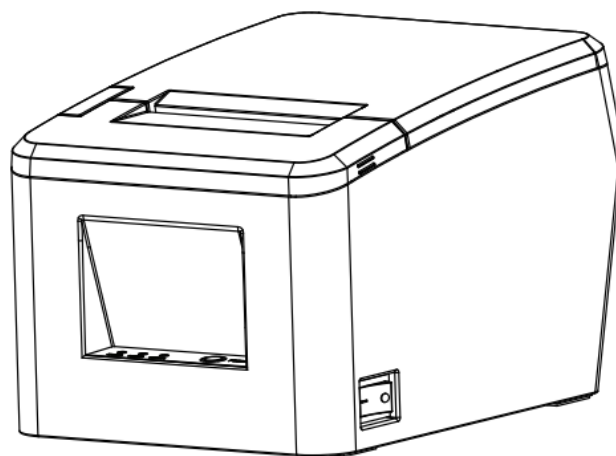


**element**<sup>TM</sup>

**RW80L**  
**User Manual**



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## Statement

### Copyright

This manual is printed in 2020.

Printed in China.

1.1 Version.

### 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 update of product, please take in kind of real machine, such as accessories, programs etc.***

## Important Safety Instructions

### ◆ Safety Warning



Warnings: The print head will become very hot during printing; avoid contact with the print head after printing has finished.



Warnings: Do not touch the printer head and connector in case static damage the printer head.

### ◆ 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) Do not use the printer near water. 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 always easily accessible.

**◆ Other Precautions**

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**◆ 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 others 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

RW80L 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.

RW80L can connect with other equipment through serial, USB, Ethernet and cash drawer 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) Cash drawer interface



## 2 GETTING STARTED

### 2.1 Packing List

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

- 1) Inspect the outside of both 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



Power Adapter



Serial Cable



Installation Guide



CD

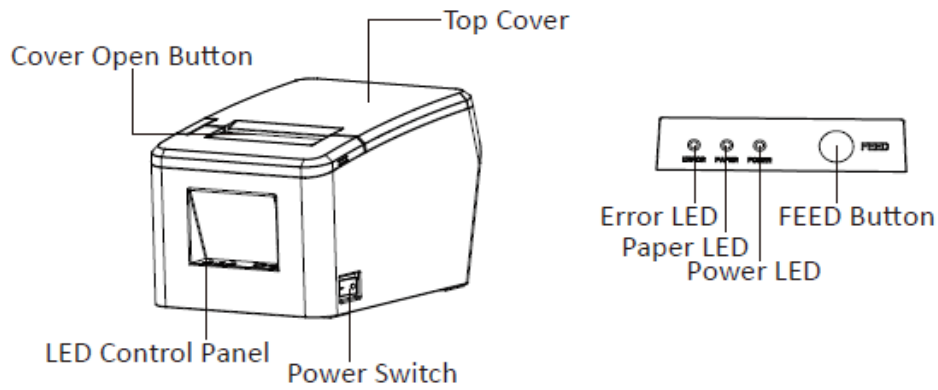


#### **Notes:**

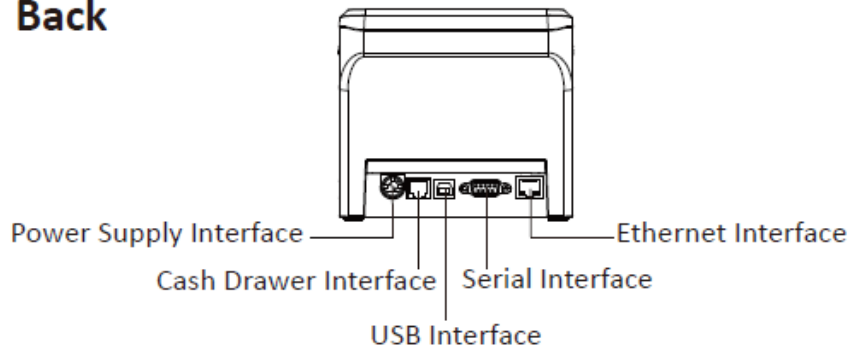
- 1) The power adapter and power cord vary by region.**
- 2) Items in the package are dependent on the actual order.**

## 2.2 Appearance

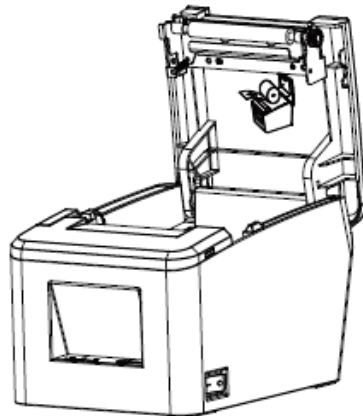
### ■ Front



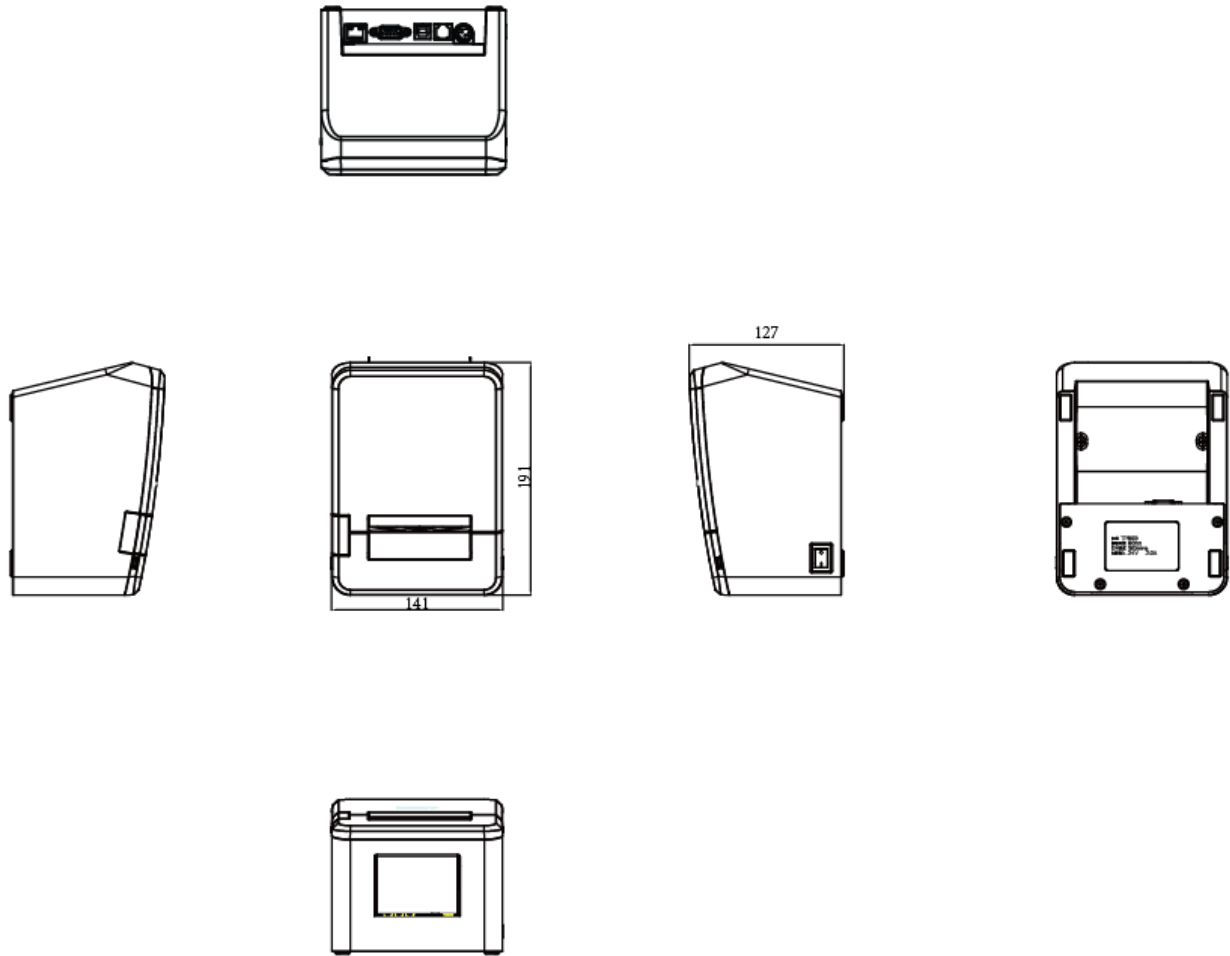
### ■ Back



### ■ Opening Top Cover



### 2.3 Dimensions



Unit: mm

## 3 SPECIFICATION

### 3.1 Printer Specification

Item		Parameter
Printing Parameter	Printing Method	Direct thermal line printing
	Resolution	Default 203 dpi, 180 dpi can be emulated
	Printing Width	72mm / 48mm
	Printing Speed	Max. 230mm/s
	Printing density	Adjustable from degree 1 to degree 4
	Printing Direction	Vertical and horizontal
Interface	Default	Built-in USB, RS232, Ethernet, Cash drawer
	Optional	N/A
Auto cutter		Partial Cut
Page mode		YES
Memory	RAM	20K
	Flash	2MB
Character set	Font	ANK Font A: 12*24 Font B: 9*17 CHN: GBK 24*24dots
	Number of Columns	48/64
	Alphanumeric	95
	Code page	PC437/Katakana/PC850/PC860/PC863/PC865/PC857/PC737/PC866/PC852/PC858/KU42/TIS11/TIS18/PC720/WPC775/PC855/PC862/PC864/ISO8859-2/ISO8859-7/WPC1250/WPC1251/WPC1253/WPC1254/WPC1255/WPC1256/WPC1257/WPC1258/MIK/PC755/Iran/IranII/Latvian/ISO8859-1/ISO8859-3/ISO8859-4/ISO8859-5/ISO8859-6/ISO8859-8/ISO8859-9/PC856/PC3848/ISO8859-15/ISO8859-7/WPC1252
Graphics		Support bitmap printing with different density and user defined bitmap printing (Max. 40K for per bitmap, and Max. 256K for total)
Barcode	1D	UPC-A, UPC-E, EAN8, EAN13, CODE39, ITF, CODEBAR, CODE128, CODE93
	2D	QR Code, PDF417
Detection	Sensor	Paper out, Cover Open
Power supply	Input	AC100V-240V 50-60HZ
	Output	DC 24V±5%, 2.5A

Item		Parameter
Paper	Paper Loading	Easy-loading structure of upward open cover
	Paper Type	Standard thermal paper
	Paper Width	79.5±0.5mm
	Paper Thickness	0.056~0.13mm
	Paper Roll Diameter	83mm Max.
Condition	Operating	0~45°C/10~85%RH No condensation
	Storage	-20~60°C/10~90%RH No condensation
Reliability	TPH Life	150km
	Cutter Life	1,500,000 times
Emulation		ESC/POS
Packing Information	Printer Dimensions	191(L)*127(H)*141(W)mm
	Accessories	Power adaptor, Power Cord, RS232 cables, CD, Quick Guide, USB Cable, Paper Roll
Driver		WindowsXP/Win8/Win7/Win10/Vista/Linux/OPOS
Certifications		CE/CCC
Eco Features		Paper saving mode

## 3.2 Printing Media Specification

### 3.2.1 Continuous Thermal Paper Specification

Paper Type : Standard thermal paper

Paper Width : 79.5±0.5mm

Paper Outer Diameter : Max. 83 mm

Paper Thickness : 0.056~0.13mm

### 3.2.2 Notices



**Notes:**

1) Please use the recommended thermal paper or same quality paper, otherwise it will influence the printing quality and decrease the thermal printer head life;

2) Don't stick the paper on the core of paper roll.

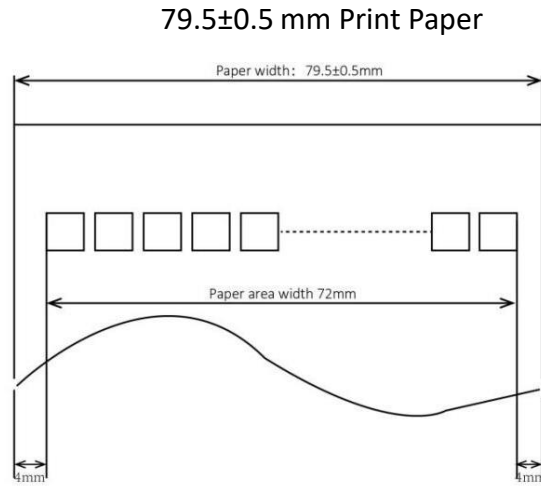
3) If the thermal paper is polluted by chemical or oil, the thermal paper heat sensibility decreases, which will influence the printing quality;

4) Don't use finger nail or hard articles to touch the surface of thermal paper, otherwise it will cause color fading;

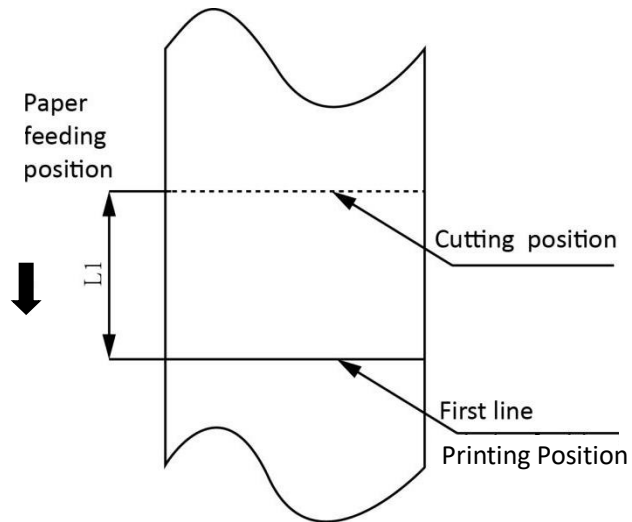
5) When the environment temperature is higher than 70°C, the thermal paper color will fade, so pay attention to the influence of temperature, humidity and sunlight.

### 3.3 Printing and Cutting Position

#### 3.3.1 Printing position



#### 3.3.2 Cutting Position

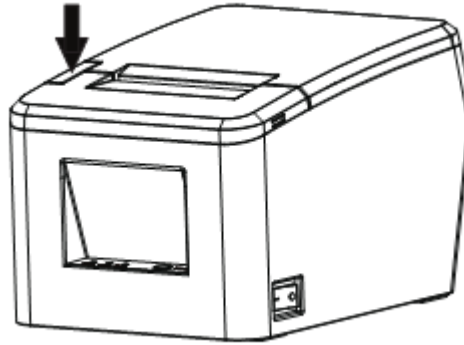


Type	Paper Cutting Position(L1)
RW80L	8.5mm

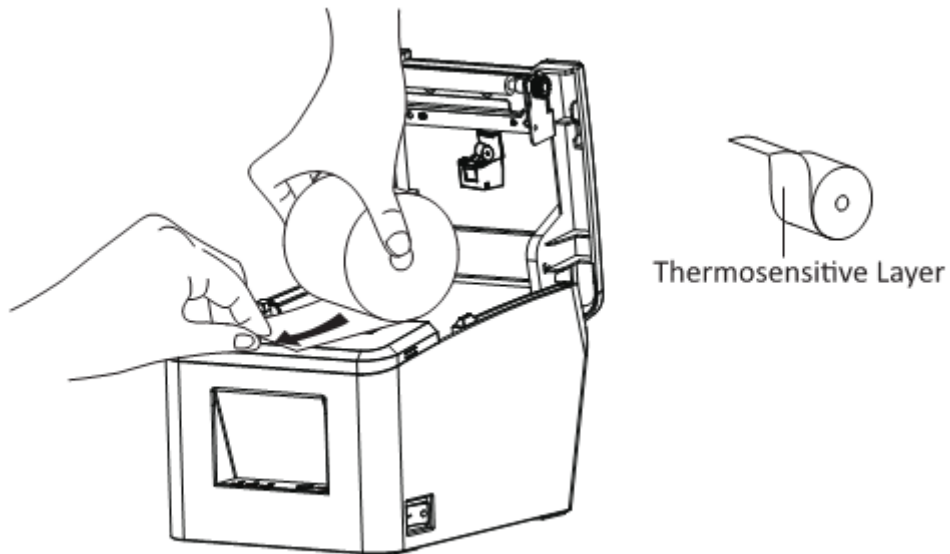
## 4 INSTALLATION AND USAGE

### 4.1 Media Loading

- 1) Press the cover open button to open the top cover.
- 2) Remove the used roll paper core, if any.

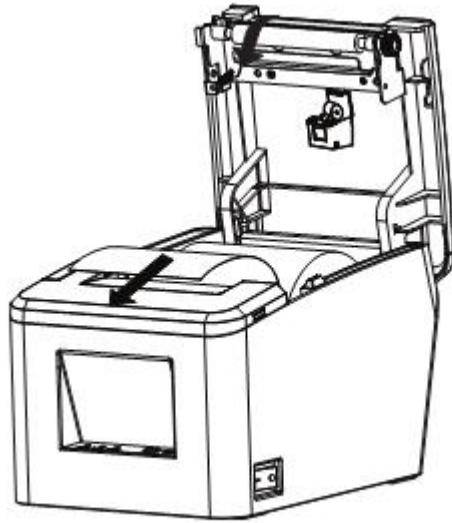


- 3) In the correct direction of the roll paper, insert the paper.

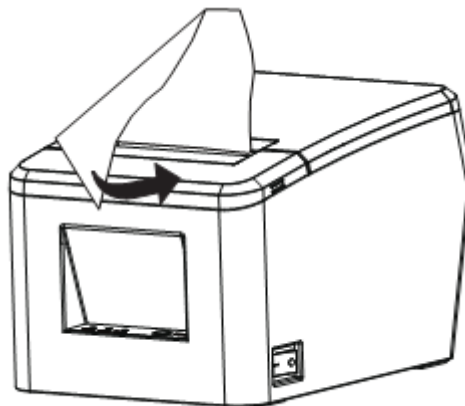




- 4) Pull out some roll paper and close the top cover.

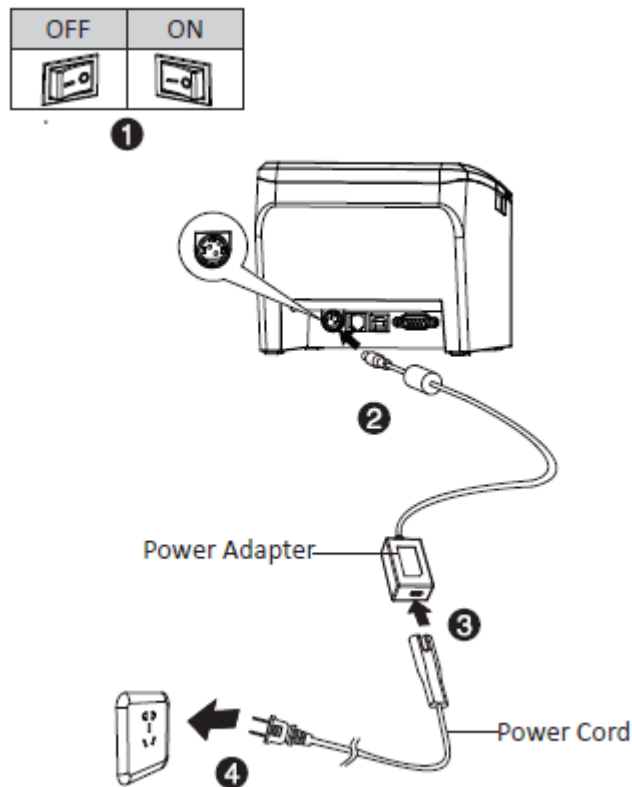


- 5) Tear the extra paper of the printer.



## 4.2 Power Connection

- 1) Make sure the printer power is turned off.
- 2) Connect power adapter with printer
- 3) Connect power adapter with power cord.
- 4) Plug the other side of power cord into the socket outlet.



 **Notes:**

- 1) Please only use the power adapter are recommended by supplied or equivalent products;
- 2) When disconnecting the power adapter plug, handheld plug connector housing, to avoid the pulling on the cable in force;
- 3) Avoid drag the power adapter cable, otherwise it will damage the cables, causing fire and shock;
- 4) Avoid put 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.

### 4.3 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.)*

### 4.4 LED Indication

Function specification of indicated light and beeper.

Name	Status	Specification
POWER LED ( Green )	ON	The printer works well.
	OFF	The printer is powered off.
ERROR LED ( Red )	Flash	The printer is in an error state
	OFF	The printer is in a normal state
PAPER LED ( Red )	ON	The printer is in paper out state
	OFF	The printer is in a normal state

Description	POWER LED	ERROR LED	PAPER LED	Beeper
Cover Open	ON	ON	ON	"Beep ,Beep--,Beep"
No Paper	ON	ON	ON	"Beep, Beep, Beep"
Cutter Jam	ON	Flash	OFF	"Beep—, Beep—"



**Notes:** 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.

## **4.5 Print Test**

### **4.5.1 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 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.

### **4.5.2 Printing of Windows Driver Program**

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

## 5 INTERFACES

RW80L supports serial interface, Ethernet interface, cash drawer interface and USB interface.

### 5.1 USB

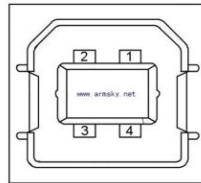


Figure 5-1

PIN NO.	SIGNAL NAME
1	VBUS
2	D-
3	D+
4	GND

### 5.2 Cash Drawer Interface



Figure 5-2

PIN NO.	SIGNAL NAME
1	FG
2	Drawer 1
3	DRSW
4	VDR
5	Drawer 2
6	GND

#### Electrical characteristics

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

Detection signal for drawer status: "L" = 0~0.5 V "H" = 3~5 V

### 5.3 Power Port Connector

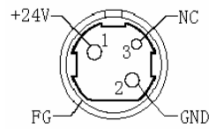


Figure 5.3

PIN NO.	SIGNAL NAME
1	+24V
2	GND
3	N.C
SHELL	F.G



**Notes:**

- 1) Strictly prohibit unplugging the cable while the printer is powered on.
- 2) When arranging the line of communication, you must avoid paralleling with the strong current.
- 3) Do use the communication line with shielding function.

### 5.4 Serial Interface

Printer RW80L serial interface is compatible with RS-232 standard, with 9 pin sockets.

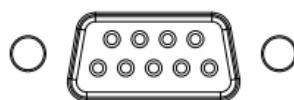
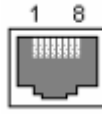


Figure 5.4

PIN NO.	SIGNAL NAME
1	-
2	TXD
3	RXD
4	-
5	GND
6	DTR
7	-
8	RTS
9	-

## 5.5 Ethernet Interface



PIN NO.	SIGNAL NAME
1	TX+
2	TX-
3	RX+
4	n/c
5	n/c
6	RX-
7	n/c
8	n/c



**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.

## 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 with your dealer for assistance.

### 6.1 Printer Not Working

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

### 6.2 LED Indicator and Beeper Alarm

Problem Description	Probable Reason	Solution
Error LED is always on and beeper alarms	Printer cover is open	Close the printer cover
Paper LED and Error LED are always on and beeper alarms	Paper end	Reload the roll paper
Error LED blinks and beeper alarms	Thermal print head is overheated	Turn the printer off and resume when it cools
	Over-voltage	Print with specified voltage
	Low-voltage	Print with specified voltage



### 6.3 Troubles Occur During Printing

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

### 6.4 Problems Emerge During the Paper Cutting

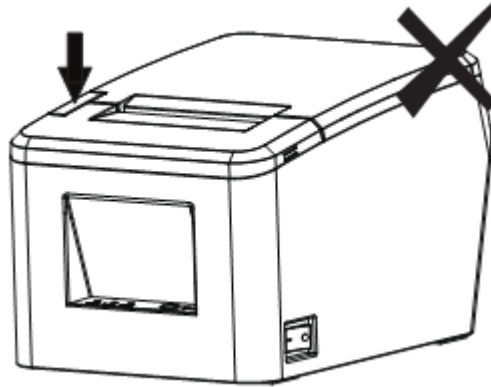
Problem Description	Probable Reason	Resolution
Cutter jam, the movable cutter cannot go back	Cutter abrasion, insufficient cutting	Replace the cutter
	Worn gear and worn wheel abrasion	Replace the worn gear and worn wheel
	Motor is burnt	Replace the motor
	Paper scraps	Clean the paper scraps on the transmission 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.



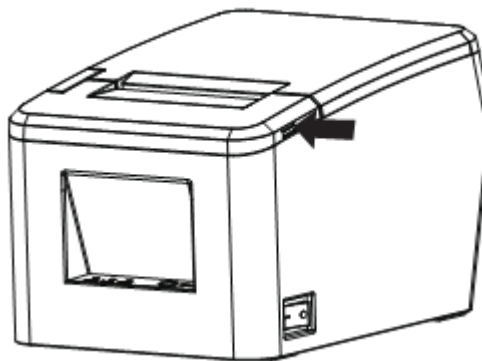
**Note:** Regarding the density of setting, please refer to "Utility Tool".

## 6.5 Troubleshooting for Cutter Jam

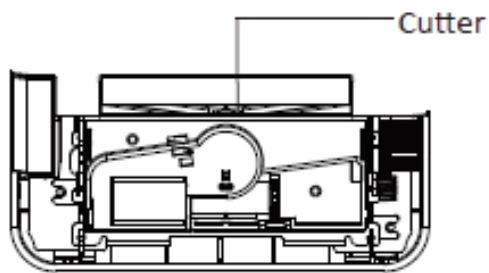
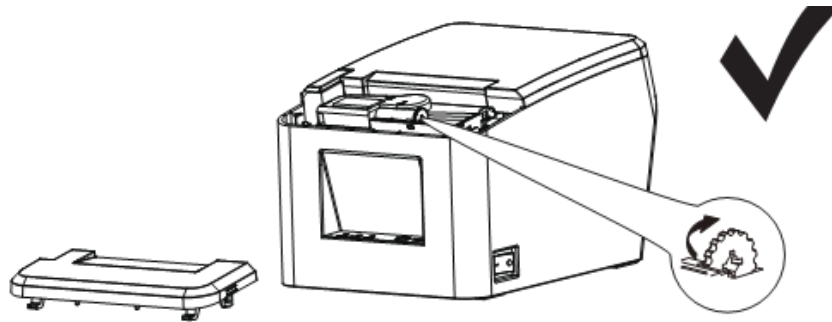
1) When cutter jam occurs, do not press the cover open button to avoid damaging the blade.



2) Fix the printer by one hand and press either side of the convex bars by the other hand. Push up and open the front cover.

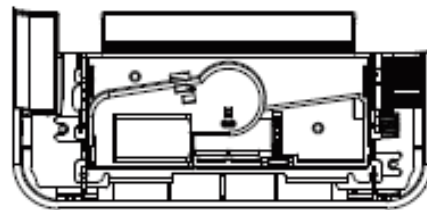


3) Please rotate the gear until the blade returns to its normal position, as shown in Figure 2.



When cutter jam occurs, the cutter does not retreat back and can be seen.

Figure 1



Cutter retreats back totally and cannot be seen.

Figure 2

## 7 PRINTER CLEANING AND MAINTENANCE

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

When printer is dirty, clean the print head as follows:

### ※ CAUTION

- Make sure to turn off the printer before cleaning.
- As the print head gets hot during printing, turn the printer off and wait approximately 2~3 minutes before starting cleaning.
- When cleaning the print head, take care not to touch the heated portion of the print head. Print head may be damaged by static electricity, etc.
- Avoid the print head being scratched and/or damaged in any way.

### 7.1 Cleaning Head

- 1) Open the Printer Cover and use the cleaning pen 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 is dry.

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

- 1) Open the printer cover and then remove the paper.
- 2) Use dry cloth or cotton swab to remove any dust or foreign substance.
- 3) Soak the cloth or cotton swab in medical-use alcohol and use it to remove adhesive foreign substances or other polluted 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

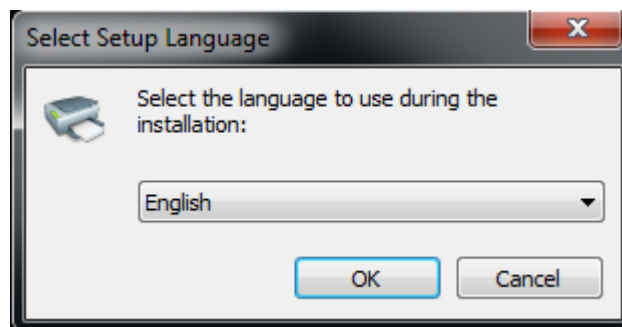
Utility Tool is applicable to the following operating system:

- Microsoft Windows 10 (32 bit/64 bit)
- Microsoft Windows 8 (32 bit/64 bit)
- Microsoft Windows 7 SPI (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

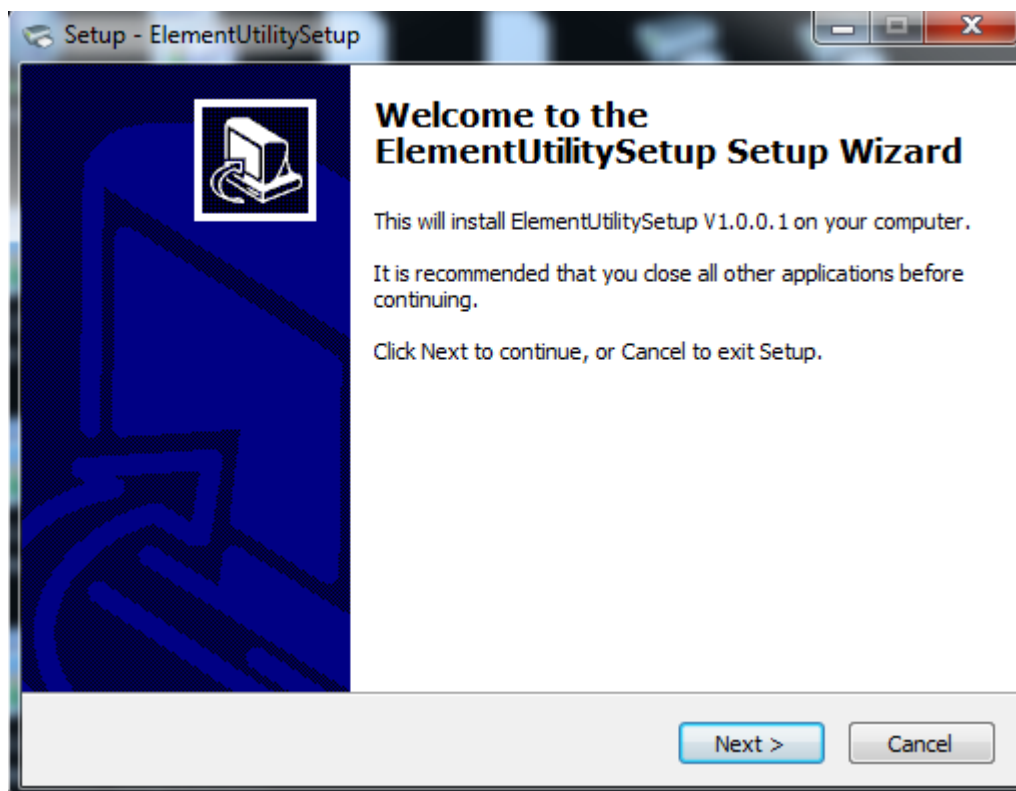
## 8.1 Utility Tool Installation

The following screens take Win 7 for example.

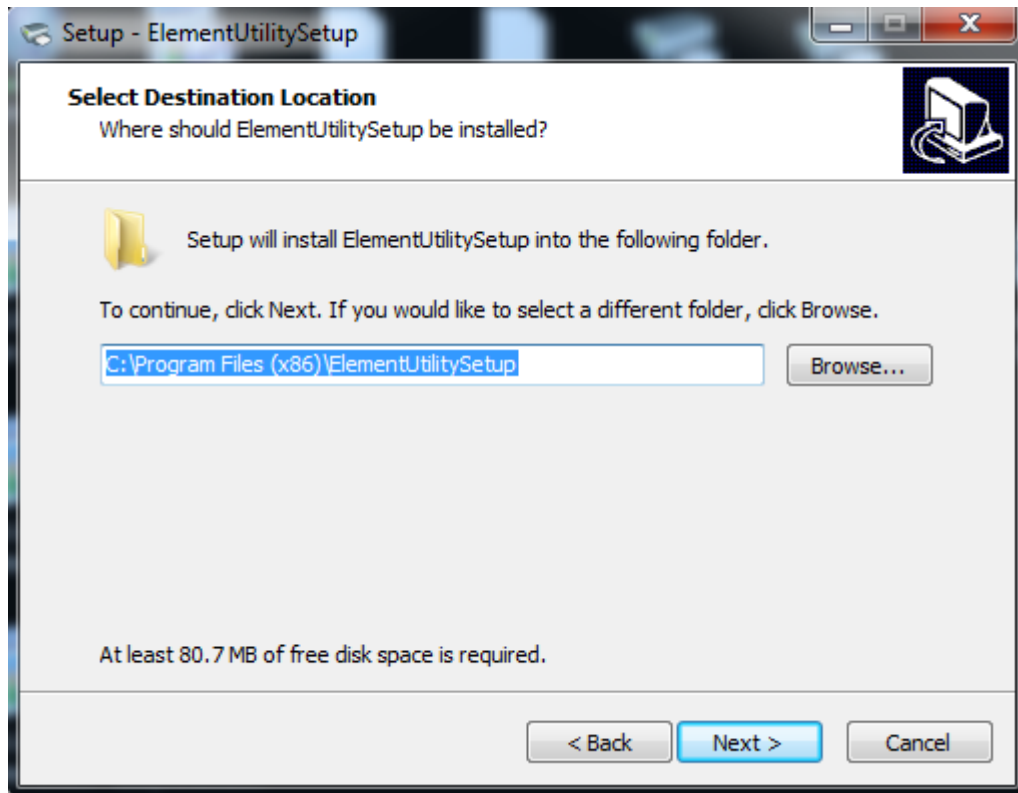
- 1) Open the installation package.
- 2) Choose “English” and click “OK”.



