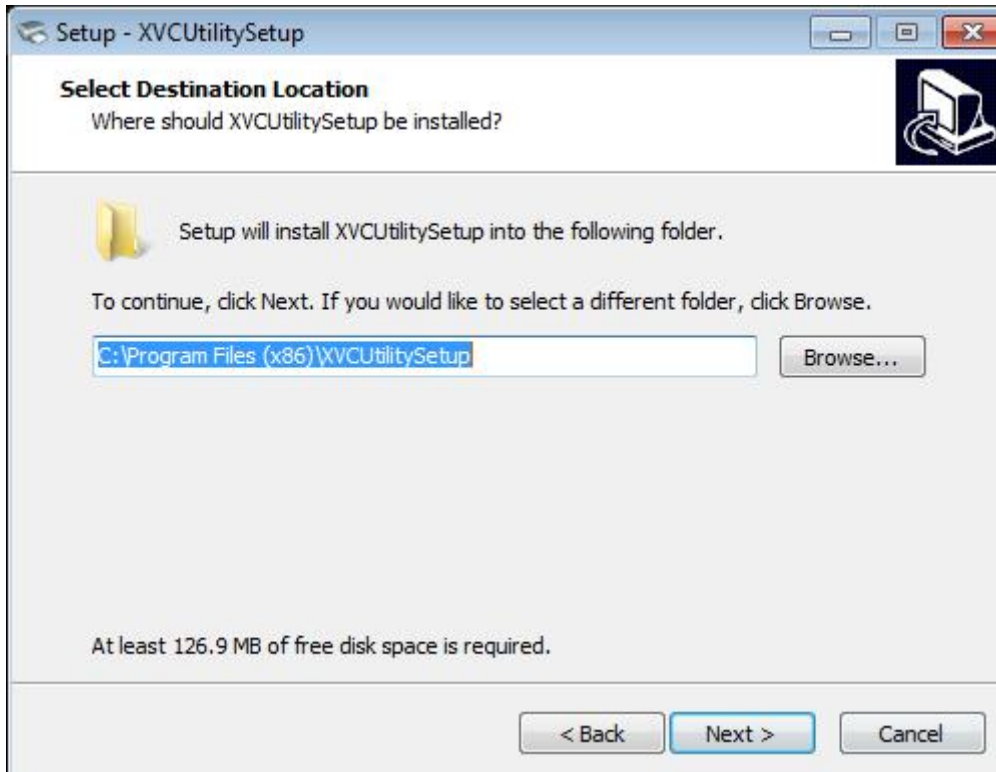
- 1) Open the installation package.
- 2) Choose “English” and click “OK”.



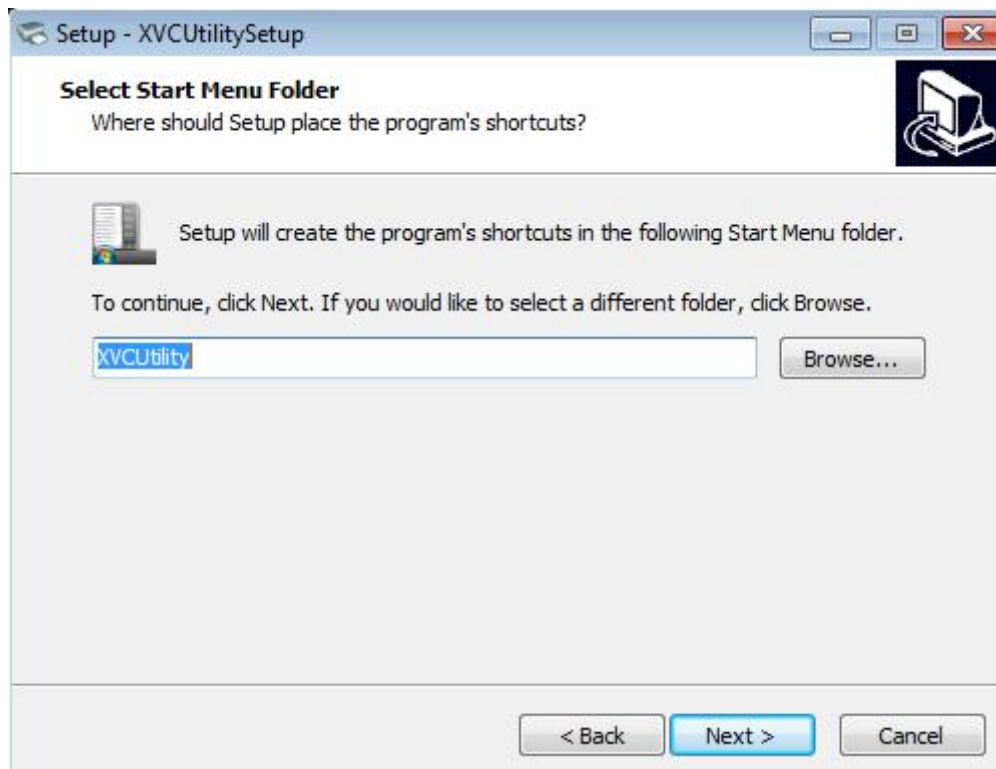
- 3) Click “Next”.



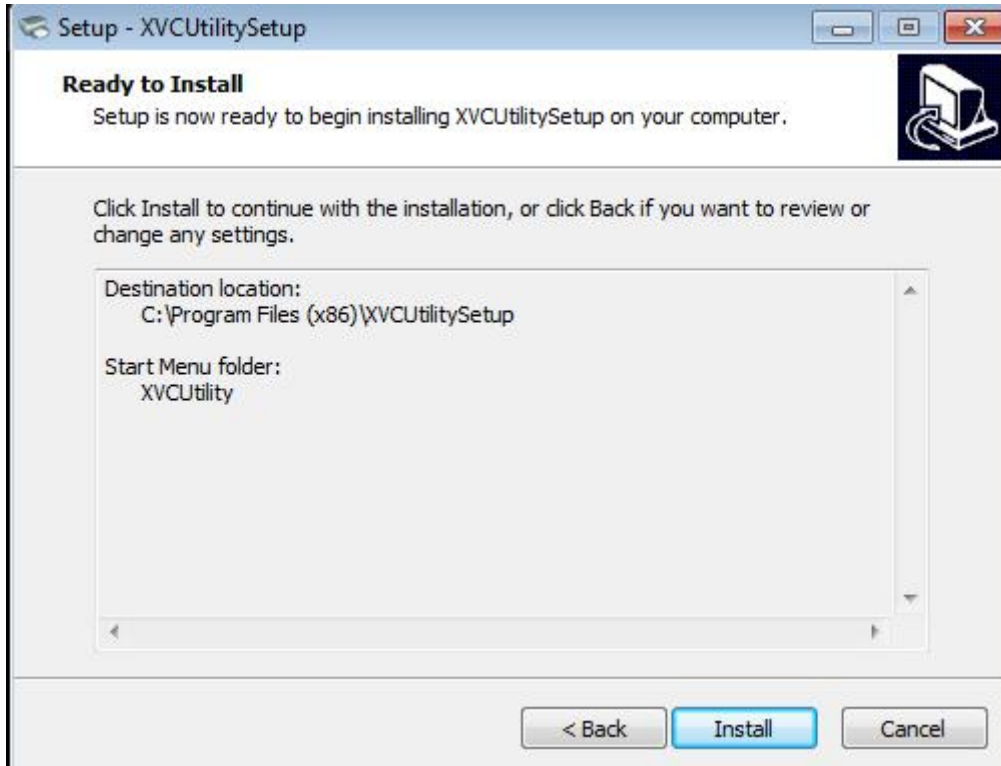
4) Select destination location. Click “Next”.



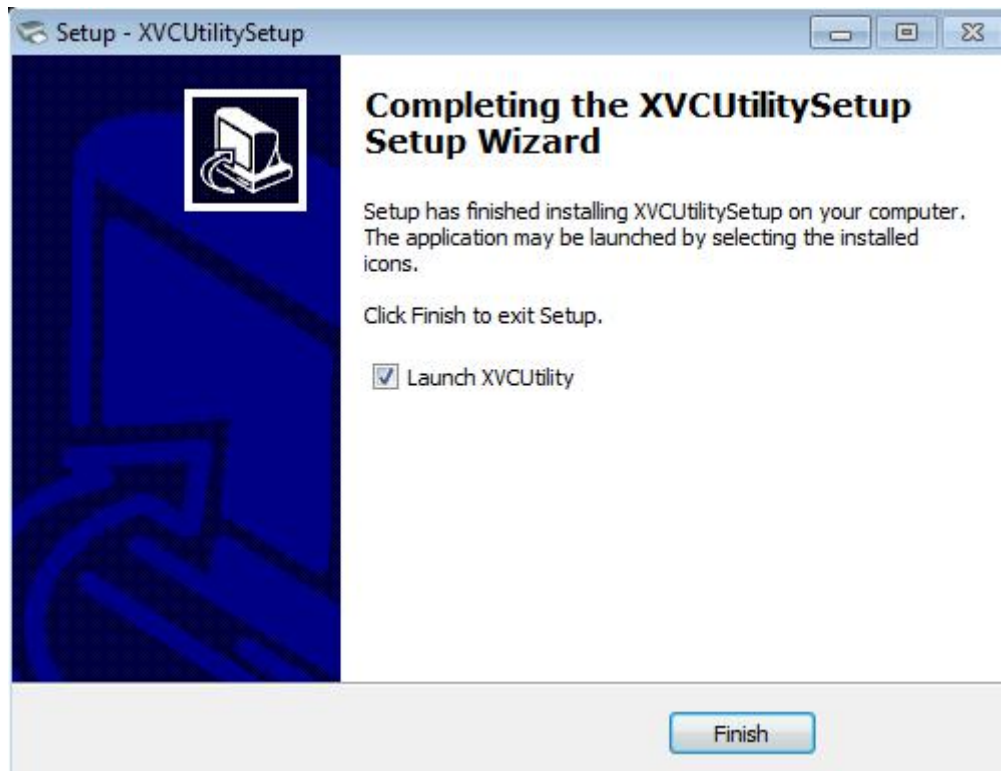
5) Select start menu folder. Click “Next”.



6) Click “Install”.




7) Click “Finish”. Utility is installed successfully.





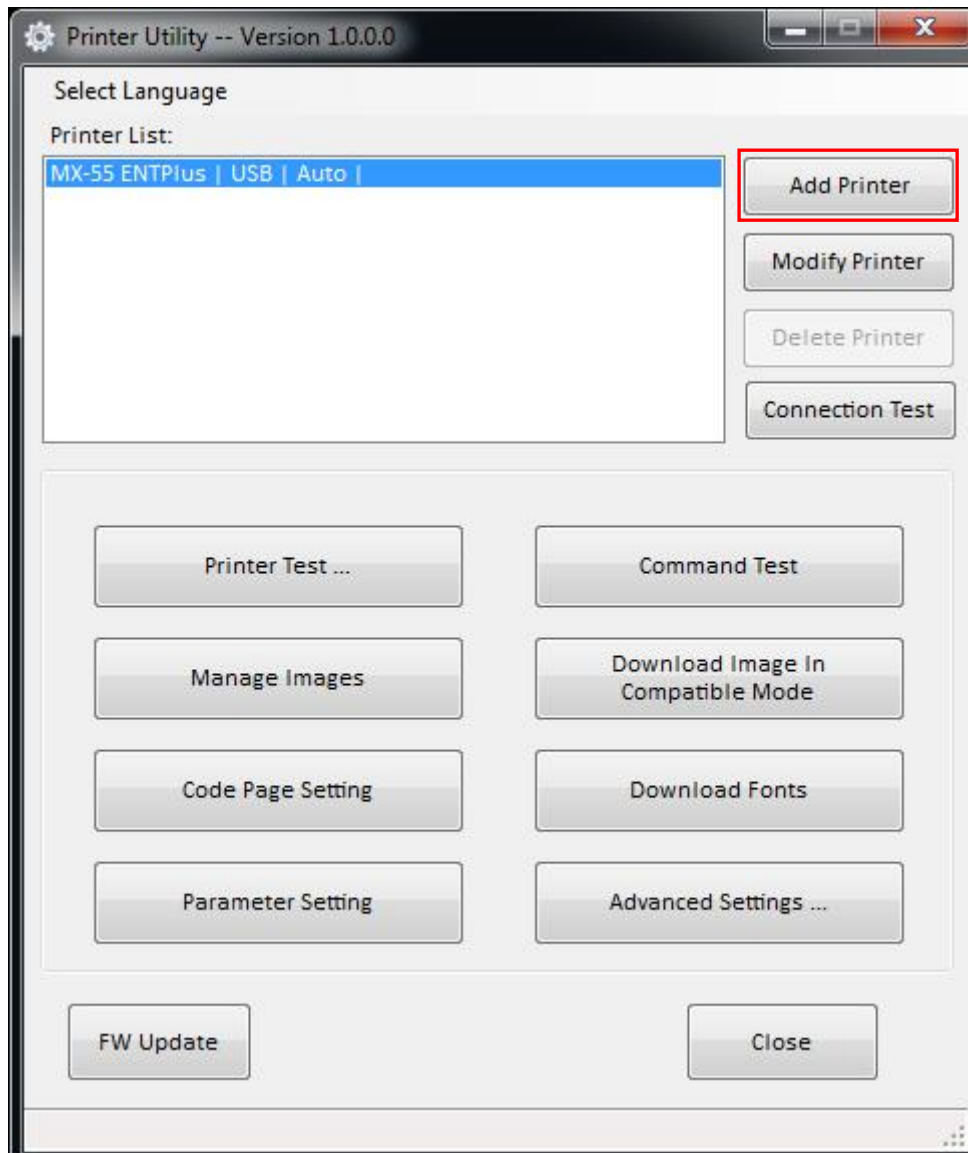
## 8.2 Using Utility Tool

 Warning: In different operating system, screen has a slight difference. Please operate it according to the tips. Take MX-55 ENTPlus (Windows 7) for example.

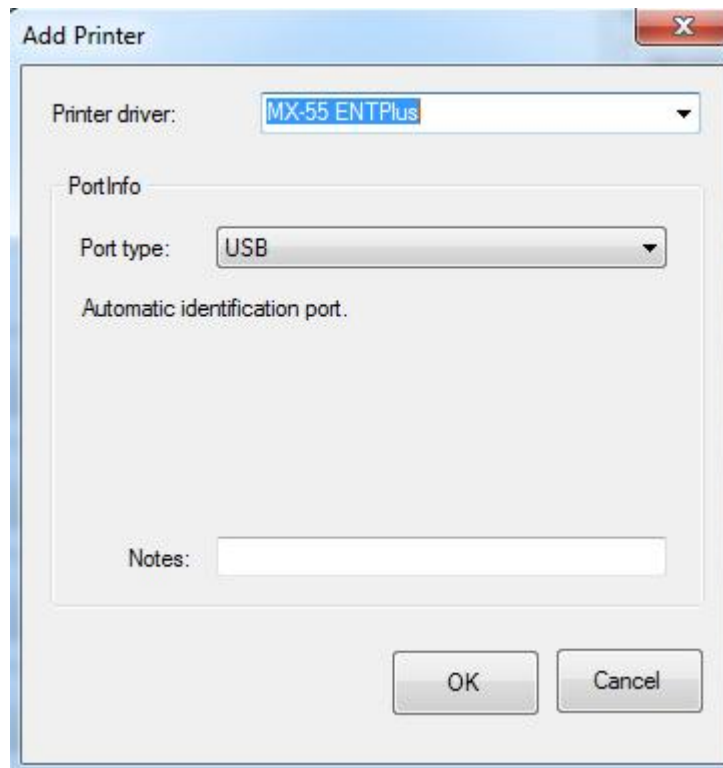
### 8.2.1 Add/Modify/Delete/Connect Printer

#### 8.2.1.1 Add printer

1) Click "Add Printer".

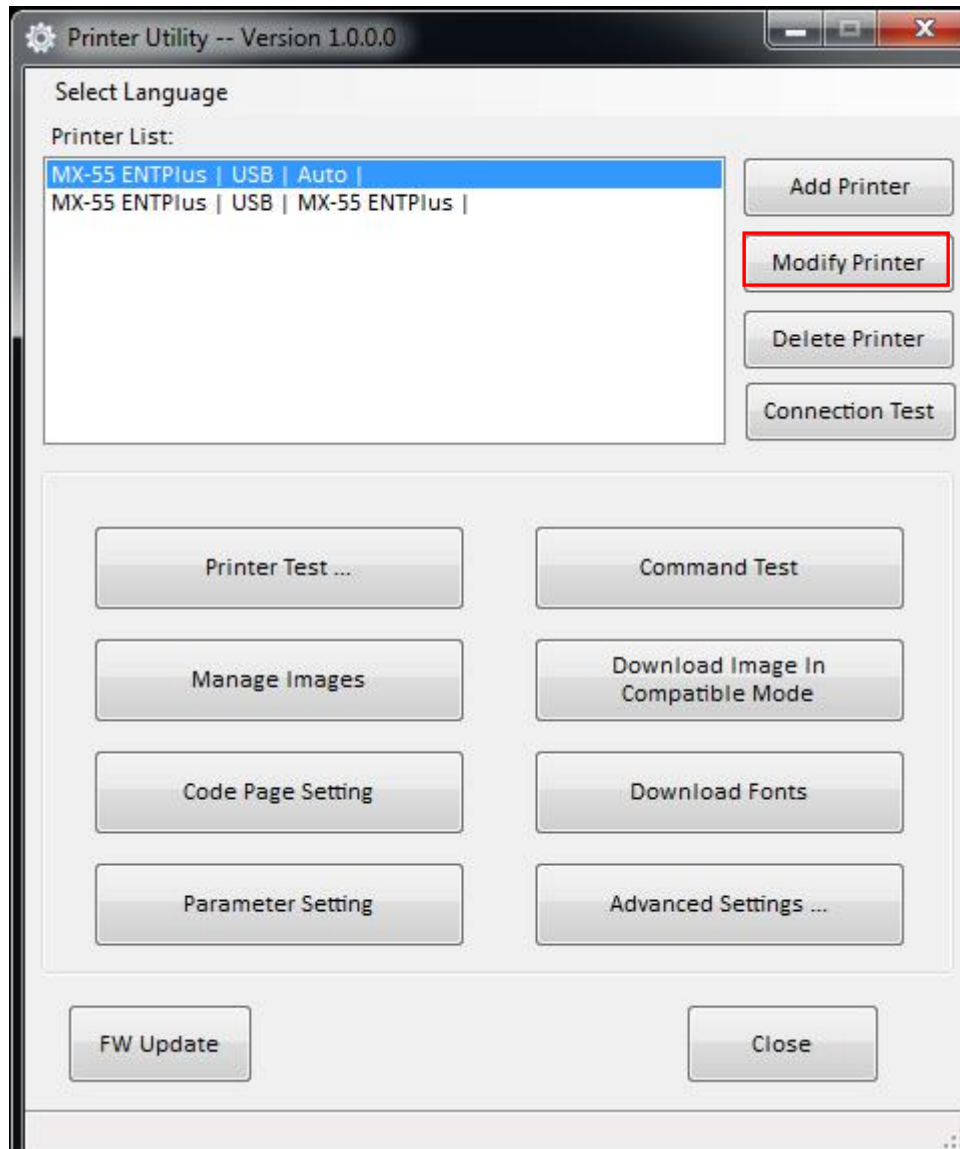


2) Choose the appropriate printer type and port. Then click “OK”. (Take MX-55 ENTPlus for example.)

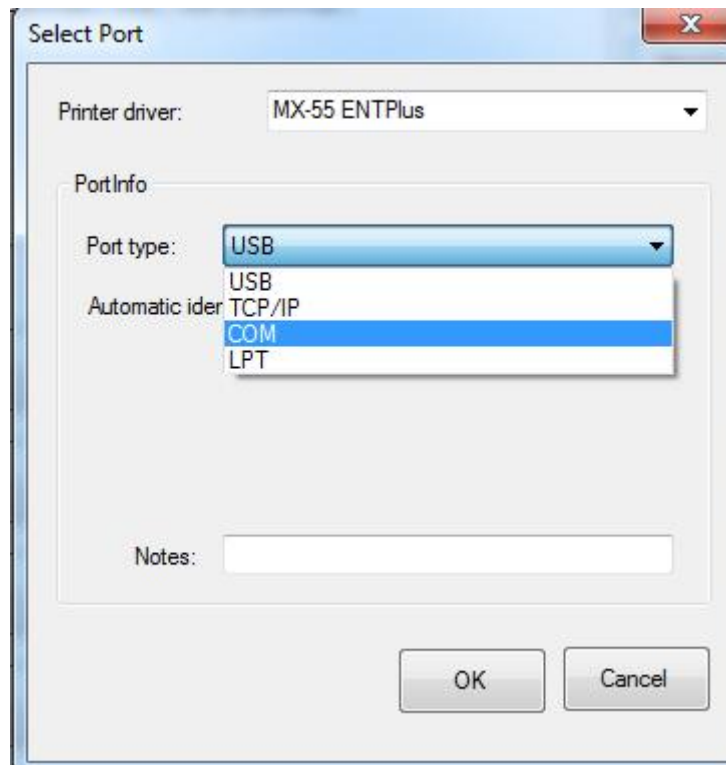


### 8.2.1.2 Modify printer

1) Choose the printer you want to modify in the list. Click “Modify Printer”.



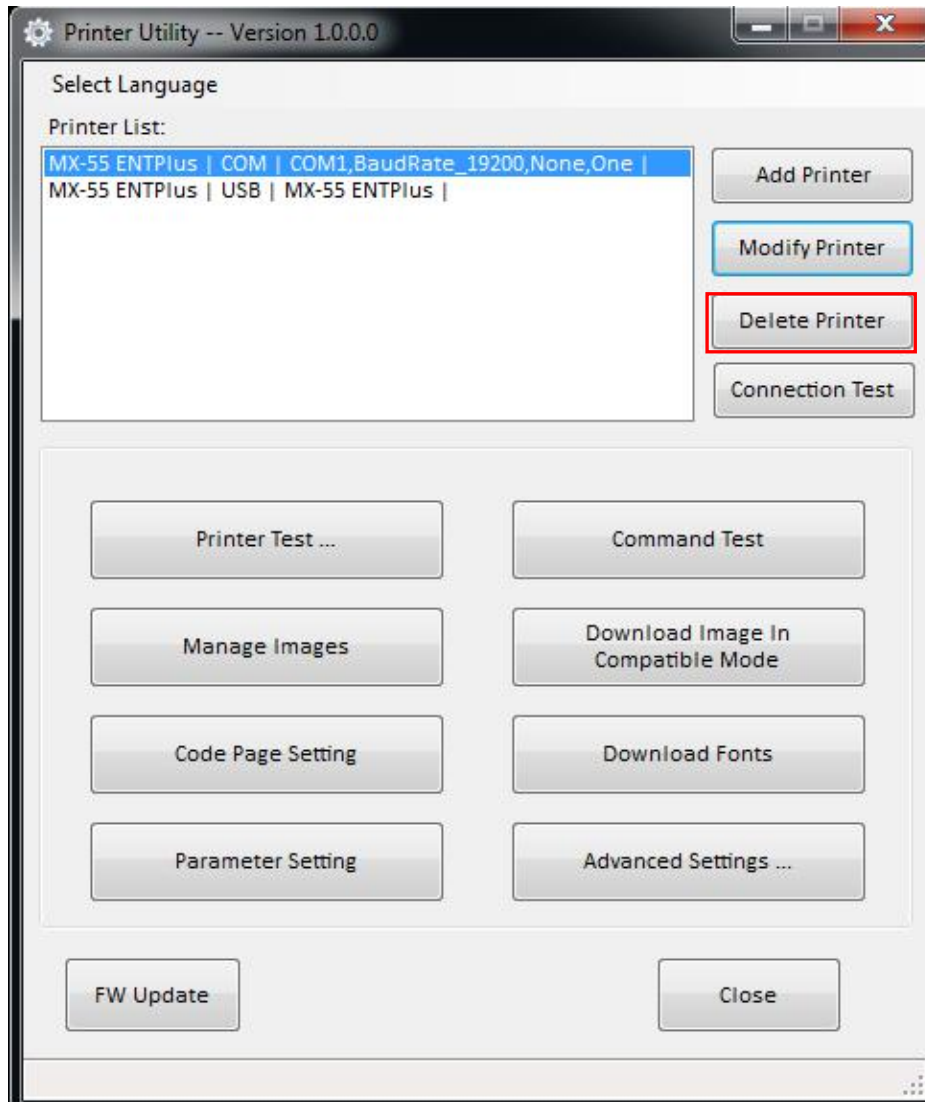
2) Choose the new printer and new port. Then click “OK”.



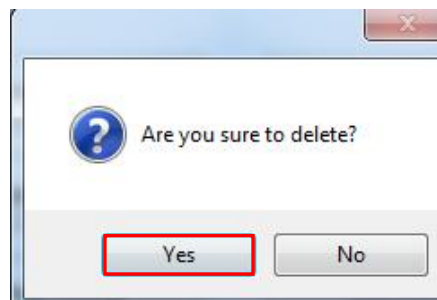
3) The new printer is added successfully.

### 8.2.1.3 Delete printer

1) Choose the printer you want to delete in the list and click “Delete Printer”.



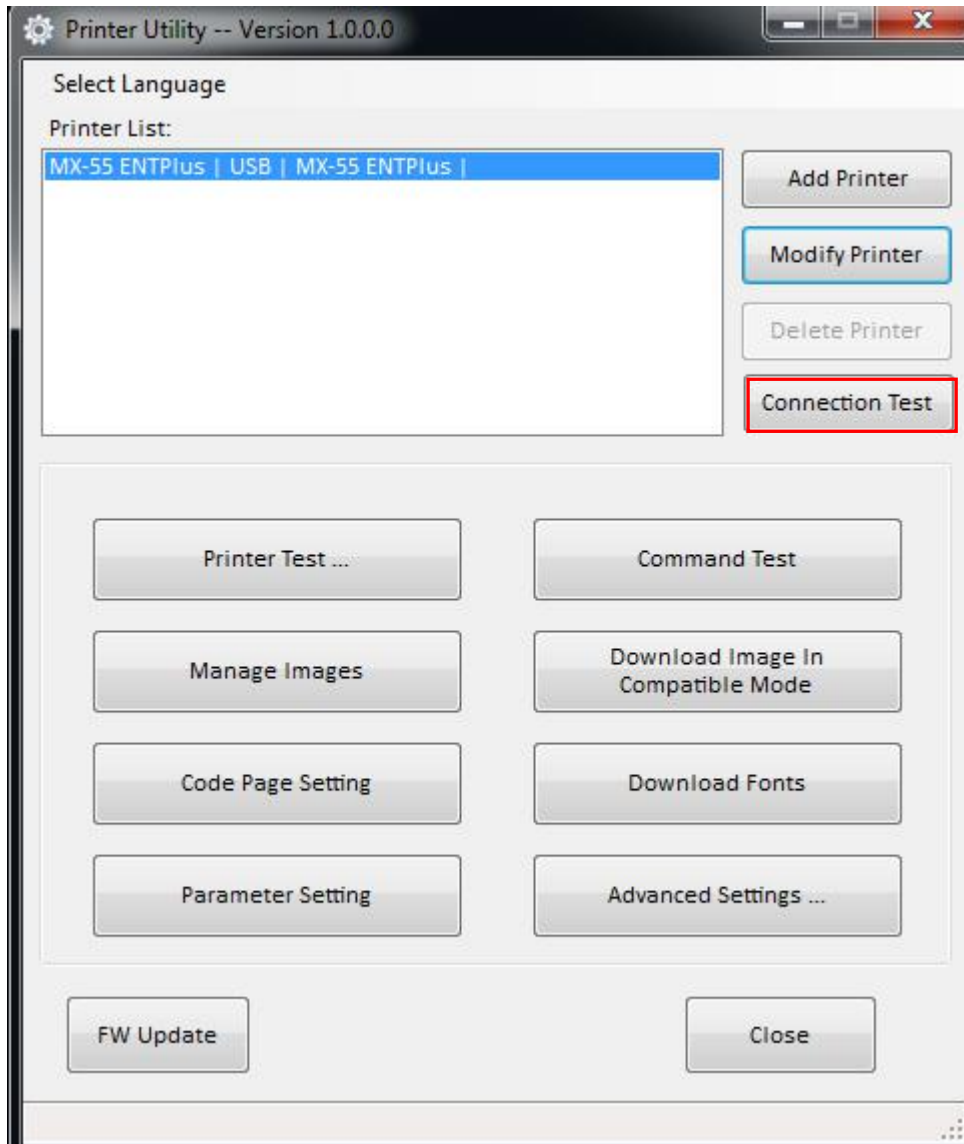
2) Click “Yes”, then the printer is deleted.



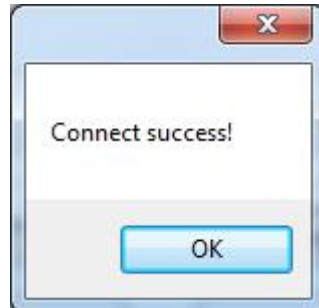
### 8.2.1.4 Connection Test

**Make sure printer is connected to computer and it is powered on.**

- 1) Choose the printer. Click “Connection Test”.



2) If the connection is successful, it will appear the following window. If the connection is unsuccessful, please connect the printer with computer.



**Notes:**

- 1) Make sure printer is connected with computer and power on.**
- 2) Make sure printer is loaded with paper.**
- 3) Before using the following function, carry out the "Connection Test" first.**

## **8.2.2 Functions**

Printer Test contains the following items:

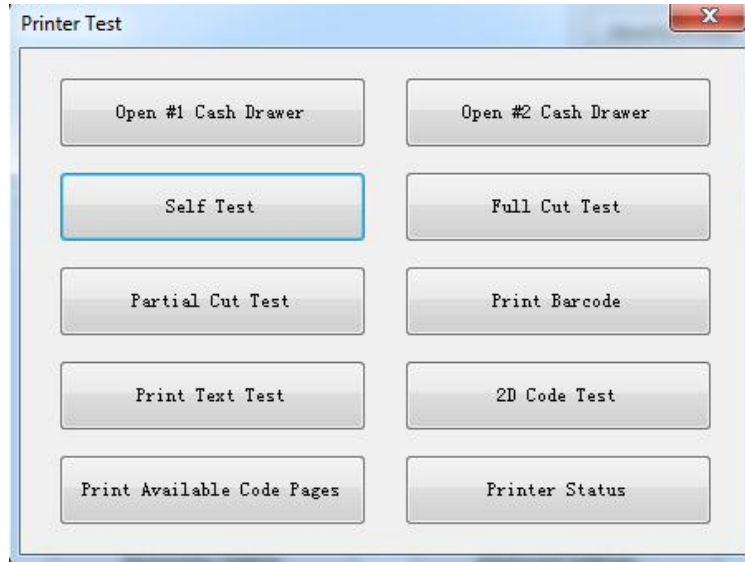
- Printer Test
- Command Test
- Manage Images
- Download Image in Compatible Mode
- Code Page Setting
- Download Fonts
- Parameter Setting
- Advanced Settings



### 8.2.2.1 Printer Test

#### 1) Self Test

Click “Self Test” to see if the printer will print properly.



#### 2) Full Cut Test

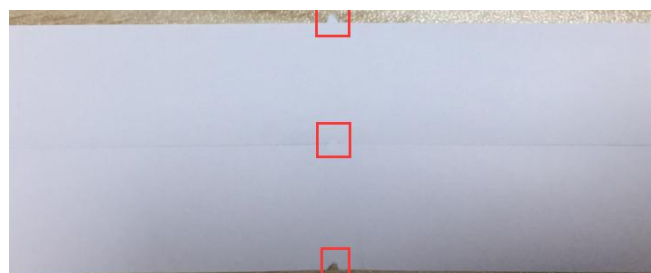
Click the “Full Cut Test” and the paper will be cut automatically. Cutting method is full-cutting. The paper would be falling down from the paper outlet after cutting.

#### 3) Partial Cut Test

Click the cutter test and the paper will be cut automatically. Cutting method is partial cut.

