RONGTA

USER MANUAL

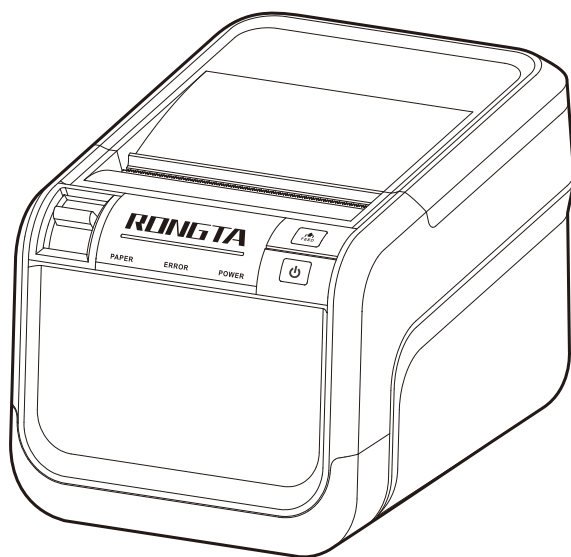# 80MM THERMAL PRINTER
ACE V1S

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THERMAL PRINTER

Introduction

Thank you for purchasing the printer produced by our company. This printer offers you safe, reliable and efficient printing quality at a reasonable economic price. Its powerful functions and easy-to-operate features are widely applied in fields such as express logistics, warehouse management, shopping malls and supermarkets, catering industry, and clothing industry.

This manual explains in detail how to install and use the printer, describes in detail how to set up and maintain the printer, and provides solutions to common printer failures.

Symbolic convention

Symbol	Instructions
⚠	Note Provides additional information to emphasize or supplement important points in the main text.
☺	Indicates a warm reminder

Version record

Version number	Release date	Instructions
V1.0	2025.08	This is the first official release

☺ The illustrations and descriptions used in this manual may differ from the actual ones.

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Safety Instructions

Before operating and using the printer, please carefully read the following items and strictly observe the use rules.

❶ Please install the printer on a stable surface to avoid printer suffered from any vibration and shocks.

❷ Stop using keeping the product in any case of unusual circumstances such as the presence of high tempreture, high humidity and serious pollution.

❸ Connect the printer's power adapter to an appropriate grounding socket. Avoid using the same socket with large motors or other equipment that may cause voltage fluctuation of power supply.

❹ Do not get the product wet. Do not insert foreign objects(e.g. metal) into the product, and once it occurs, immediately turn off the power supply.

❺ Never use the printer without paper, otherwise it will seriously damage the printing rubber roller and thermal head.

❻ Unplug the product from the power outlet if the printer is idle for a long time.

❼ Do not disassemble or modify the product personally.

❽ Use only the power adapter specified in this instruction.

❾ In order to ensure the printing quality and prolong the service life of the product, it is recommended to use the recommended or equivalent thermal printing paper.

❿ Do not plug/unplug the product with the product powered on.

⓫ When plugging and unplugging the printer power cord, please hold the arrow position of the printer power connector with your hand, not the cord of the printer power cord.

⓬ Please keep this manual for the future use and reference.

Safety warning

⚠ Warning: The print head is a hot part, during the printing process or just after printing, Do not touch the print head and surrounding parts, children must use it under adult supervision.

⚠ Warning: Do not touch thermal print head surfaces and connectors. Avoid electrostatic damage to the print head.

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I. Product Introduction

1.1 Product Specifications

| Item		Parameter
Print	Printing Method	Thermosensitive type
	Resolution	203dpi
	Maximum Print Width	3"(78mm)
	Maximum Print Speed	6.7ips(170mm/s) (MAX)
	Maximum Print Length	0.79"-9.84"(20-250mm)
Detect		Cover opening detection, paper shortage detection, stitching label detection, black label detection, paper extraction detection
Medium	Paper type	Bottomless paper, continuous paper, top black label paper, label paper
	Width (label + backing paper)	1.57"-3.15"(40-80mm)
	Thickness (label + backing paper)	0.0023"-0.0071"(0.06-0.18mm)
	Maximum paper roll diameter	φ3.15"(φ80mm)
	Inner diameter of the reel	Label paper: φ0.5" (φ12.7mm) (MIN); Other types of paper are not restricted.
Paper tearing method		Automatic cutting knife
Processor		32bit ARM MCU
Storage	RAM	8MB
	FLASH	4MB
Function	Press the button	Power on button, latch opening button, FEED button
	Indicator light	Yes
	Buzzer	Beep sound alert
	Display screen	/
	Other	Automatic recognition of paper, re-print if paper is insufficient
Communication interface		USE+Cash register interface
Programming language		TSPL ESC/POS
Built-in font		ASCII Font,5x9,7x11,10x18,15x28,13x26,40x60,13x21,10x12,14x20,16x24,24x32, 36x48,14x19,21x27,14x25,12x24 Chinese: 24×24,16x16
Code page	Extended character set	CP437,CP850,CP852,CP860,CP863,CP865,CP866, WPC1250,WPC1251,WPC1252,WPC1253,WPC1254
Barcode	1D	Code39,Code39C,I25,Code93,ITF25,EAN128,Code128, Codabar, EAN-8, EAN8+2,EAN8+5, EAN-13,EAN13+2,EAN13+5, UPC-A,UPCA+2,UPCA+5, UPC-E,UPCE+2,UPCE+5 MSIC,ITF14,EAN14,Code11
	2D	QRCODE, PD417(Optional)
Software	Drive	Win7, Win8, Win10, Win11, Linux, MacOS
	SDK	Android, ios, windows
	Label Design	Barcode label editing software (PC)
Power adapter		Input: AC 100-240V, 50/60Hz
		Output: DC 24V/2.5A
Environmental parameters	Work	(Thermal paper) Temperature: 32 - 113°F (0 - 45°C); Humidity: 20 - 90% (no condensation) (Without liner) Temperature: 32 - 104°F (0 - 40°C); Humidity: 20 - 85% (no condensation)
	Storage	Temperature: -4 to 131°F (-20 to 55°C); Humidity: 5 to 95% (no condensation)
Physical parameters	Dimensions	146*196*140mm
	Weight	1.42kg

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1.2 Unpacking List

Once you receive the printer, first check to see if the printer was damaged during shipping. You can check the packing box, The appearance of the printer and whether the accessories are damaged. In the event of damage to the carriage, file a written claim with the carrier immediately. Next, please check the accessories according to the "Quick Installation Guide" provided with the product. If any accessories are missing, Please contact the seller immediately.
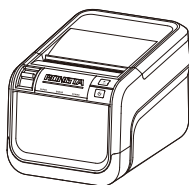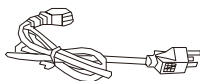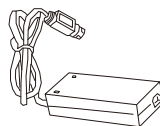
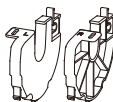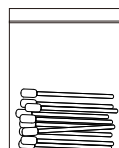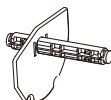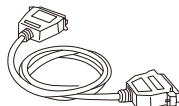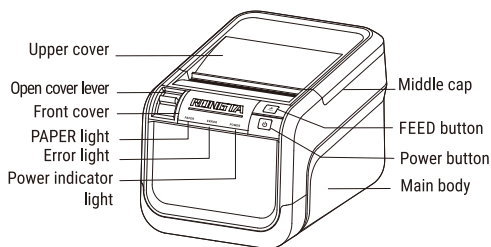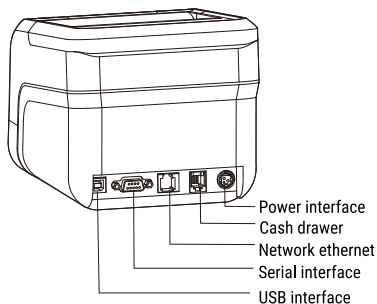|		
Printer	Power cord	Adapter
USB cable	paper shaft & paper partition	Cleaning cutton bud
Paper roll	Paper reel and paper wide baffle	Quick installation guide
Serial interface cable (Optional)		

☺ If any item is damaged or missing, please contact the supplier. The picture is for reference only.
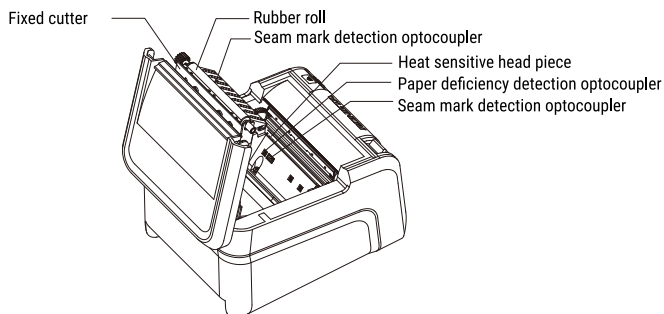
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1.3 Appearance and Components