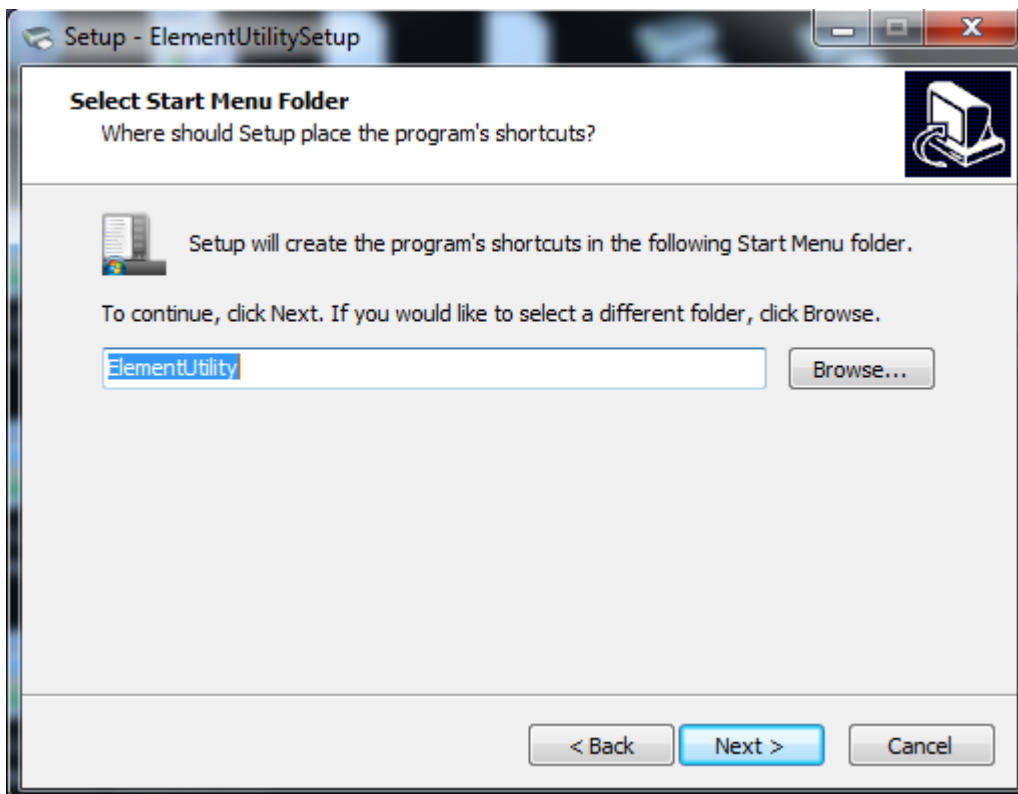
- 3) Choose “I accept the agreement”, then click “Next”.



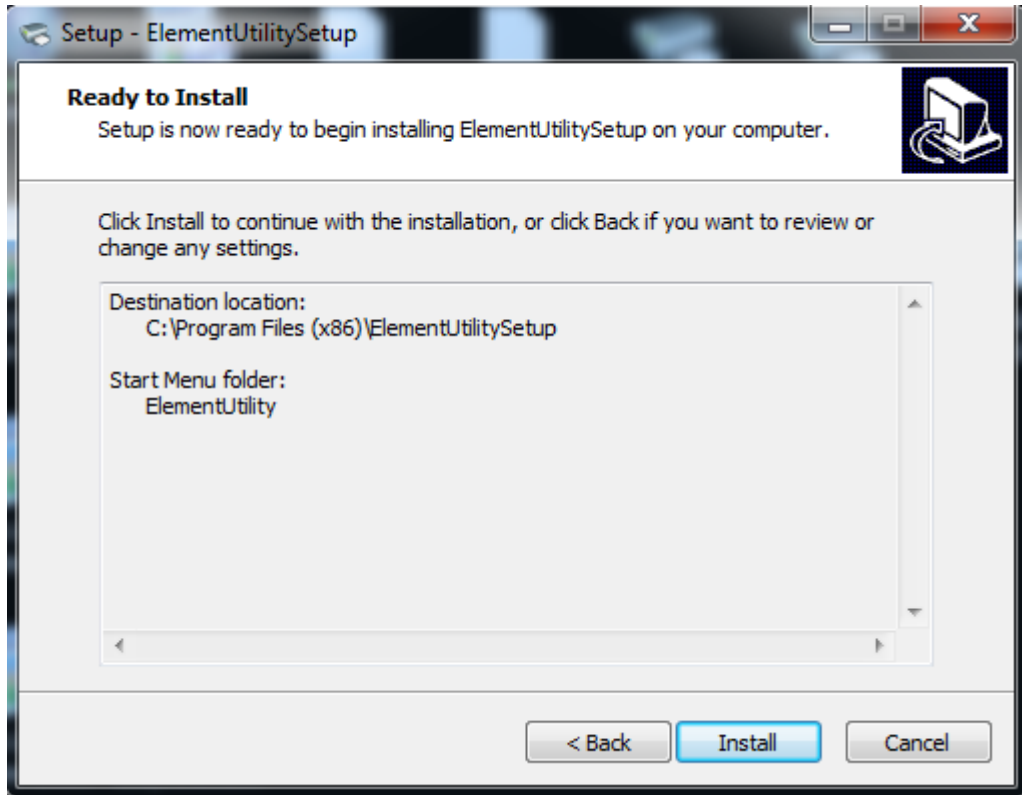
4) Click “Next”.



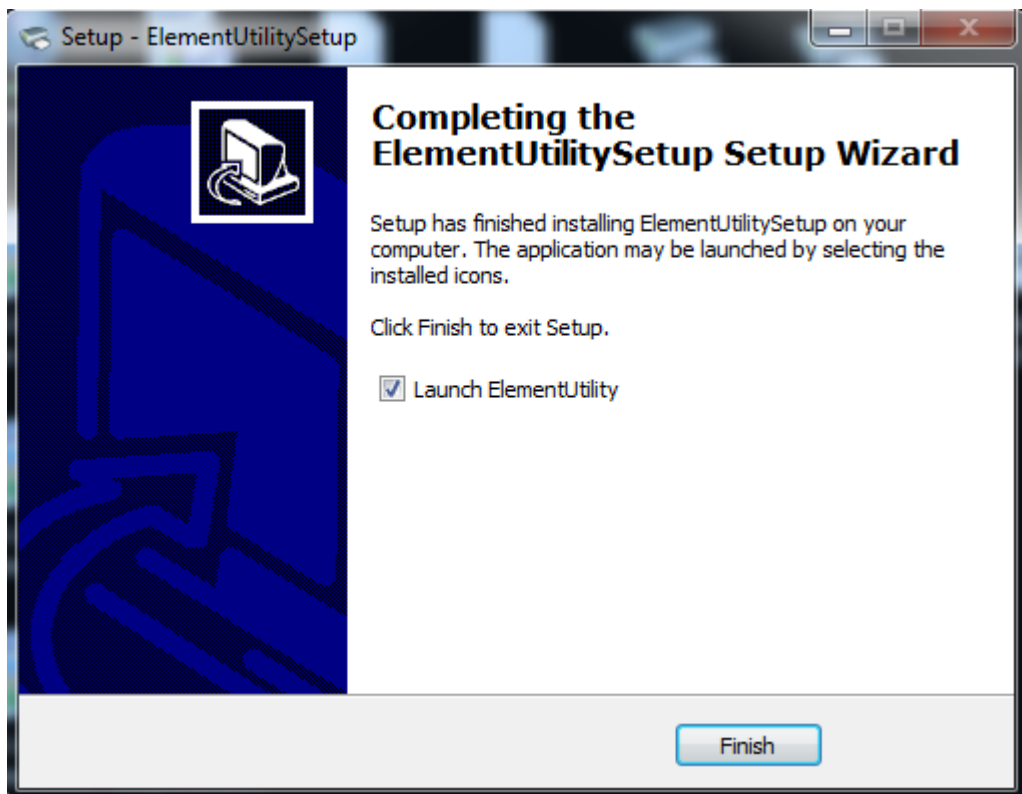
5) Select start menu folder. Click “Next”.



6) Click "Install".




7) Click "Finish". Utility is installed successfully.





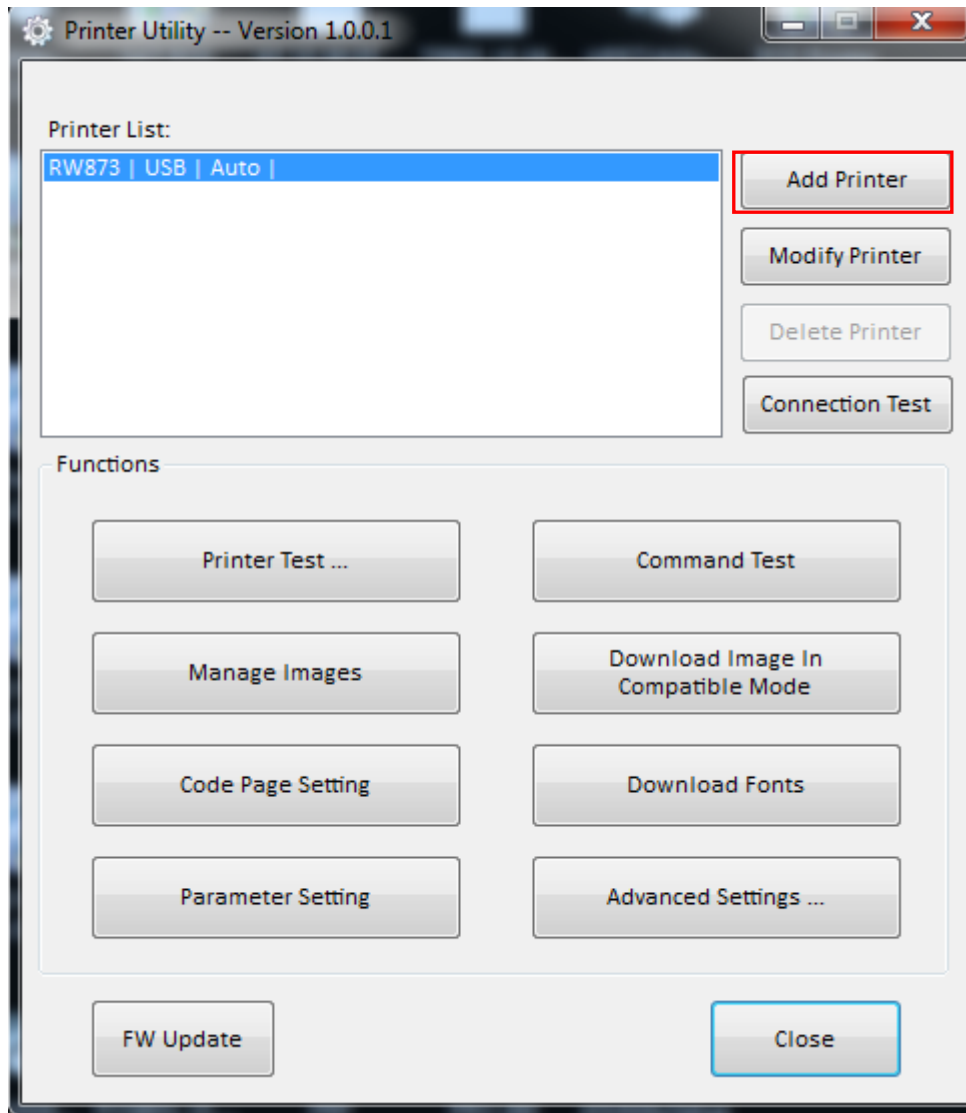
## 8.2 Using Utility Tool

 Warning: In different operating system, screen has a slight difference. Please operate it according to the tips. Take RW80L (Windows 7) for example.

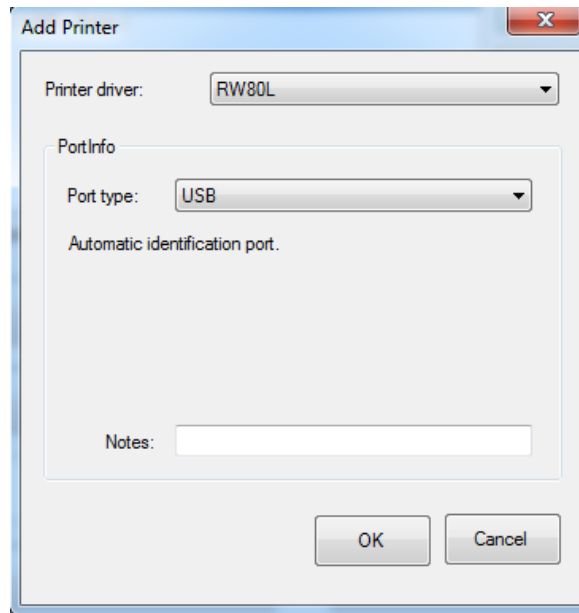
### 8.2.1 Add/Modify/Delete/Connect Printer

#### 8.2.1.1 Add printer

1) Click "Add Printer".

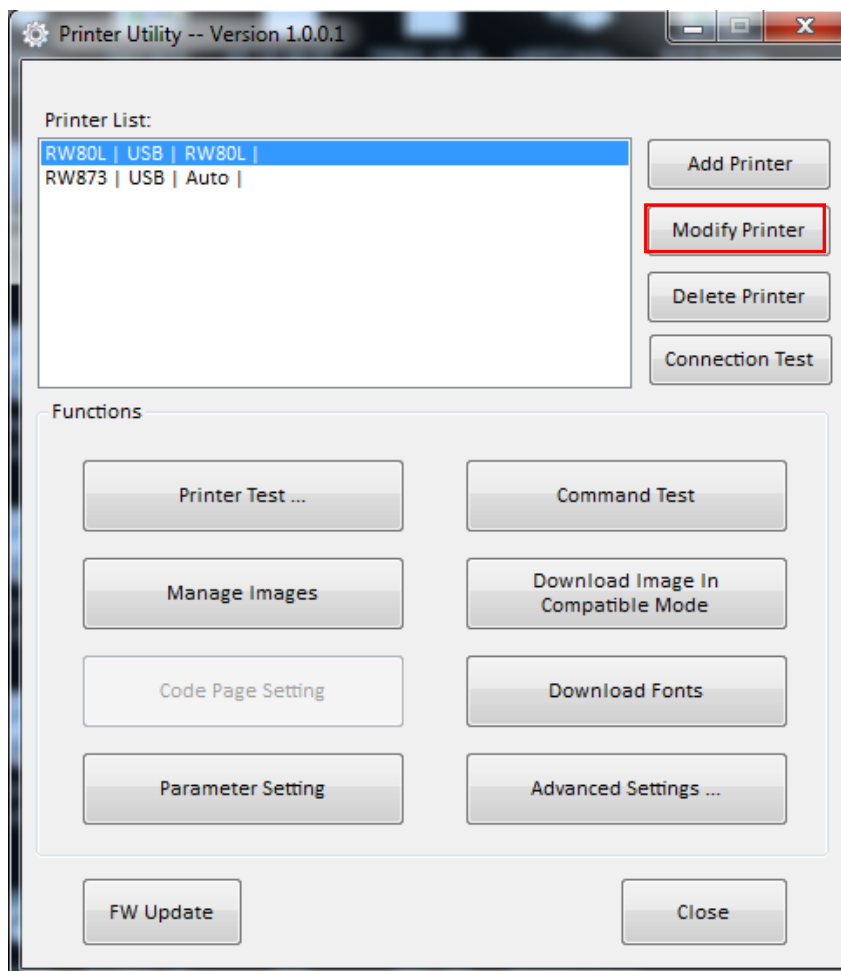


2) Choose the appropriate printer type and port. Then click “OK”. (Take RW80L for example.)

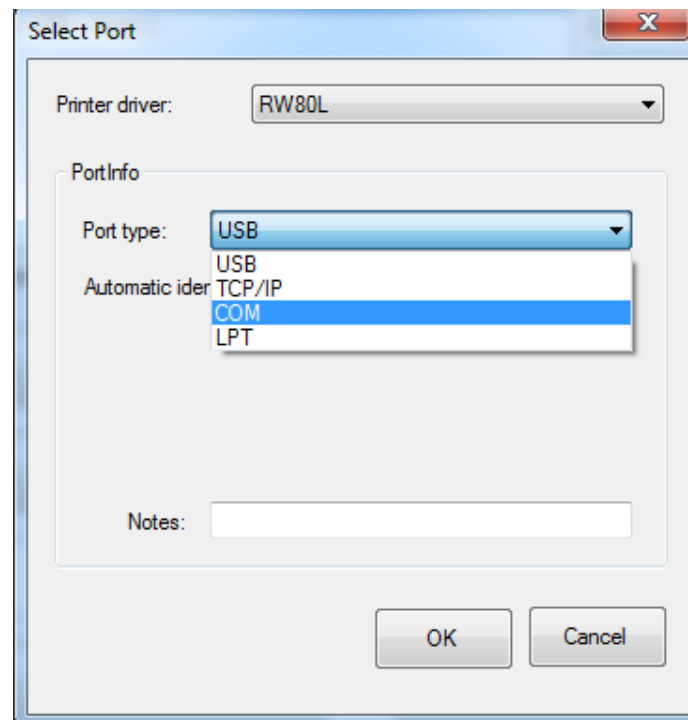


### 8.2.1.2 Modify printer

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



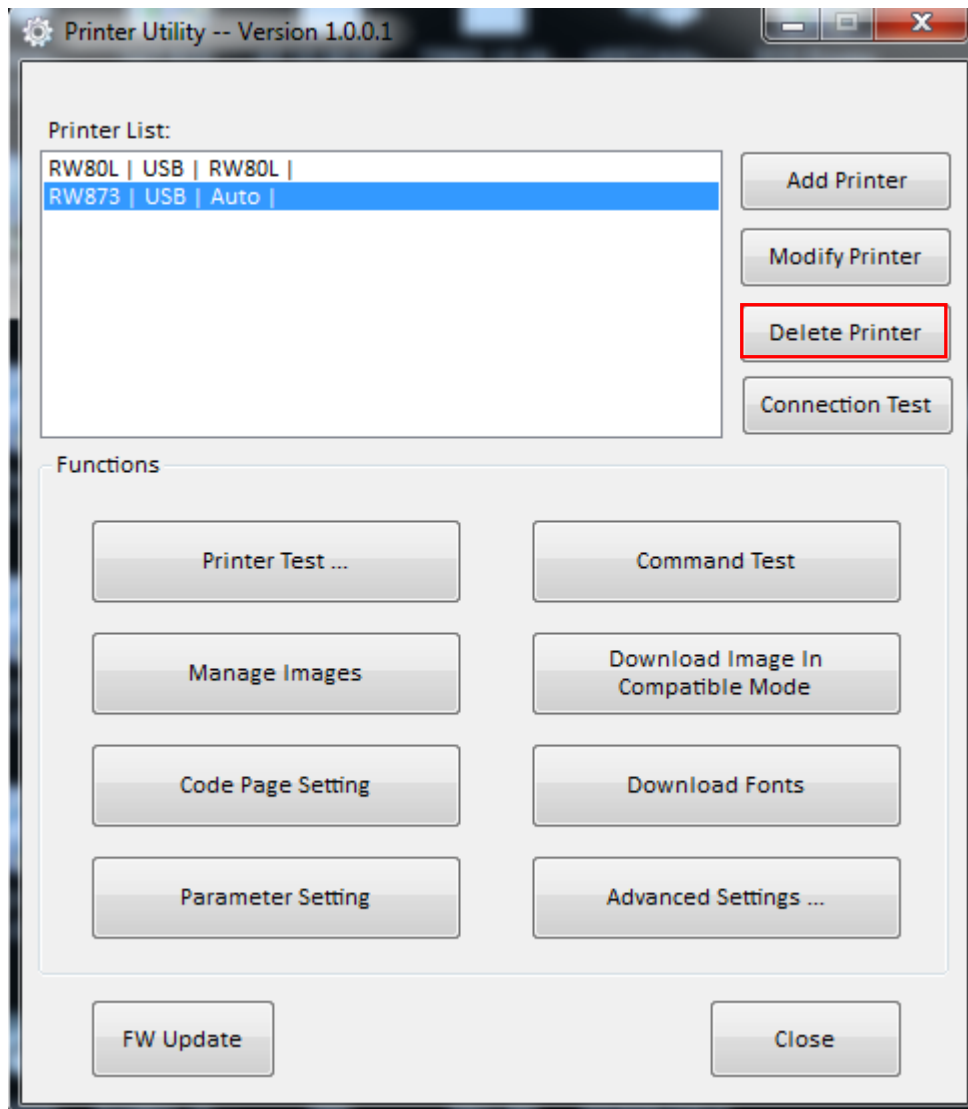
2) Choose the new printer and new port. Then click “OK”.



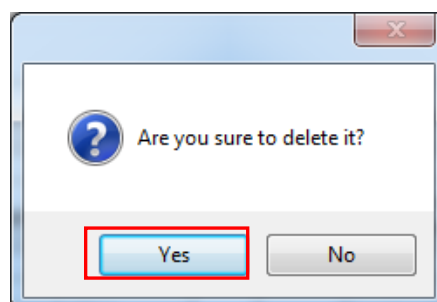
3) The new printer is added successfully.

### 8.2.1.3 Delete printer

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



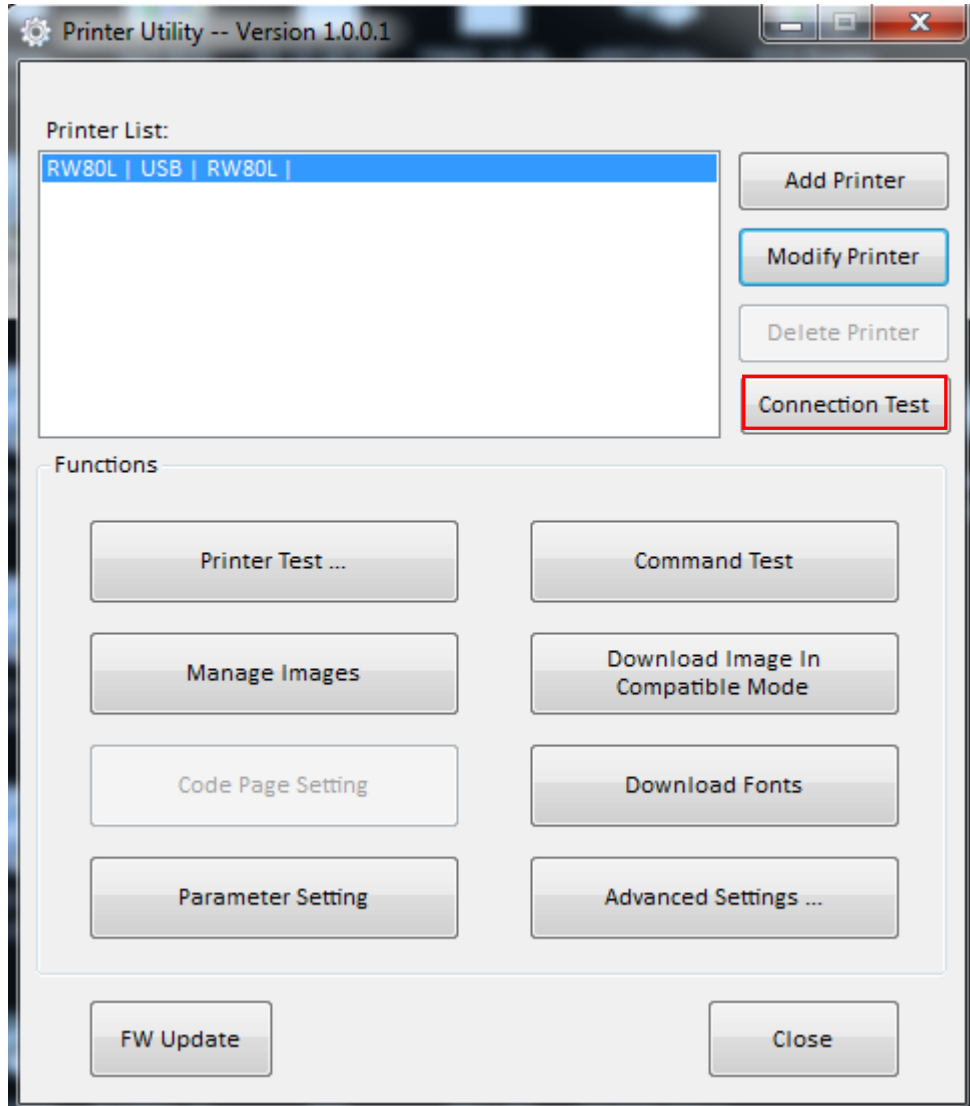
2) Click “Yes”, then the printer is deleted.



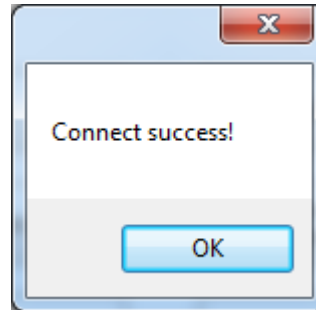
### 8.2.1.4 Connection Test

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 to 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

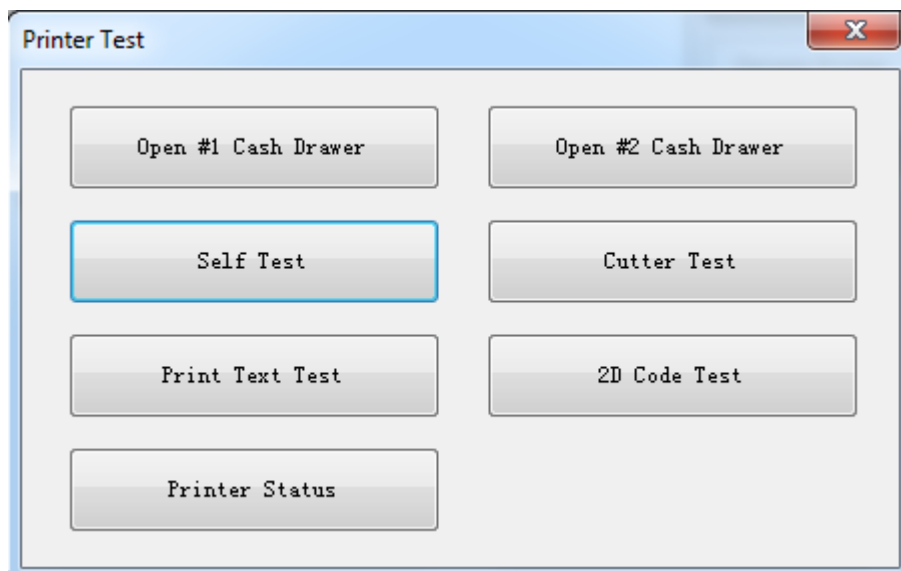
Printer Test contains the following items:

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

### 8.2.2.1 Printer Test

1) Self Test

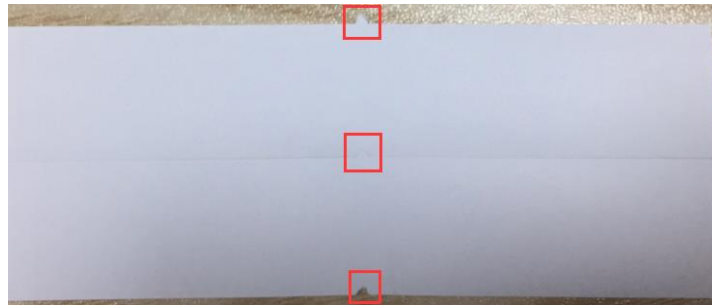
Click “Self Test” to see if the printer will print properly.



## 2) Cutter Test

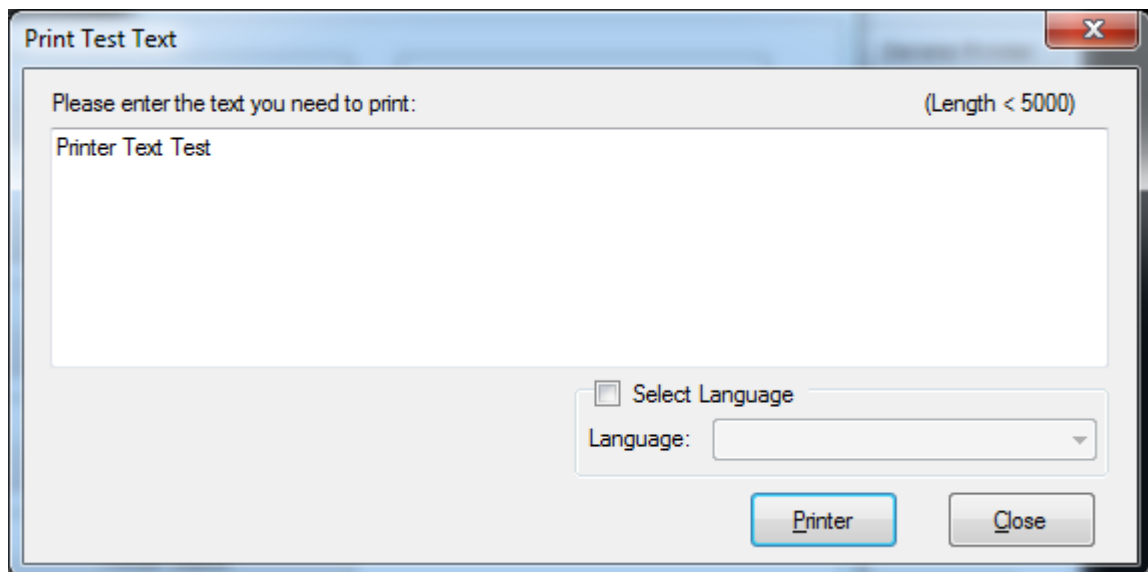
Click the cutter test and the paper will be cut automatically. Cutting method is partial cut (Partial cut: Not fully cut off, leave a connection point between the two sheets of paper).

As shown in the figure:



## 3) 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.



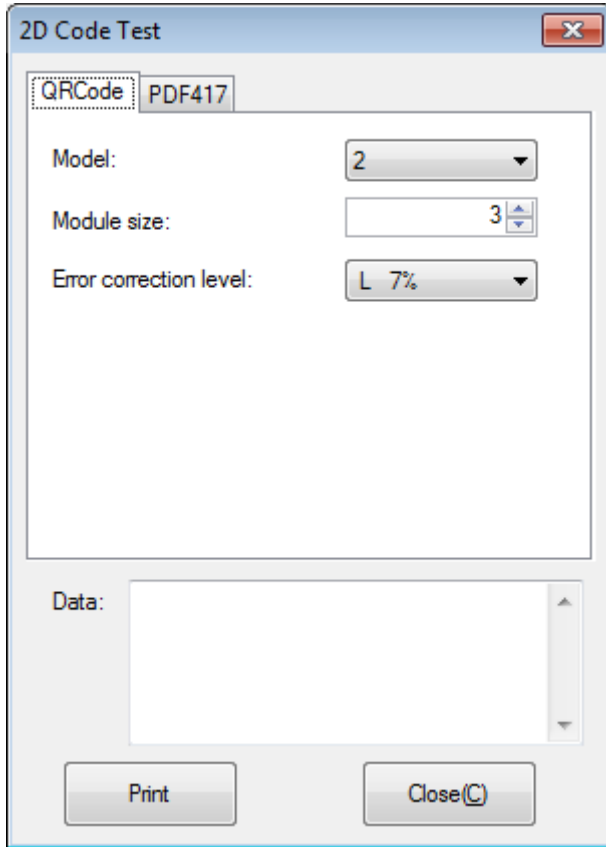
**Note:**

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)

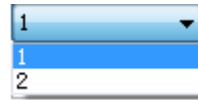


4) 2D Code

Click the QRCode mode.