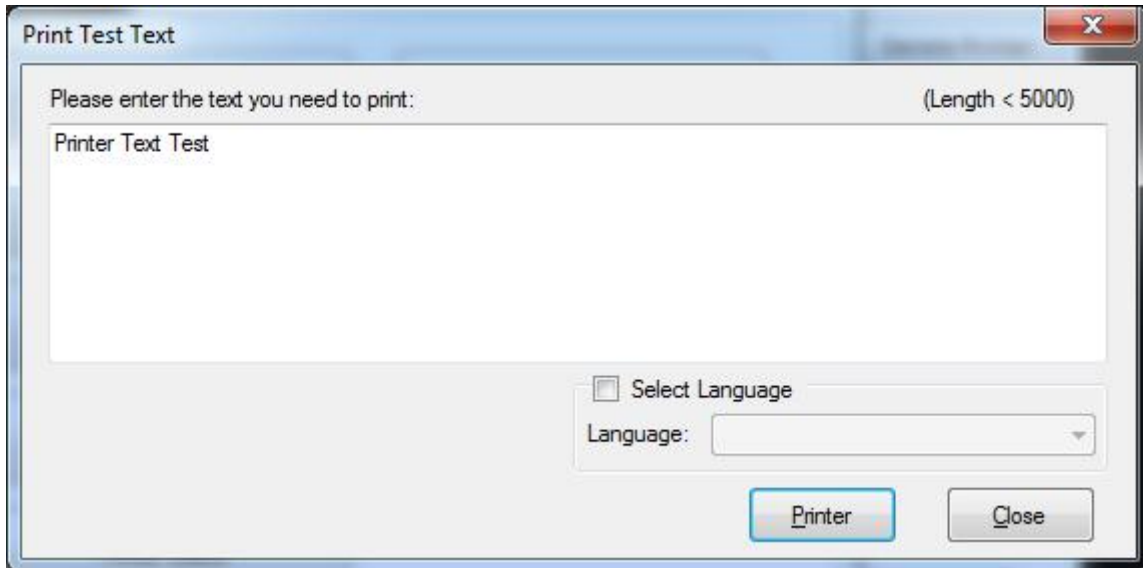
(Partial cut: not full cut. A small connection point will be left between the two sheets of paper.)

As shown in the figure:



#### 4) Print Test Text

Click "Print Test Text", input the text you want to print. When you click "Print", the printer starts printing text content. Such as: Print Text Test.

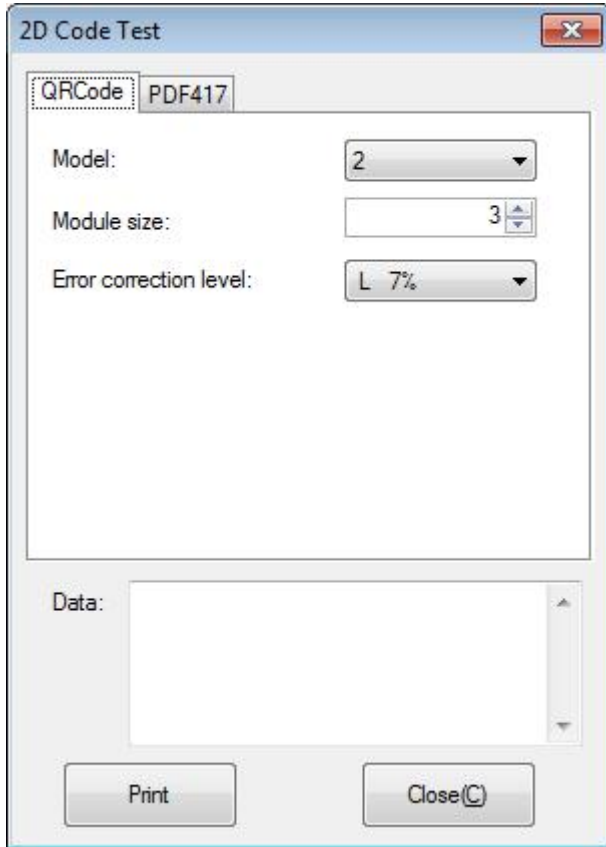
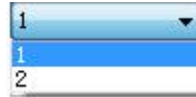


**Note:**

*The language option in the lower right corner is checked according to the input text. (For example: The input is Simplified Chinese, the language is checked for Simplified Chinese, the printer prints the input text according to the setting options, and if you check other languages, the printer does not print the text)*

## 5) 2D Code

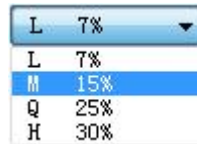
Click the QRCode mode.

**▲ Model: 1~2****▲ Module size: 1~16**

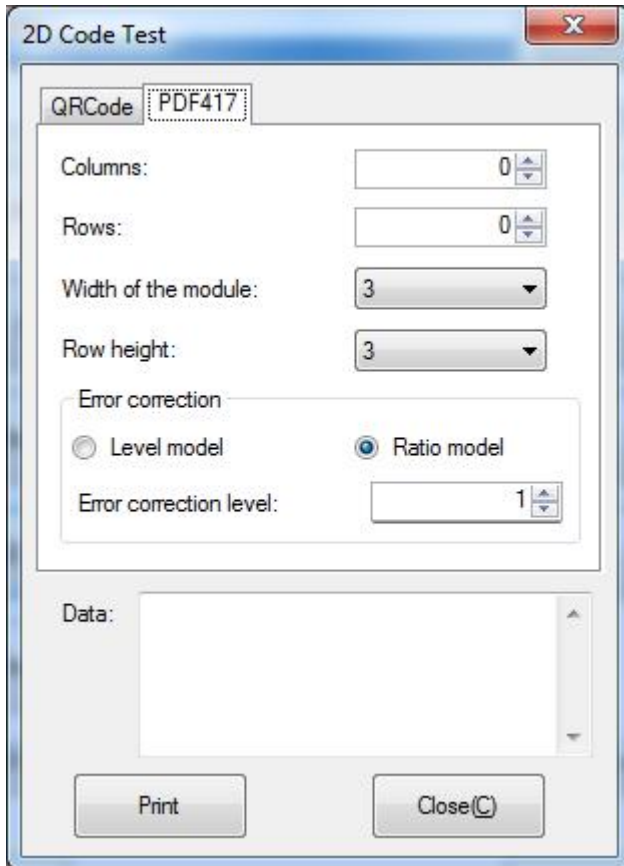
The larger the module value, the larger the printed QR code is, and the smaller the opposite.

**▲ Error correction level: 7%~30%**

The higher the error correction level, the more intensive the module graphics.



Click the PDF417 mode.



▲ Columns: 0~30

▲ Rows: 0~90

▲ Width of the module: 2~6

The larger the module value, the wider the width of the printed PDF417 barcode, and the smaller the opposite.



▲ Row height: 2~8

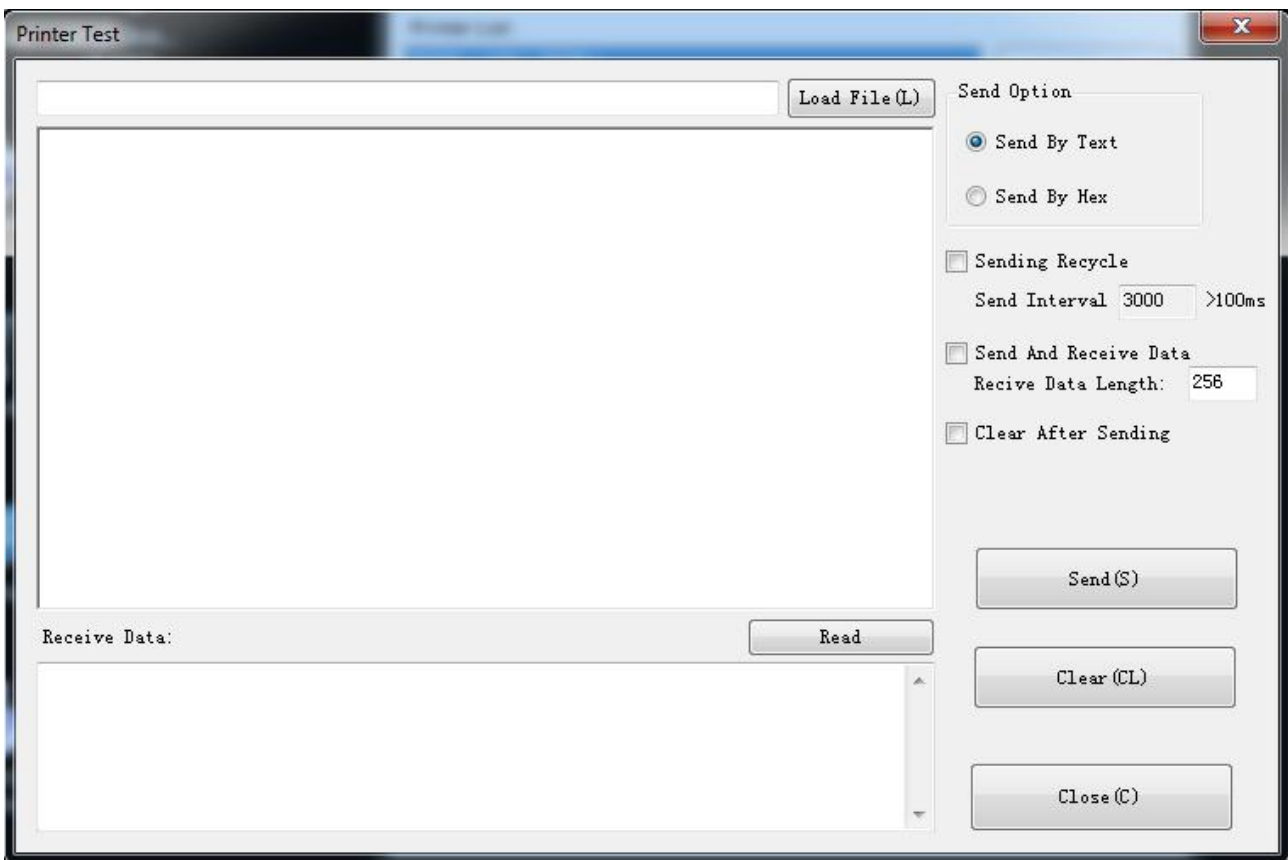
The larger the module value, the longer the printed PDF417 barcode, and the smaller the opposite.

▲ Error connection level

### 8.2.2.2 Command Test

In the command test, you can send command to the printer. Input text or hexadecimal data. Select a file or enter a command in the input box.

- 1) Click “Send by Text”, input text content.



**▲Sending Recycle:**

When the interval is set to 3000ms (you can set the interval as needed), then click “Send”, the printer starts to recycle printing. Click “Stop” to stop the recycle printing.

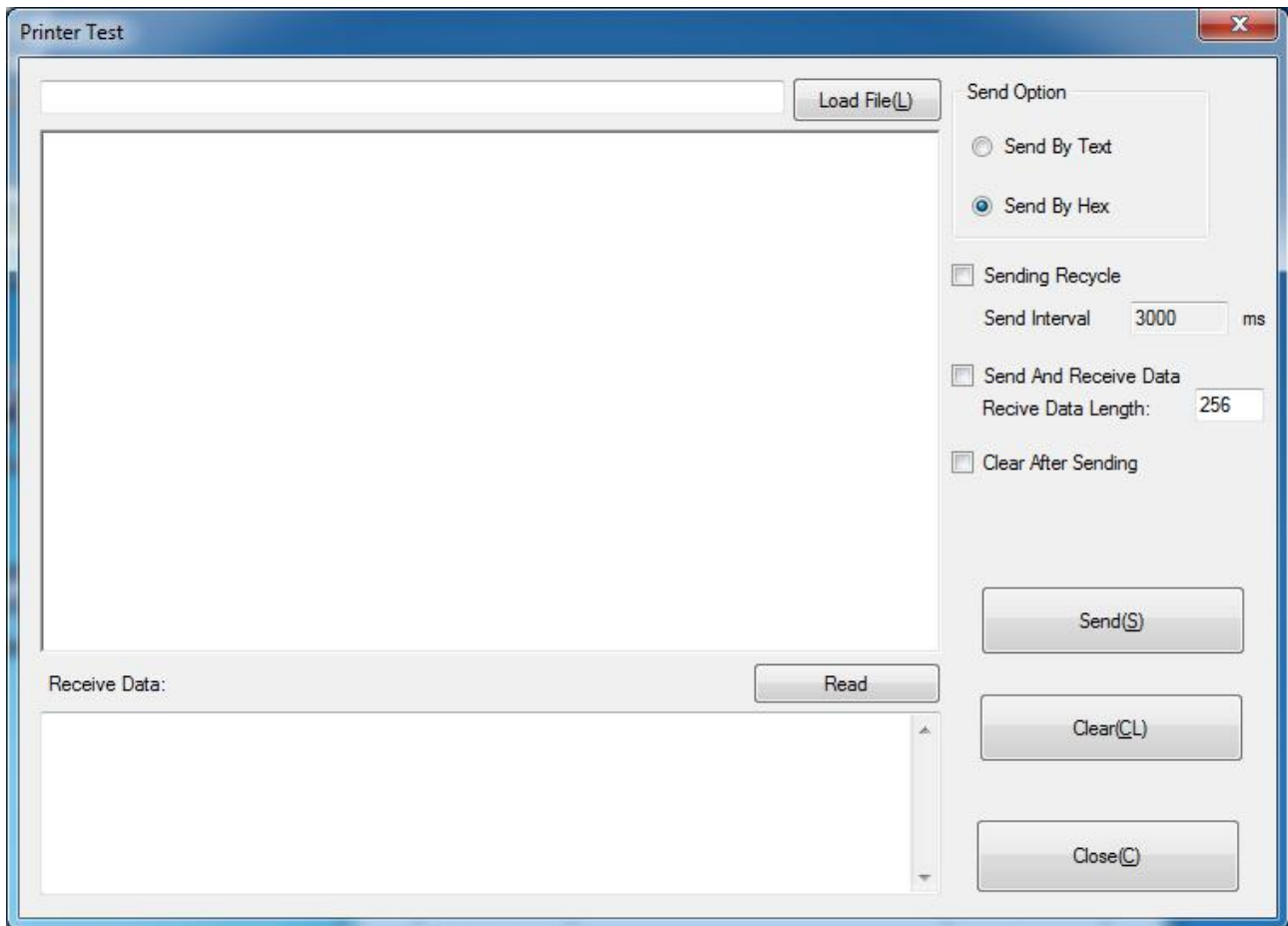
The screenshot shows a configuration window with the following elements:

- Send Option** section:
  - Send By Text
  - Send By Hex
- Sending Recycle
  - Send Interval:  >100ms
- Send And Receive Data
  - Recive Data Length:
- Clear After Sending

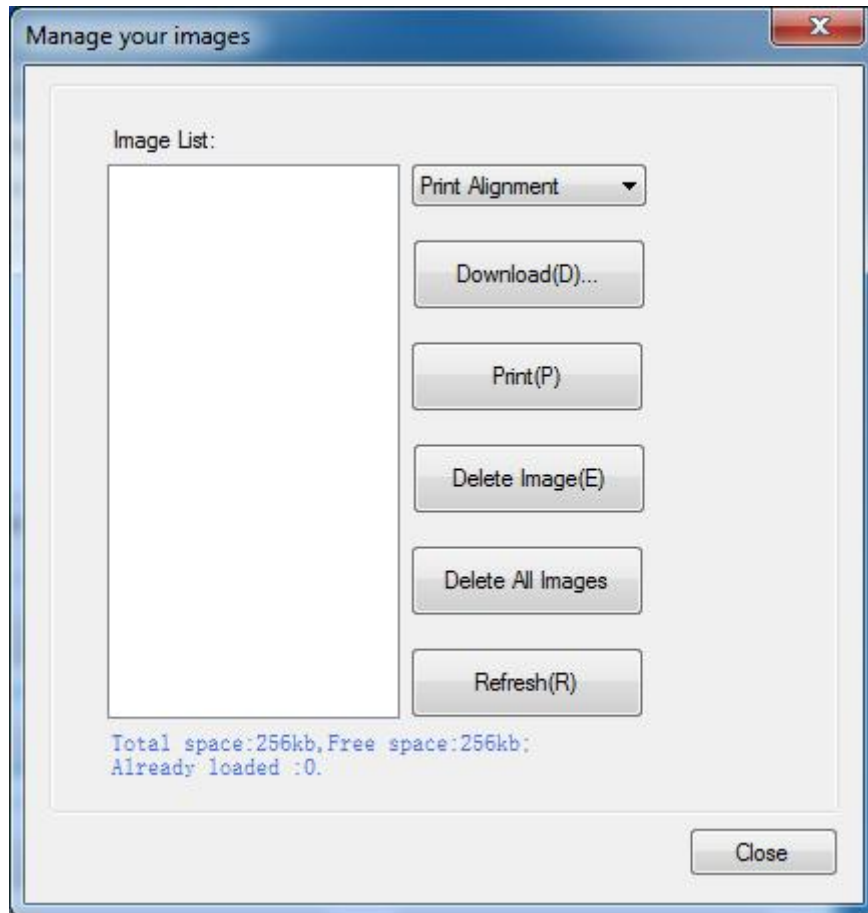
At the bottom of the window are three buttons:

- Send (S)
- Clear (CL)
- Close (C)

2) Click “Send by Hex”, input the content. (Convert text to HEX or send ESC command)

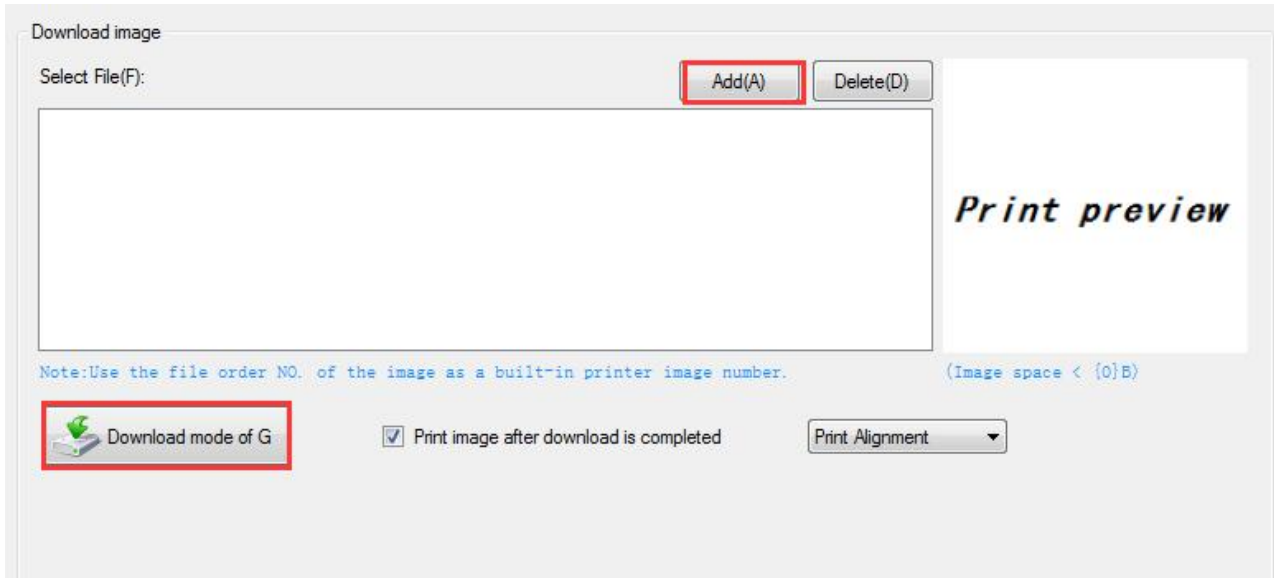


### 8.2.2.3 Manage Images

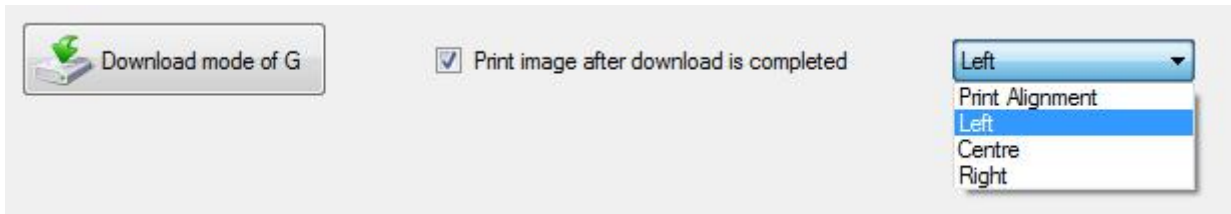


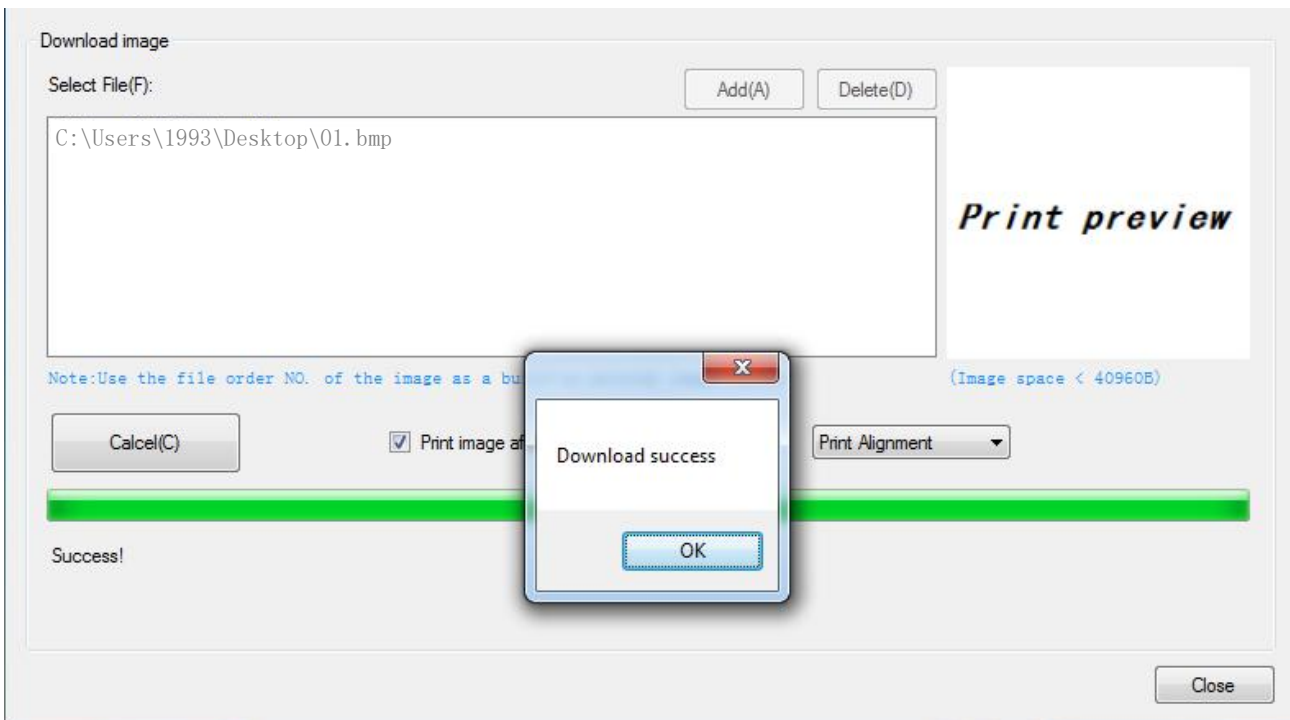


1) Click "Download" to add the image, if you want to print the picture, set the print location before clicking "Download mode of G" to print the picture. (It is recommended to use a picture in BMP format)



2) Select the print location, center, left, and right. (Such as, left print).



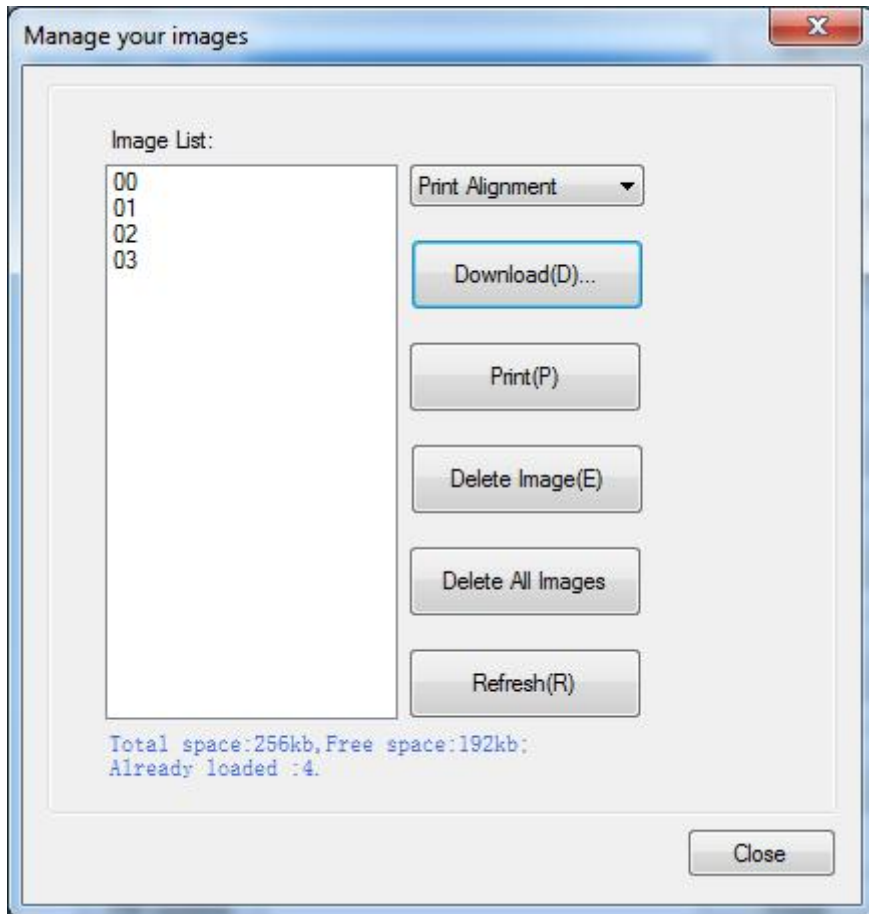


**Note: Total memory is 256K.**

## 3) Delete Image.



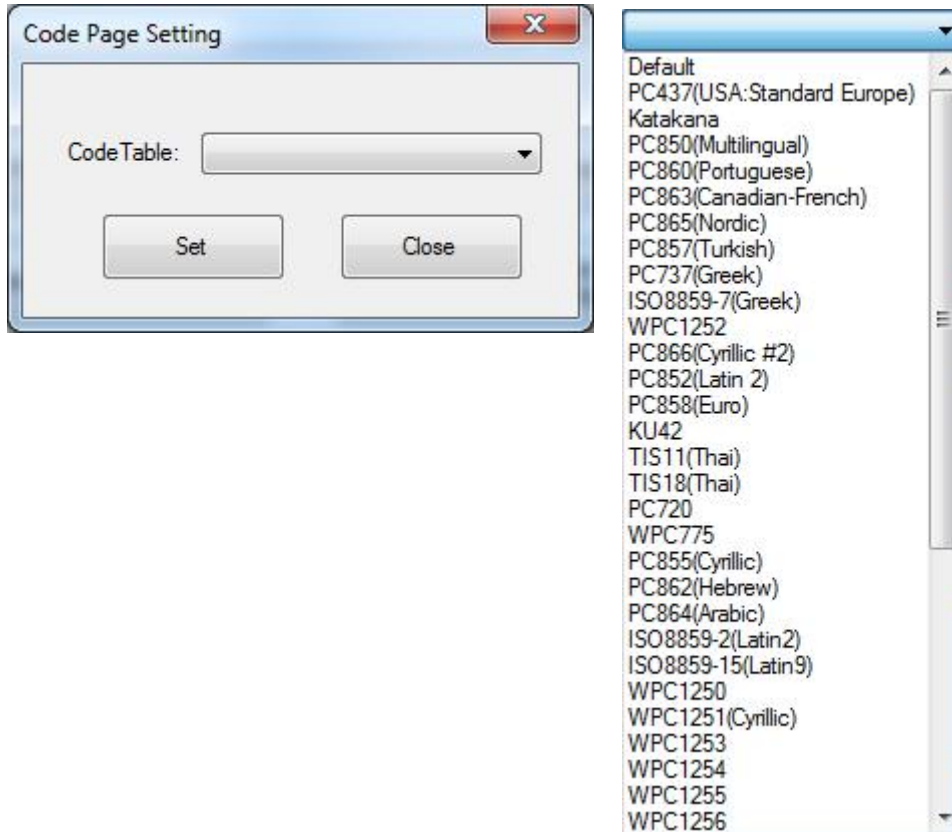
**Note:** Each time click "Download mode of G", an image list number will be generated.



Click the image list, select "Delete selected image" will delete the image, click "Delete all Images", without clicking the list option to delete all the images in the list.

### 8.2.2.4 Code Page Setting

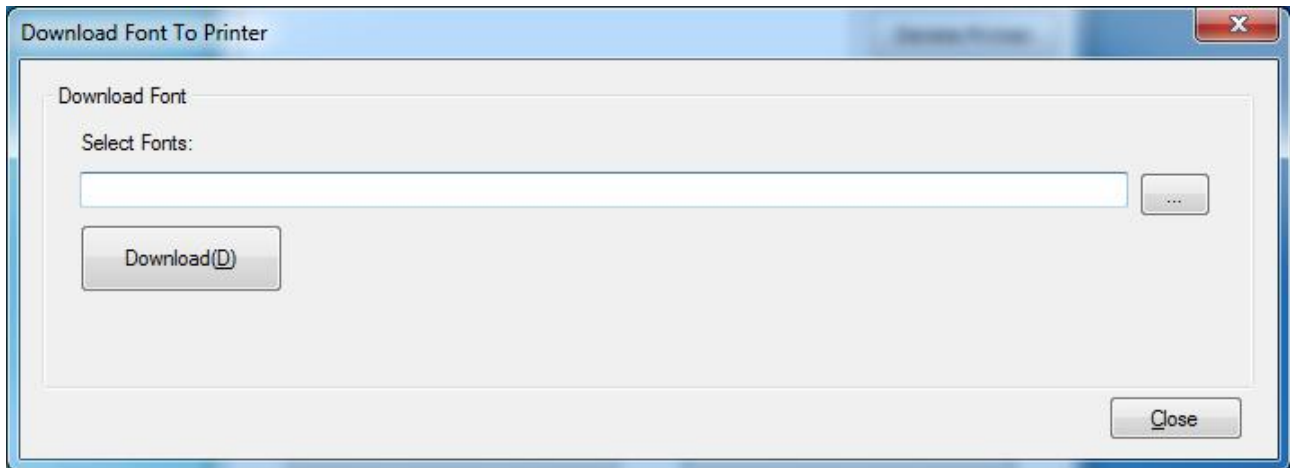
Select the code page from the list and click “Set”.



**Note:** *This code page is only valid in multiple languages.*

### 8.2.2.5 Download Fonts

Select the font from the existing file and click "Download".

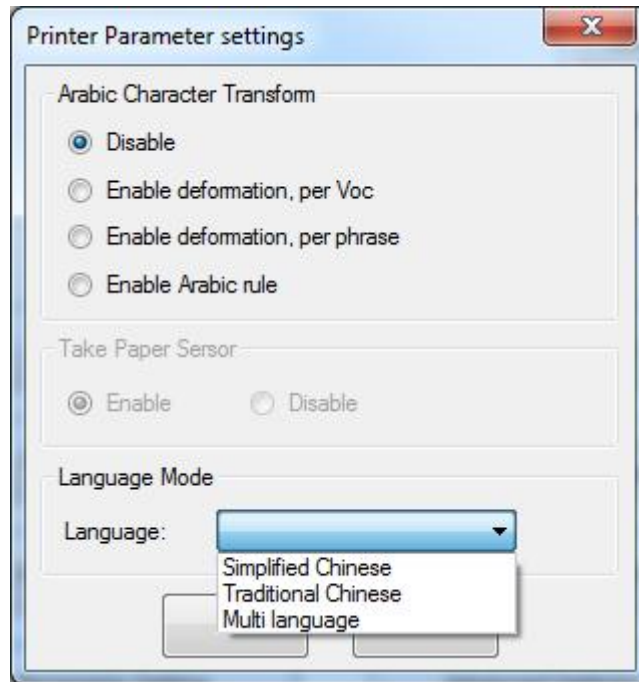


**Note:**

***After downloading the font successfully, you need to restart the printer to take effect.***

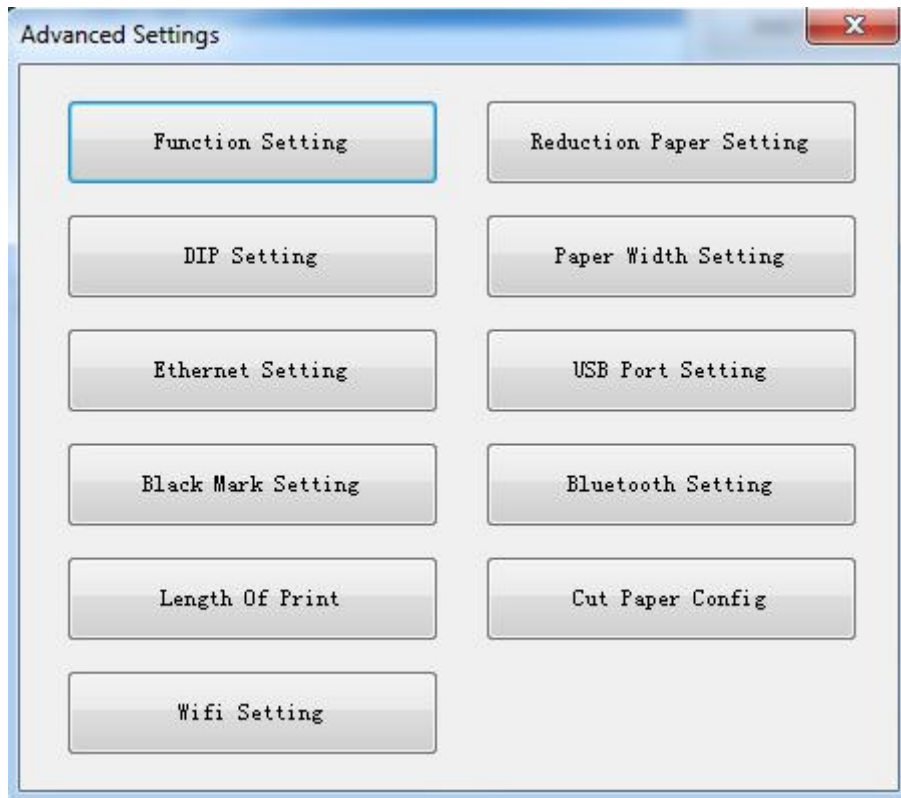
### 8.2.2.6 Parameter Setting

You can set Arabic Character Transform (for example: WPC1256).



