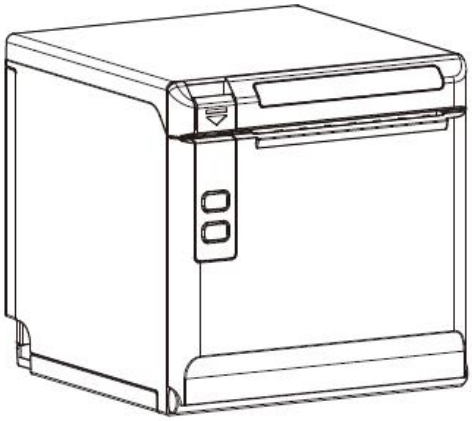
element™

RW60

User Manual



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Statement

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This manual is printed in 2020.

Printed in China.

Version 1.0.

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 printhead and peripheral parts during printing and printing just finished.

Please do not touch the printhead and connectors, in case that static damages the printer 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

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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

RW60 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.

RW60 can connect with other equipment through USB, Ethernet, Serial interface, cash drawer and other optional 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

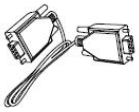
Power Cord

Power Adapter

Paper Roll

CD

Quick Start Guide



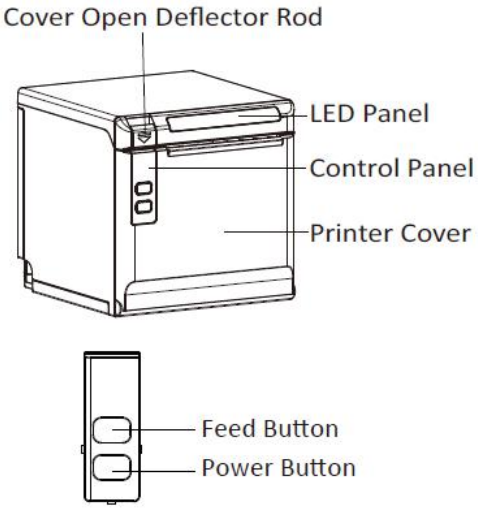
Serial Cable

Notes: 1) The Power adapter and power cord vary by region.

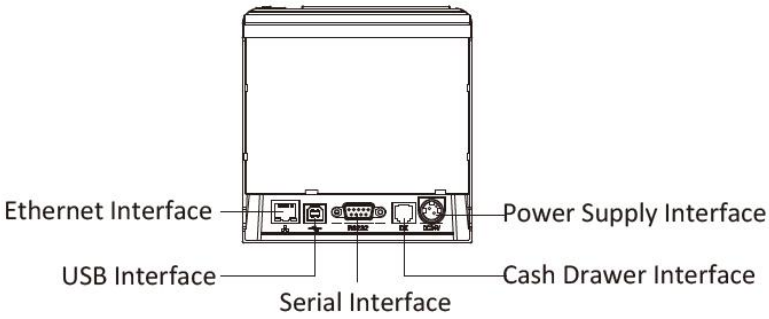
2) Items in the package are dependent on the actual order.

2.2 Appearance 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	Max. 260mm/s
	Interface	USB, Cash drawer, Serial, Ethernet
	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	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 varied density bitmap as and download bitmap printing Max size of each bitmap is 40K, the total size of bitmap is 256K.
Detection	Sensors	Paper end detection, Cover open detection, Paper near end detection
LED Indicator		There are different light colors: blue, green, red and purple, depending on different status of printer
Power Supply	Input	AC100V-240V
	Output	DC24V, 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 ϕ83mm
	Paper load	Easy-loading structure of forward open cover cover
	Paper cut	Partial cut or full cut
Physical Spec.	Operating condition	0℃ ~ 40℃， 20% ~ 85%RH
	Storage condition	-20℃ ~ 70℃， 5% ~ 95%RH
	Dimensions	136.8(L)*132(W)*130.5(H)mm
	Weight	1.33kg
Command		ESC/POS
Software	Driver	Windows (Win10/POSReady/Win8/Win7/Vista/XP/2000), Linux, OPOS
	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.

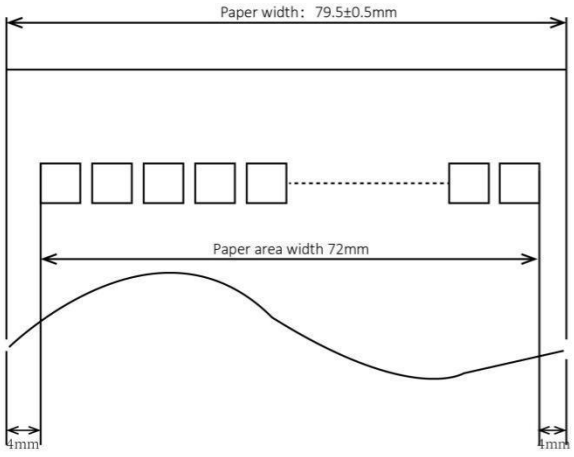
3.2.2 Notices

- 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 print 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.

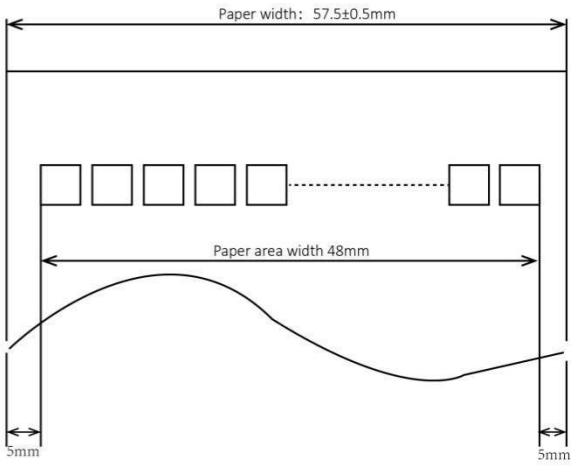
3.3 Printing and Cutting Position

3.3.1 Printing position

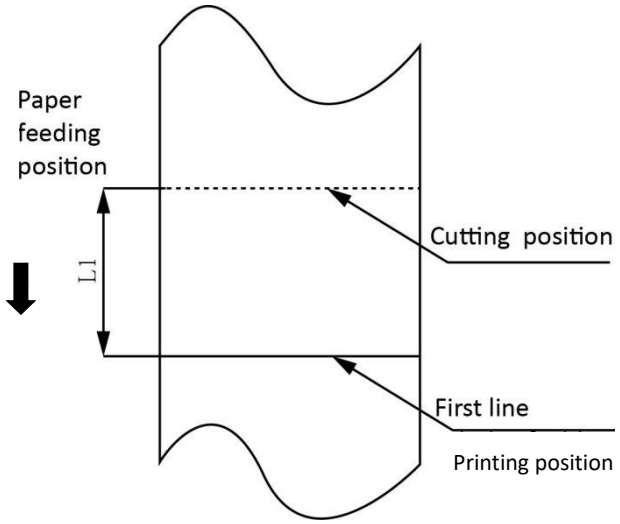
80^{+0}_{-1} mm Print Paper



58^{+0}_{-1} mm Print Paper



3.3.2 Cutting Position



Type	Paper Cutting Position(L1)
RW60	11.6mm

4 INSTALLATION AND USAGE

4.1 Media Loading

4.1.1 Paper Confirmation

1) When using 80mm(width) roll paper, take out the paper guide of both sides.

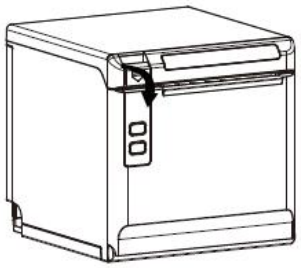
2) When using 58mm(width) roll paper, insert the paper guide to each side.

Note: Paper roll should be placed in the middle.

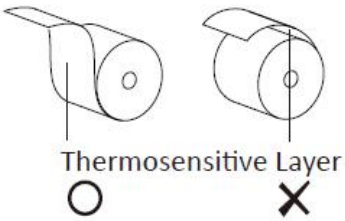
4.1.2 Paper Installation

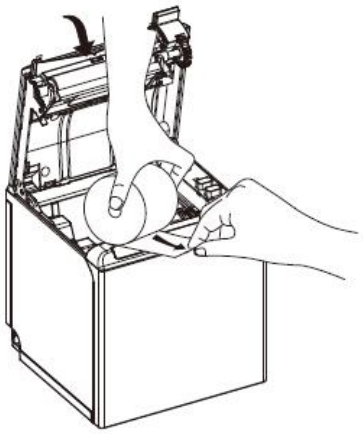
1) Pull the cover open deflector rod to open the printer cover.

2) Remove the used roll paper core, if any.

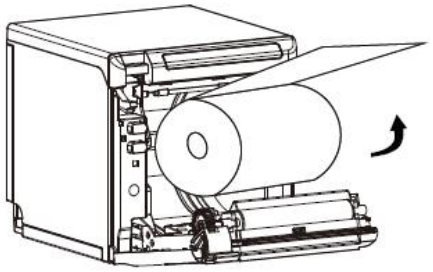


3) In the correct direction of the roll paper, insert the paper.

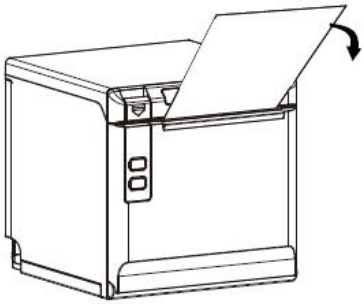




4) Pull out some roll paper and close the printer cover.



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 or other obstacle.

4.2 LED Indicator and Beeper

Function specification of indicator light and beeper.

Status LED	Description
Red (Flashing)	Wrong status (cutter jam, over temperature, paper end and so on)
Purple (Constant Light)	Paper near end / printer is in normal status
Blue (Constant Light)	Printer is busy
Green (Constant Light)	Printer is ready and in idle condition

Description	LED	Beeper
The printer cover is open	Red (Flashing)	“Beep, Beep—, Beep”
Paper Sufficient	Green	Silent
No Paper	Red (Flashing)	“Beep Beep Beep”.
Cutter Jam	Red (Flashing)	”Beep—, Beep—”

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

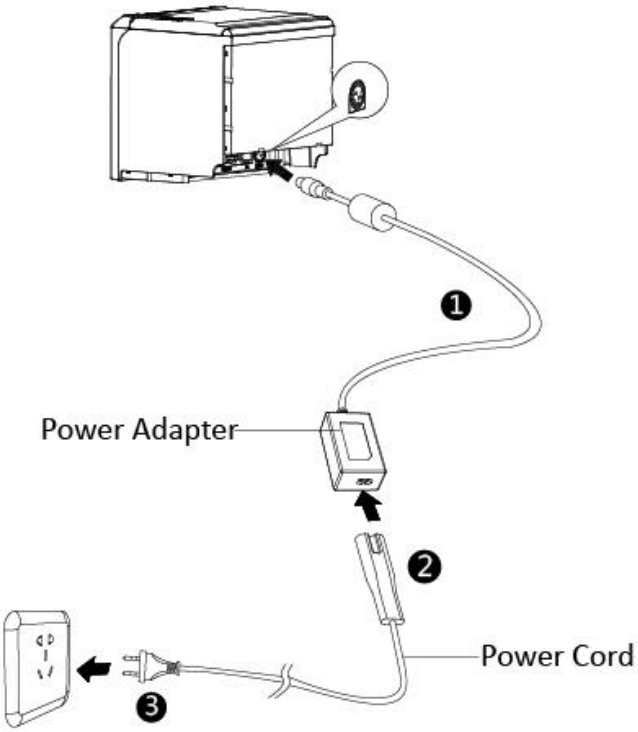
4.3 Power Connection

1) Make sure the printer is turned off.

2) Connect power adapter to printer.

3) Connect power adapter to the power cord.

4) Plug the other side of power cord into the socket outlet.



Notes:

1) The Power adapter and power cord vary by 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 pull the plug by holding at any other place of the 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 shell to avoid the 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) Plug the cash drawer cable into the cash drawer interface on the rear 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 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 Manual 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

RW60 supports various communicating interfaces, such as USB interface, cash drawer interface, serial interface and Ethernet interface.

5.1 USB

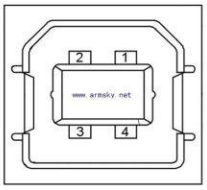


Figure 5-1

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

5.2 Cash Drawer Interface

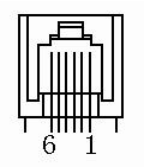


Figure 5-2

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

5.3 Power Supply Interface

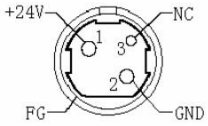


Figure 5-3

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.

5.4 Serial Interface

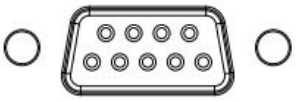


Figure 5-4

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

5.5 Ethernet Interface

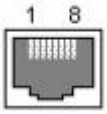


Figure 5-5

PIN NO.	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.

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 light is off, printer is not working	Printer has no power	Connect printer to power supply
	Printer is not on	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
	Overvoltage	Print with specified voltage
	Cutter jam	Restart the printer
	Printer over is open	Close the printer 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 roll paper 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 *Utility Tool for POS Instruction* at 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
	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: about the density setting, please refer to *Utility Tool for POS Instruction* at Chapter 8.

6.5 Remove 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 following steps.

1) Turn off the printer and pull the cover open.

2) Remove the jammed paper, reload the paper 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 the print head.
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 to avoid the print head from being scratched and/or damaged in any way.

7.1 Cleaning Head

1) Open the Printer Cover and then use the cleaning pen to clean the head in the direction from the center of the head to the edges.
2) After cleaning the print 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 has completely dried.

※ 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

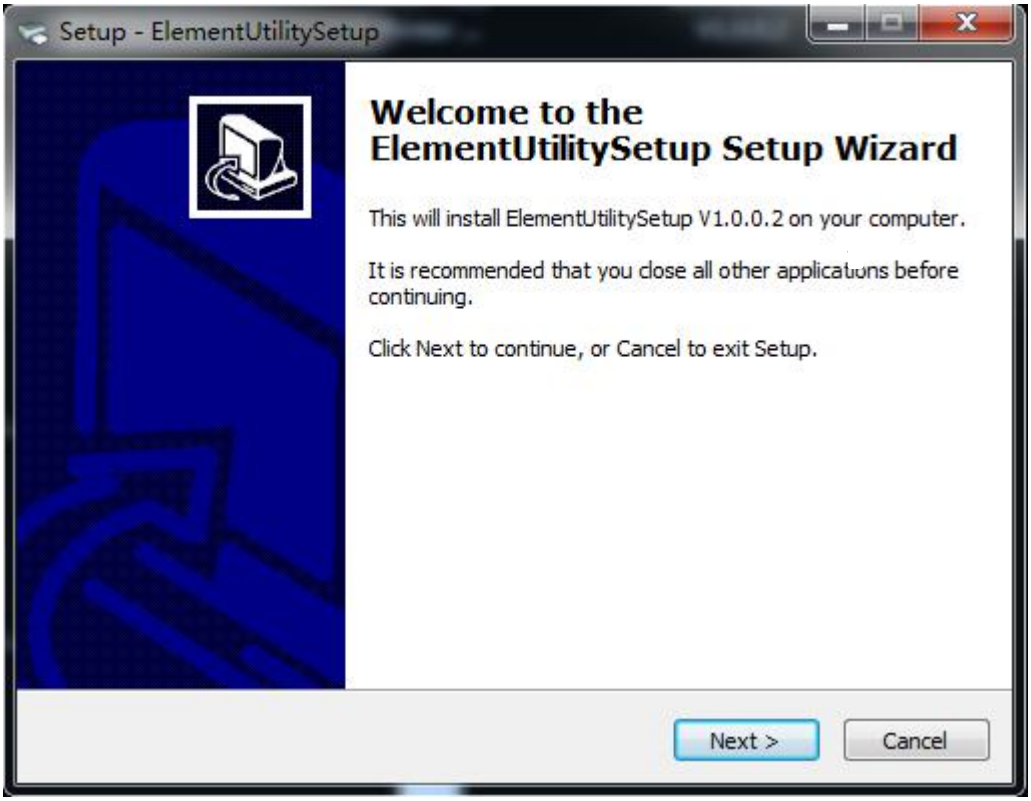
8.1 Install Utility Tool

The following screens take Win 7 for example.

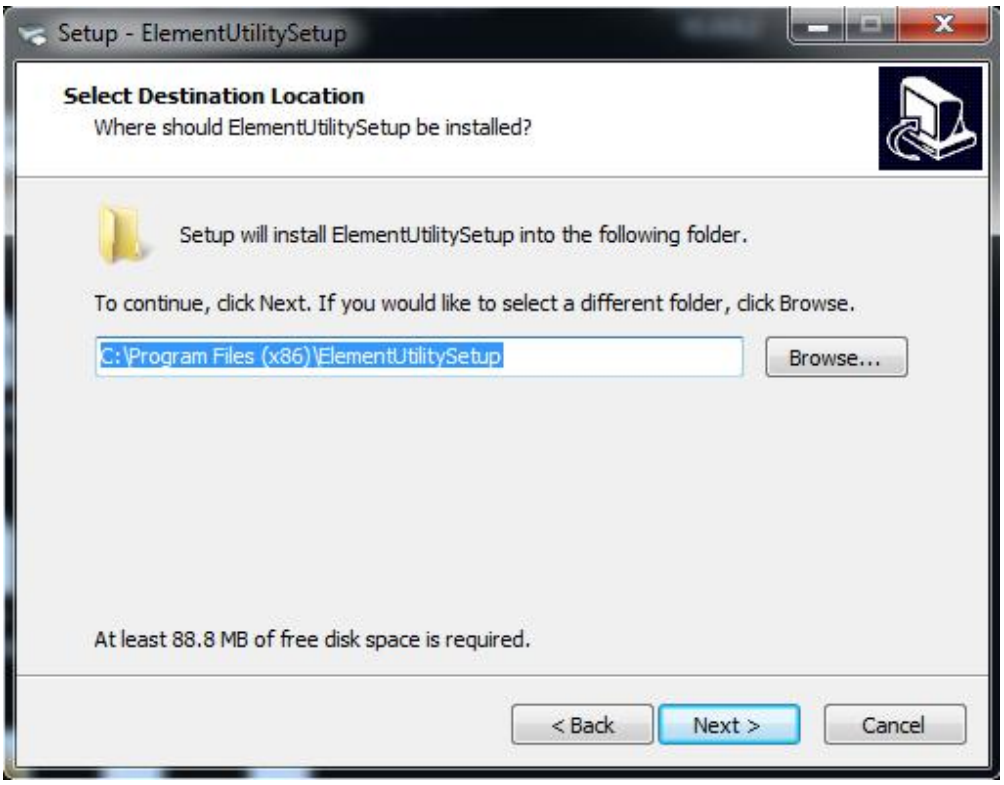
1) Open the installation package.

2) Choose “English” and click “OK”.

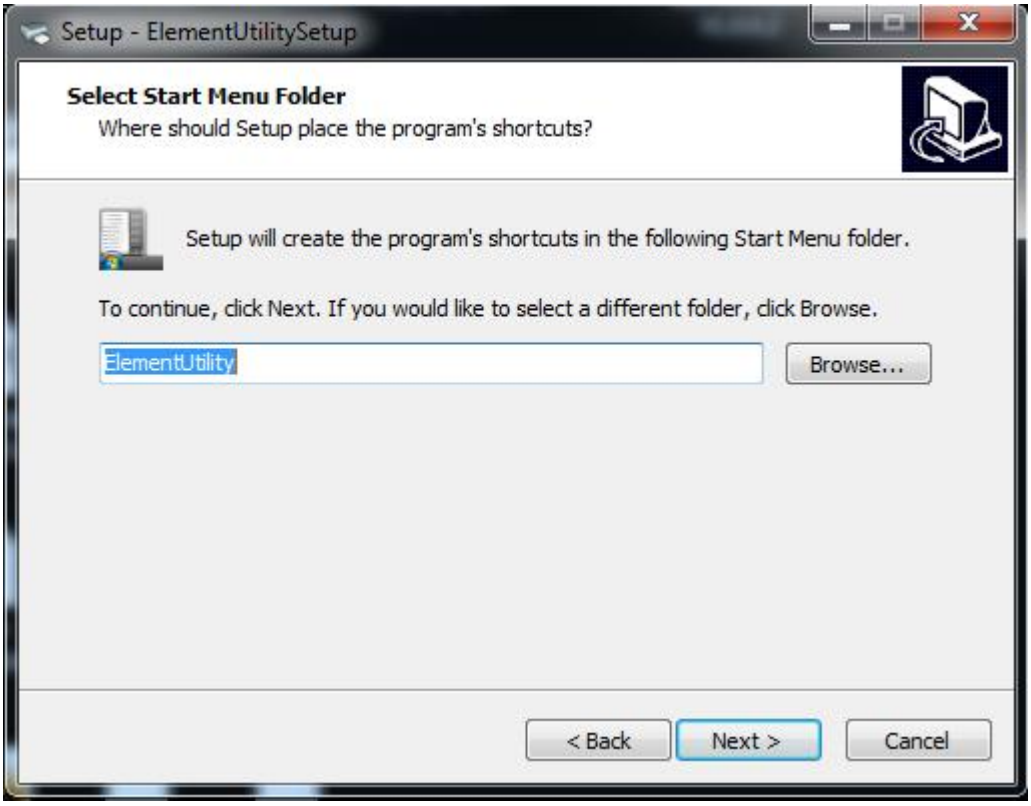
3) Choose “I accept the agreement”, then click “Next”.



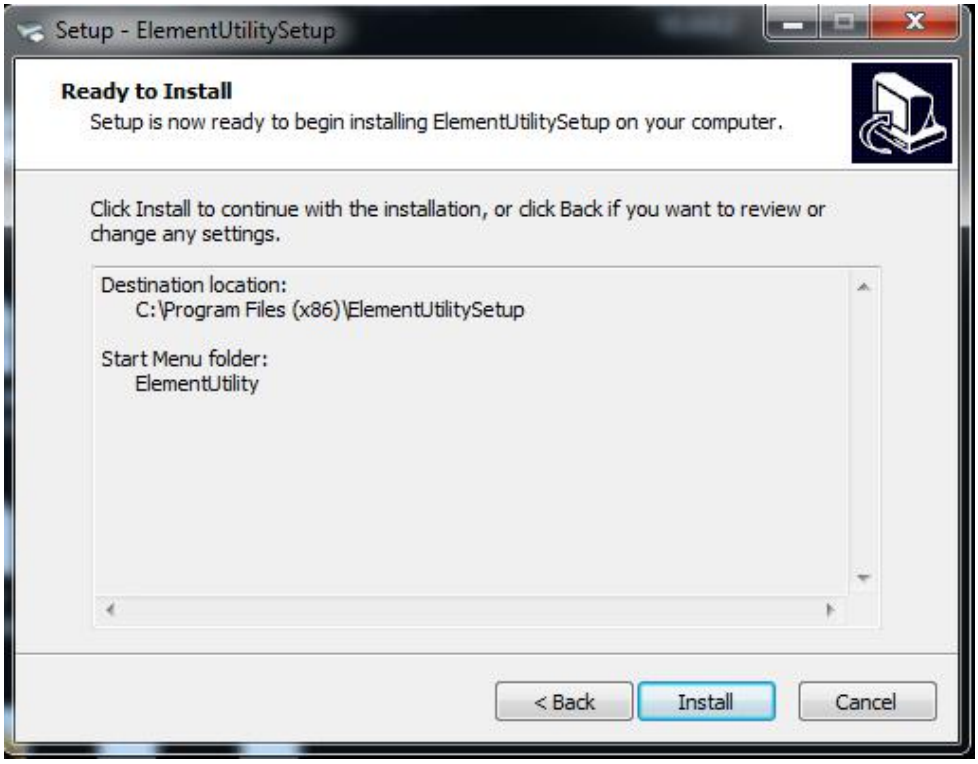
4) Click “Next”.



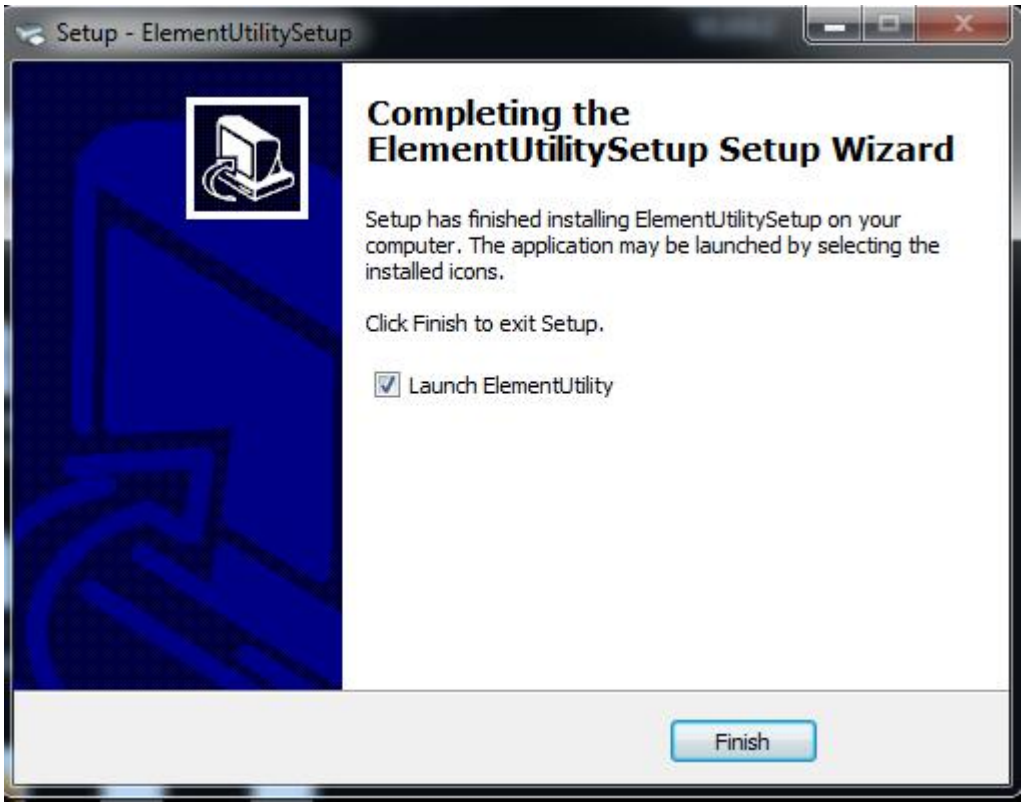
5) Select start menu folder. Click “Next”.



6) Click “Install”.



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



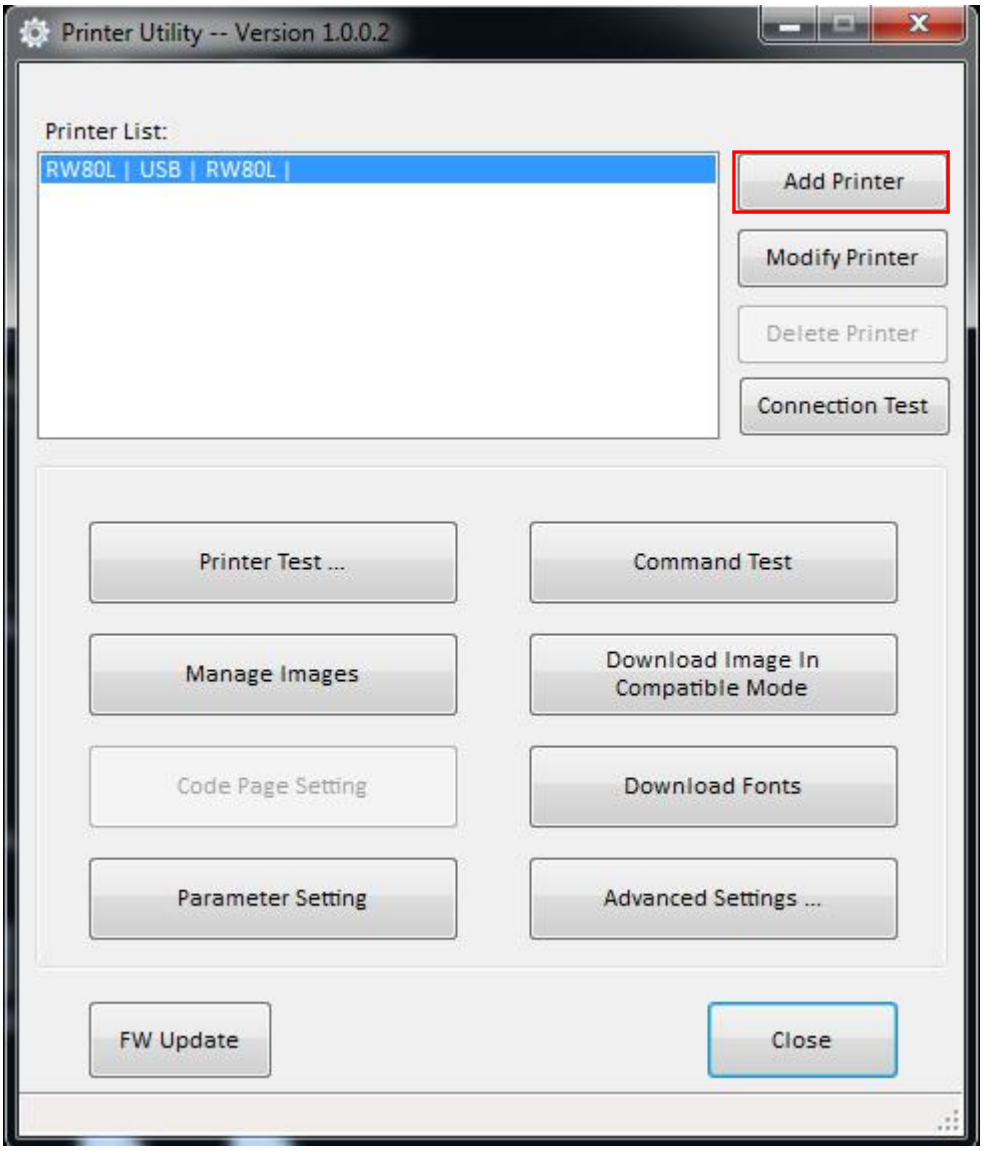
8.2 Use Utility Tool

Warning: In different operating system, screen has a slight difference. Please operate it according to the tips. Take RW60 (Windows 7) for example.

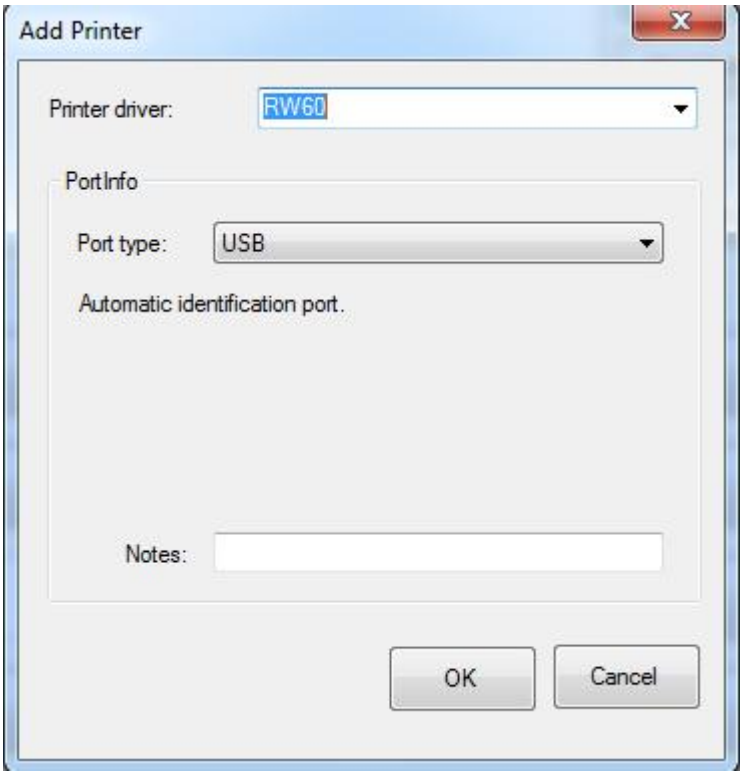
8.2.1 Add/Modify/Delete/Connect Printer

8.2.1.1 Add printer

1) Click ”Add Printer”.