▲ Model: 1~2

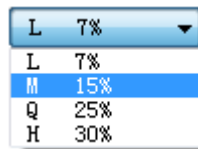


▲ Module size: 1~16

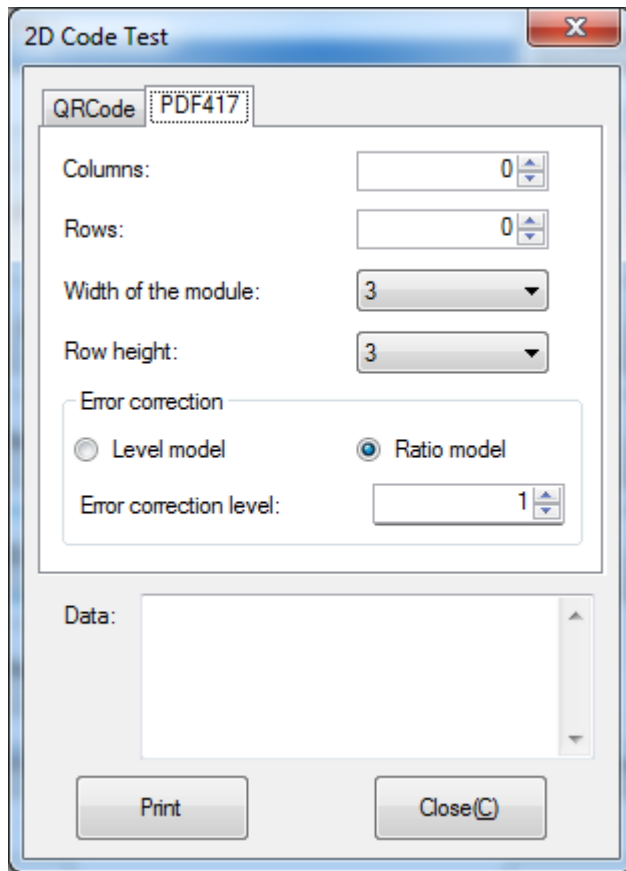
The larger the module value, the larger the printed QR code is, and the smaller the opposite.

▲ Error correction level: 7%~30%

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



Click the PDF417 mode.

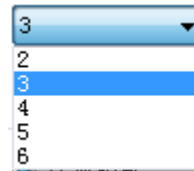


▲ Columns: 0~30

▲ 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

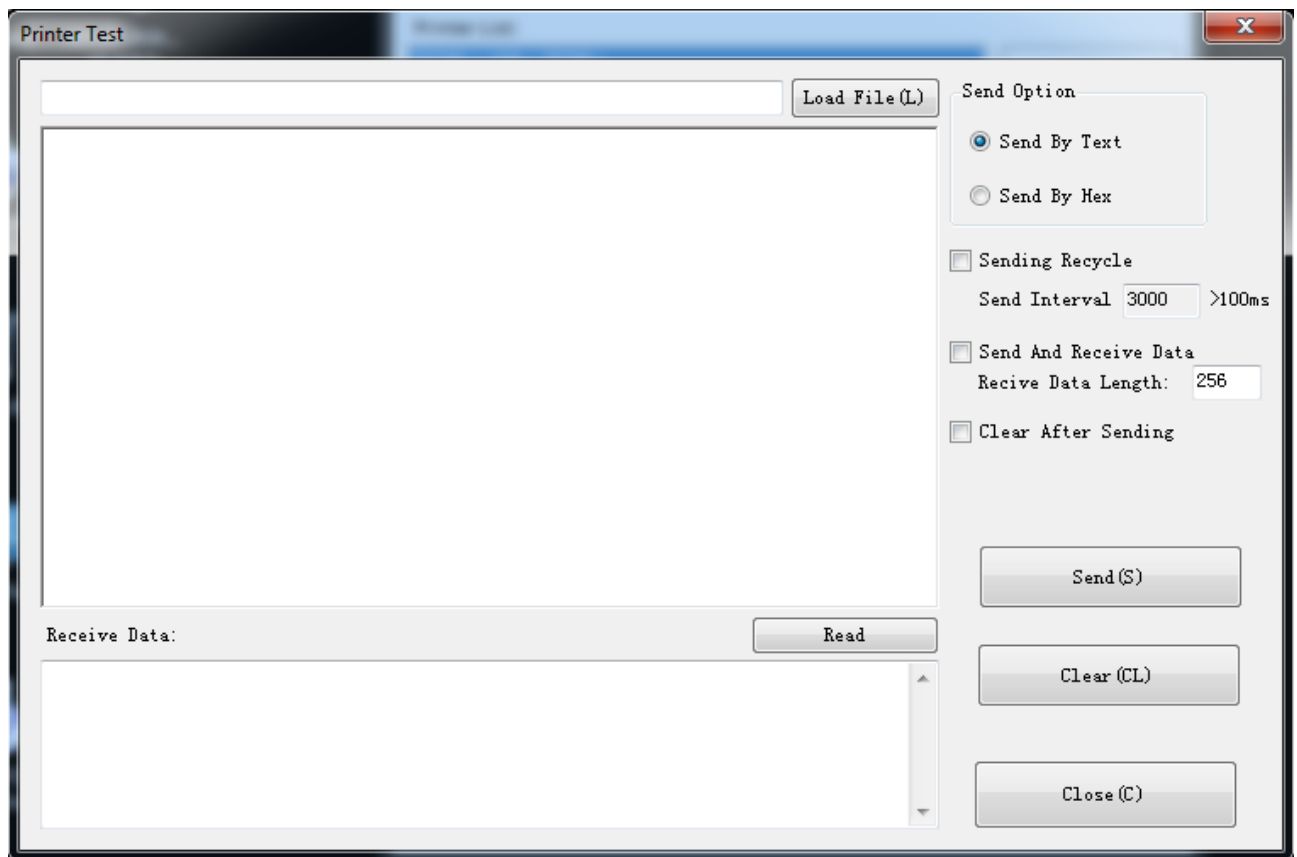
The larger the module value, the longer the printed PDF417 barcode, and the smaller the opposite.

▲ Error connection level

### 8.2.2.2 Command Test

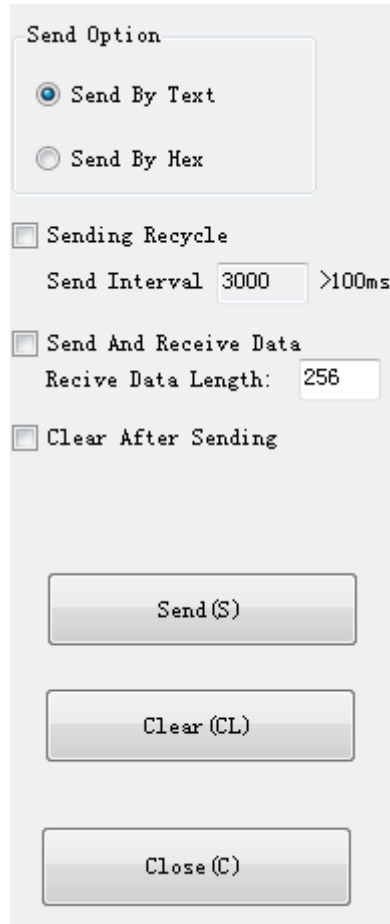
In the command test, you can send command to the printer. Input text or hexadecimal data. Select a file or enter a command in the input box.

- 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.

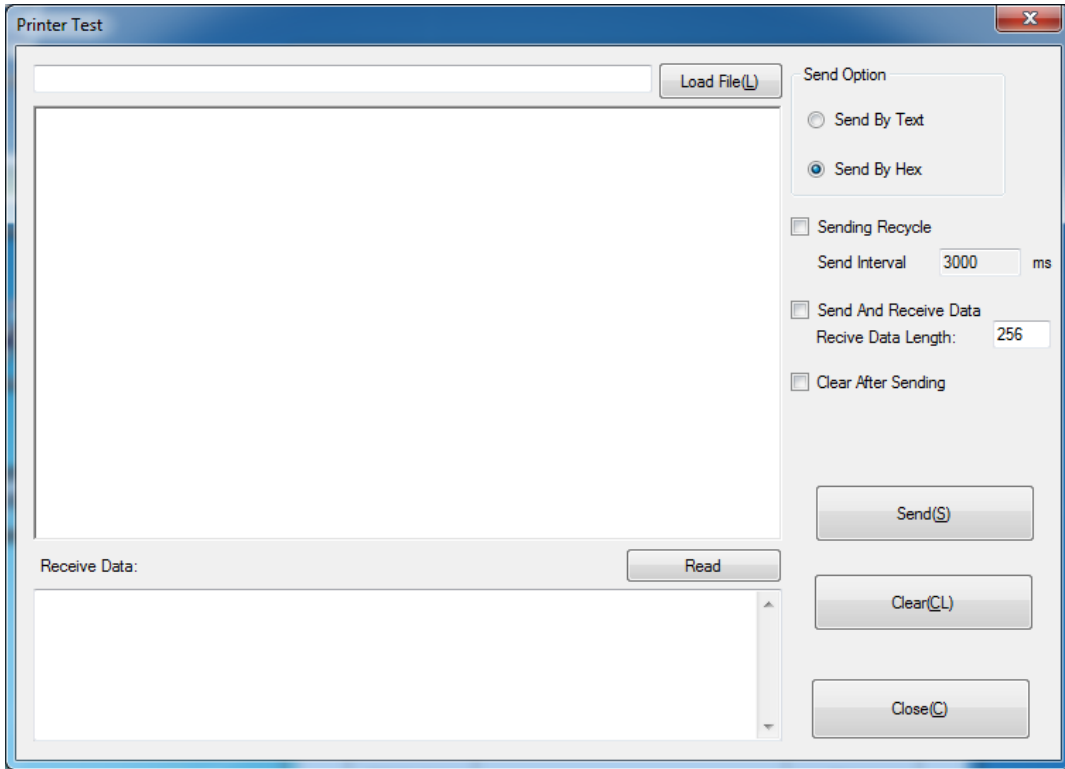


The screenshot shows a dialog box titled "Send Option" with the following controls:

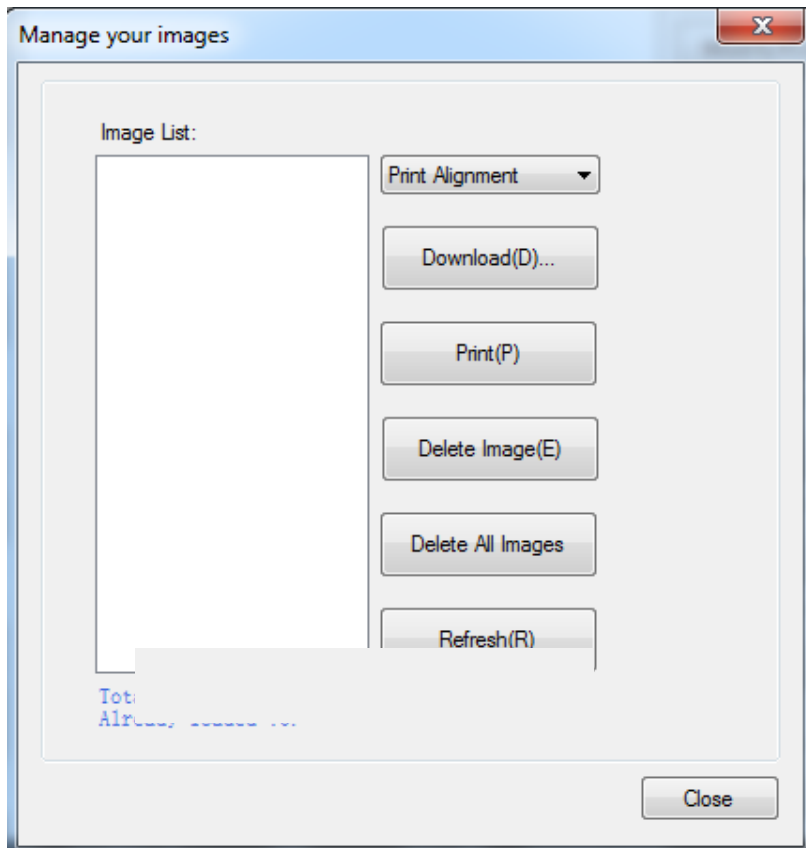
- Send By Text
- Send By Hex
- Sending Recycle
  - Send Interval:  >100ms
- Send And Receive Data
  - Recive Data Length:
- Clear After Sending

At the bottom of the dialog are three buttons: "Send (S)", "Clear (CL)", and "Close (C)".

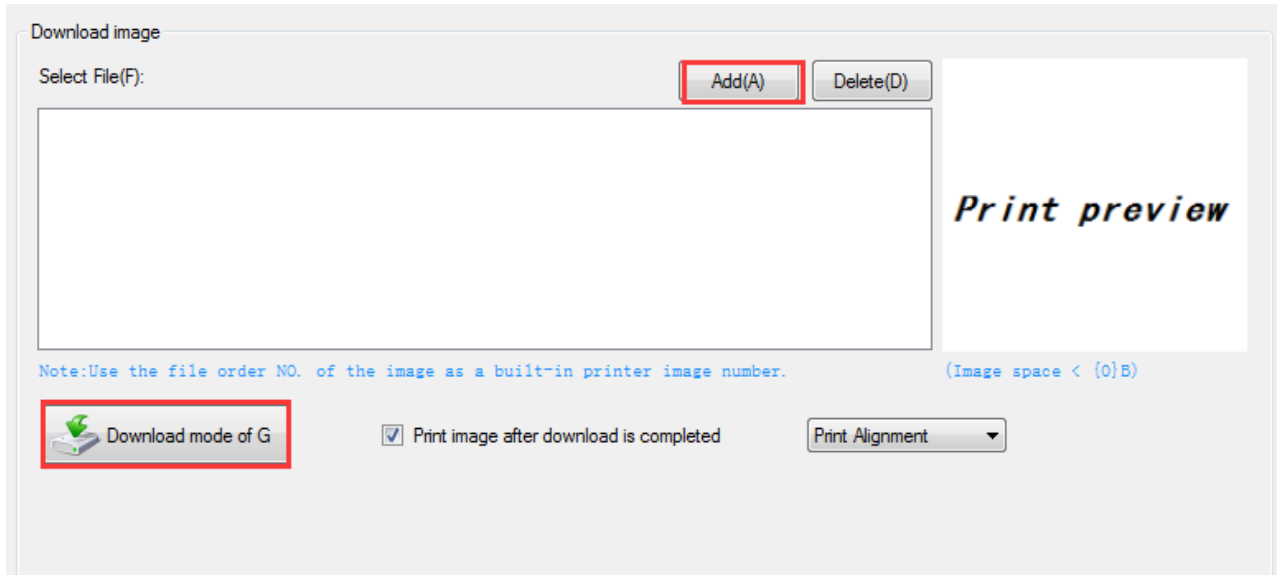
2) Click “Send by Hex”, input the content. (Convert text to HEX or send ESC command)



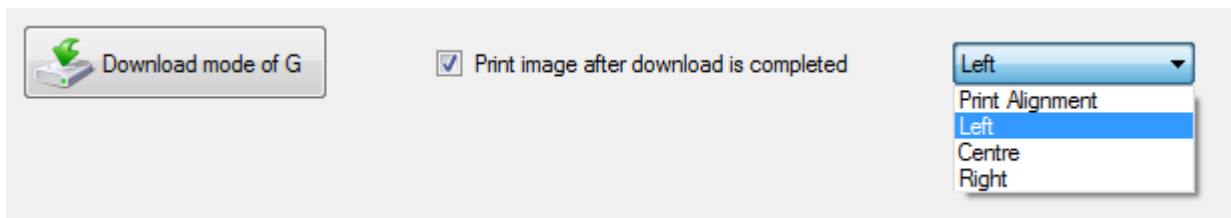
### 8.2.2.3 Manage Images

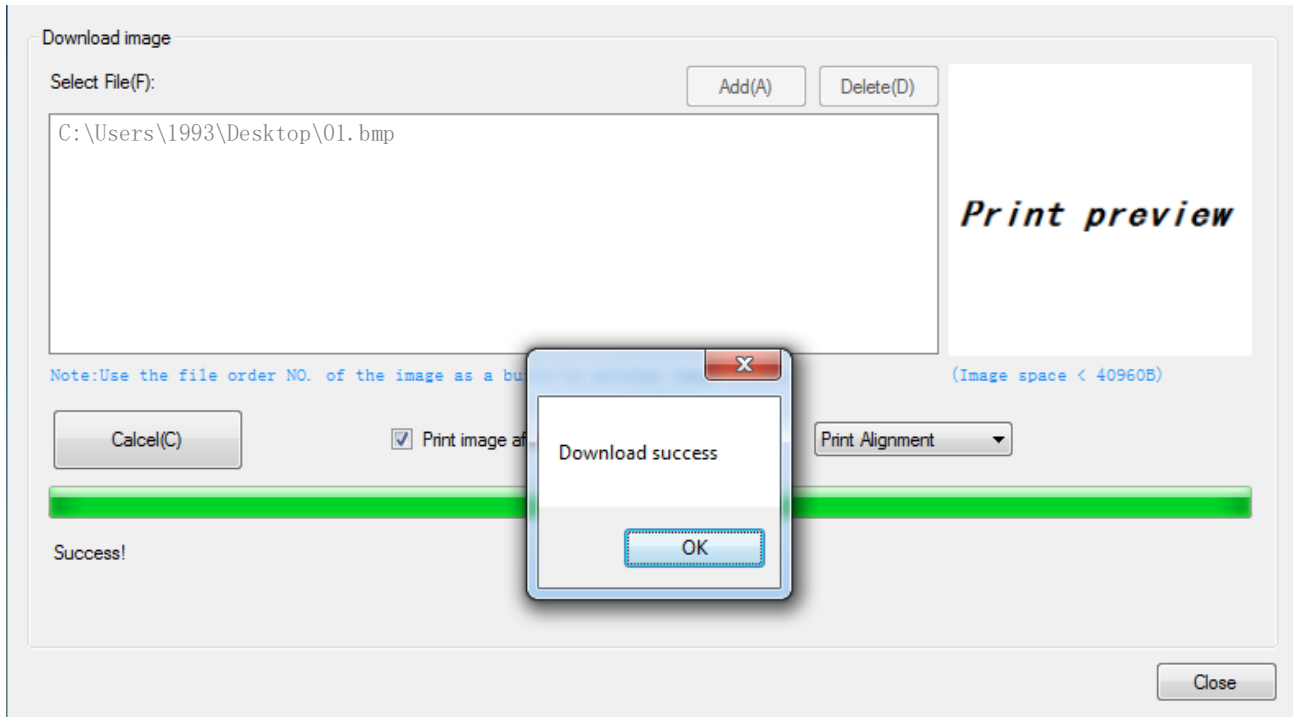


1) Click "Download" to add the image, if you want to print the picture, set the print location before clicking "Download mode of G" to print the picture. (It is recommended to use a picture in BMP format)



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

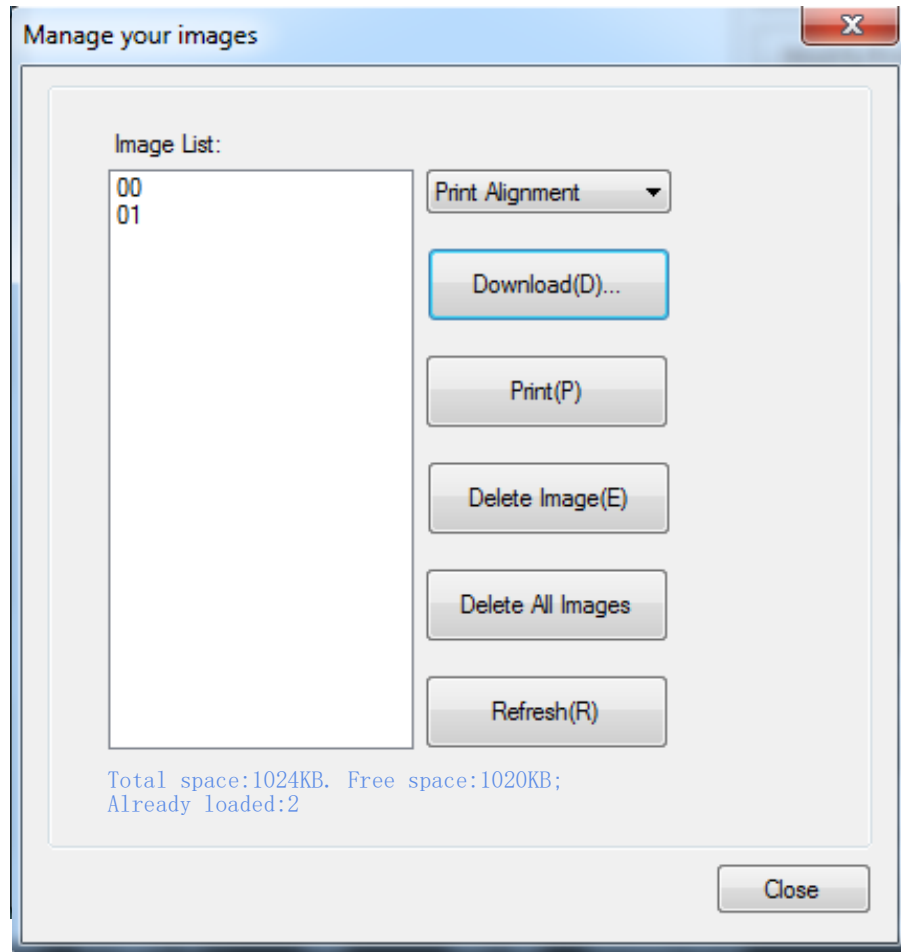




## 3) Delete Image.



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

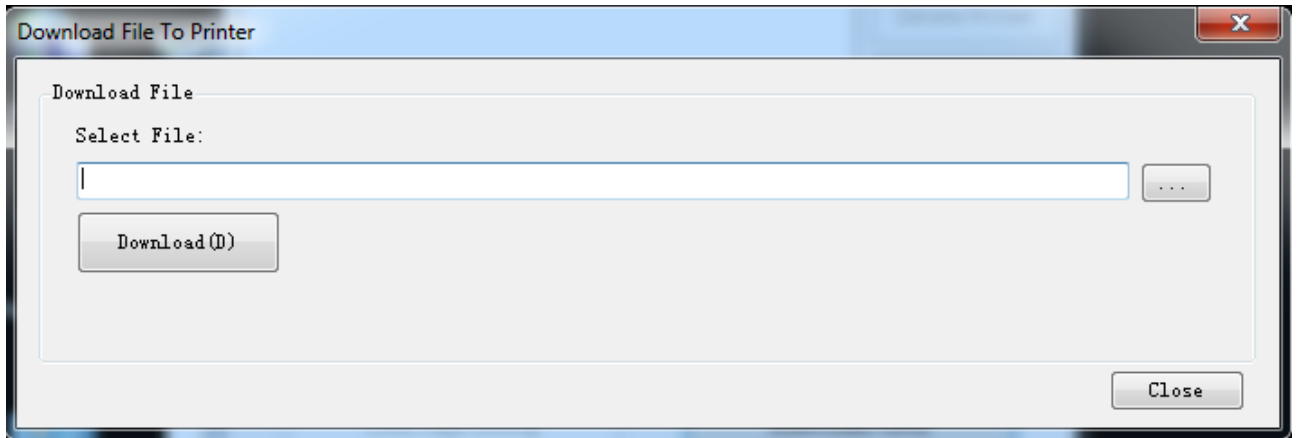


Click the image list, select "Delete selected image" will delete the image, click "Delete all Images", without clicking the list option to delete all the images in the list.



### 8.2.2.5 Download Fonts

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



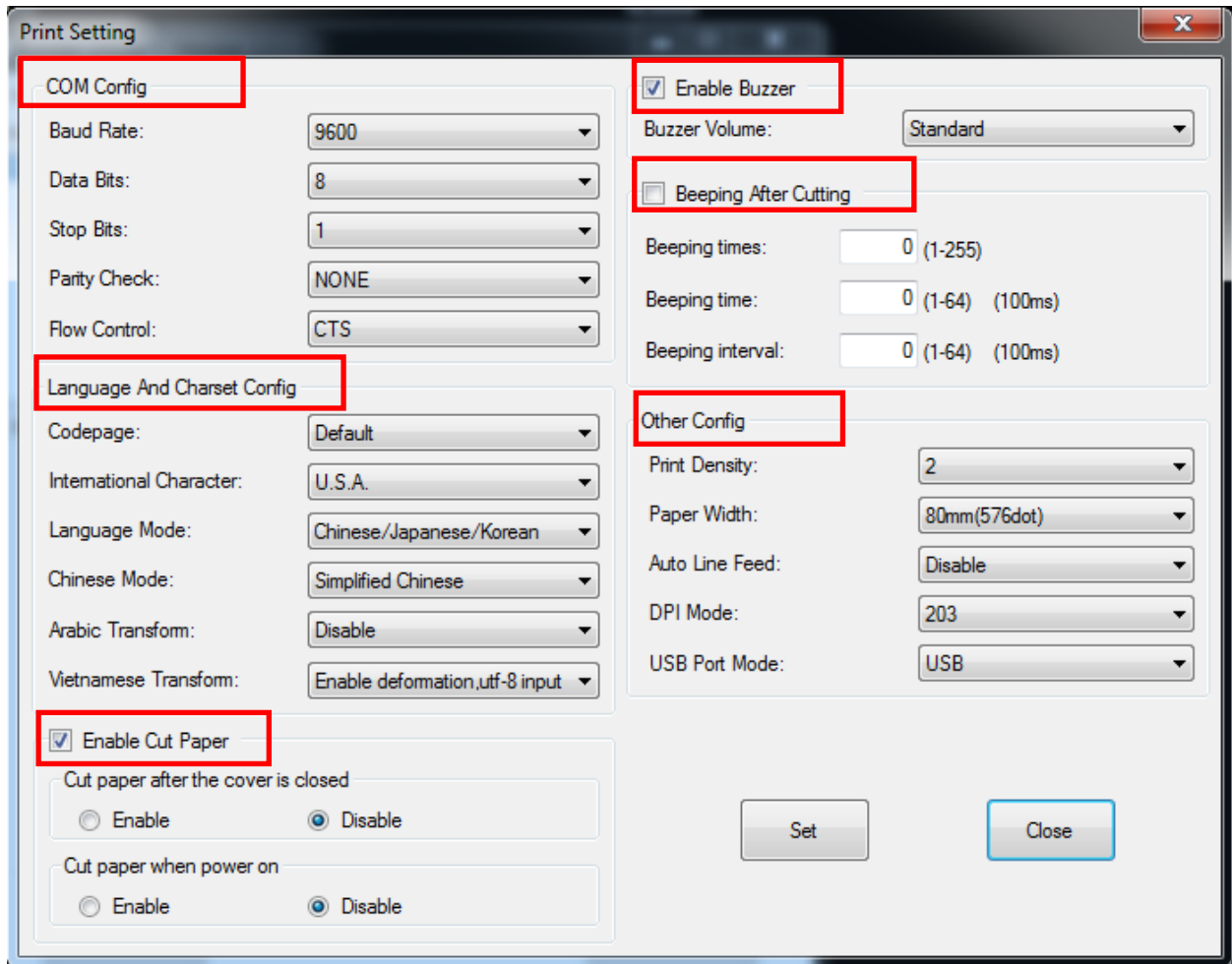
 **Note:** After downloading the font successfully, you need to restart the printer to take effect.

### 8.2.2.6 Parameter Setting



**Note:** This step needs to restart the printer to take effect.

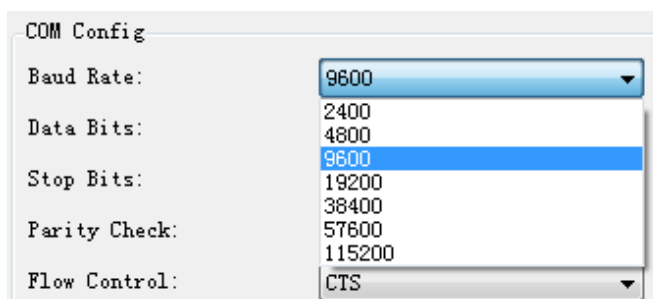
1) Click “Parameter Setting” to set “COM Config” (Only support the printers configured with serial interface), “Language and Charset Config”, “Cut Paper”, “Buzzer” and “Other Config”.



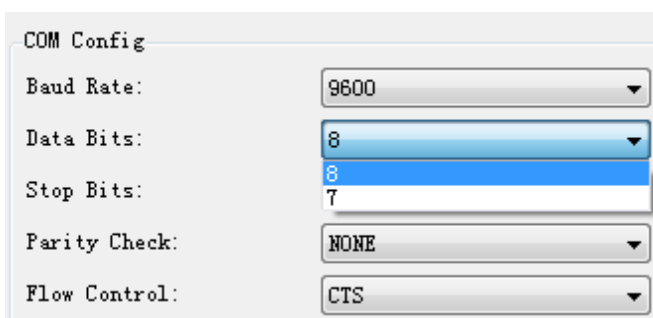
◆ **COM Config**

Click the items to set “Baud Rate”, “Data Bits”, “Stop Bits”, “Parity Check”, and “Flow Control”.

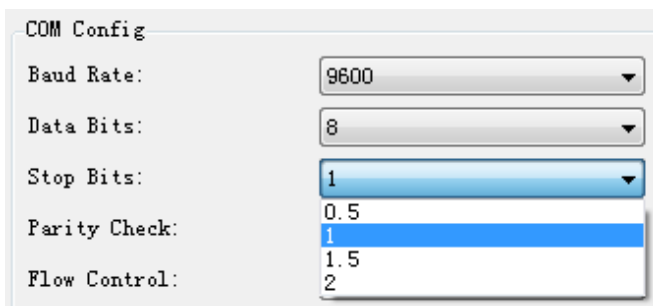
• Baud Rate



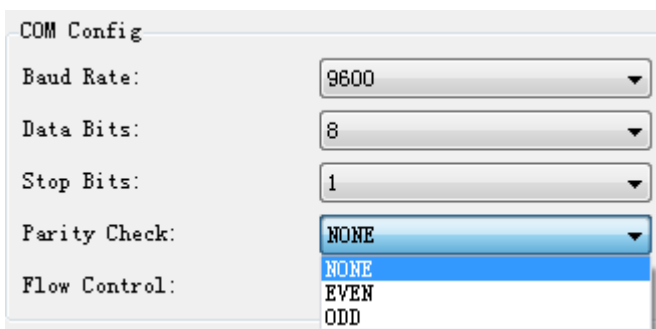
• Data Bits



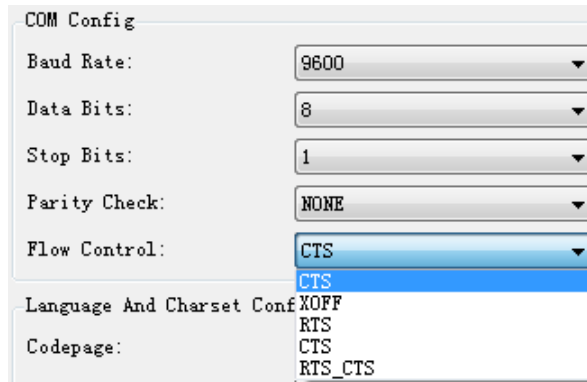
• Stop Bits



• Parity Check

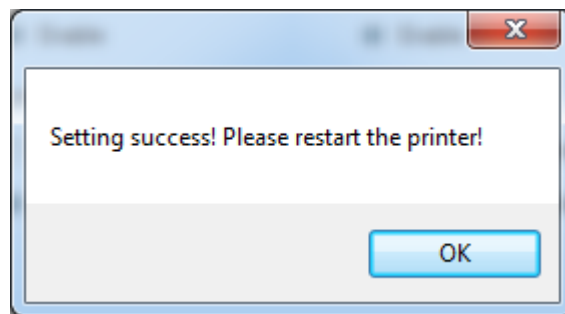


• Flow Control

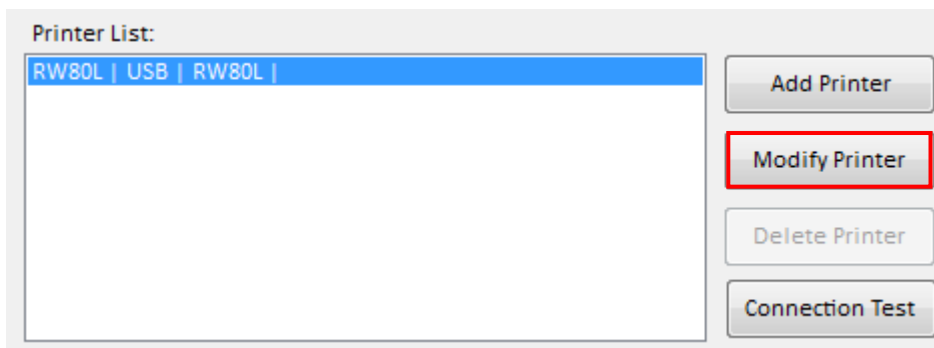


**Note:** The value of the serial port parameter can be obtained according to the value of the Self-test page information.