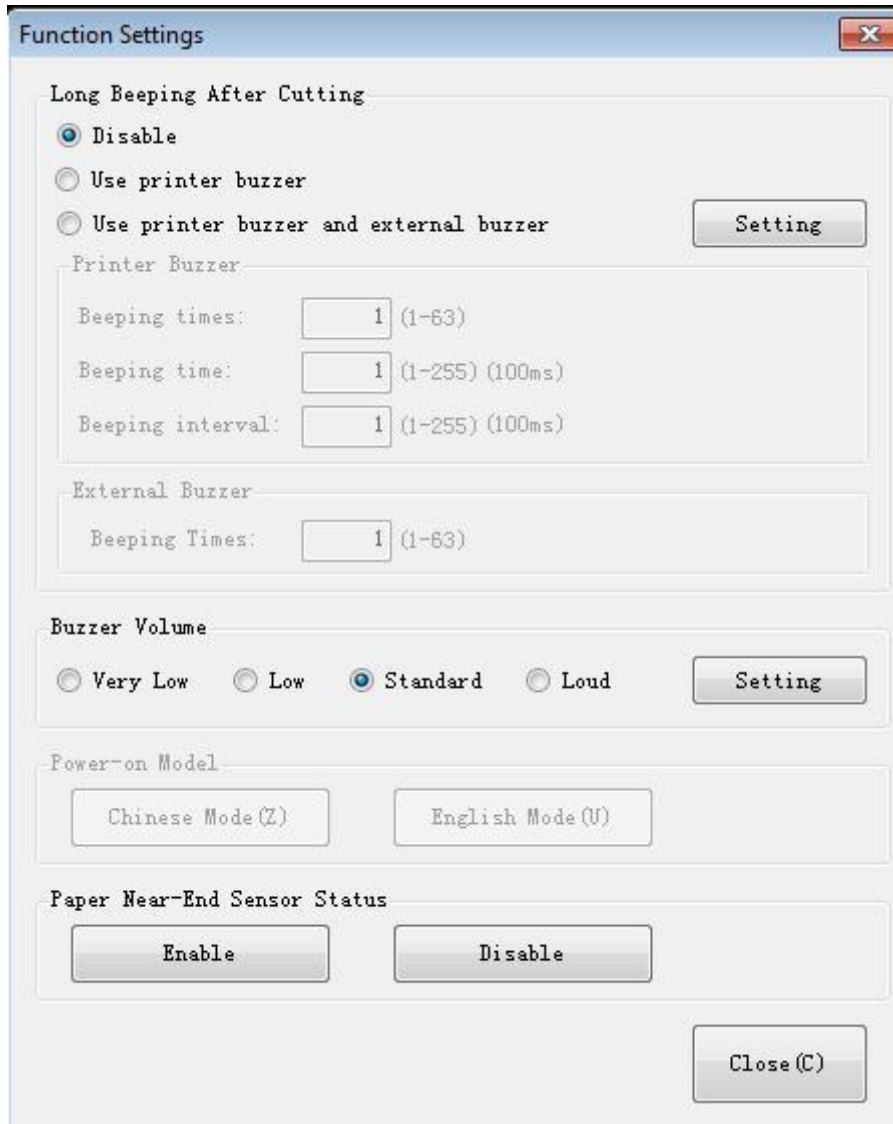
### 8.2.2.7 Advanced Setting

Advanced Settings contain following items. Click the items and printer will execute the appropriate action. The change will take into effect after restarting the printer.



**◆ Function Setting**

Choose the item and click “Setting”.



The image shows a software dialog box titled "Function Settings" with a close button (X) in the top right corner. The dialog is organized into several sections:

- Long Beeping After Cutting:** Contains three radio button options: "Disable" (selected), "Use printer buzzer", and "Use printer buzzer and external buzzer". A "Setting" button is located to the right of these options.
- Printer Buzzer:** Contains three input fields:
  - Beeping times: 1 (1-63)
  - Beeping time: 1 (1-255) (100ms)
  - Beeping interval: 1 (1-255) (100ms)
- External Buzzer:** Contains one input field:
  - Beeping Times: 1 (1-63)
- Buzzer Volume:** Contains four radio button options: "Very Low", "Low", "Standard" (selected), and "Loud". A "Setting" button is located to the right.
- Power-on Model:** Contains two buttons: "Chinese Mode (Z)" and "English Mode (U)".
- Paper Near-End Sensor Status:** Contains two buttons: "Enable" and "Disable".

A "Close (C)" button is located at the bottom right of the dialog box.



- **Long Beeping After Cutting:**

- ① **Disable:** There is no sound after cutting.
- ② **Use printer buzzer (The beeping time, times and interval time can be set for what you want, such as 2 milliseconds, 3 milliseconds or 4 milliseconds, etc.)**

The following setting is set as an example:

When cutting one piece of paper each time, the printer will emit the “Beep” for one time, and the beeping time is two milliseconds and beeping interval is three milliseconds.



Printer Buzzer

Beeping times:  (1-255)

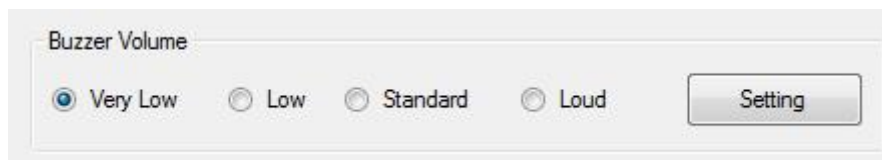
Beeping time:  (1-255) (100ms)

Beeping interval:  (1-255) (100ms)



**Note:** 100ms=0.1s, 1s=1000ms

- **Buzzer Volume:**



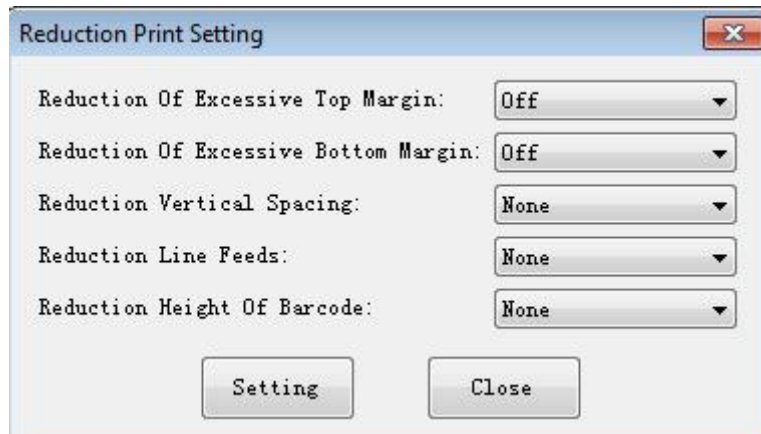
Buzzer Volume

Very Low    Low    Standard    Loud  

The “Very Low” is the minimum sound, and the “Loud” is the maximum sound. You can select a volume level and click "Setting" to print (Default: "Standard" level).

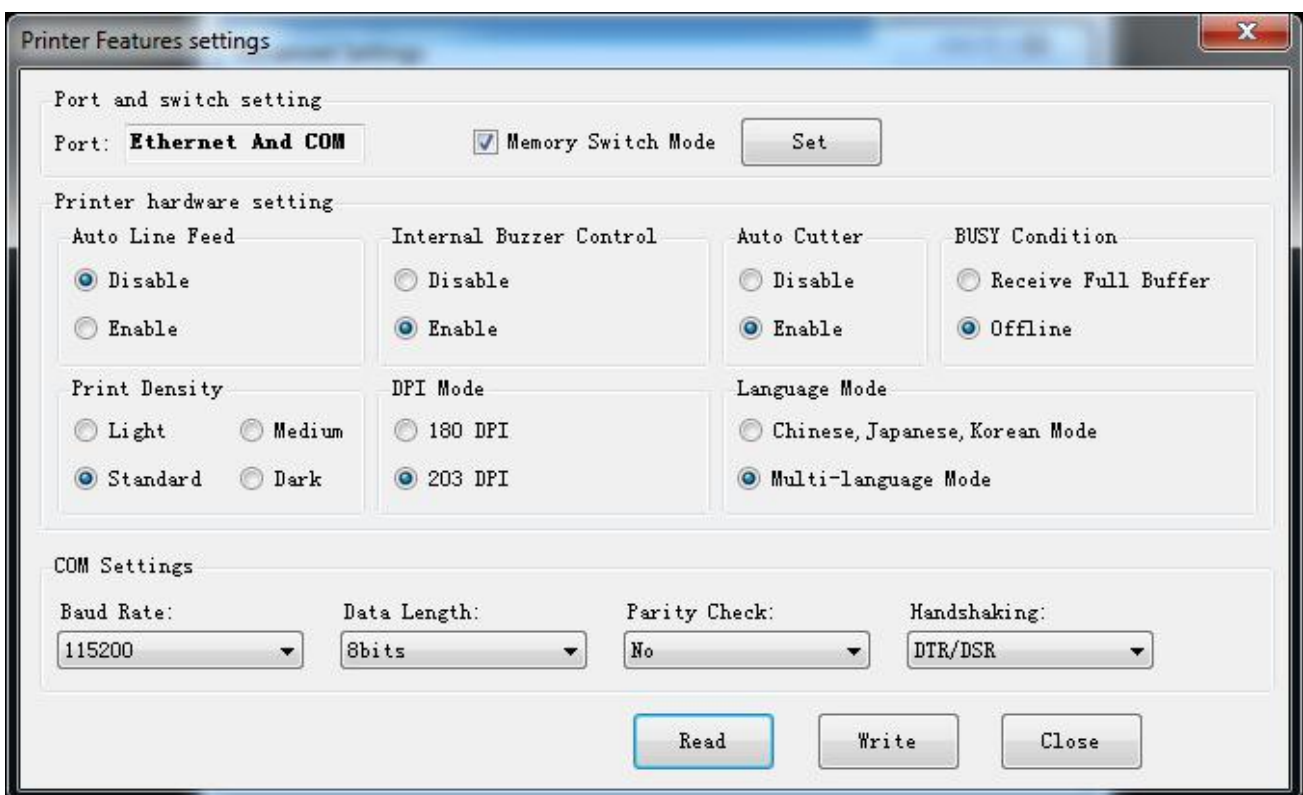
◆ **Reduction Paper Setting**

Choose the item and click “Setting”.

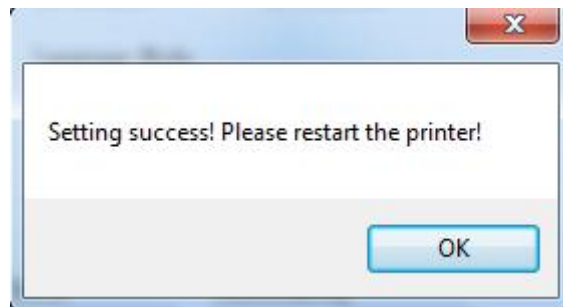
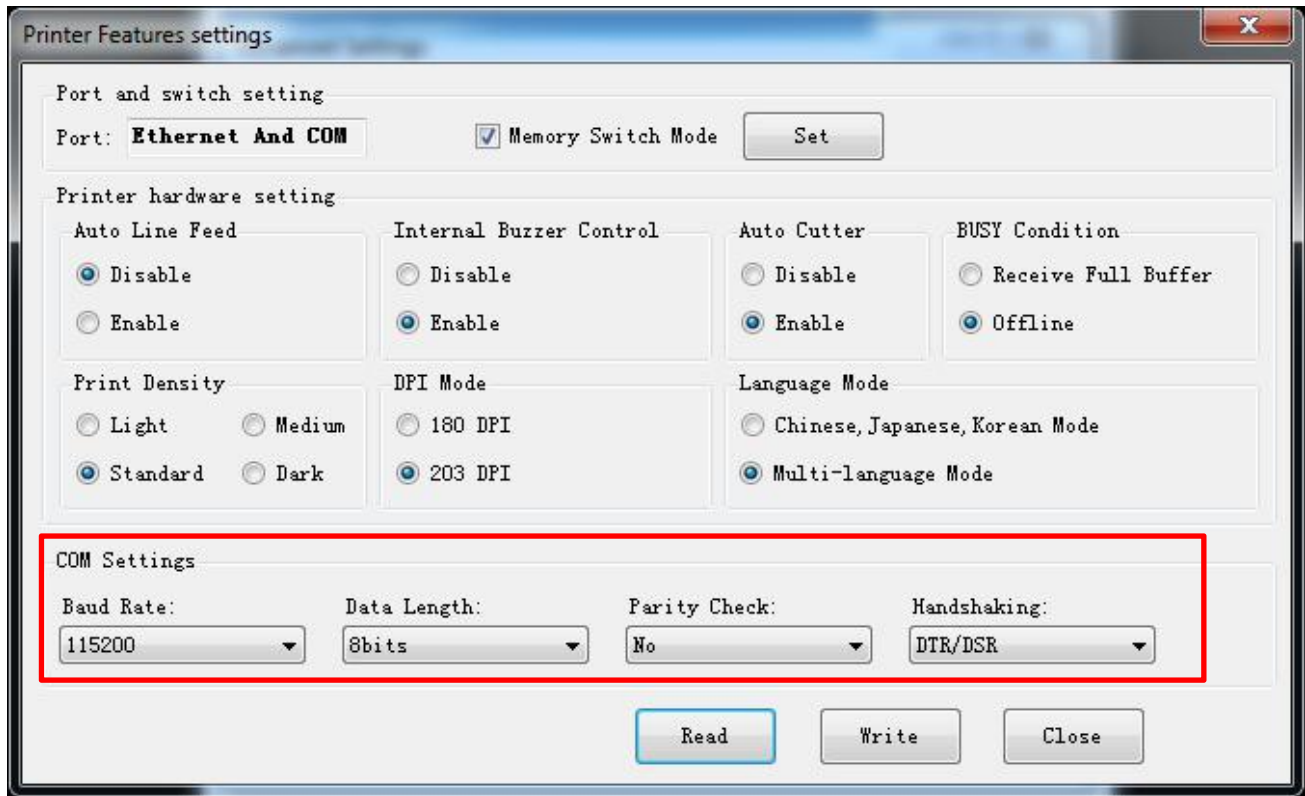


◆ **DIP Setting**

Click "Read" to get the printer parameters, click "Write" to send the modified parameters to the printer.



After the serial port parameter is set, click "Write".



**Note:** When DIP setting is set in soft, the DIP switch in the bottom of printer is disable.

**After setting the DIP successfully, you need to restart the printer before using it.**

- **Printer hardware setting**

- 1) Print Density: Light, Medium, Standard, Dark (default "standard" level)

The print density value varies according to the paper material and it can be adjusted to suit your needs.

- 2) DIP Mode: 180/203DPI (default "203 DPI")

The printer supports both of the resolutions.

- 3) Language Mode:

Chinese, Japanese, Korean mode (default)

Multi-language mode

- **COM Setting**

- 1) Baud Rate: 2400, 4800, 9600, 19200, 38400, 57600, 115200
- 2) Data Length: 7bits, 8bits
- 3) Parity Check: No, EVEN, ODD
- 4) ADDC: DTR/DSR, XON/XOFF



**Note: The value of the serial port parameter can be obtained according to the value of the Self-test page information:**

E.g: Self-test page (Serial 115200, None, 8, 1, DTR/DSR)

Baud Rate: 115200

Parity Check: None

Data Length: 8bits

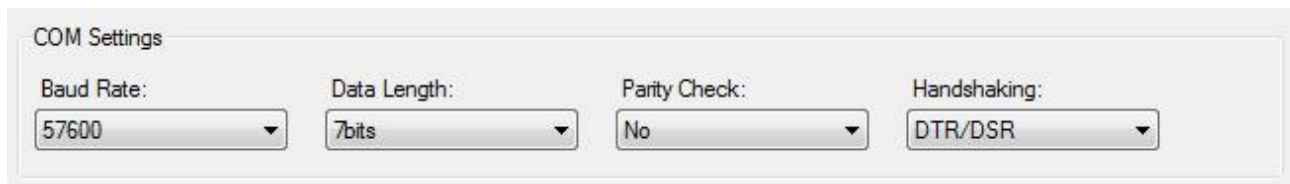
Stop Bits: 1

ADDC: DTR/DSR



**Note: When the DIP setting is set in memory switch mode, the DIP switch at the bottom of the printer need to be disabled.**

- **Modify the COM setting**



COM Settings

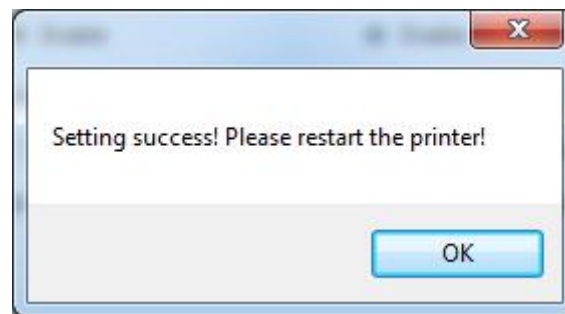
Baud Rate: 57600

Data Length: 7bits

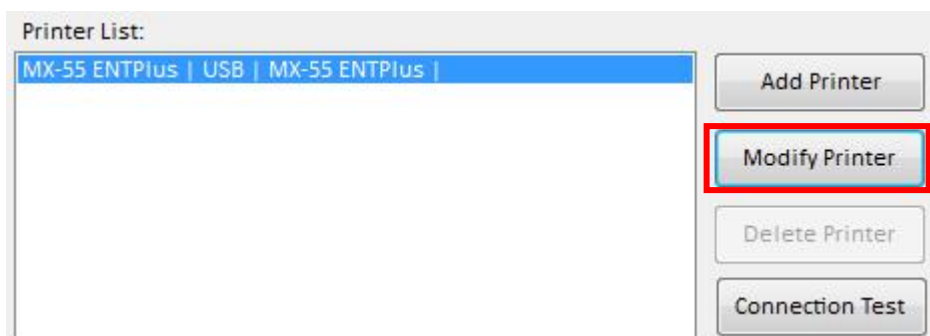
Parity Check: No

Handshaking: DTR/DSR

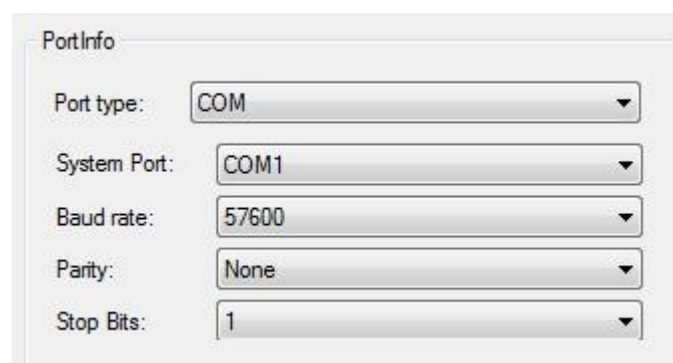
1) After setting the parameters as required, click "Write" and restart the printer.



2) After restarting the printer, open the main menu screen of the tool and click "Modify Printer".



3) Select the port category "COM" and set the baud rate to the value "57600" as shown above, and parity "None". This port allows you to print after setup is complete.



PortInfo

Port type: COM

System Port: COM1

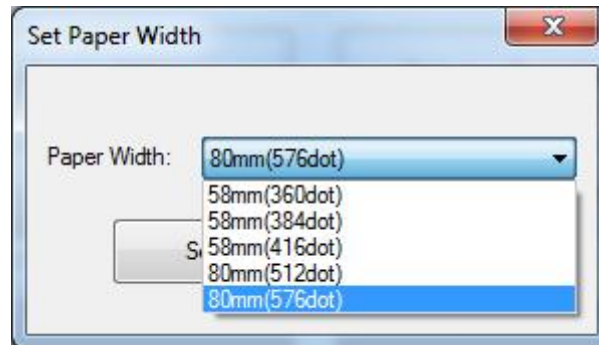
Baud rate: 57600

Parity: None

Stop Bits: 1

**◆ Paper Width Setting**

Choose the item and click “Setting”.



- ① 58mm (360dot)
- ② 58mm (384dot)
- ③ 58mm (416dot)
- ④ 80mm (512dot)
- ⑤ 80mm (576dot)



**Note:** Select the paper width above according to the paper print width.

**◆ Ethernet Setting**

This mode is divided into “Auto Assignment IP” and “Static IP Mode”, select one of the modes to connect as needed.



**Note: IP addresses can be obtained from the Self-test page.**

Ethernet Setting

Board Type: Ethernet And COM

Board Soft Version: V2.00.05

Ethernet Setting

DHCP: Auto Assignment IP

IP address: Auto Assignment IP

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 10 . 0 . 21 . 1

MAC: D8 : 80 : 39 : 78 : 5F : AA

- Static IP Mode

1) Change the printer IP address so that the printer IP address (such as: 192.168.0.33) is the same segment as the host IP address (such as: 10.0.21.89).

Here is the illustration:

Ethernet Setting

Board Type: Ethernet And COM

Board Soft Version: V2.00.05

Ethernet Setting

DHCP: Static IP Model

IP address: 192 . 168 . 0 . 33

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 10 . 0 . 21 . 1

MAC: D8 : 80 : 39 : 78 : 5F : AA

Figure ■ Printer IP Address

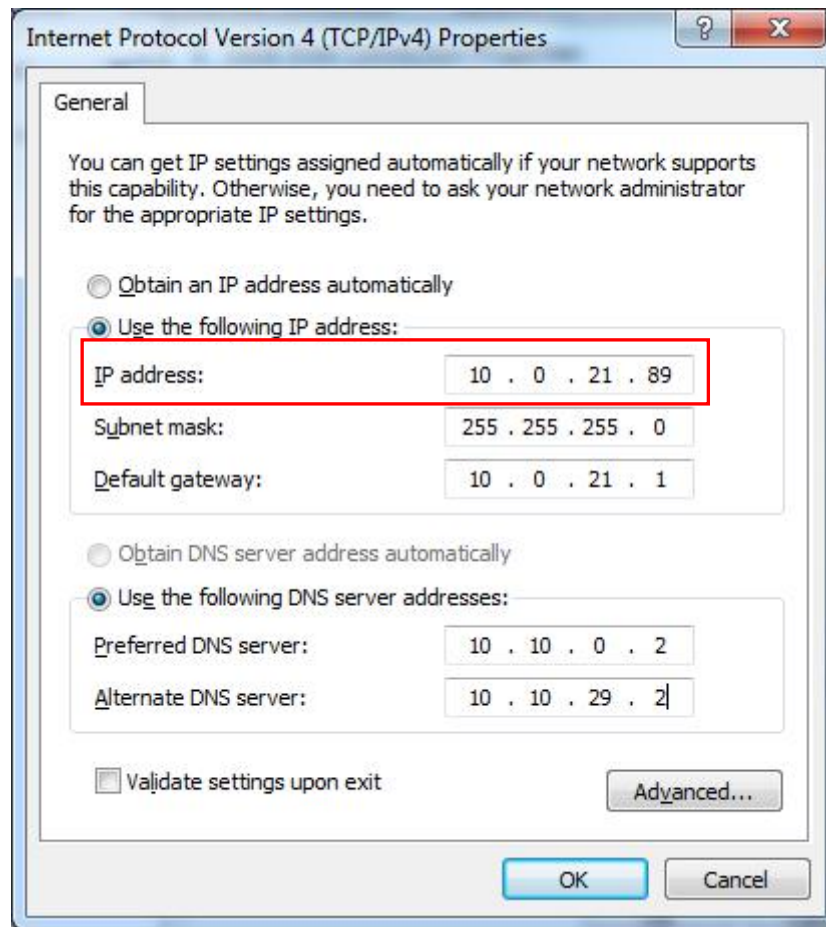


Figure ■ Host IP Address



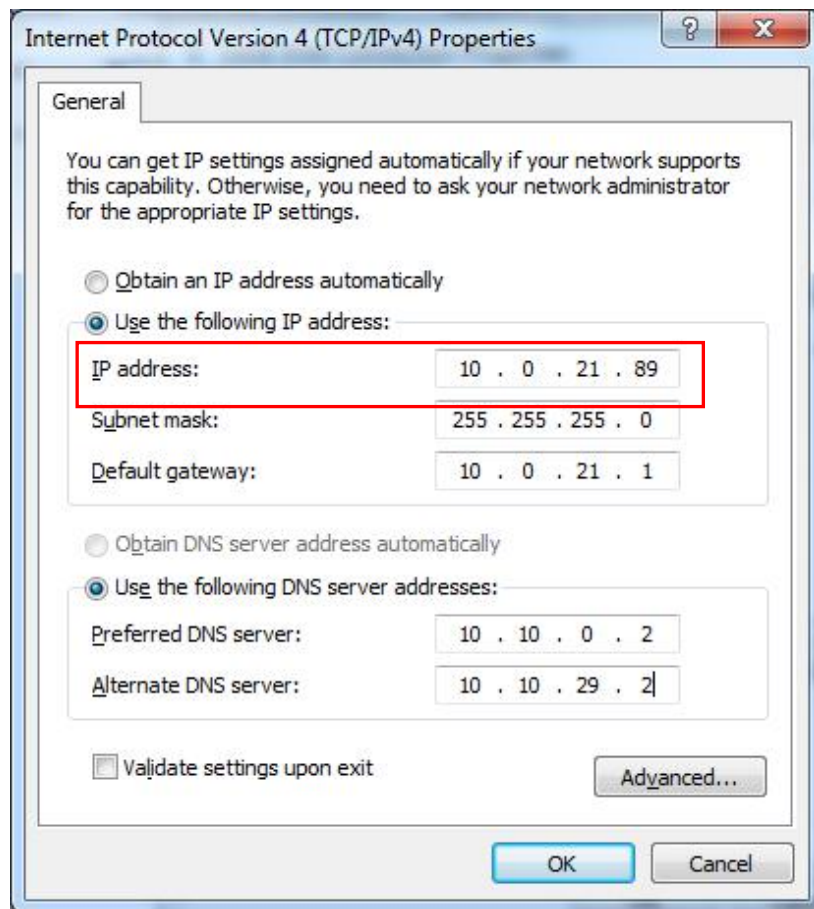


Figure ■ Host IP Address

2) Set the same network segment.

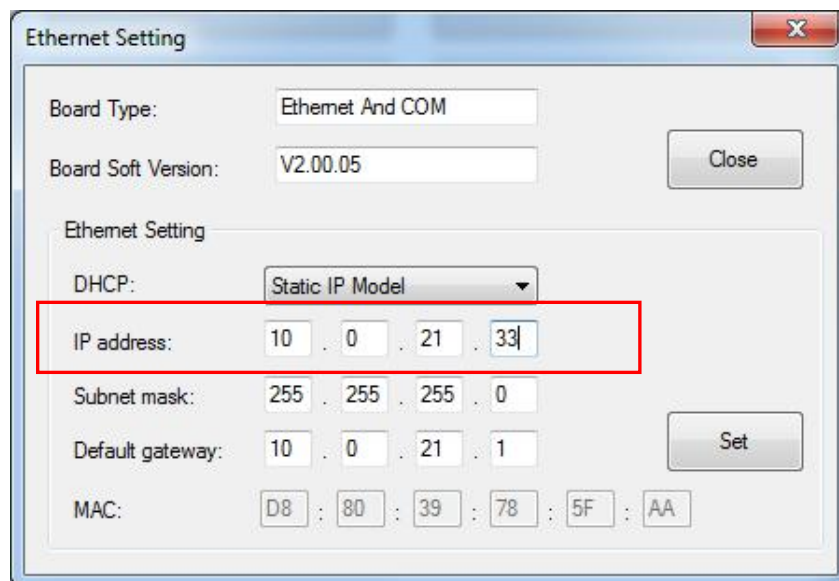


Figure ■ Printer IP Address

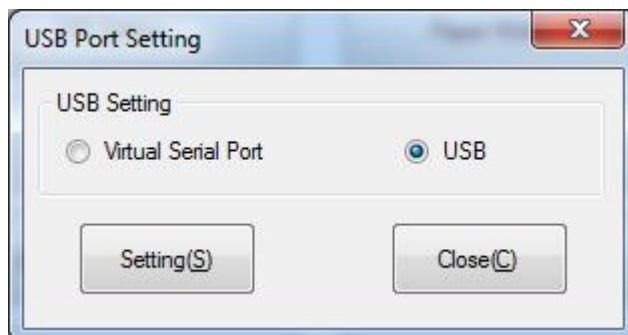
- Auto Assignment IP

This mode automatically assigns the IP address to the printer.

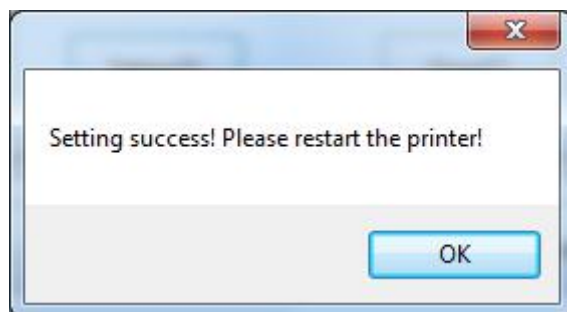
The screenshot shows a window titled "Ethernet Setting" with a close button (X) in the top right corner. The window contains the following fields and controls:

- Board Type: Ethernet And COM
- Board Soft Version: V2.00.05
- Close button
- Ethernet Setting section:
  - DHCP: Auto Assignment IP (dropdown menu)
  - IP address: 10 . 0 . 21 . 33
  - Subnet mask: 255 . 255 . 255 . 0
  - Default gateway: 10 . 0 . 21 . 1
  - MAC: D8 : 80 : 39 : 78 : 5F : AA
  - Set button

When the settings are complete, click "Write", then restart the printer.