■ **Front View**　　　　　　　　　　　　　　　　　■ **Back View**

Upper cover

Open cover lever
Front cover
PAPER light
Error light
Power indicator
light

Middle cap
FEED button
Power button
Main body

Power interface
Cash drawer
Network ethernet
Serial interface
USB interface

■ **Internal View**

Fixed cutter

Rubber roll
Seam mark detection optocoupler
Heat sensitive head piece
Paper deficiency detection optocoupler
Seam mark detection optocoupler
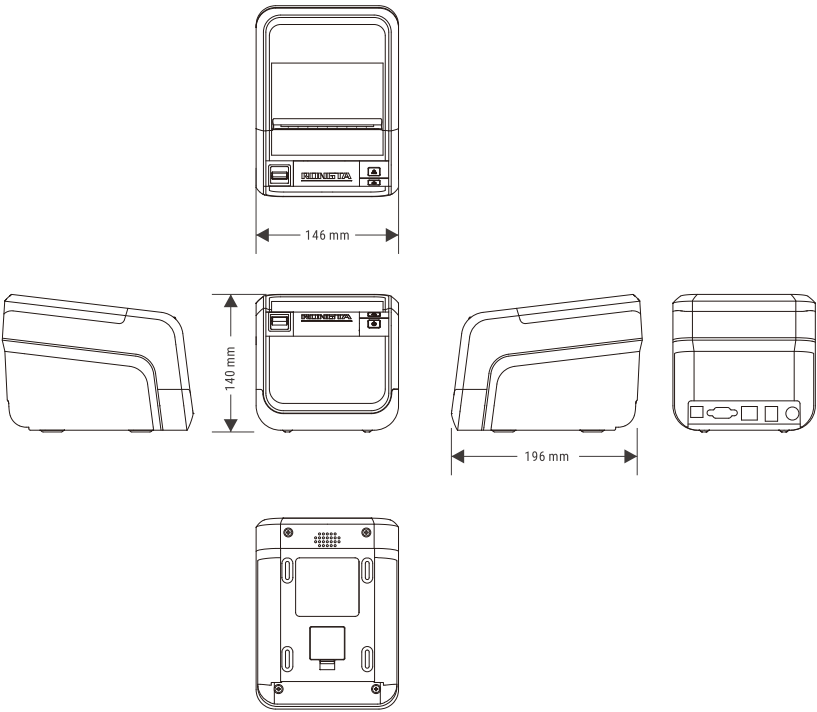
☺ **Note:** The interface is optional or customized. The specific interface is subject to the actual object.

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1.4 Product dimensions

146 mm

140 mm

196 mm

II. Installation and Usage

Printer installation and usage steps

Connect the power cable ⟶ Connect a USB cable ⟶ load paper roll
Power on ⟶ Label learning ⟶ Print the self-test page ⟶ Install driver
⟶ Editing software printing

2.1 Power Connection

(1) Make sure the printer is powered off;
(2) Connect the power cable to the power adapter.
(3) Connect the power adapter to the printer.
(4) Connect the other end of the power cable to a nearby socket.

Power adapter
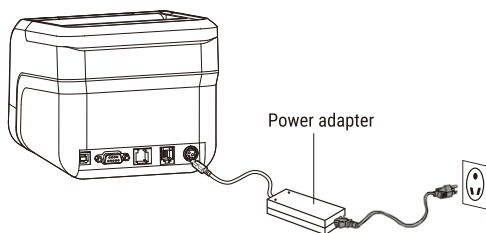
2.2 Port USB cable connection

(1) Connect the USB cable to the printer.
(2) Connect the other end of the USB cable to the computer;
(3) Press the power button to power on the device.

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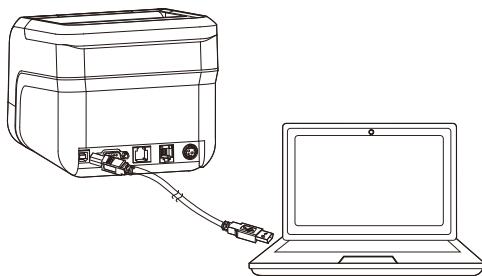
2.3 Load Paper Roll

(1) Label mounting

1) Press the cover lever, open the paper storage room cover, make sure the paper roll print face forward, and put the paper roll into the paper roll (as shown in Figure 1 below).
2) Put in the paper bin and adjust the paper baffle to the right according to the paper width (as shown in Figure 2 below).
3) Pull the paper roll out beyond the tear knife (as shown in Figure 3 below);
4) Close the upper cover of the printer and gently press down until the upper cover clicks to lock. (As shown in Figure 4 below)
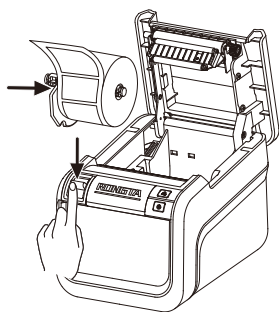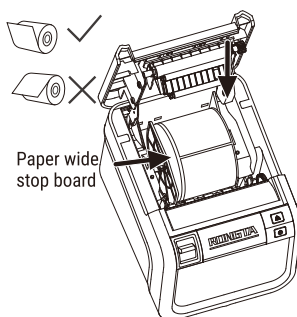

Figure 1

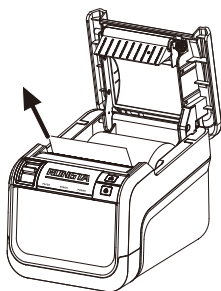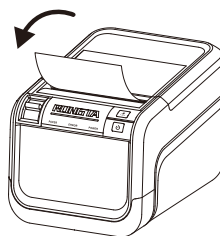Paper wide stop board

Figure 2

Figure 3

Figure 4

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(2) Linerless paper/continuous paper mounting

1) Press the cover lever to open the paper storage room cover (as shown in Figure 5 below)
2) Make sure that the printing side of the paper roll faces forward, and place the paper width adjustment partition according to the size of the paper roll (see the tip at the bottom of the paper bin, as shown in Figure 6 below)
3) Pull the paper roll out beyond the tear knife (as shown in Figure 7 below)
4) Close the upper cover of the printer and gently press down until the upper cover clicks to lock. (As shown in Figure 8 below)
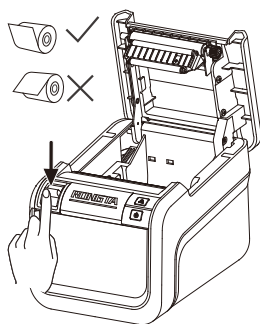
Paper width adjustment partition

Press here to remove the adjustment partition

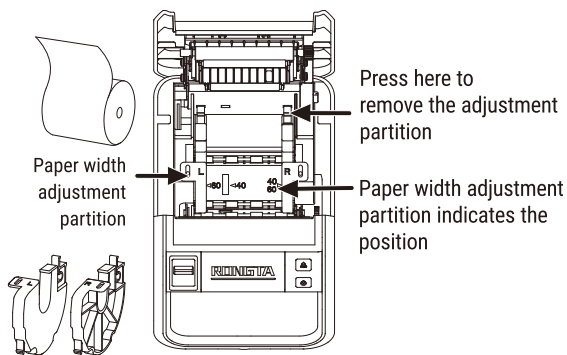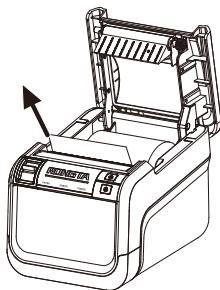Paper width adjustment partition indicates the position
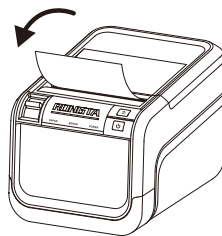
Figure 5

Figure 6

Figure 7

Figure 8

Note: When using 40mm/60mm linerless or continuous paper, the paper width adjustment partition should be placed on the left and right sides of the paper storage room. When using 40mm paper roll, the left paper width adjustment partition should be placed at the 40mm mark at the bottom of the paper storage room. When using 80mm liner less or continuous paper, the paper width adjustment partition is not needed. Press the raised part above the paper width adjustment partition to easily lift it up, as shown in Figure 6 above.

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2.4 Basic Function Description

(1) Power switch

The power switch is used to turn on and off the power of the printer. The power switch of the printer is located on the left side of the printer. When you press the "-" on the switch, the printer is turned on; when you press the "O" on the switch, the printer is turned off.

⚠ **Note:** Turn on the switch only after the power is connected.

Button Instructions:

FEED button: Paper feeding button

When in standby mode, pressing the paper feed button will continuously feed the paper.

Pressing the paper feed button during printing is ineffective.

Before powering on the printer, holding down this button can enable the printer to perform self-checking after power-on.

Fault description

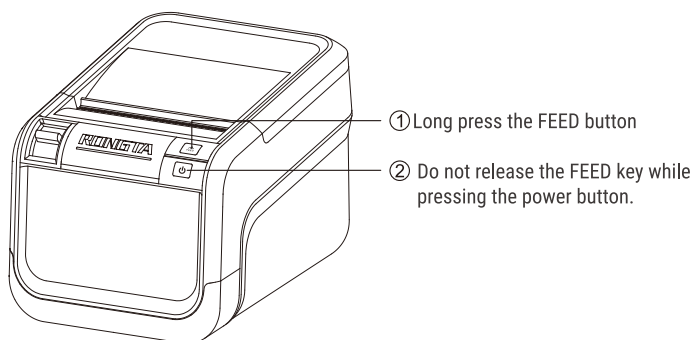| PARER	ERROR(Red)	POWER (Green/Blue)	Alarm sound	Fault description
Light off	Destroy	Bright	NO	Standby mode (Green: label instruction mode) (Blue: bill order mode)
The red light is on	Flicker	Bright	Three-tone	Paper out
Light off	Flicker	Bright	Five-tone	Print head overheating
Light off	Flicker	Bright	Six-tone	Closing anomaly
Light off	Flicker	Bright	Seven-tone	Black mark/seam mark error
Light off	Steady on	Bright	NO	Print pause
Light off	Light off	Flicker	NO	Printing/paper moving/ data receiving process
Blue light	Light off	Bright	Call every ive seconds Cycle stops 5 times	Paper removal detection On paper not removed
Light off	Light off	Bright (Green/Blue)	Eleven tone (Closed after 3 cycles)	The cutter has been cleaned several times as recommended. For details on the cleaning method, see the instructions on the label or the user manual.

☺ This guide is for reference only, the specific functions and product pictures may be slightly different from the actual product, please refer to the actual product.