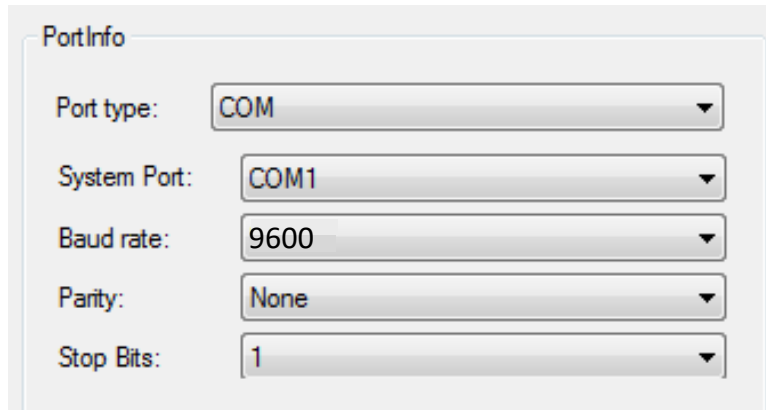
① After setting the parameters as required, click "Set" and restart the printer.



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



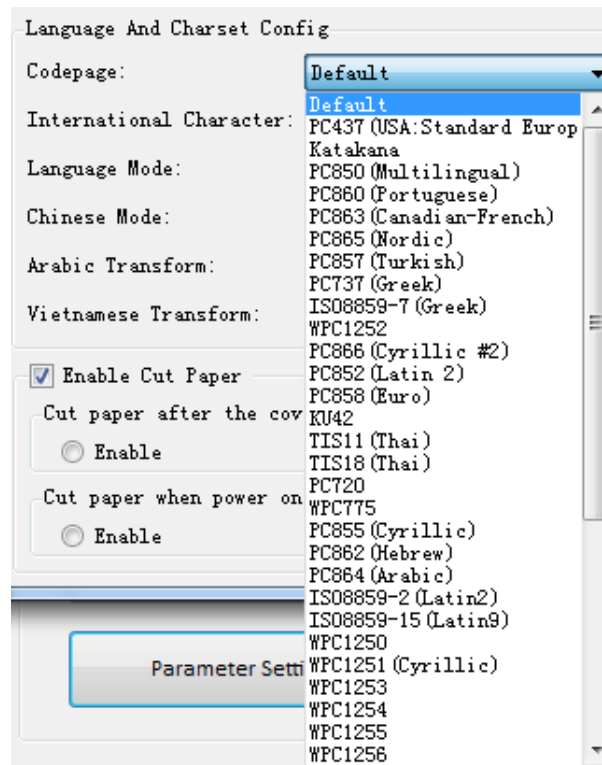
③ Select the port category "COM" and set the baud rate to the value "9600" as shown above, and parity "None". This port allows you to print after setup is complete.



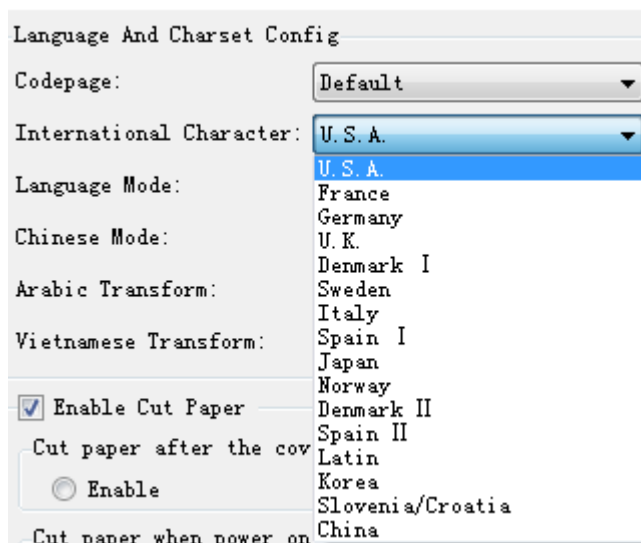
◆ **Language And Charset Config**

Click the items to set “Codepage”, “International Character”, “Language Mode”, “Chinese Mode”, “Arabic Transform” and “Vietnamese transform”.

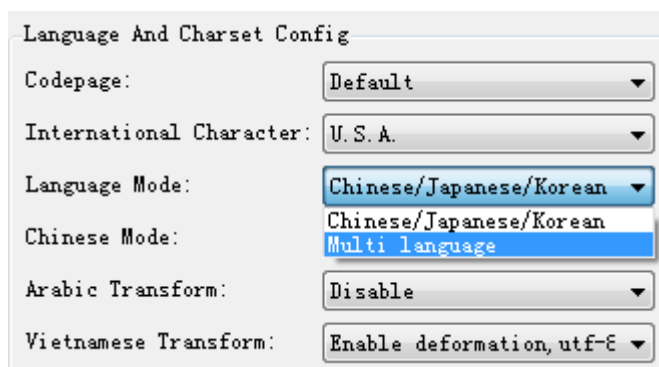
- Codepage



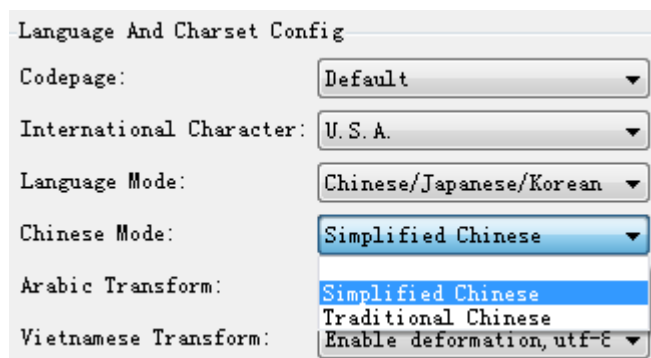
- International Character



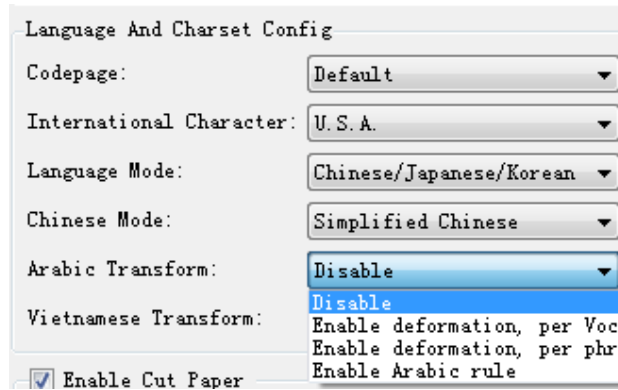
- Language Mode ( The default mode is “Chinese/Japanese/Korean”)



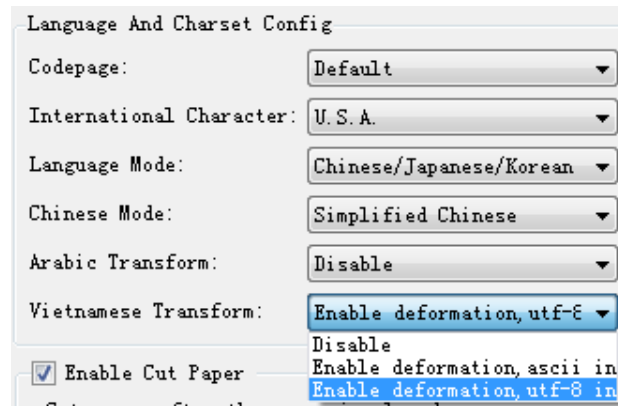
- Chinese Mode



• Arabic Transform

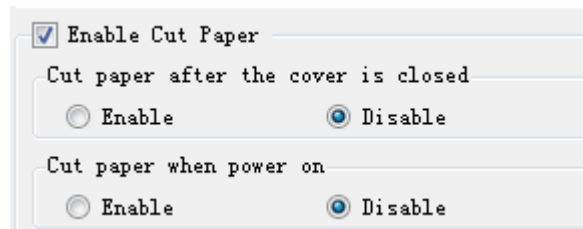


• Vietnamese transform



◆ **Cut Paper**

Enable or disable “Cut paper after the cover is closed” / “Cut paper when power on”.



**Enable “Cut paper after the cover is closed”:**

When the printer closes the cover, it will automatically cut the paper.

**Disable “Cut paper after the cover is closed”:**

The printer does not cut the paper automatically after closing the cover.

**Enable “Cut paper when power on”:**

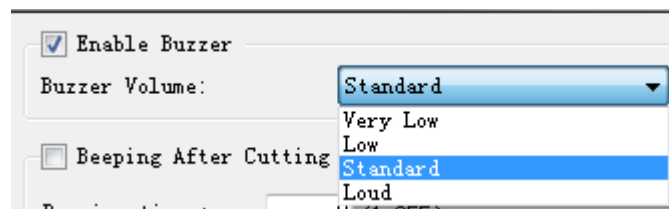
The printer will automatically cut paper when it is powered on.

**Disable “Cut paper when power on”:**

The printer does not cut paper automatically after it is powered on.

◆ **Buzzer**

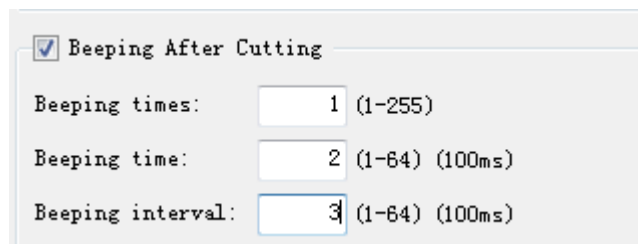
Buzzer Volume: Very Low/Low/Standard/loud



**Tick “Beeping after cutting” (The beeping time, times and interval time can be set for what you want, such as 1 milliseconds, 2 milliseconds or 3 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.





◆ **Other Config**

Click the items to set “Print Density”, Paper Width”, “Auto Line Feed”, “DPI Mode”, and “USB Port Mode”

- Print Density (default “level 2”)

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

Other Config

Print Density:	2
Paper Width:	1 2 3 4
Auto Line Feed:	4
DPI Mode:	203
USB Port Mode:	USB

- Paper Width Setting

Other Config

Print Density:	2
Paper Width:	80mm (576dot) 58mm (360dot) 58mm (384dot) 58mm (416dot) 80mm (512dot) 80mm (576dot)
Auto Line Feed:	80mm (512dot)
DPI Mode:	203
USB Port Mode:	USB



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

- Auto Line Feed

Other Config

Print Density:	2
Paper Width:	80mm (576dot)
Auto Line Feed:	Disable Enable
DPI Mode:	203
USB Port Mode:	USB

- DPI Mode (Default “203DPI”)

Other Config

Print Density:	2
Paper Width:	80mm (576dot)
Auto Line Feed:	Disable
DPI Mode:	203
USB Port Mode:	203 180

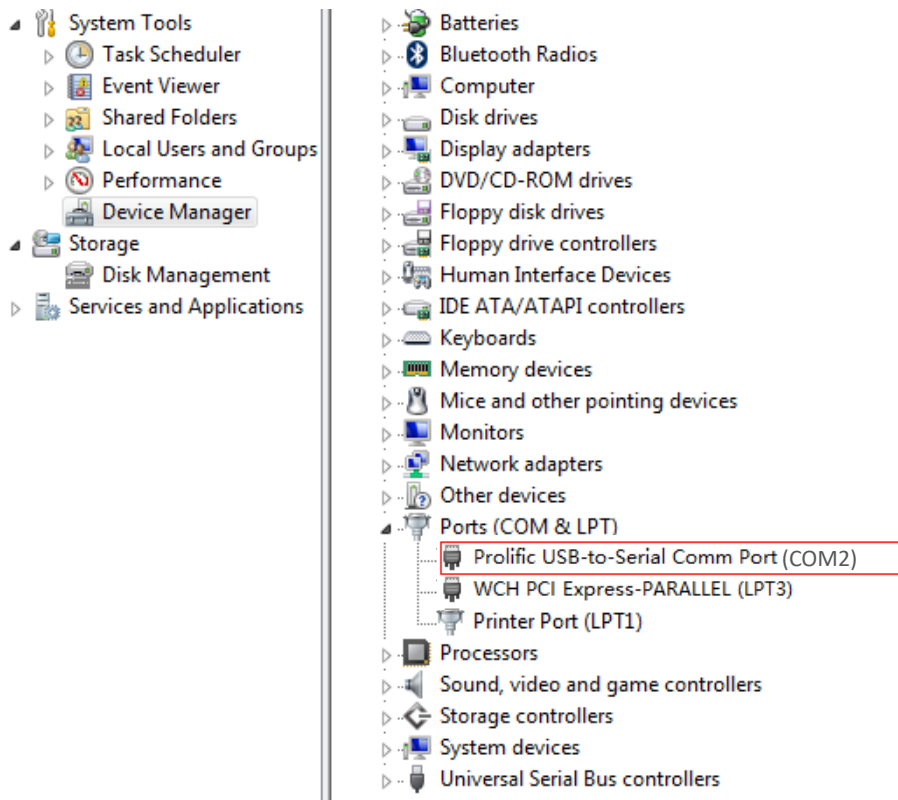
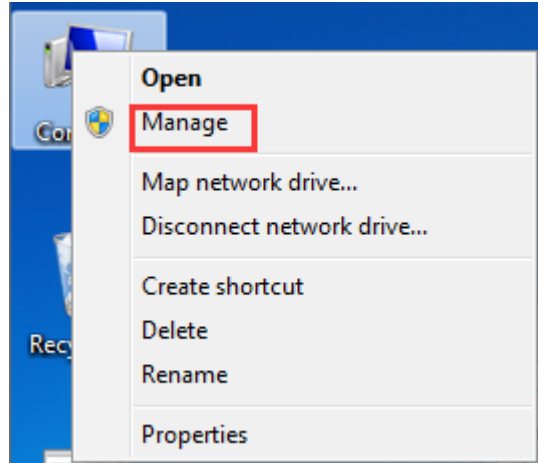
- USB Port Mode

Other Config

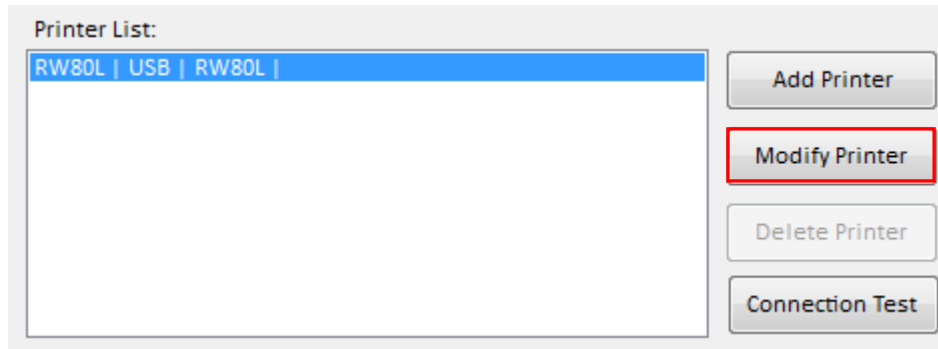
Print Density:	2
Paper Width:	80mm (576dot)
Auto Line Feed:	Disable
DPI Mode:	203
USB Port Mode:	USB Virtual Serial Port

- Check the Virtual Serial Port

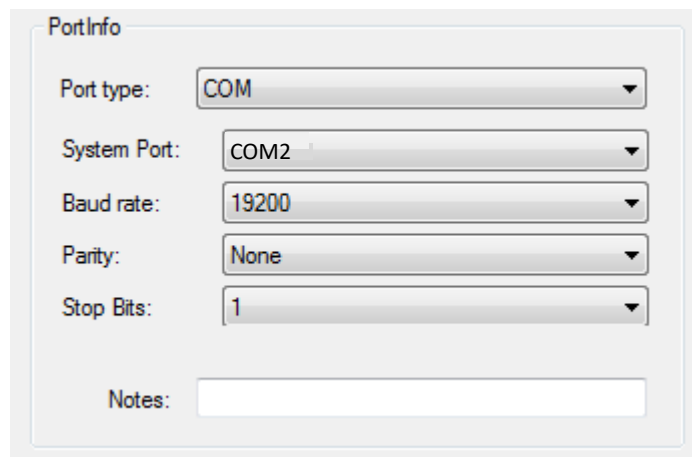
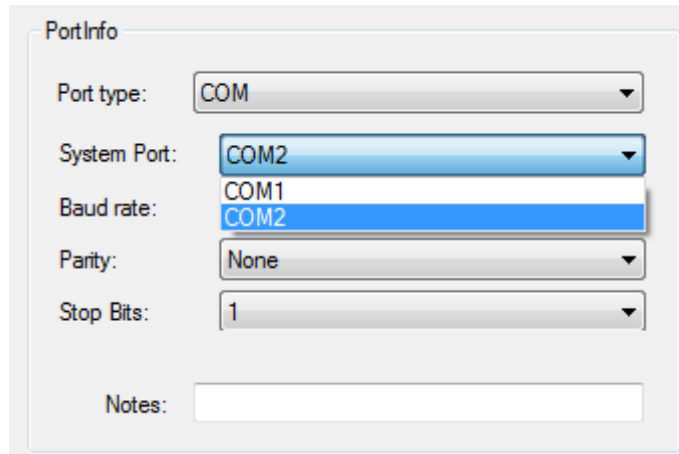
- ① Right-click the computer and select "Manage".
- ② Click "Device Manager" to view the virtual port. (such as: COM2).



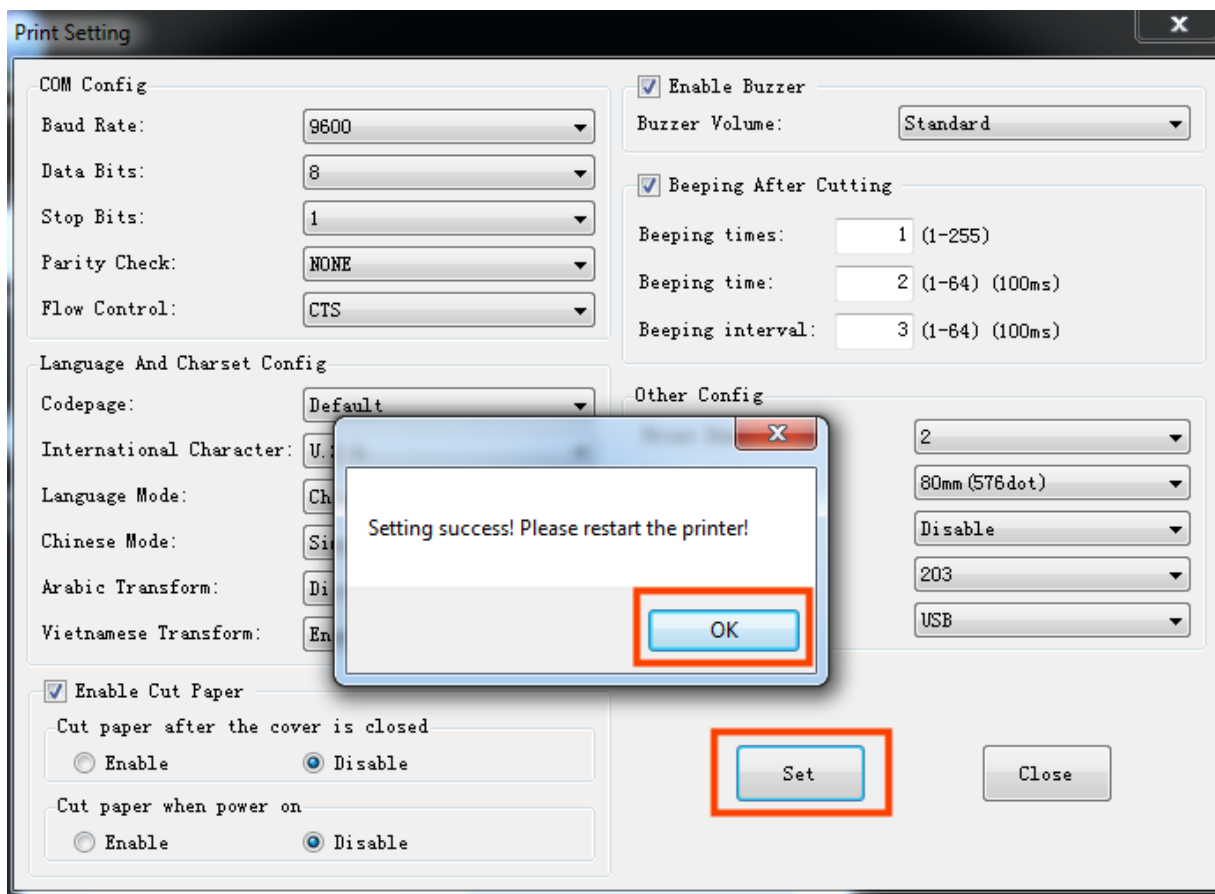
- ③ Return to the printer utility and click "Modify Printer".



- ④ Change the port to "COM2".

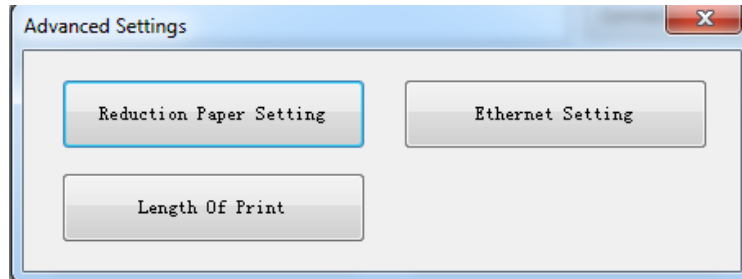


2) After finishing setting all the above parameters, click "Set", and restart the printer, then the setting would take effect.



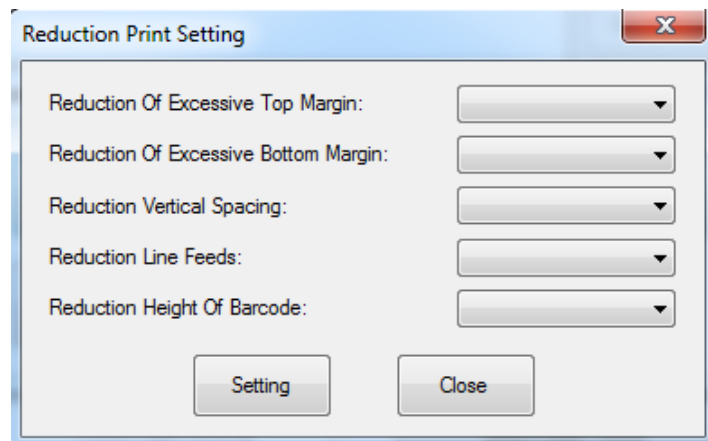
### 8.2.2.7 Advanced Setting

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



◆ **Reduction Paper Setting**

Choose the item and click "Setting".



① Reduction of Excessive Top Margin:

When the printer is in the "off" state, the blank part at the top of the printed paper is larger than the blank part at the top of the paper printed in the "on" state.

② Reduction of Excessive Bottom Margin:

When the printer is in the "off" state, the blank part of the bottom of the printed paper is larger than the blank part of the bottom of the paper printed in the "on" state.

③ Reduction Vertical Spacing: 25%~75%

The bigger the reduction vertical spacing, the narrower the interval between two lines of characters.

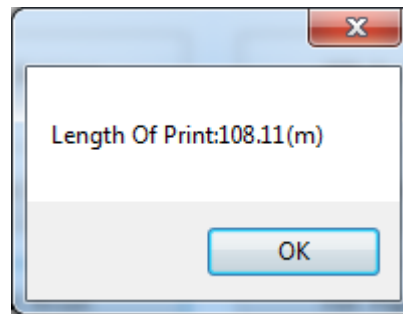
④ Reduction Line Feeds: 25%~75%

The higher the reduction line feeds, the narrower the interval between two lines of characters.

⑤ Reduction Height of Barcode: 25%~75%

The bigger the reduction height of barcode, the smaller the height of the barcode.

◆ **Length of Print**



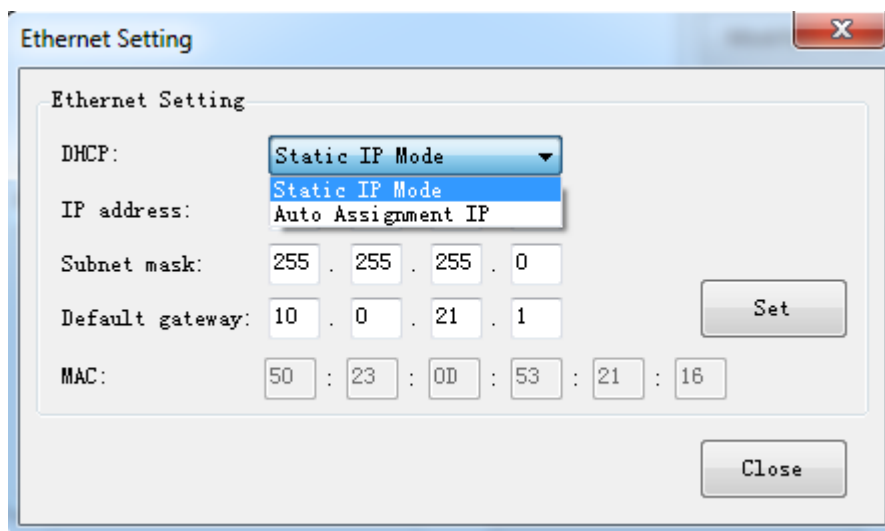
Click "Length of Print" to obtain the length of the paper that the printer has printed.

◆ **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.**



- 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:

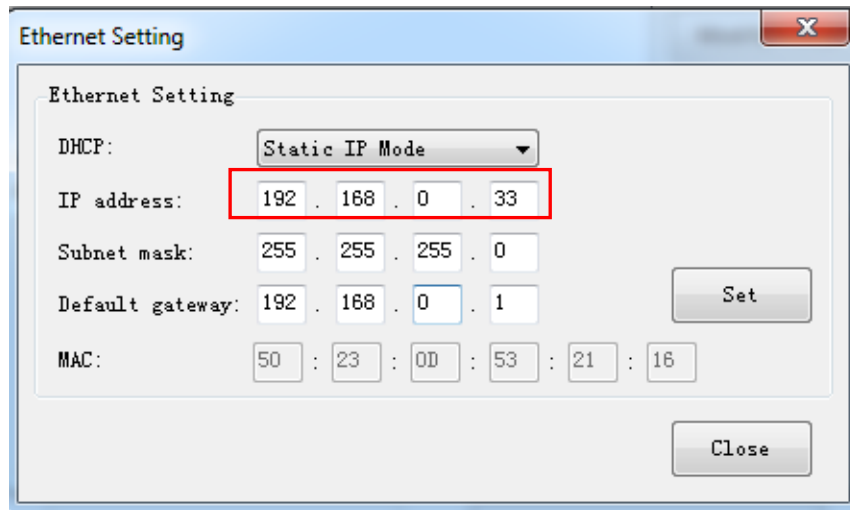


Figure ■ Printer IP Address

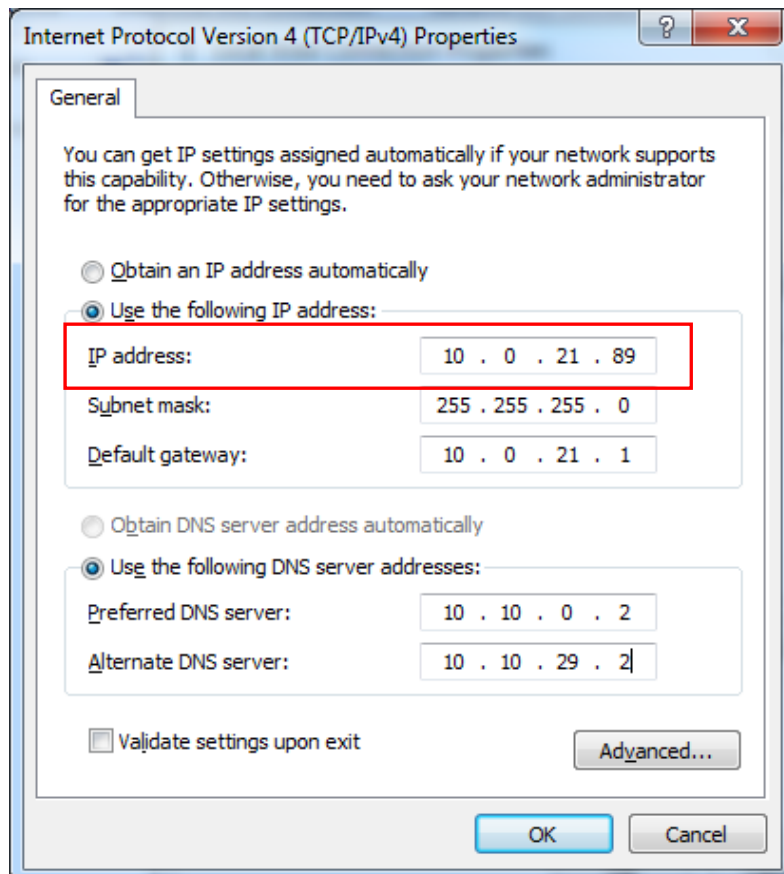


Figure ■ Host IP Address



2) Set the same network segment.

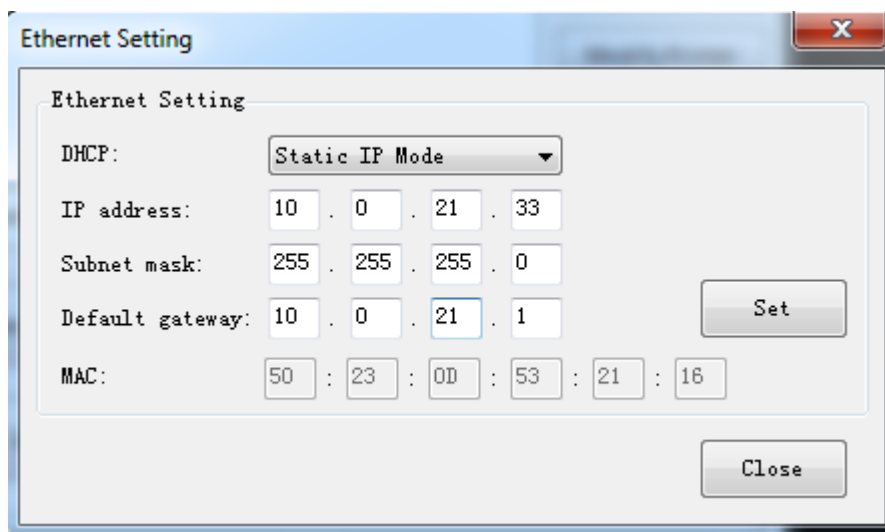
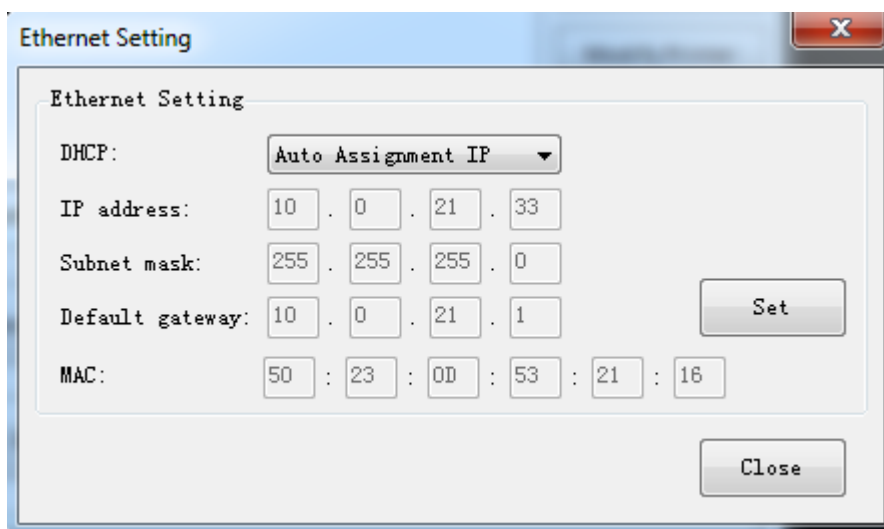


Figure ■ Printer IP Address

- Auto Assignment IP

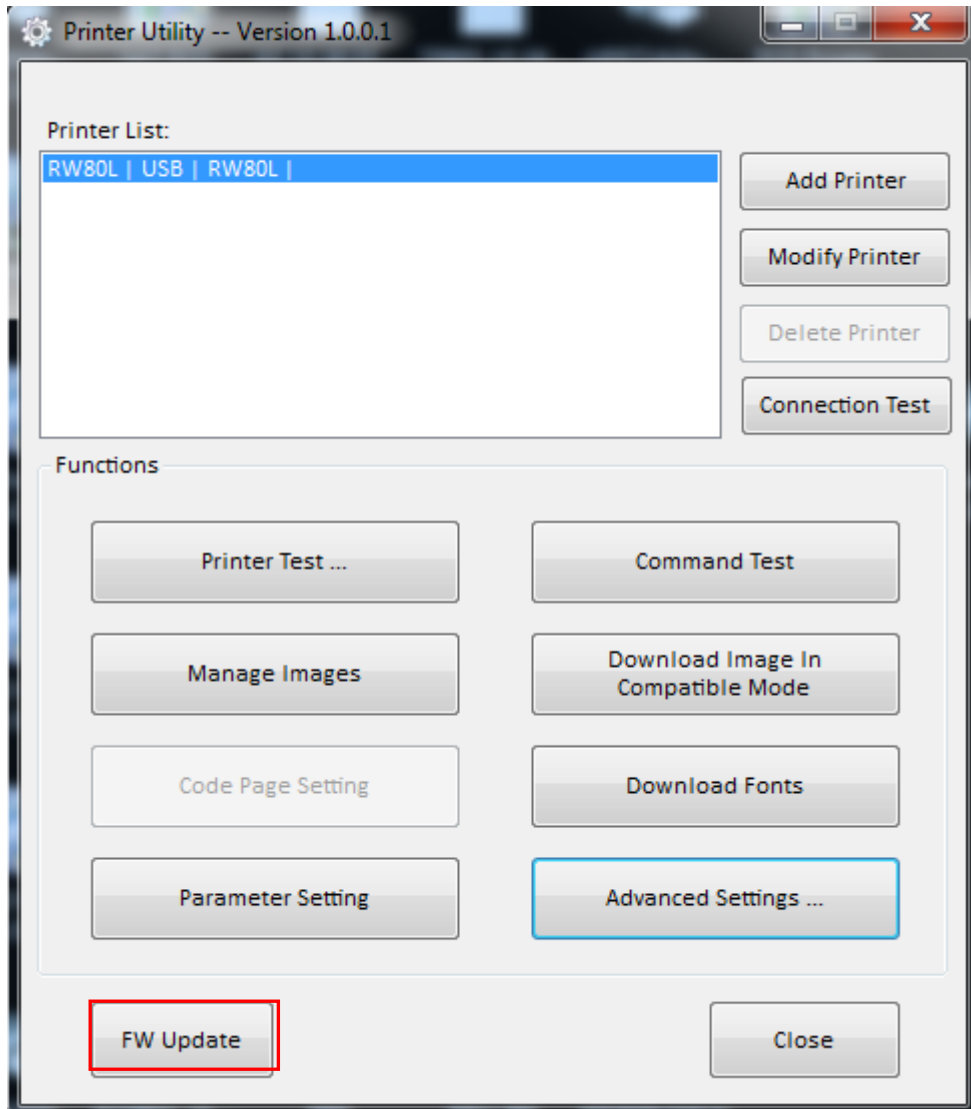
This mode automatically assigns the IP address to the printer.