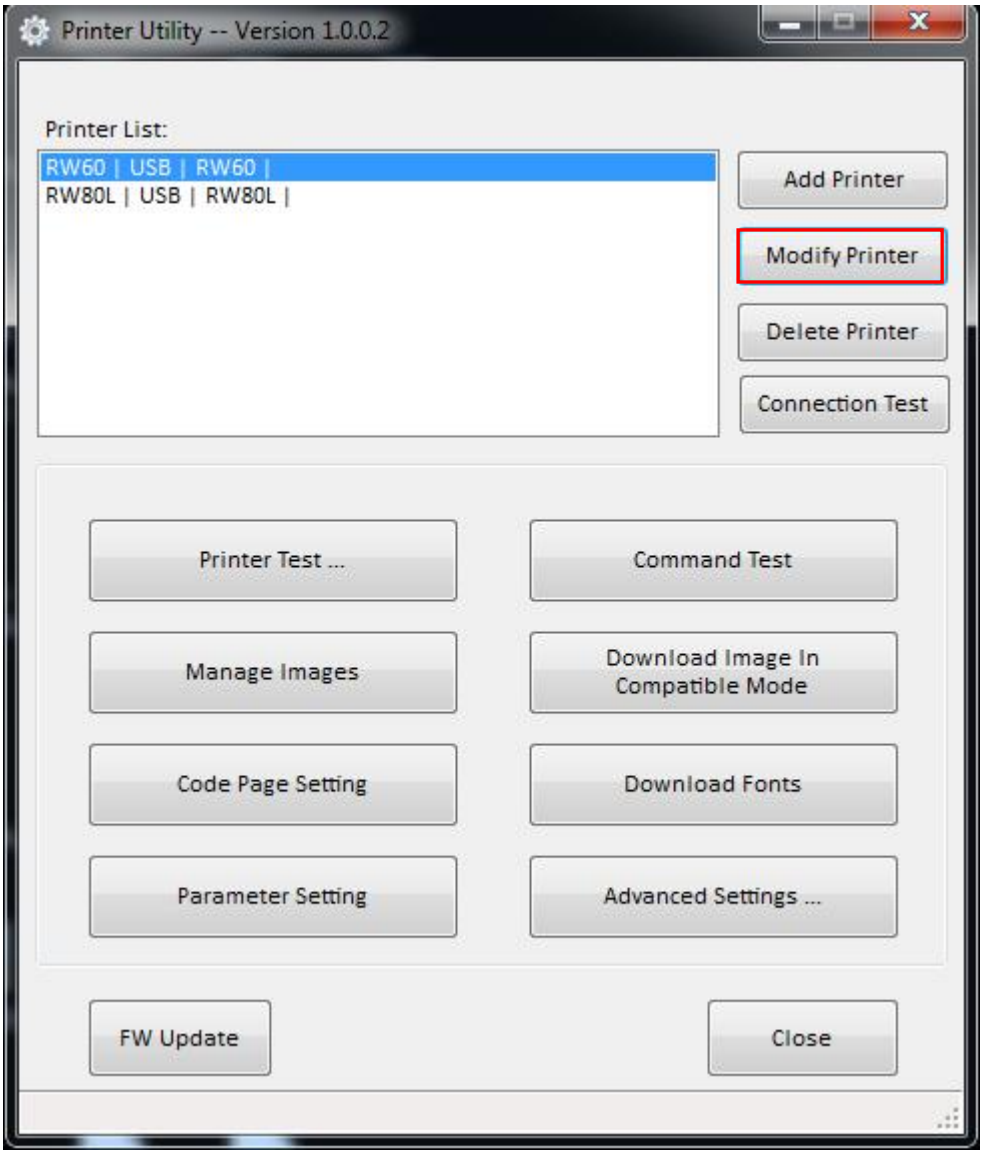


2) Choose the appropriate printer type and port. Then click “OK”. (Take RW60for example.)

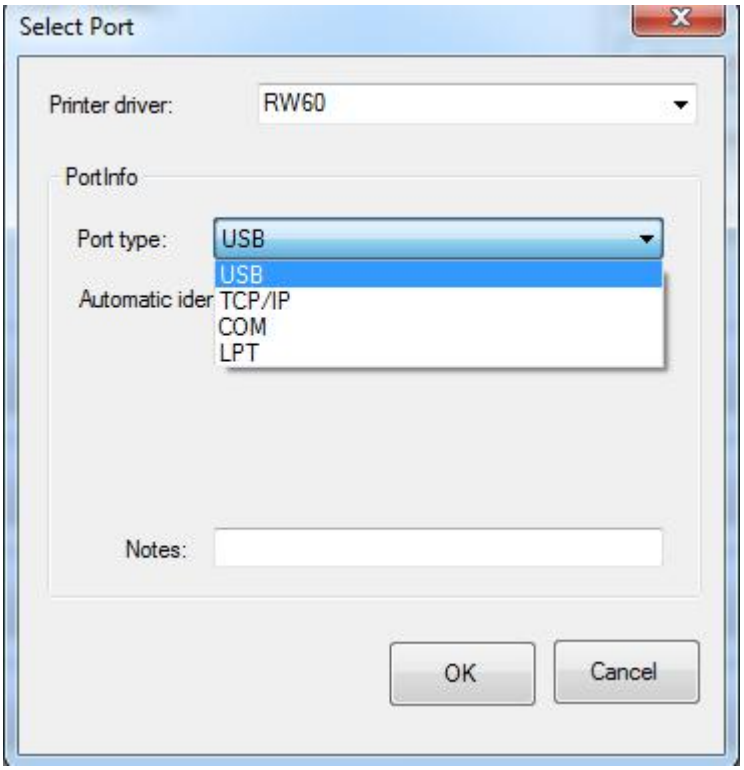


8.2.1.2 Modify printer

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



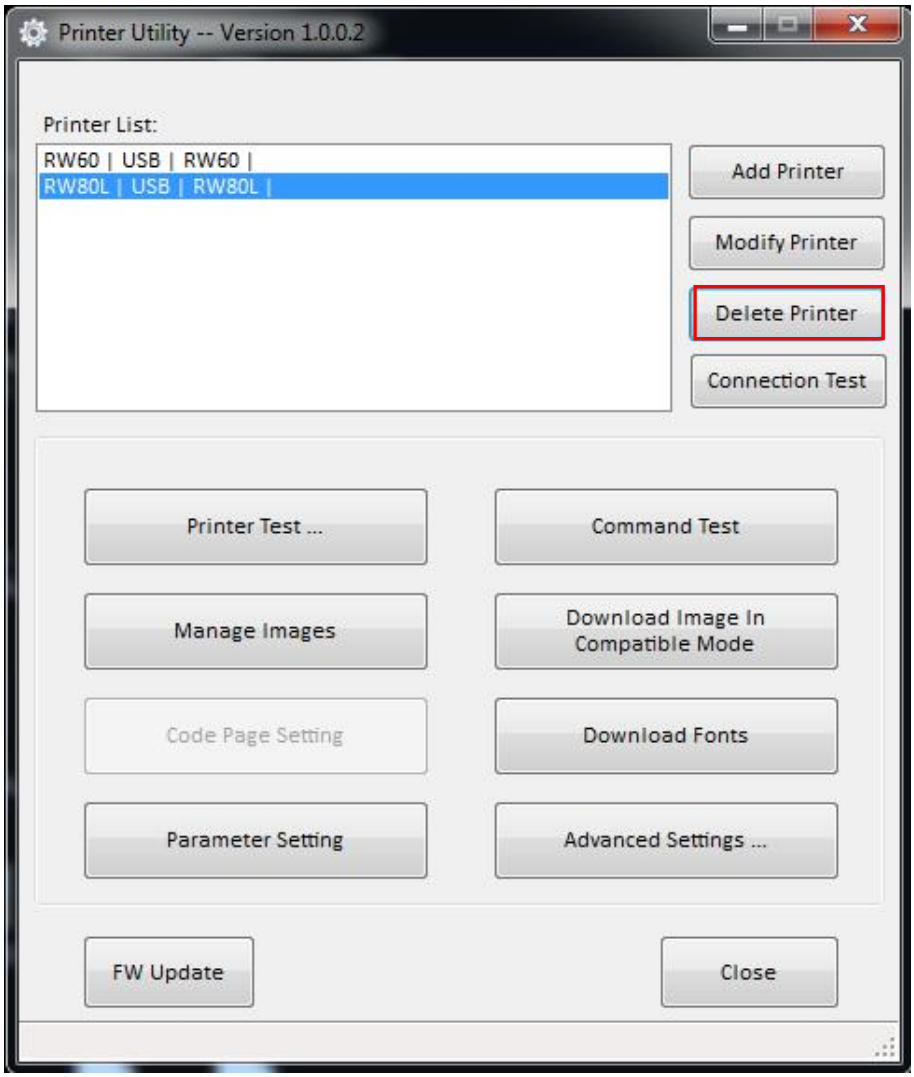
2) Choose the new printer and new port. Then click “OK”.



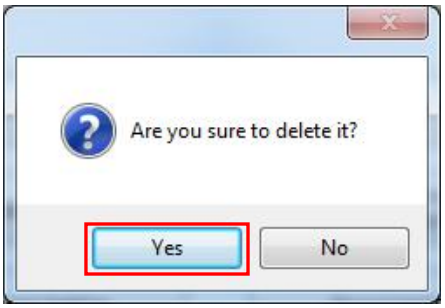
3) The new printer is added successfully.

8.2.1.3 Delete printer

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



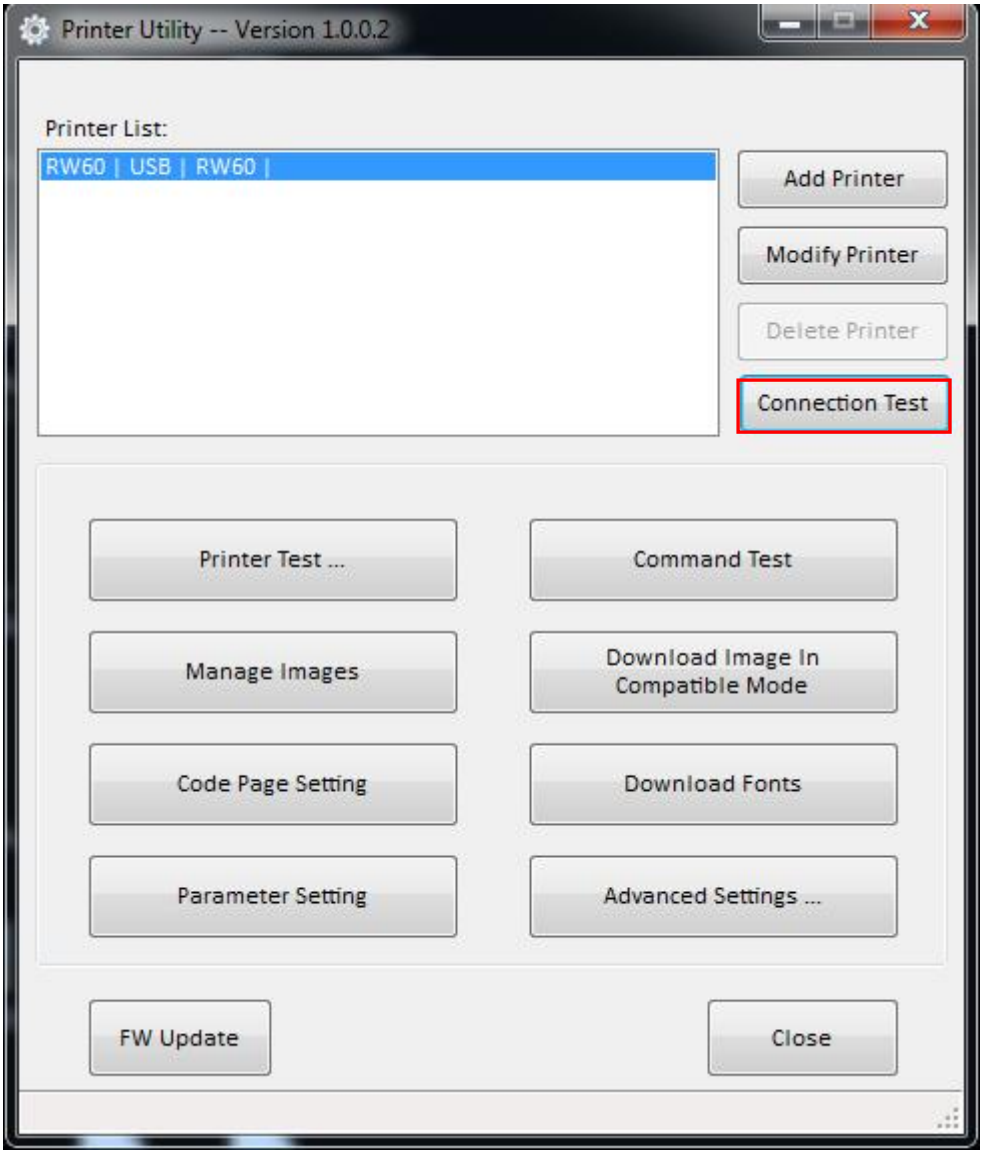
2) Click “Yes”, then the printer is deleted.



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 to 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

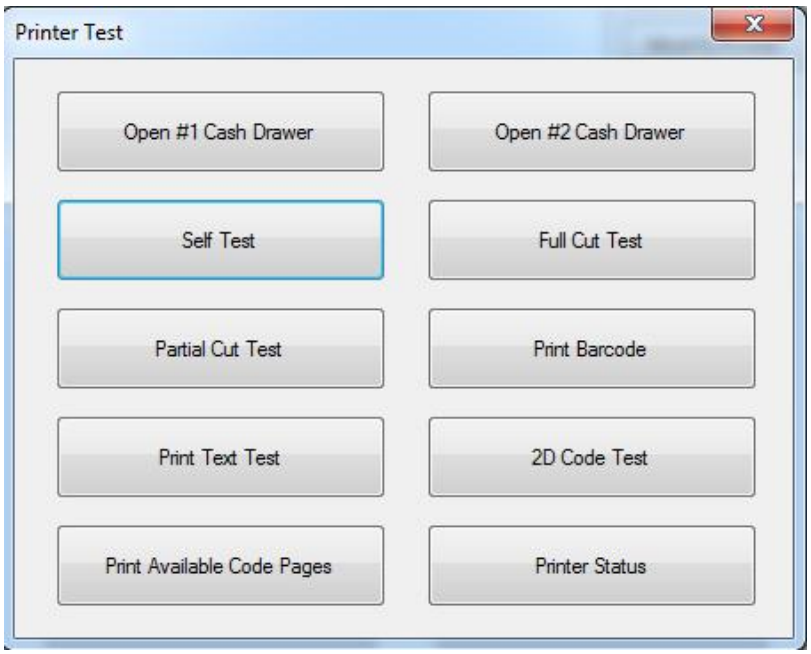
Printer Test contains the following items:

- 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.



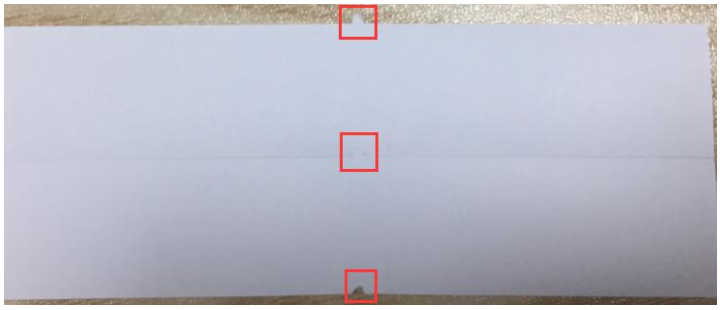
2) Full Cut Test

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

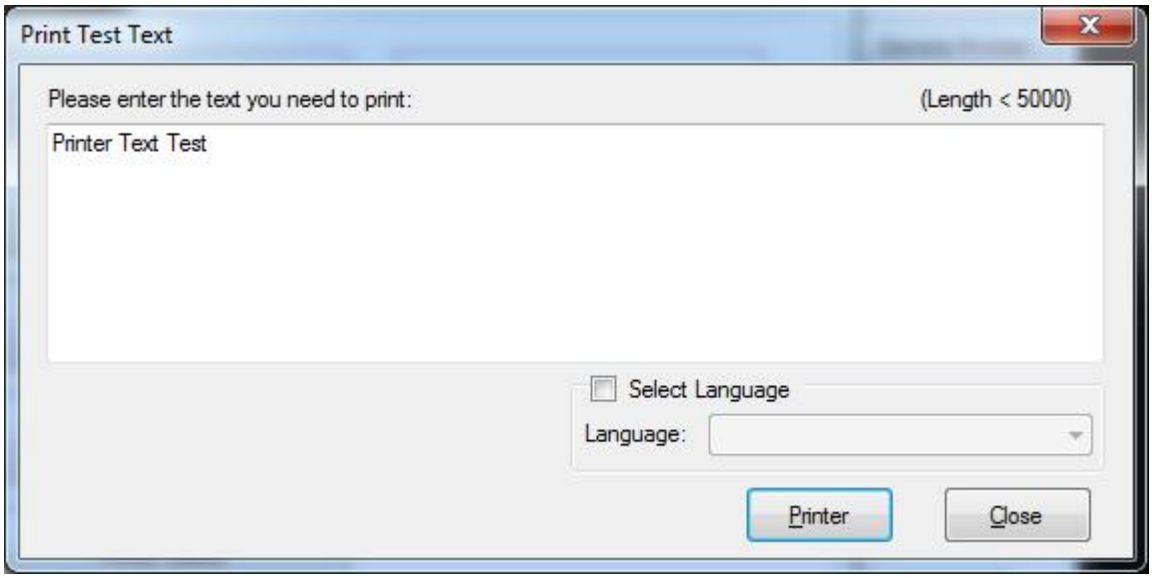
Click the cutter test and the paper will be cut automatically. Cutting method is partial cut (Partial cut: Not all cut off, between the two sheets of paper to leave a connection point).

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.

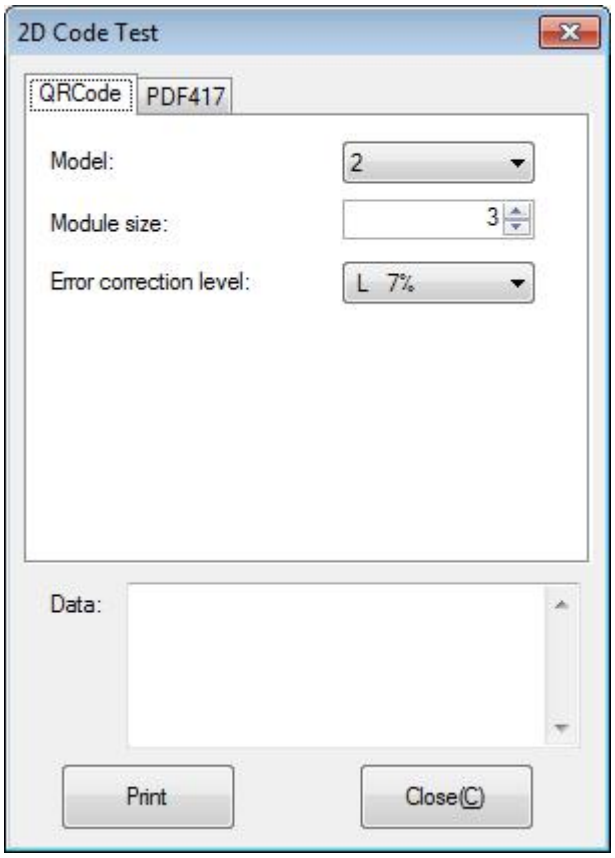


Note:

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

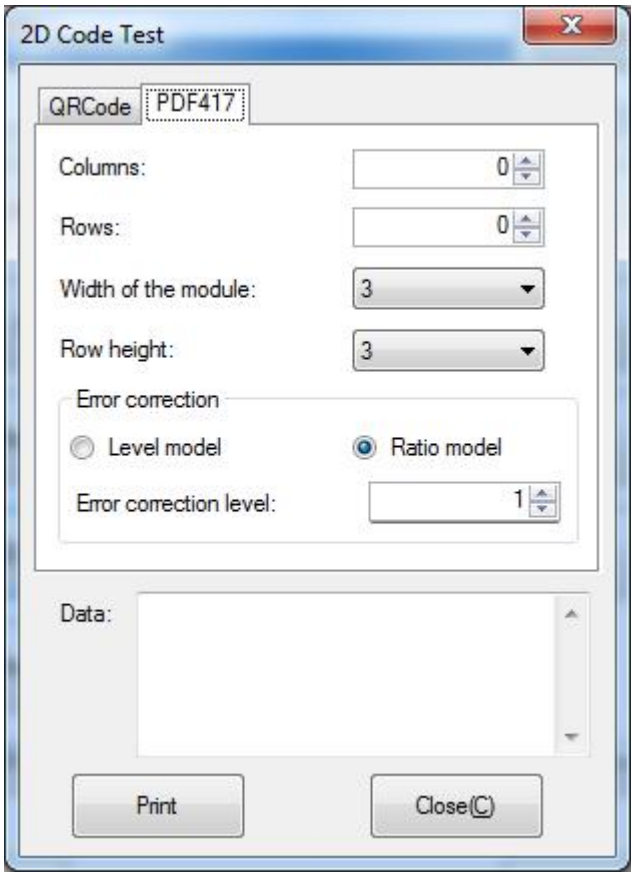
▲Module size: 1~16

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.

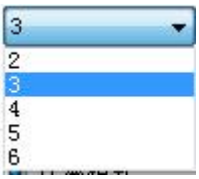


▲Columns: 0~30

▲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

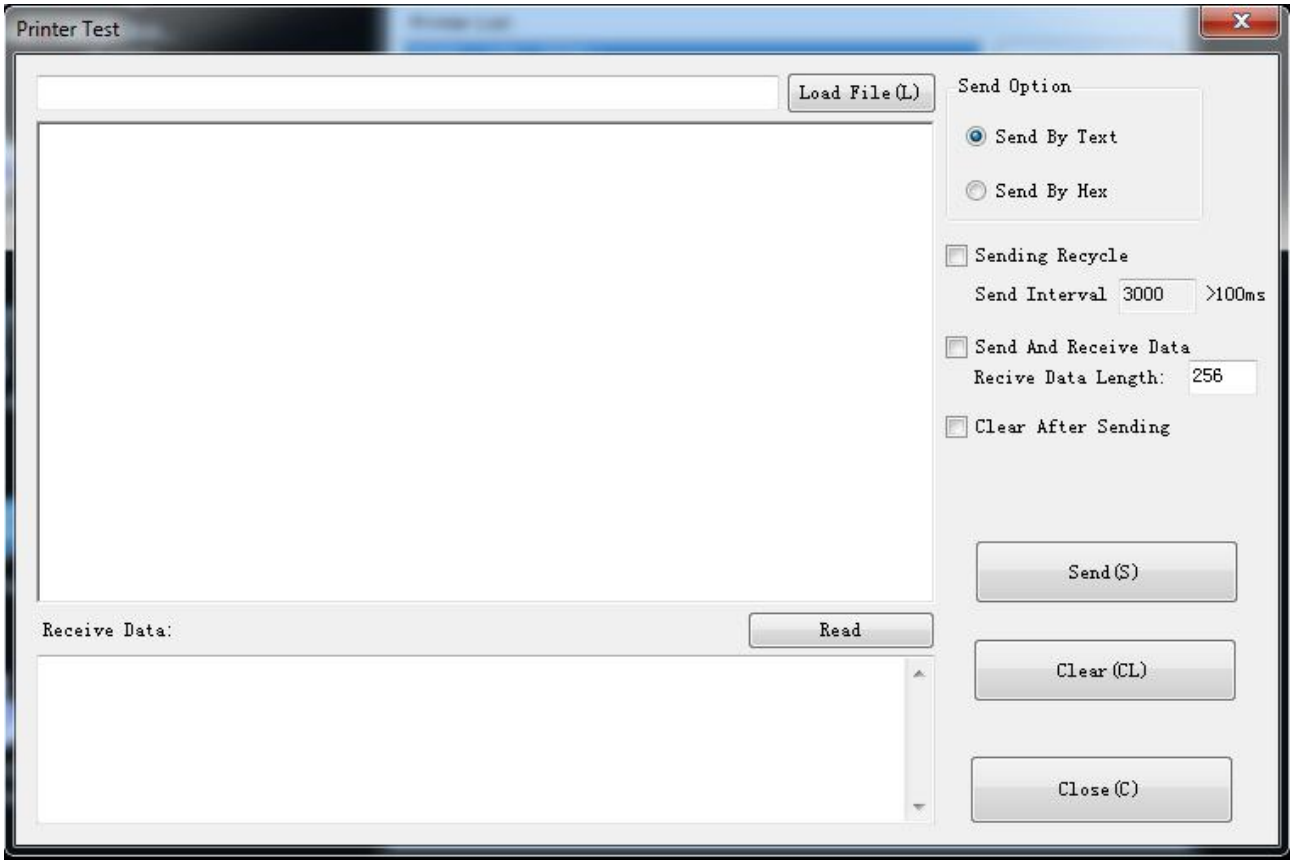
The larger the module value, the longer the printed PDF417 barcode, and the smaller the opposite.

▲Error connection level

8.2.2.2 Command Test

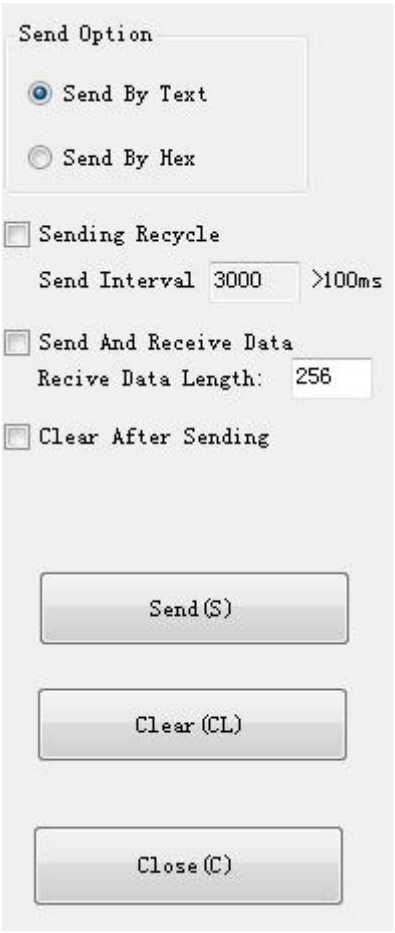
In the command test, you can send command to the printer. Input text or hexadecimal data. Select a file or enter a command in the input box.

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

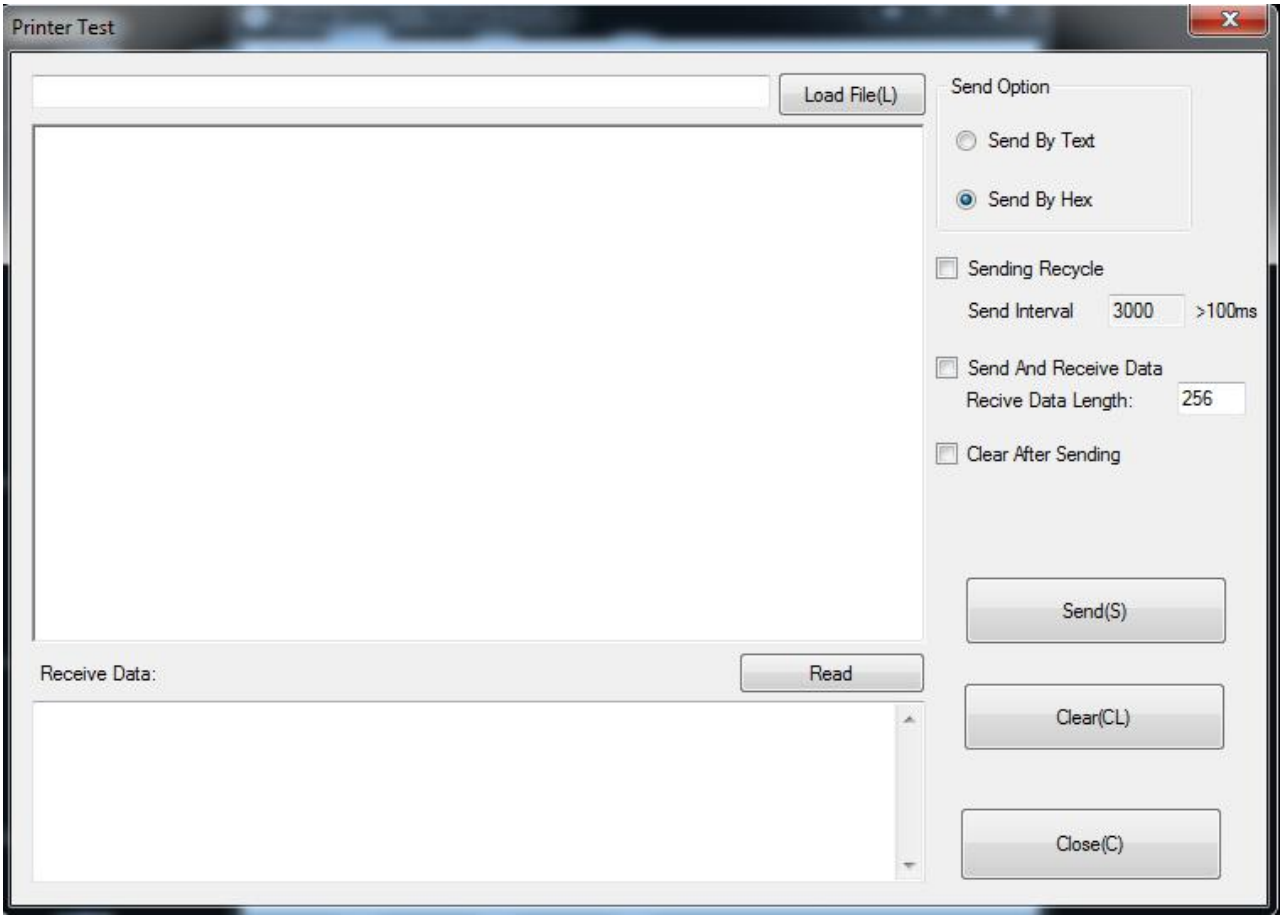


▲Sending Recycle:

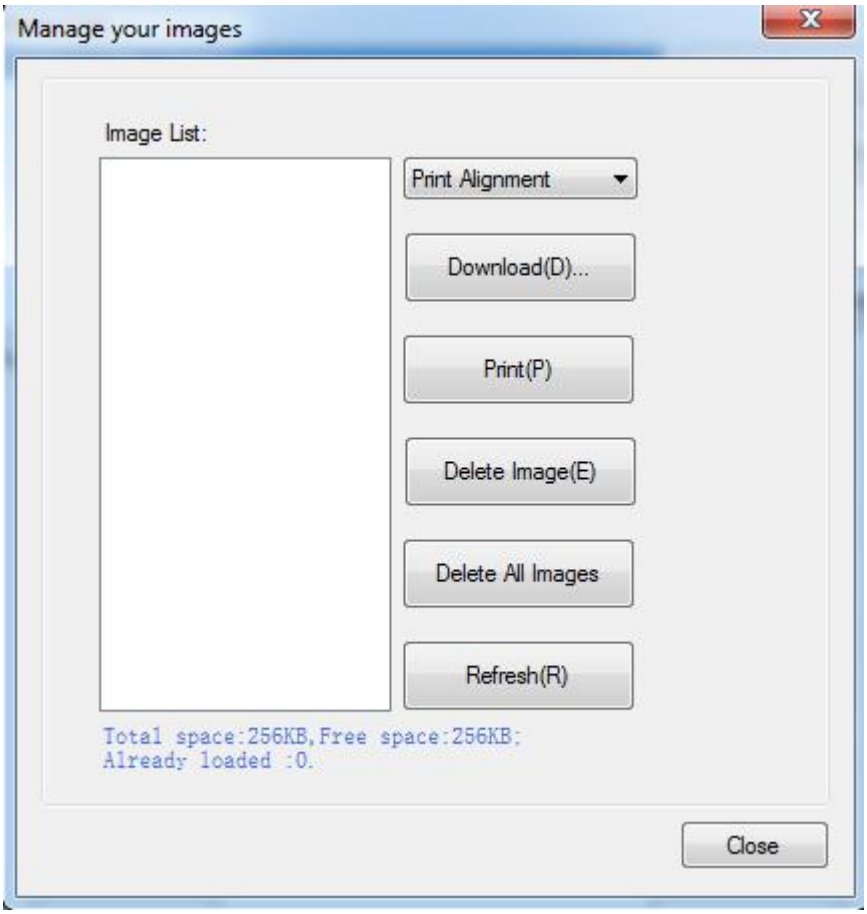
When the interval is set to 3000ms (you can set the interval as needed), then click “Send”, the printer starts to recycle printing. Click “Stop” to stop the recycle printing.