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(7) Print the self-test page

Self-check can determine whether the printer is functioning properly. If it can correctly print the self-check list sample, it indicates that everything about the printer is normal except for the connection interface with the host. Otherwise, maintenance is required. The self-check will sequentially print out the software version number, printing density, interface form, and some English and Chinese characters.

The self-test method is as follows:
The operation method of the self-check is as follows: After connecting the power cord of the printer properly, close the cover when there is paper, and turn off the power. First, hold down the (FEED) button without releasing it, then press the printer power button. After starting the printing, you can release the (FEED) button. At this time, the printer will perform the self-check and print the self-check sample page.


① Long press the FEED button

② Do not release the FEED key while pressing the power button.

III. Driver installation instructions

3.1 Driver Introduction

This driver is applicable to the following operating systems:

Microsoft Windows 11 (32 bit/64 bit)

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 Server 2012(64 bit)

Microsoft Windows Server 2008 R2

Microsoft Windows Server 2008 SP2(32 bit/64 bit)

Microsoft Windows Server 2003 R2 SP2(32 bit/64 bit)

3.2 Driver Download

(1) Visit the official website of Rongta University, www.rongtatech.com

(2) Click "DOWNLOAD"--"DRIVER DOWNLOAD" find the appropriate driver click "DOWNLOAD."

3.3 Drive installation

⚠️ **Note:** Before installing the driver, make sure the power supply is connected and the USB cable is connected to the computer. The following images may vary depending on the operating system on your computer. The following example is based on the Windows 10 operating system. You are advised to close related security protection software before installing the driver. Drivers are integrated drivers that automatically install drivers that match the printer instruction language. (Here, we take the screenshot of the installation with RP400H (ZPL 203DPI) as an example)

(1) 📥 RTLabelPrinterDriverInstall Double-click the driver, the dialog box as shown below pops up, select the installation language, click "OK", as shown below;
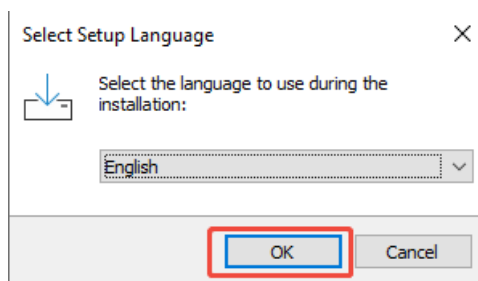
(2) Pop up the dialog box as shown below, select "Install";

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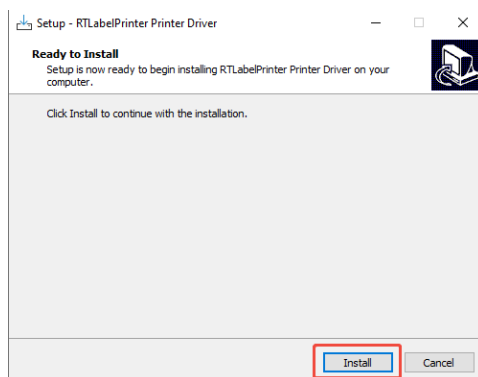
(3) Click "OK";
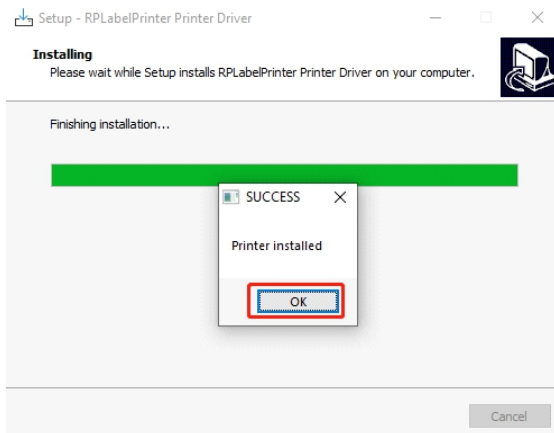
(4) Click "Finish" to complete the driver installation;
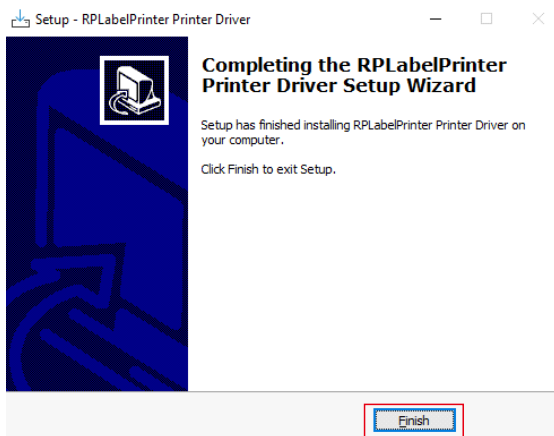
(5) You can find the installed printer icon in Control Panel –-- Devices and Printers.


V1S(TSPL 203DPI)

3.4 Driver Usage

Under normal circumstances, the driver can be used after installation, the default printing paper size of the driver: 76mm*130mm, if the user's printing paper size is inconsistent with the default paper size, it needs to be reset, if not reset, the print may be missing or cannot be printed normally, the specific setting method is as follows:

(1) Print preference Settings
1) Click "Control Panel" -- "Devices and Printers", right click the printer icon, select
   "Print Preferences"
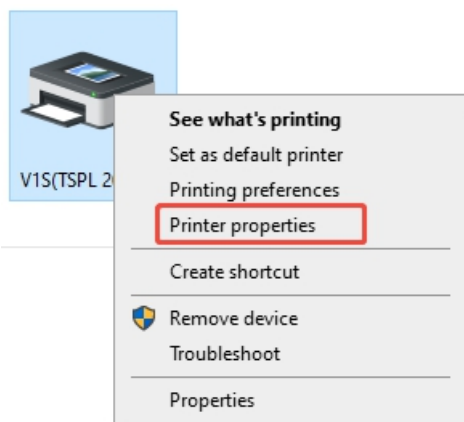
2) In the "Paper" option, you can set the paper, offset, effect, etc.
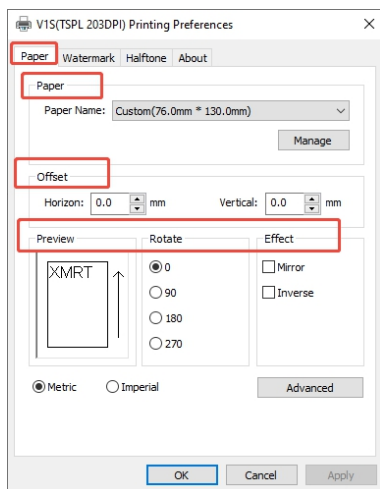
● Drop down "Paper Name" and select the paper size according to the actual paper size.
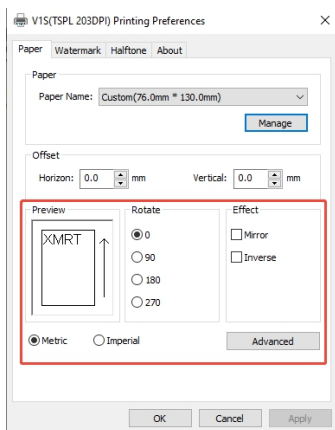   Default size (76mm*130mm)
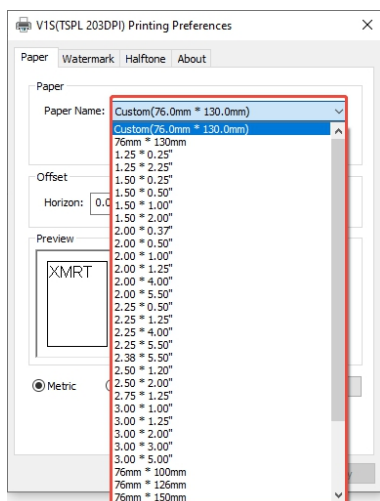
● Click "Paper Manage" to customize the paper size Settings.
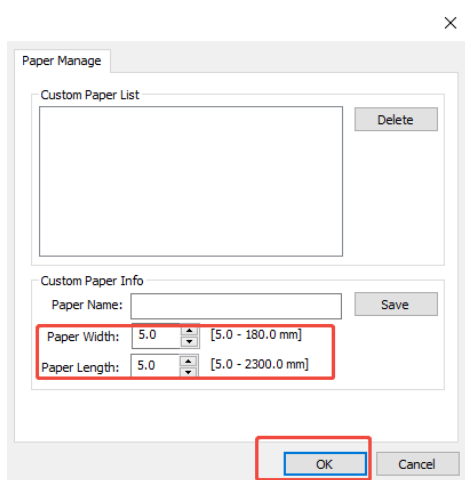
● Click "Horizon" or "Vertical" to set the horizontal and vertical printing margins.
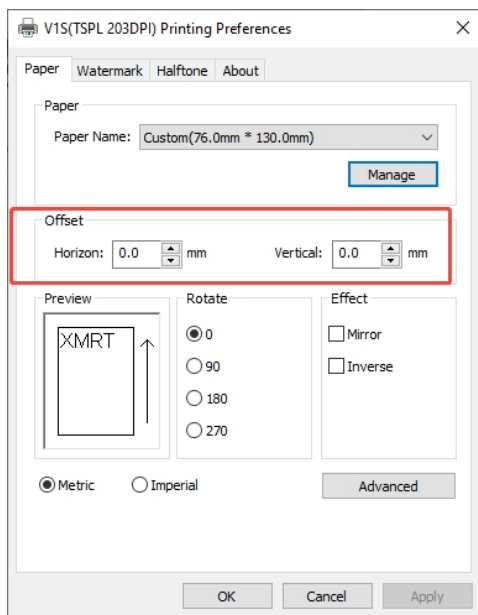
● Click "Rotate" or "Effect". The left preview shows the print position

    Rotate: Printing in different directions can be set.

   Effect: The image can be mirrored or reversed printed.