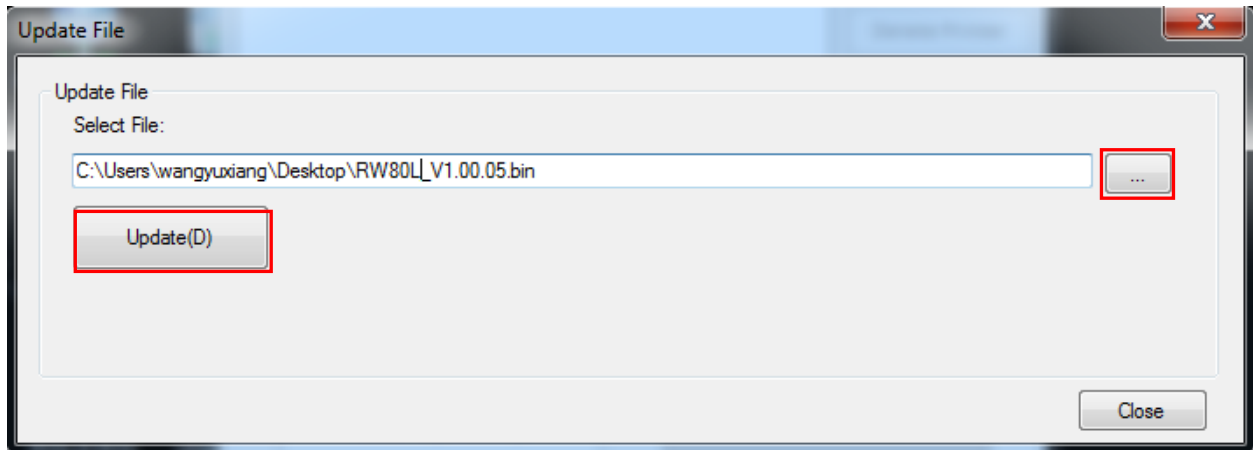
When the settings are complete, click "Write", then restart the printer.

## 8.3 Firmware Update

1) Click “FW Update”.

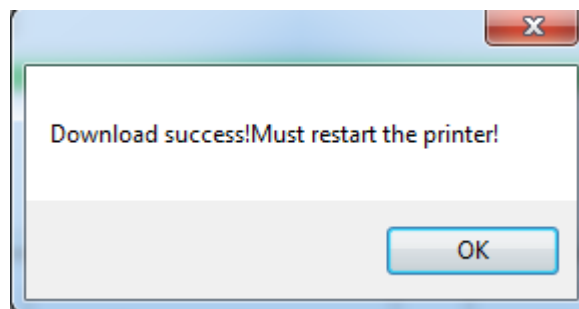


2) Add the “bin” file, and click “Update”.



3) Click “Update”.

4) Update success.



5) Restart the printer to take effect.

## 9 WINDOWS DRIVER

### 9.1 Manual Information

This Windows Driver Installation Manual 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 SPI (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 Element Printer Driver v2.7.1.0

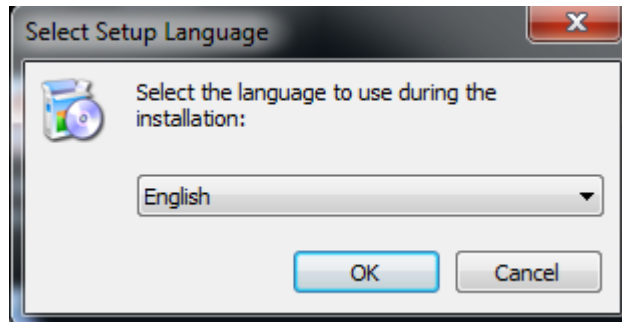
## 9.4 Windows Driver Installation



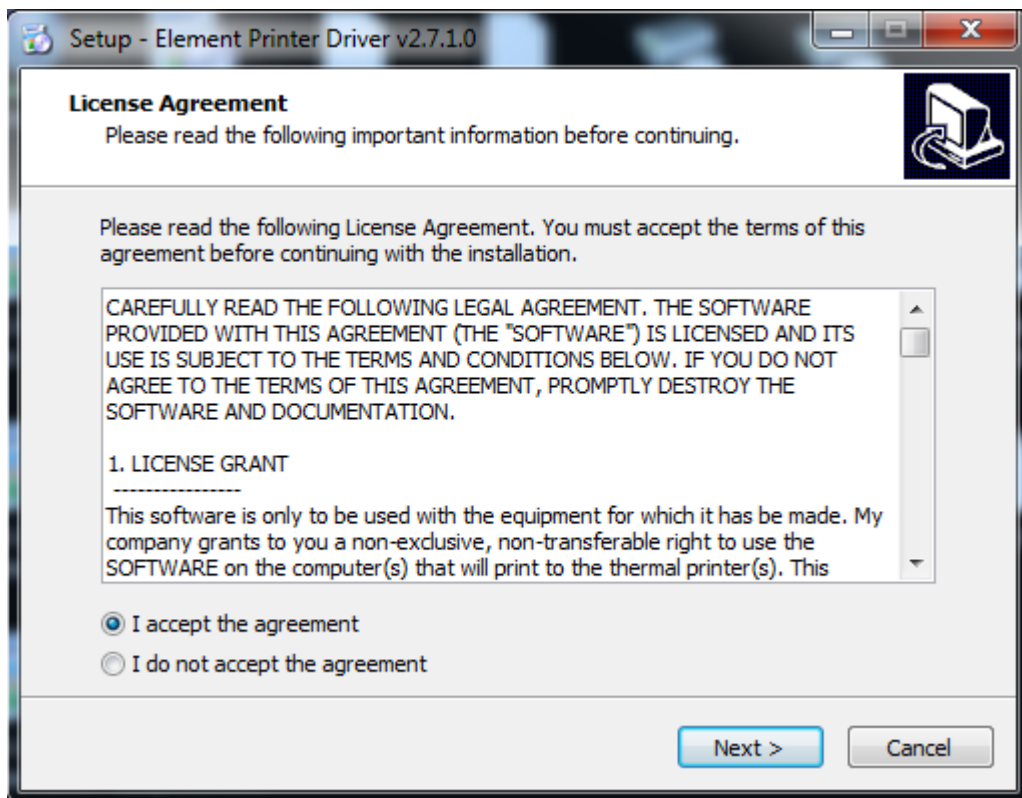
**Warning:**

Under different operating system, the screen has slight difference. Please operate it according to the tips. Take RW80L (Windows 7) as example.

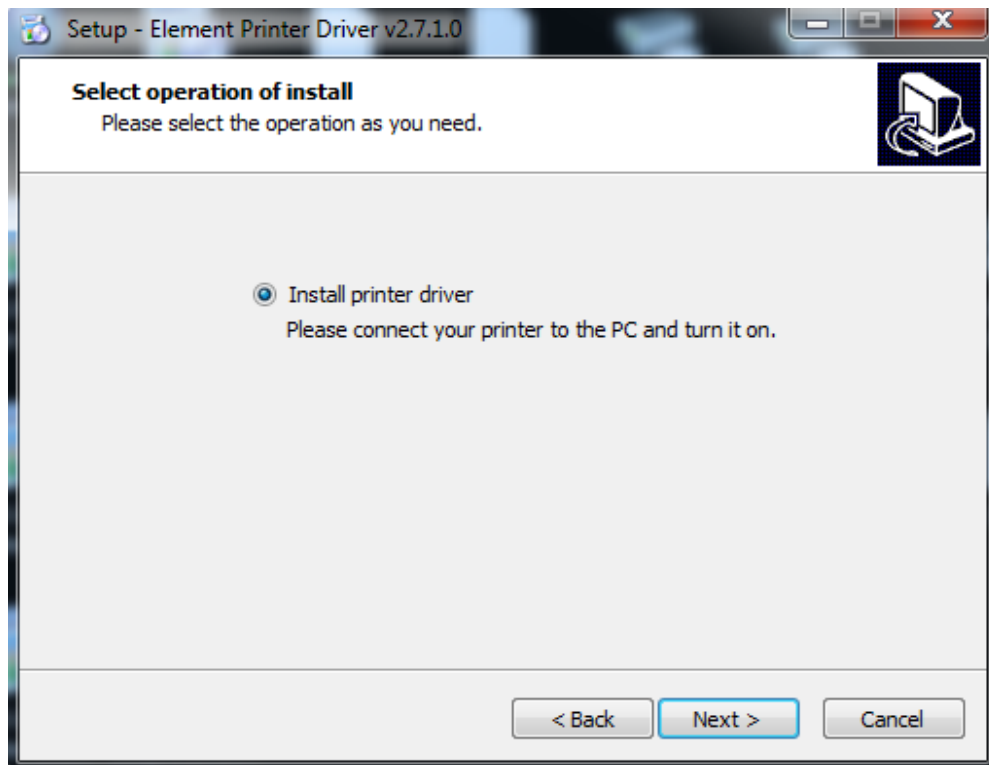
1) Double click Windows Driver, and choose the language.



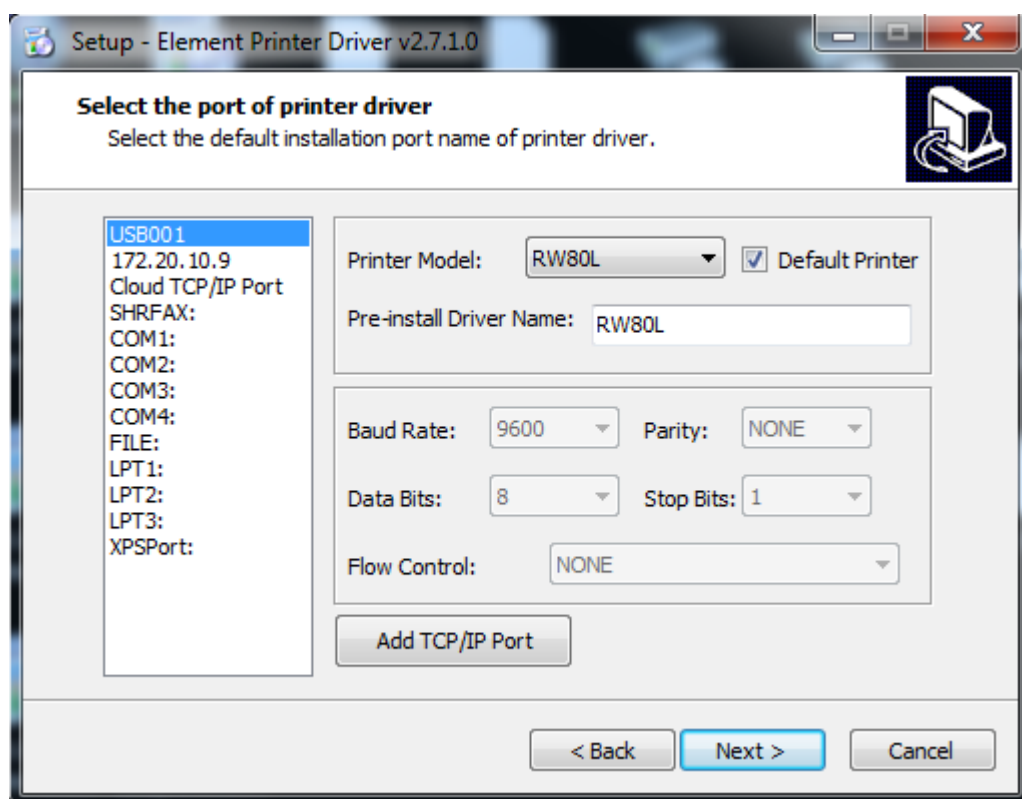
2) Choose "I accept the agreement" and click "Next".



3) Click “Next”



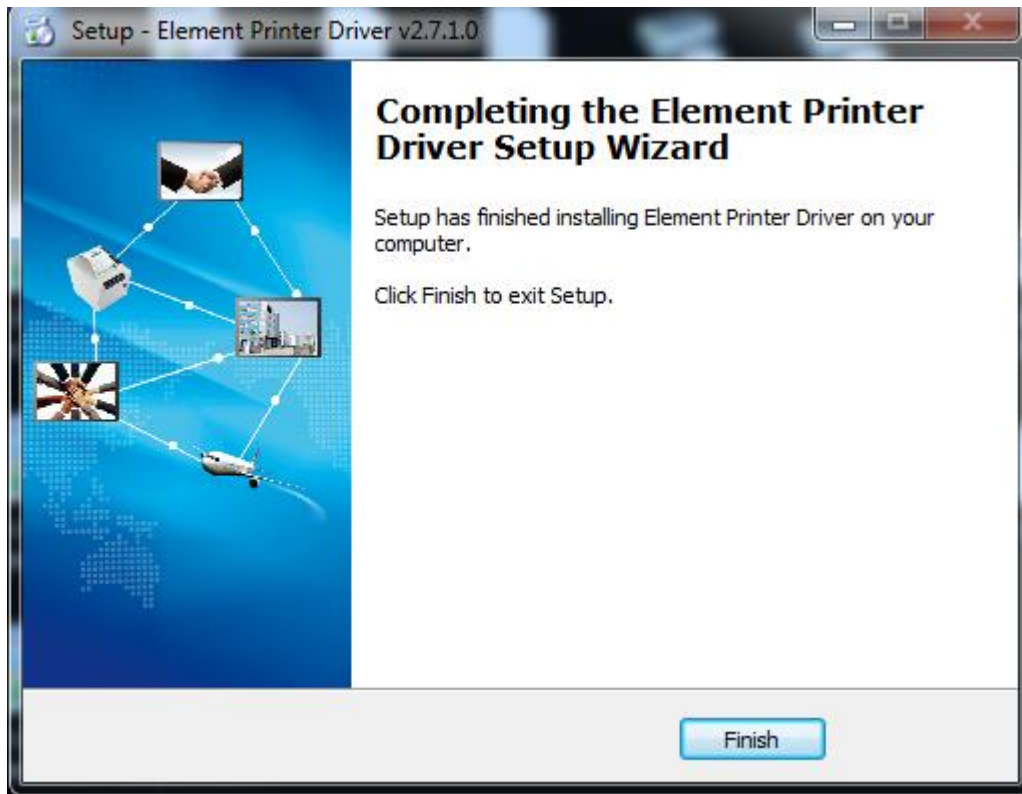
4) Choose the matched type and port (USBxxx is for USB port, COMx is for serial port, LPTx is for parallel port). Choose the type and port of driver, such as “RW80L”, “USB001”. Click “Next”.





**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.*

5) Click “Finish”. POS printer driver is installed successfully.



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

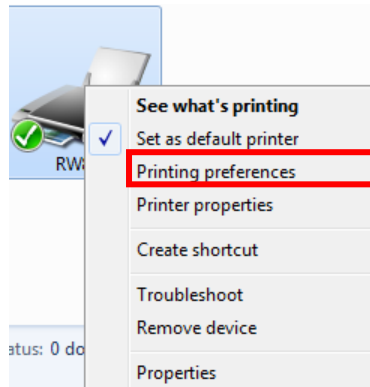


**Note:** *If you already installed the driver (No matter what kind of port), when you connect the printer with computer, it will create a USB port automatically.*

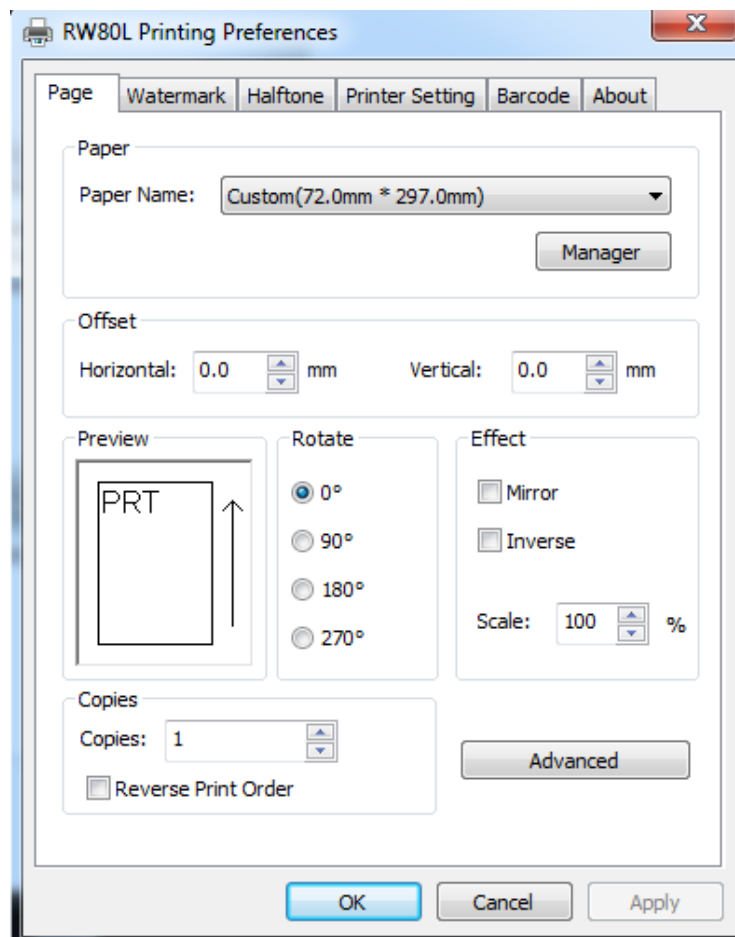
## 9.5 Detailed Windows Driver Setting

### 9.5.1 Printing Preferences

1) Click “Start” → “Devices and Printers”. Right click “RW80L” and choose “Printing preferences”.

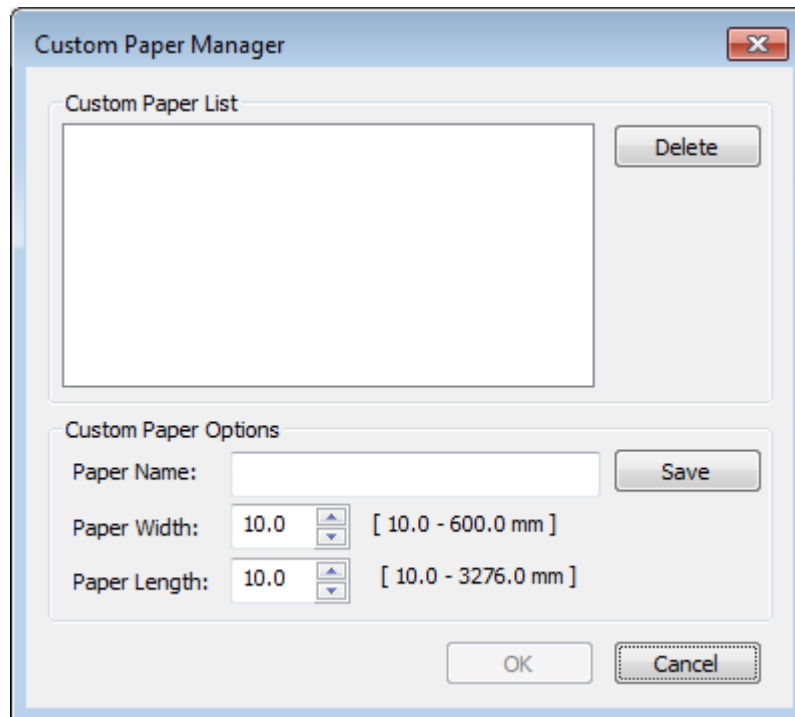


2) According to the different needs, choose “Paper”\“Offset”\“Rotate”\“Effect”\“Copies” in “Paper”.



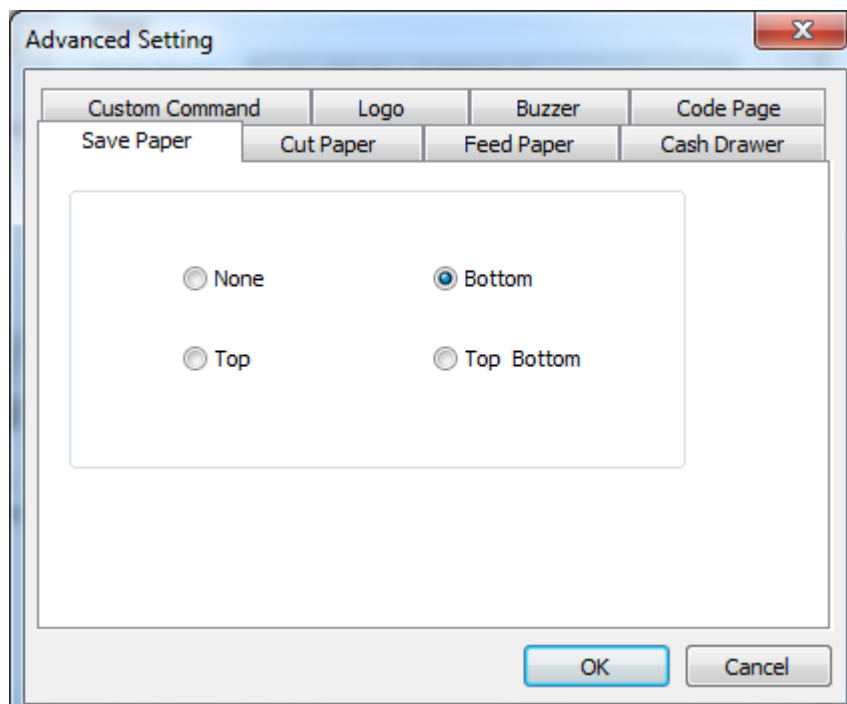


- Click on “Manager”, add or delete paper.

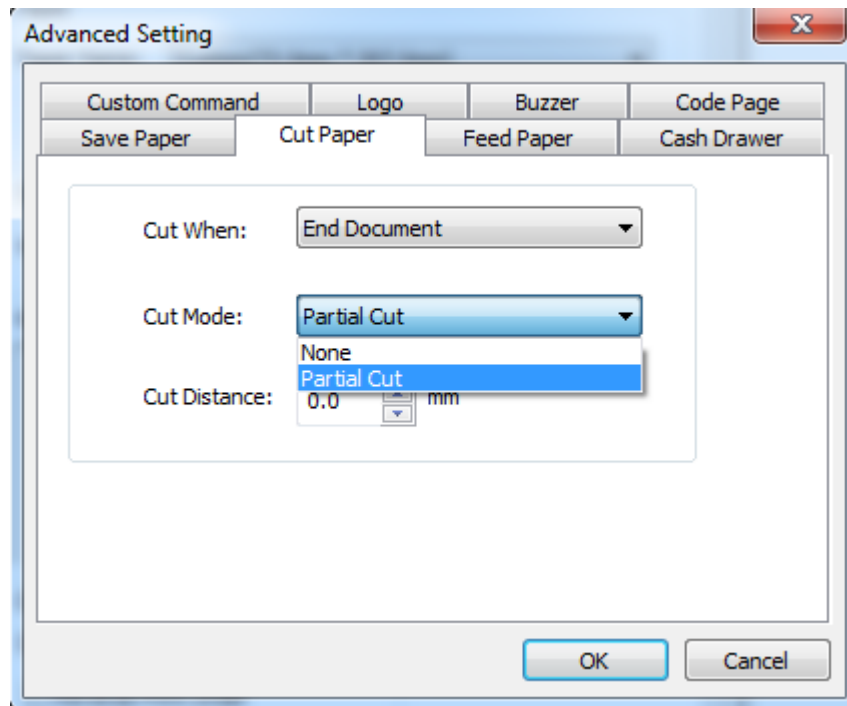
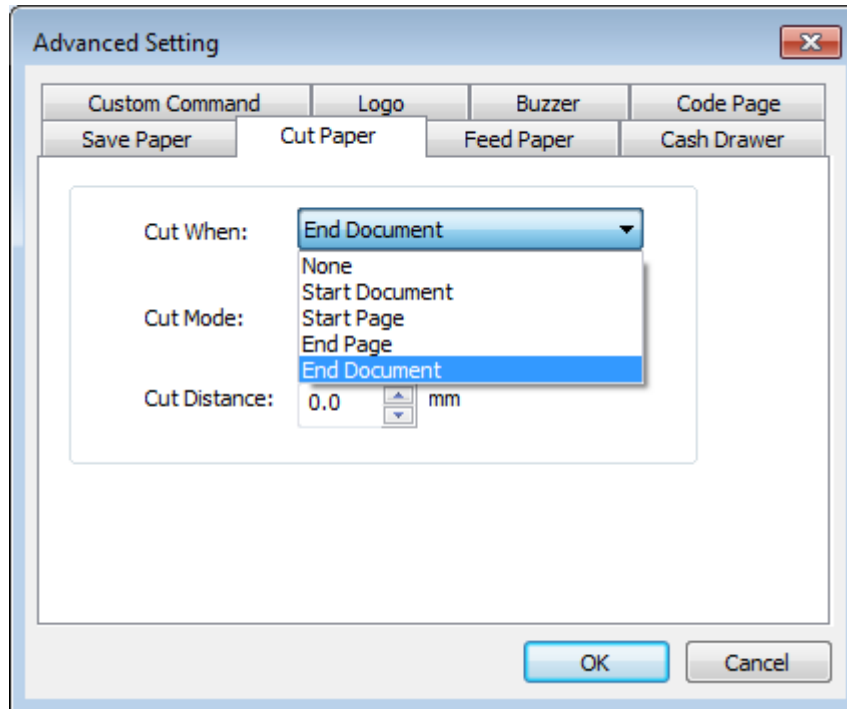


- Click on “Advanced” to set “Custom Command”, “Logo”, “Buzzer”, “Code Page”, “Save Paper”, “Cut Paper”, “Feed Paper”, “Cash Drawer”.