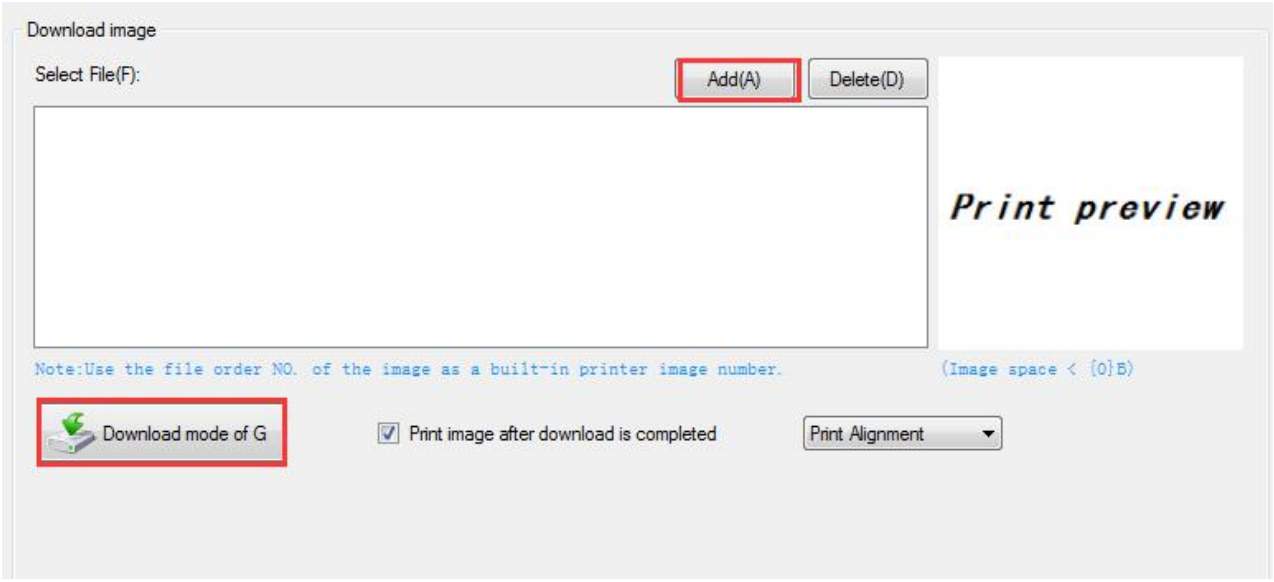
2）Click “Send by Hex”, input the content. (Convert text to HEX or send ESC command)



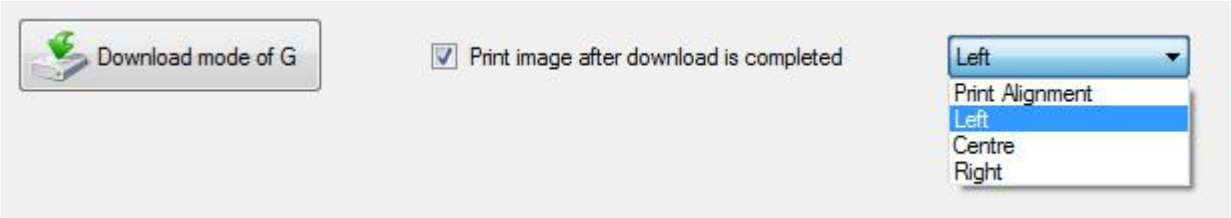
8.2.2.3 Manage Images

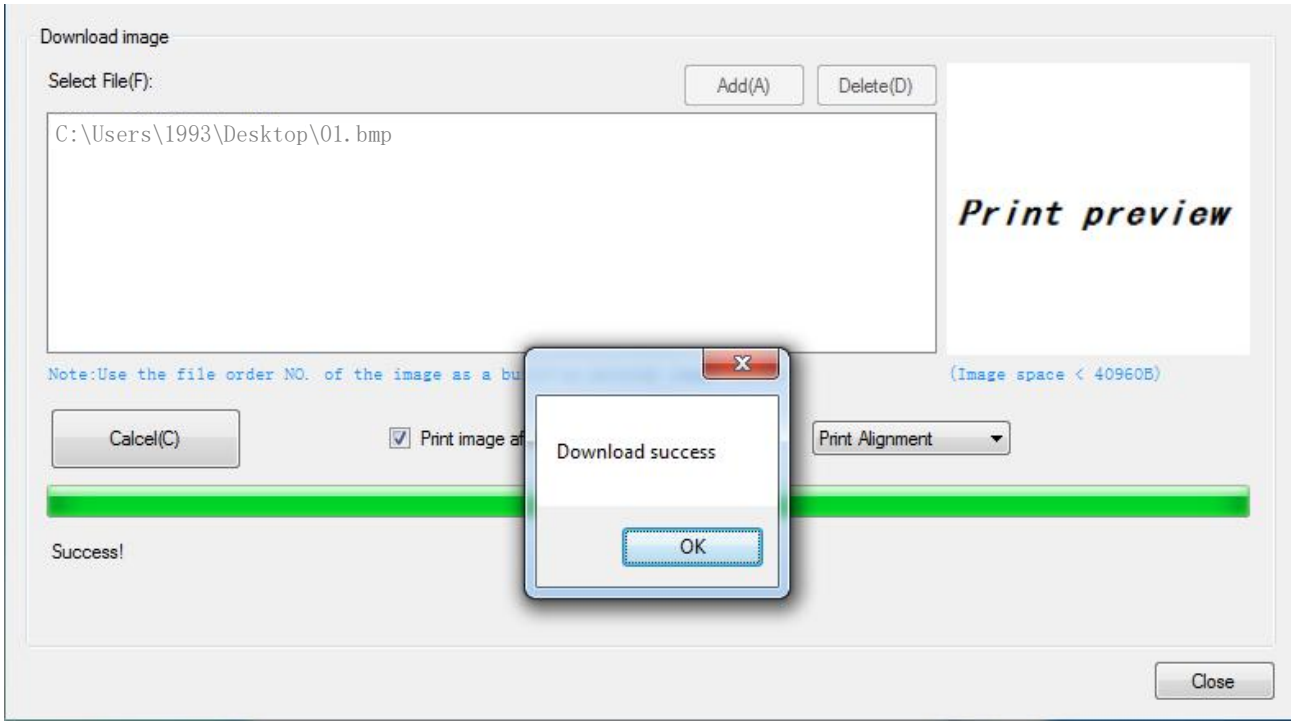


1) Click "Download" to add the image, if you want to print the picture, set the print location before clicking "Download mode of G" to print the picture. (It is recommended to use a picture in BMP format)



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

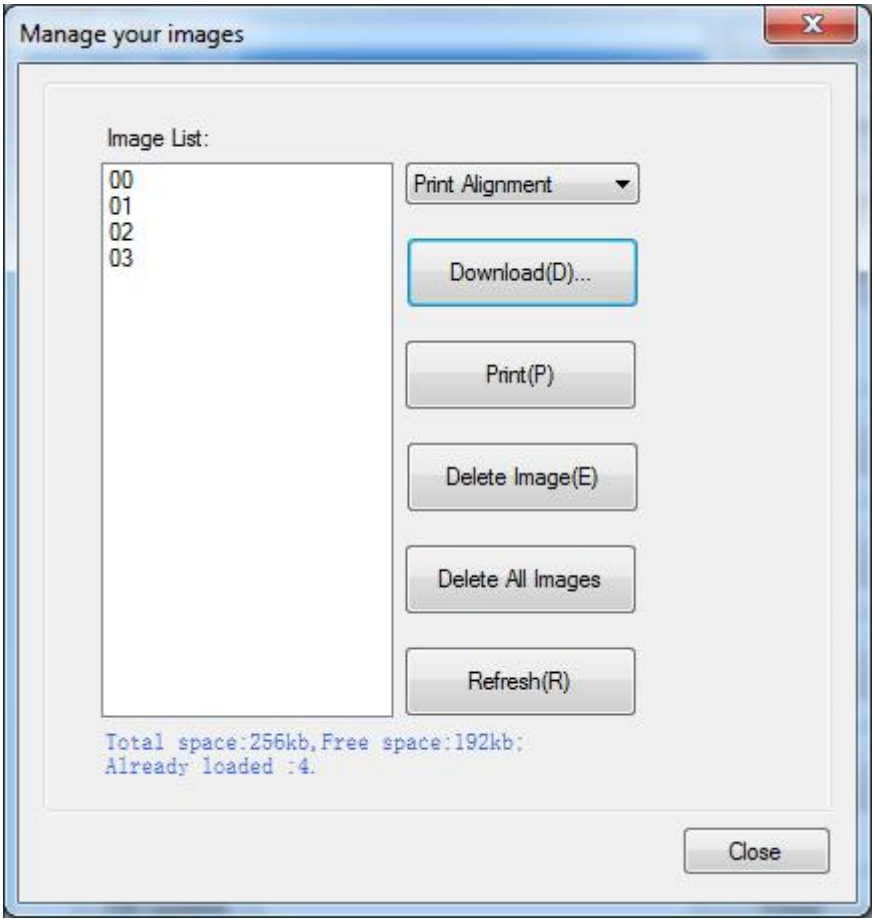




Note: Total memory 256K, each bitmap should be below 40K.

3) Delete Image.

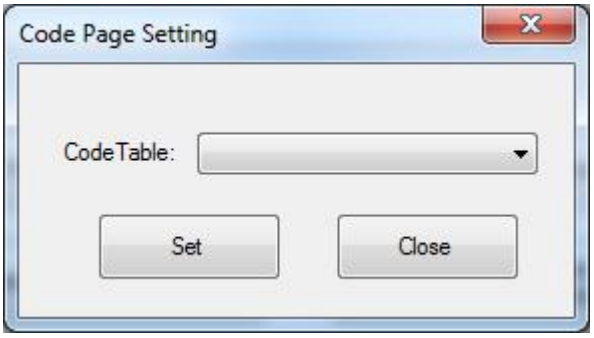
Note: Each time click "Download mode of G", an image list number will be generated.

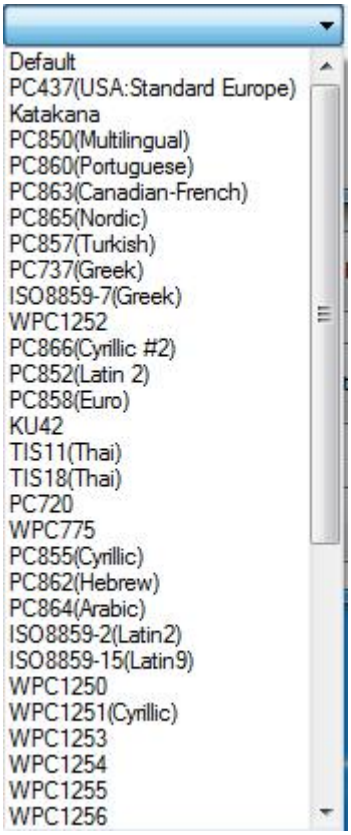


Click the image list, select "Delete selected image" will delete the image, click "Delete all Images", without clicking the list option to delete all the images in the list.

8.2.2.4 Code Page Setting

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

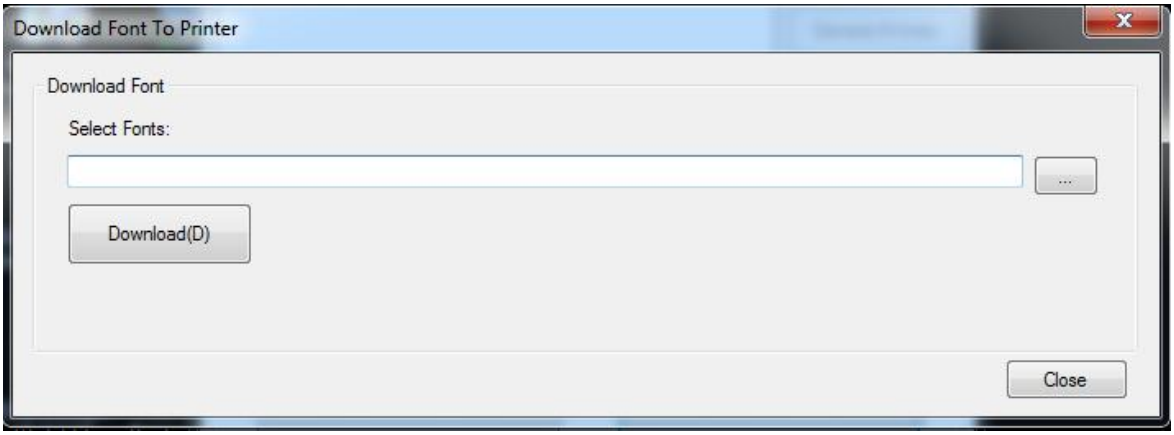




Note: These code pages are only valid in multiple languages.

8.2.2.5 Download Fonts

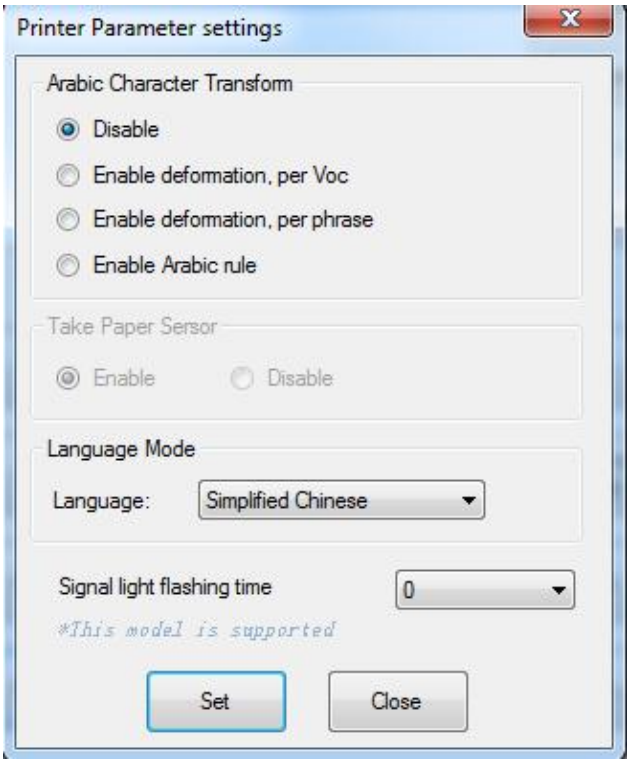
Select the font from the existing file and click "Download".



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

8.2.2.6 Parameter Setting

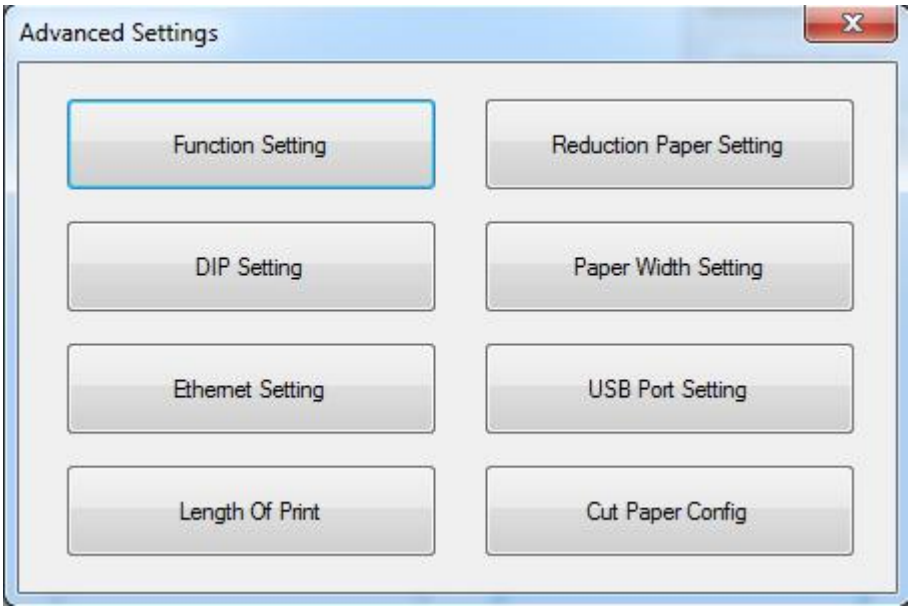
• You can set Arabic Character Transform (for example: WPC1256).



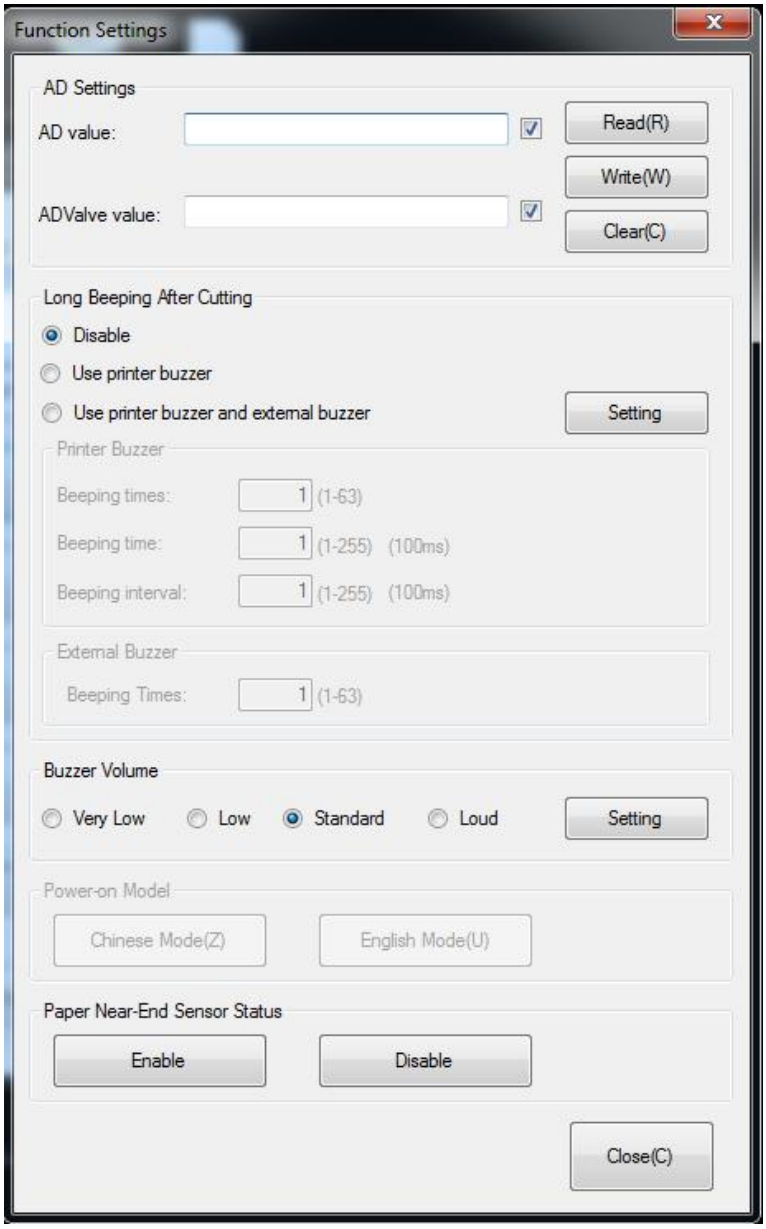
• You can set signal light flashing time 0~ 60s.

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.



◆ ***Function Setting***



- **AD Settings**

We recommend general thermal paper. If user uses special thermal paper, and the status of the paper can't be detected by the printer, please set as below:

1) Load the paper roll into the printer.

2) Turn on the printer and connect it to a master device.

3) Open the Utility Tool of the printer on the master device, choose "Advanced Setting" -> "Function Setting" -> "AD Settings" -> Click "Read" to check the AD value.

4) For example, the "ADValue value" is "2100".

5) Add "300" to the original "ADValue value 2100", which is "2400", type in "2400" and click "Write", then the setting is effected.

6) So the status of the user's thermal paper can be detected by the printer,

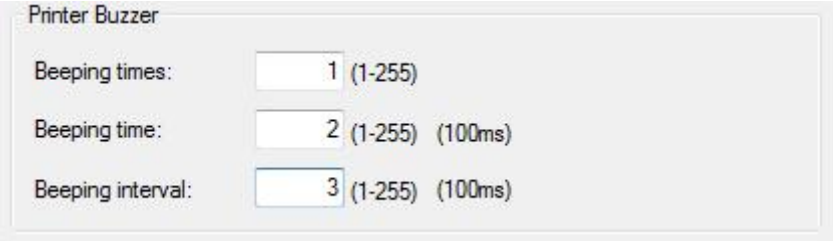
- **Long Beeping After Cutting:**

① **Disable:** there is no sound after cutting.

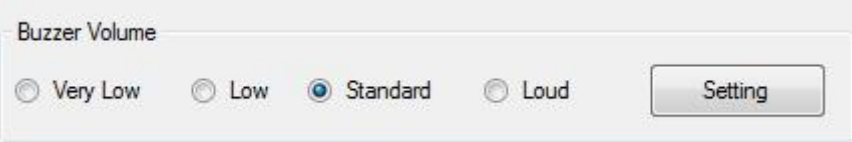
② **Use printer buzzer (The beeping time, times and interval time can be set for what you want, such as 1 milliseconds, 2 milliseconds or 3 milliseconds, etc.):**

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.



- **Buzzer Volume:**

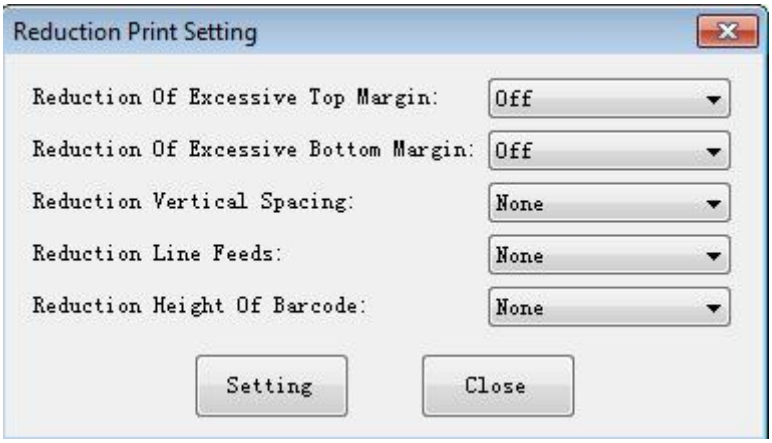


The “Very Low” is the minimum sound, and the “Loud” the maximum sound. You can select a volume level and click "Setting" to print (Default: "Standard" level).

- **Paper Near-End Sensor Status:**

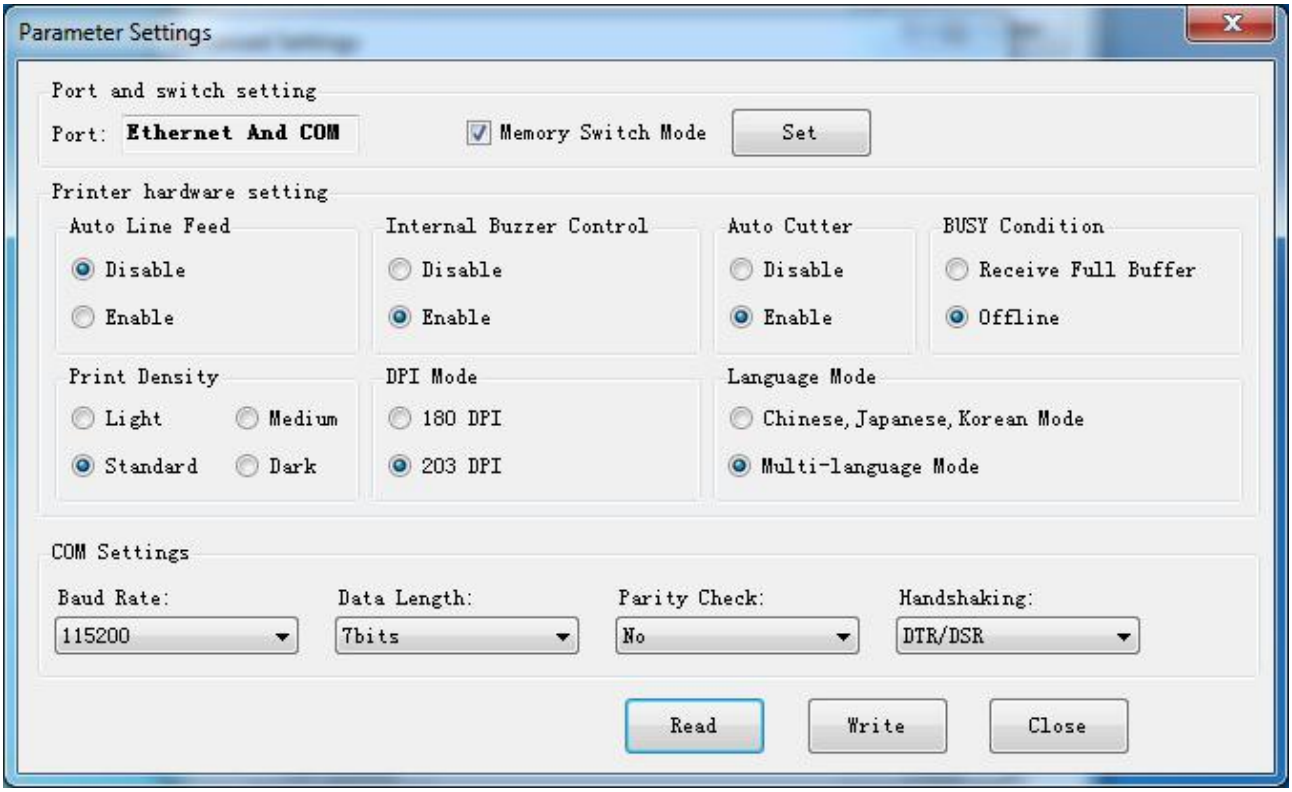
◆ ***Reduction Paper Setting***

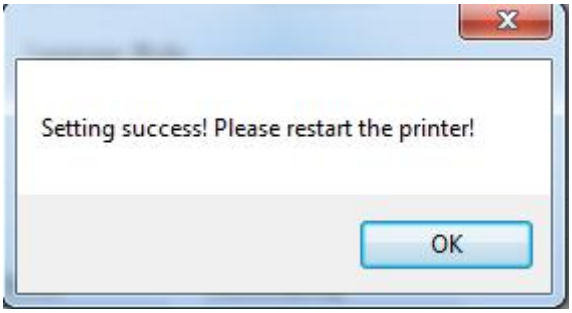
Choose the item and click “Setting”.



◆ ***DIP Setting***

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





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 to take effect.

- **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 these 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

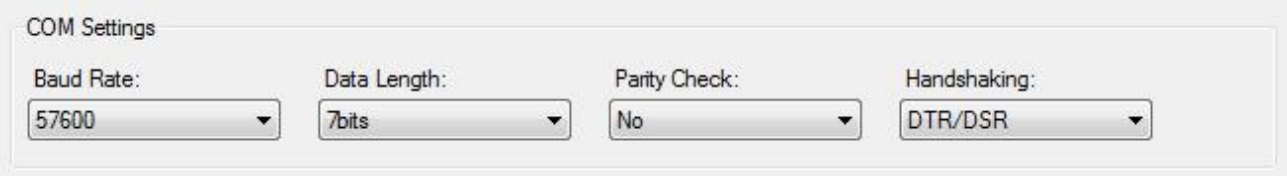
Parity Check: None

Data Length: 8bits

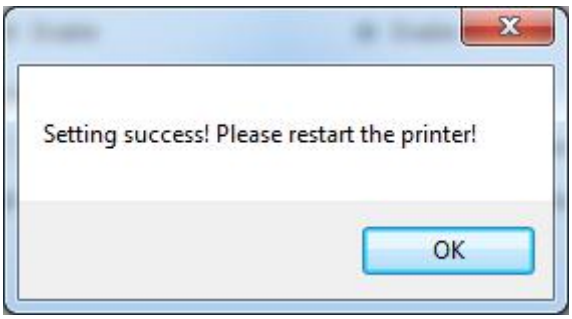
Stop Bits: 1

ADDC: DTR/DSR

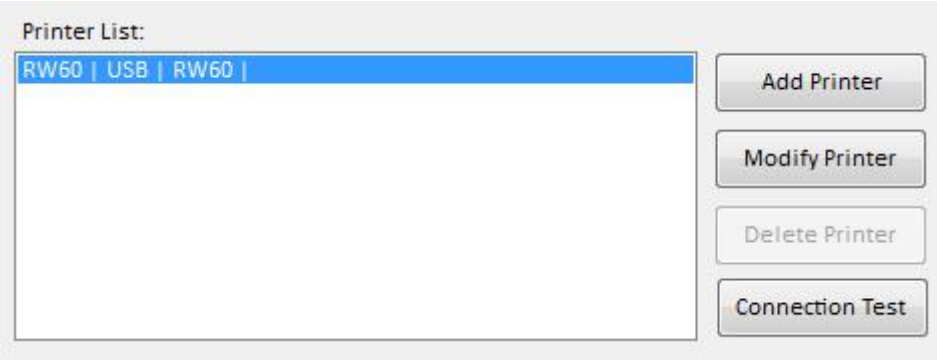
- **Modify the COM setting**



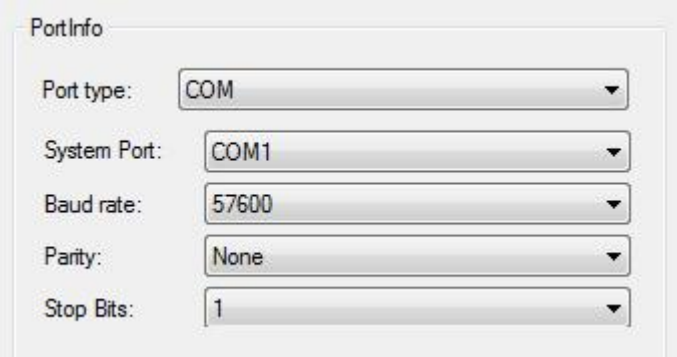
1） After setting the parameters as required, click "Write" and restart the printer.



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.

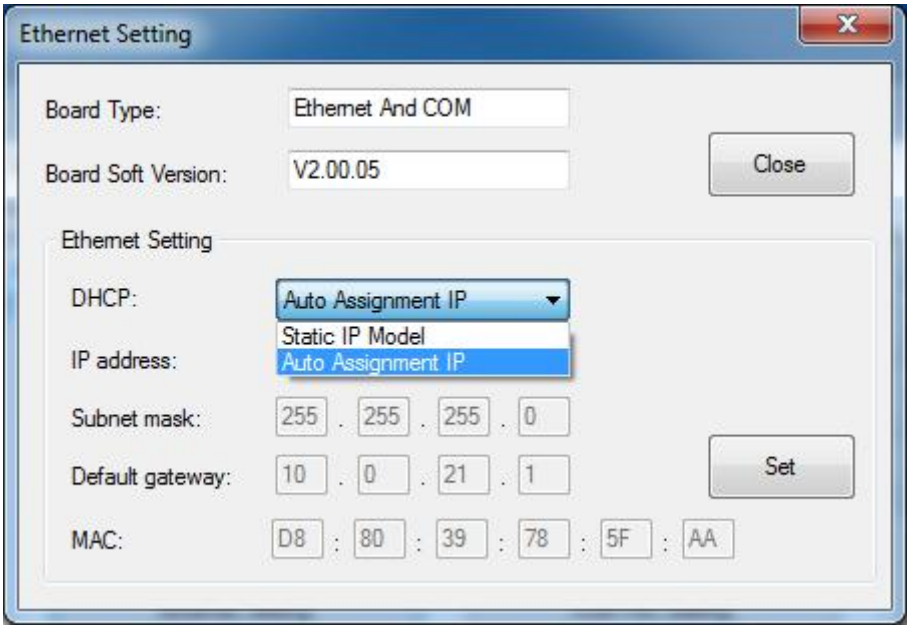


Note: When the DIP setting is set in memory switch mode, the DIP switch at the bottom of the printer need to be disabled.