● Select Advanced Settings

    Set print Density: due to the inconsistency of the color degree of the paper, the printing
    concentration parameter is increased if the printing effect is light, and the printing
    concentration parameter is reduced if the printing is strong.
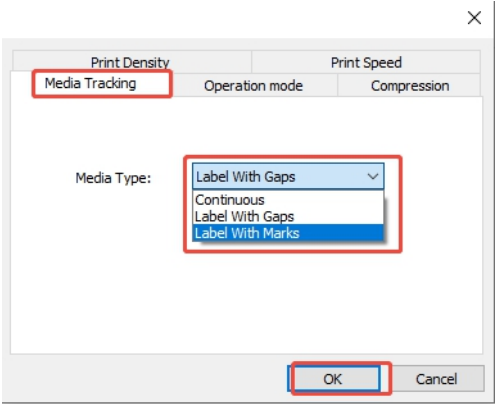
    (Refer to the table on page P23 for different label types and carbon bands, concentration
    and speed Settings.)
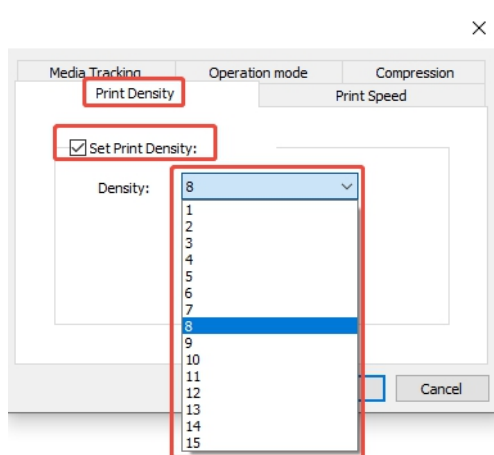
Set Print Speed: the general default speed "7", according to the printing needs to adjust the printing speed.
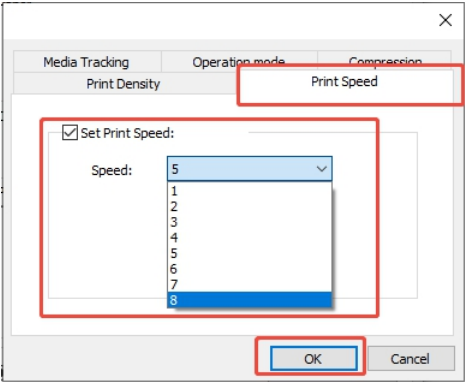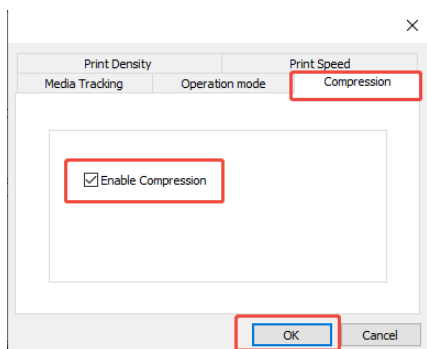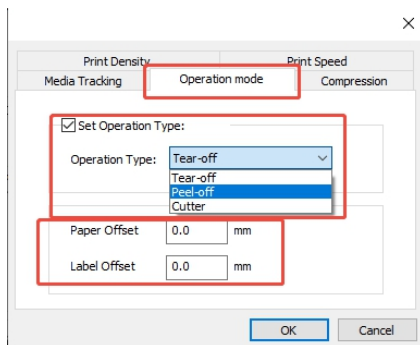

Media Tracking: You can select the type of paper currently used to select "Continuous ", "Label With Gaps", "Label With Marks".

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Operation mode: You can set the operation mode: Tear-off , Peel-off, Cutter

Tear-off : Using the paper tearing mode without installing the cutting blade.

**Cutter:** When the cutter is installed, use the cutter mode

Compression
"Enable Compression" will reduce the amount of data transmission, alleviate the problem of slow printing and lagging caused by excessive data volume. If the printing is not smooth, check whether the option is selected (it is selected by default)
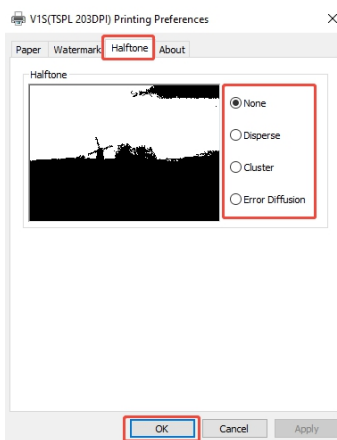
3) Watermark
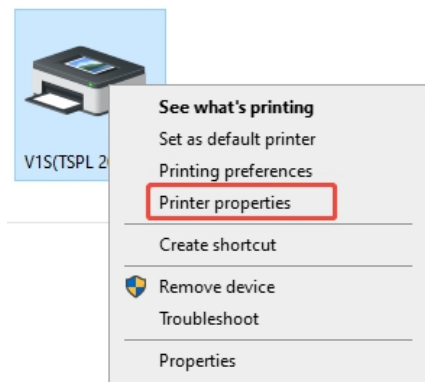
Watermarks can be added to the labels here.
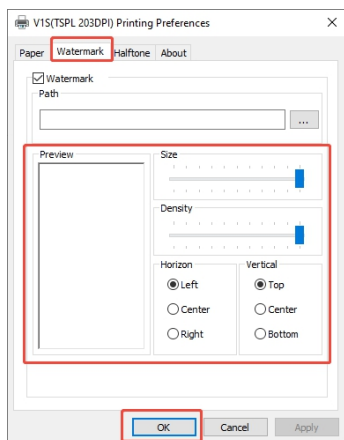
4) Halftone

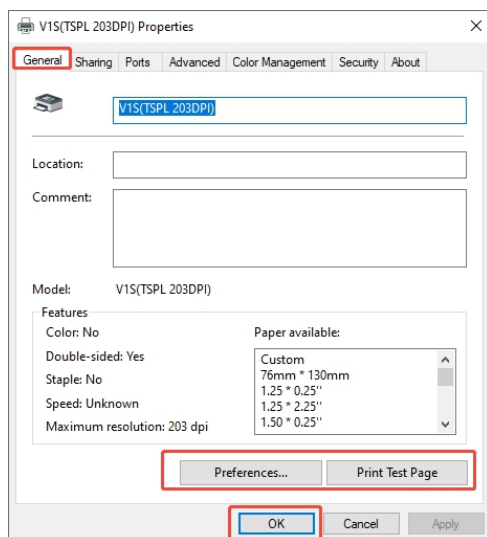Adjustable picture printing effect.

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(2) Printer properties

1) Click "Control Panel" -- "Device and Printer", right-click the printer icon, and choose"Printer properties"

2) Select "General", then click "Print Test Page"

Select "Print Test page ", if the test page can be printed normally, it indicates that the printer is correctly connected to the PC and configured, and the printer can be used normally.

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3) USB port print test page

Click "Ports", select the corresponding port, click " ✓ ", and then click to confirm the setting.
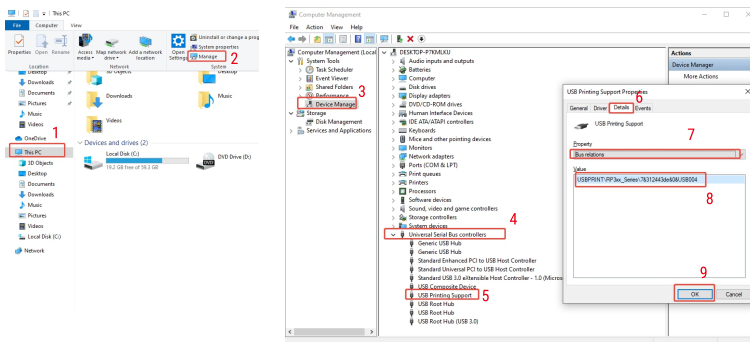
⚠ Note: A printable test page is available to confirm that the setup is successful.
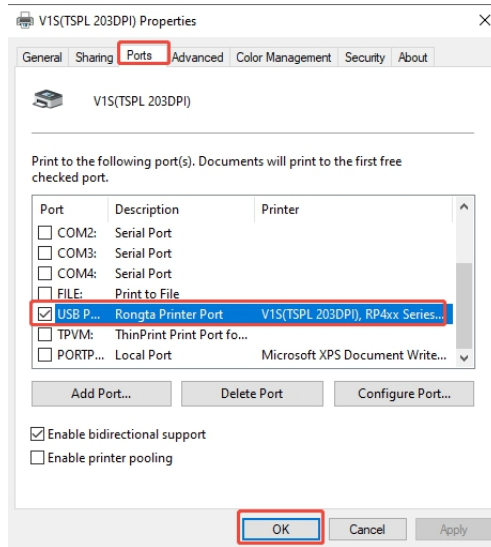
Steps for identifying the type of USB port:

Desktop: "This PC", right click on the "Mange" ——"Device Manager"————"Universal Serial Bus controllers"———

USB Printing Support "———" Details"————select "Bus relations"————click "OK".