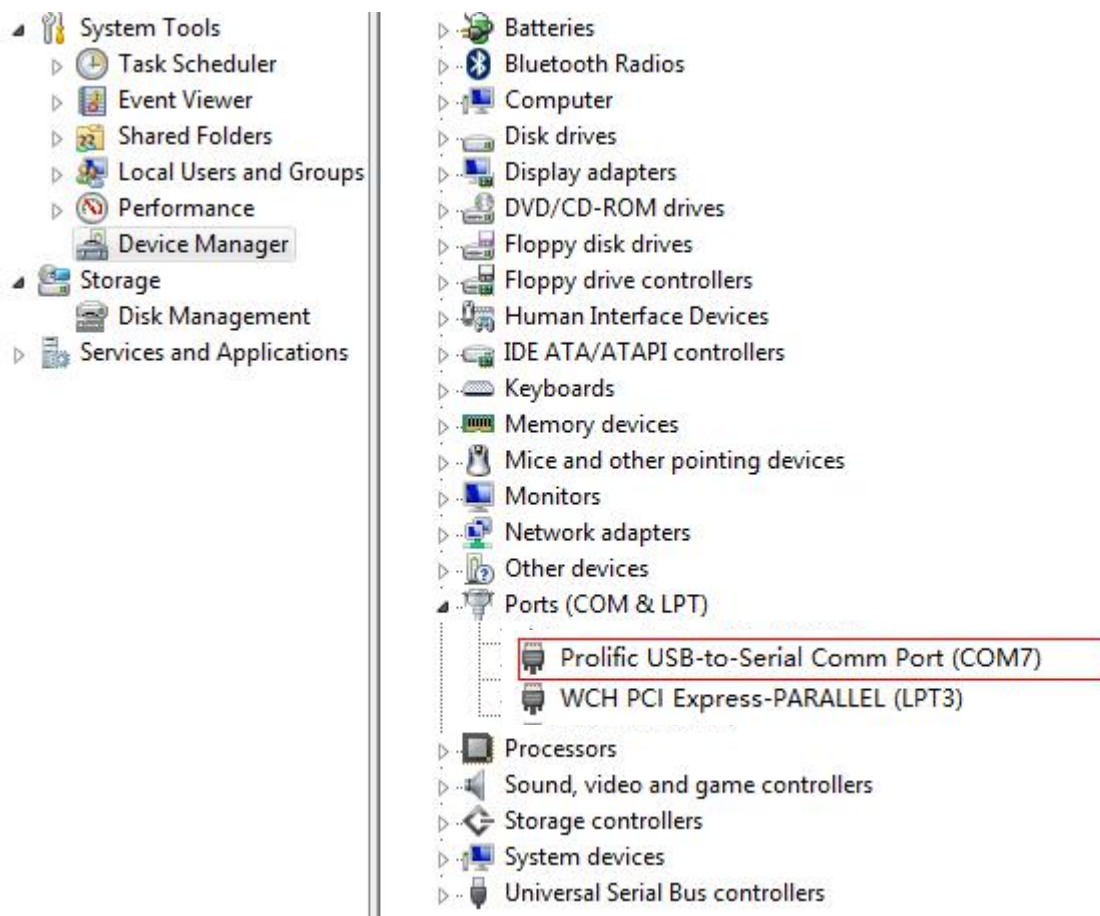
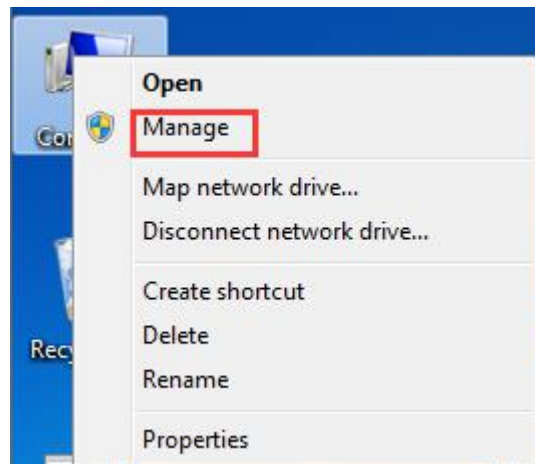
**◆ USB Port Setting**

Click "Virtual serial port" setting and restart the printer.

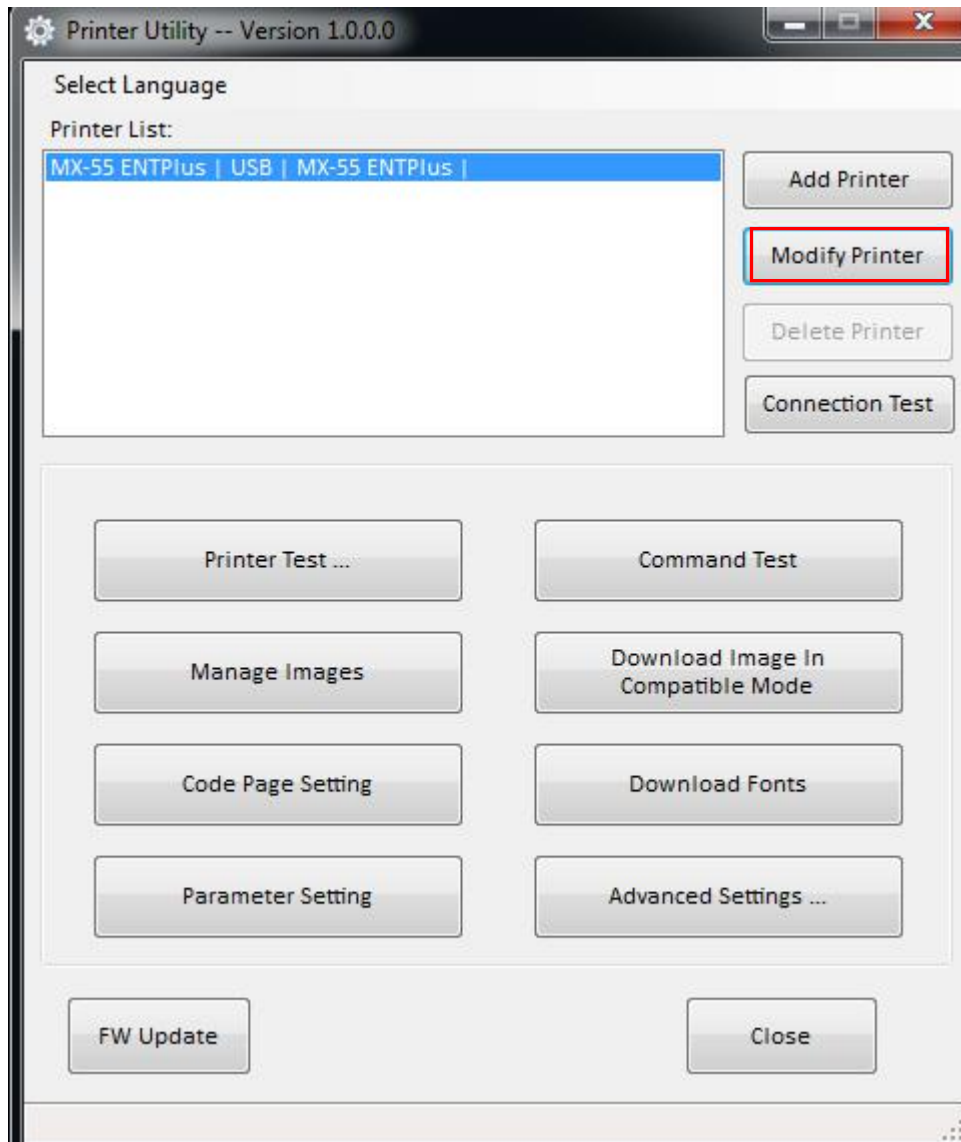


- **Check the Virtual Serial Port**

- 1) Right-click the computer and select "Manage".
- 2) Click "Device Manager" to view the virtual port. (such as: COM7).



3) Return to the printer utility and click "Modify Printer".



- 4) Change the port to "COM7".

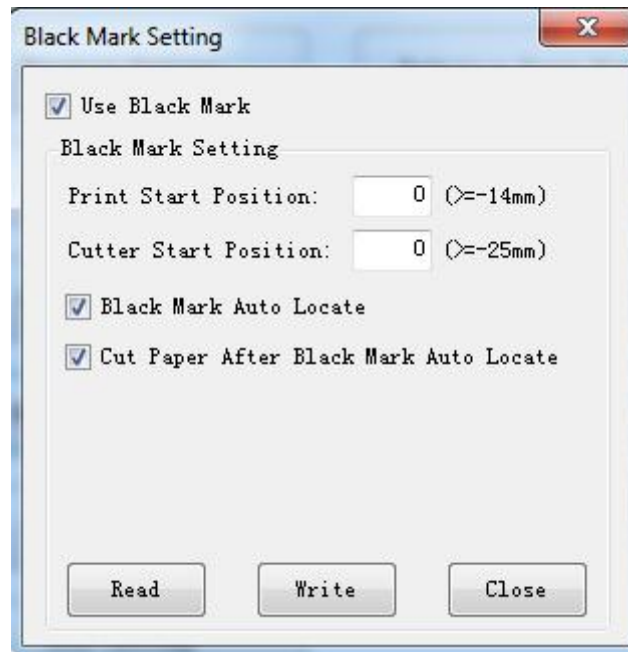
PortInfo

Port type:	COM
System Port:	COM7
Baud rate:	19200
Parity:	None
Stop Bits:	1

Notes:

**◆ Black Mark Setting**

When using black mark paper, the black mark can be set, and the printer will automatically locate the black mark position.

**1) Print start position (>=-14mm)**

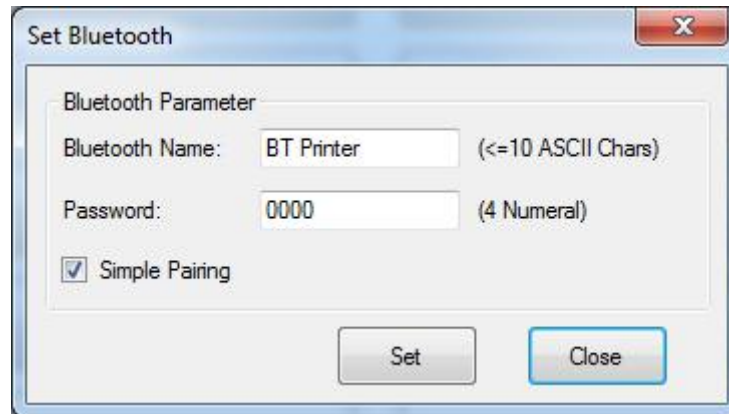
>=14mm: the start position of printing is at least 14mm from the bottom edge of the black mark paper.

**2) Cutter start position (>=-25mm)**

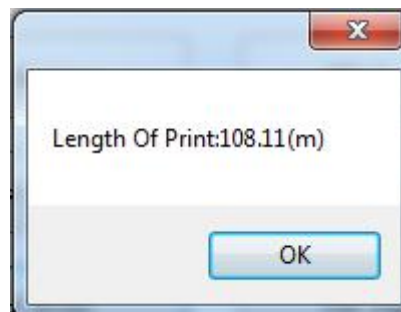
>=-25mm: the position of cutter is at least 25mm from the bottom edge of the black mark paper.

**◆ Bluetooth Setting**

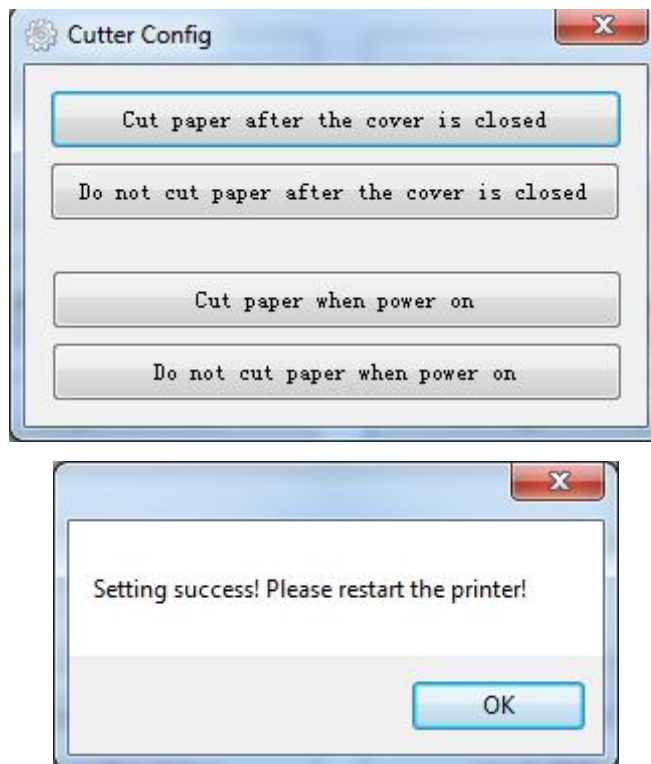
In the below window, type in the new Bluetooth name and password, then click “Set” and restart the printer to take it into effect.



Note: when “Simple Pairing” is ticked, the password is not needed for Bluetooth connection. When “Simple Pairing” is not ticked, the password is needed for Bluetooth connection.

**◆ Length Of Print**



**◆ Cut Paper Config**

- 1) Cut paper after the cover is closed: The printer automatically cuts paper after closing the cover.
- 2) Do not cut paper after the cover is closed: The printer does not automatically cut paper after closing the cover.
- 3) Cut paper when power on: The printer automatically cut paper after the printer is power on.
- 4) Do not cut when power on: The printer does not automatically cut paper after the printer is power on.

**◆ Wi-Fi Setting**

Following steps take MX-55 ENTPlus as an example. All the settings are effective only on the printers with Wi-Fi function.

The screenshot shows a 'WiFi Config' window with a close button (X) in the top right corner. The interface includes the following elements:

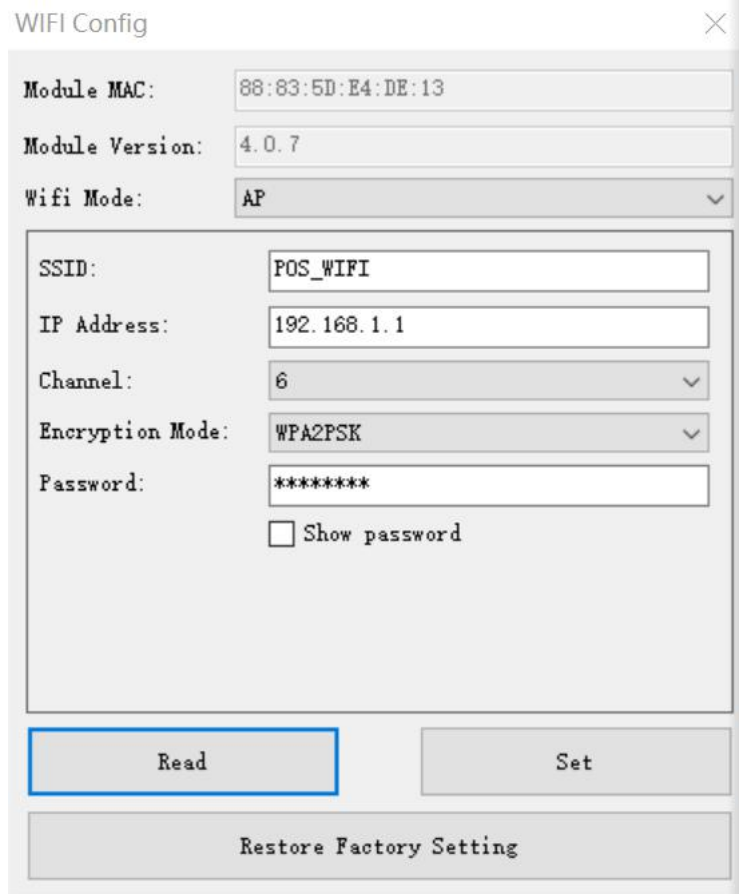
- Module MAC: [Text input field]
- Module Version: [Text input field]
- Wifi Mode: [Dropdown menu]
- Scan: [Button]
- SSID: [Dropdown menu]
- DHCP: [Dropdown menu]
- IP Address: [Text input field]
- Auth Mode: [Dropdown menu]
- Encryption Method: [Dropdown menu]
- Key ID: [Dropdown menu]
- Password: [Text input field]
- Show password
- Read: [Button]
- Set: [Button, highlighted with a blue border]
- Restore Factory Setting: [Button]

1) Click "Read" to obtain the current status of printer.



2) WiFi Module supports AP mode and STA mode, and default as AP mode

① Under AP mode, printer will be used as a wireless access point, computer or other mobile devices can connect to this Wi-Fi.



<b>Module Version</b>	Current Module Version
<b>WiFi Mode</b>	Supports “AP” mode and “STA” mode, and default as “AP” mode
<b>SSID</b>	Modifiable, default as “POS_WIFI”
<b>IP Address</b>	Modifiable, default as “192.168.1.1”
<b>Encryption Mode</b>	Supports “Open” and “WPA2PSK” mode, default as “WPA2PSK (Default password is 12345678)”

If it's necessary to modify SSID and IP address, click "Set" after modifying, then restart the printer.

WIFI Config

Module MAC: 88:83:5D:E4:DE:13

Module Version: 4.0.7

Wifi Mode: AP

SSID: POS\_WIFI

IP Address: 192.168.1.1

Channel: 6

Encryption Mode: WPA2PSK

Password: \*\*\*\*\*

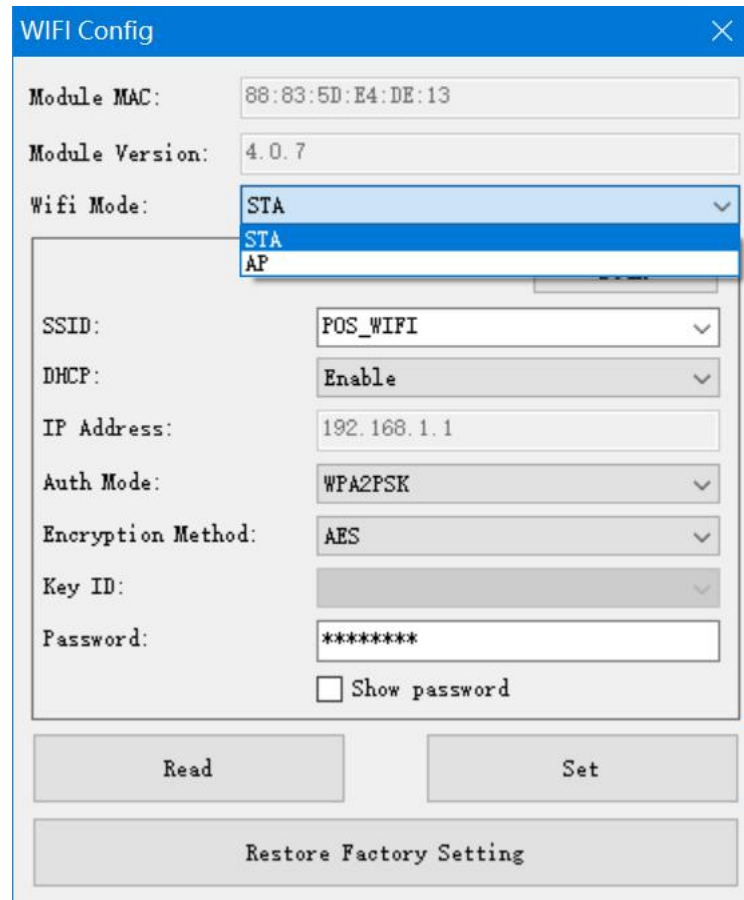
Show password

Read Set

Restore Factory Setting

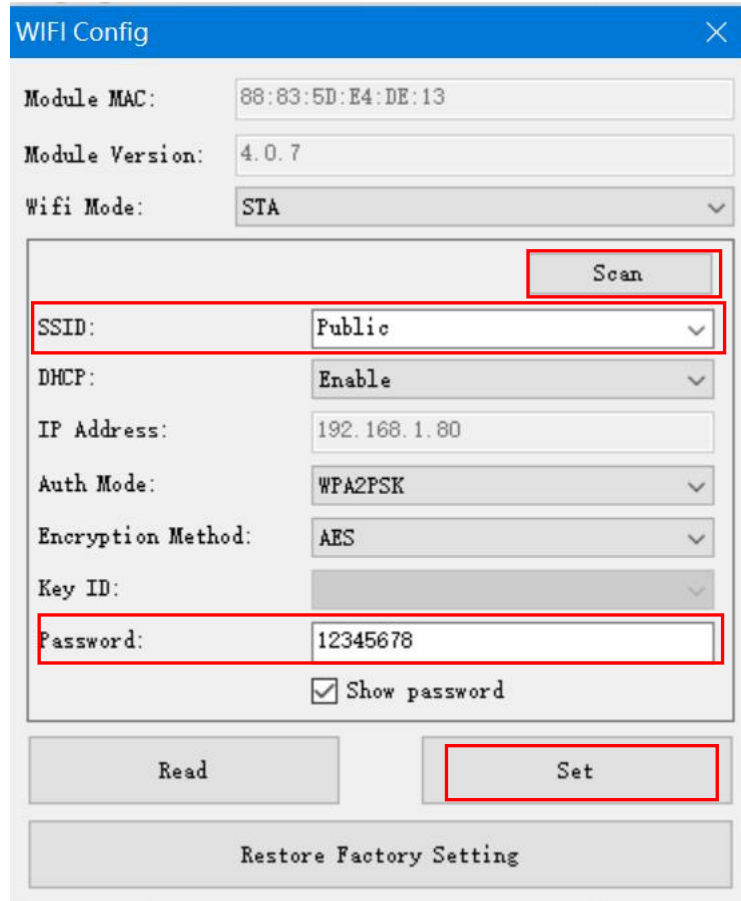
② Change from AP mode to STA mode.

- Choose STA under Wi-Fi mode, the interface is shifted to the following screenshot:



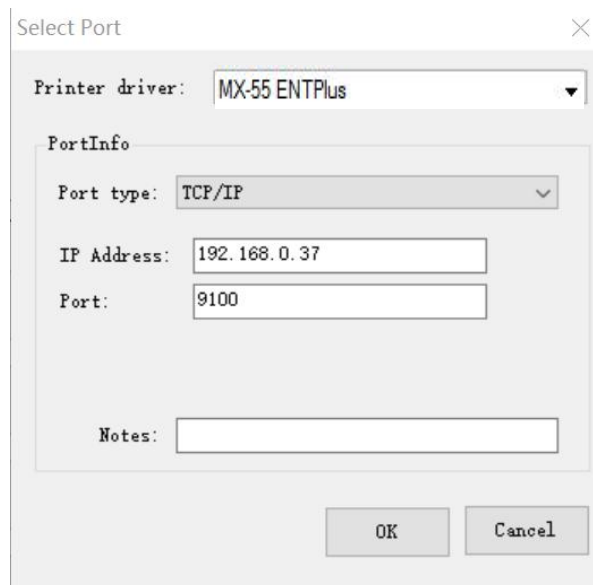
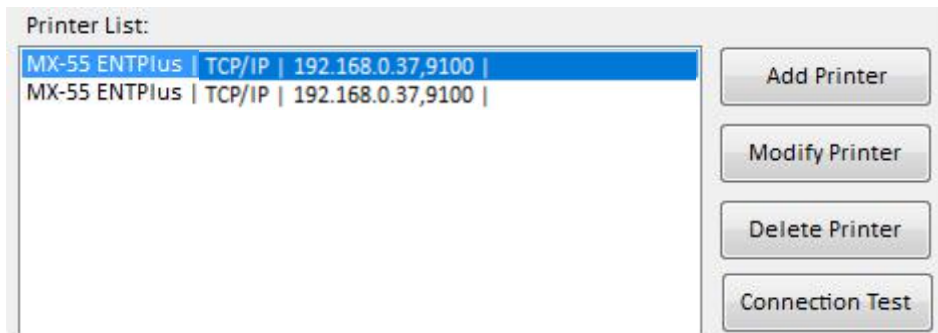
The screenshot displays the 'WIFI Config' window. The 'Wifi Mode' dropdown menu is open, showing 'STA' as the selected option. Other visible settings include: Module MAC: 88:83:5D:E4:DE:13, Module Version: 4.0.7, SSID: POS\_WIFI, DHCP: Enable, IP Address: 192.168.1.1, Auth Mode: WPA2PSK, Encryption Method: AES, Key ID: (empty), Password: (masked with asterisks), and a 'Show password' checkbox. At the bottom, there are 'Read', 'Set', and 'Restore Factory Setting' buttons.

- Click “Scan”, choose a connectable “hot spot” from SSID options. Enter the password of Wi-Fi that you want to connect to.
- Click “Set”. After it is set successfully, the printer would restart automatically.



<b>SSID</b>	The SSID name that is chosen after scanning “hot spot”
<b>DHCP</b>	Enable/Disable dynamic allocation of IP
<b>IP Address</b>	When DHCP is at Enable status, IP address will be allocated automatically, no need to do the setting; When DHCP is at Disable status, IP address must be set to the same LAN with the Wi-Fi that you connect to
<b>Auth Mode</b>	Parameter of the router, which is read automatically, no need to do the setting
<b>Encryption Method</b>	Parameter of the router, which is read automatically, no need to do the setting
<b>Key ID</b>	Parameter of the router, which is read automatically, no need to do the setting; It is effective only when the Auth Mode is SHARED with the Encryption Method WEP.

- After the printer is restarted, short press the power button 3 times, so that the current Wi-Fi parameter information can be printed.
- After completing the setting, connect the computer to the Wi-Fi that the printer connects to, click “Modify Printer”, choose “TCP/IP”, and set the IP address the same as the printer’s IP address, then click “OK”.



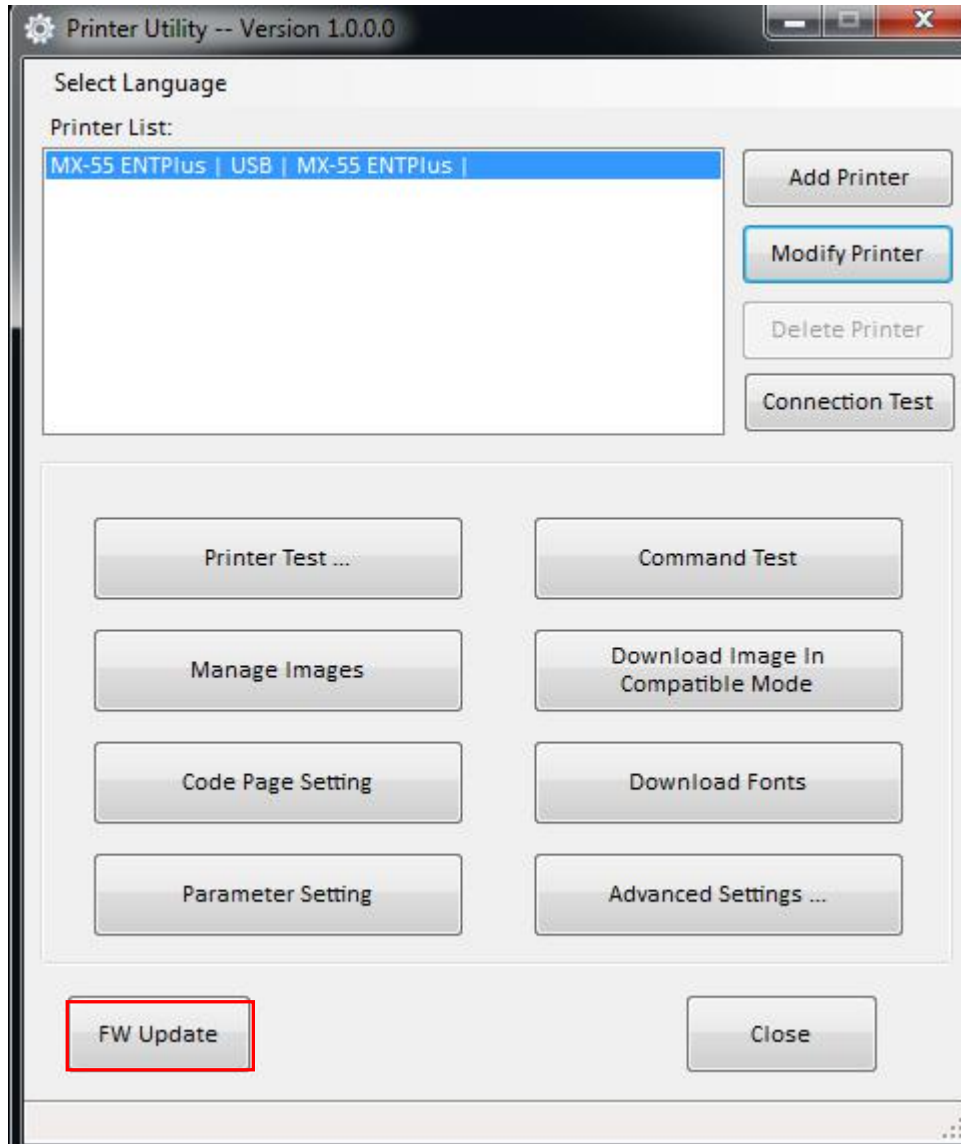
- Click “Connection Test” to check if the setting is successful.



**Note:** Short press the power button five times, so that the Wi-Fi parameter can be reset.

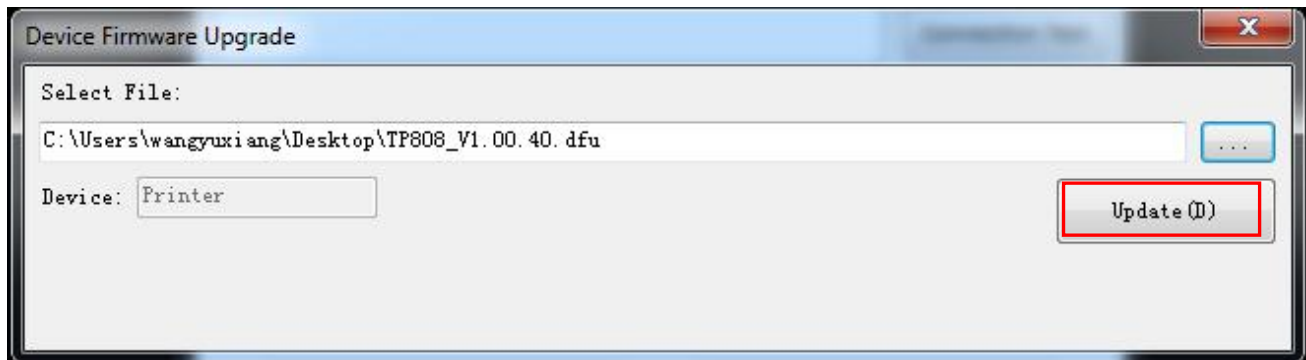
## 8.3 Firmware Update

1) Click “FW Update”.



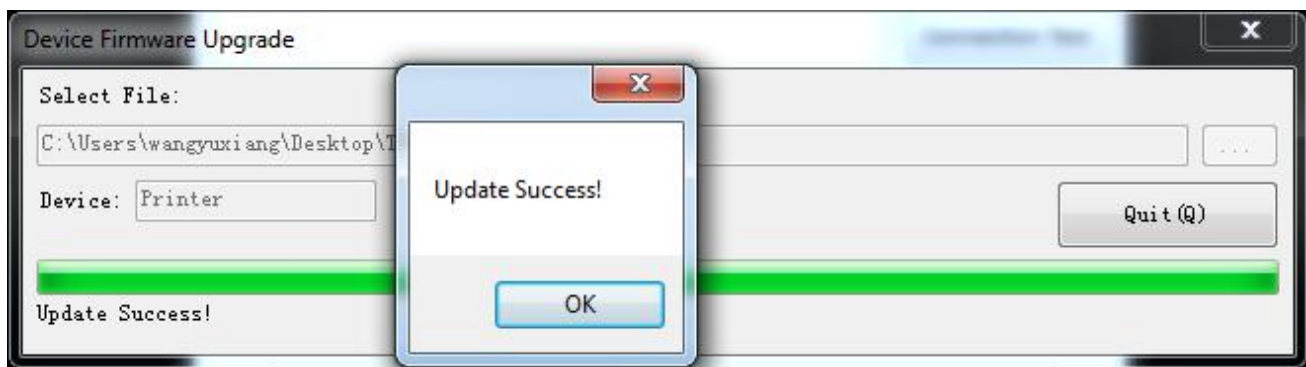


2) When the device appears "Printer", select the Dfu file.



3) Click "Update".

4) Update success.



5) Restart the printer.

## **9 WINDOWS DRIVER INSTRUCTION**

### **9.1 Information**

This Windows Driver Installation Instruction provides information on installation, detailed specifications, and usage of the printer's Windows Driver according to PC operating system (OS).

We maintain ongoing efforts to enhance and upgrade the functions and quality of all our products. As follows, product specifications and/or user manual content may be changed without prior notice.

### **9.2 Operating System (OS) Environment**

The following operating systems are supported for usage.

- Microsoft Windows 10 (32 bit/64 bit)
- Microsoft Windows 8 (32 bit/64 bit)
- Microsoft Windows 7 SP1 (32 bit/64 bit)
- Microsoft Windows Vista SP2 (32 bit/64 bit)
- Microsoft Windows XP Professional SP3 (32 bit)
- Microsoft Windows Server 2012 (64 bit)
- Microsoft Windows Server 2008 R2

### **9.3 Windows Driver Preparation**

The Windows Driver is included in the enclosed CD.