◆ ***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:

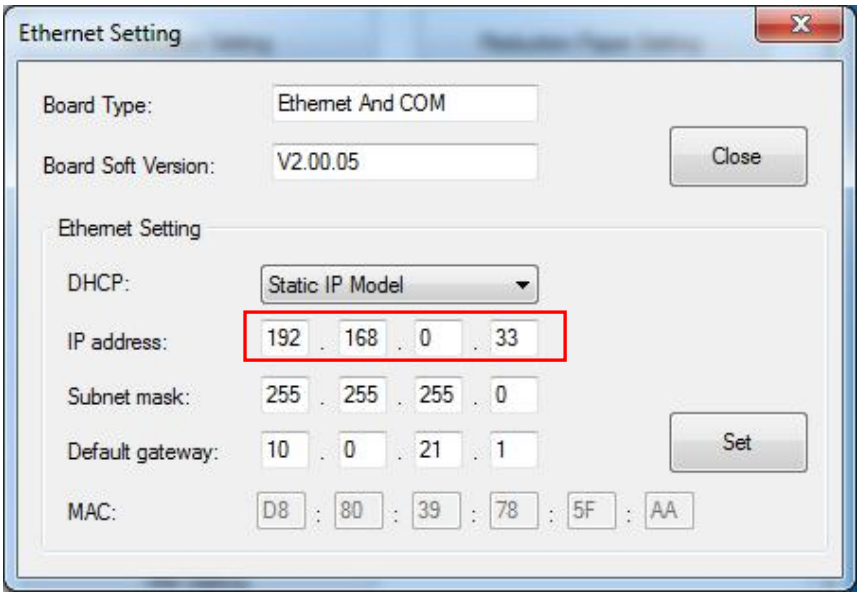


Figure ▪ Printer IP Address

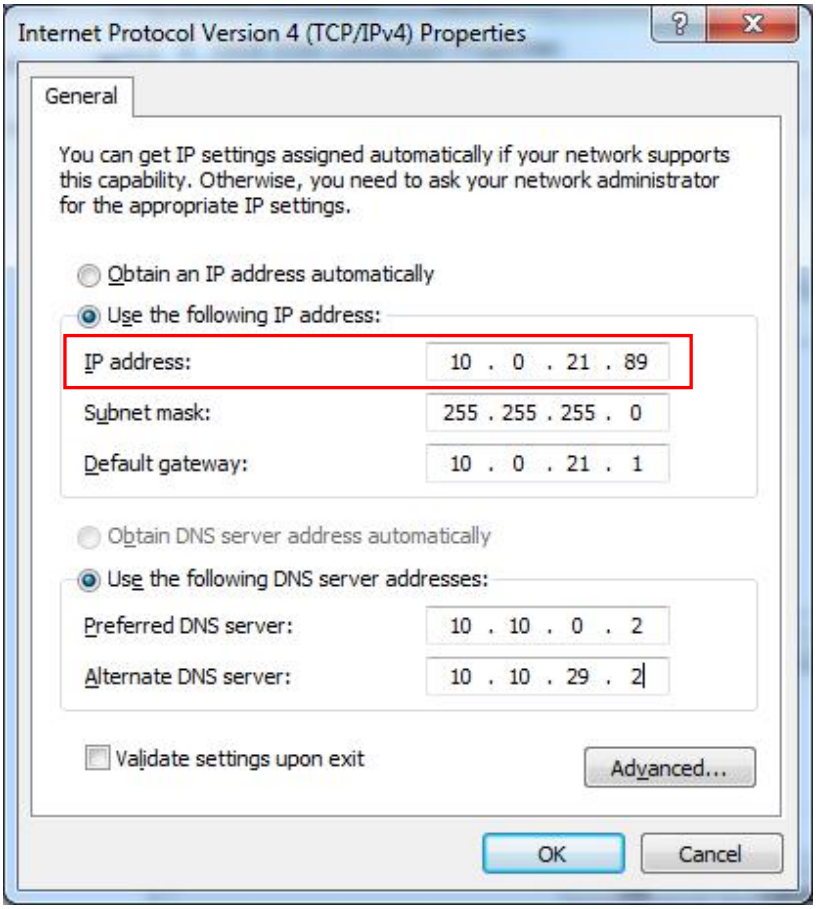


Figure ▪ Host IP Address

2) Set the same network segment.

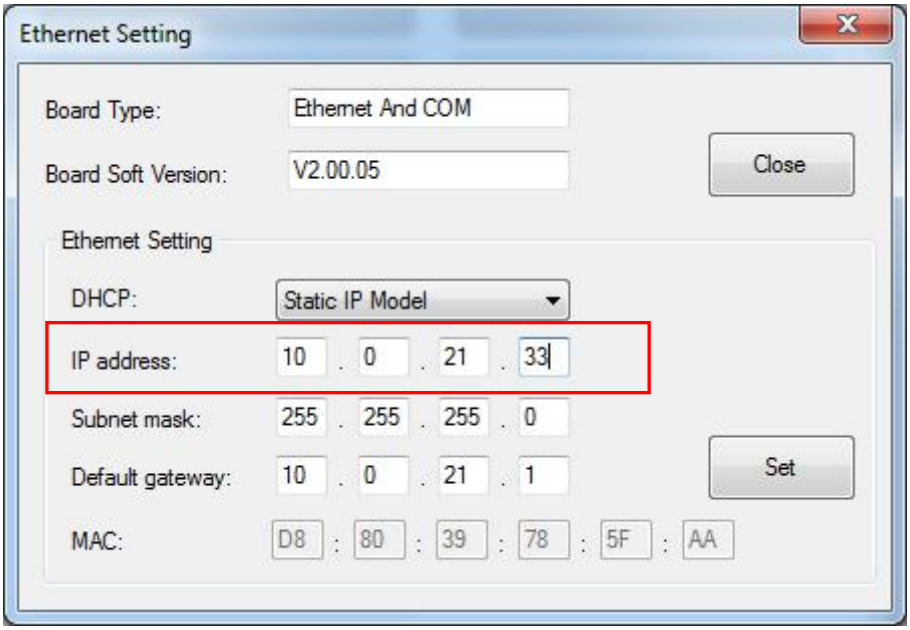
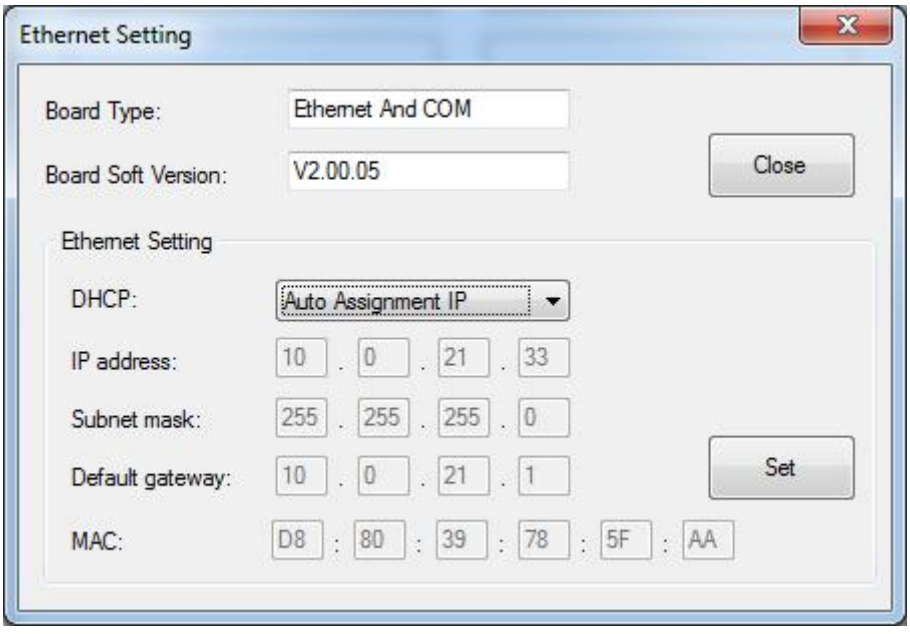


Figure ▪ Printer IP Address

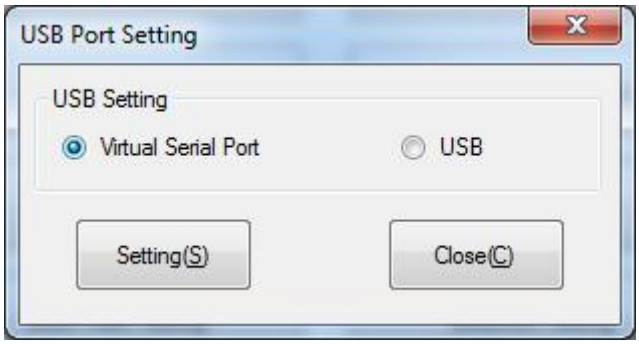
- Auto Assignment IP

  This mode automatically assigns the IP address to the printer.

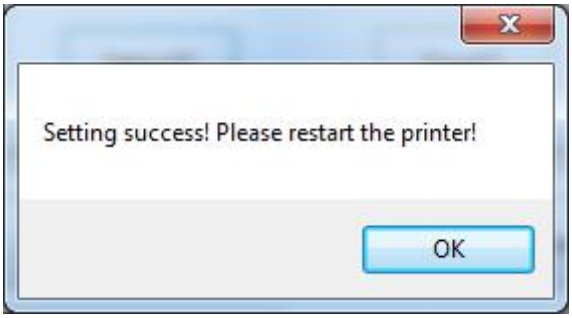


When the settings are complete, click "Write", then restart the printer.

- ***USB Port Setting***



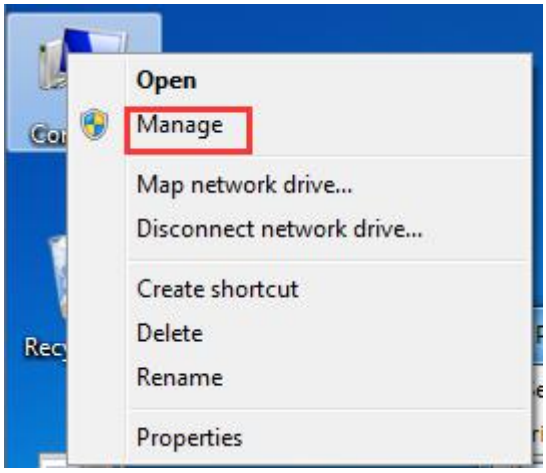
Click "Virtual serial port" setting and restart the printer.

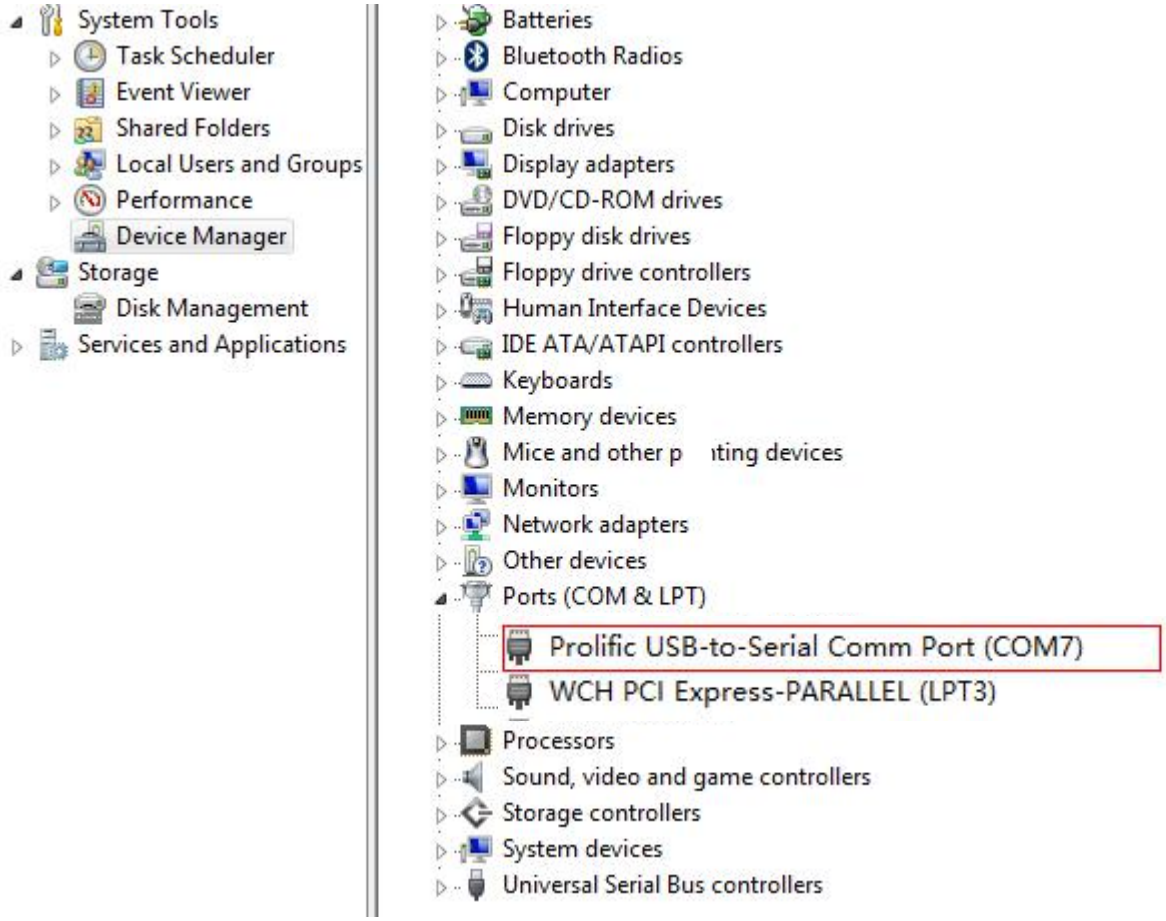


- **Check the Virtual Serial Port**

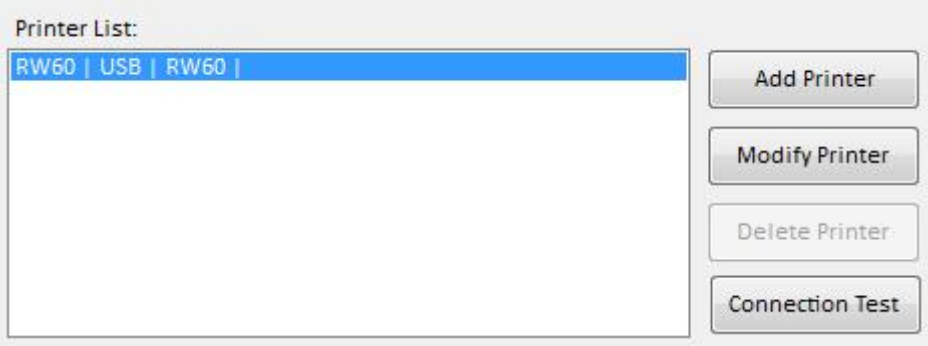
1) Right-click the computer and select “Manage”.

2) Click "Device Manager" to view the virtual port. (such as: COM7)

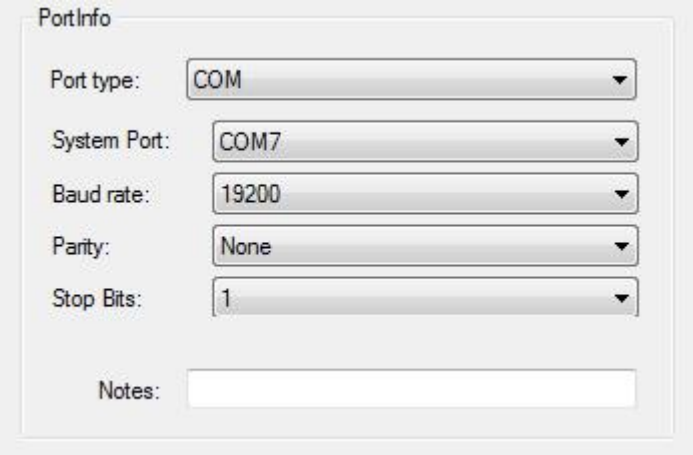




3) Return to the printer utility and click "Modify Printer".

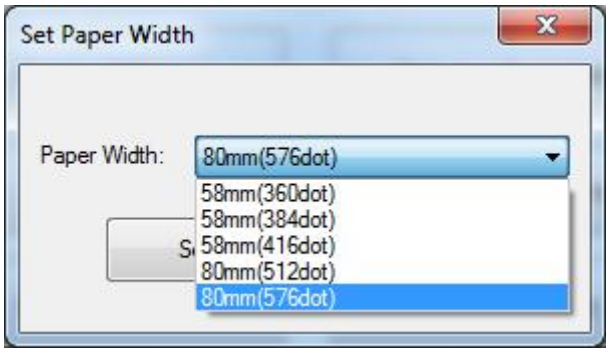


4) Change the port to "COM7".



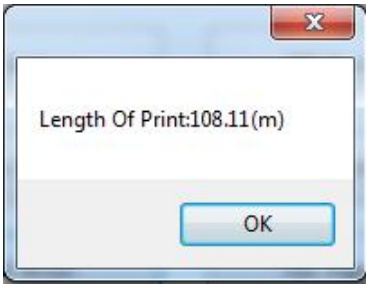
◆ ***Paper Width Setting***

Choose the item and click “Set”.



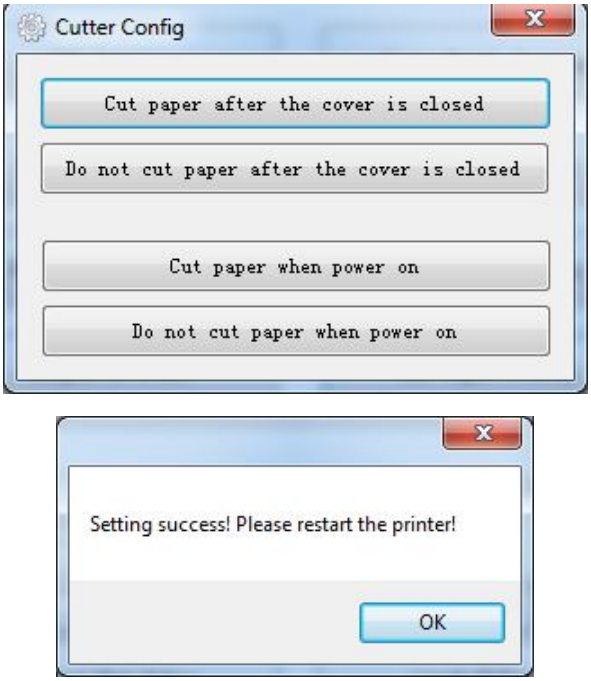
Note: Select the paper width above according to the paper print width.

- ***Length Of Print***



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

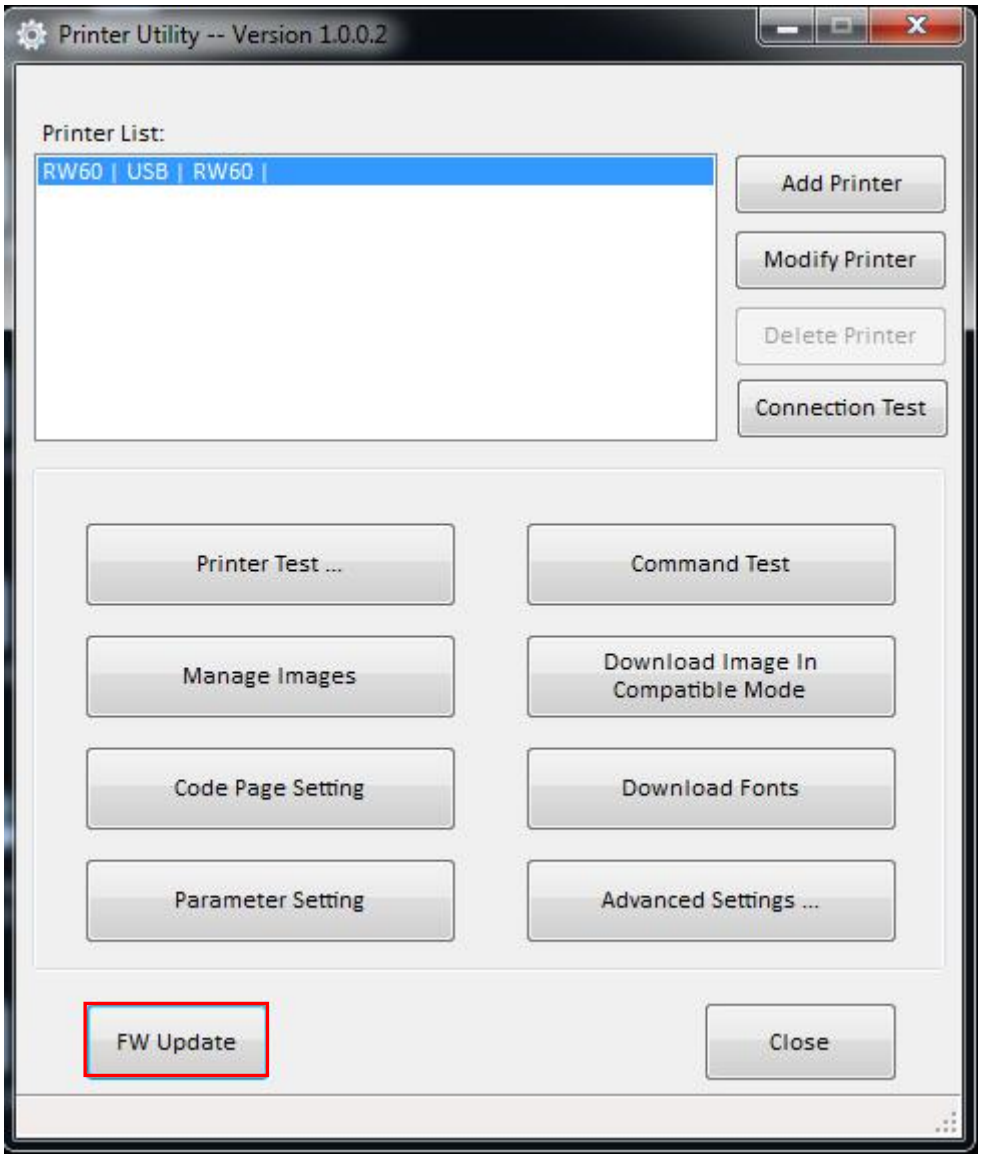
- ***Cut Paper Config***



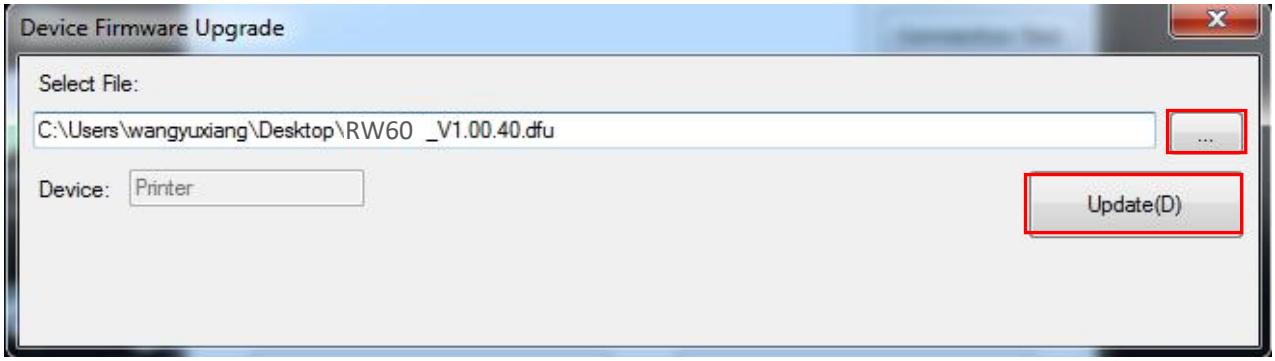
1) Cut paper after the cover is closed: the printer automatically cuts the paper after closing the cover.
2) Do not cut paper after the cover is closed: the printer does not automatically cut the paper after closing the cover.
3) Cut paper when power on: the printer automatically cut paper after the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

8.3 Firmware Update

1) Click “FW Update”.

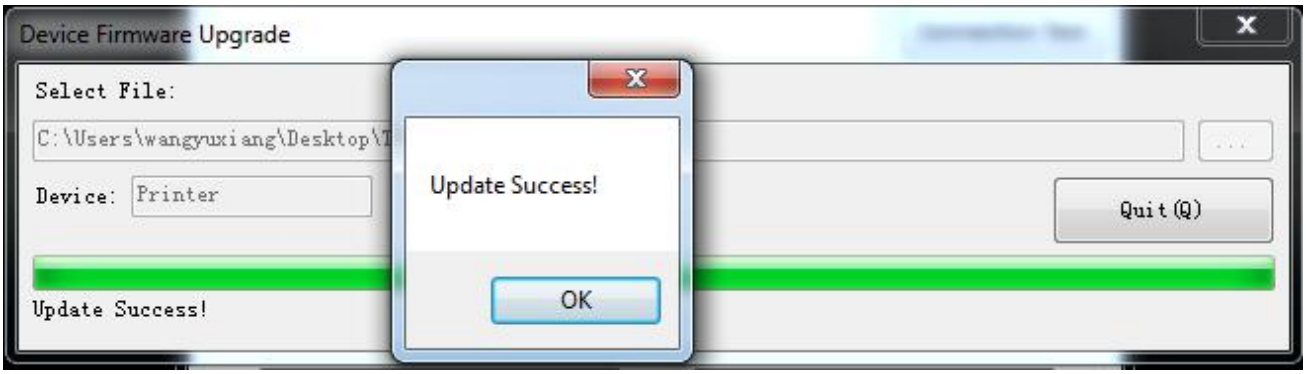


2) When the device appears "Printer", select the Dfu file.



3) Click “Update”.

4) Update success.



5) Restart the printer.

9 WINDOWS DRIVER

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_v2.7.1.1

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 RW60 (Windows 7) as example.

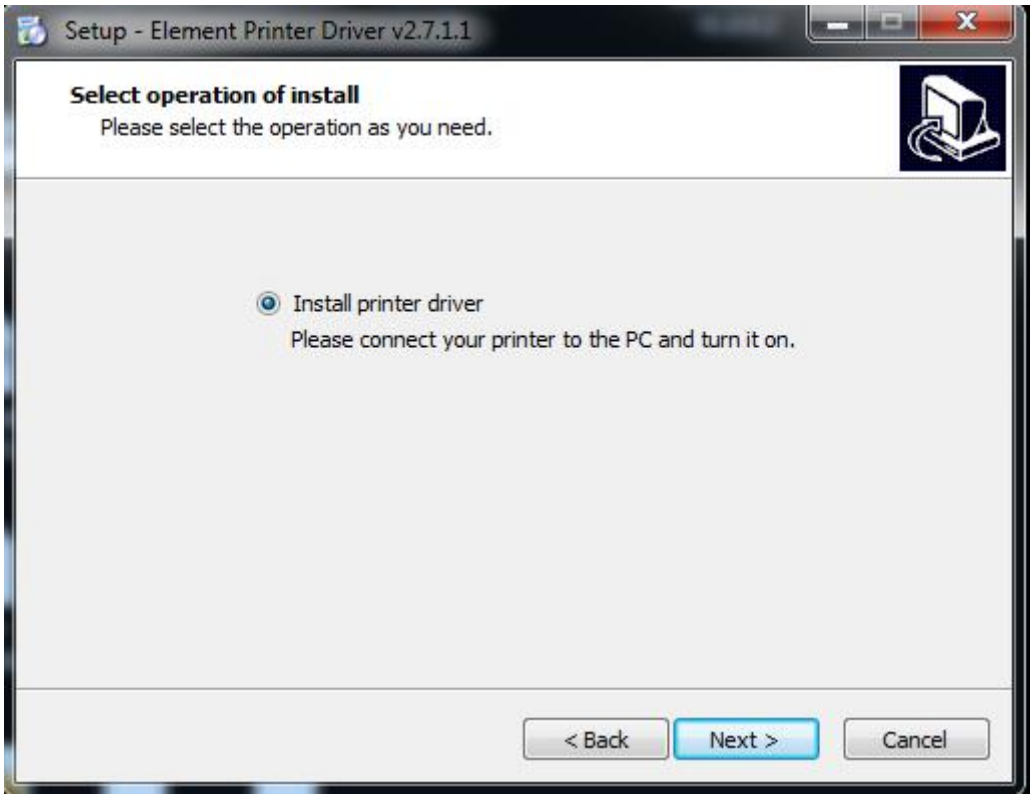
1) Double click Windows Driver.

2) Choose “English” and click “OK”.

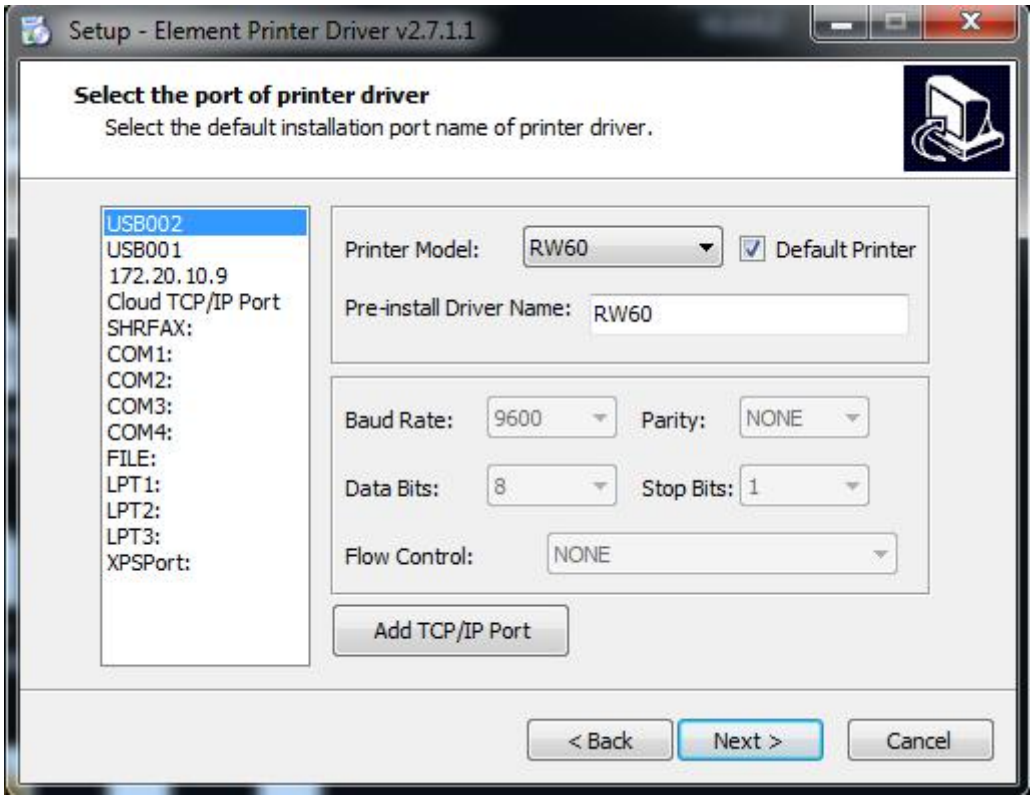
3) Choose “I accept the agreement”, then click “Next”.

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 “RW60”, “USB” as port. Click “Next”.



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

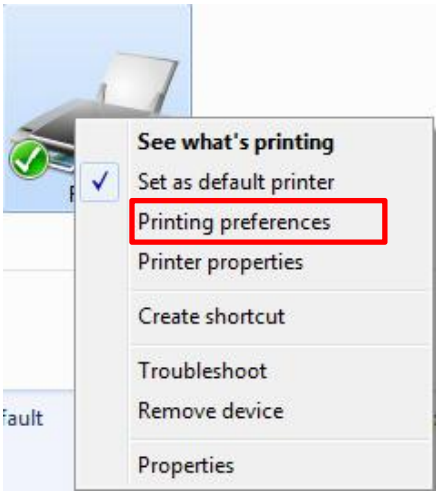
7) After installation, the icon will be found in “Start”→“Devices and Printers”.

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.