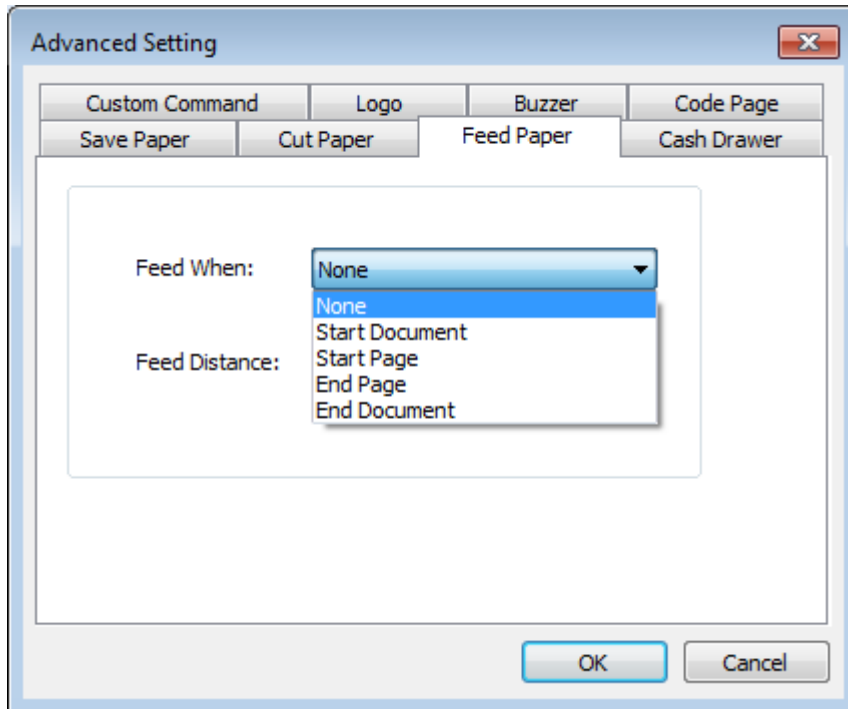
- Save paper



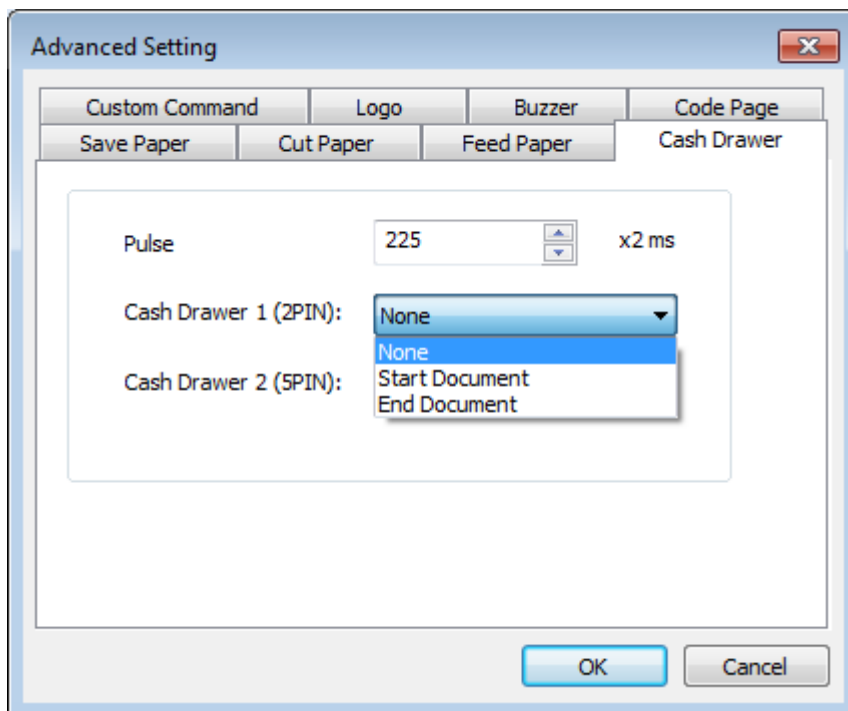
▪ Cut Paper

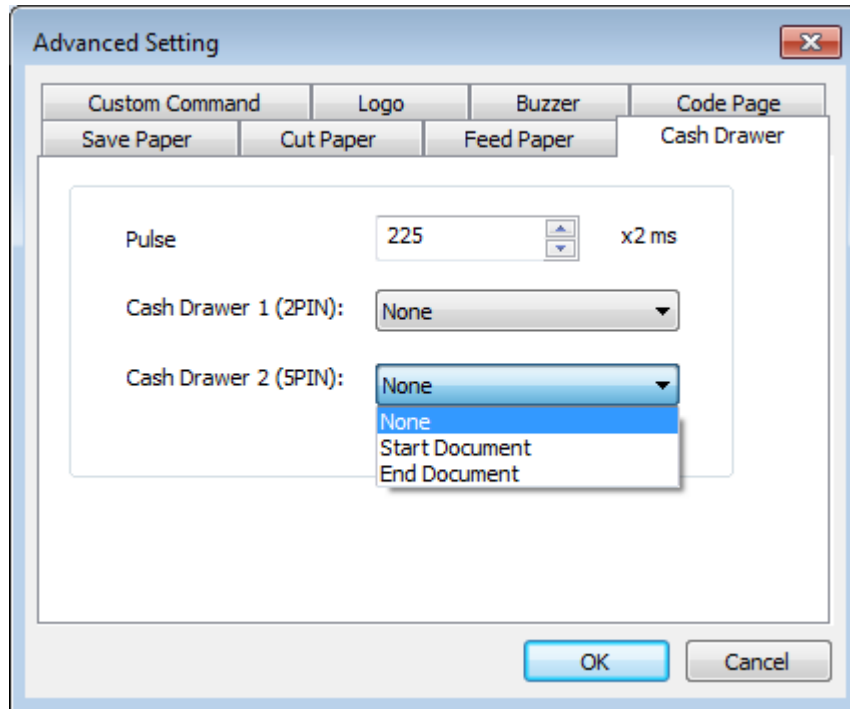


- Feed paper

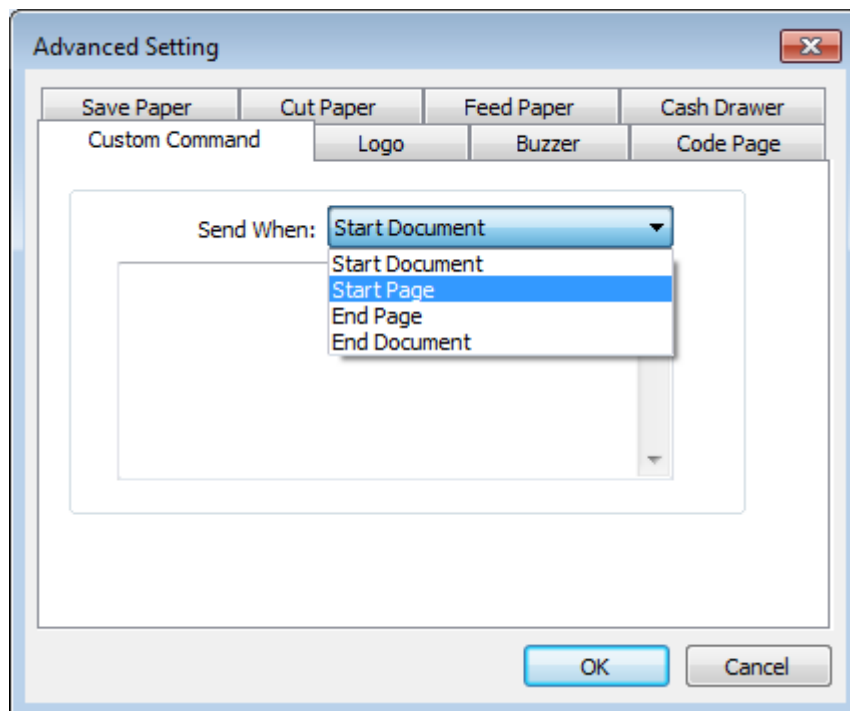


- Cash drawer

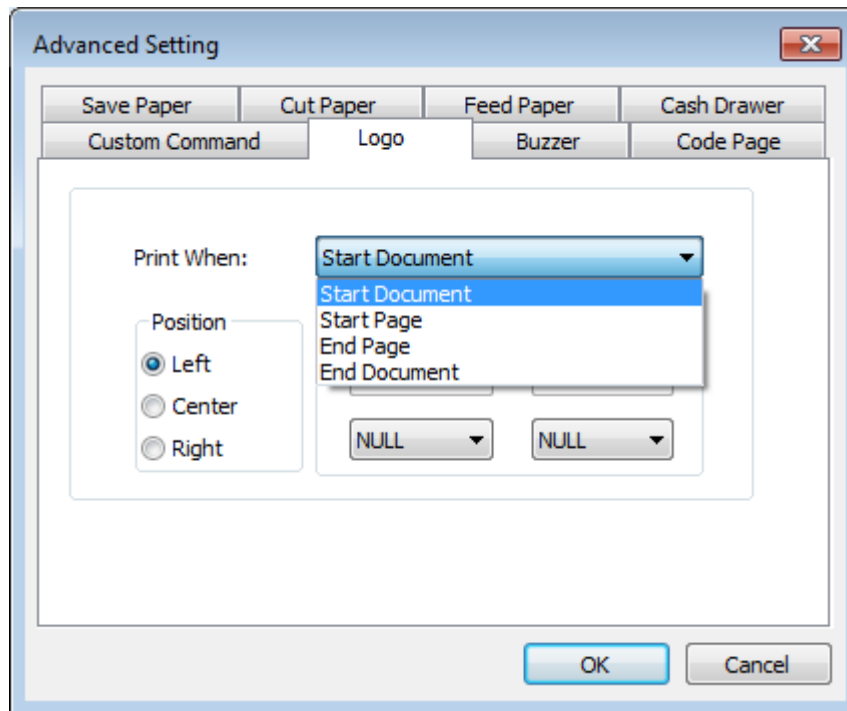




- Custom command

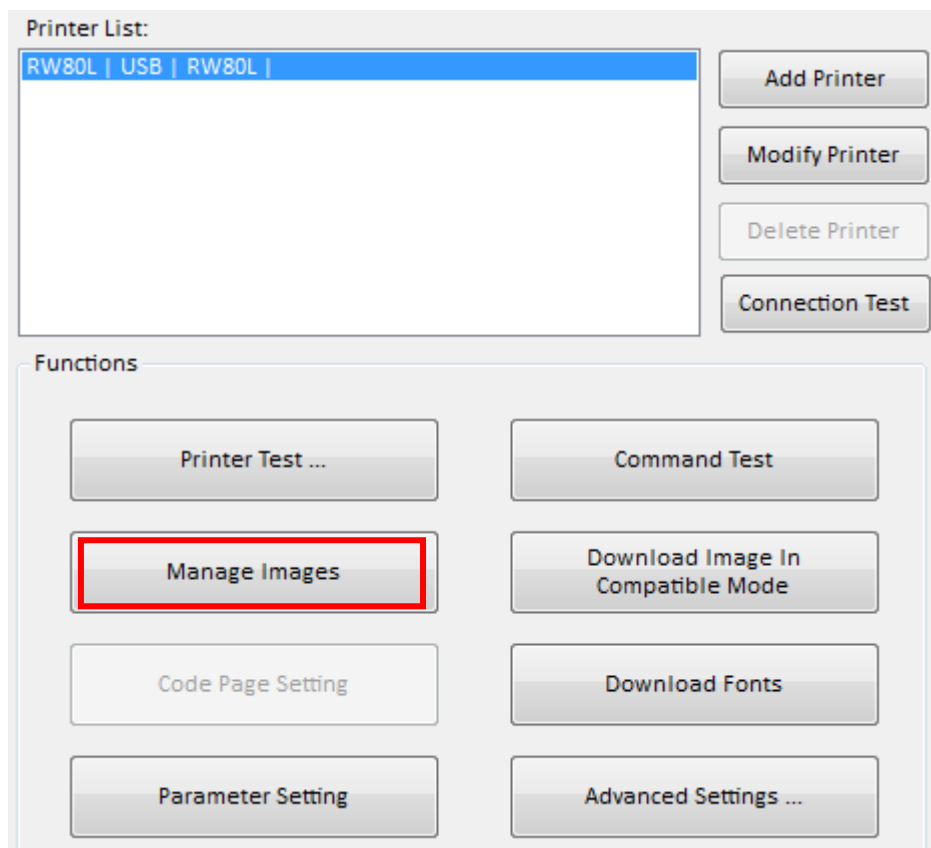


- Logo

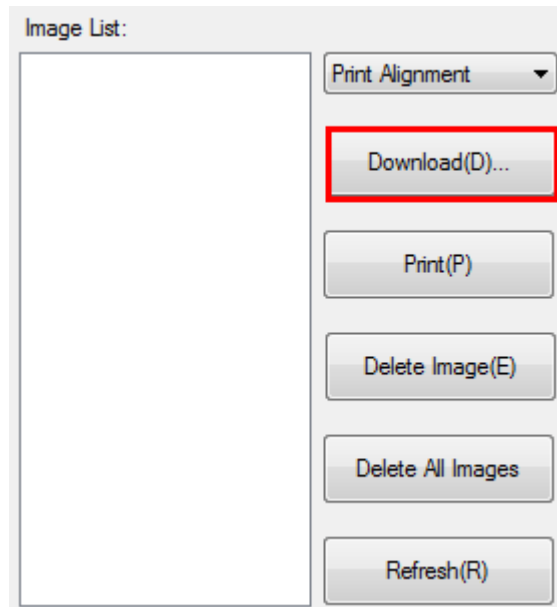


**Note: this setting needs to be set in utility.**

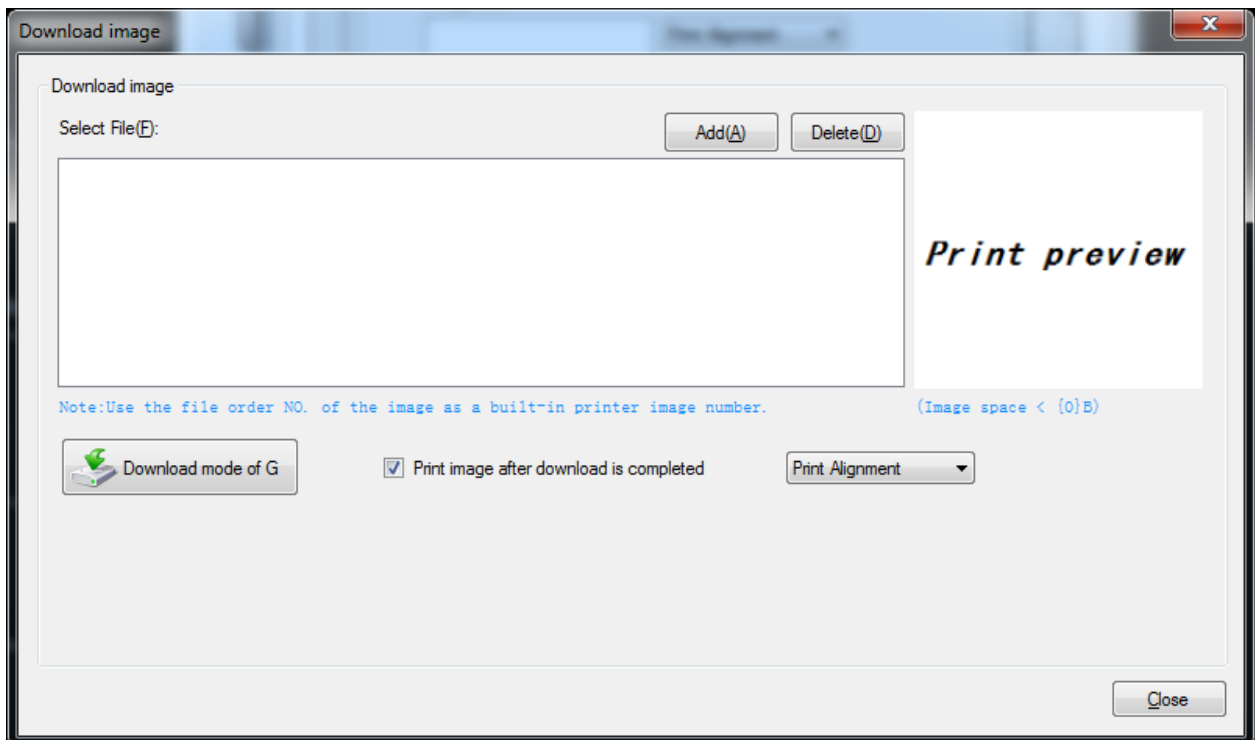
- ① Open the utility and click "Manage Images".

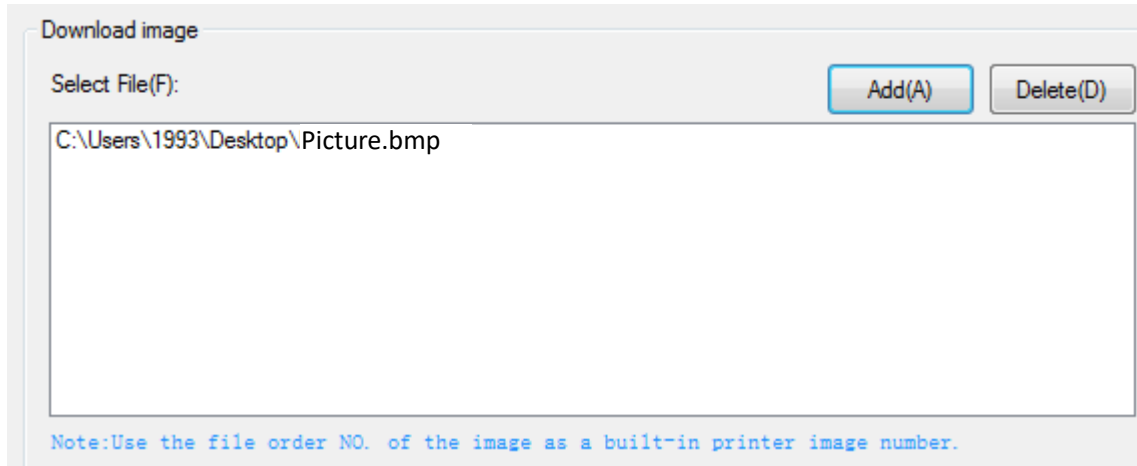


② Click "Download".

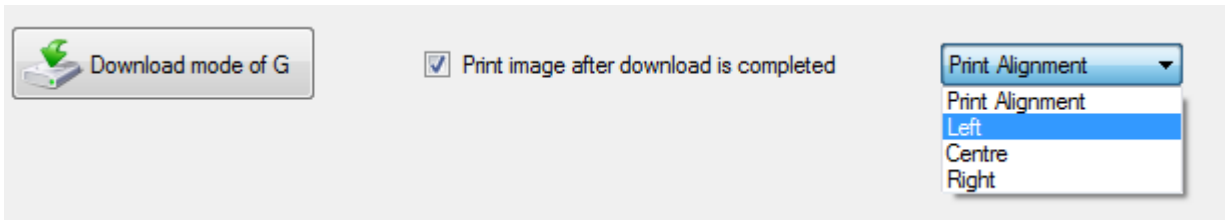


③ Click "Add" to add a logo. (BMP format is recommended)





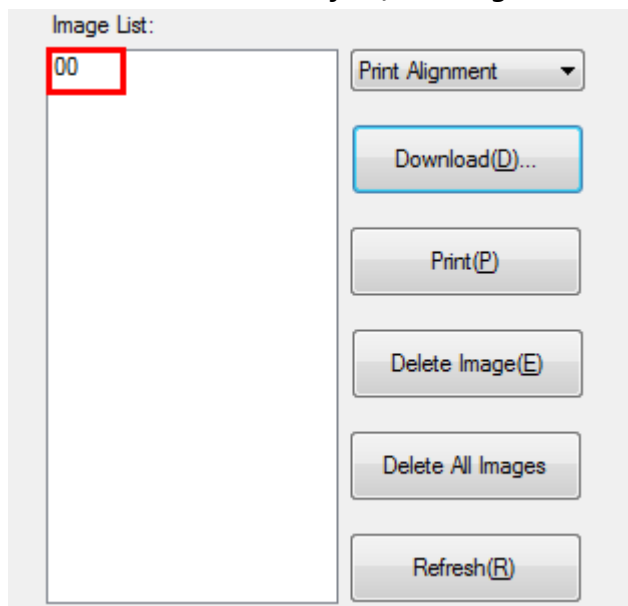
- ④ Select the print location, and then click "Download mode of G". (Such as: left print)



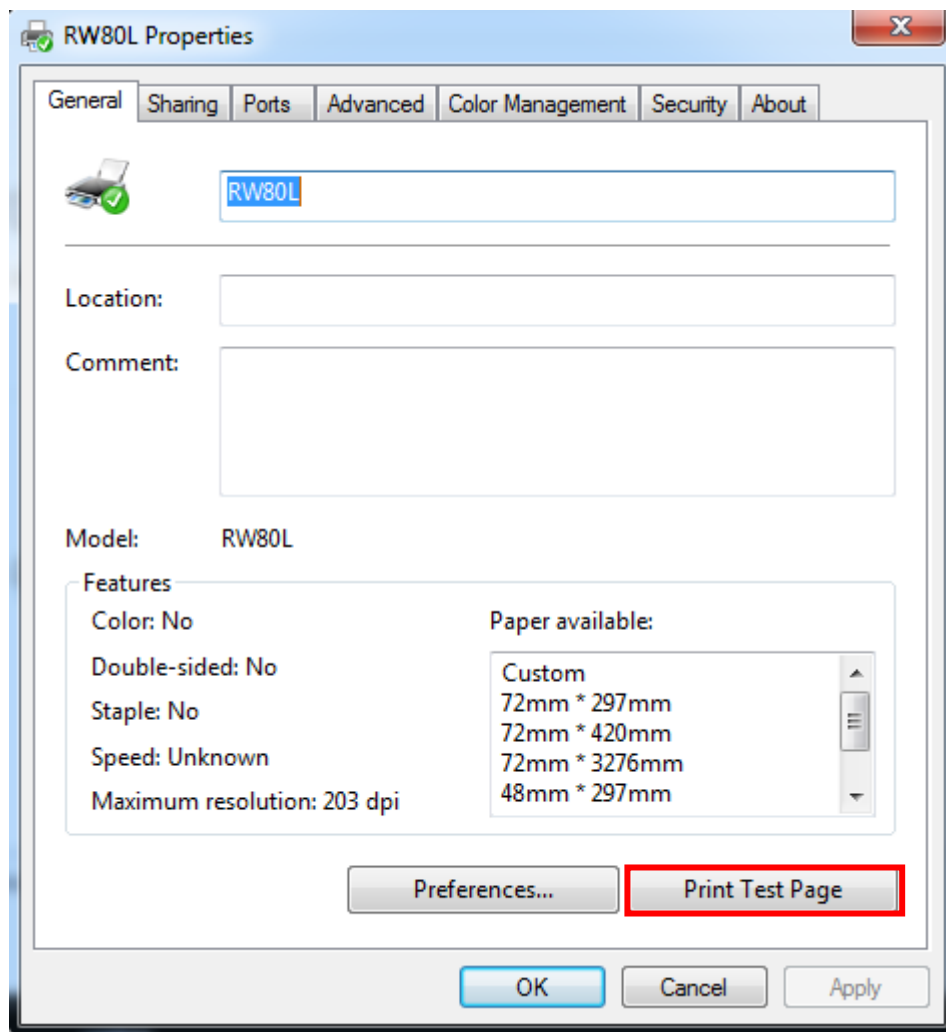
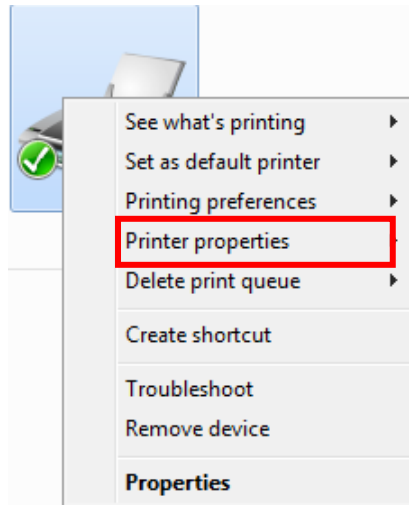
- ⑤ Return to image list to view the image number.



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

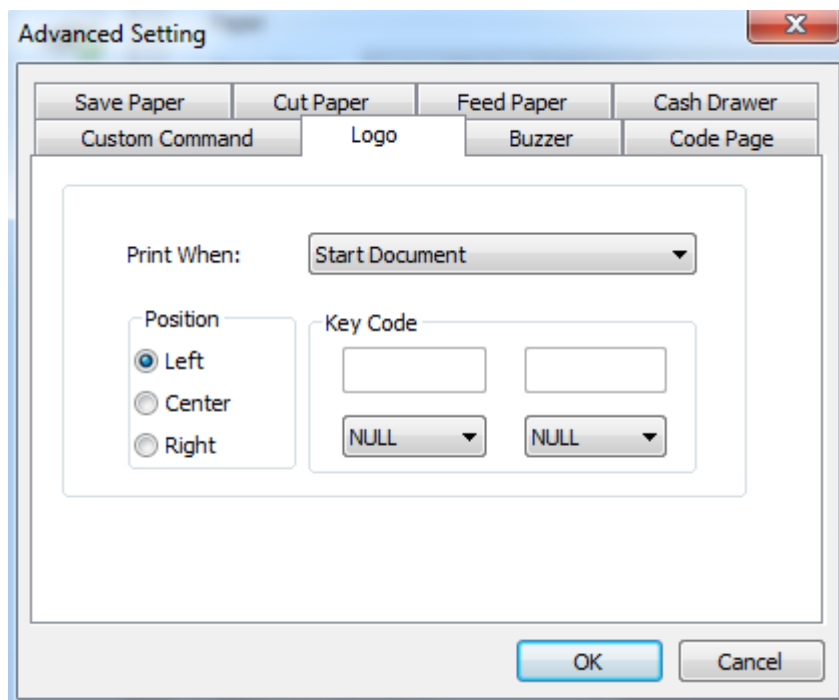
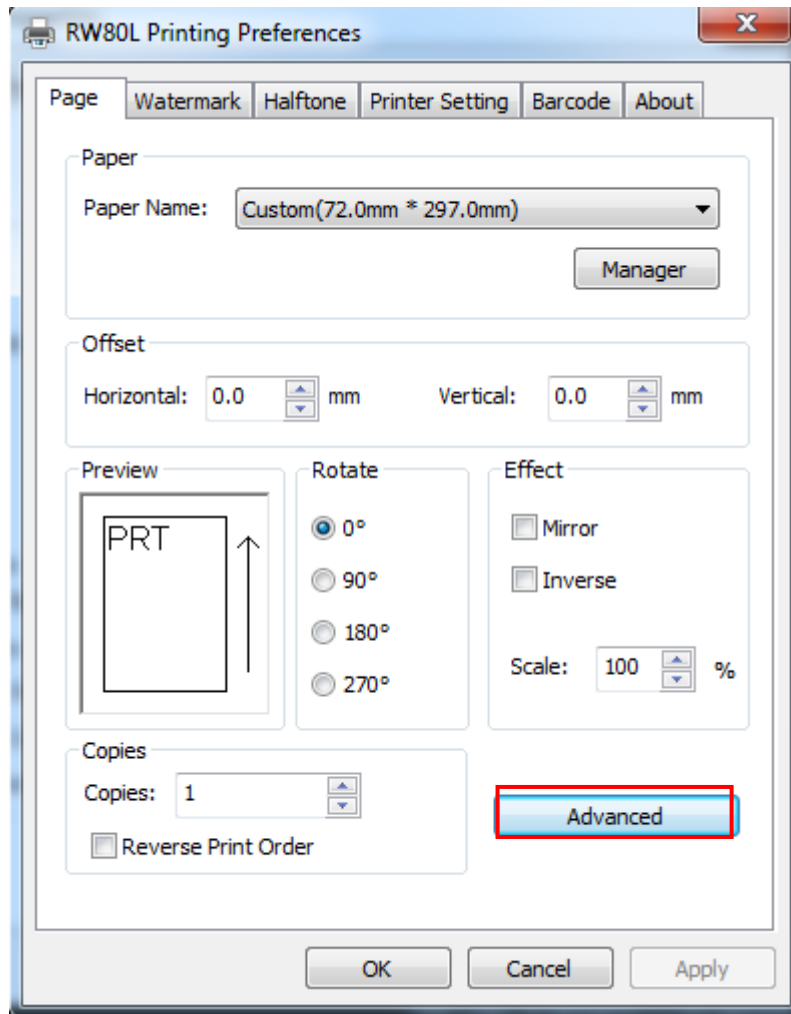


- ⑥ Select Printer properties, click “Print Test Page” to view the printing effect.

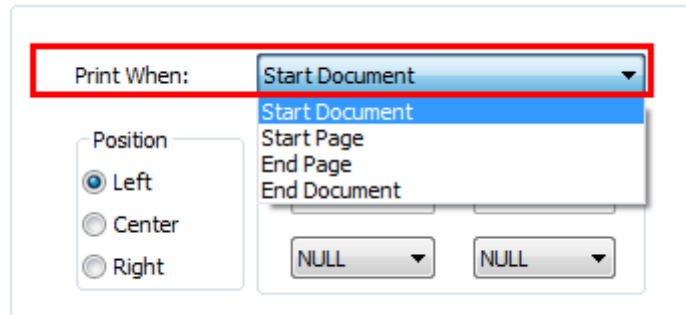




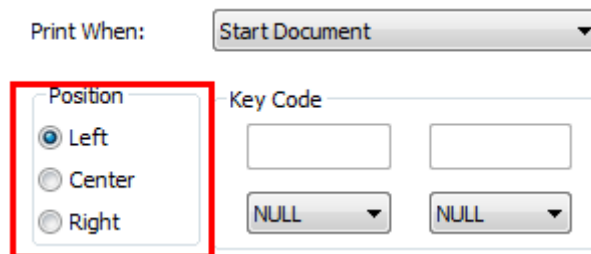
- ⑦ Click the “Advanced”, then click “Logo”.



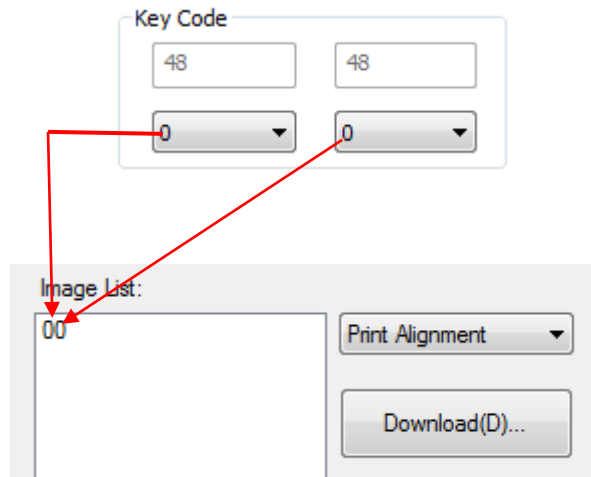
⑧ Set the printing time to print and click "OK". (Such as: Start Document)



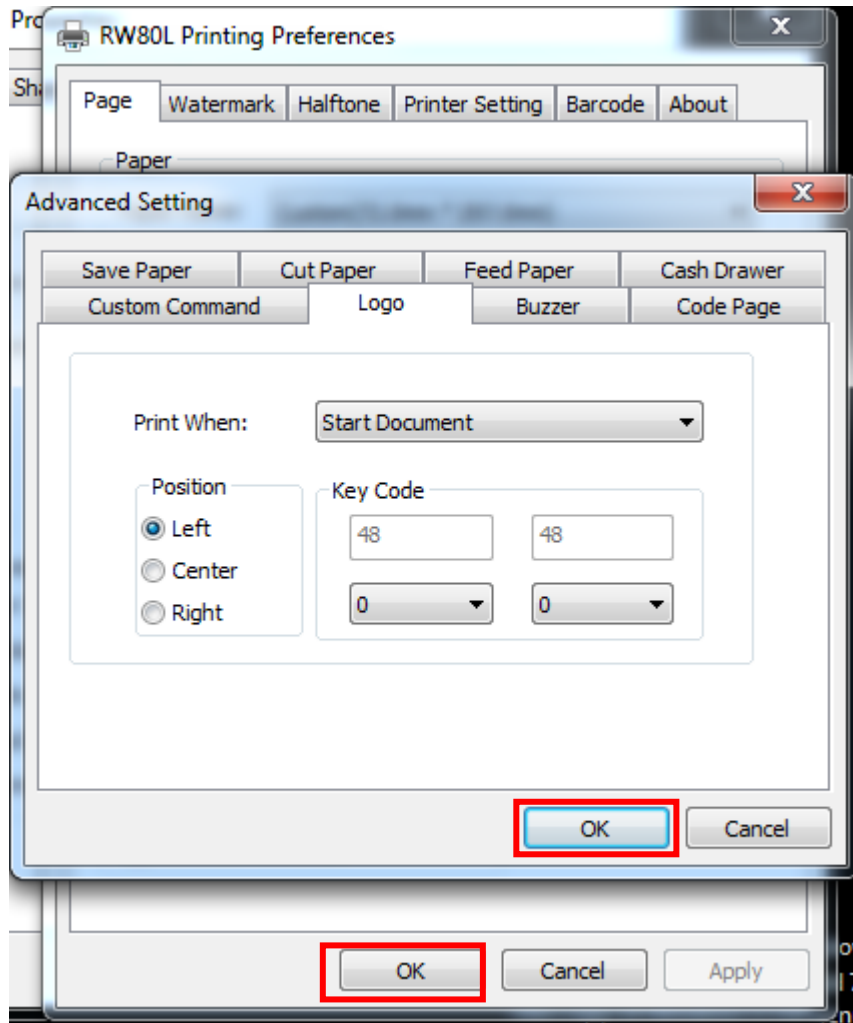
⑨ Return to the logo setting in driver, also select "Print left".



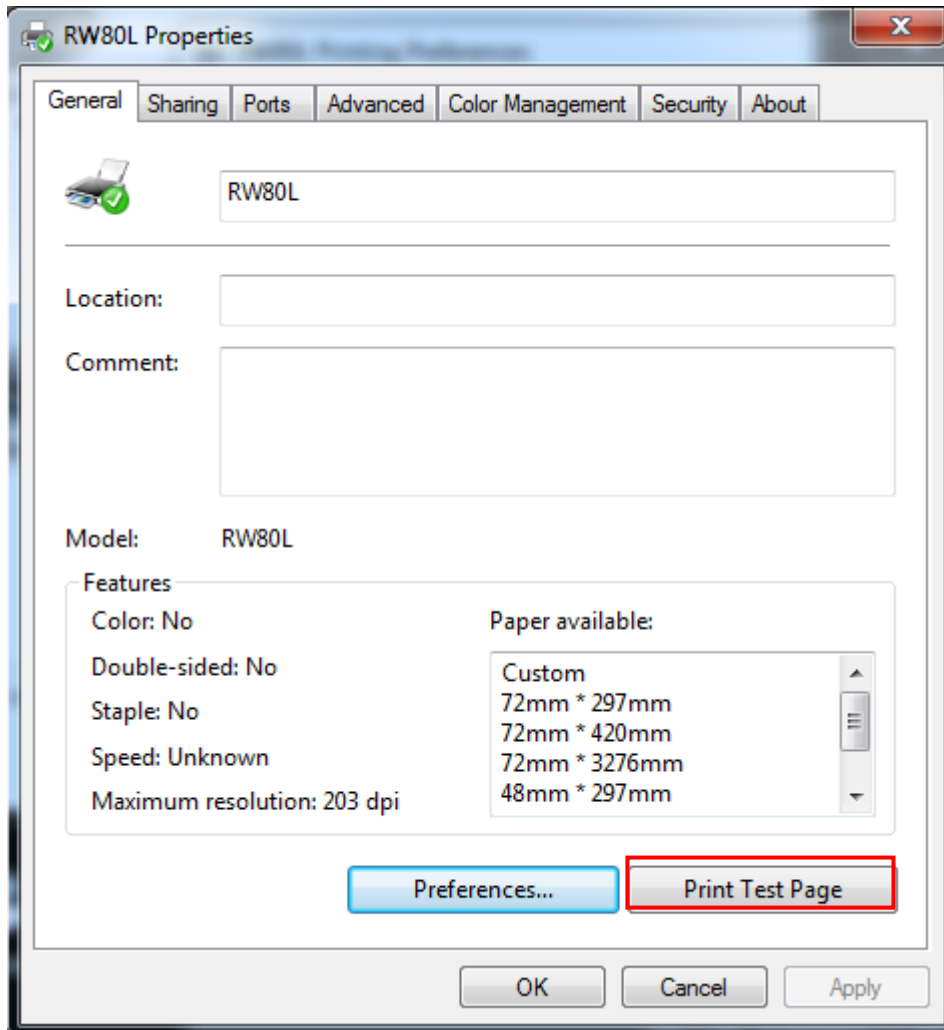
⑩ Set the key Code according to the image number. (Such as: 0 0)



⑪ Then click “OK”.