The installation file name is POS Printer Driver-V-X.X.X.X.exe

## 9.4 Windows Driver Installation



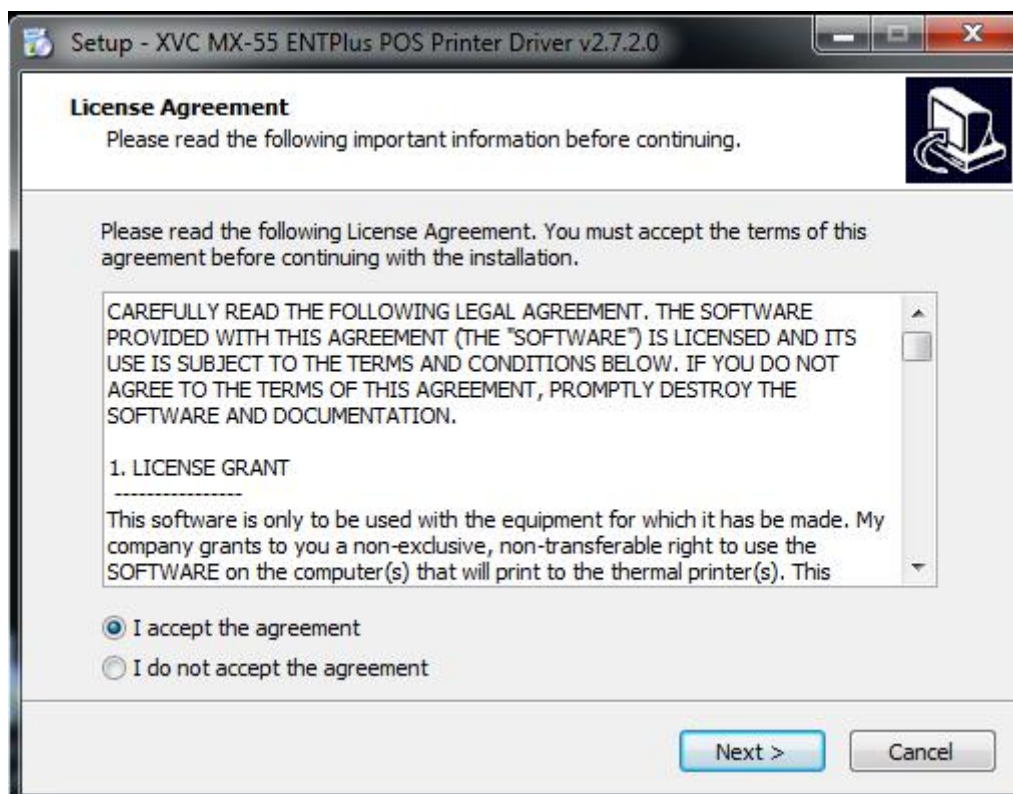
### Warning:

Under different operating system and different type of driver, the screen has slight difference. Please operate it according to the tips. Take MX-55 ENTPlus (Windows 7) as example.

- 1) Double click Windows Driver.
- 2) Choose “English” and click “OK”.

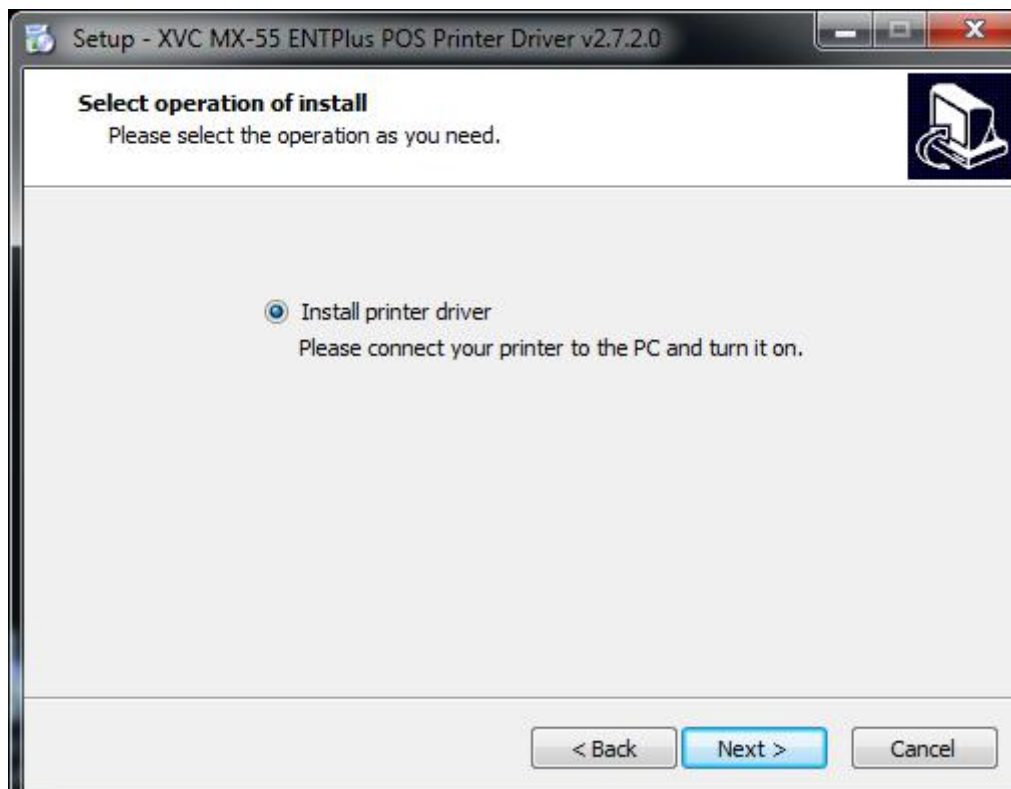


- 3) Choose “I accept the agreement”, then click “Next”.

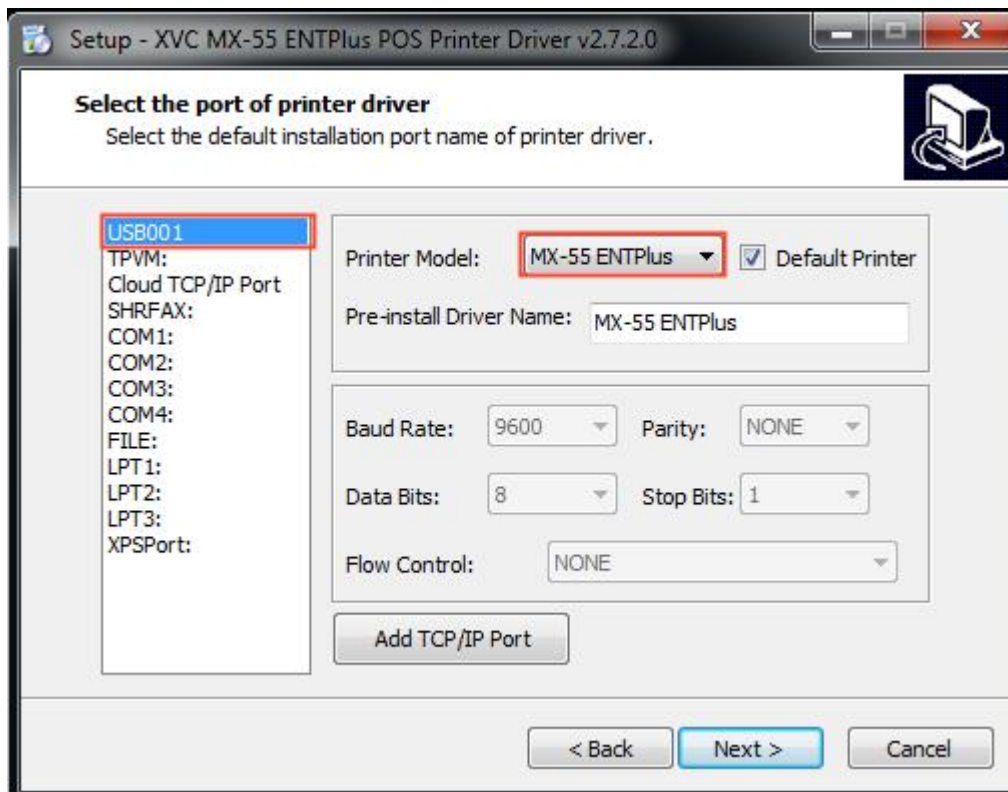


**Note:** If printer is already connected with computer by USB port, it only needs to click “Install”, then it will be installed automatically. Otherwise, proceed to the next step.

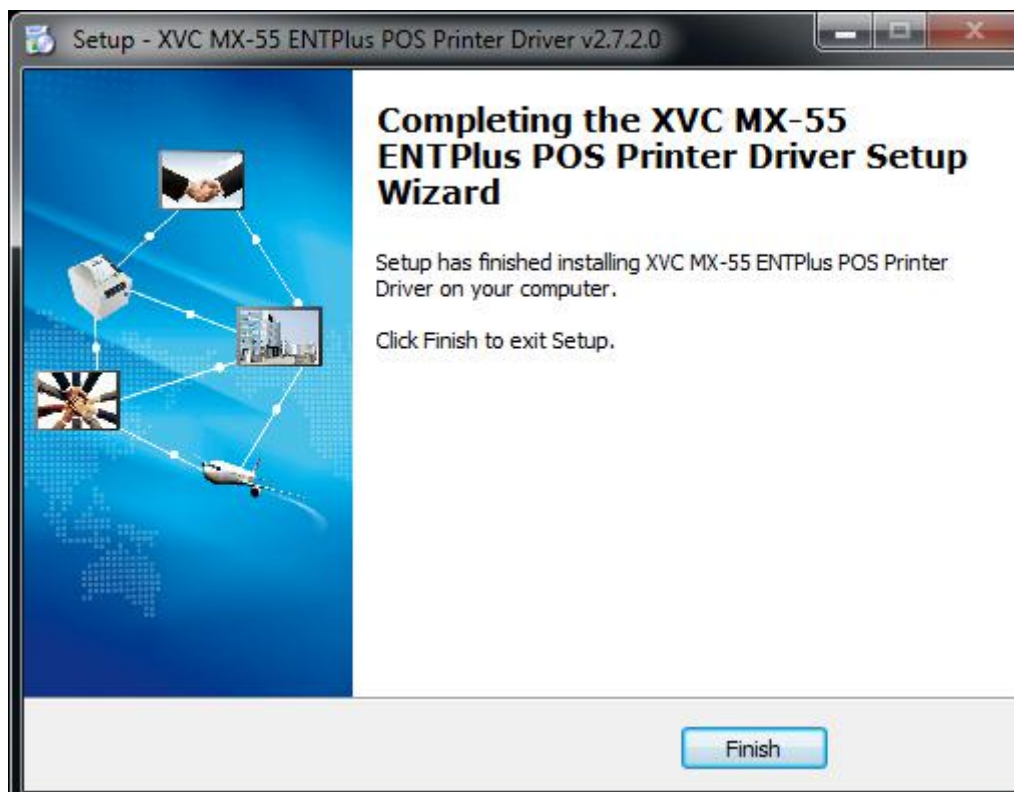
4) Click “Next”.



5) Choose the matched type and port (USBxxx is for USB port, COMx is for serial port, LPTx is for parallel port). Choose the type of driver, port, such as “MX-55 ENTPlus”, “USB” as port. Click “Next”.



6) Click “Finish”, the driver is installed successfully.



7) After installation, the icon will be found in “Start”→“Devices and Printers”.

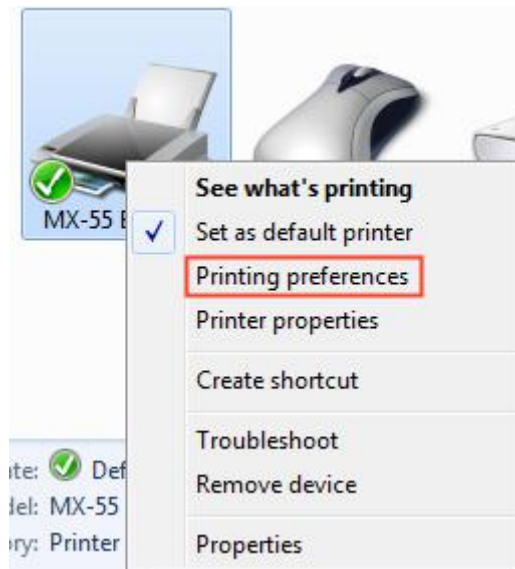


**Note:** *If you already installed the driver (No matter what kind of port), when you connect the printer with computer, it will create a USB port automatically.*

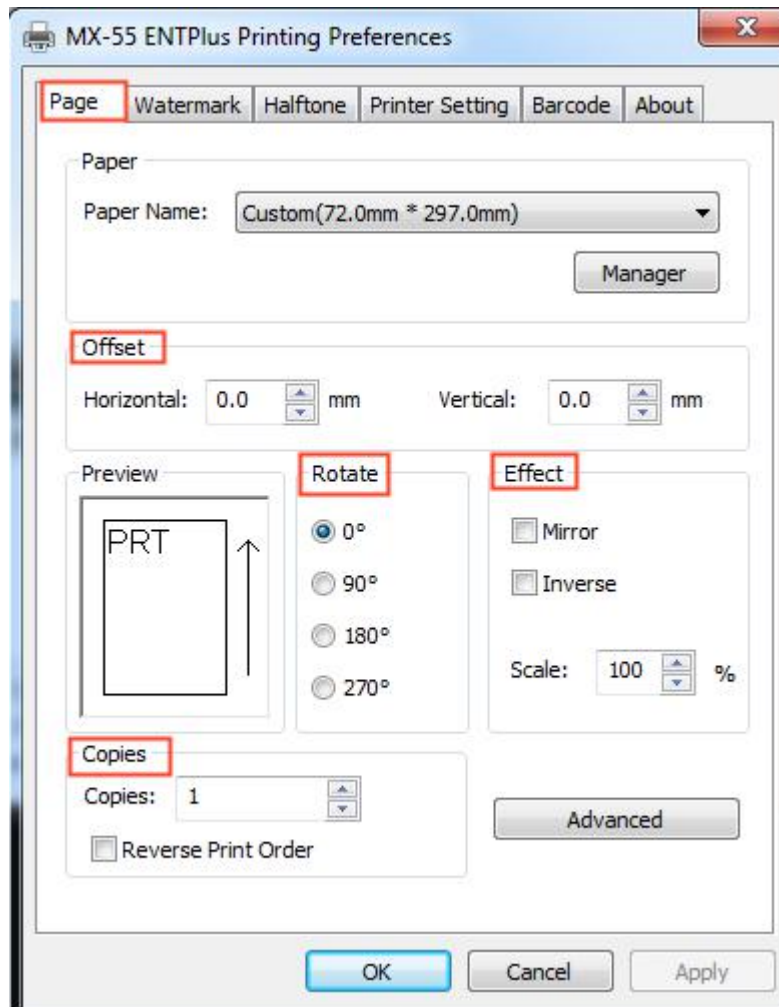
## 9.5 Detailed Windows Driver Setting

### 9.5.1 Printing Preferences

1) Click “Start” → “Devices and Printers”. Right click “MX-55 ENTPlus” and choose “Printing preferences”.

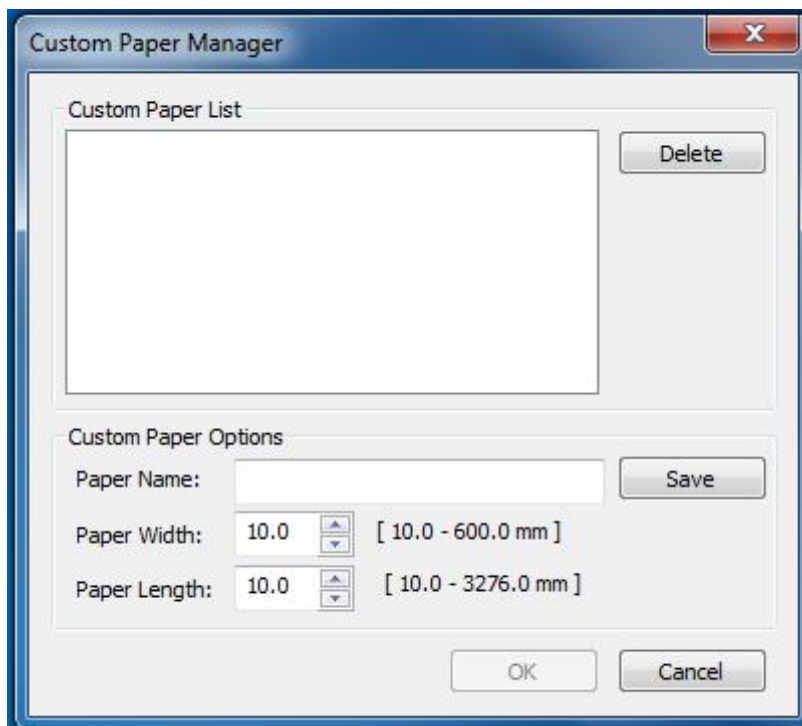


2) According to the different needs, choose “Paper”\“Offset”\“Rotate”\“Effect”\“Copies” in “Page”.



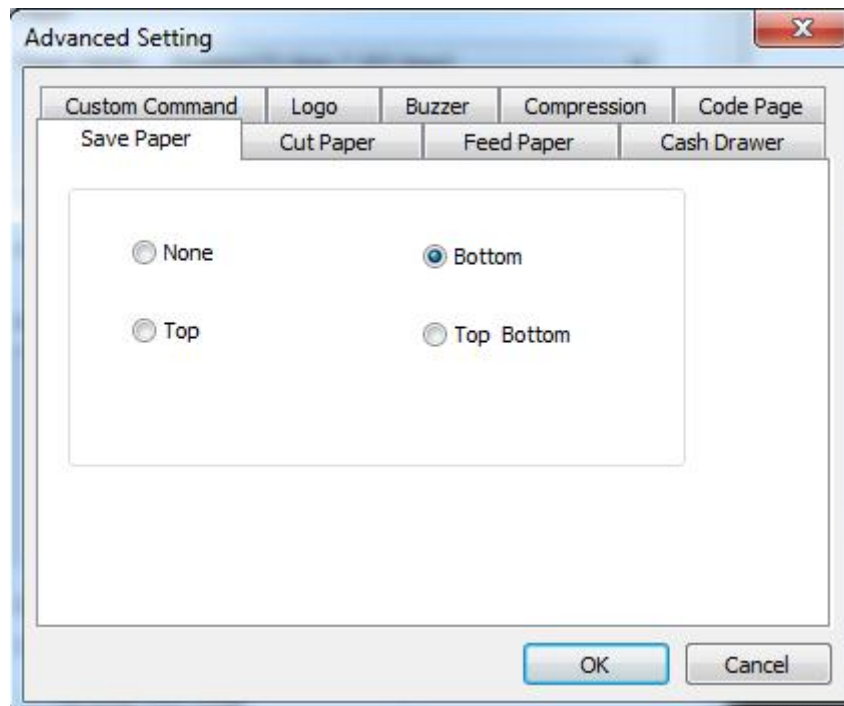


- Click “Manager”, add or delete paper.

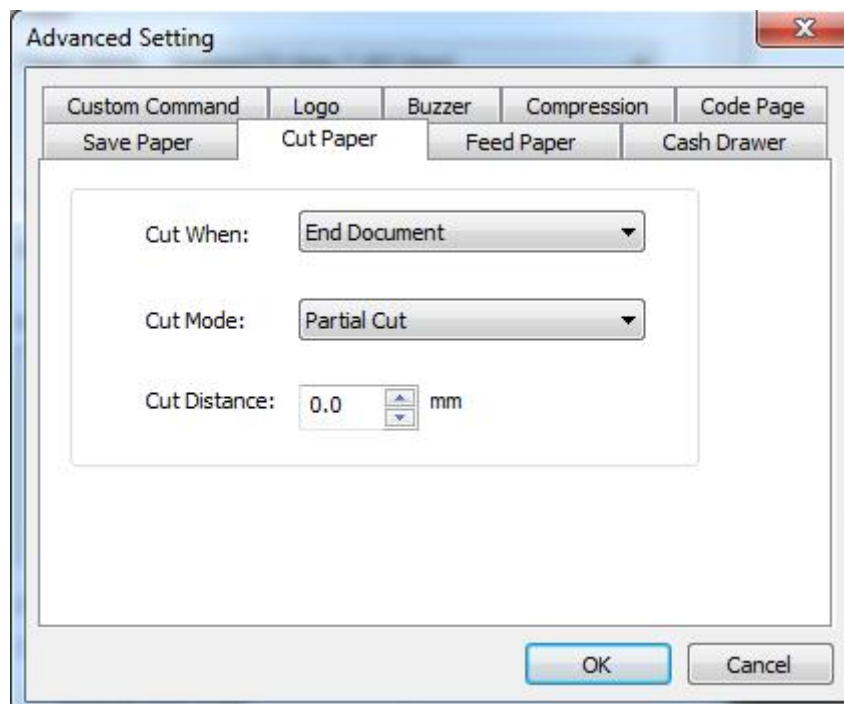


•Click “Advanced” to set “Save Paper/Cut Paper/Feed Paper/Cash Drawer/Custom Command/Logo/Buzzer/Code Page”.

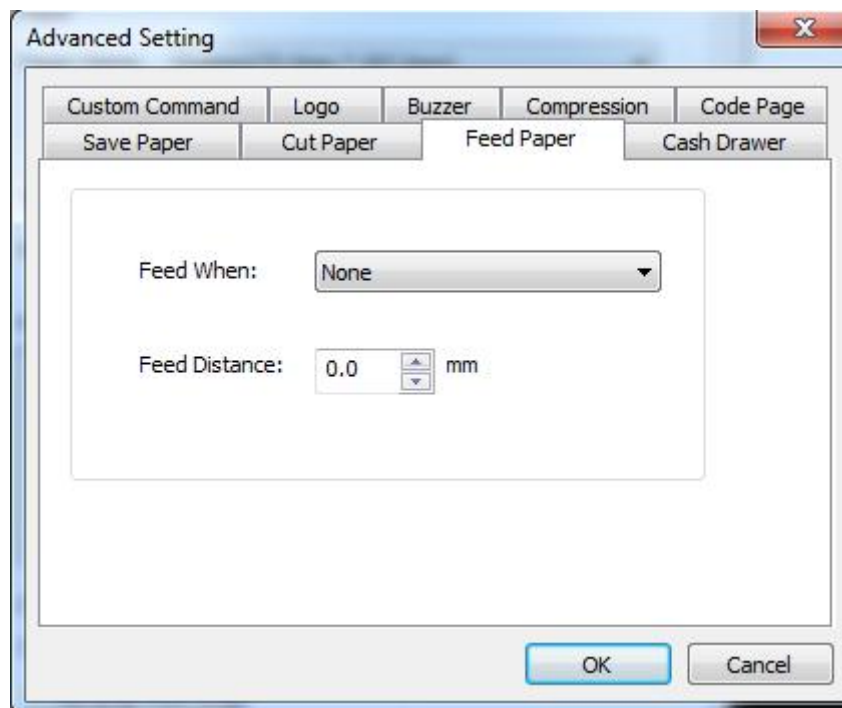
▪ Save Paper



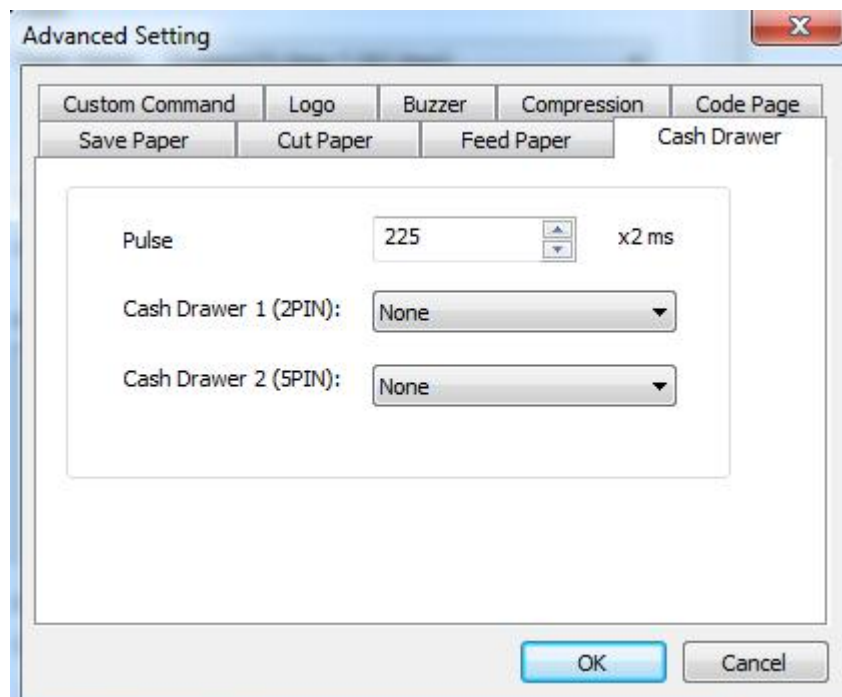
▪ Cut Paper

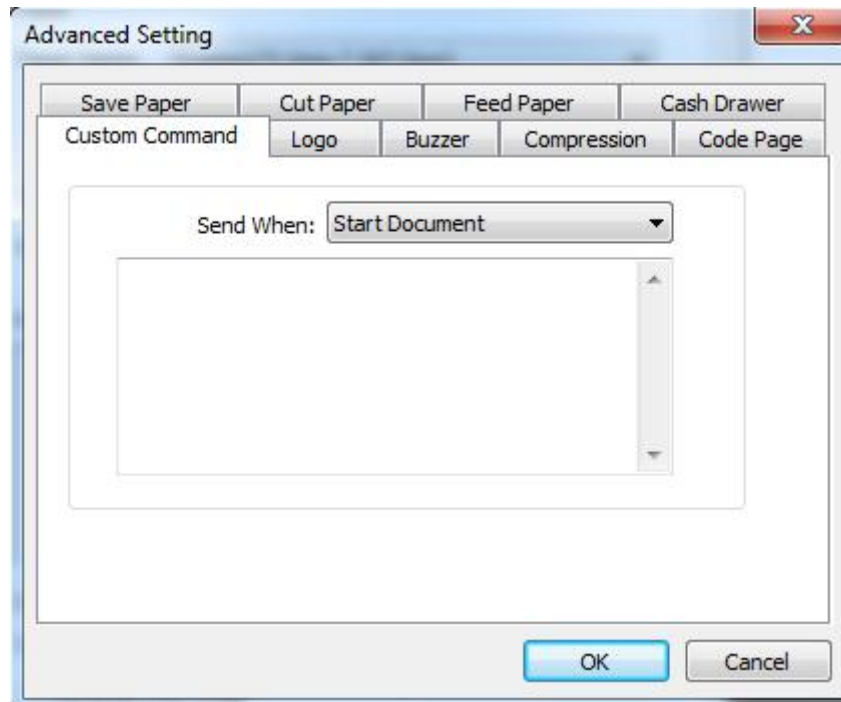
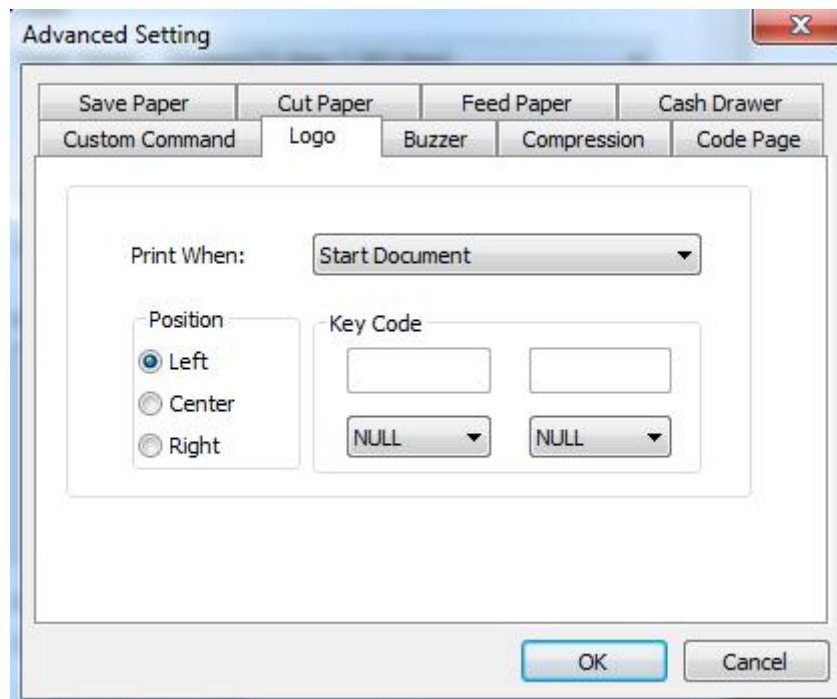


- Feed Paper



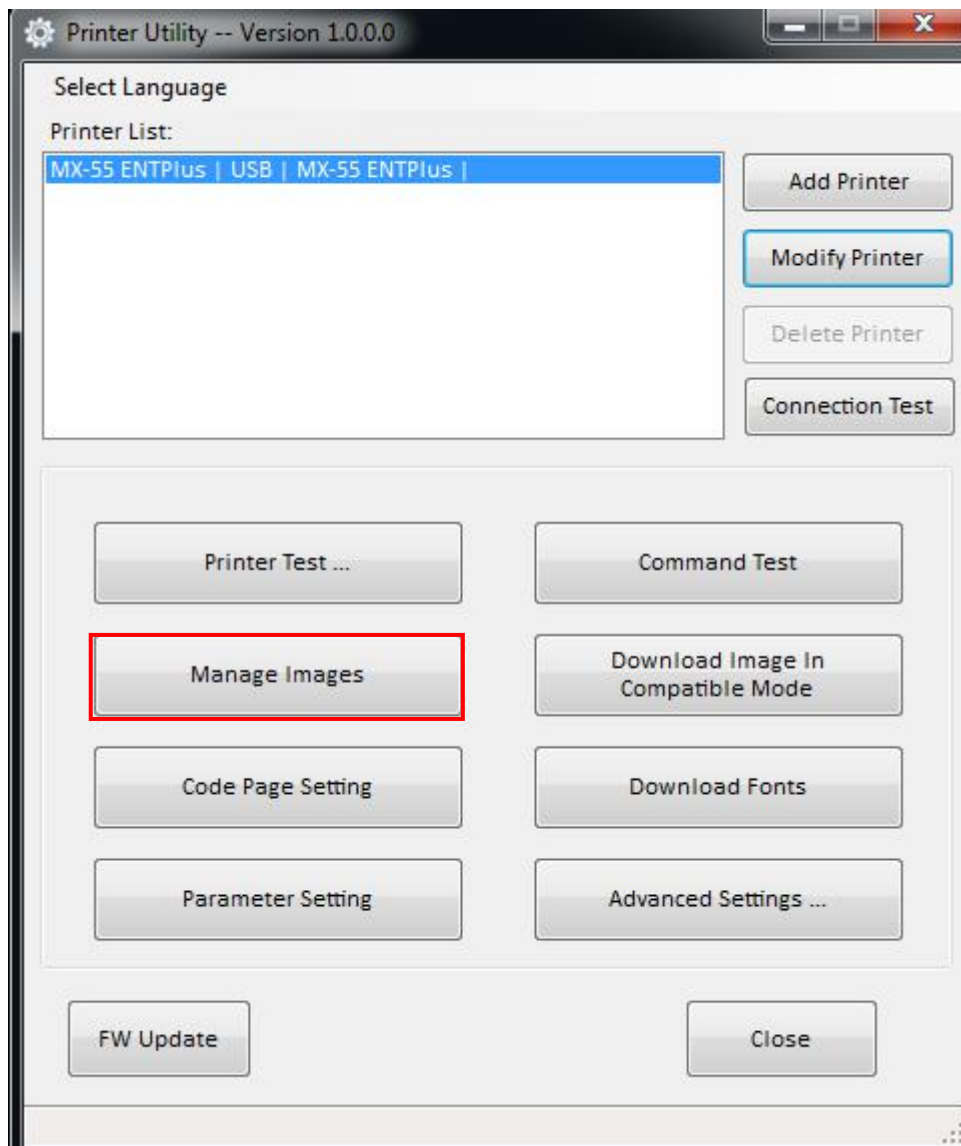
- Cash Drawer



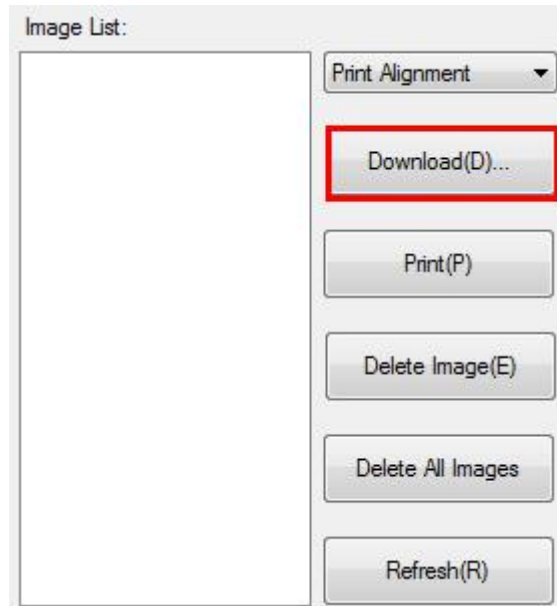
**▪ Custom Command****▪ Logo**

**Note:** This setting needs to be set in utility. Here are the steps.

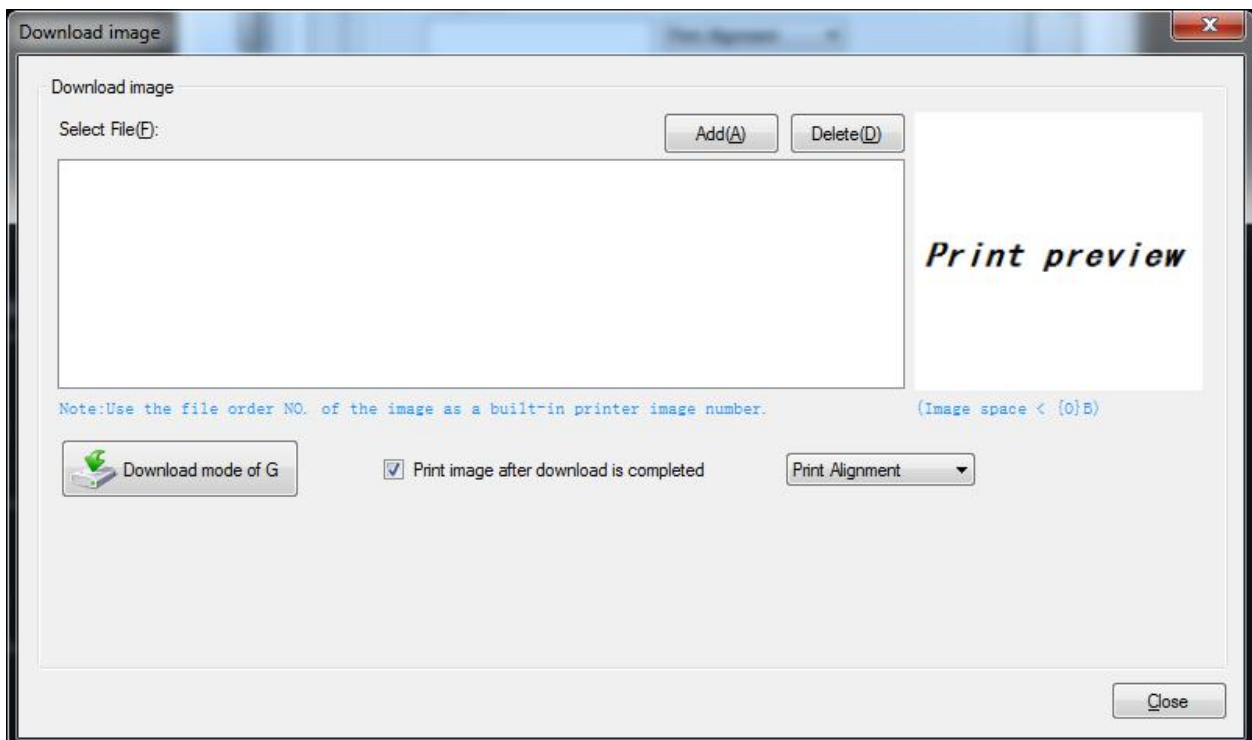
- ① Open the utility and click "Manage Images".