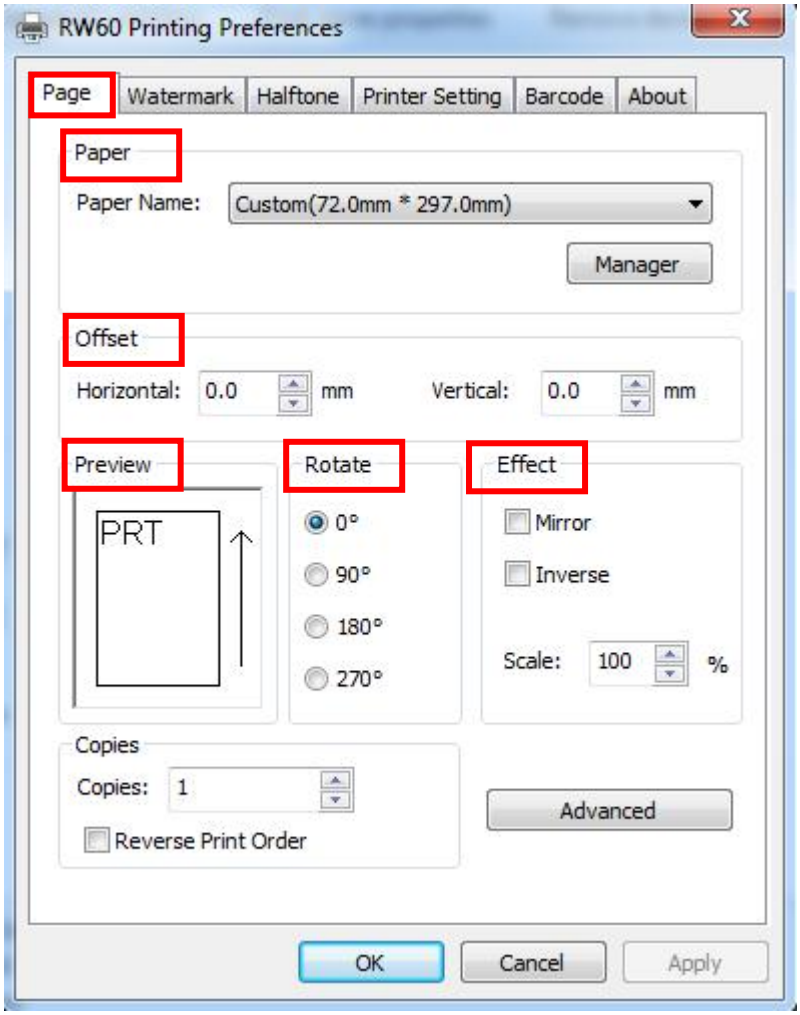
9.5 Detailed Windows Driver Setting

9.5.1 Printing Preferences

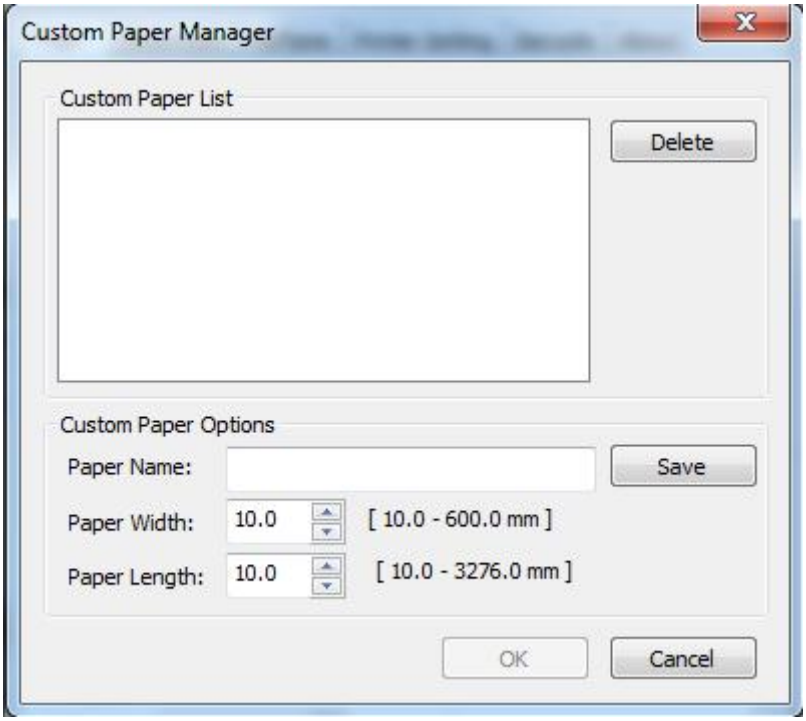
1) Click “Start” → “Devices and Printers”. Right click “RW60” and choose “Printing preferences”.



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

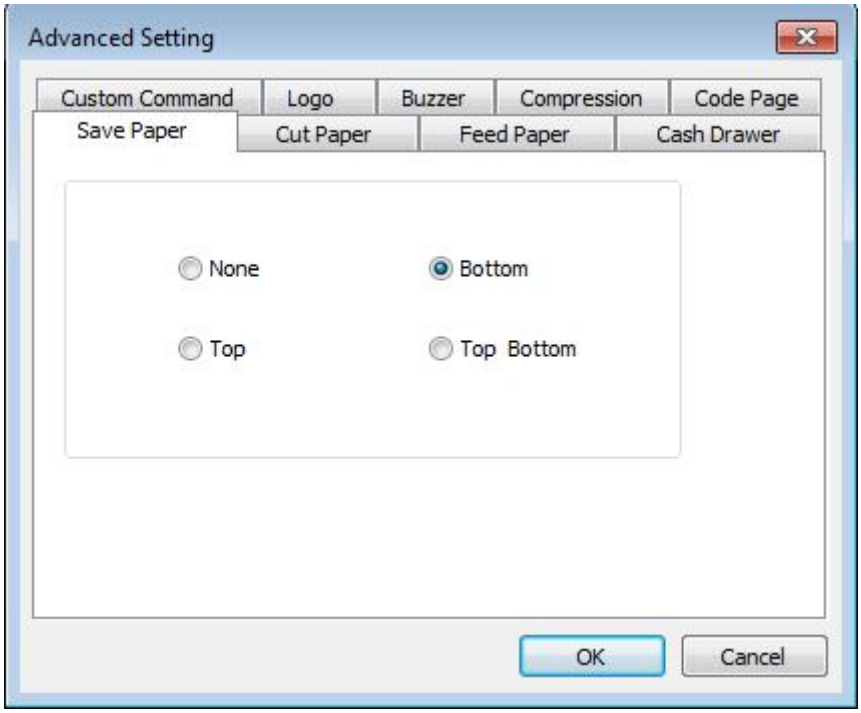


• Click “Manager”, add or delete paper.

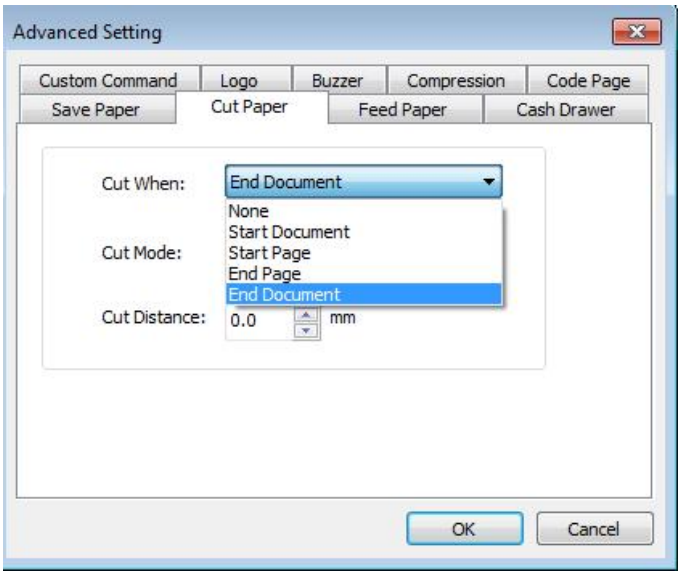


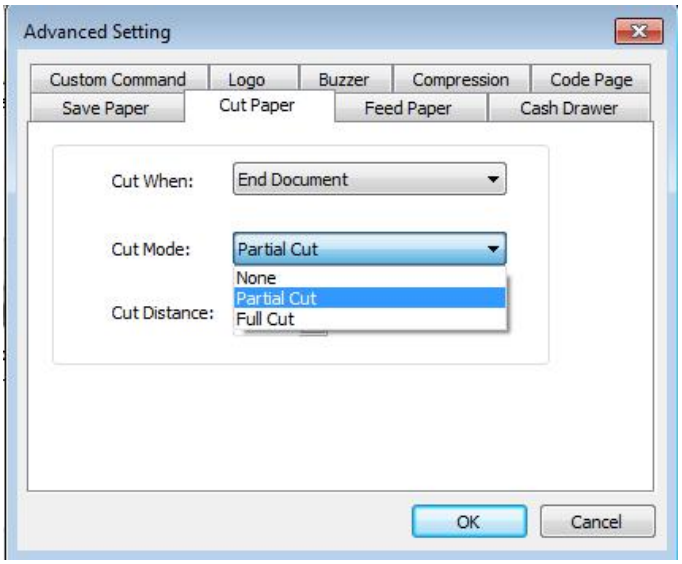
• Click “Advanced Setting” to set “Save Paper/Cut Paper/Feed Paper/Cash Drawer/Custom Command/Logo/Buzzer/Code Page”.

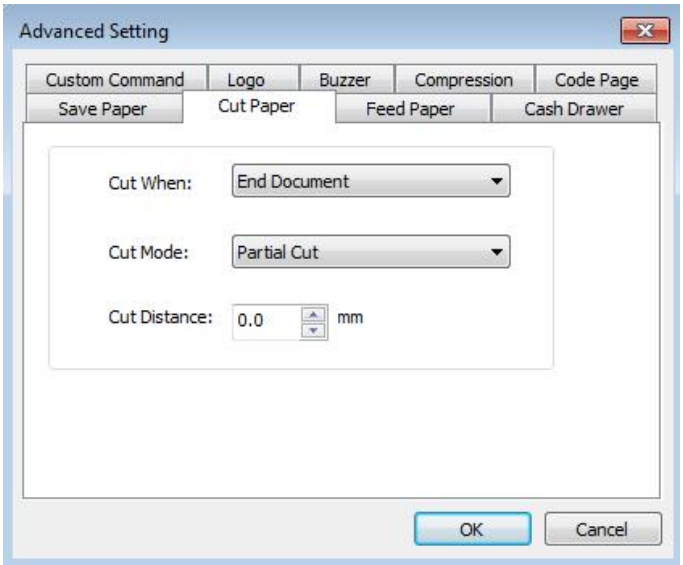
- Save Paper



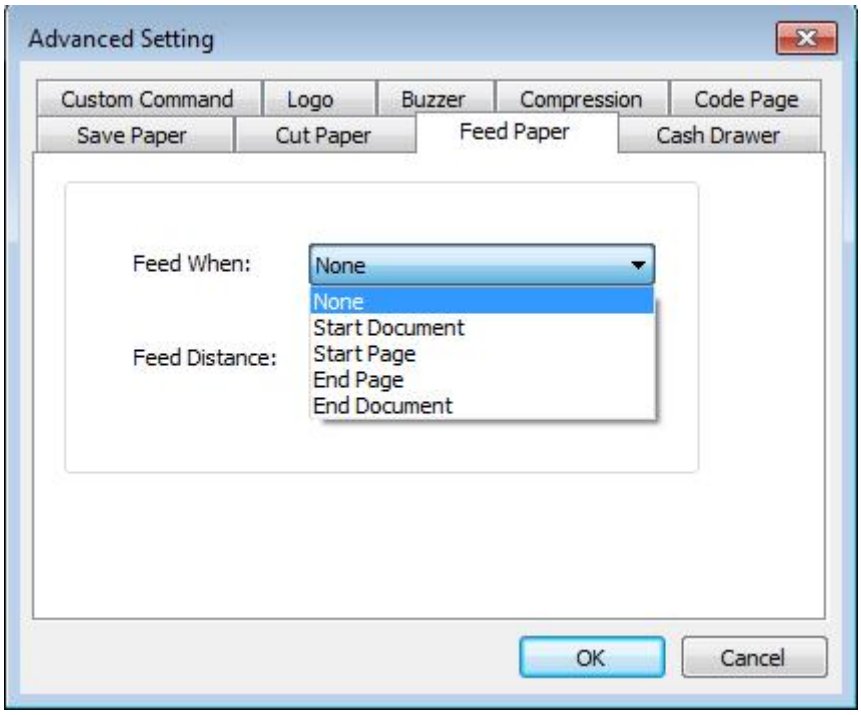
- Cut Paper

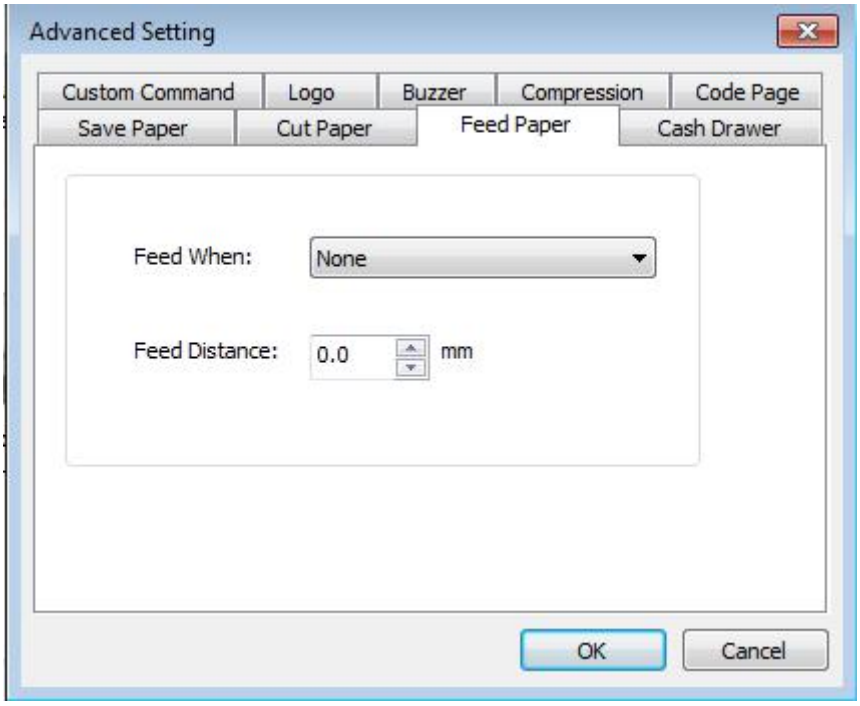

Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Cut When:
End Document
None
Start Document
Start Page
End Page
End Document
Cut Mode:
Cut Distance:
0.0
mm
OK
Cancel


Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Cut When:
End Document
Cut Mode:
Partial Cut
None
Partial Cut
Full Cut
Cut Distance:
OK
Cancel

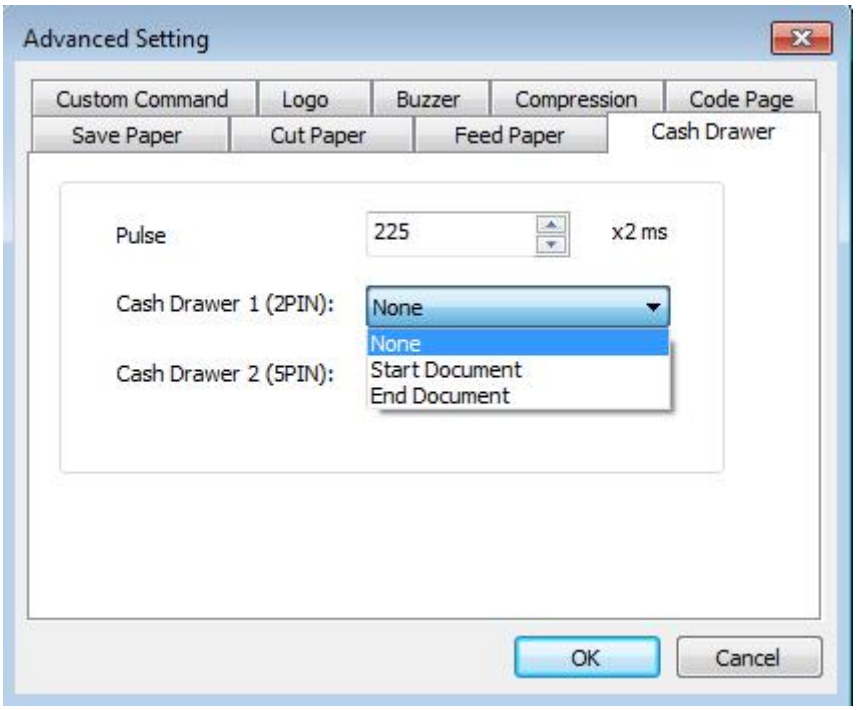

Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Cut When:
End Document
Cut Mode:
Partial Cut
Cut Distance:
0.0
mm
OK
Cancel

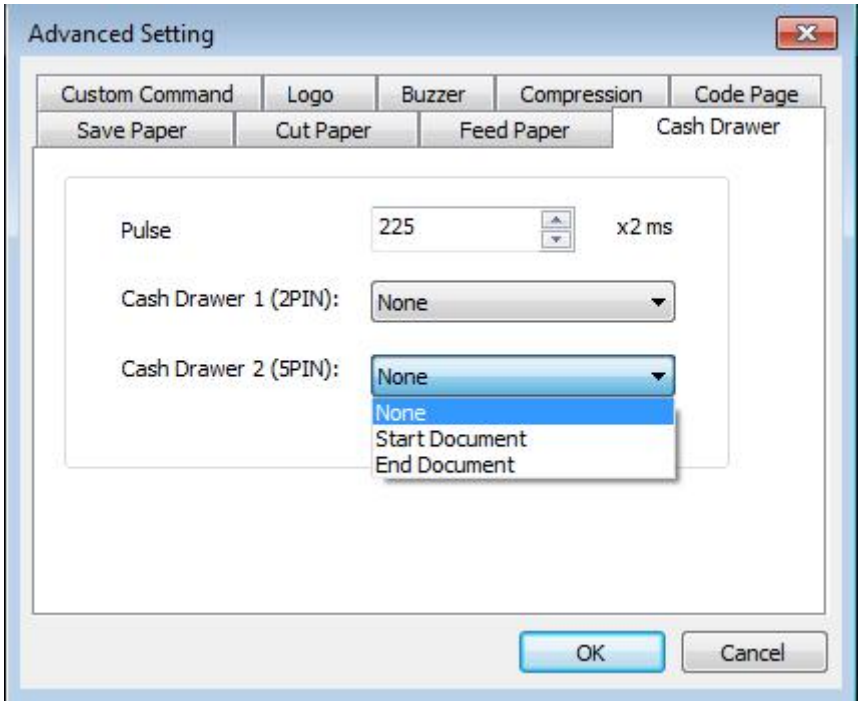
- Feed Paper


Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Feed When:
None
Feed Distance:
None
Start Document
Start Page
End Page
End Document
OK
Cancel

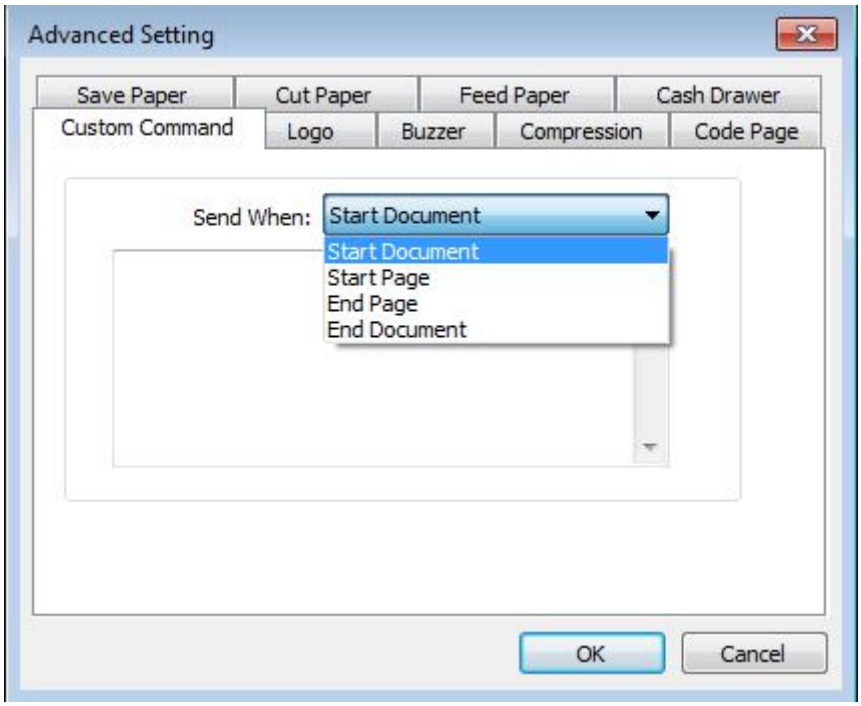

Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Feed When:
None
Feed Distance:
0.0
mm
OK
Cancel

- Cash Drawer

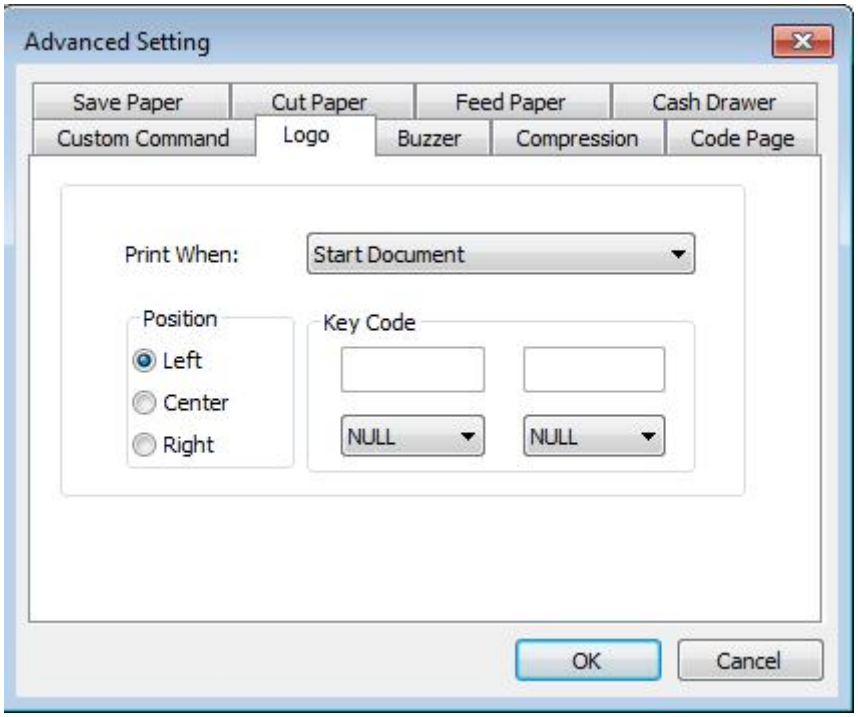

Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Pulse
225
x2 ms
Cash Drawer 1 (2PIN):
None
Cash Drawer 2 (5PIN):
None
Start Document
End Document
OK
Cancel


Advanced Setting
Custom Command
Logo
Buzzer
Compression
Code Page
Save Paper
Cut Paper
Feed Paper
Cash Drawer
Pulse
225
x2 ms
Cash Drawer 1 (2PIN):
None
Cash Drawer 2 (5PIN):
None
None
Start Document
End Document
OK
Cancel

- Custom Command

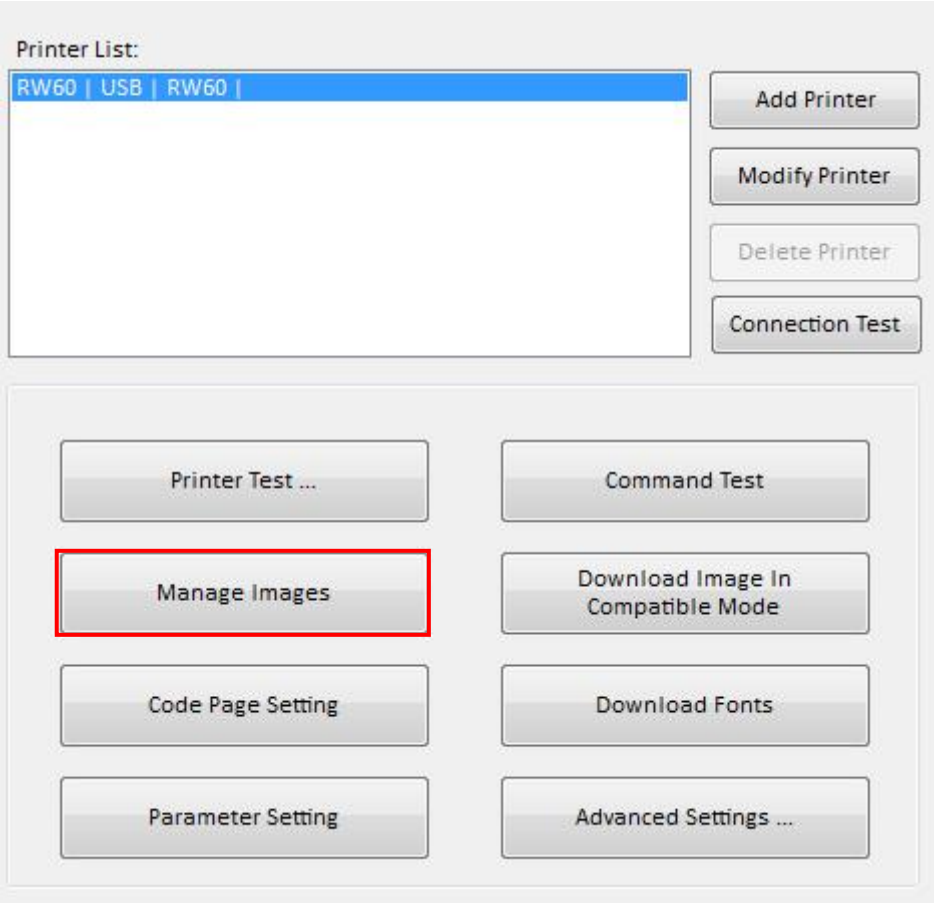


- Logo



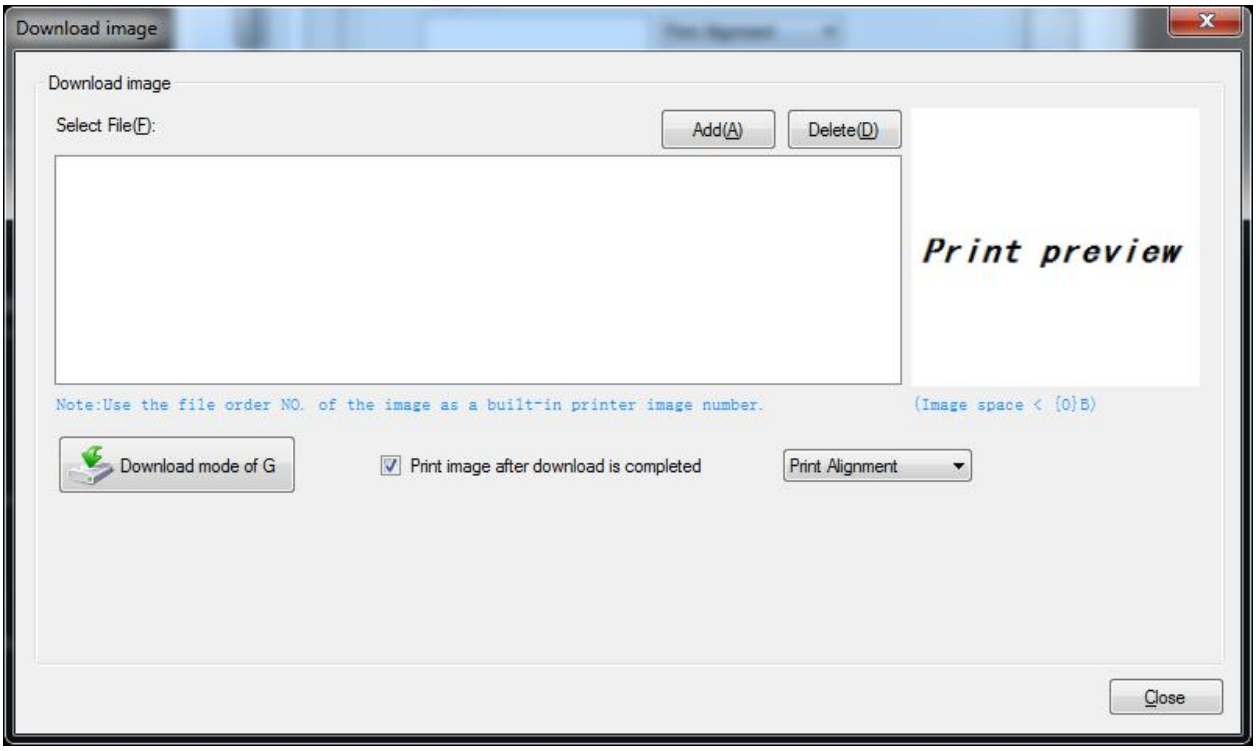
Note: this setting needs to be set in utility, here are the steps.

① Open the utility and click "Manage Images".



② Click “Download”.

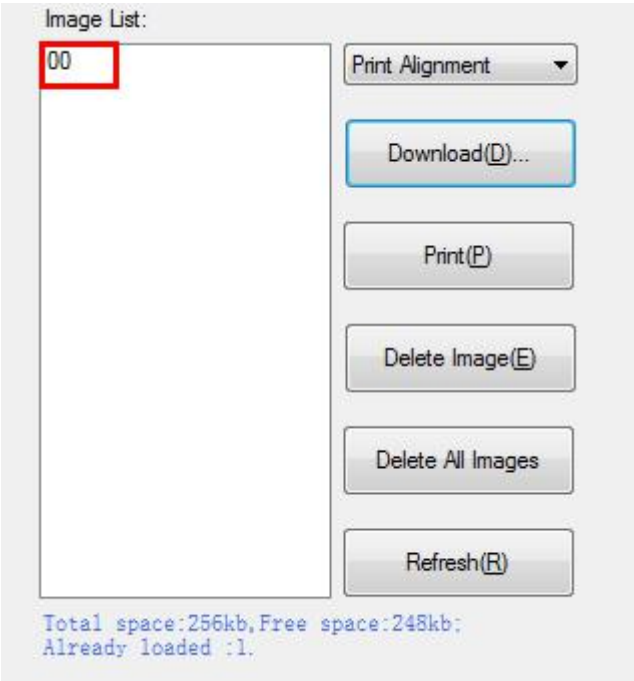
③ Click "Add" to add a logo. (BMP format is recommended)



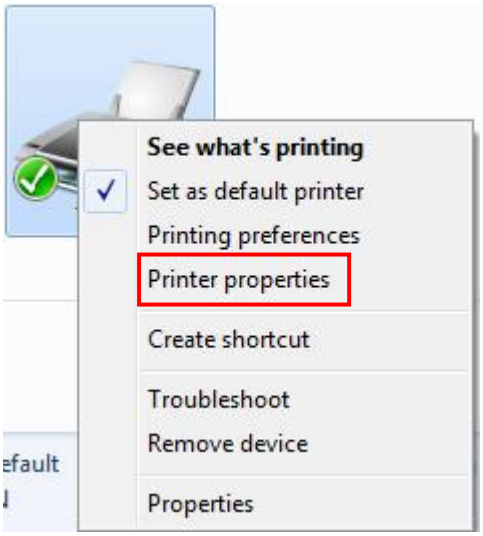
④ Select the print location, and then click "Download mode of G". (Such as: left print)

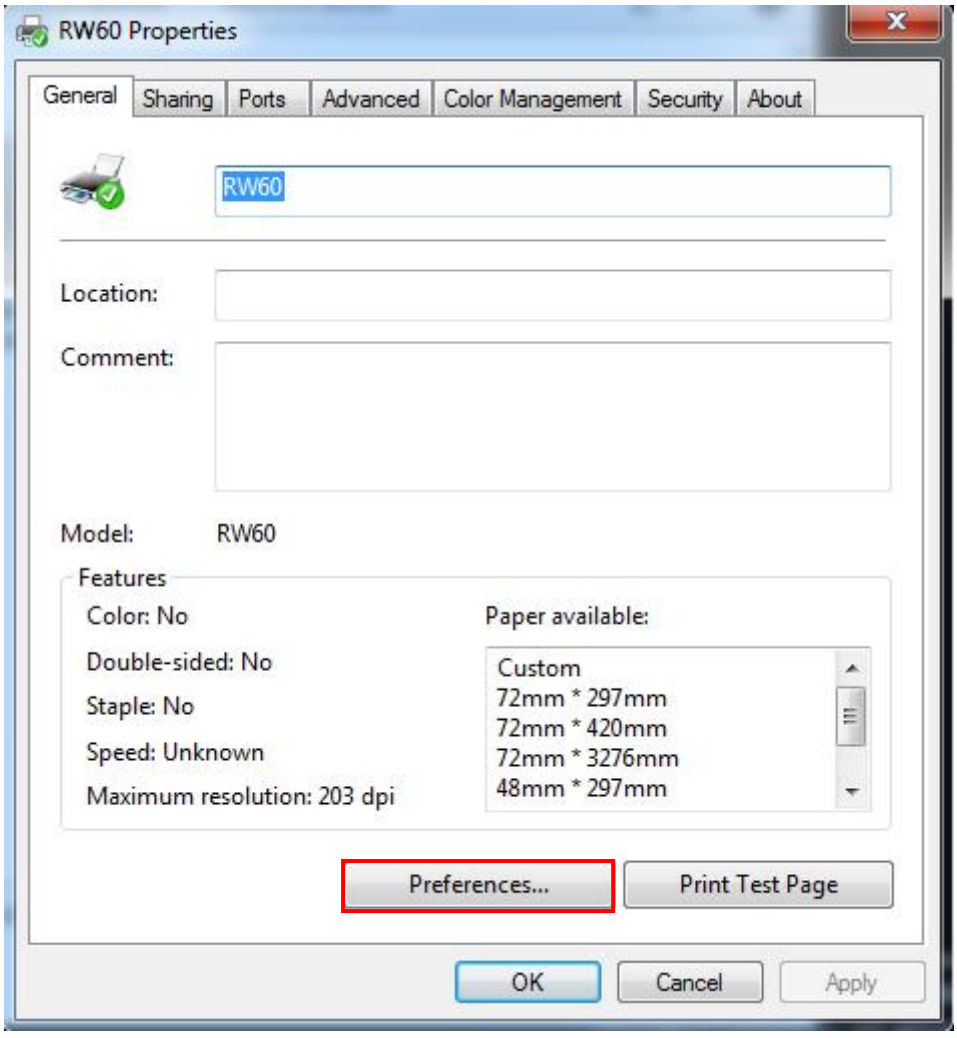
⑤ Return to image list to view the image number.