4) Connect the serial port to print the test page

Make sure the serial cable is connected to the printer. Select "Port" as shown in the figure below, choose the corresponding serial port (for example, COM1), select COM1, then select "Configure Port". A dialog box will appear: Set the value of the bit rate per second to be the same as the printer's baud rate. If the printer's baud rate is 19200, then in the serial port properties for printing, set the bit rate per second to 19200.
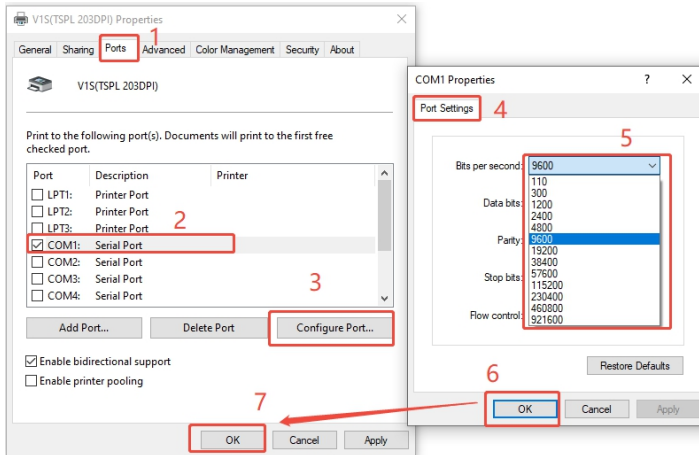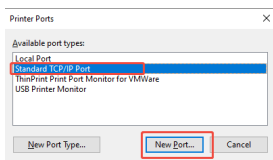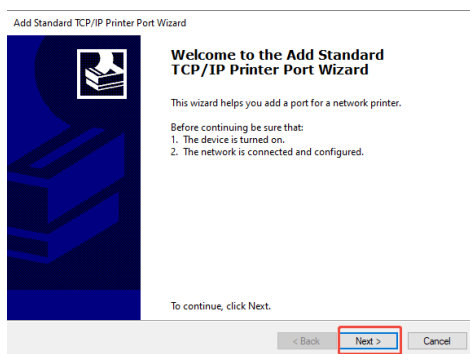

5) Network port print test page

Make sure the network cable is connected to the printer. Open the printer properties, select "Add Port ...", as shown in the following picture.
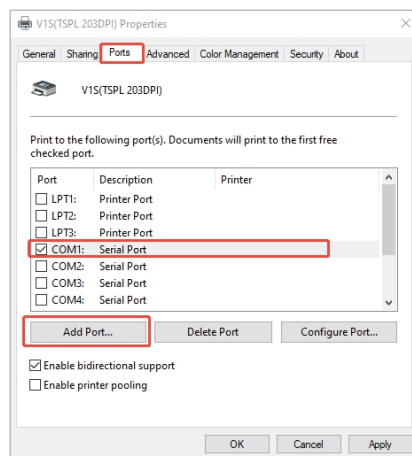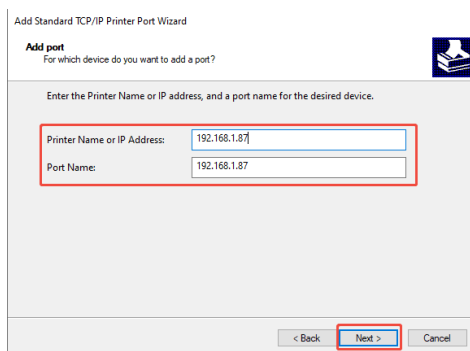
Select "New Port...", as shown in the following figure
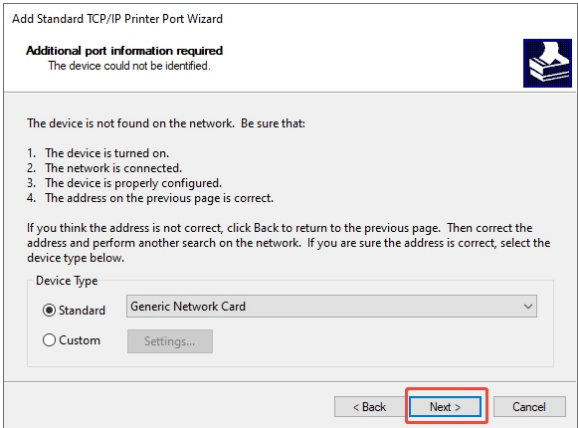

Select "Next > ", as shown in the following picture
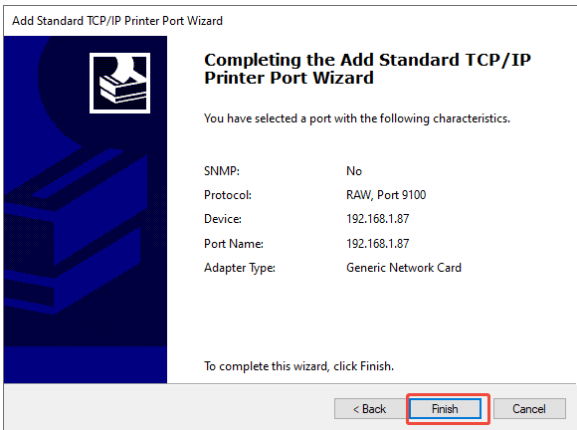

Enter "192.168.1.87" (the default factory setting) in the "Printer Name or IP address " field, and select "Next > " as shown in the following picture:

THERMAL PRINTER

Select "Next >", as shown in the following picture.


Select "Finish" to indicate that the standard TCP/IP printer port addition is completed.

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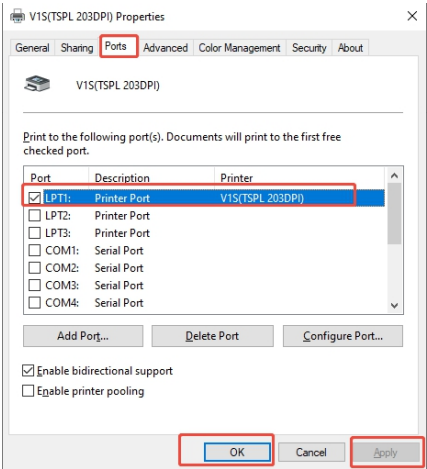Select " ☑ 192.16... Standard TCP/IP Port V1S(TSPL 203DPI) " and then select "Apply ".
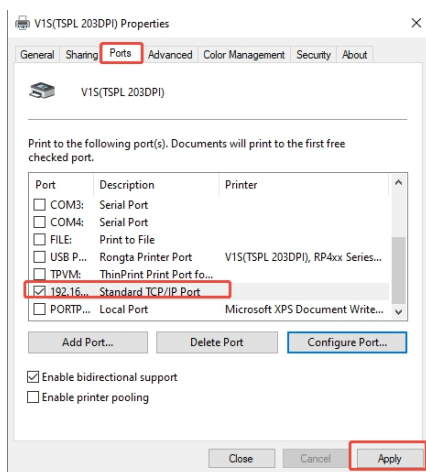
Then select "Print Test Page". If the test page can be printed normally, it indicates that the printer and the PC are properly connected and configured, and the printer port can be used normally.
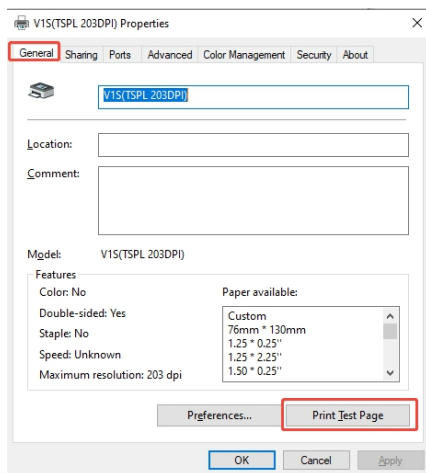
6) f. Connect the parallel port and print a test page.

Select one of the ports among "LPT1: Printer Port", "LPT2: Printer Port", and "LPT3: Printer Port". The port should be chosen according to the position where the user connects the parallel port cable. Here, "LPT1: Printer Port" is taken as an example. Select "Apply" as shown in the following figure.

Then select "General", as shown in the following figure, and choose "Print Test Page". If the test page can be printed normally, it indicates that the connection and configuration between the printer and the PC are correct, and the printer port can be used normally.
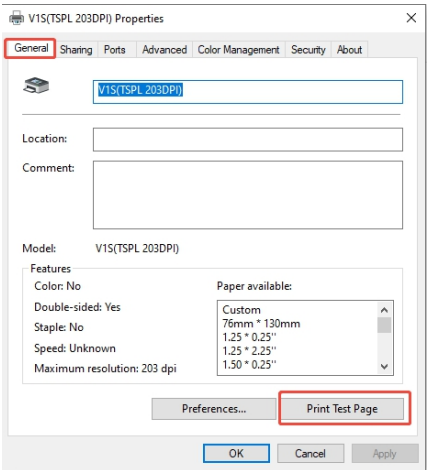
3.5 Uninstalling the Driver

（1） Open "Control Panel" - "Programs";
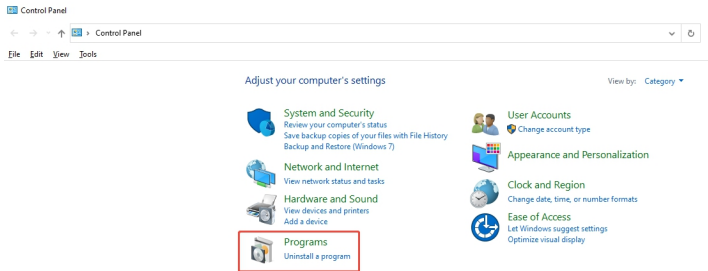
（2） Select "RTLabelPrinter Printer Driver" and right-click Uninstall.

(3) Click "Yes";

(4) Click "OK";

(5) Click "OK" .The driver is uninstalled successfully.

IV. Label printer setup tool instructions

4.1 Uses of the Label Tool

(1) Query or configure basic printer information.

(2) Set Ethernet, WiFi, serial port, Bluetooth, and character set parameters.

(3) Update the printer firmware and font library.

(4) Provide relevant shortcuts (for example, print a self-test page).

(5) You can use the tool to send data.