- ② Click "Download".

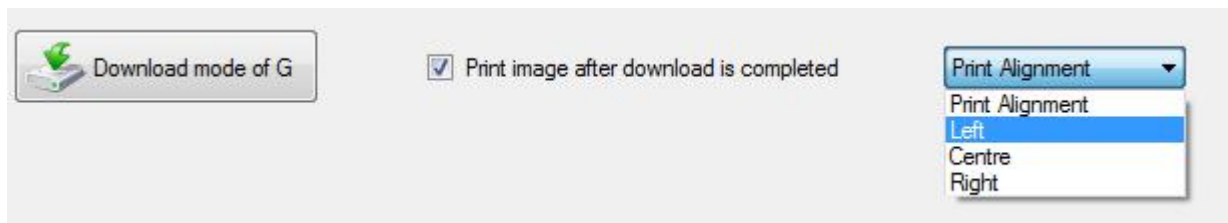


- ③ Click "Add" to add a logo. (BMP format is recommended)





- ④ Select the print location, and then click "Download mode of G". (Such as: left print)



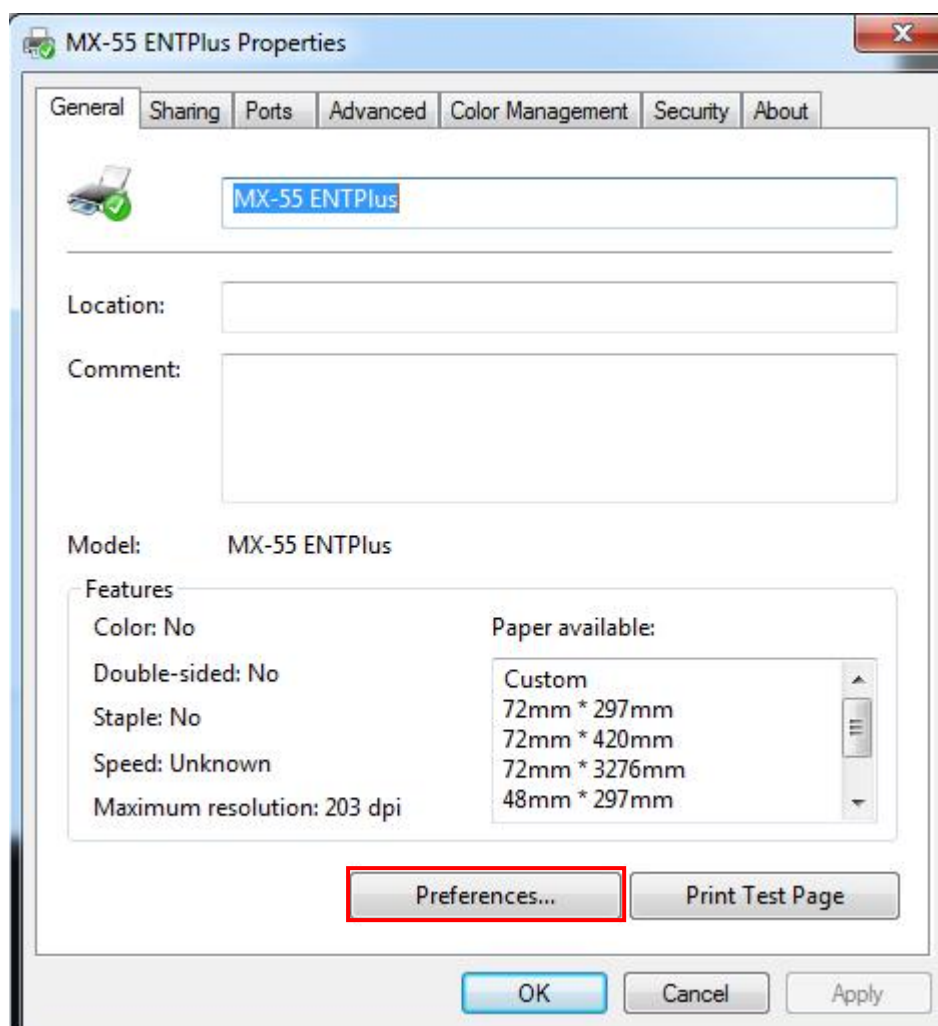
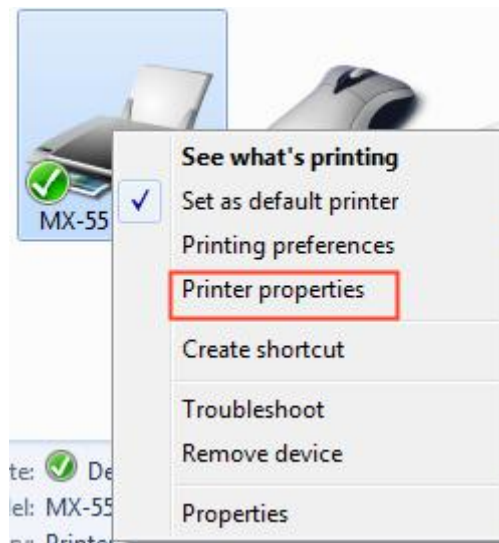
- ⑤ Return to image list to view the image number.



**Note:** each time click "Download mode of G", an image list number will be generated.

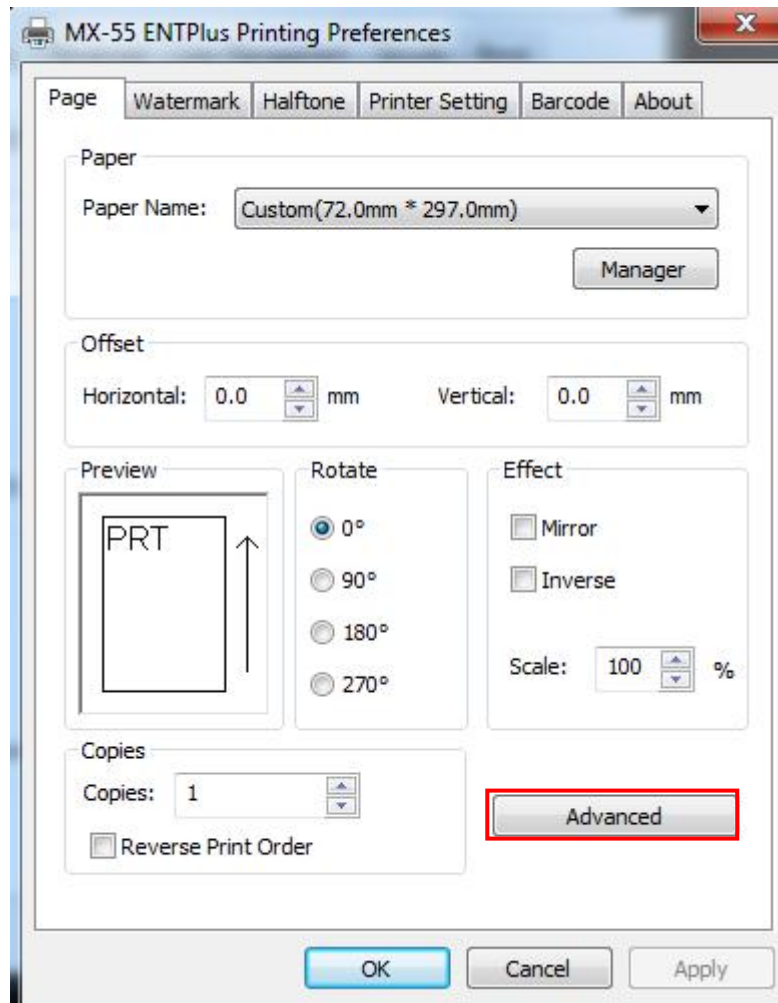


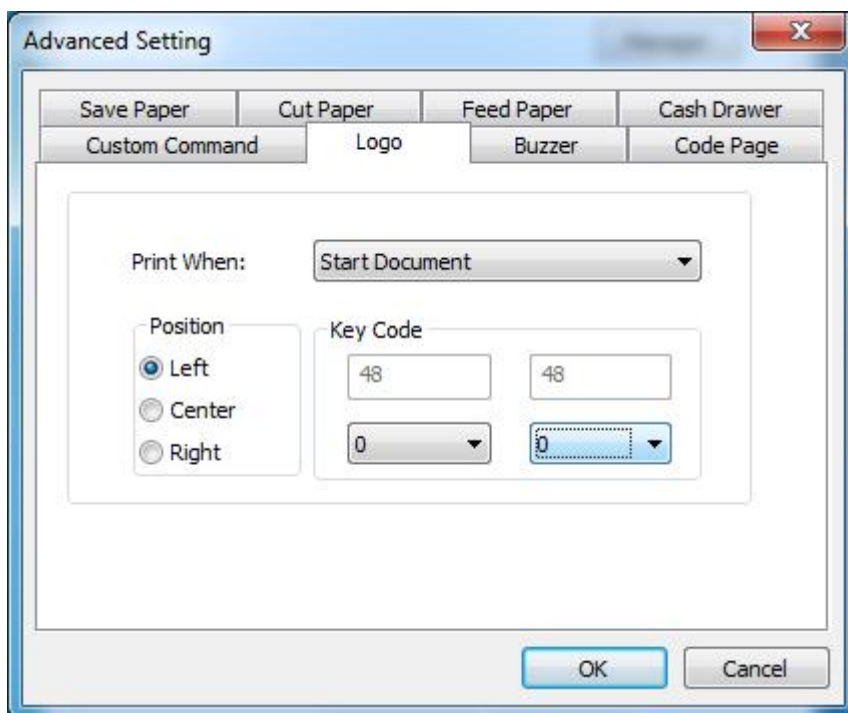
- ⑥ Select Printer properties in Devices and Printers, then click “Preference”.



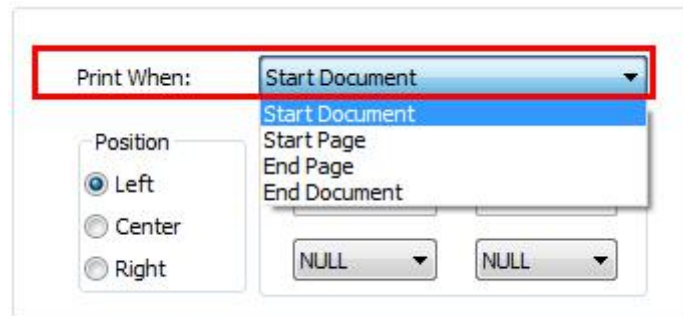


- ⑦ Click the “Advanced”, then click “Logo”.





- ⑧ Set the printing time to print and click "OK". (Such as: Start Document)



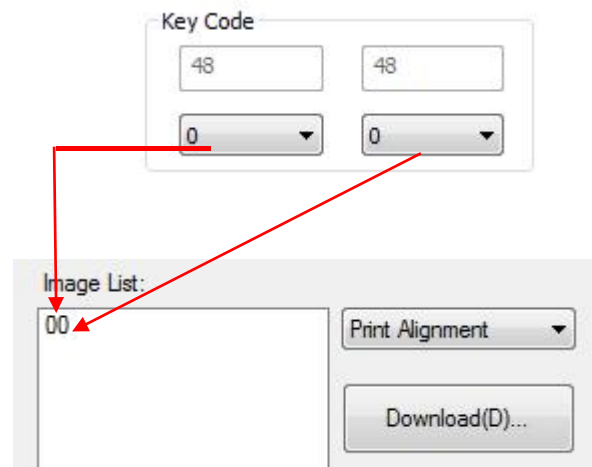
The screenshot shows a software interface with a 'Print When:' dropdown menu. The menu is open, showing options: 'Start Document', 'Start Page', 'End Page', and 'End Document'. 'Start Document' is selected and highlighted in blue. Below the dropdown are two 'NULL' dropdown menus. To the left of the dropdown is a 'Position' section with three radio buttons: 'Left' (selected), 'Center', and 'Right'.

- ⑨ Return to the logo setting in driver, also select "Print left".



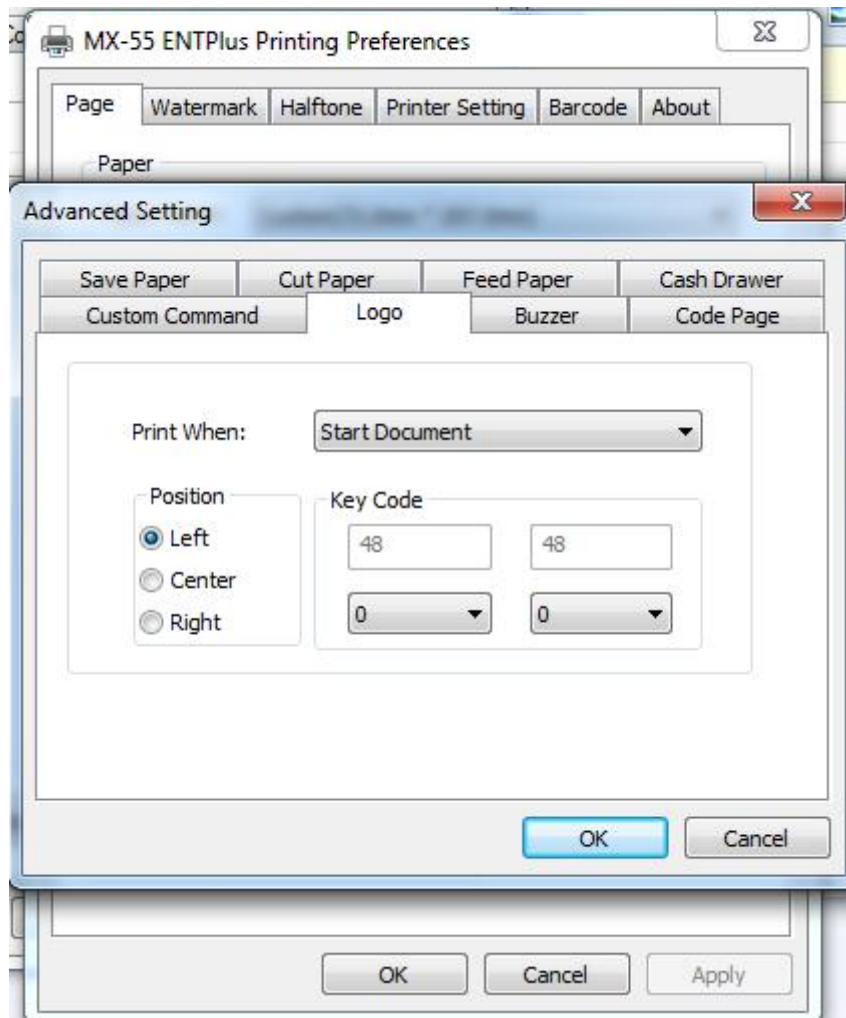
The screenshot shows the 'Print When:' dropdown menu set to 'Start Document'. Below it is the 'Position' section with three radio buttons: 'Left' (selected), 'Center', and 'Right'. To the right of the 'Position' section is a 'Key Code' section with two empty text input fields and two 'NULL' dropdown menus.

- ⑩ Set the key Code according to the image number. (Such as: 0 0)

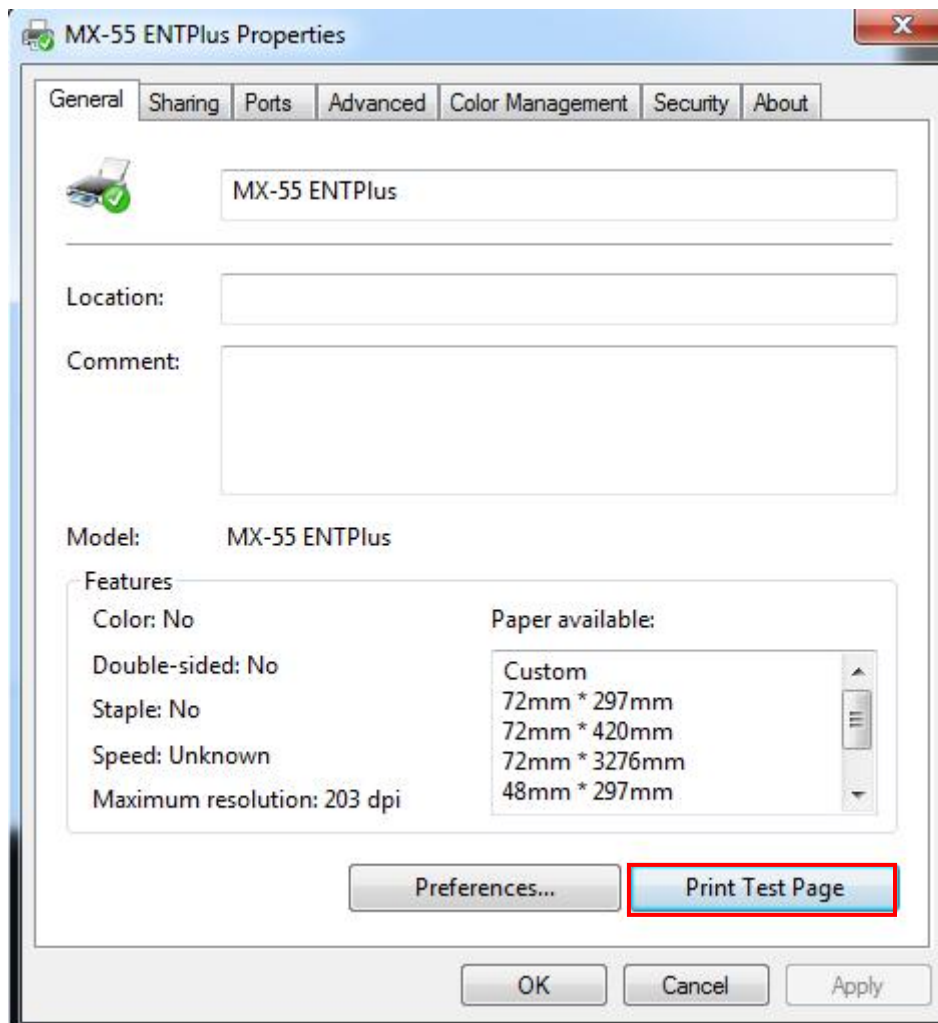


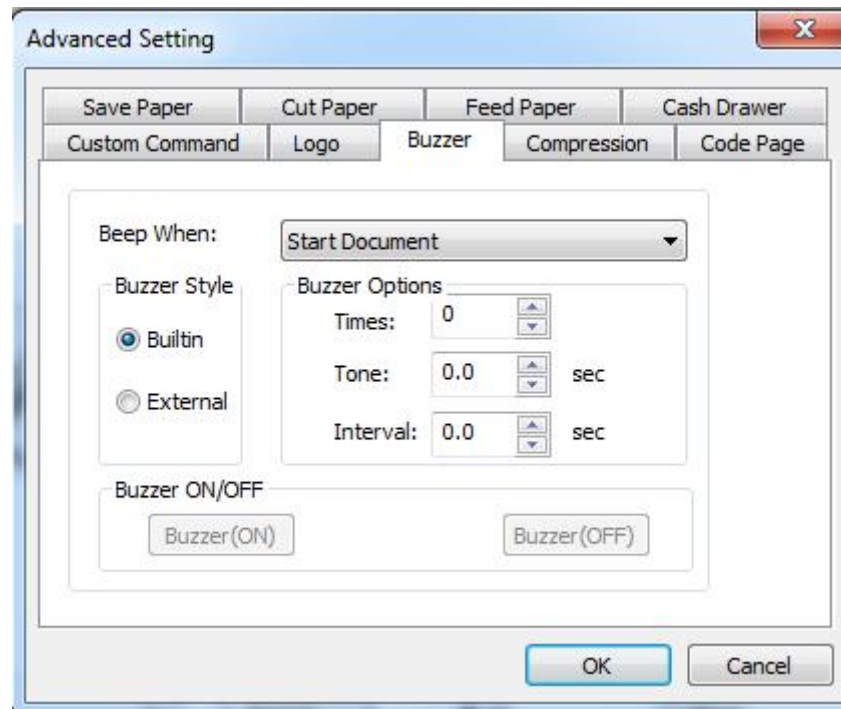
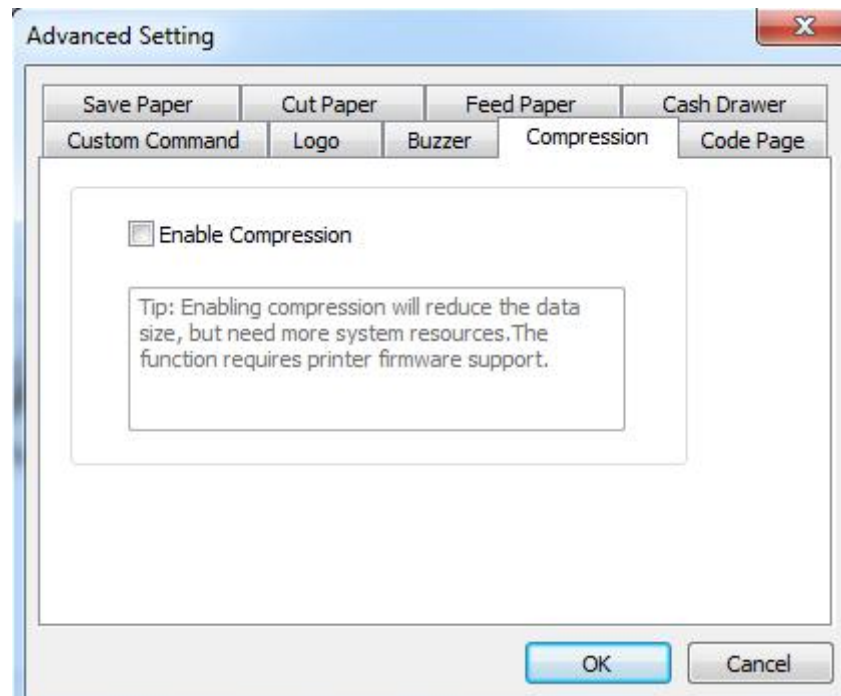
The screenshot shows the 'Key Code' section with two text input fields containing '48' and two dropdown menus set to '0'. Below this is the 'Image List:' section with a list box containing '00'. A red arrow points from the '00' in the list box to the '0' in the dropdown menu. To the right of the 'Image List' is a 'Print Alignment' dropdown menu and a 'Download(D)...' button.

⑪ Then click “OK”.

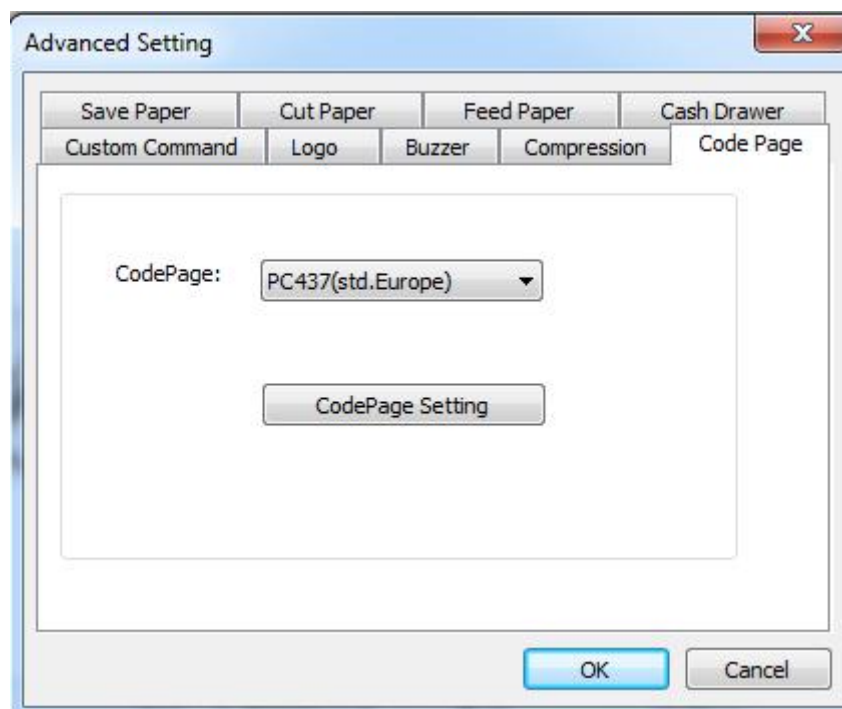


- ⑫ Click “Print Test Page” to view the printing effect.

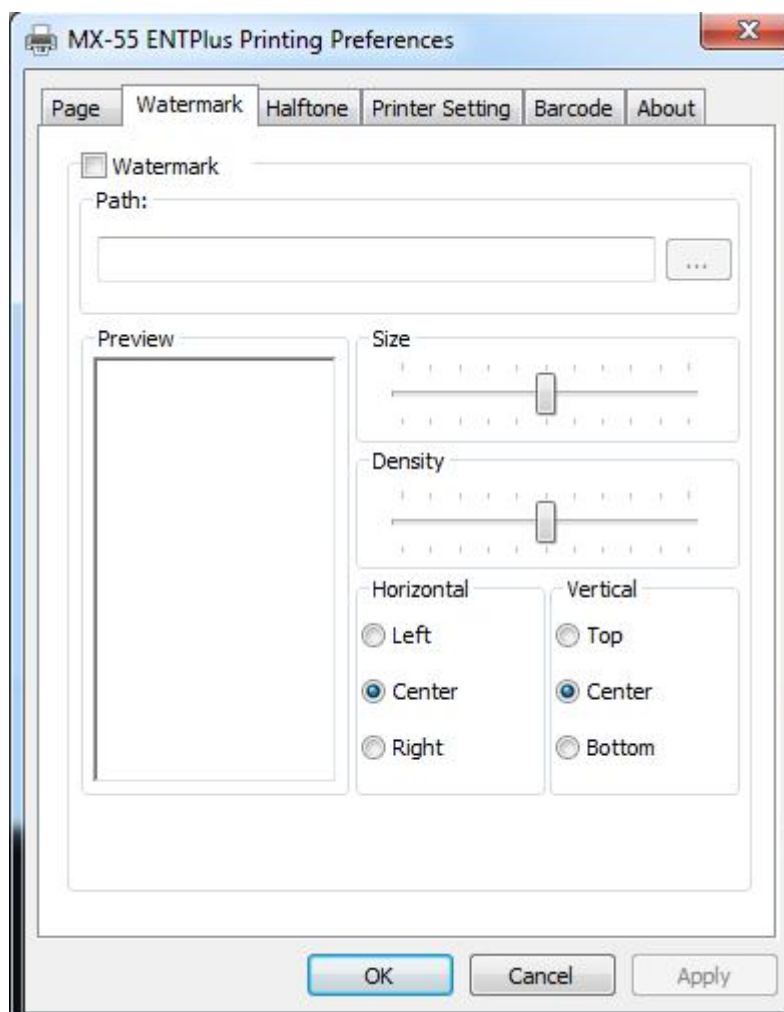


**▪ Buzzer****▪ Compression**

- Code Page

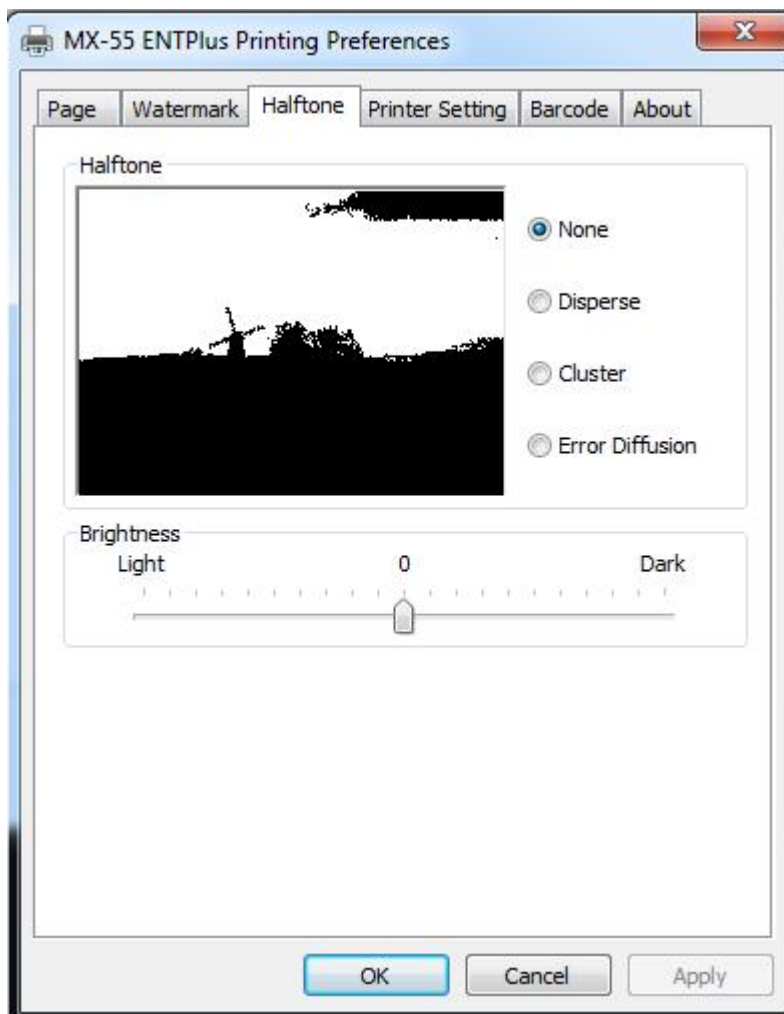


3) Click “Watermark”. Set watermark to print.