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

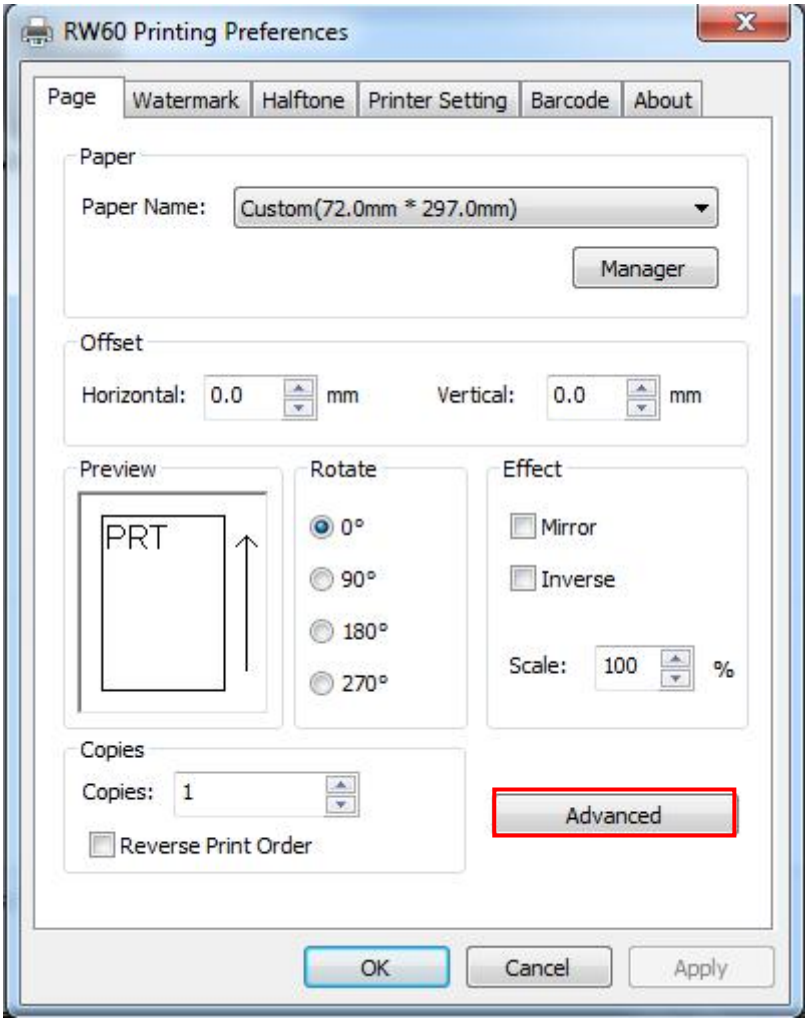


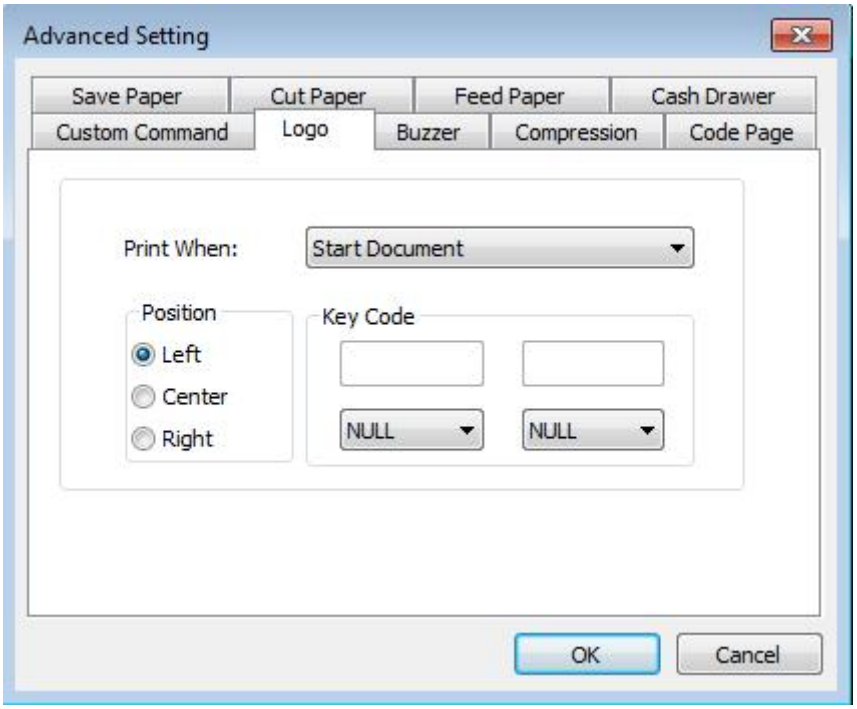
⑥ Select Printer properties in Devices and Printers, then click “Preference”.



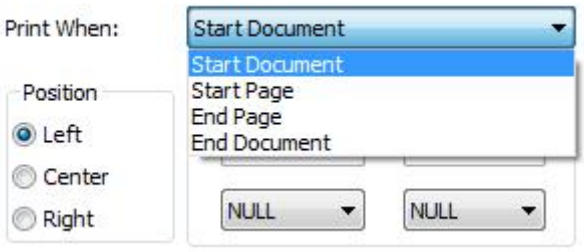


⑦ Click the “Advanced”, then click “Logo”.

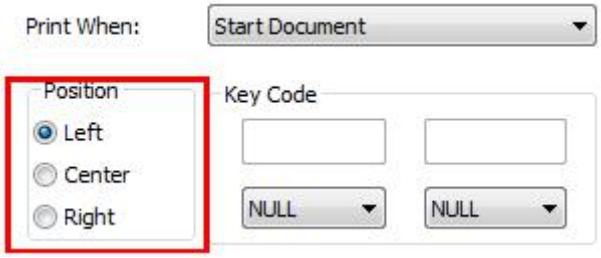




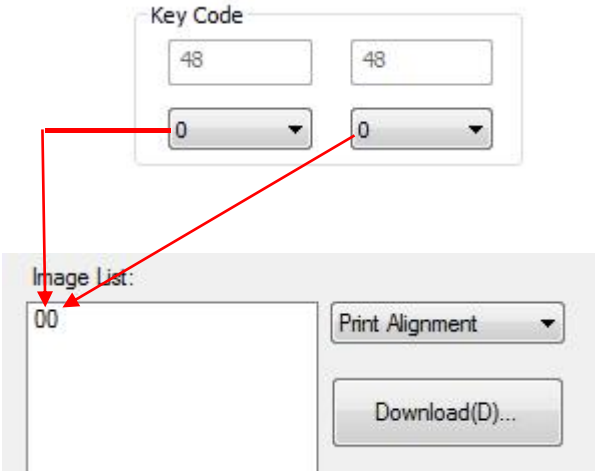
⑧ Set the printing time to print and click "OK". (Such as: Start Document)



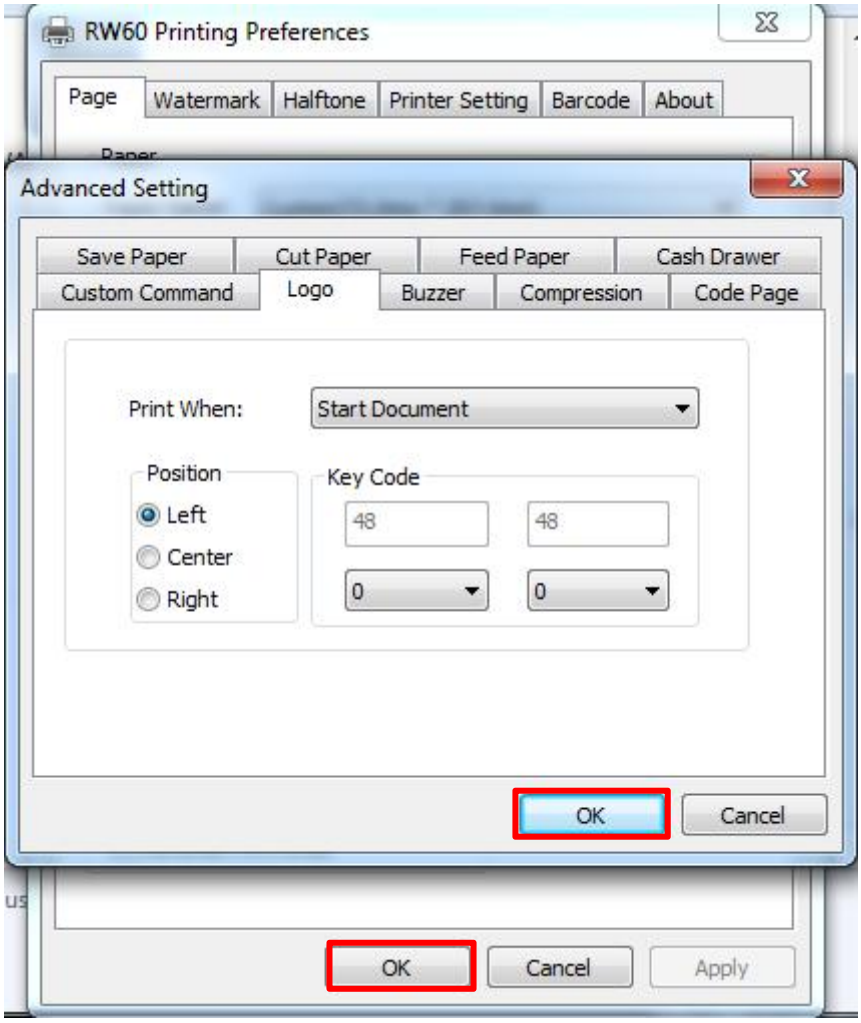
⑨ Return to the logo setting in driver, also select "Print left".



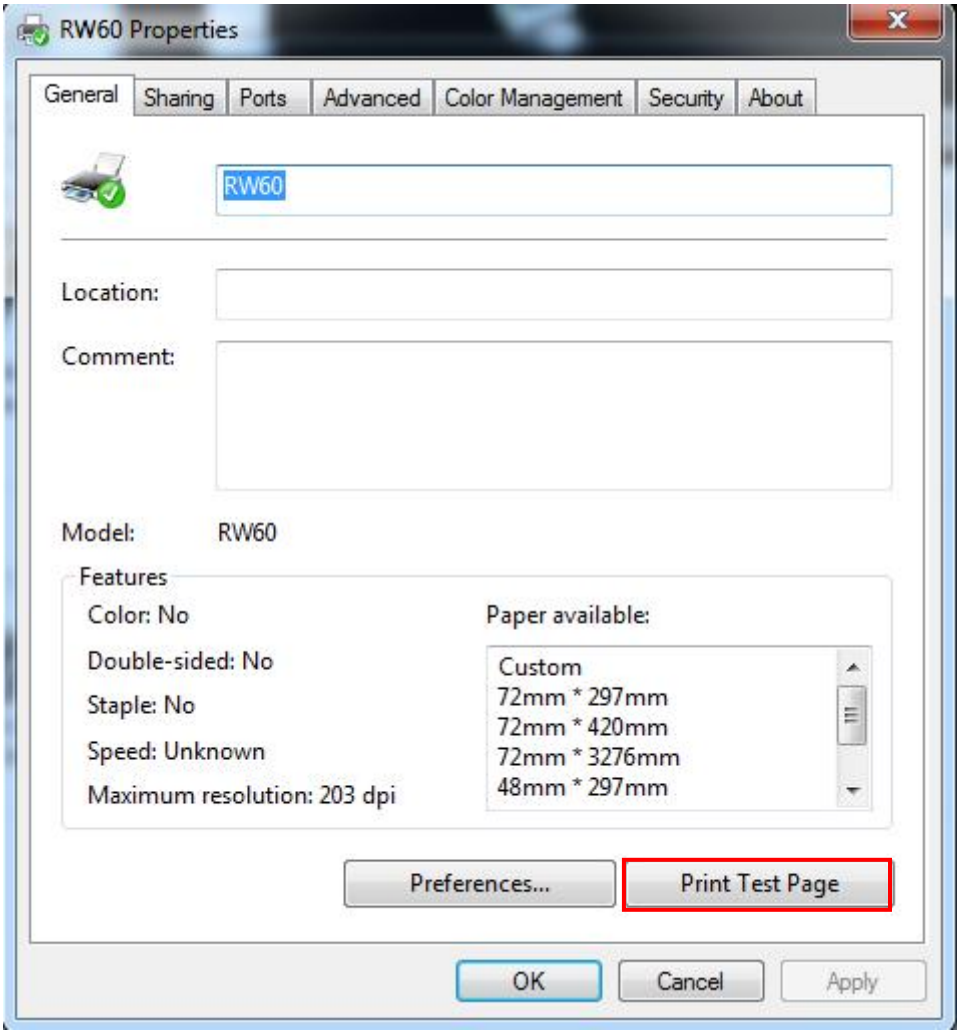
⑩ Set the key Code according to the image number. (Such as: 0 0)



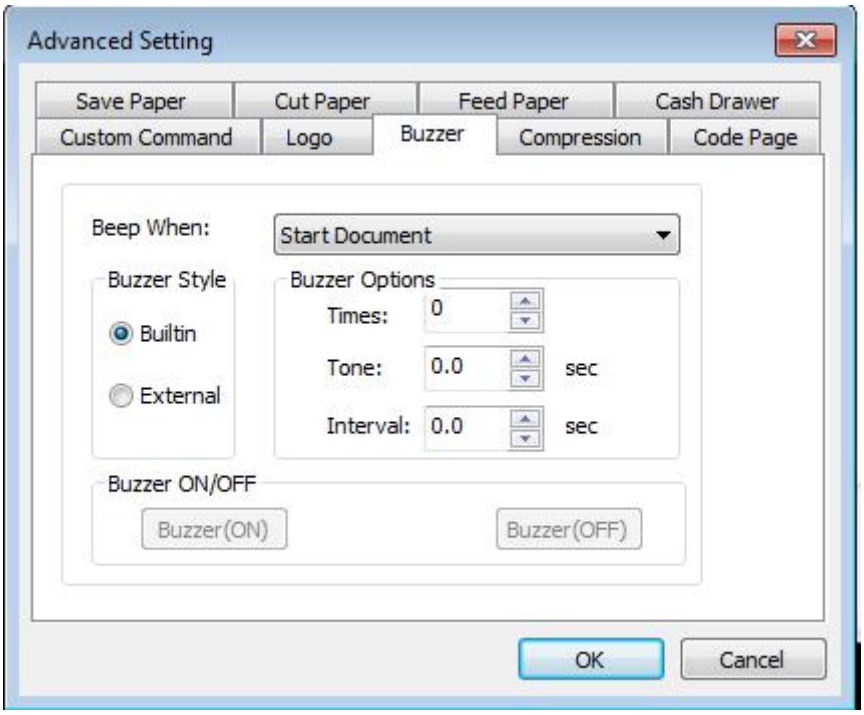
⑪ Then click “OK”.



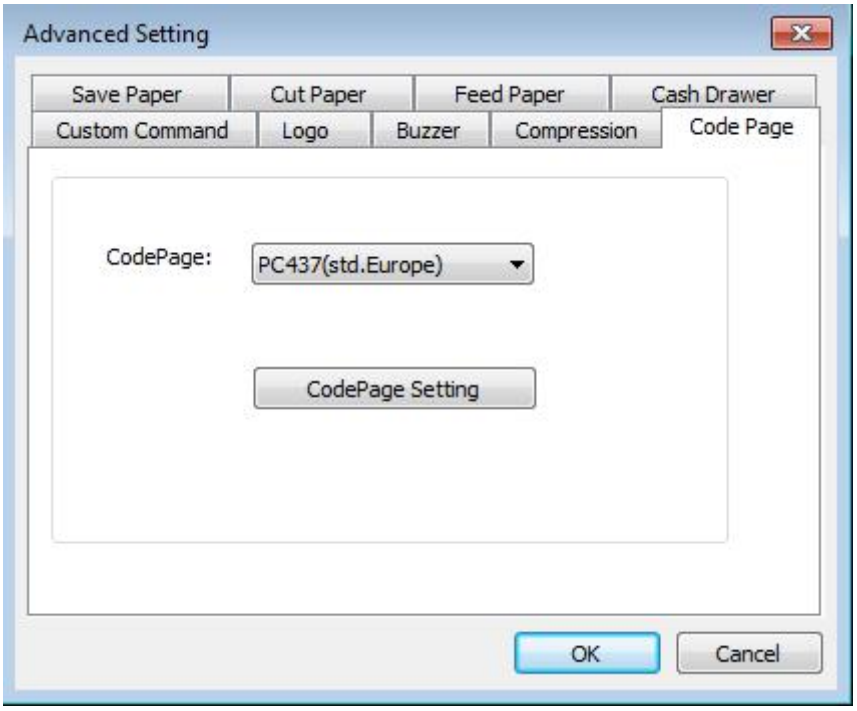
⑫ Click “Print Test Page” to view the printing effect.



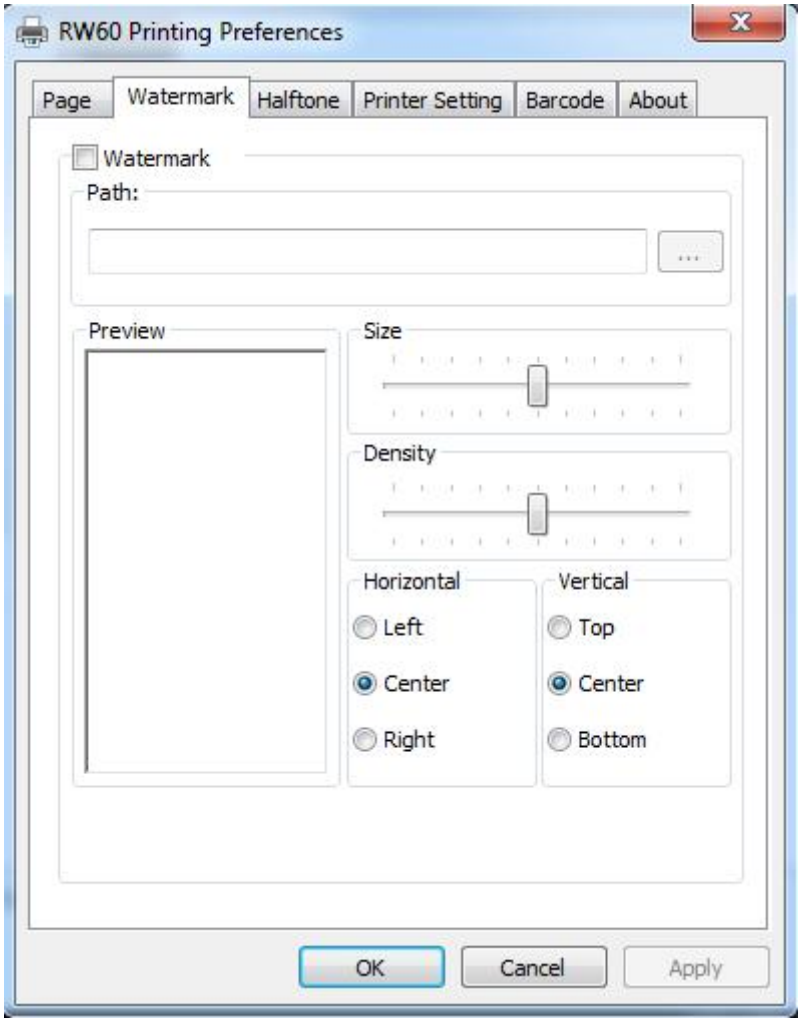
- Buzzer



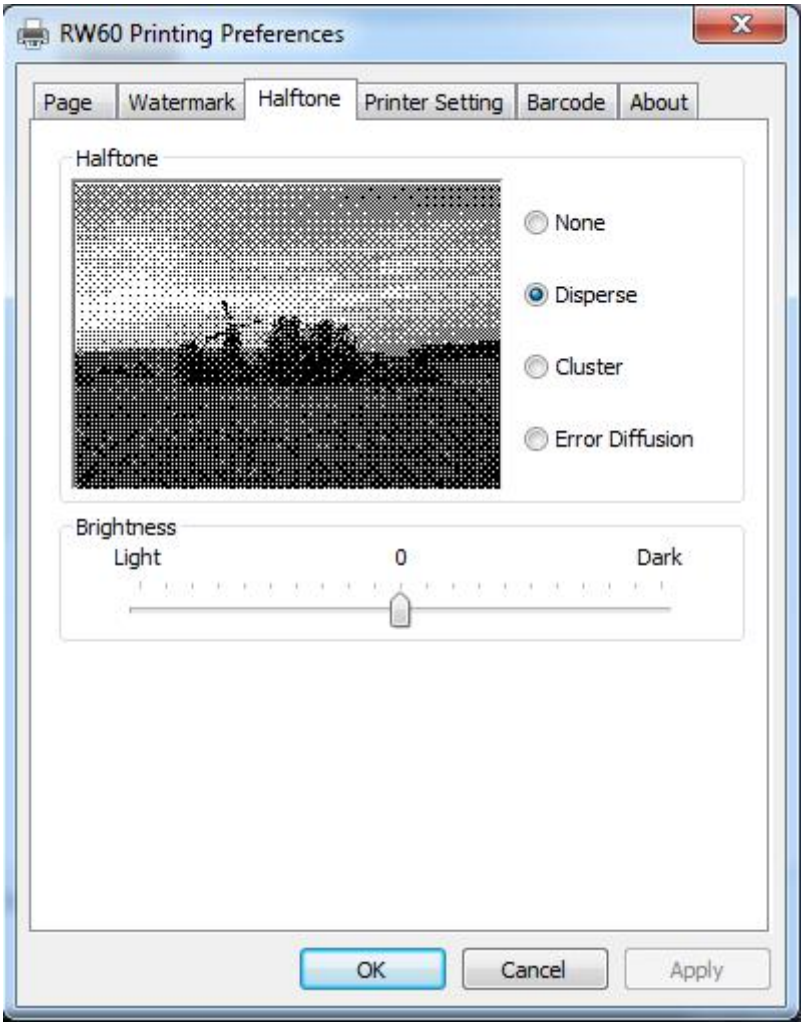
- Code Page



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



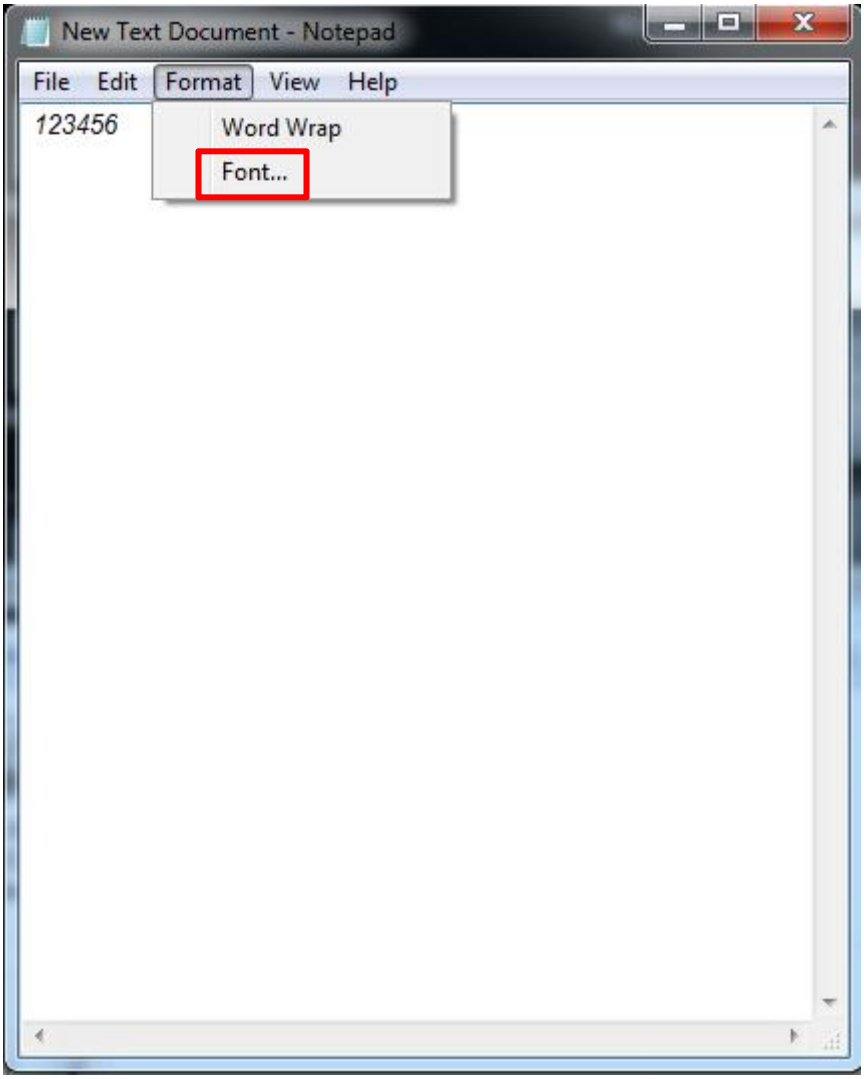
4) Click “Halftone” to set the halftone.

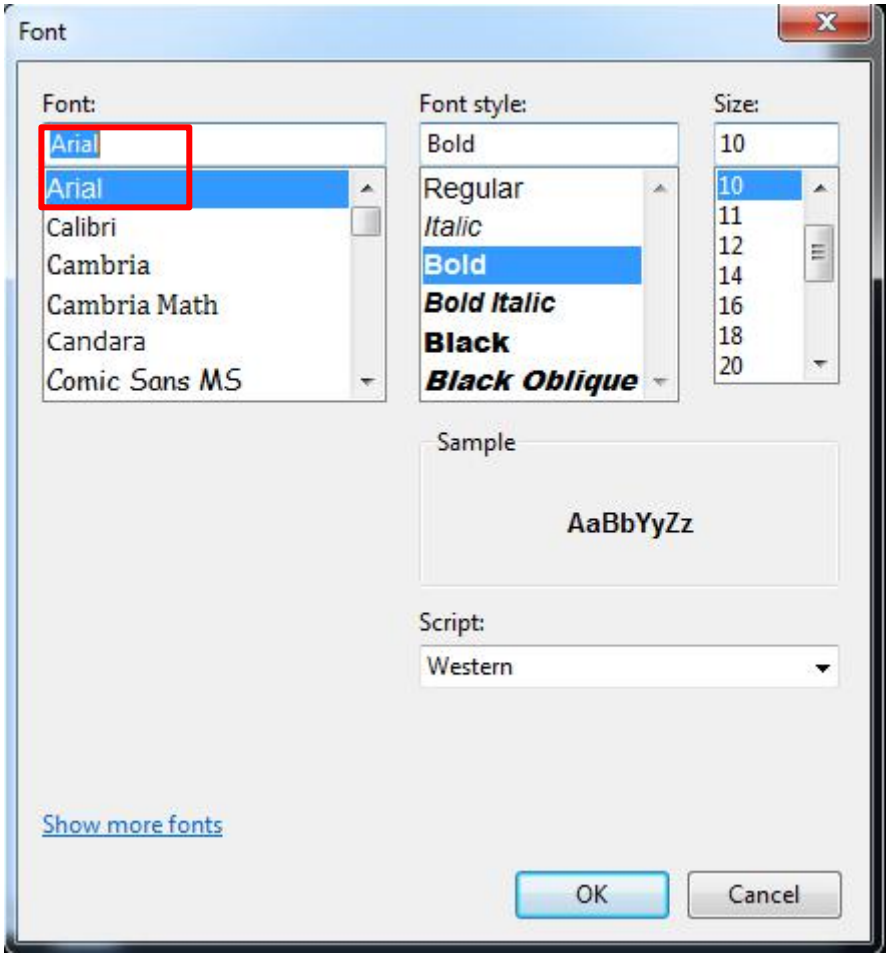


5) Set up the “Barcode”

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:

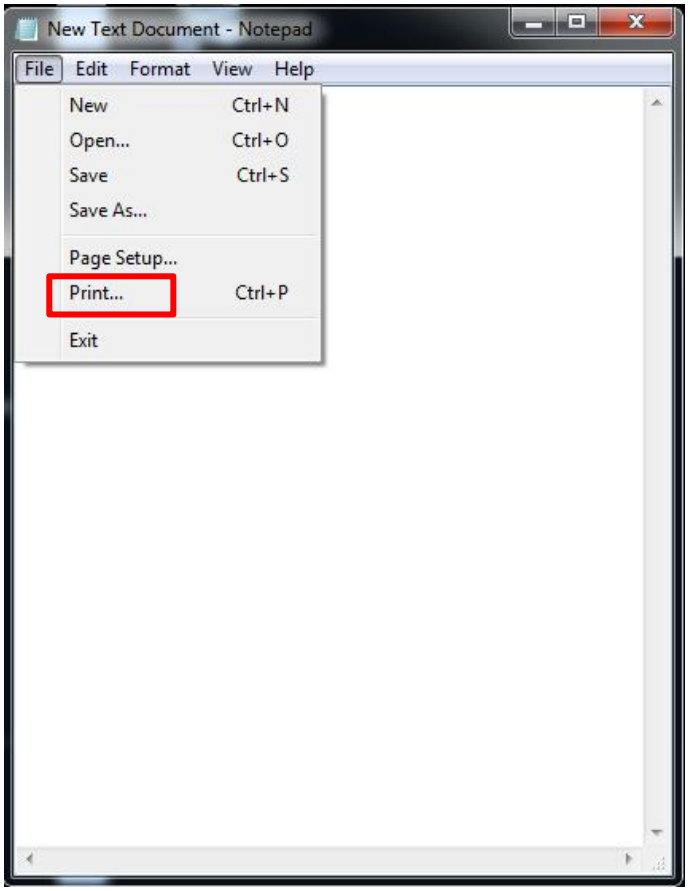
• Set the data "123456" font type to a different font from the main document. Such as: Arial.