4.2 Tool Download
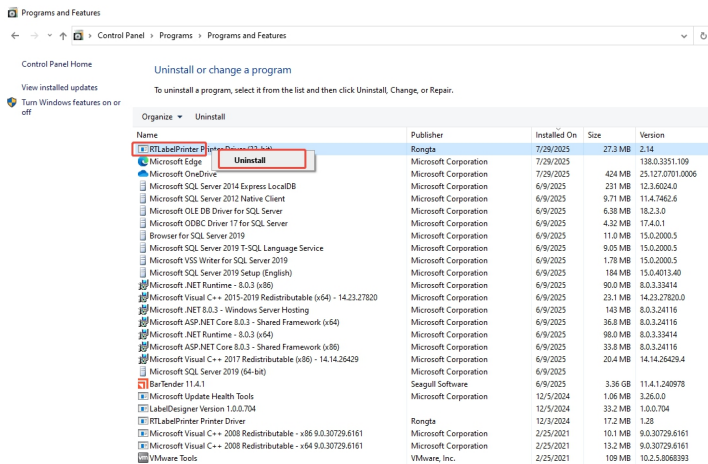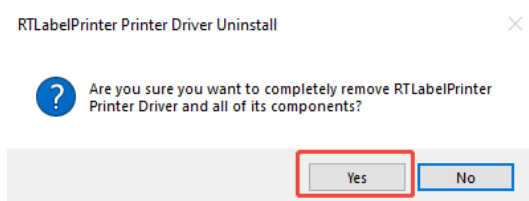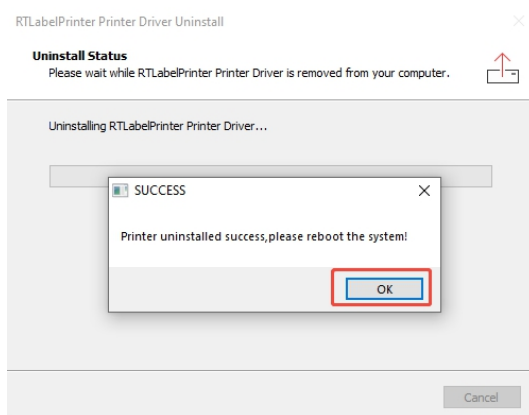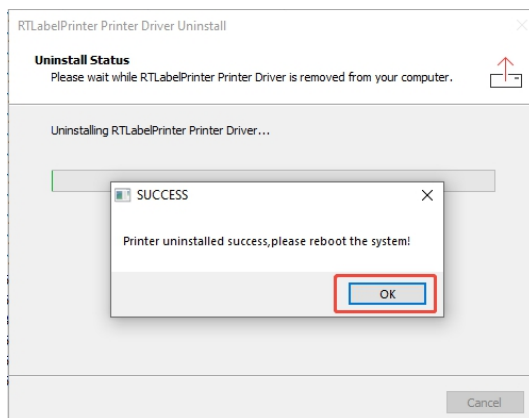
(1) Visit the official website of Rongta University at www.rongtatech.com

(2) Click on "SUPPORT", find "TOOL DOWNLOAD", find "Thermal Printer Tool" and click "DOWNLOAD".

4.3 Tool instructions

Printer ready to use tool:

(1) Make sure that the printer is connected to the power supply and is in the shutdown state;

(2) The communication cable used is inserted into the communication connection plug of the corresponding printer;

(3) Confirm that the printer has installed the paper roll;(4) Turn on [power switch].

(1) ⚙ V1SLabelPrinterTool **Double-click the tool to appear the following interface, as shown in the following picture**

If the printer is connected to USB, directly default the USB option, and then "set the printer" or "download" the program (if the printer is connected to USB, then USB can be selected, if not, then the USB option is gray, can not be selected, as shown in the following picture).
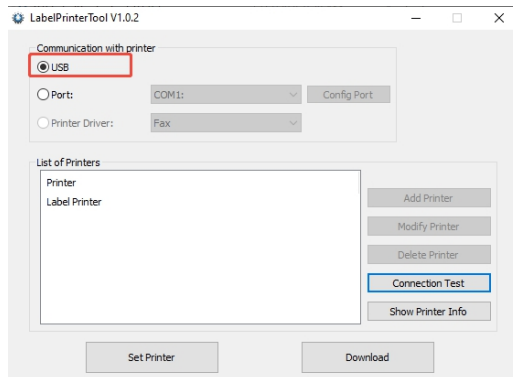
Select USB and click "Connection Test". If the following figure shows success, it means that the printer has been connected (if the connection is unsuccessful, please reinstall the communication cable and test the communication Settings).
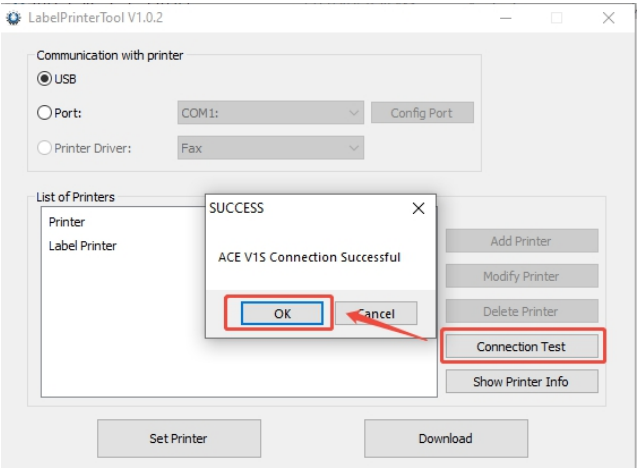
Click "Show Printer Info" to view the basic information of the current printer, as shown in the figure below.
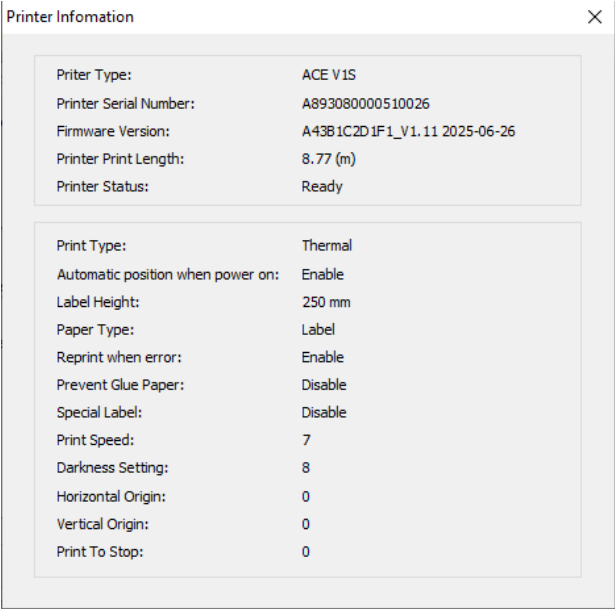
When the firmware version of the printer is low or non-ideal, you can click "Download". The following dialog box is displayed, click "Program" to open the file, and then click "Update". After the interface shows that the update is successful (do not manually power off), the printer will enter the update mode (the light is off). About 5-10s later, the printer will automatically restart (the light is on). At this time, you can click "Show printer information" or "Print self-test page" to confirm whether the update is successful.
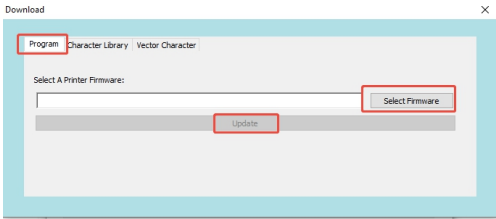
If the user wants to change the font by himself, he can select "Character Library", click "Select Font" to select the font, and then click "Update". When the interface address pops up: the default address is "0", after clicking OK, the update progress will be displayed until the update is successful, and the printer will be restarted after the font library is updated.

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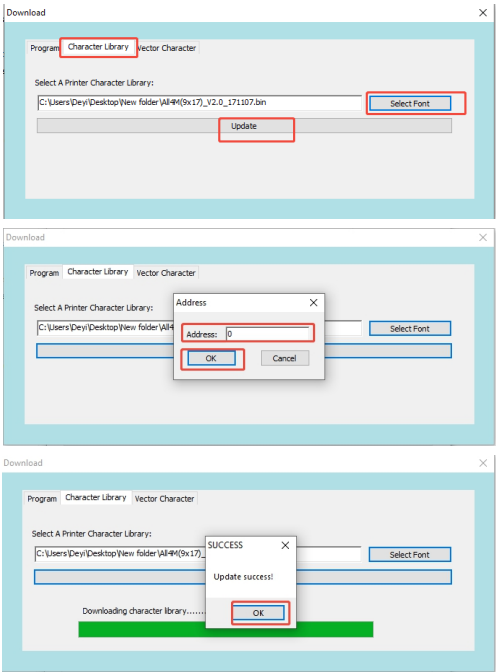
4.4 Tool setup

(1) Print setup

Click "Set printer" to pop up the following window, you can change the basic parameters in the print setting interface.
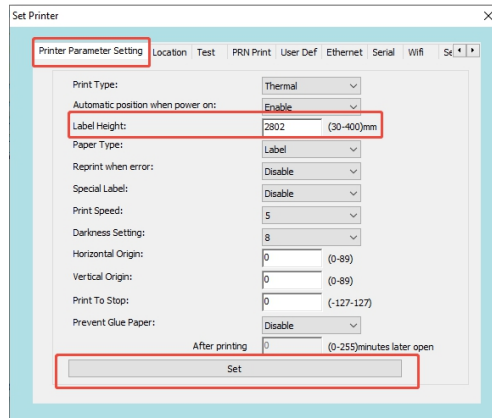
(2) Label calibration

When the printer is ready, switch to the label calibration interface (as shown in the figure below) :

● Label Auto Learn: by learning to identify the size of the loaded paper;