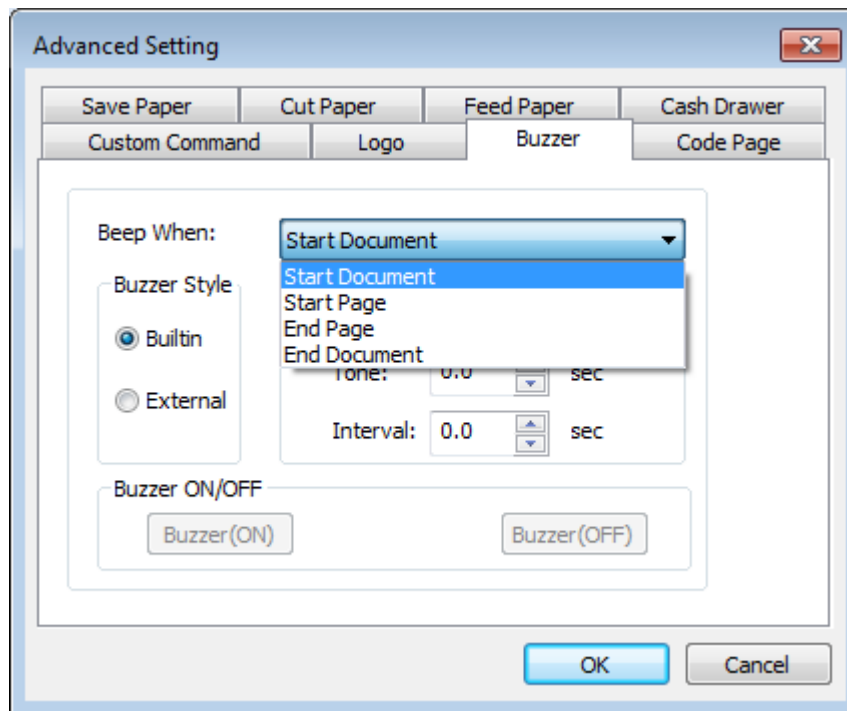
⑫ Click “Print Test Page” to view the printing effect.



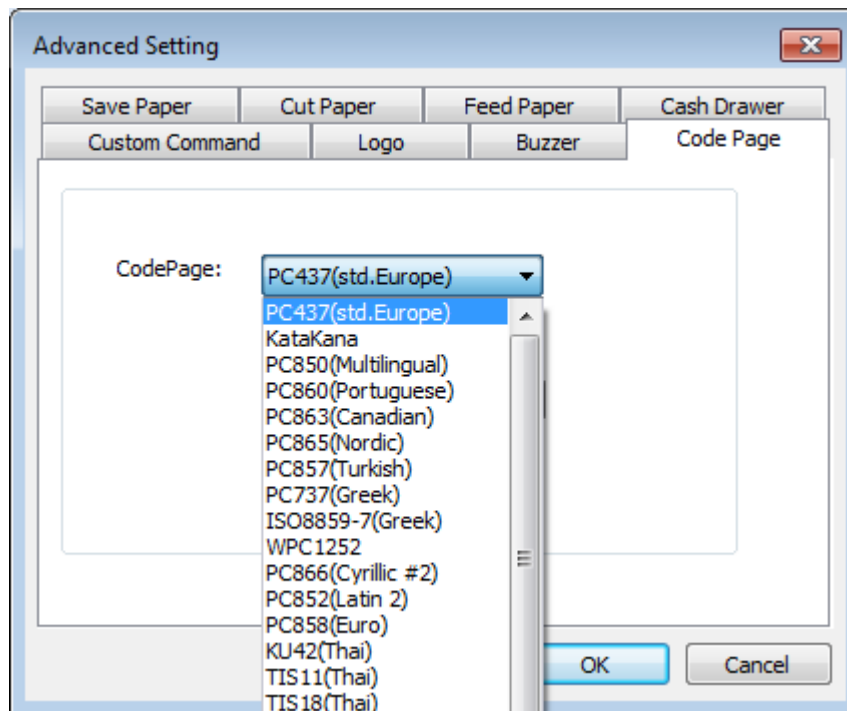
▪ Buzzer



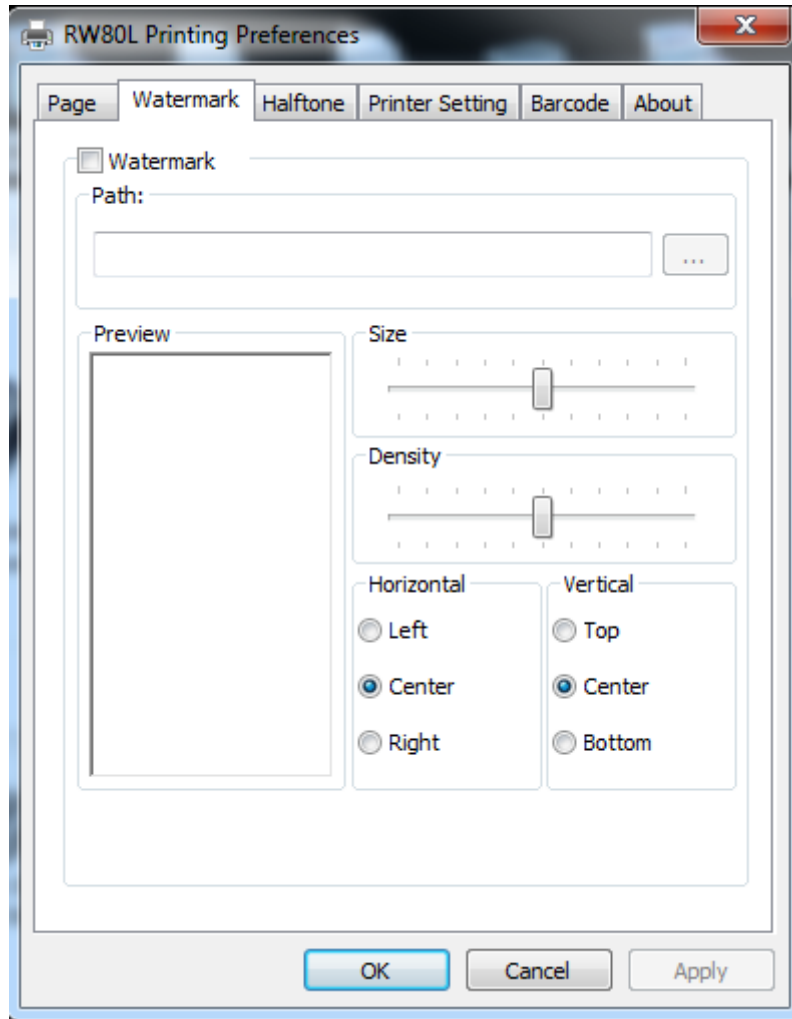
*Note: this setting need to be set in utility.*



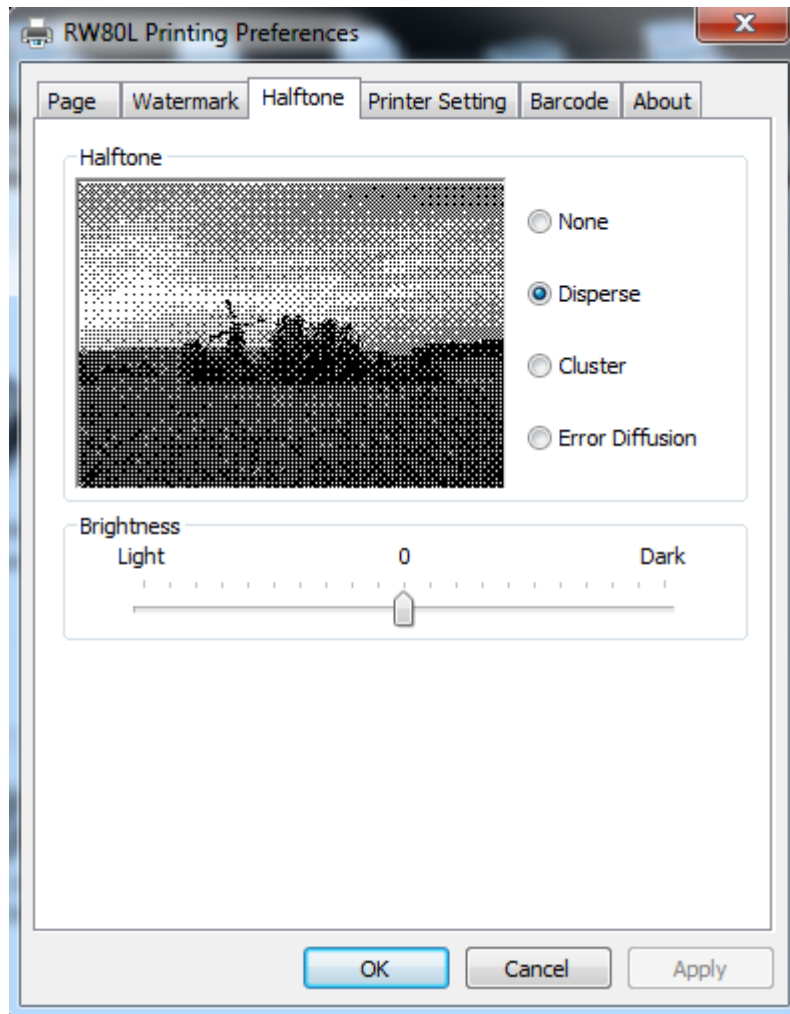
▪ Code Page



3) Click “Watermark”. Set watermark to print (Only BMP file can be selected).



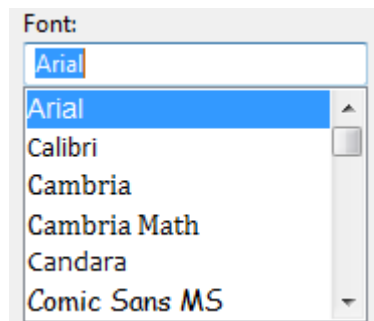
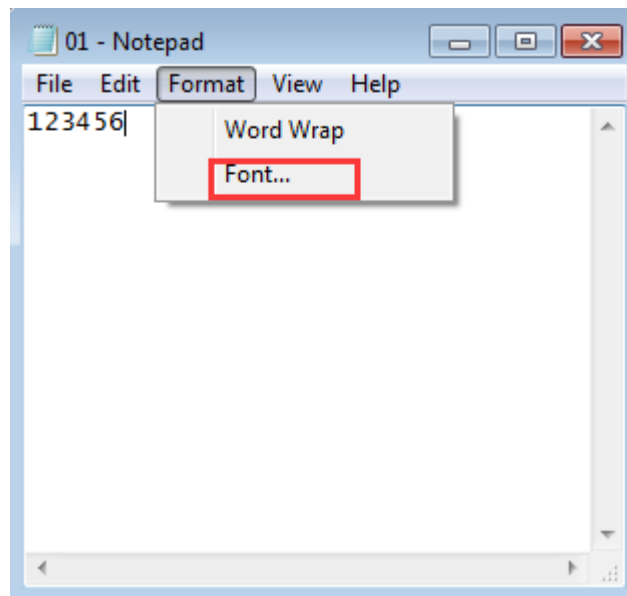
4) Click “Halftone” to set the halftone.



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:

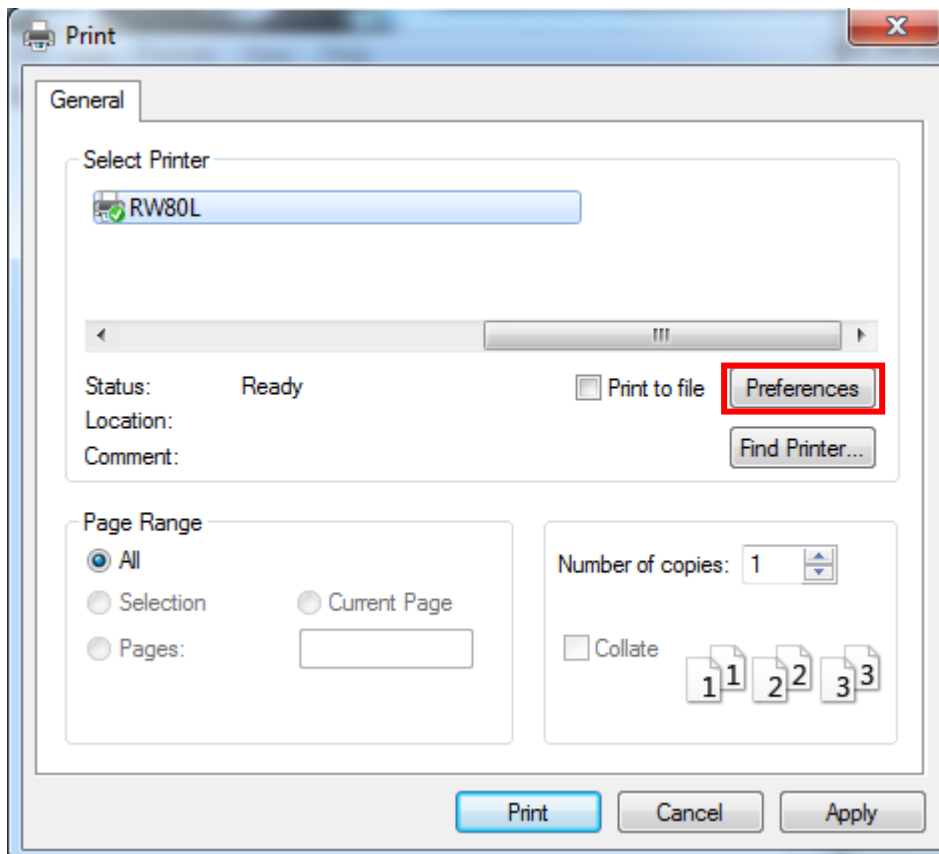
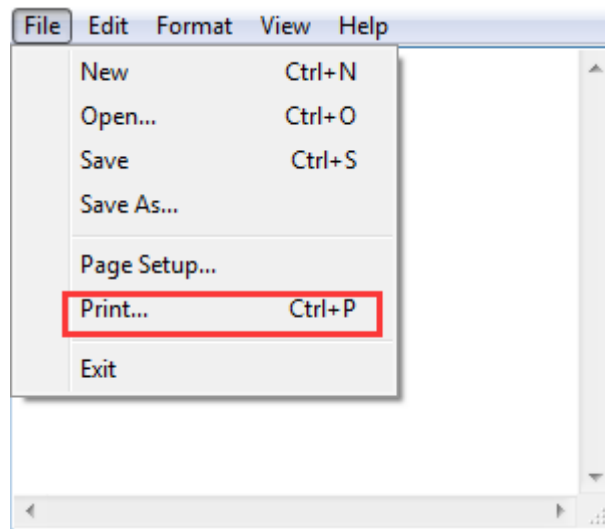
- Sets the data "123456" font type to a different font from the main document. Such as: Arial.



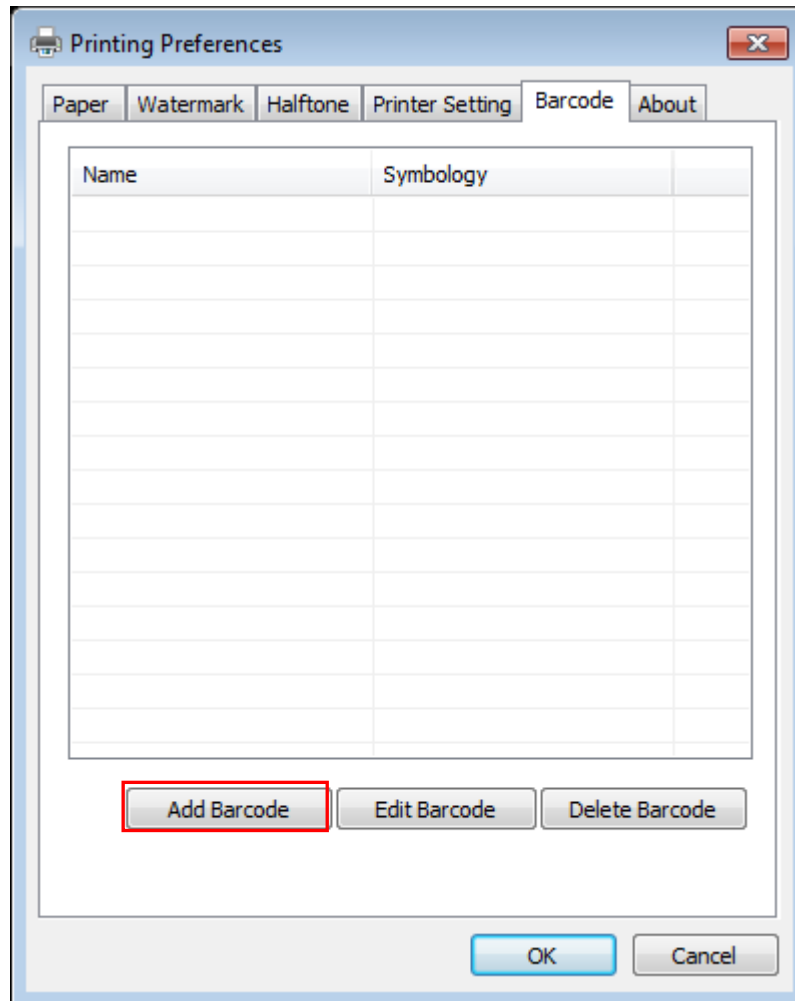


- Open the Preference.

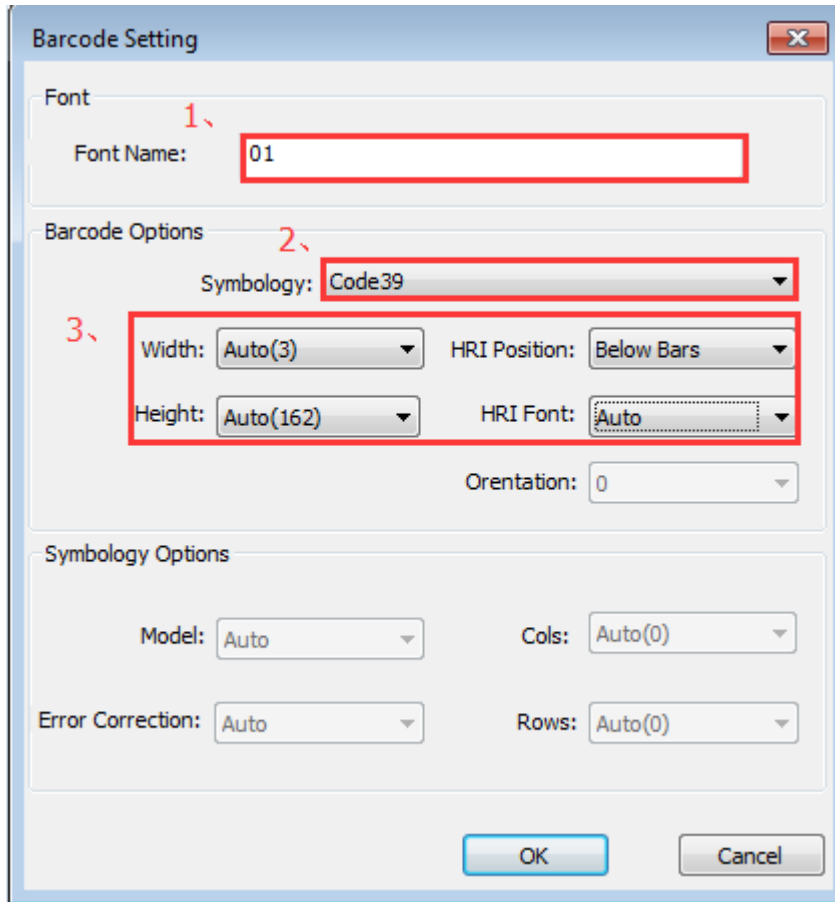
If the document is open, you can set it in the document: file-print-preferences.



1) Add Barcode firstly.



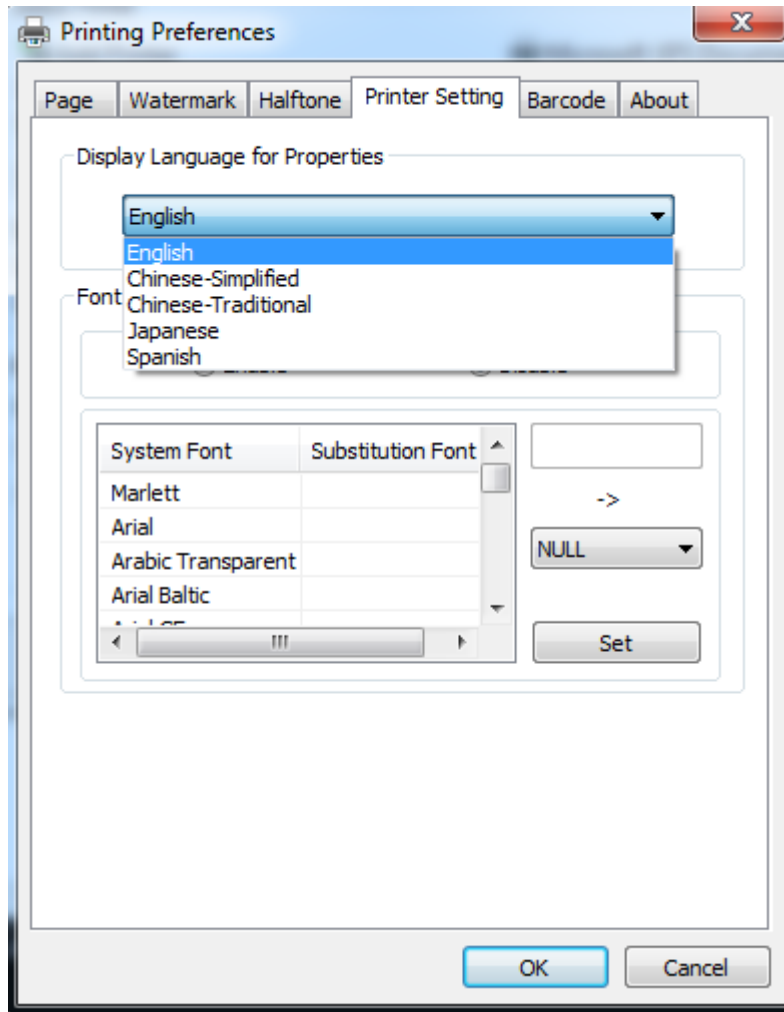
2) Set the "Font Name" and the "Barcode Option".



Name	Symbology
01	Code39

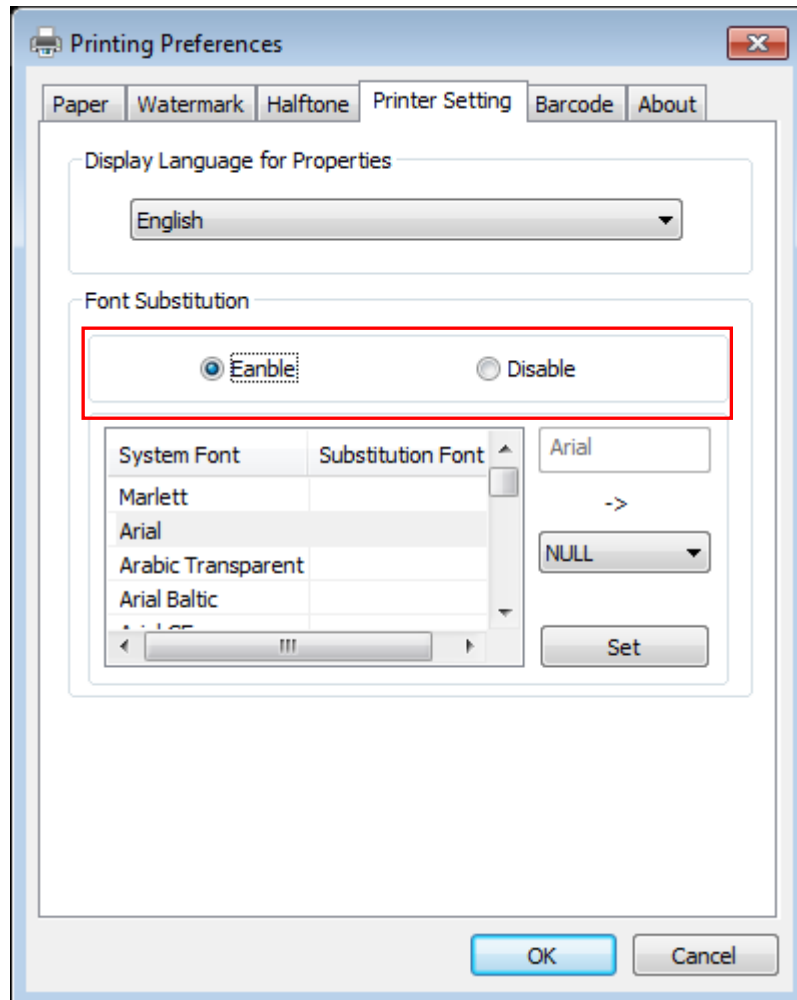
3) Click the “Printer Setting”.

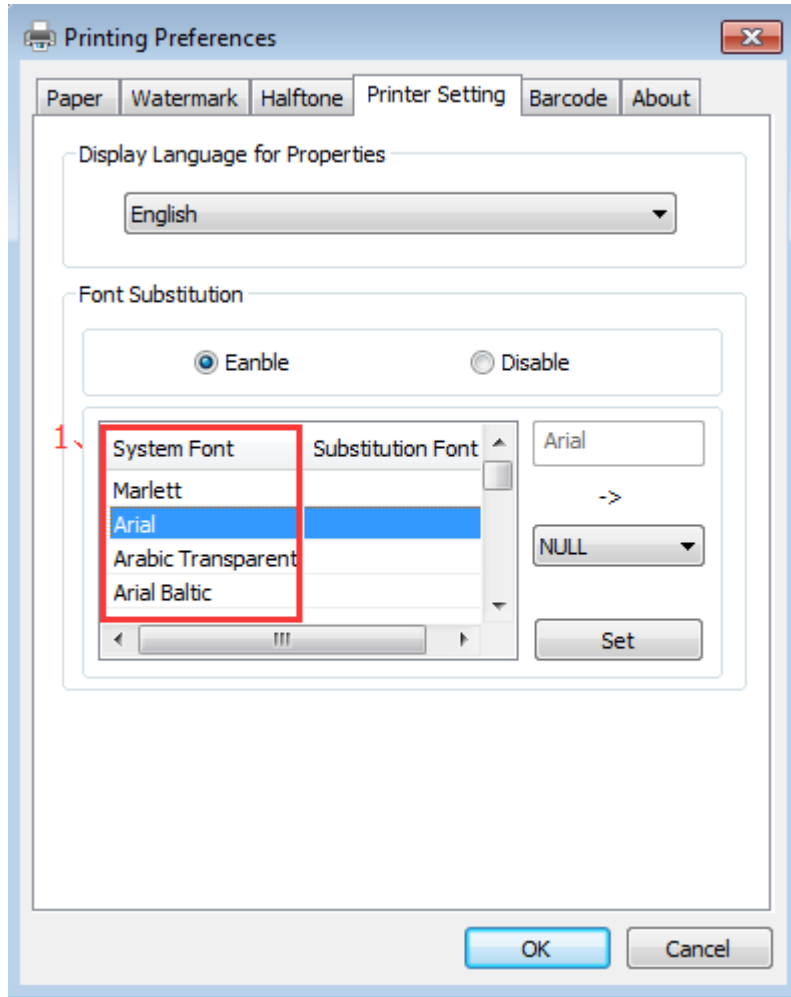
- Choose the “Display Language for Properties”

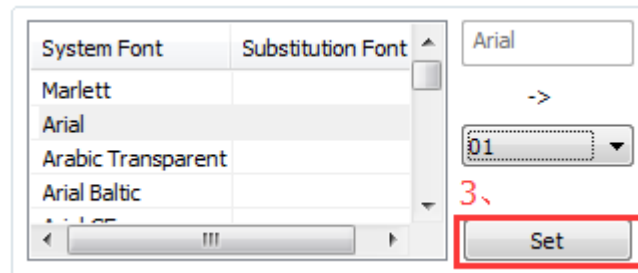
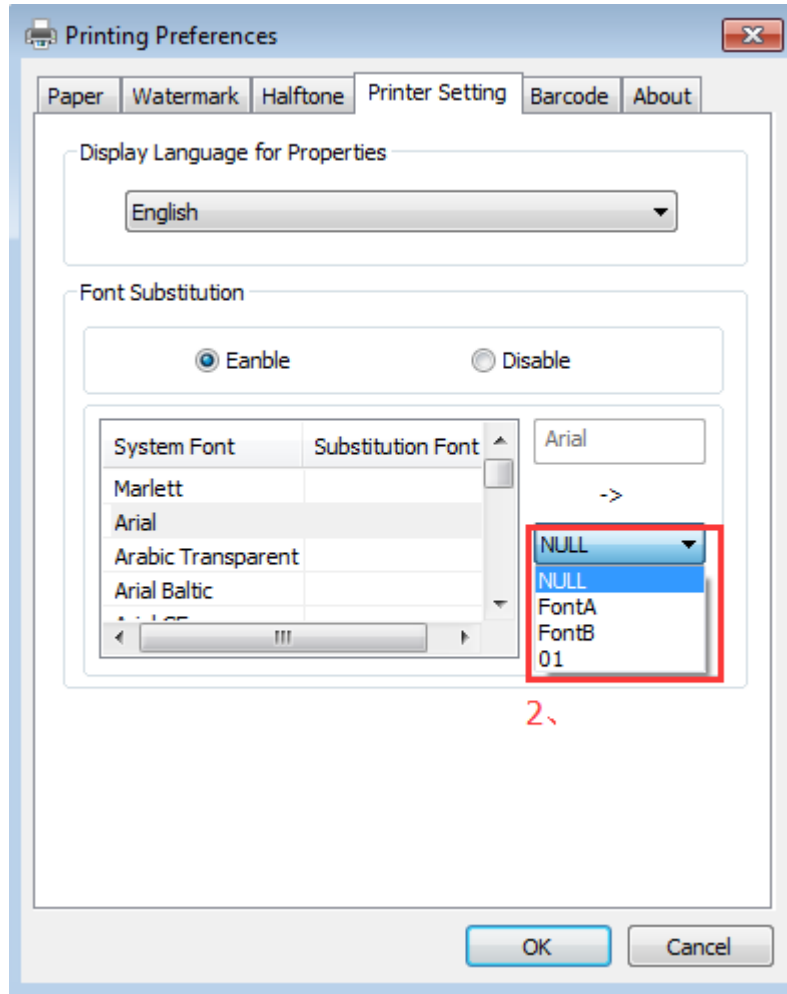


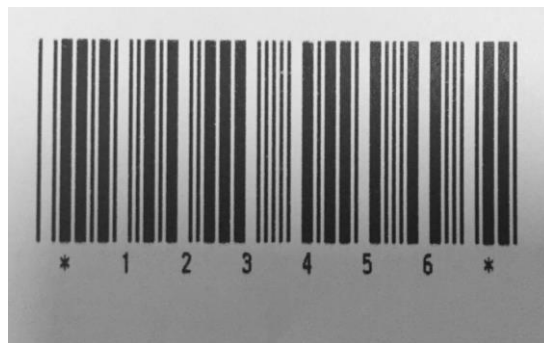
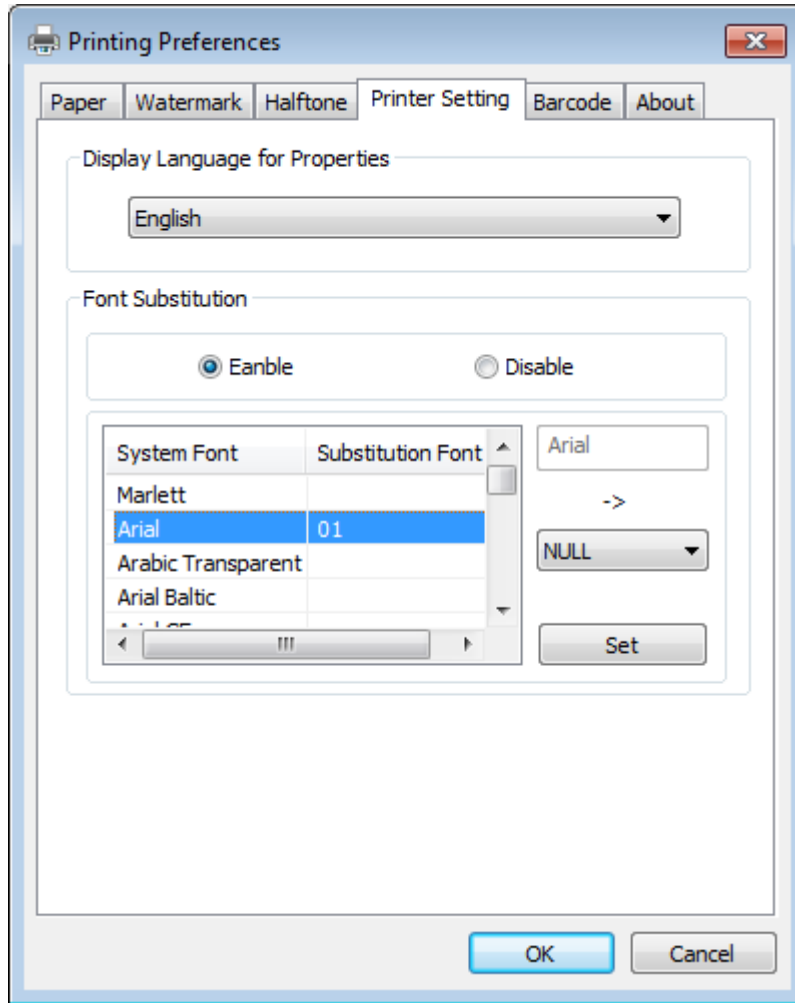
- Turn on the “Font Substitution”, select the system text need to be replaced (for example, Arial), and then select the font you want to replace (for example, 01) and click Settings, and the replacement font will display "01".