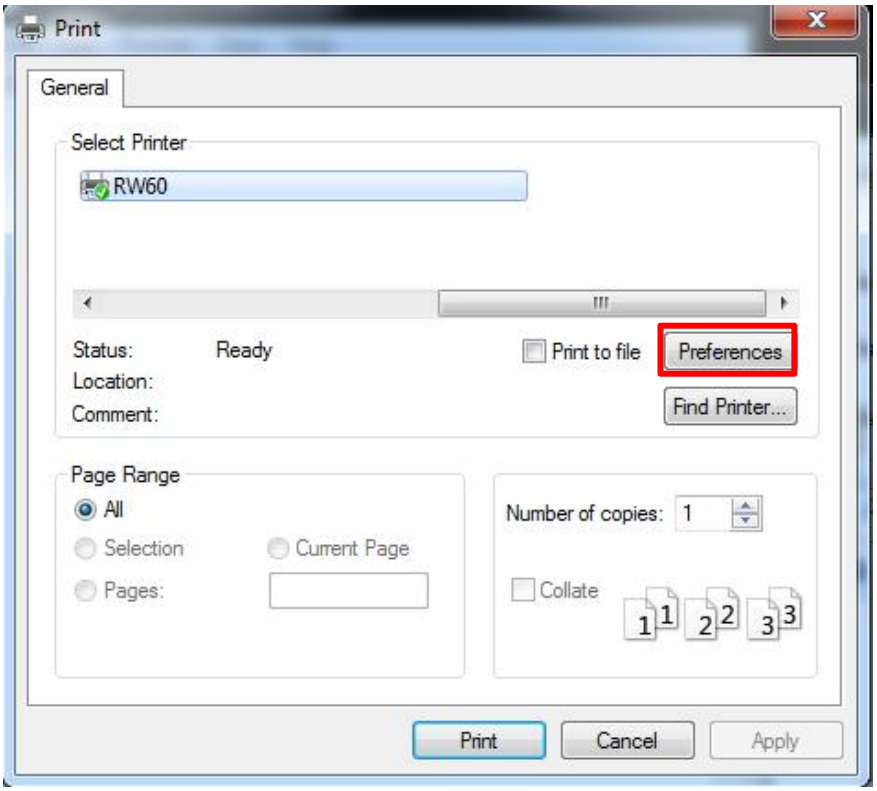



Font
Font:
Arial
Arial
Calibri
Cambria
Cambria Math
Candara
Comic Sans MS
Font style:
Bold
Regular
Italic
Bold
Bold Italic
Black
Black Oblique
Size:
10
10
11
12
14
16
18
20
Sample
AaBbYyZz
Script:
Western
Show more fonts
OK
Cancel

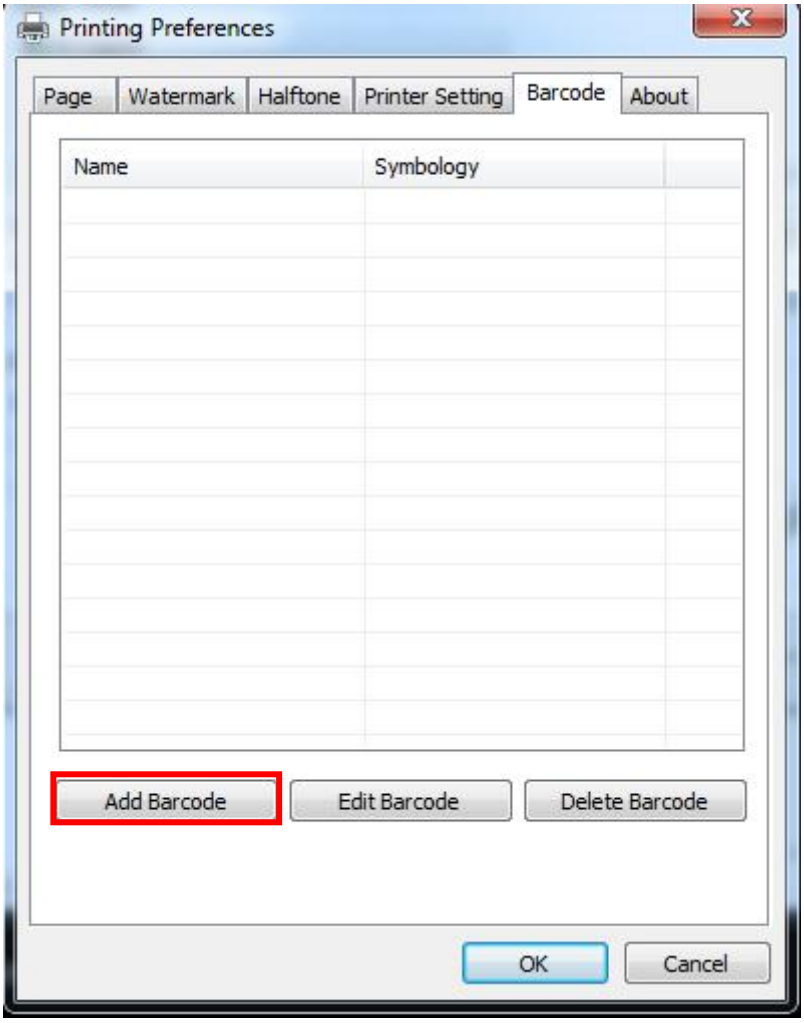
• Open the Preference.

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

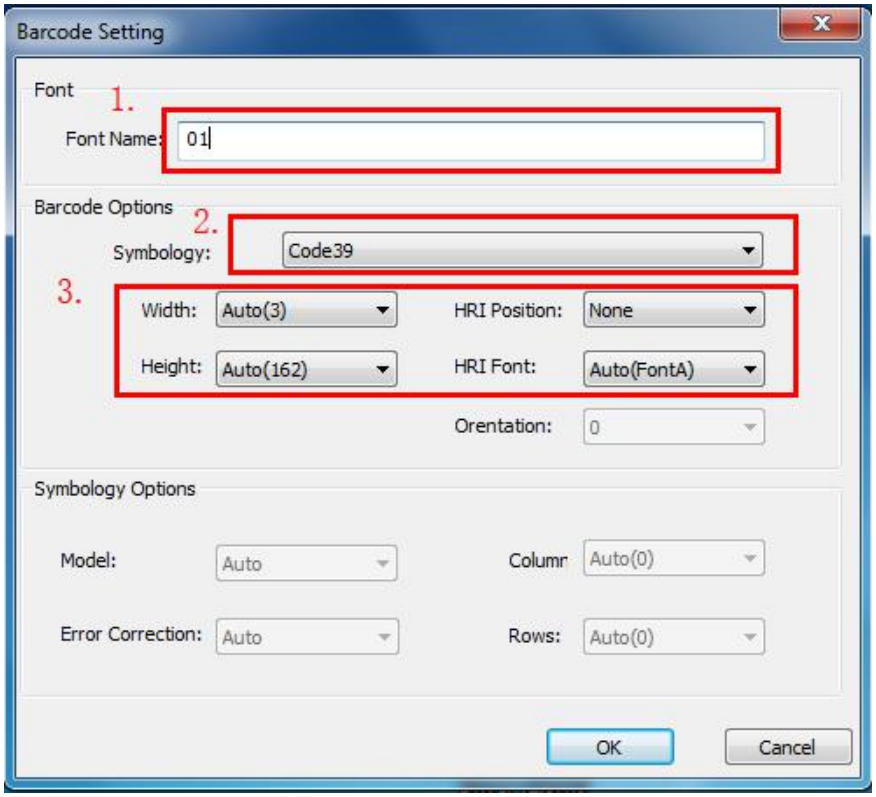


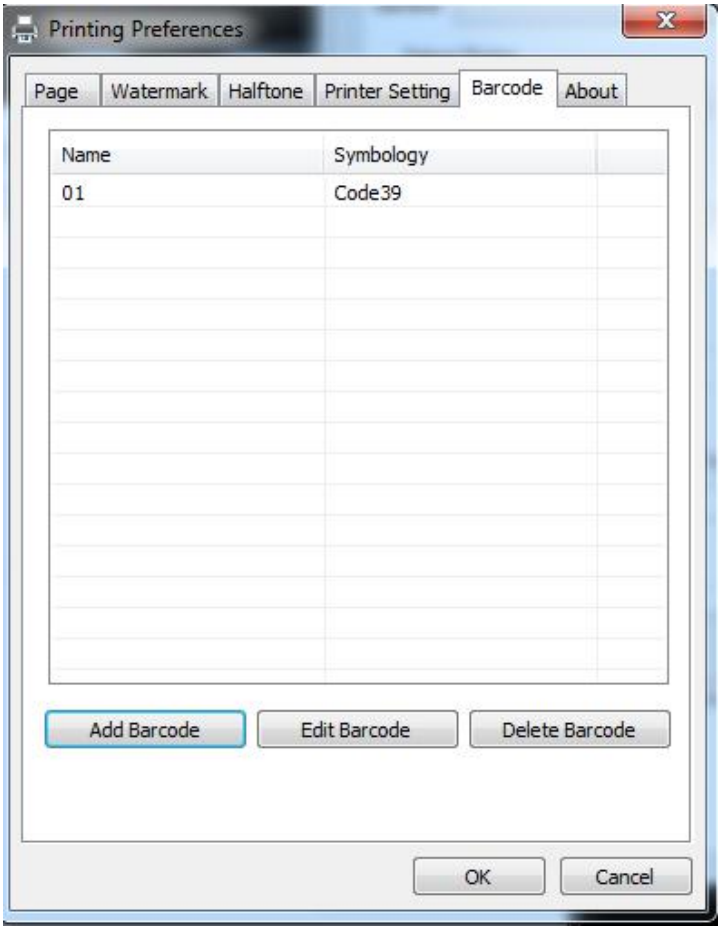


① Add Barcode firstly.



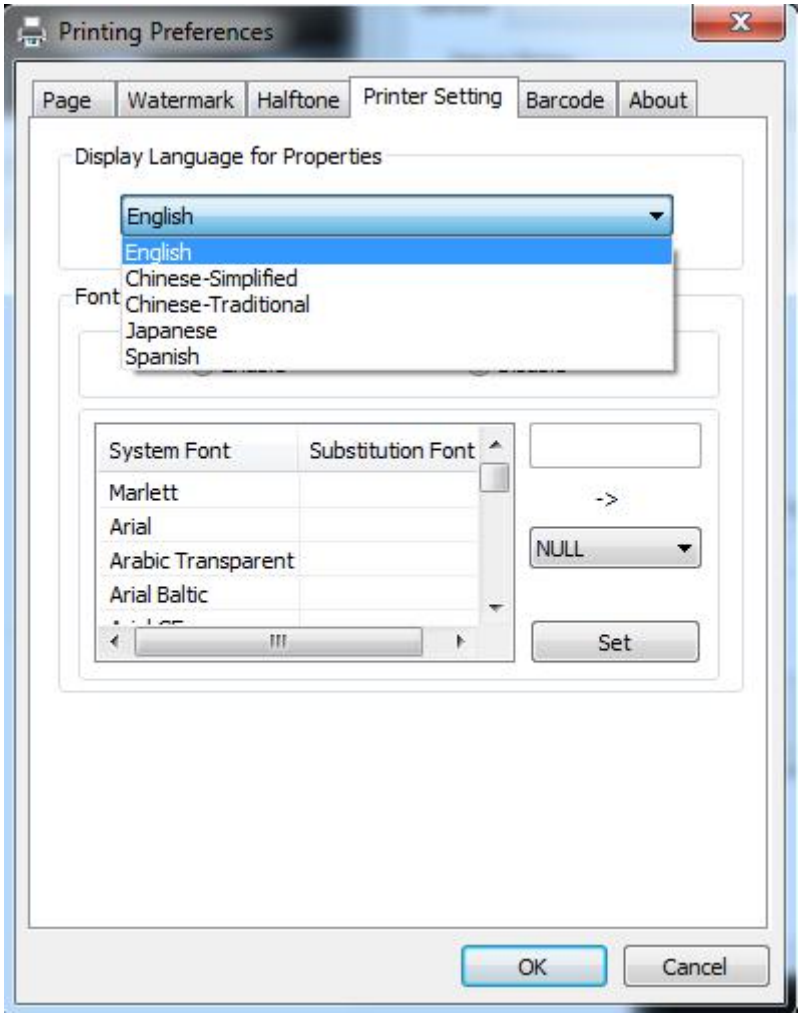
② Set the “Font Name” and the “Barcode Options”.





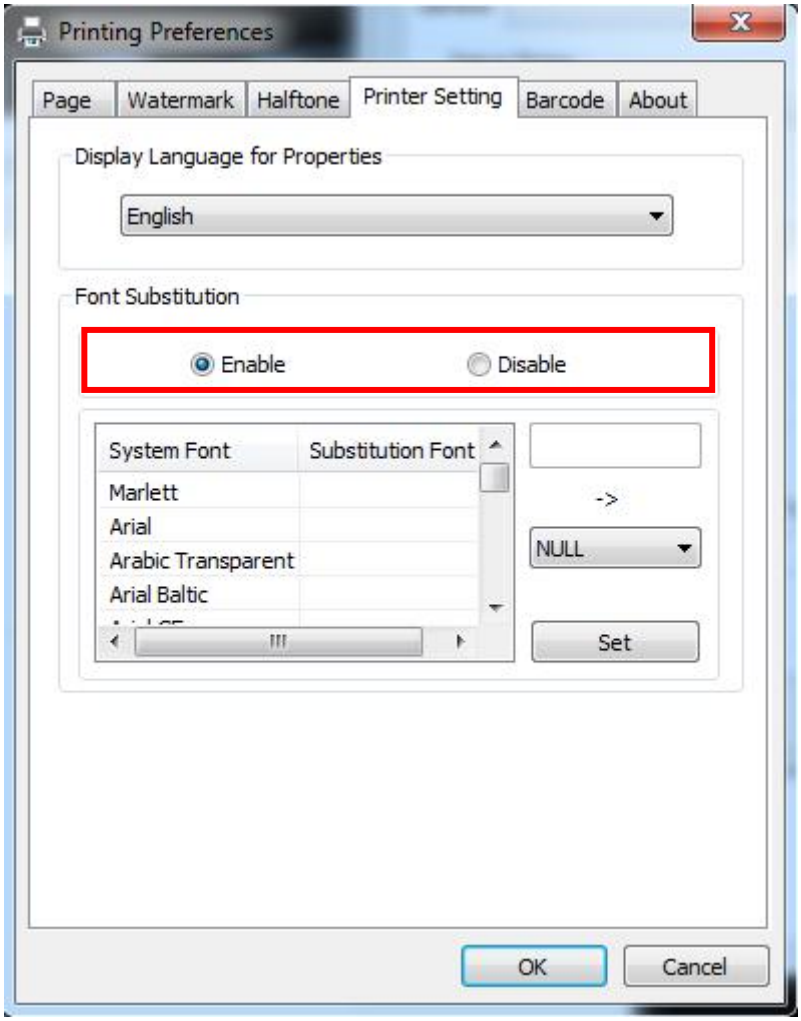
③ Click “Printer Setting”.

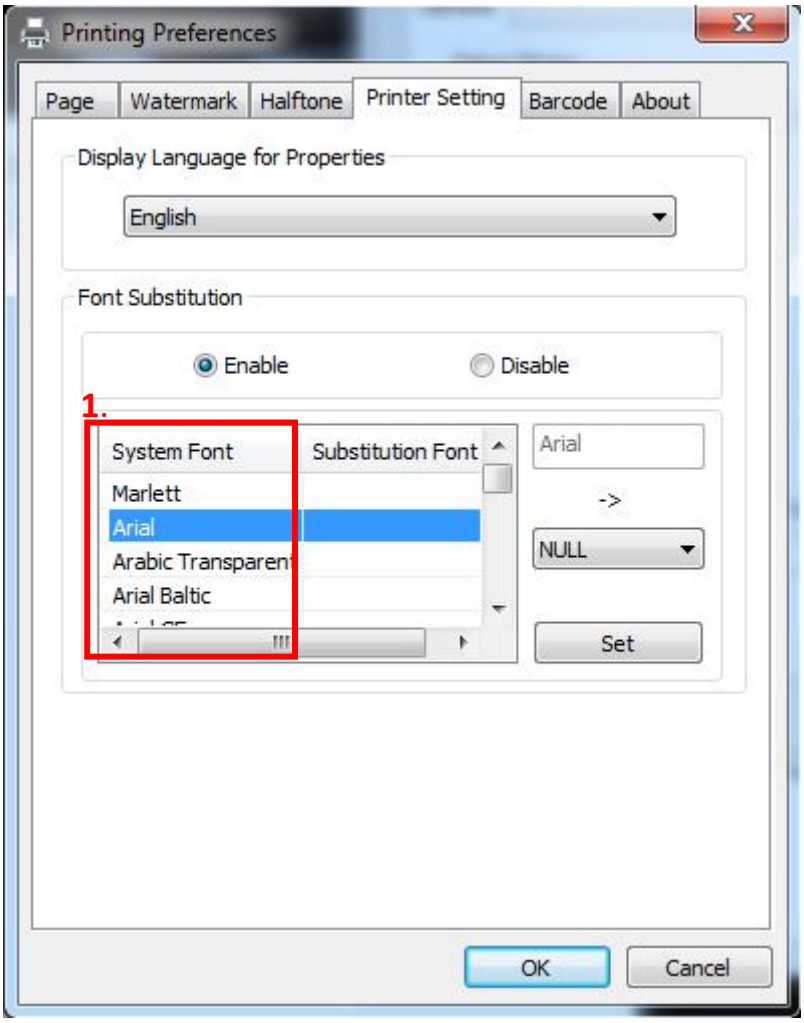
• Choose “Display Language for Properties”

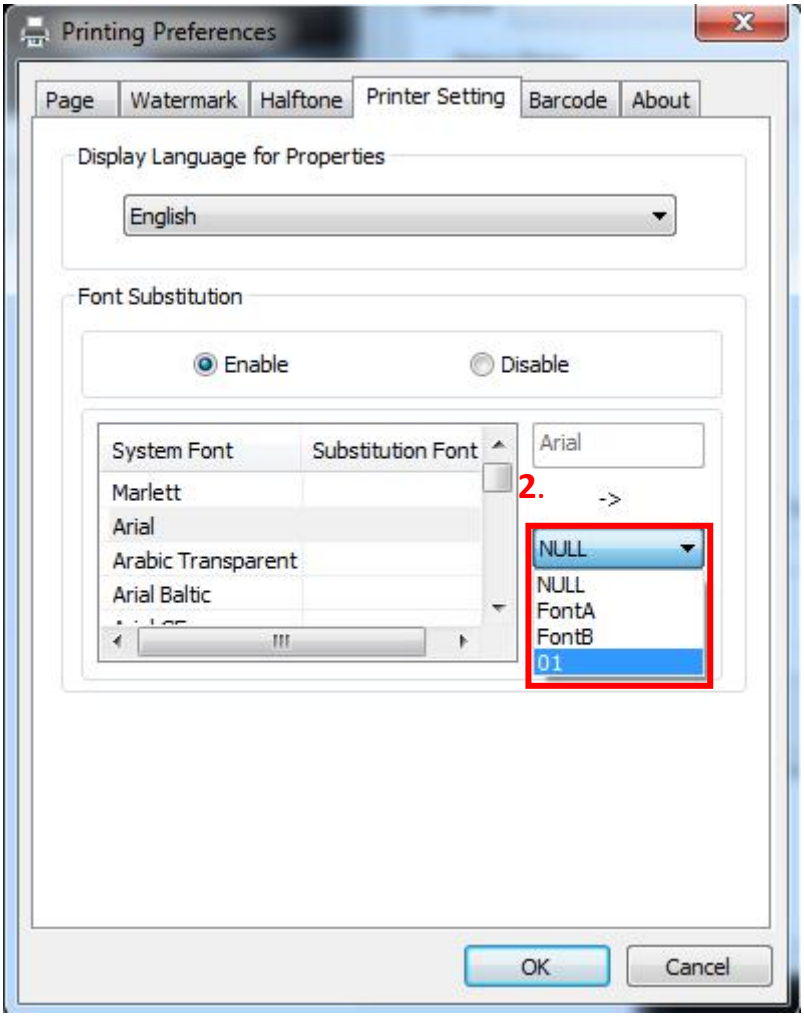


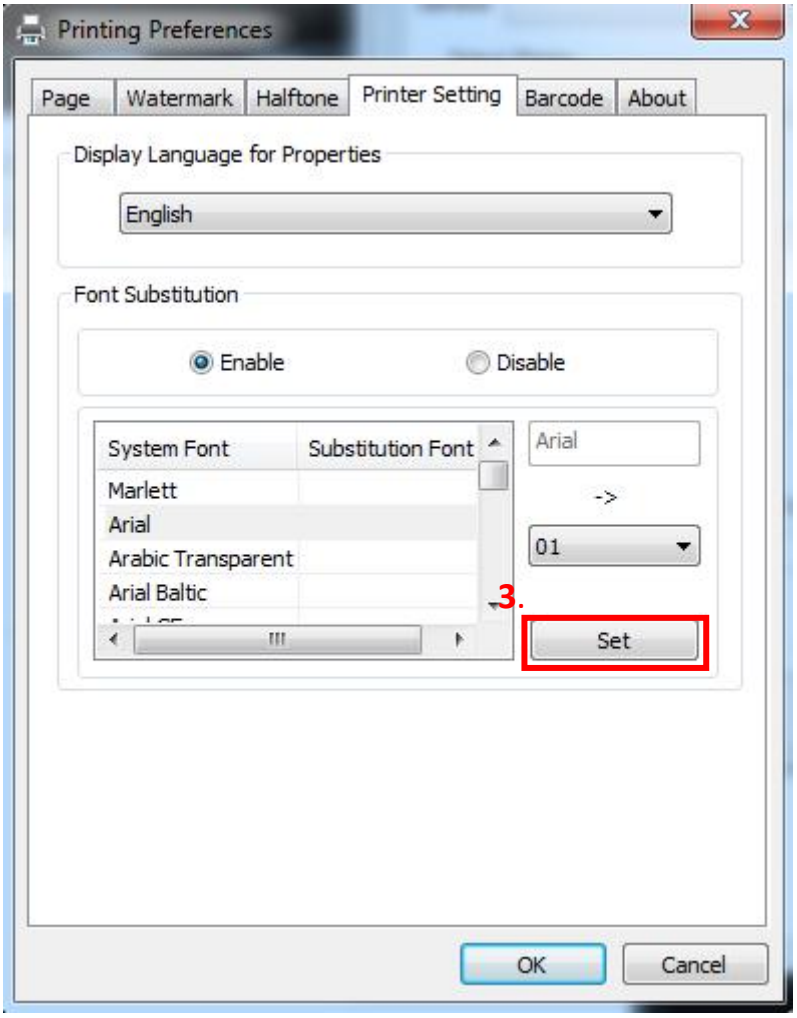
- Turn on “Font Substitution”, select the system text need to be replaced (for example, Arial), and then select the font you want to replace (for example, 01) and click “Set”, and the replacement font will display "01".

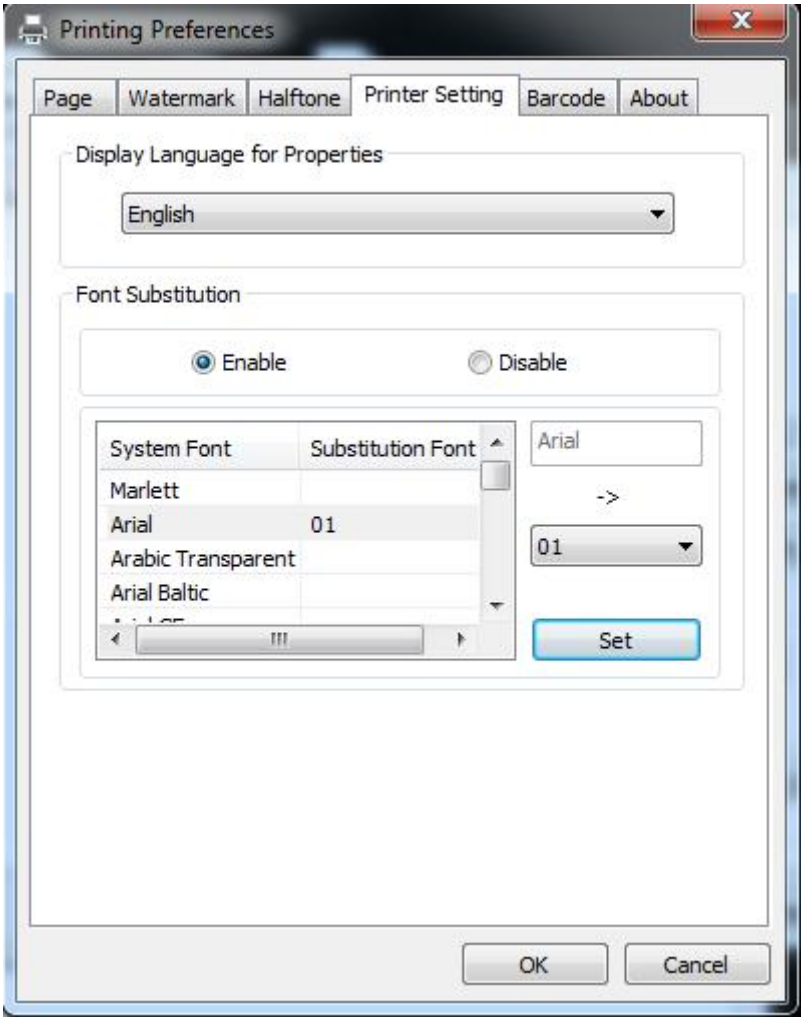
  The steps are as follows:

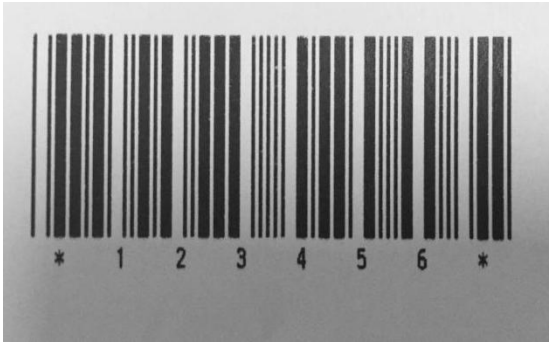



Printing Preferences
Page
Watermark
Halftone
Printer Setting
Barcode
About
Display Language for Properties
English
Font Substitution
Enable
Disable
1.
System Font
Substitution Font
Marlett
Arial
Arabic Transparent
Arial Baltic
Arial
->
NULL
Set
OK
Cancel


Printing Preferences
Page
Watermark
Halftone
Printer Setting
Barcode
About
Display Language for Properties
English
Font Substitution
Enable
Disable
System Font
Substitution Font
Marlett
Arial
Arabic Transparent
Arial Baltic
Arial
2.
->
NULL
NULL
FontA
FontB
01
OK
Cancel

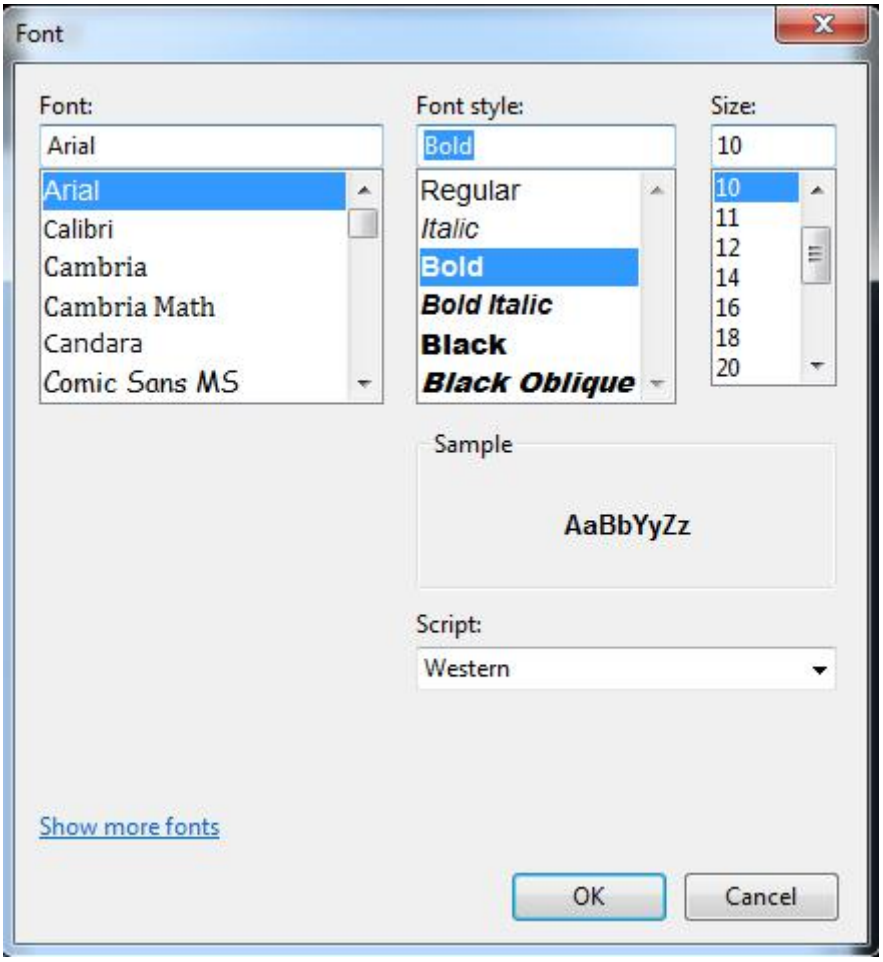

Printing Preferences
Page
Watermark
Halftone
Printer Setting
Barcode
About
Display Language for Properties
English
Font Substitution
Enable
Disable
System Font
Substitution Font
Marlett
Arial
Arabic Transparent
Arial Baltic
Arial
->
01
3.
Set
OK
Cancel


Printing Preferences
Page
Watermark
Halftone
Printer Setting
Barcode
About
Display Language for Properties
English
Font Substitution
Enable
Disable
System Font
Substitution Font
Marlett
Arial
01
Arabic Transparent
Arial Baltic
Arial
->
01
Set
OK
Cancel

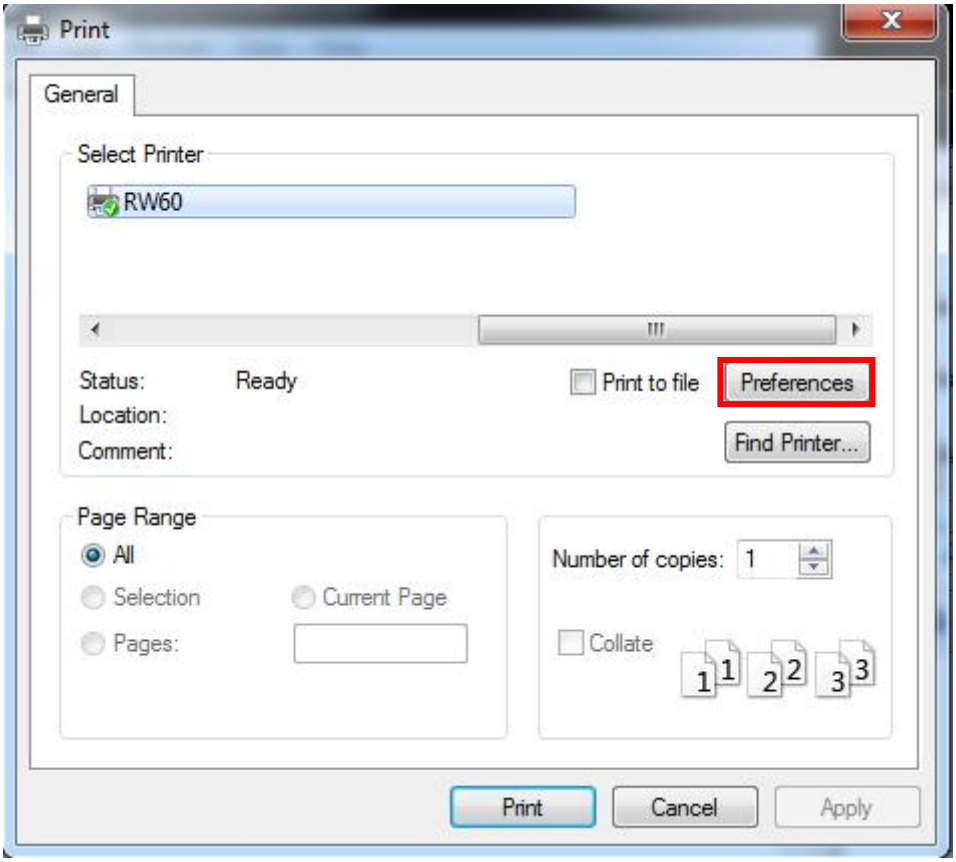

* 1 2 3 4 5 6 *

• 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:

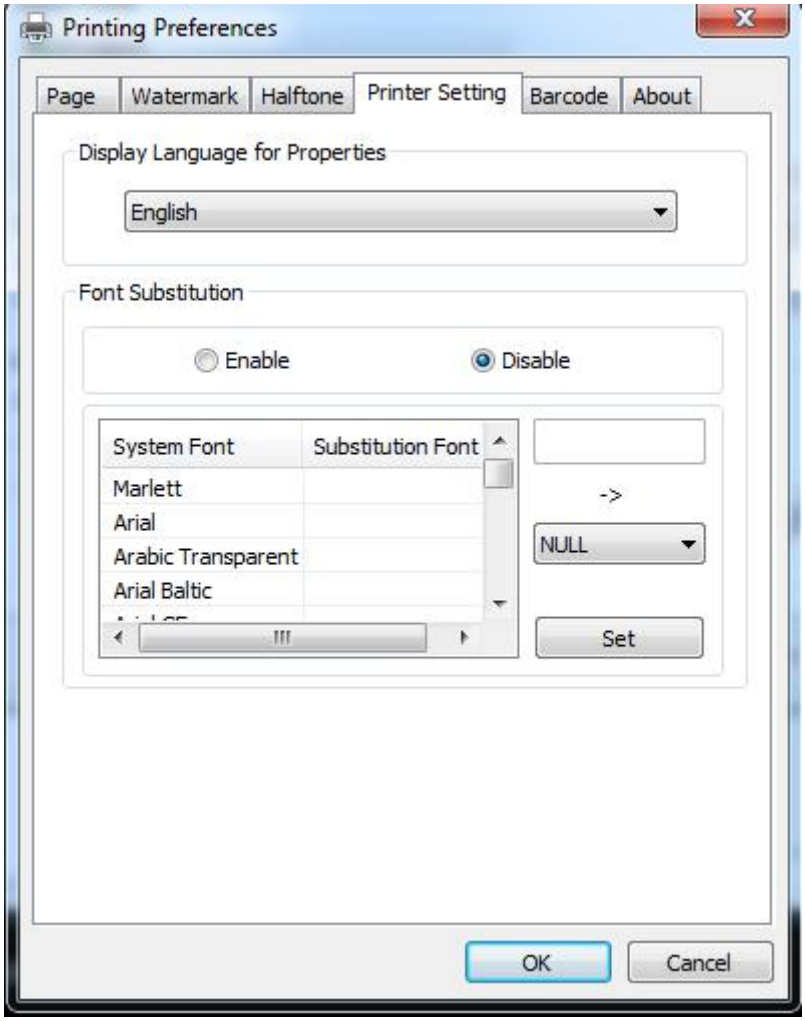


② Set the Printing preferences.