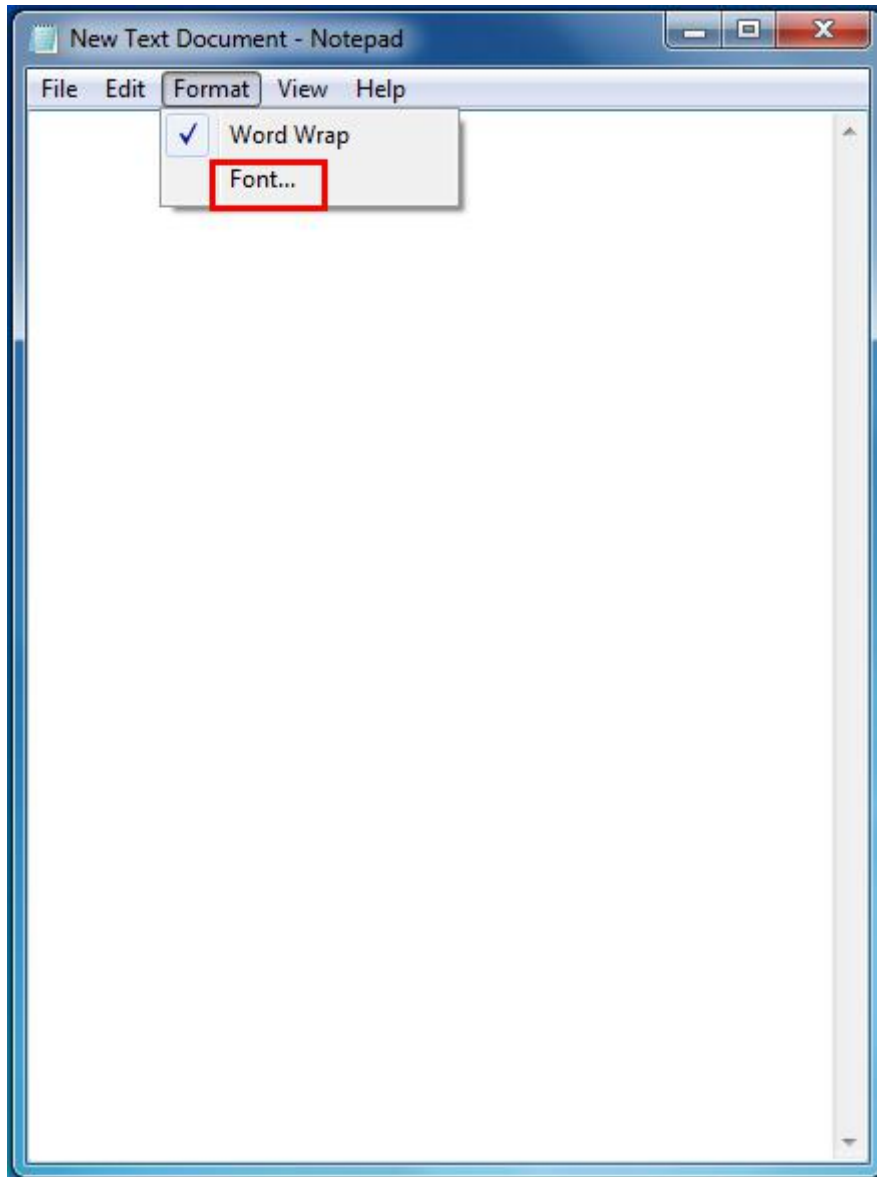
4) Click “Halftone” to set the halftone.

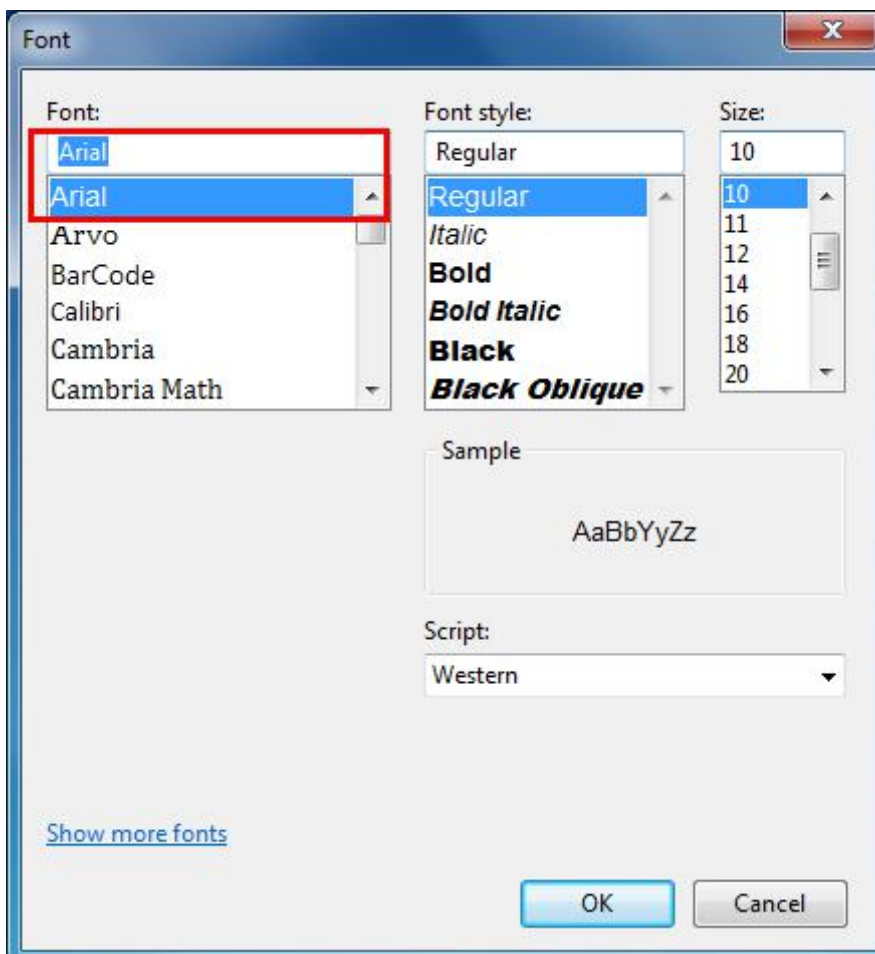


### 5) Set up the “Barcode”

Assuming the font type of the main document is “Italics”, if you want to convert the data “123456” to the barcode printing, the steps are as follows:

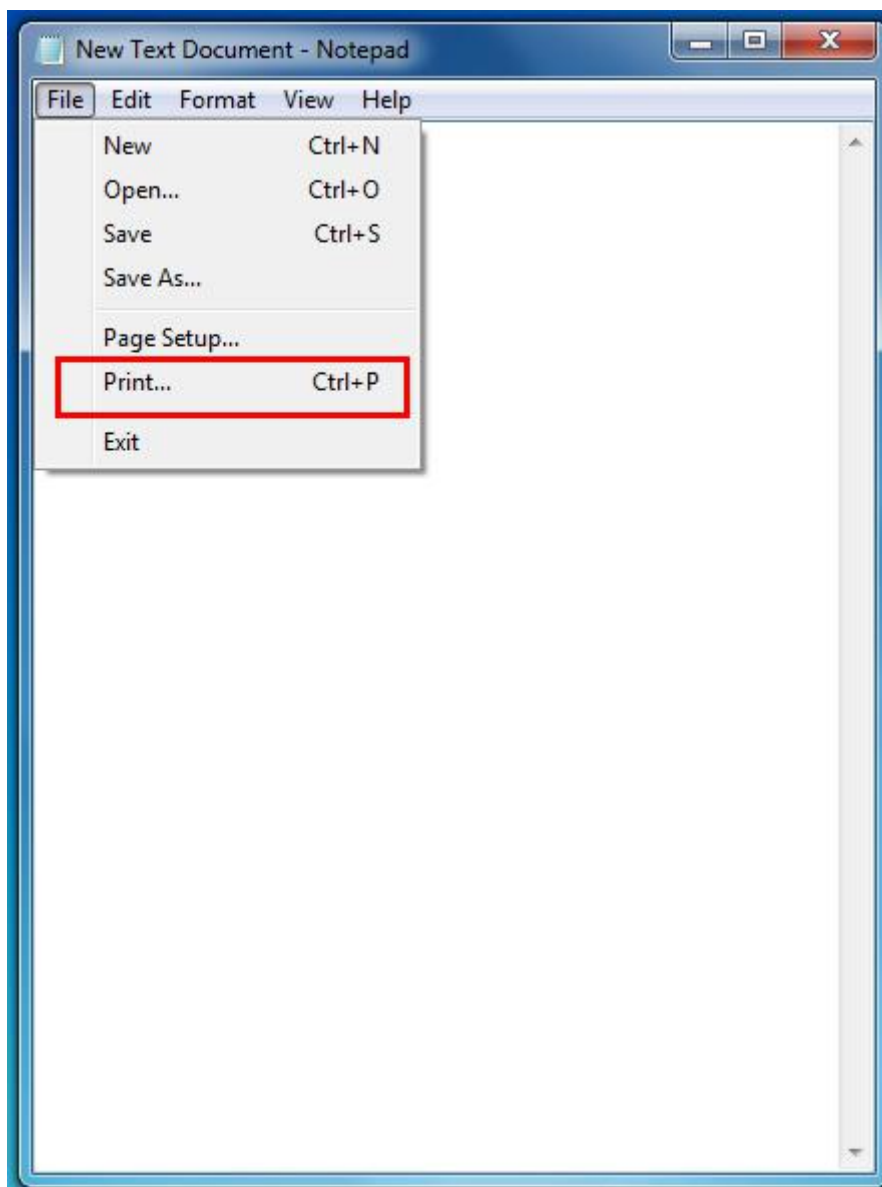
- Sets the data "123456" font type to a different font from the main document. Such as: Arial.

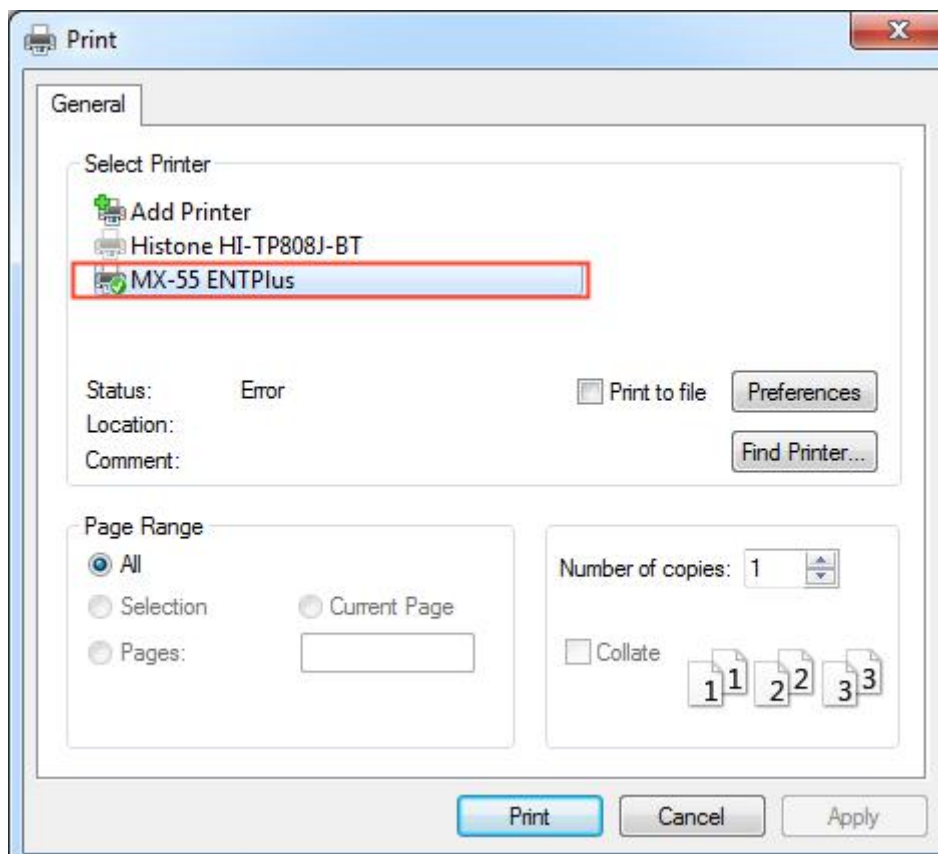




- Open the Preference.

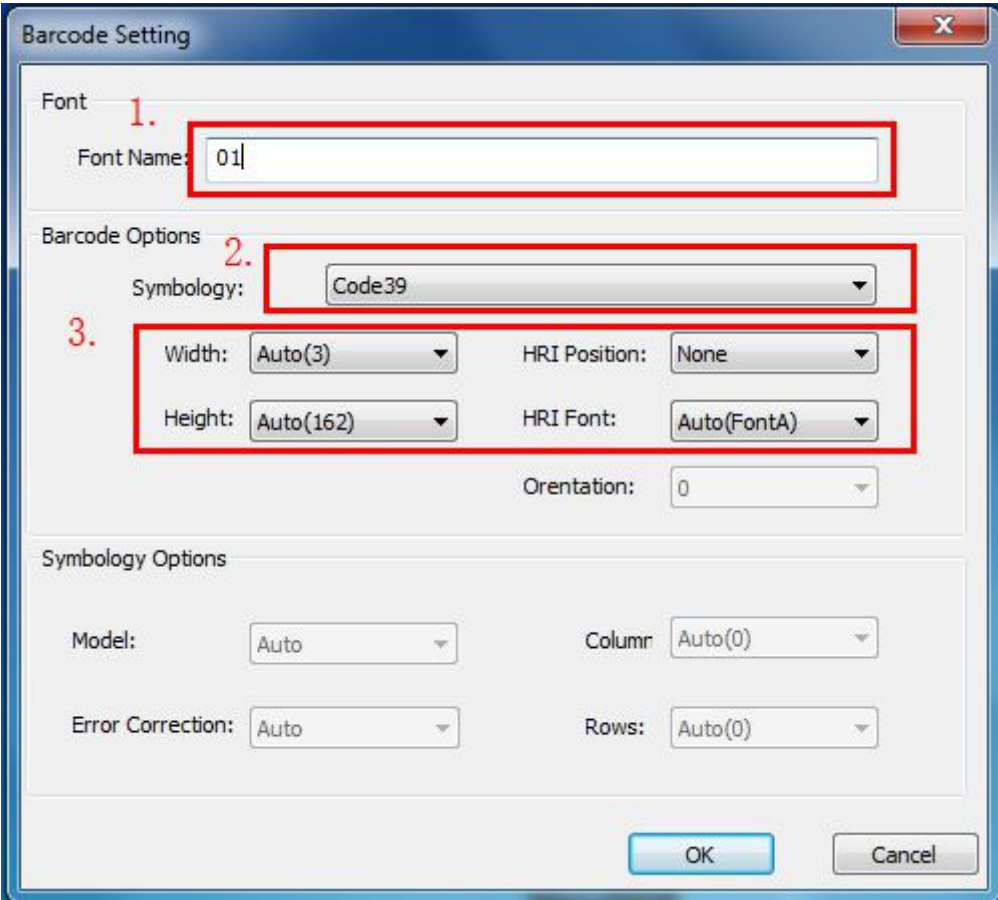
If the document is open, you can set it in the document: file-print-preferences.







- ② Set the “Font Name” and the “Barcode Option”.



The image shows a "Barcode Setting" dialog box with the following fields and values:

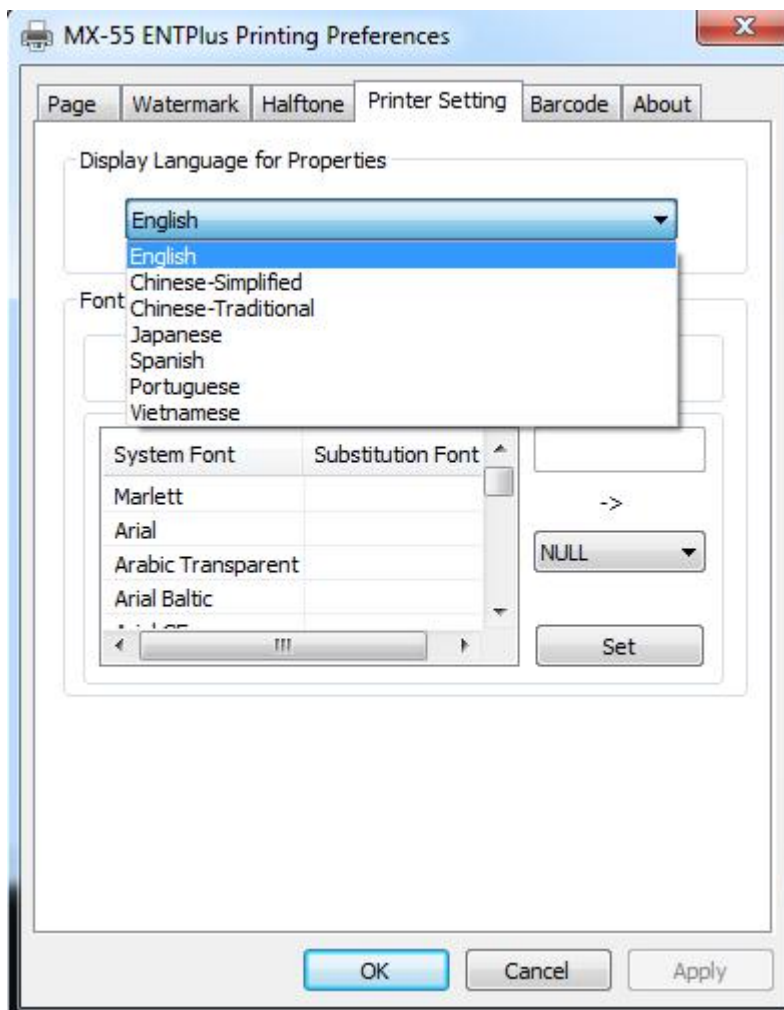
- Font** (1.): Font Name: 01
- Barcode Options** (2.): Symbology: Code39
- 3.:** Width: Auto(3), HRI Position: None, Height: Auto(162), HRI Font: Auto(FontA), Orientation: 0
- Symbology Options:** Model: Auto, Column: Auto(0), Error Correction: Auto, Rows: Auto(0)

Buttons: OK, Cancel



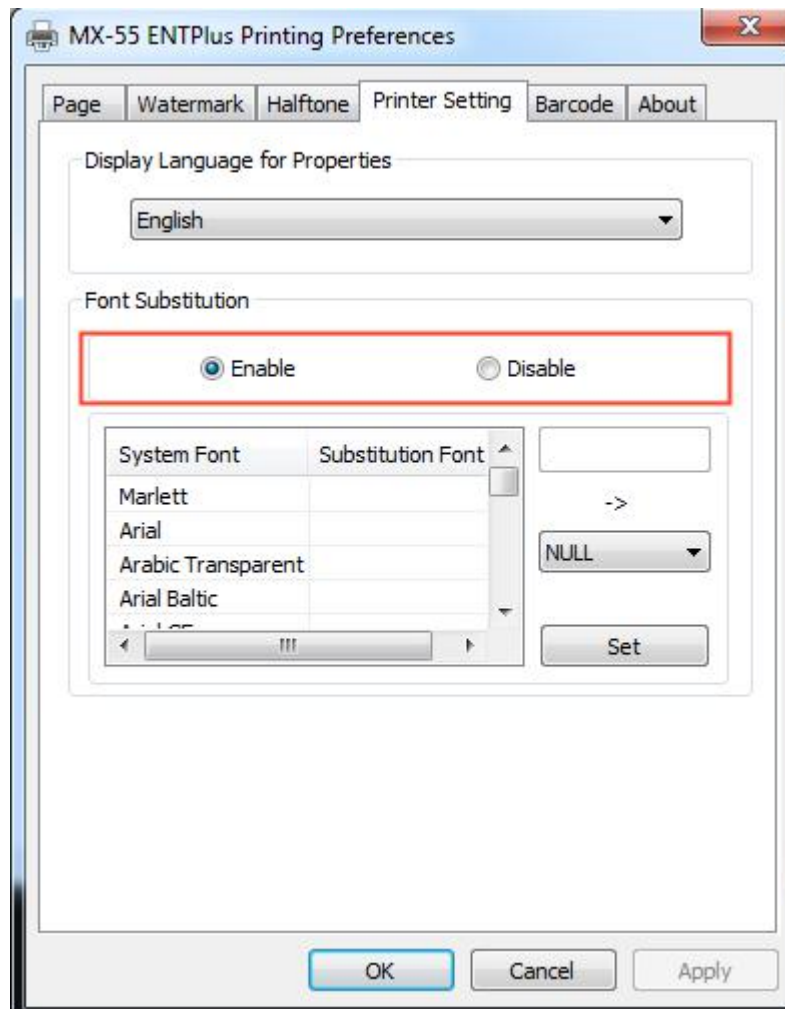


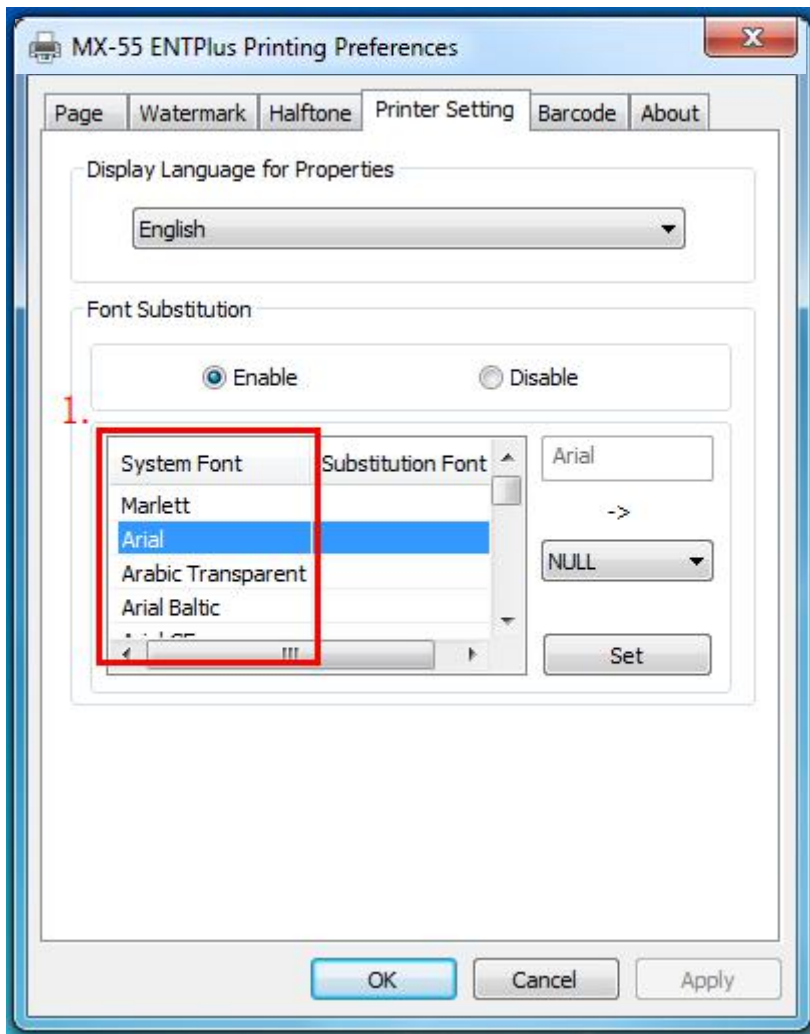
- ③ Click the “Printer Setting”.
- Choose the “Display Language for Properties”

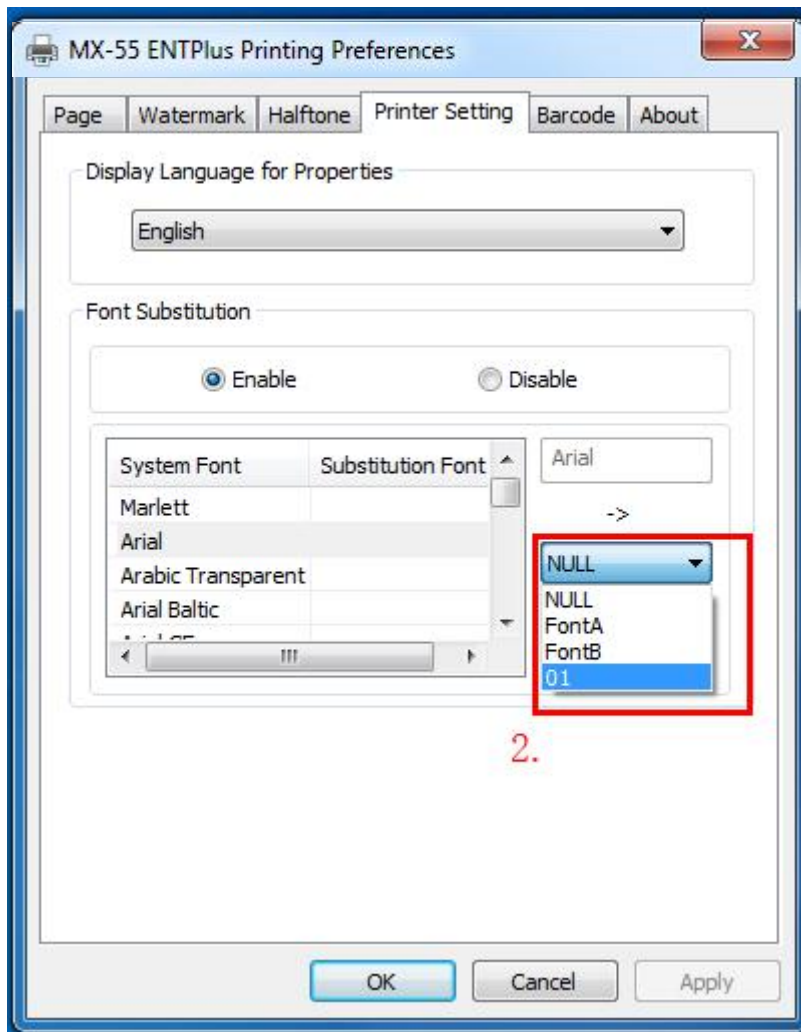


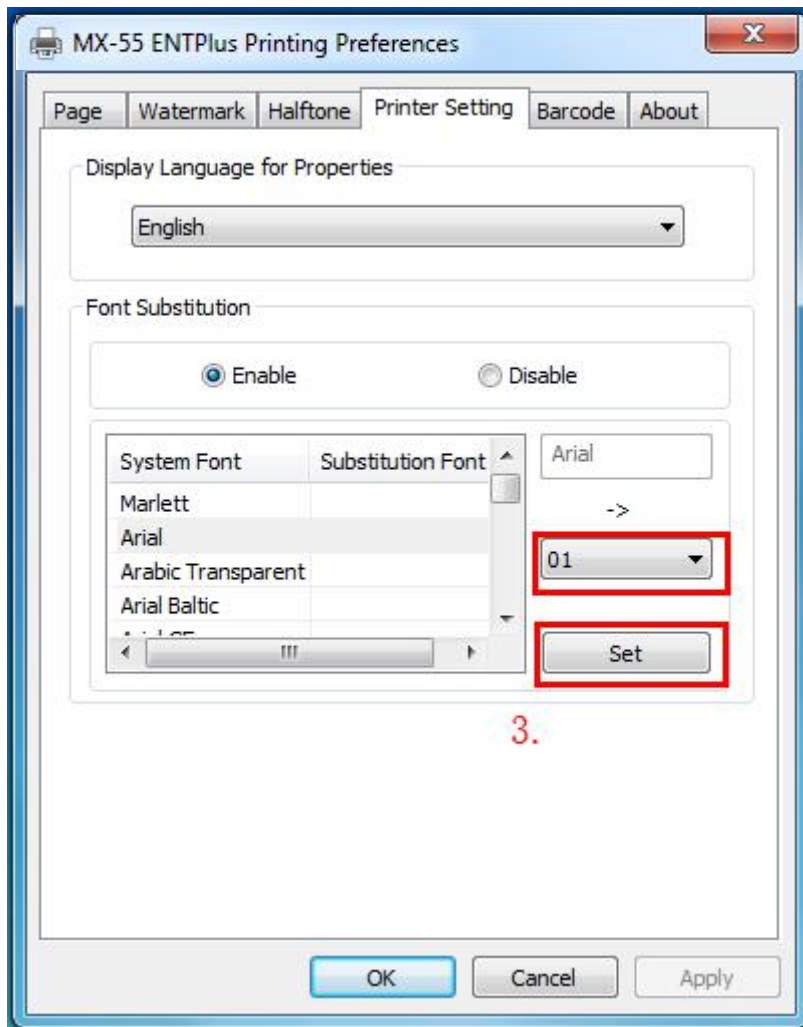
- Turn on the “Font Substitution”, select the system text need to be replaced (for example, Arial), and then select the font you want to replace (for example, 01) and click Set, and the replacement font will display "01".