the steps are as follows:





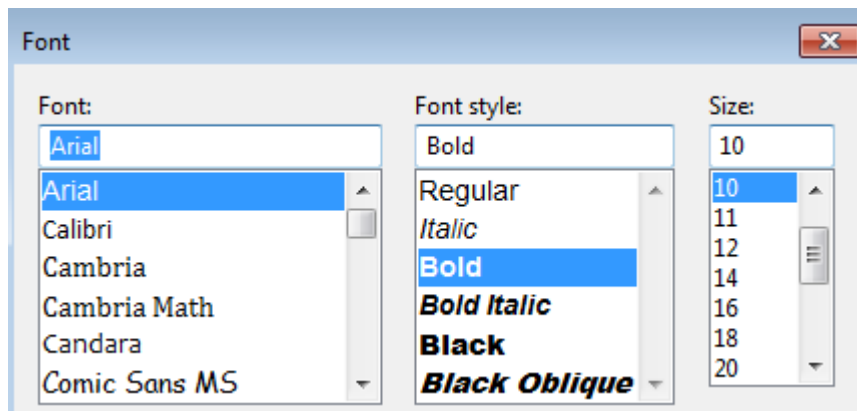




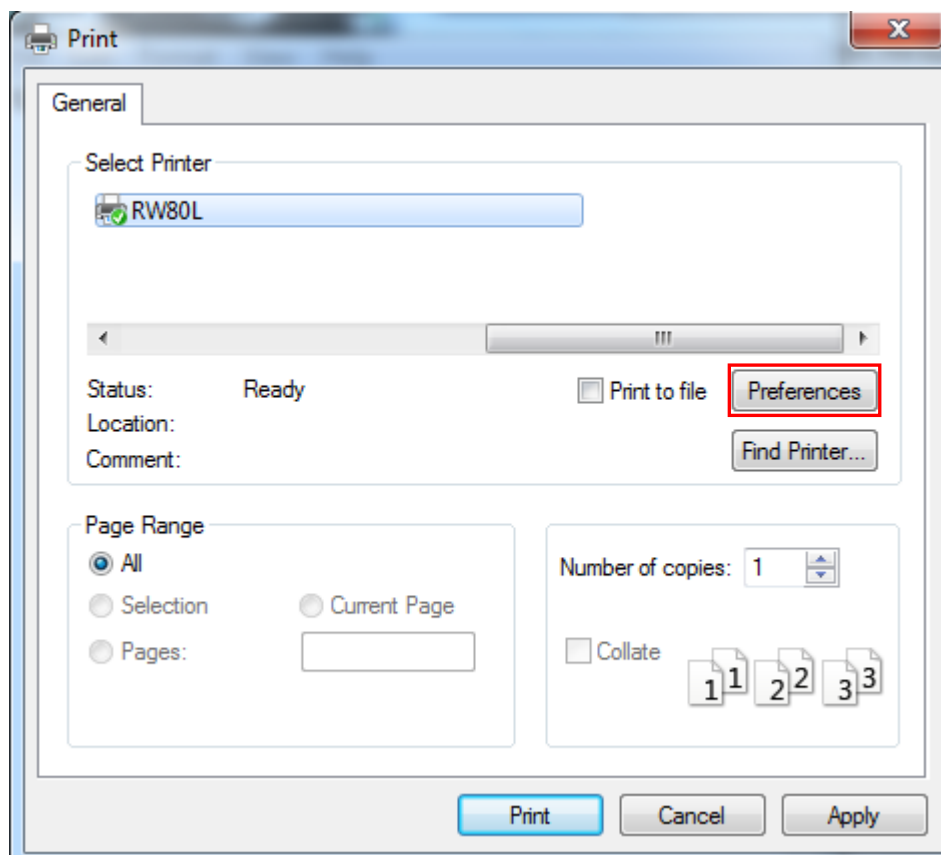


- If you do not have a barcode set, the action is as follows:

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

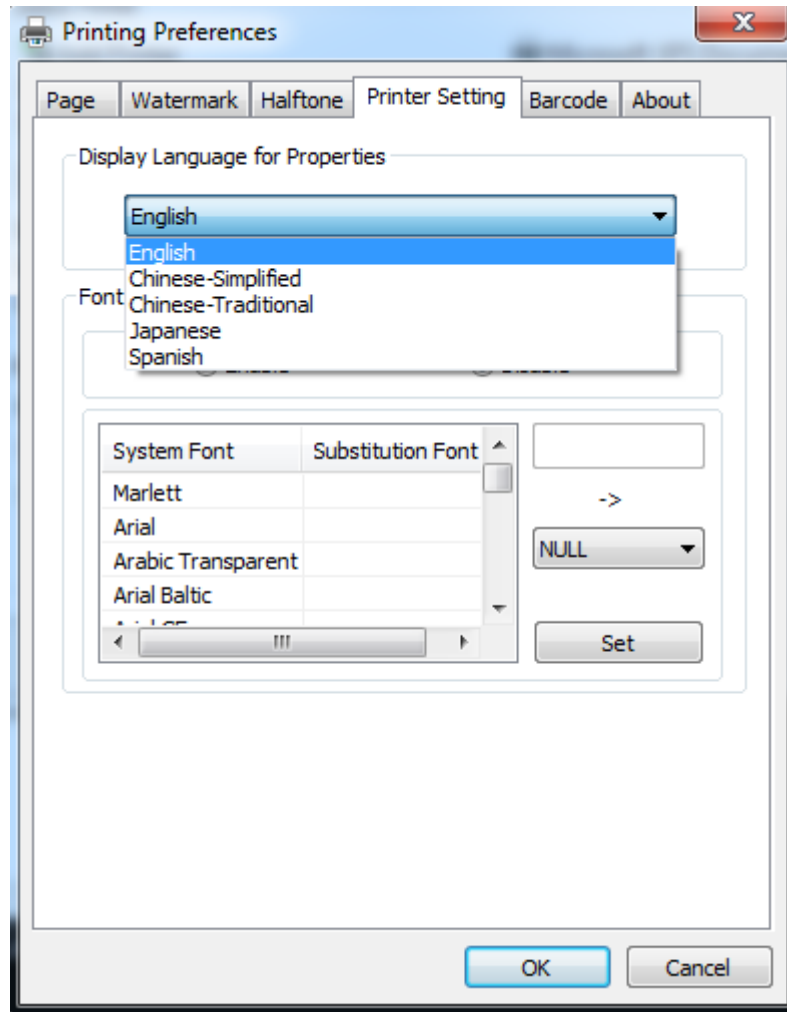


2) Set the Printing preferences.

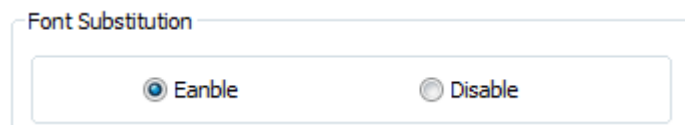


- 3) Click the “Printer Setting”.

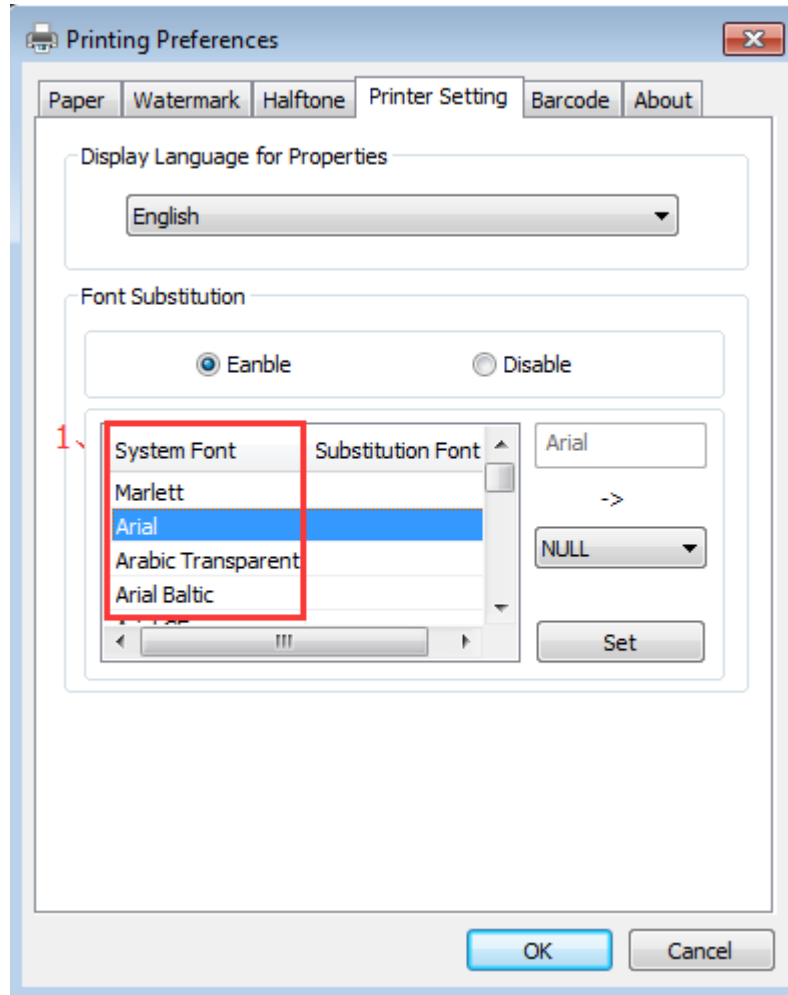
  - Choose the “Display Language for Properties”.



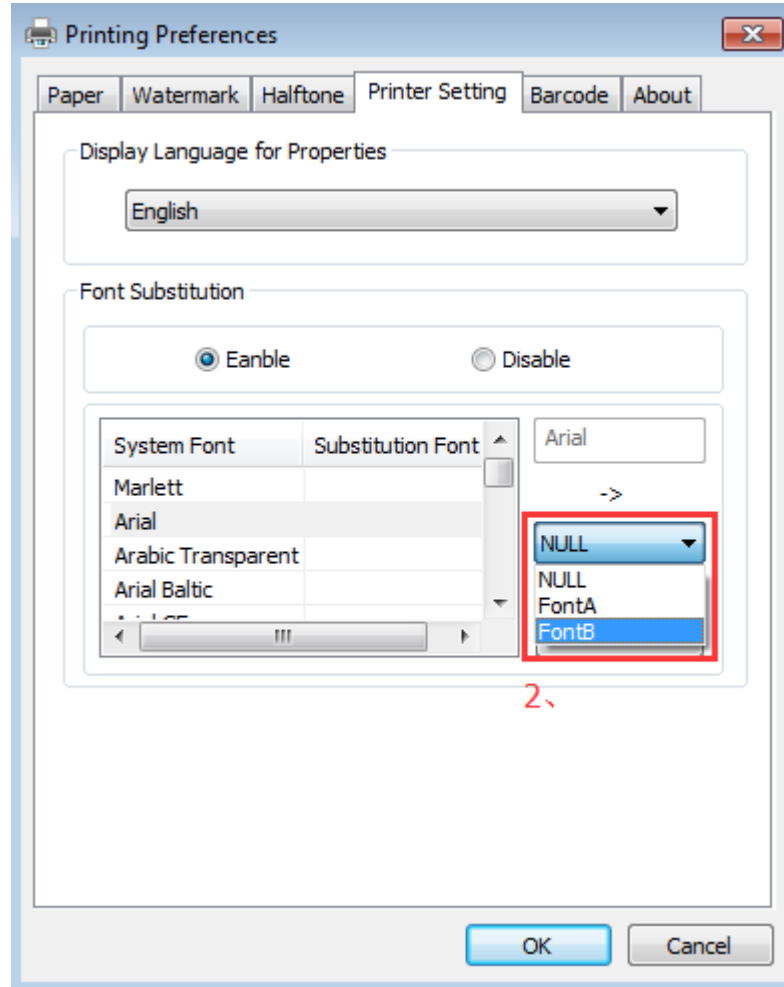
- 4) Turn on the “Font Substitution”.



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

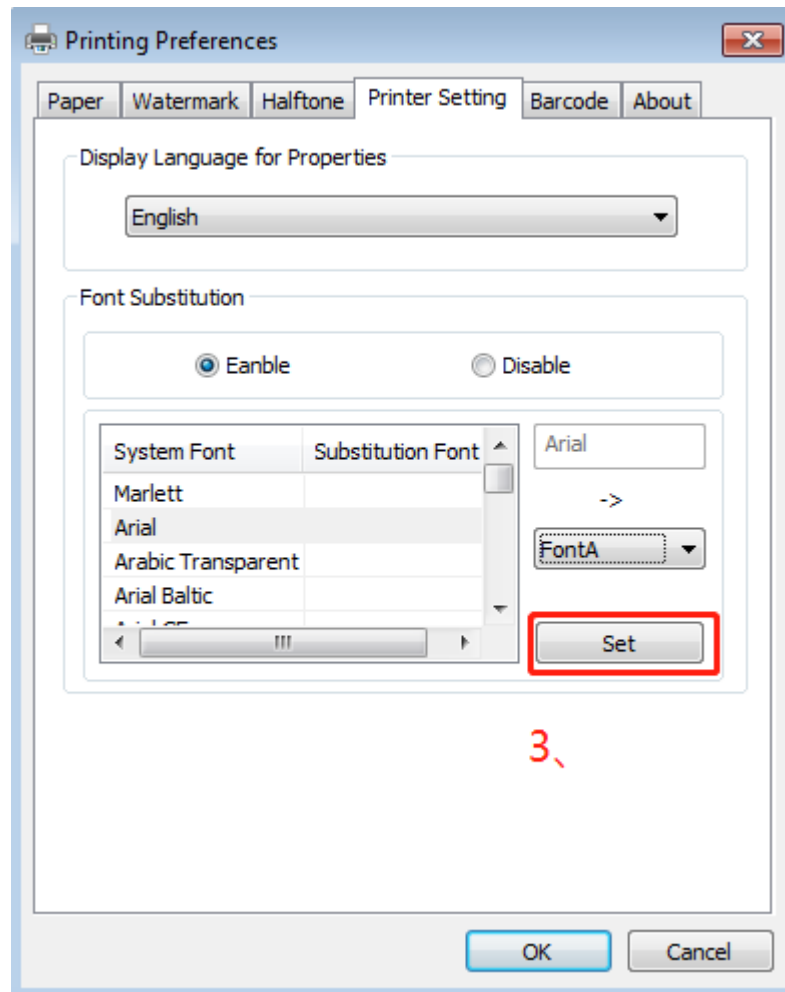


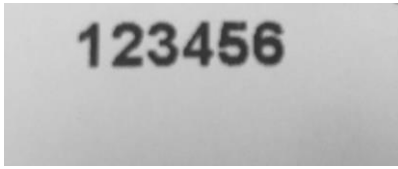
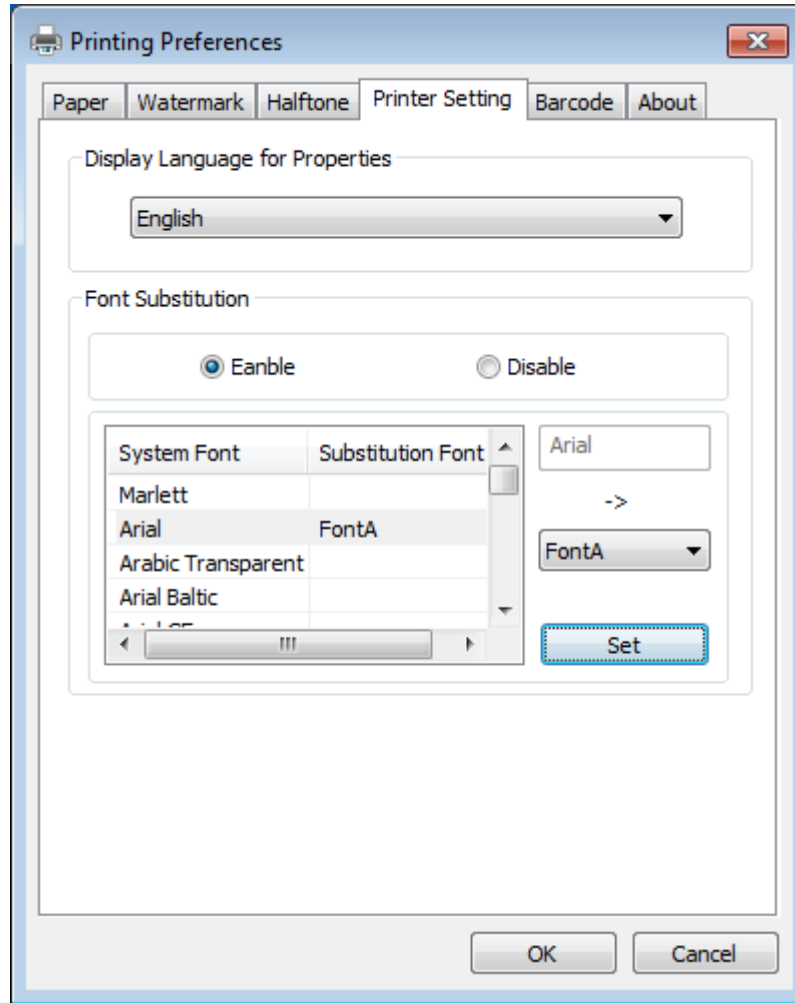
6) Select the font to that you went to replace.



2、

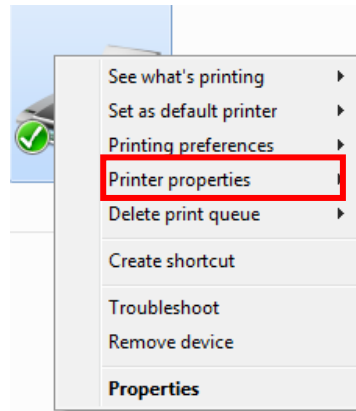
7) Click "Set".



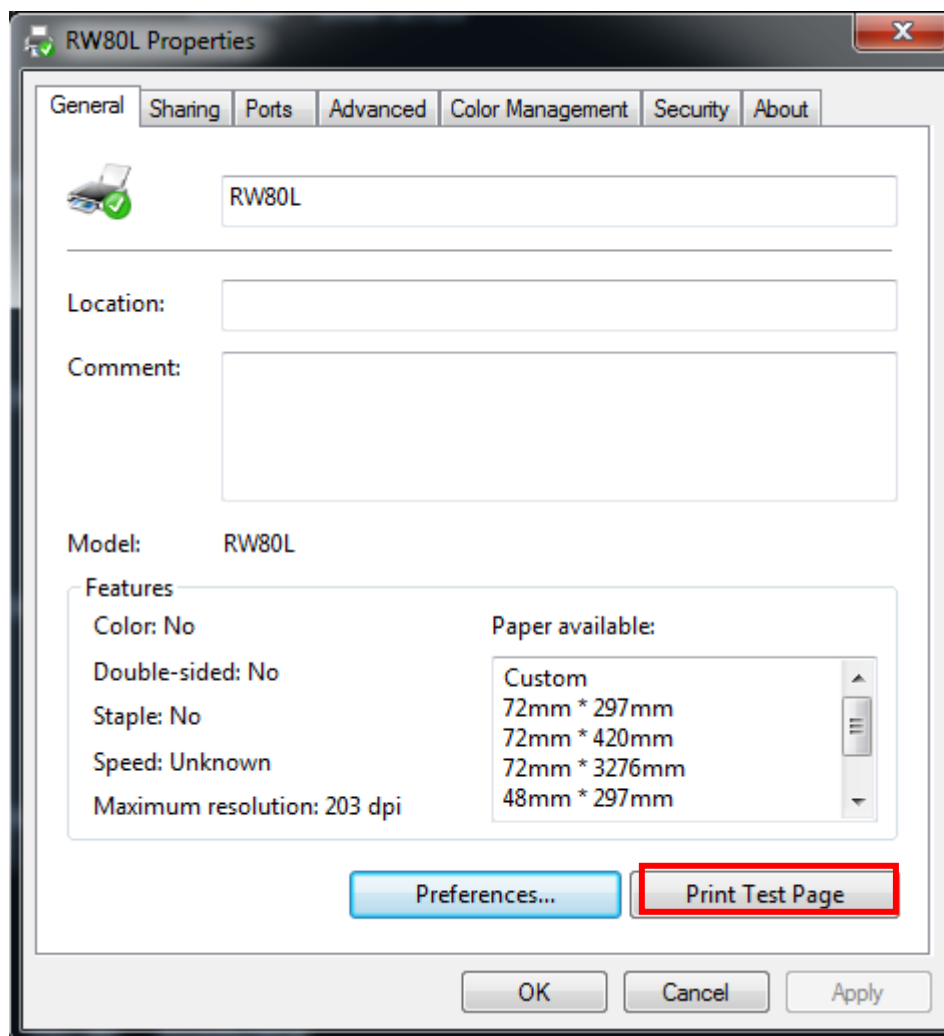


### 9.5.2 Other Settings

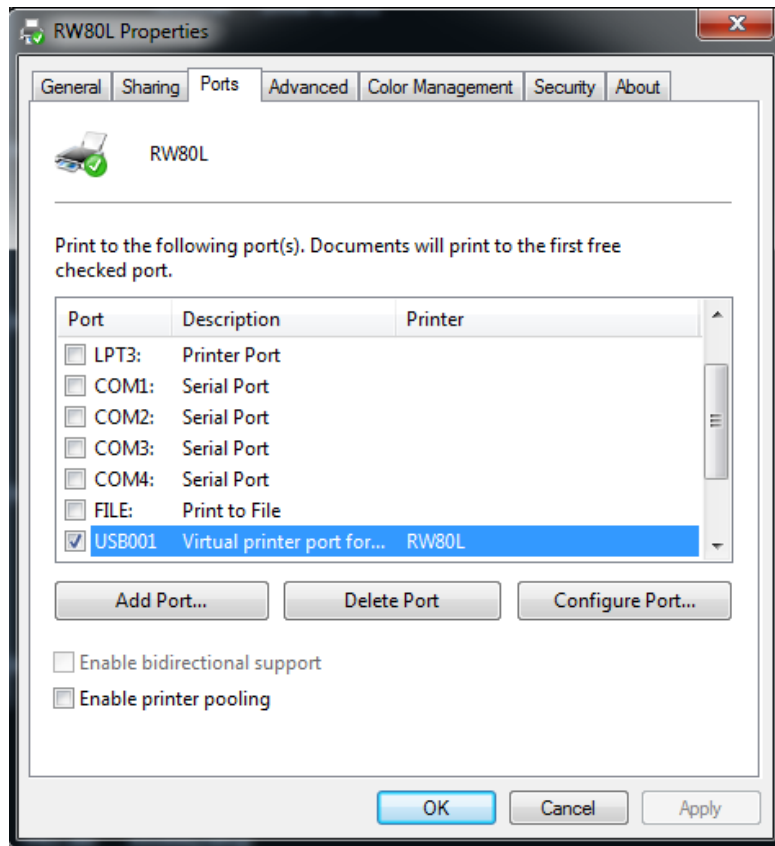
1) Click "Start" → "Devices and Printers". Right click "RW80L" and choose "Printer properties".



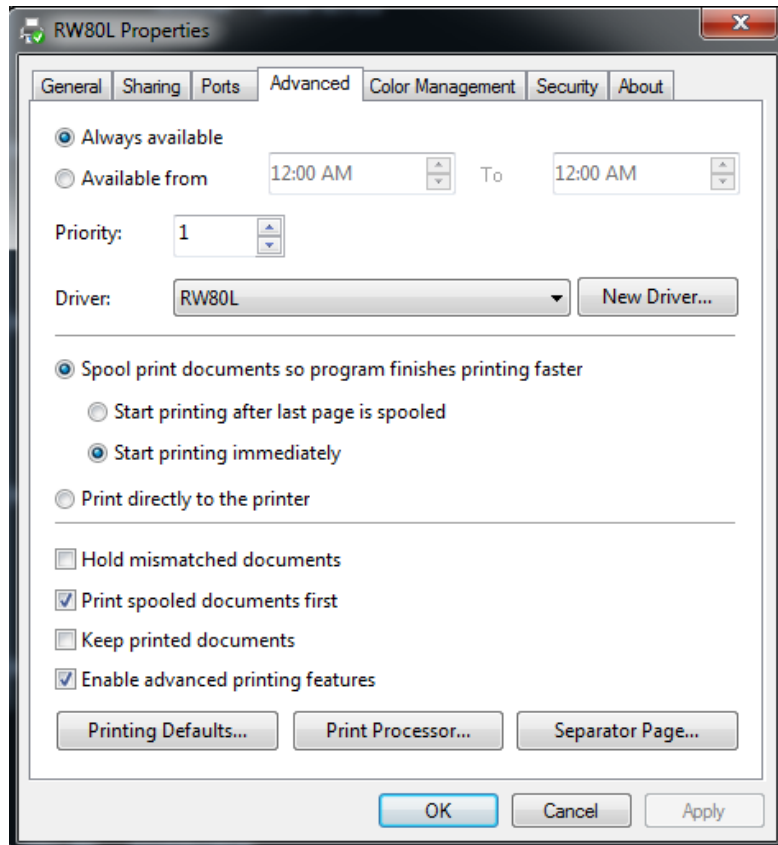
2) Choose "General", click on "Print Test Page", then it will print the current settings.



3) Click “Port” to change the other connecting port.



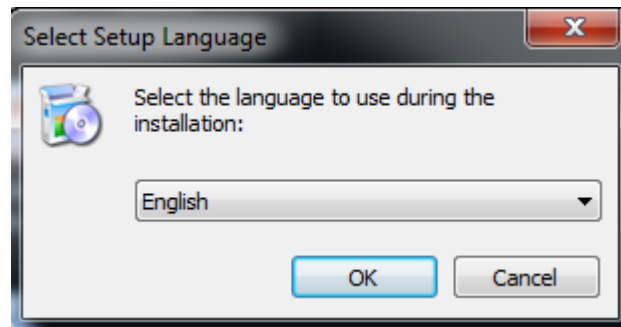
4) Click “Advanced” to set the available time for using.



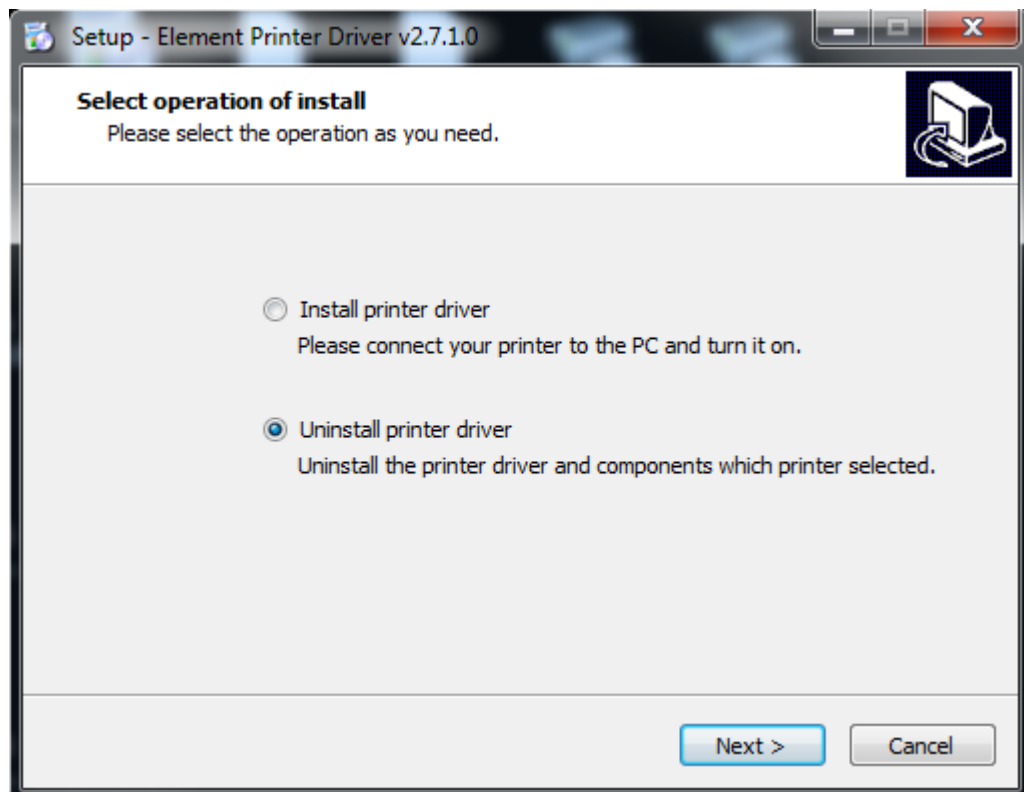


## 9.6 Uninstall Windows Driver

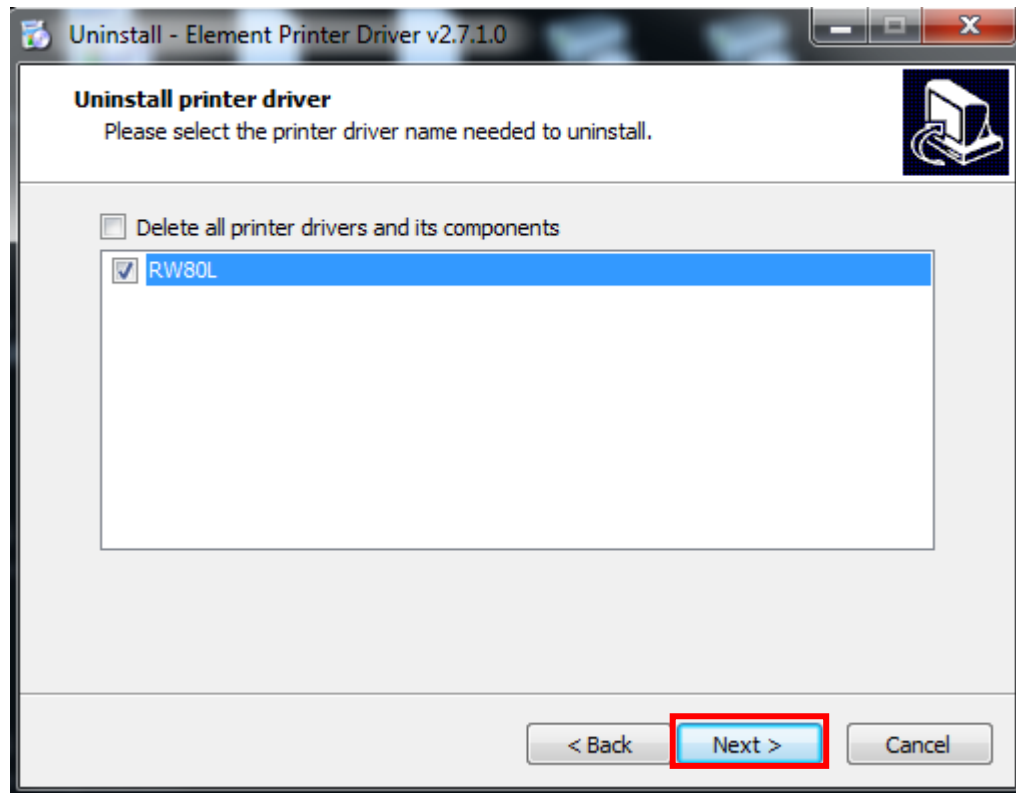
- 1) Double click Windows Driver, and then click “OK”.



- 2) Choose “Uninstall printer driver”, then click “Next”



- 3) Choose “RW80L”, then click “Next”



- 4) Then it is complete to uninstall.