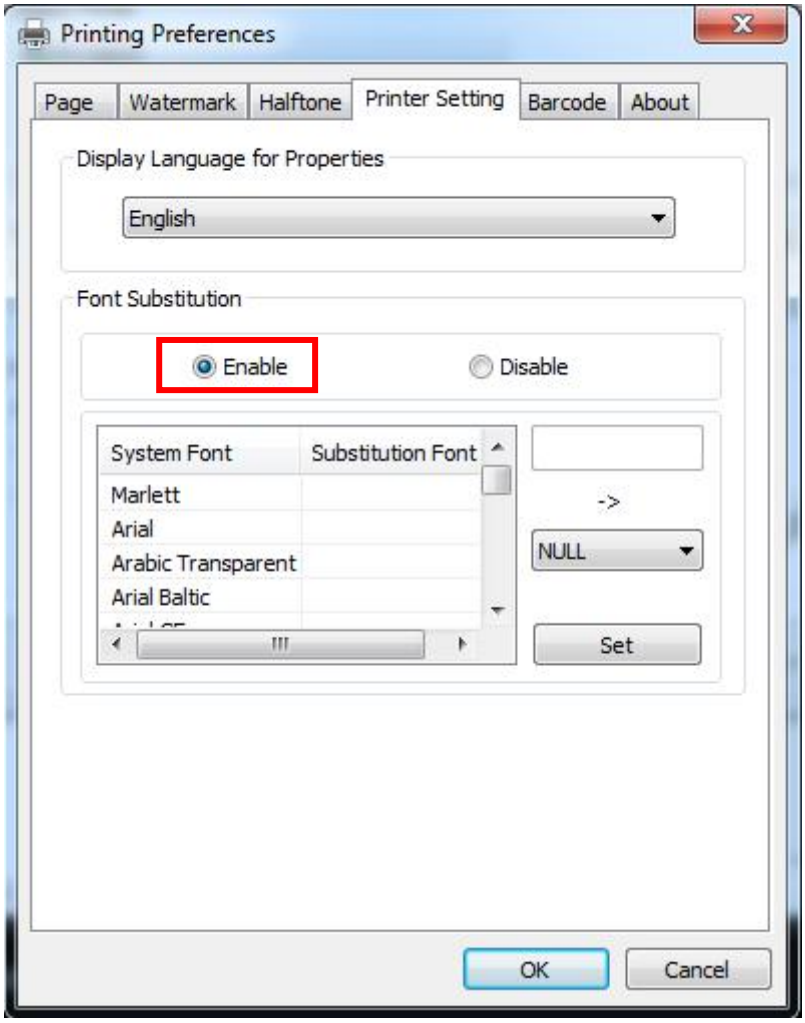


③ Click the “Printer Setting”.

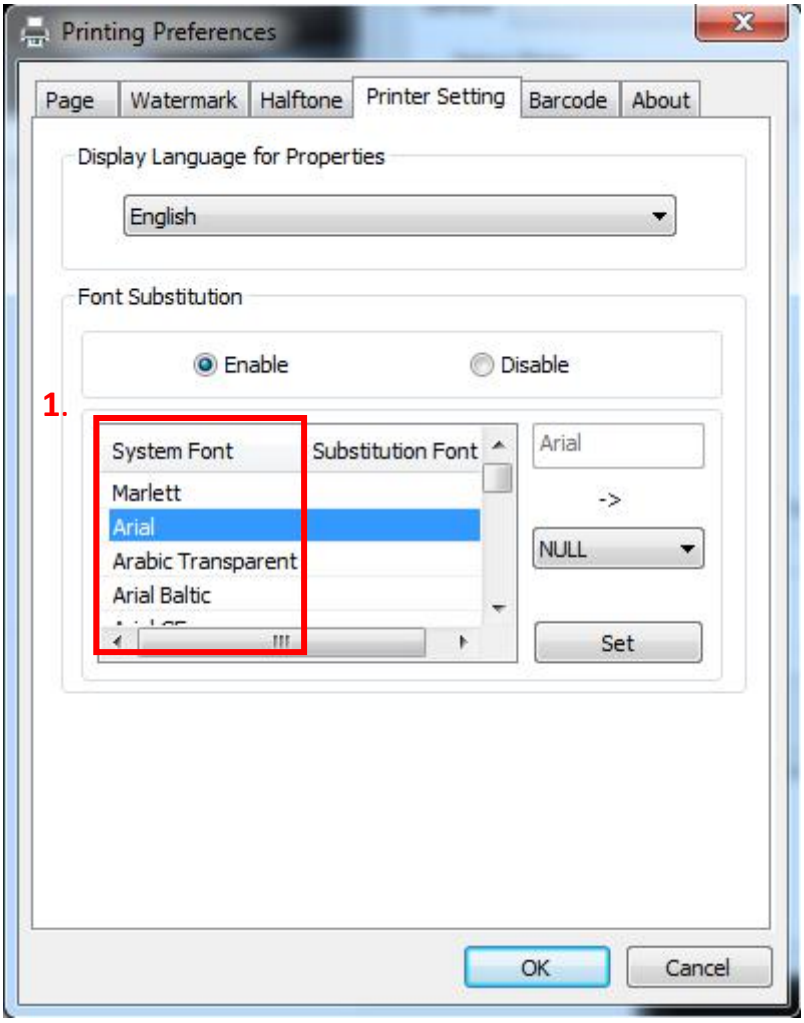
• Choose the “Display Language for Properties”.



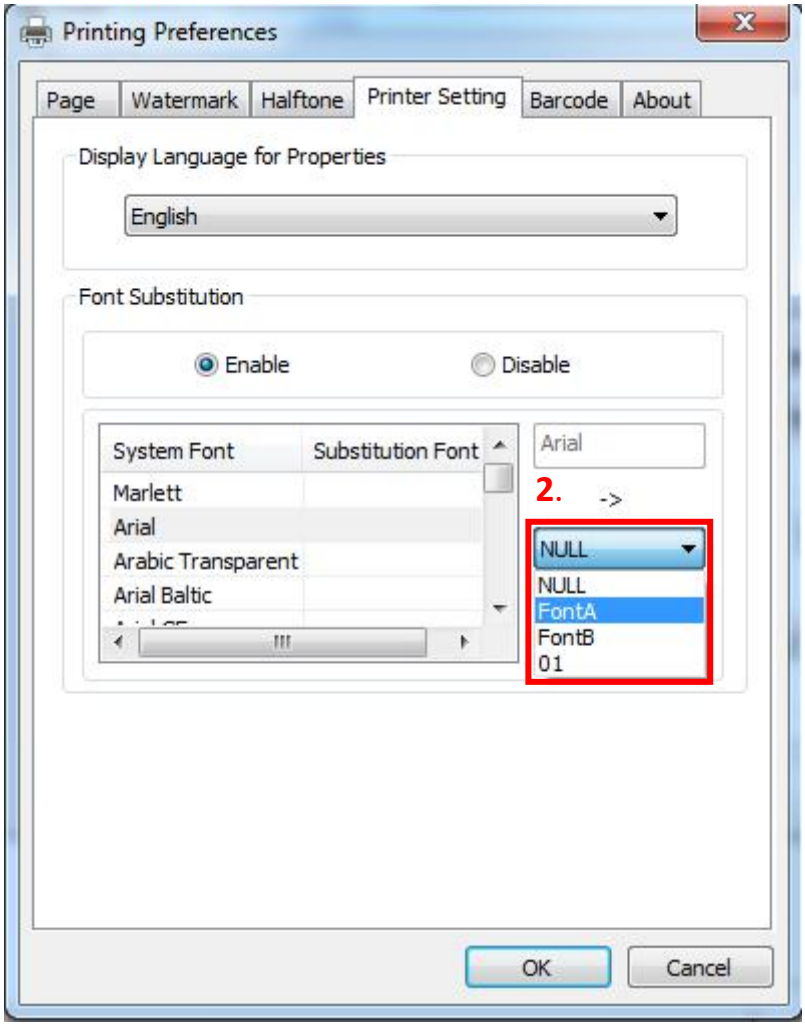
④ Turn on the “Font Substitution”.



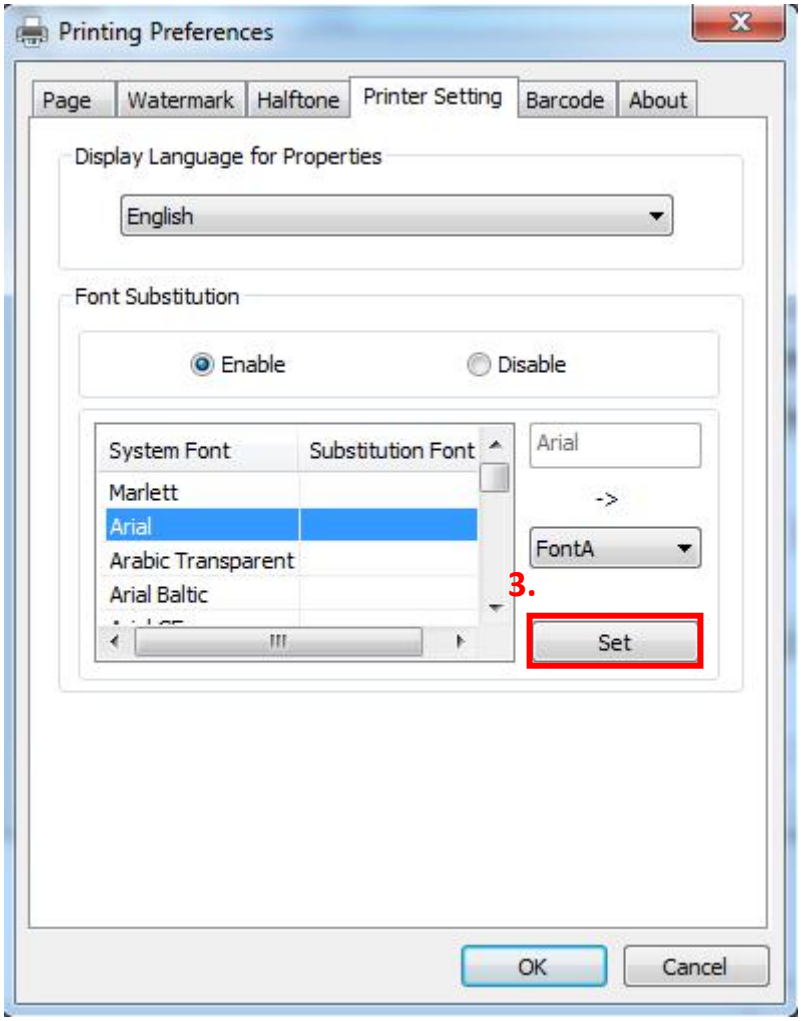
⑤ Select the “System Font”, for example: Arial.

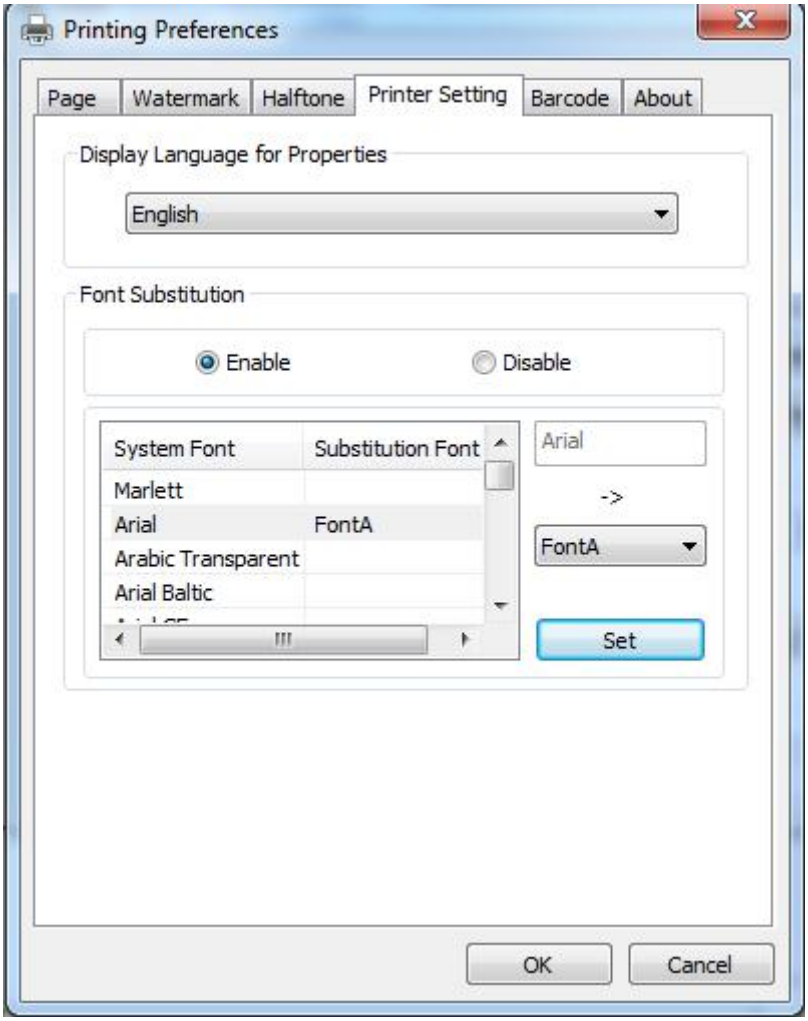


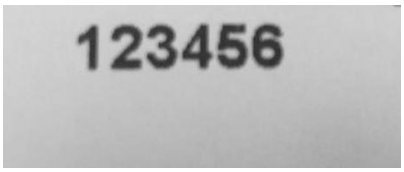
⑥ Select the font that you want to replace.



⑦ Click “Set”.

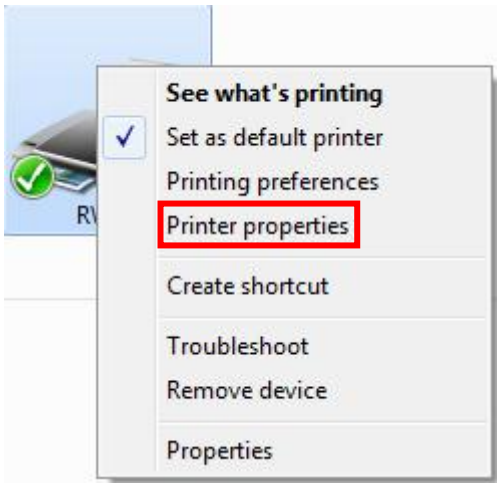

Printing Preferences
Page
Watermark
Halftone
Printer Setting
Barcode
About
Display Language for Properties
English
Font Substitution
Enable
Disable
System Font
Substitution Font
Marlett
Arial
Arabic Transparent
Arial Baltic
Arial
->
FontA
3.
Set
OK
Cancel


Printing Preferences
Page
Watermark
Halftone
Printer Setting
Barcode
About
Display Language for Properties
English
Font Substitution
Enable
Disable
System Font
Substitution Font
Marlett
Arial
FontA
Arabic Transparent
Arial Baltic
Arial
->
FontA
Set
OK
Cancel

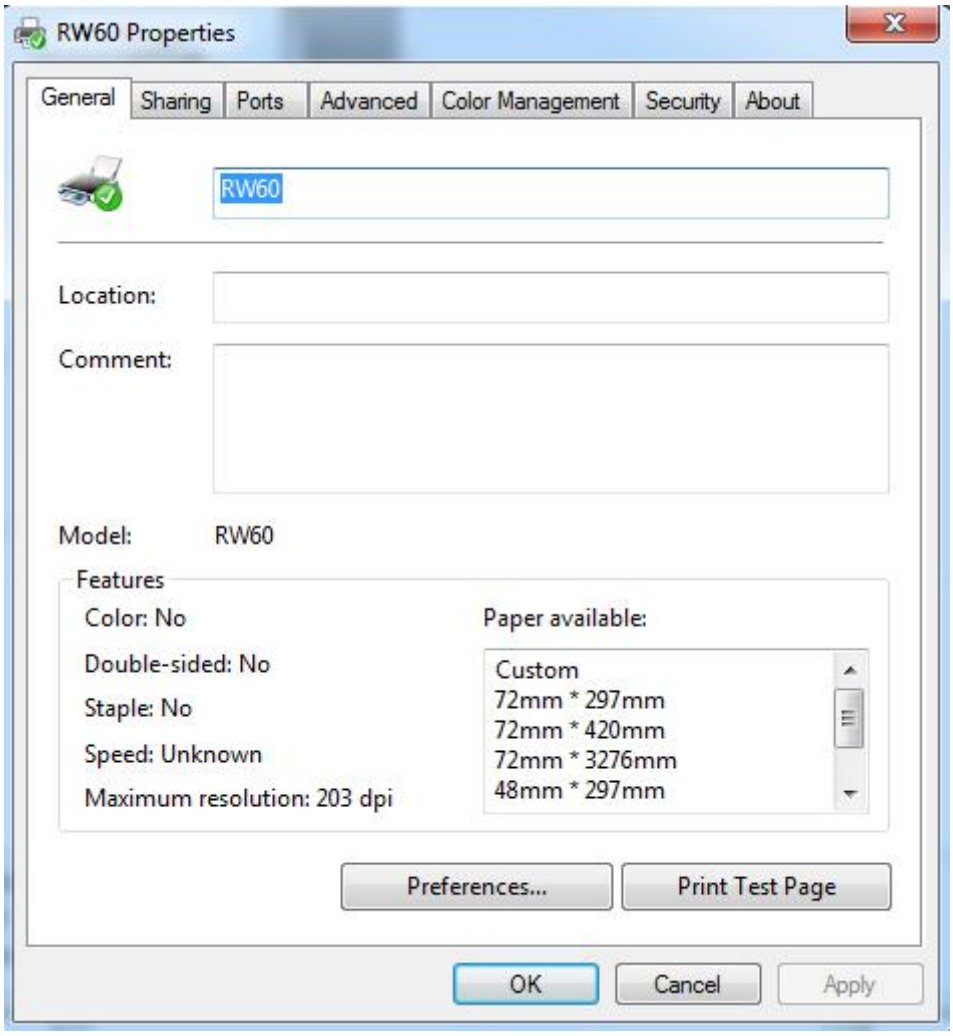

123456

9.5.2 Printer Properties

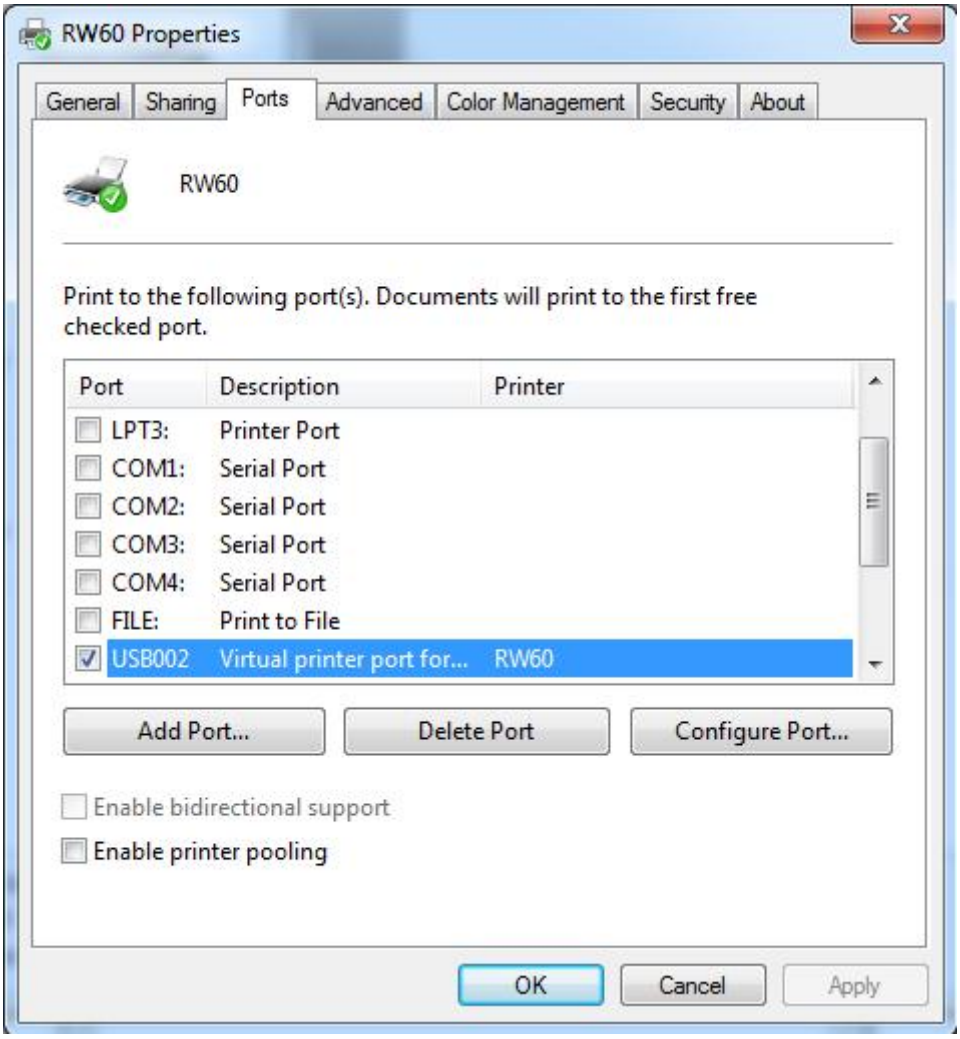
1) Click “Start” → “Devices and Printers”. Right click “RW60” and choose “Printer properties”.



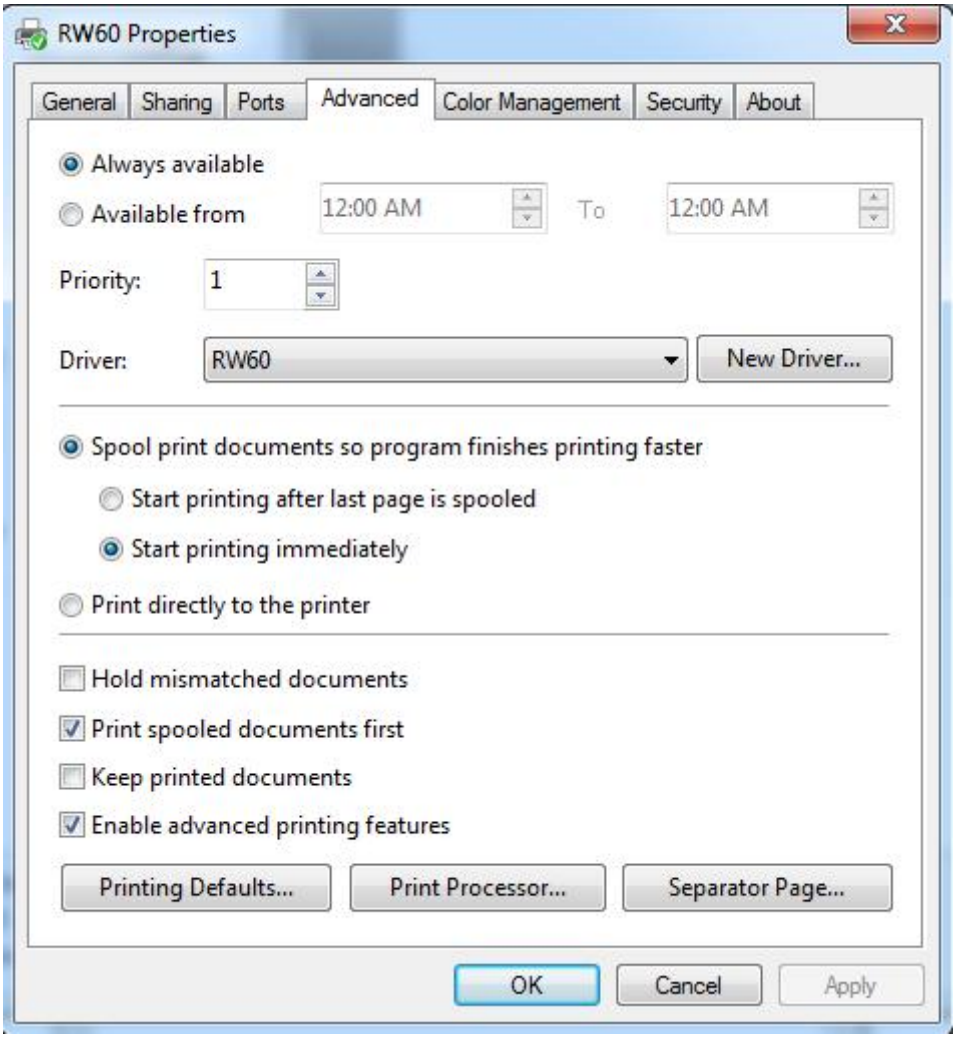
2) Choose “General”, click “Print Test Page”, then it will print the current settings.



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



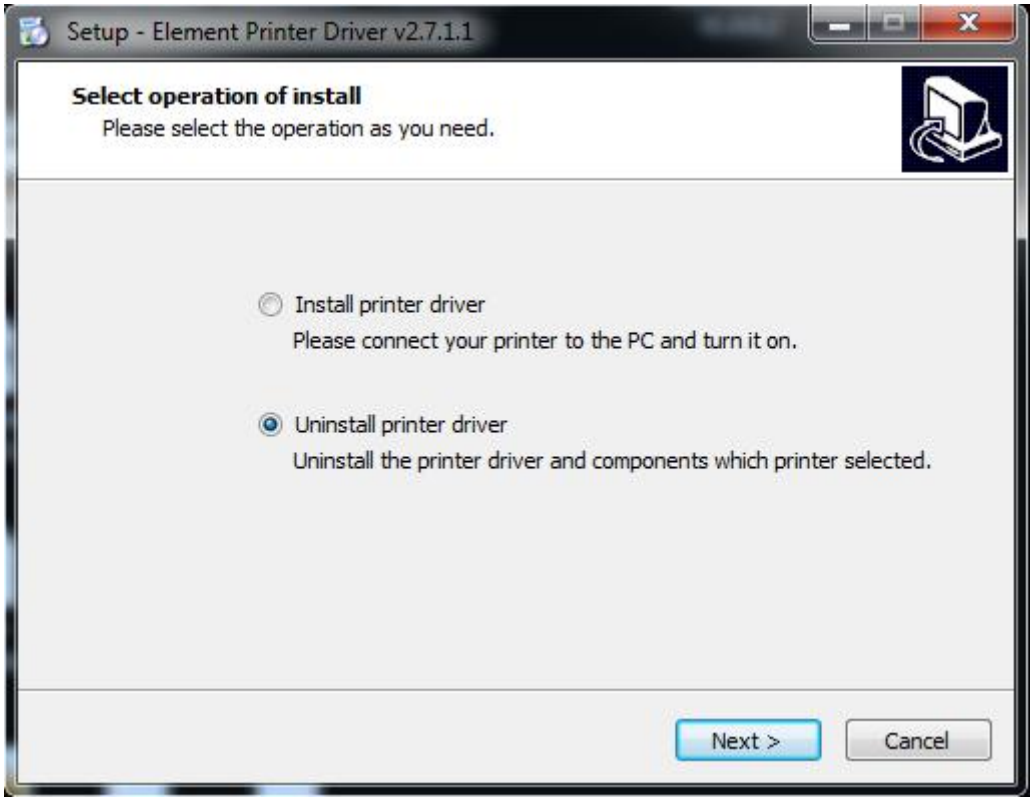
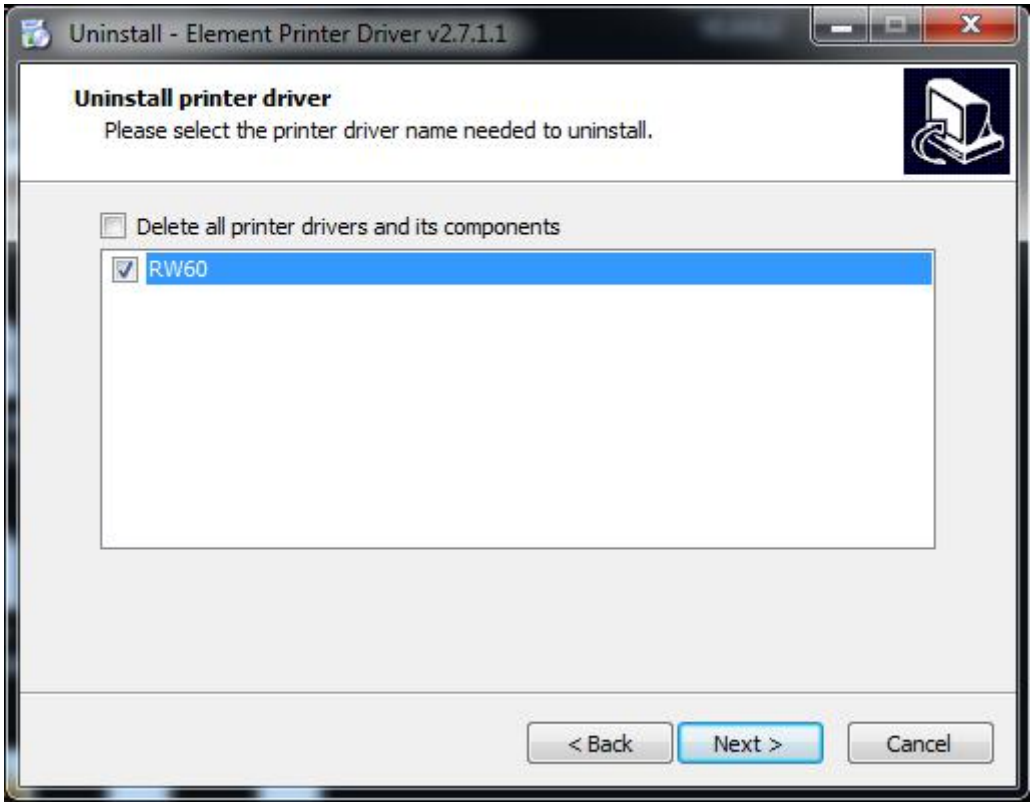
4) Click “Advanced” to set the available time for printing.



9.6 Uninstall Windows Driver

1) Double click Windows Driver.

2) Choose “Uninstall printer driver”, click “Next”.



3) Choose “RW60”, click “Next”. Then it is complete to uninstall.