● Lack Paper learn: It can solve the problem that when there is no paper or the learning label cannot find the seam mark, click the lack of paper learning in the case of no paper and close the cover. Finally, reload the paper for automatic label learning.
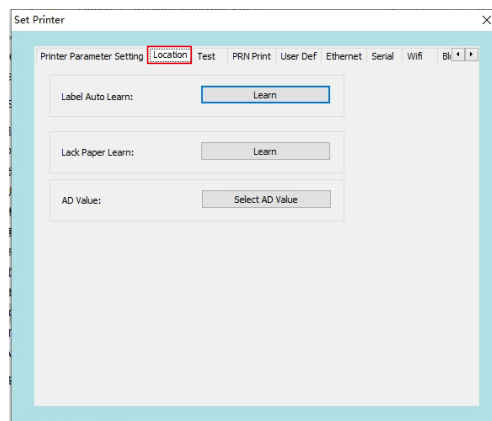
(3) Print test

Print the test interface as shown in the right figure.
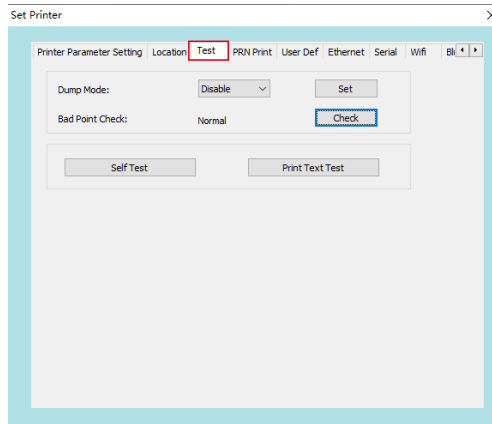
● **Print self-test page:** When the printer is initially installed or there is any problem with the printer, you can click "Print Self-test page" to confirm the firmware version, printer parameter setting status, print quality and related Settings of external devices.

● **Print Text Test :** The following figure shows that you can enter the text you want to print in the text box, and set the printable area in label mode. Click "Print" to print the test.
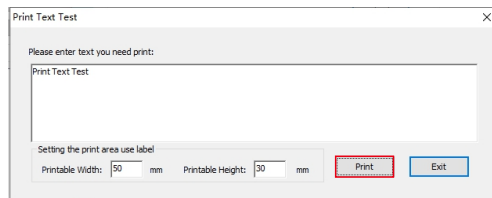
(4) PRN print

Click "Select File", select a PRN file and click "Print" to print the PRN file.
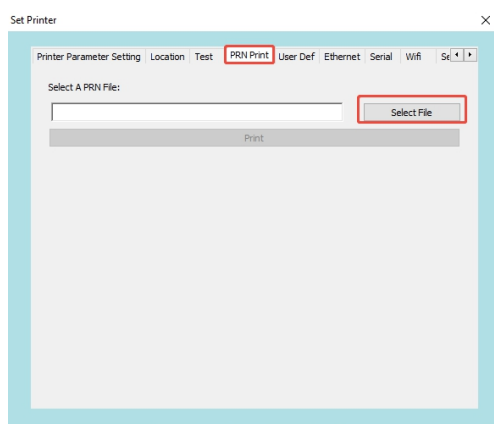
(5) User Def

Switch to the "User Def" interface, as shown in the following figure, you can set "Buzzer sound" on and off, "Command type", "Restore factory Settings".

THERMAL PRINTER
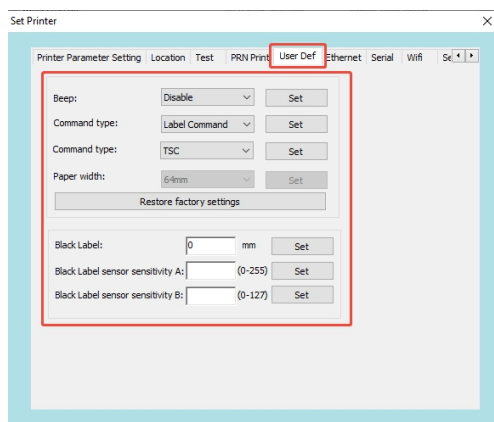
(6) Ethernet Settings

On the Ethernet interface, you can set Ethernet parameters.

Static IP setting

● Set the IP address of the printer, for example, 192.168.1.87, and set the
  communication port.

● Set the subnet mask of the printer, for example, 255.255.255.0.

● Set the printer gateway, for example, 192.168.1.1.

Click Settings after filling in.

DHCP Settings

● Set the DHCP function for the printer. By default, the DHCP function for the printer is
  disabled. If necessary, the DHCP function can be enabled so that the printer can
  automatically obtain an IP address.

MAC Address Setting

● Setting a MAC Address

⚠ **Note:** Before setting the URL, if the printer is connected in the following two ways: "One" uses "Network port", "two" print the IP address in the driver mode, after changing the IP address, the printer's IP address has been changed. In this case, the printer is disconnected from the tool. You need to reset the IP address of the tool to connect to the printer. Other connection methods have no effect.

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(7) WiFi Settings(Only valid for printers with WiFi functionality)

Printer WiFi parameter Settings

● Open the downloaded "Label printer Tool" "RTLabelPrinterTool";

● According to this setup tool manual, first make sure to connect the printer;

● Open the setup tool and select "WiFi Settings";

● Enter the SSID (the name of the wireless) to which the printer is to connect, and the corresponding mode;

● Enter the wireless encryption type, and enter the WiFi password, for example: add wireless "rdhz", password encryption type is WPA-PSK, and enter the wireless password, click "Settings";

● After clicking "Set", the printer will print out the set wireless parameters. Please print the self-test page to check the printed wireless parameters Compare with the router,
if correct, please wait patiently, the printer will connect to the wireless network within
1 minute, if the printed none The line parameters are different from those on the router. Please reset them and repeat the preceding steps.

⚠ **Attention:** The default IP address of the printer is 192.168.1.87. If the IP address of the printer and the IP address of the wireless router are not in the same network segment, you need to go to the Ethernet page to set a static IP address for the printer, or enable the DHCP function to automatically obtain an IP address. Make the IP address of the printer and the router in the same network segment.

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(8) Serial port Settings

Serial port Settings screen allows you to set serial port parameters.
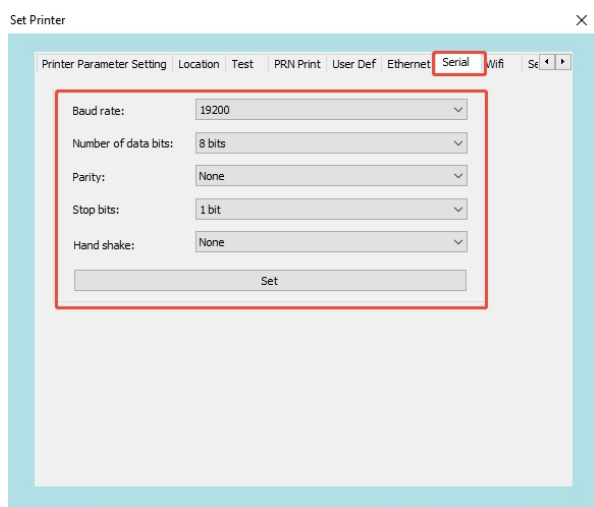
(9) CodePage setting

On the "Code page " setting screen, click the drop-down key to select the desired character set and click "Set".

THERMAL PRINTER
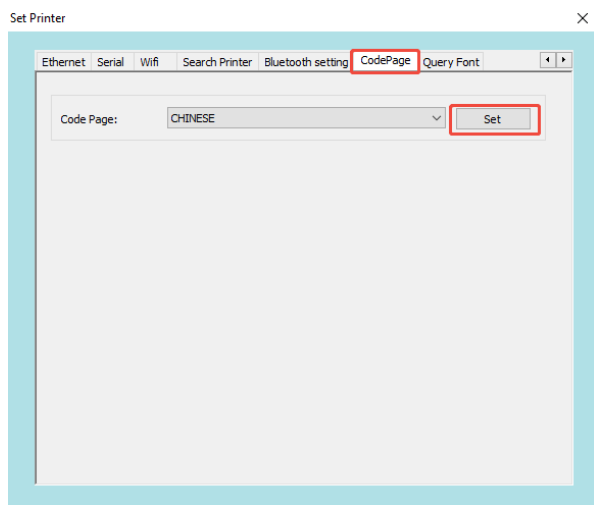
(10) Bluetooth Settings(Only valid for printers with Bluetooth functionality)

If the printer has Bluetooth function, you can set the parameters of Bluetooth.

● First press and hold the printer's [paper key], then turn on the machine, and print out the printer's self-test page. From the self-test page, find the printer's Bluetooth pairing name and password;

● If necessary, you can modify the Bluetooth pairing name and password, this time to use the "label printer tool" in the "Bluetooth Settings" function, as shown in the following figure;

● Enter the "device name" and "Pin" of the printer Bluetooth to be modified, click "Settings", and then manually restart the printer, and wait for a short period of time after starting up, after hearing a "drop" sound, the Settings are changed successfully. (The device type needs to select Android or IOS system, if it is IOS system Pin needs to be set to 6 characters, if it is Android system Pin set to 4 characters);

● Find the Bluetooth printer you just modified, enter the corresponding password, and complete the pairing. The printer must be turned on when pairing.

⚠ **Note:** When pairing, do not turn on multiple printers at the same time, otherwise you may not be able to determine which printer is successfully paired.