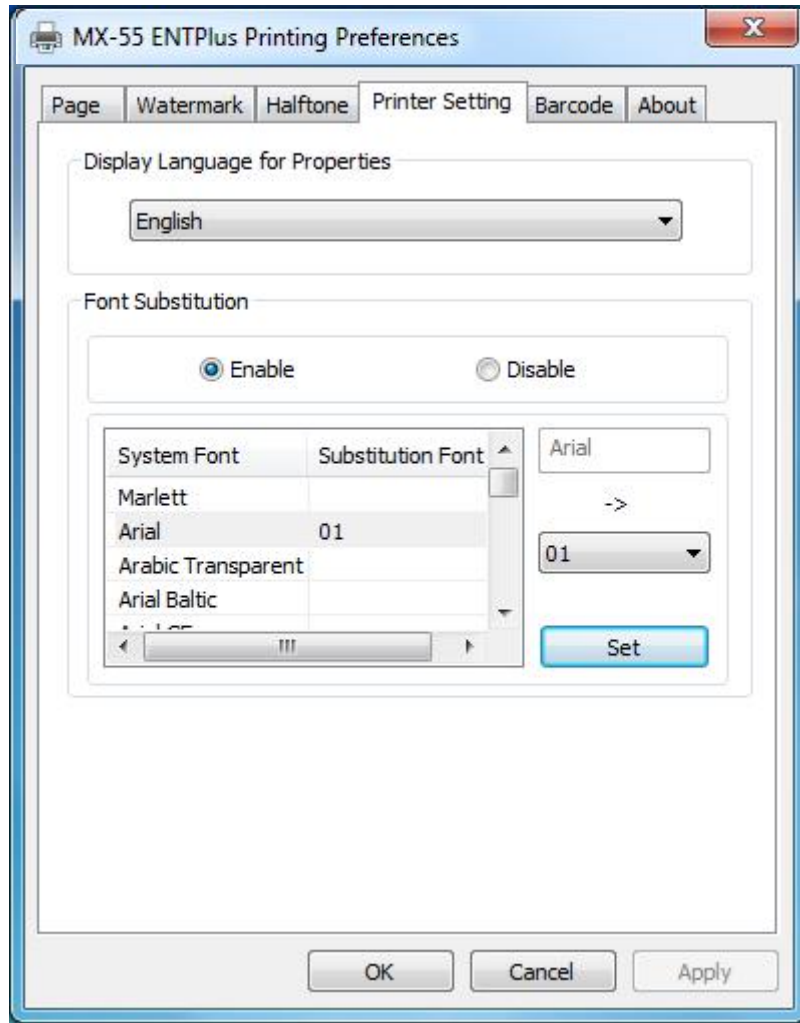
the steps are as follows:





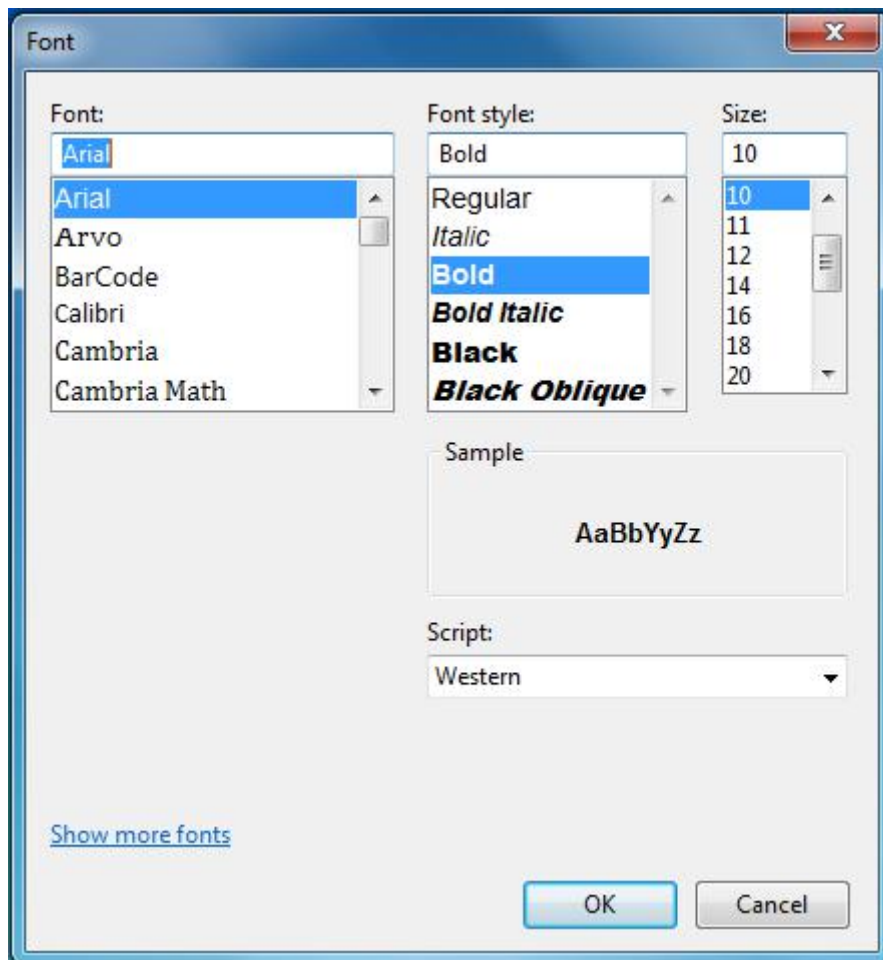




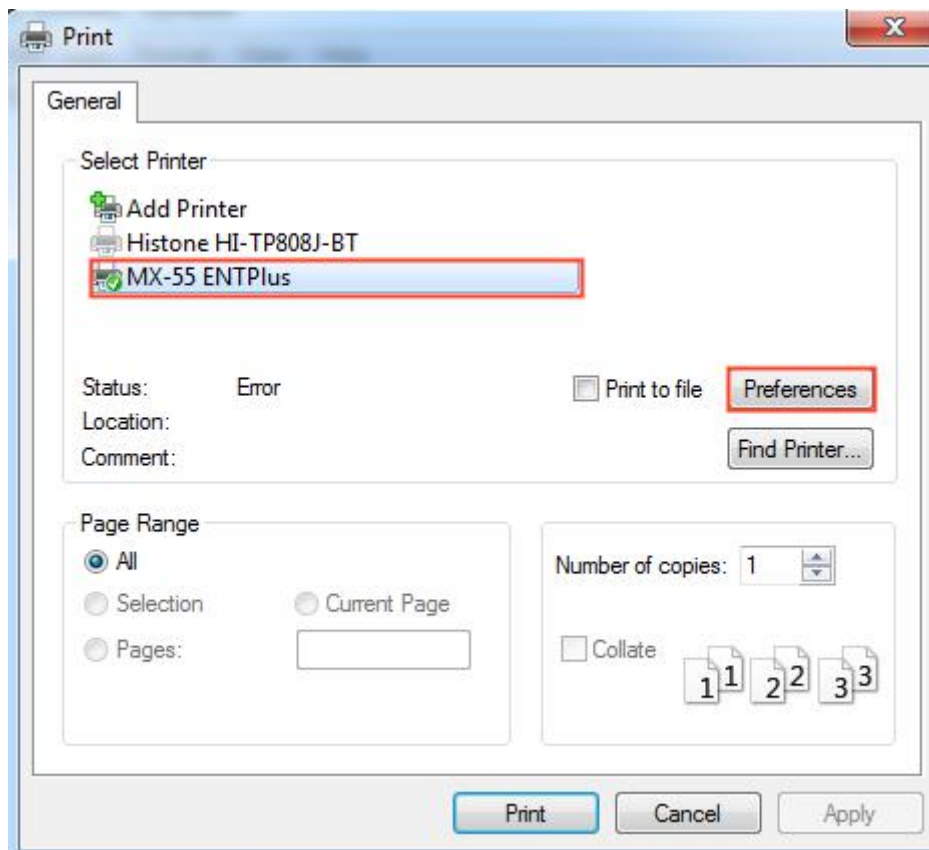


• If you do not have a barcode set, the action is as follows:

① Suppose you change the size of the data "123456", for example:

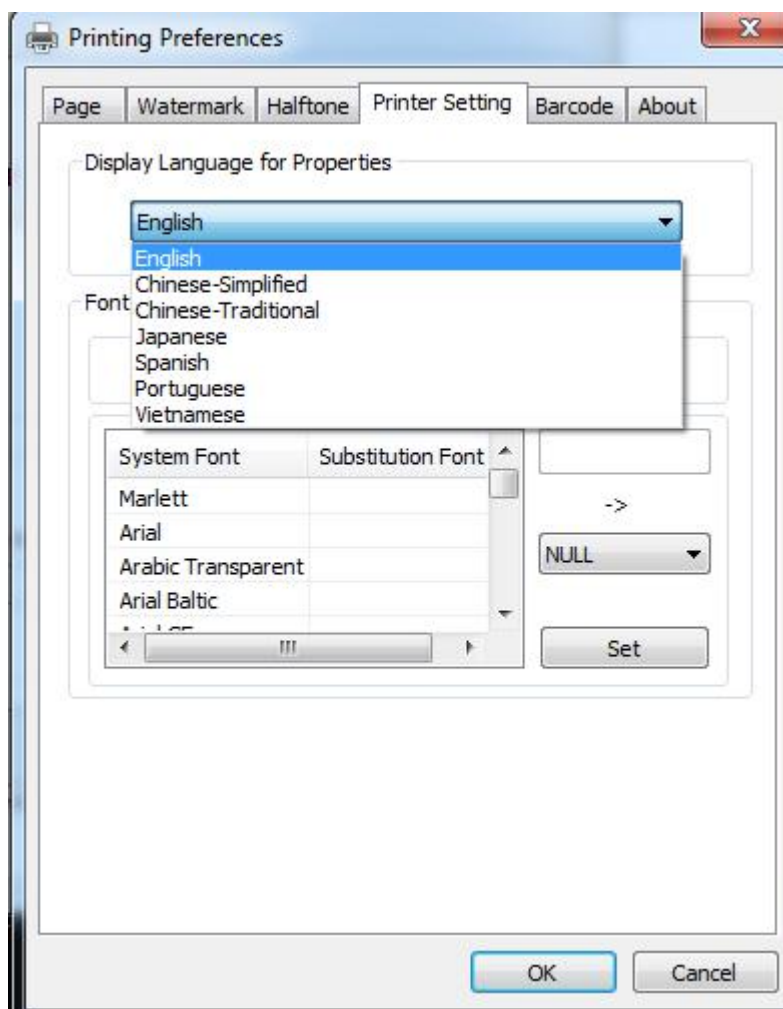


- ② Set the Printing preferences.

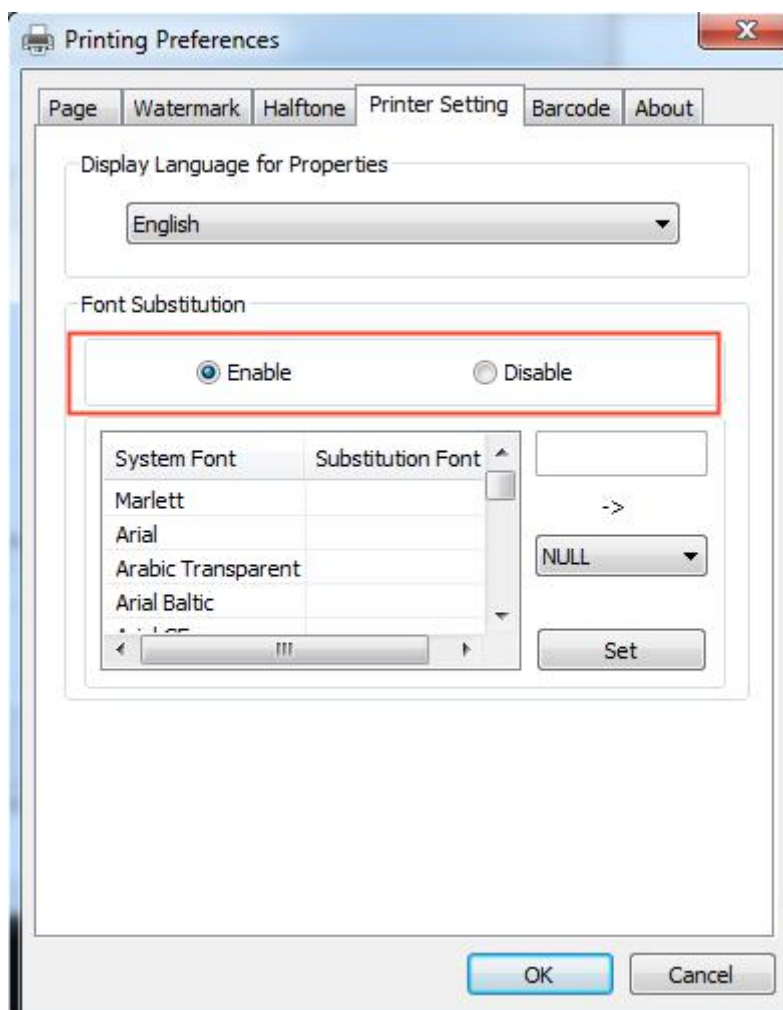




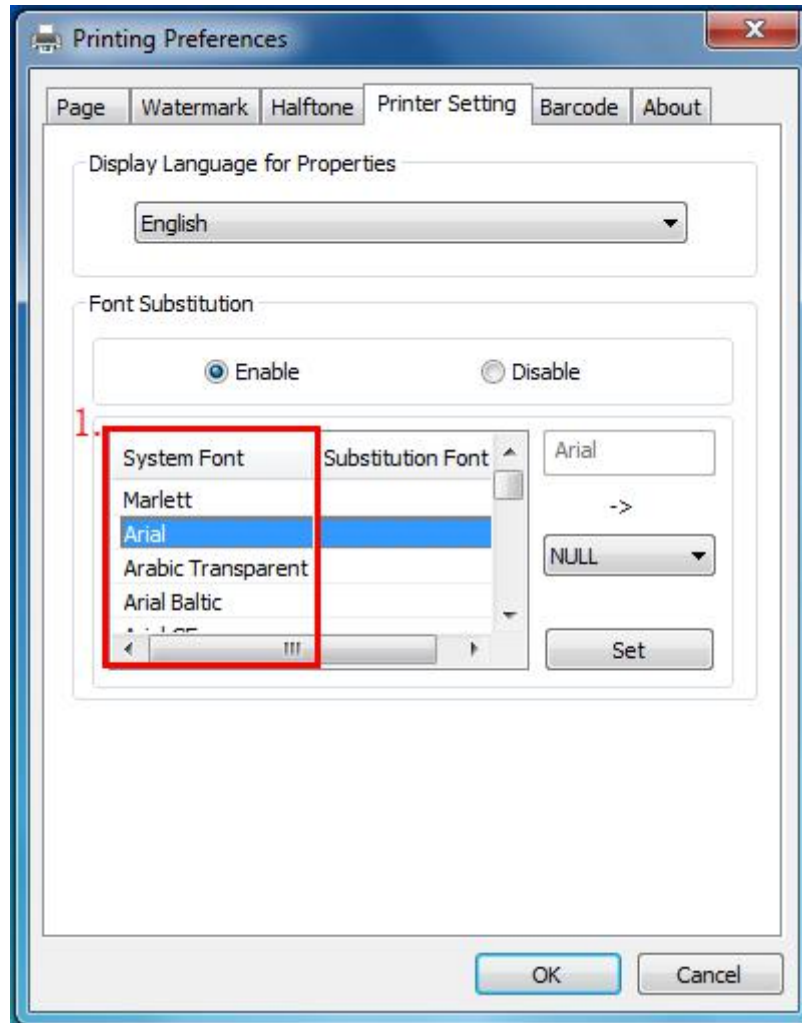
- ③ Click the “Printer Setting”.
- Choose the “Display Language for Properties”.



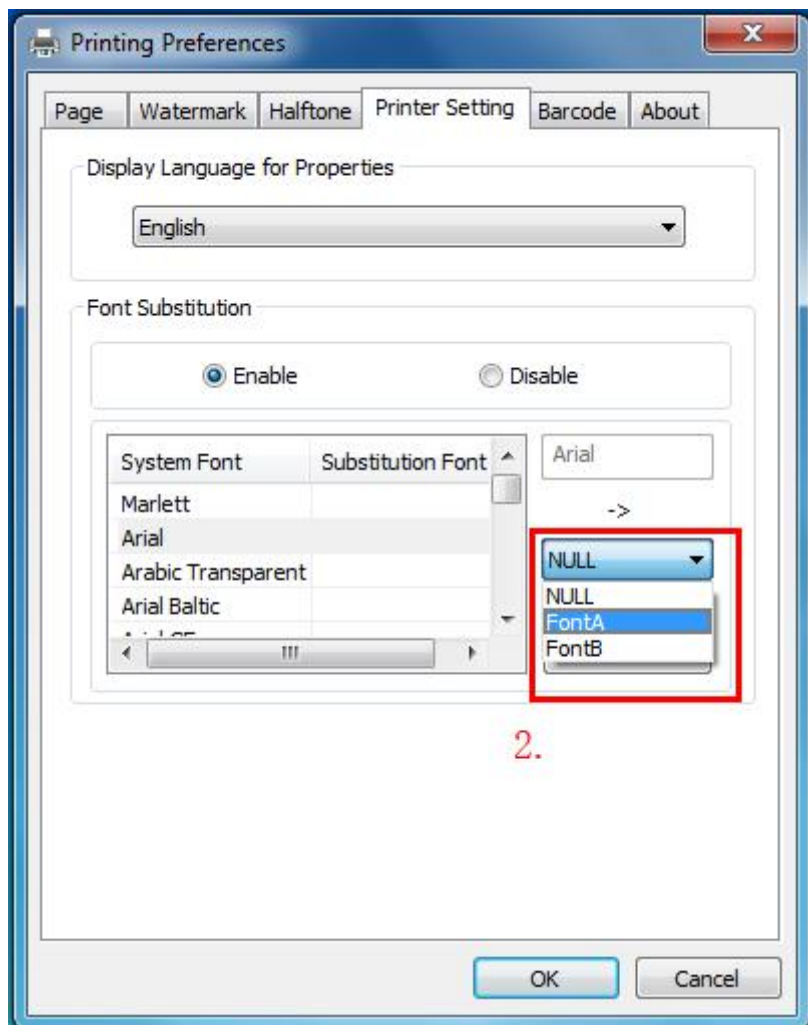
- ④ Turn on the “Font Substitution”.



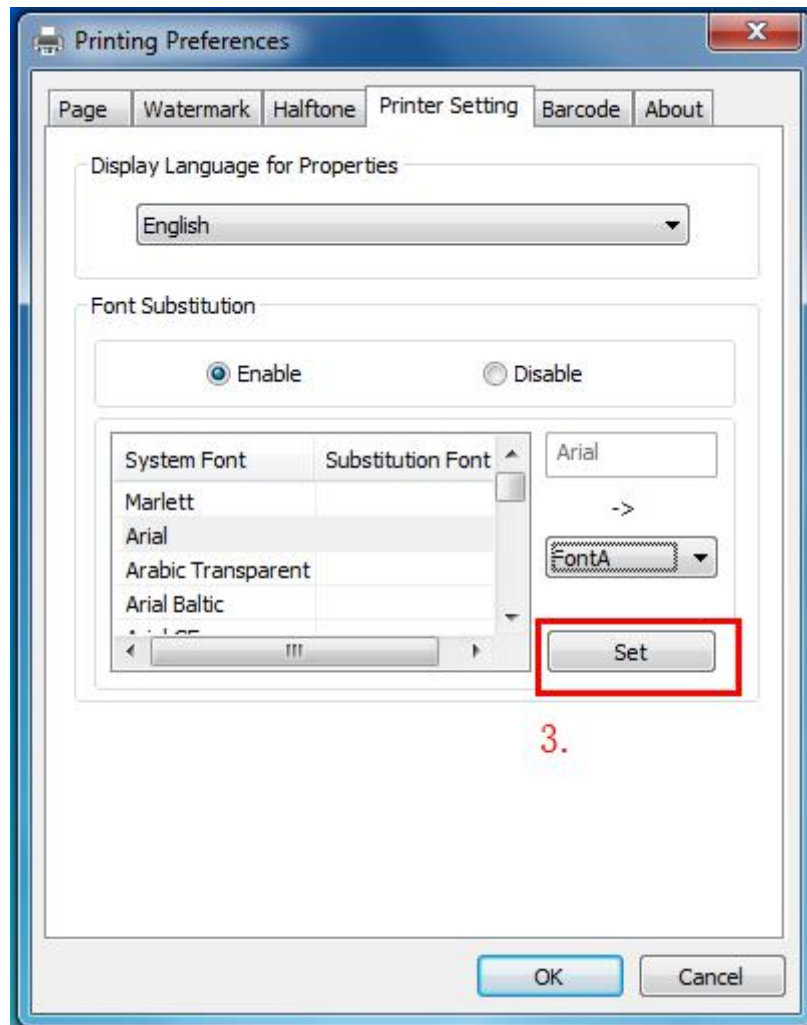
- ⑤ Select the “System Font”, for example: Arial.

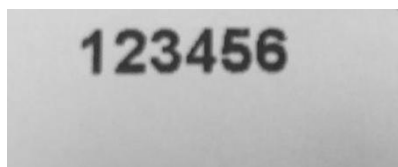
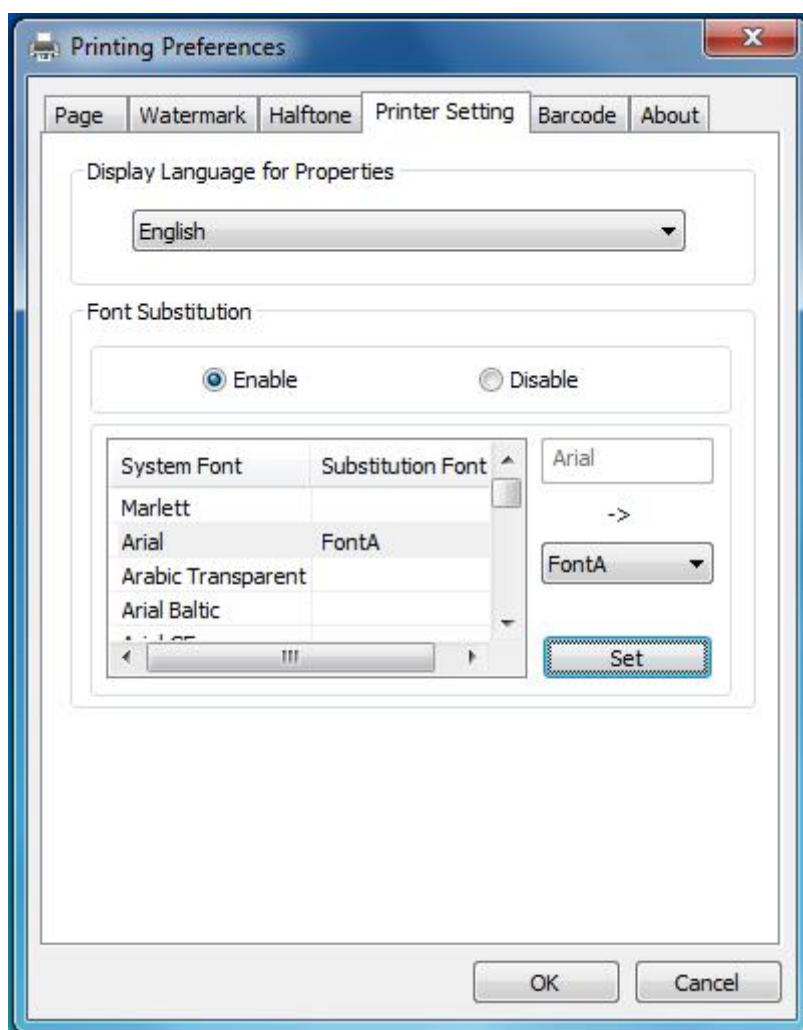


- ⑥ Select the font to that you want to replace.



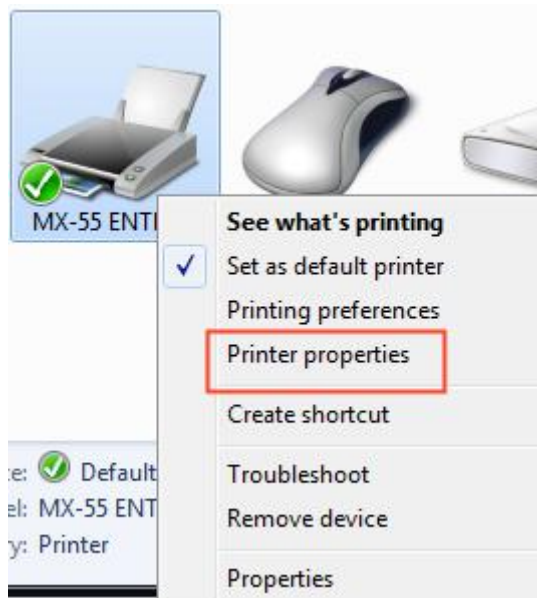
⑦ Click “Set”.



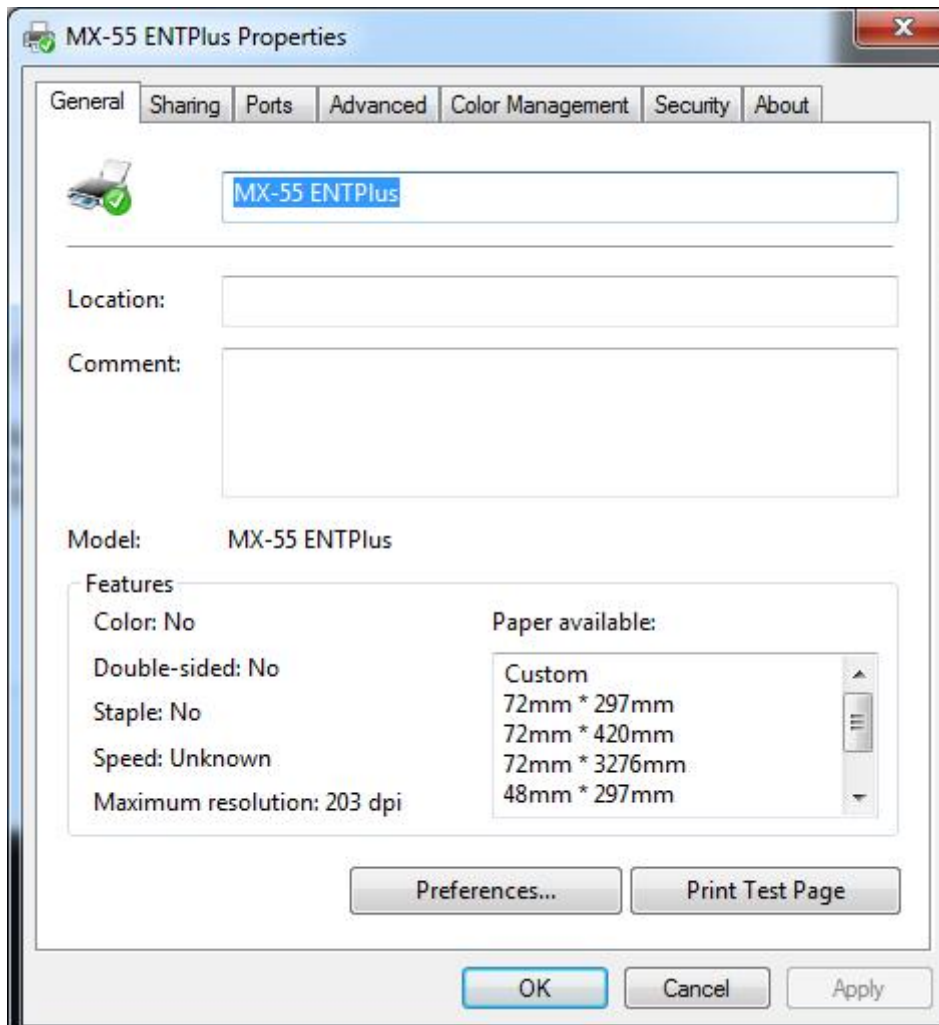


## 9.5.2 Printer properties

1) Click “Start” → “Devices and Printers”. Right click “MX-55 ENTPlus” and choose “Printer properties”.

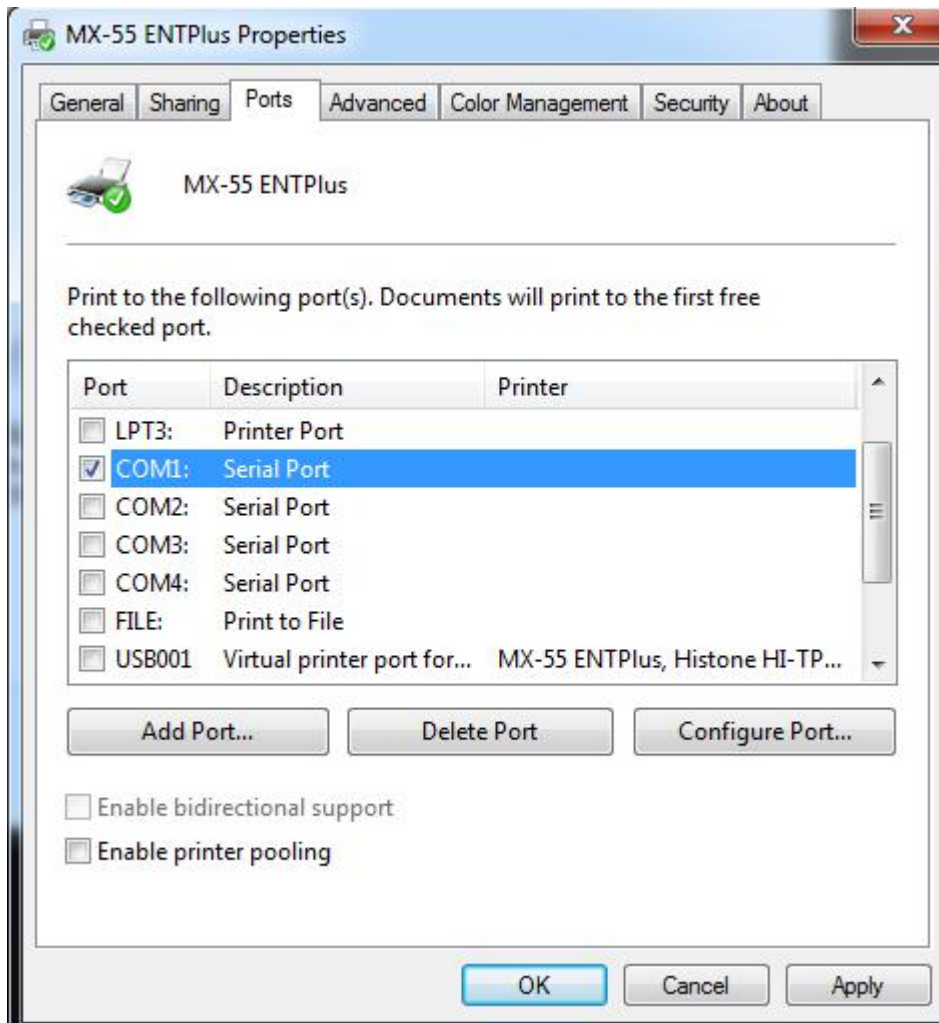


2) Choose “General”, click “Print Test Page”, then it will print the current settings.

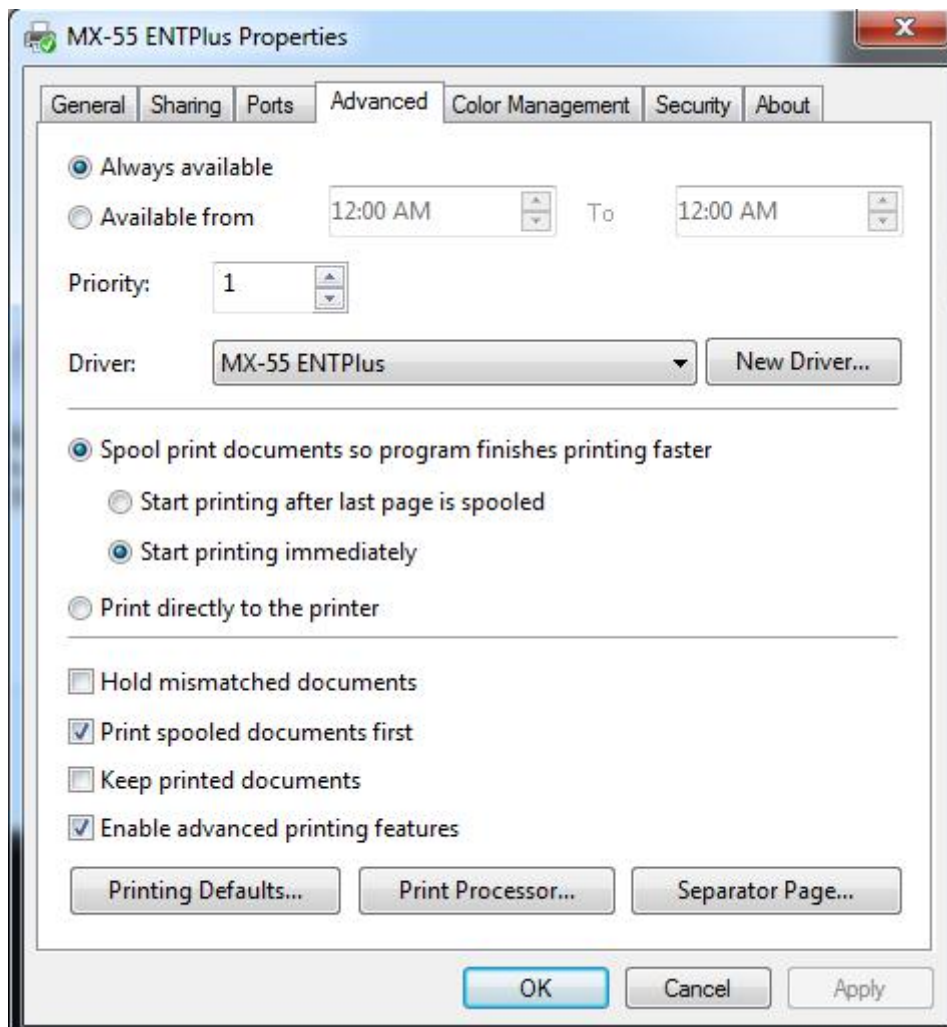




3) Click “Port” to choose another port or add port.

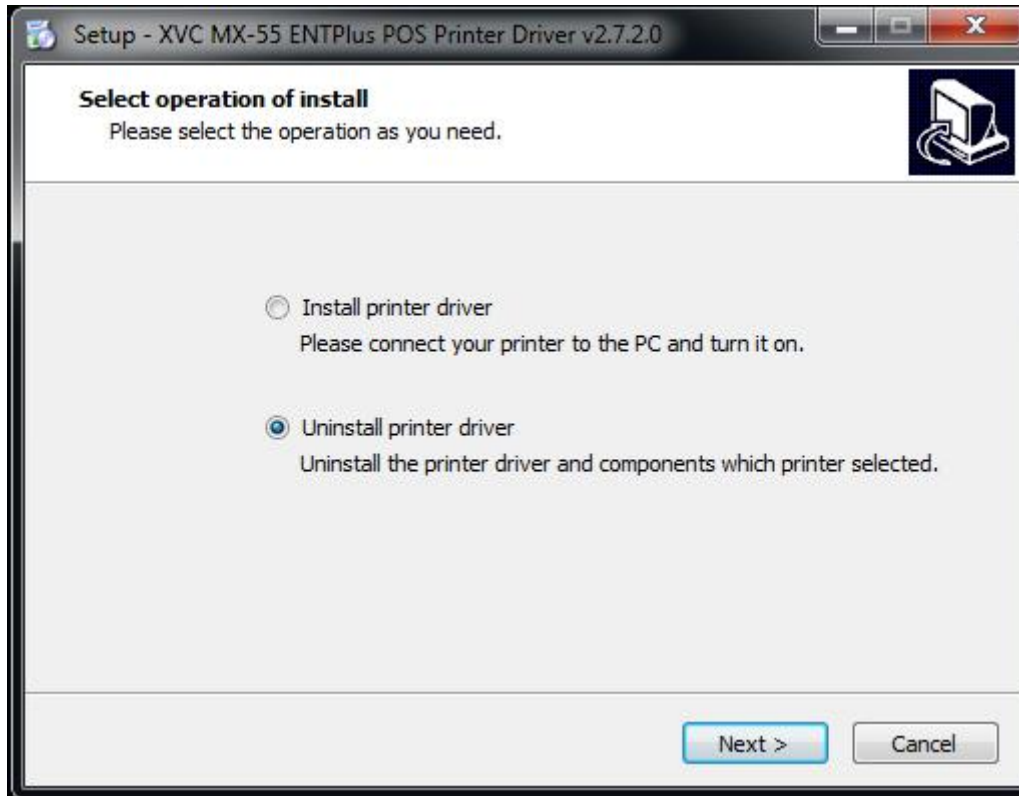


4) Click “Advanced” to set the available time for printing.



## 9.6 Uninstall Windows Driver

- 1) Double click Windows Driver.
- 2) Choose “Uninstall printer driver”, click “Next”.



3) Choose “MX-55 ENTPlus”, click “Next”. Then it is complete to uninstall.