THERMAL PRINTER
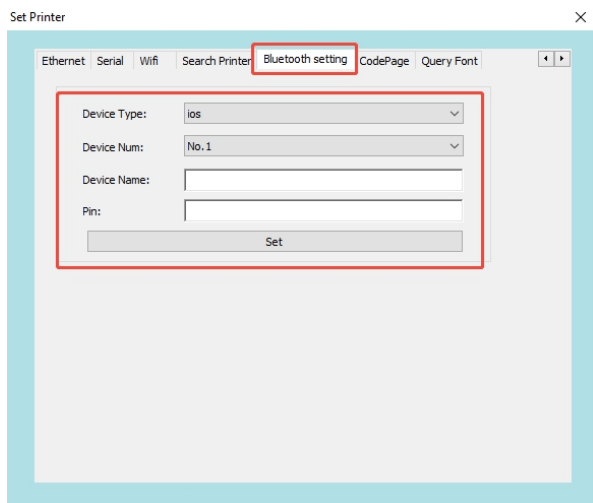
V. Page change parameter operation description

In addition to using the WINDOWS application software provided by us, the printer can also update the network port parameters through the browser (such as Internet Explorer /Firefox)

5.1 Obtaining the IP address of the Printer

Connect the printer to the power adapter, press the FEED key and turn on the power switch, wait 1-2 seconds for the printer to automatically print out the self-check page, and find the IP address in the description of the self-check page, the default is 192.168.1.87.

5.2 Connect the printer

(1) Direct connection with network cable
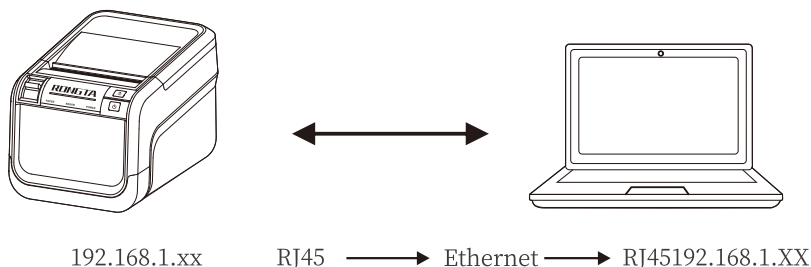
192.168.1.xx   RJ45 ⟶ Ethernet ⟶ RJ45192.168.1.XX

Printer and PC shall use the IP Address of the same network segment,
for example 192.168.1.xx
For example, printer: 192.168.1.87, PC: 192.168.1.87

(2) Connect through a network device
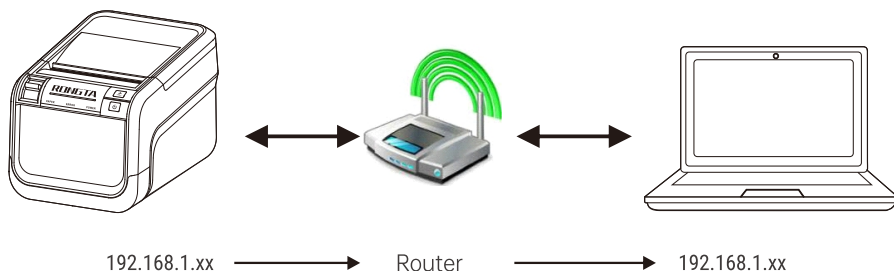
192.168.1.xx ⟶ Router ⟶ 192.168.1.xx

Printer and PC shall use the IP Address of the same network segment, for example

192.168.1.xx For example, printer: 192.168.1.87,Router：192.168.1.1， PC: 192.168.1.87

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5.3 Change parameters

(1) Set pages

Open a browser, for example Microsoft IE, enter the printer IP address, and then press Enter.

(2) View interface information

After entering the web page, you will first see the printer interface information.
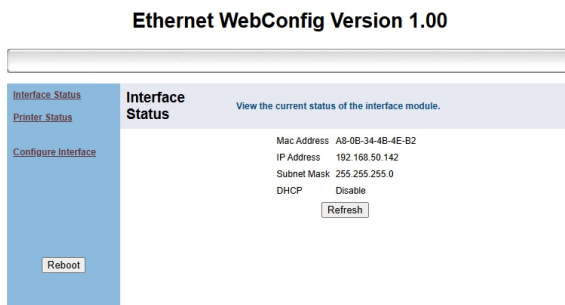
(3) View the current status of the printer

1) Click the link "Printer Status" on the left to view the printer status:

2) Whether the upper cover is open.

3) Whether there is diffusion knife error.

4) Whether the printing paper runs out.

5) Whether the printing paper is about to run out.

6) Whether the printer is offline, As shown in the following figure.
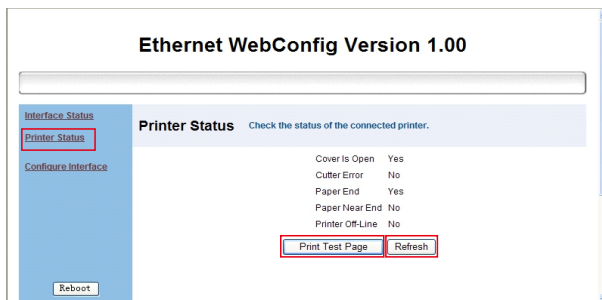
Click"Print Test Page" to print a self-test page.

Click"Refresh"to refresh the page and view the latest status.

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5.4 Set Ethernet port parameters

Click "Configure Interface" to enter the Ethernet port parameters setting interface.

Enter a new parameter, as shown below, new IP:192.168.1.86, and click Save.

A dialog box appears, as shown in the following figure, select OK.
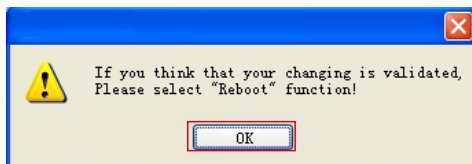
Then click the Reboot button on the left to restart the printer. The dialog box appears and select OK, as shown below.
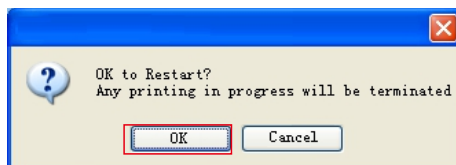
After clicking OK, the interface as shown below appears.
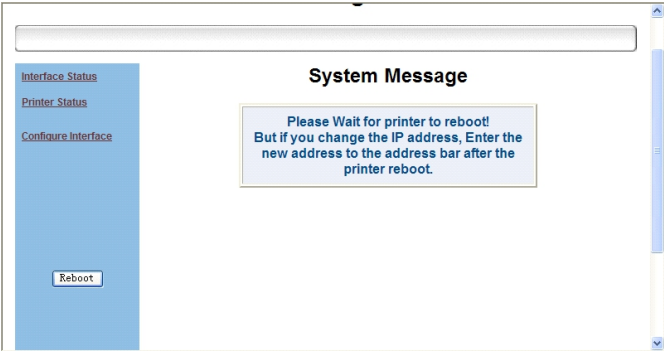
Wait a few seconds, hear the printer "drip" sound, indicating that the restart is complete. The network port parameters have been modified. To continue, enter the latest IP address in your browser and repeat the steps above. As shown in the figure below.
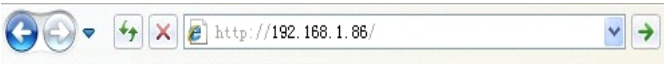
VI. Daily Cleaning and Maintenance

6.1 Clean print head

When the printer has one of the following conditions, the print head should be cleaned:
(1) The printing is fuzzy and unclear
(2) A vertical column of the printed page is not clear
(3) The noise of paper output is loud
(4) Print head black, carbon accumulation serious

The steps for cleaning the print head are as follows
(1) Turn off the power of the printer, open the cover, if there is paper, remove the paper;
(2) If you have just finished printing, wait for the print head to cool completely;
(3) Wipe the dust and stains on the surface of the print head with a soft cotton cloth dipped in alcohol;
(4) Wait until the alcohol is completely volatilized, close the upper cover, and re-test the printing machine.

Schematic diagram of cleaning the print head

6.2 Clean Sensor

When the printer has one of the following conditions, the paper sensor should be cleaned:
(1) Paper identification error
(2) Paper positioning is not allowed
(3) Lack of paper does not alarm
(4) Lack of paper
(5) Print blank paper and run more paper
(6) Can not learn paper correctly
(7) The paper is offset

Clean the sensor as follows:
(1) Turn off the power of the printer, open the cover, if there is paper, remove the paper;
(2) Wipe the dust and stains on the sensor surface with a soft cotton cloth dipped in neutral alcohol, as shown in the picture on the right;
(3) Wait until the alcohol is completely volatilized, close the upper cover, and re-test the machine.

Schematic diagram of the cleaning sensor

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6.3 Clean the printer roller

When the printer has one of the following conditions, the print head should be cleaned:
(1) The printing is fuzzy and unclear
(2) A vertical column of the printed page is not clear
(3) The noise of paper output is loud
(4) Print head black, carbon accumulation serious

The steps for cleaning the printer roller are as follows:
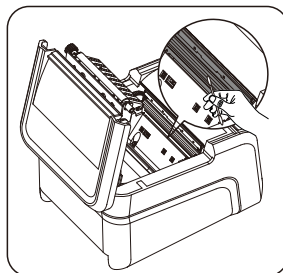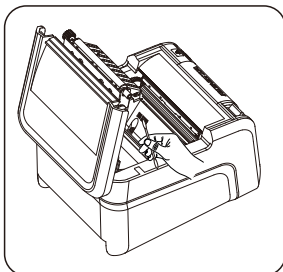(1) Turn off the power of the printer and open the top cover;
(2) Wipe the dust and stains on the surface of the printer roller with a soft cotton cloth dipped in neutral alcohol;
(3) After the alcohol is completely volatilized, close the top cover.
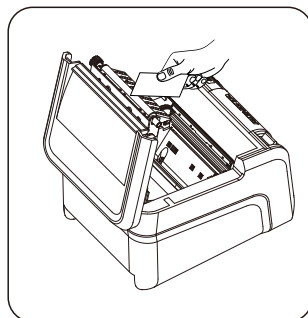
Cleaning printer roller diagram

6.4 Cleaning the Cutting Blade

When the printer fails to cut the paper or gets paper stuck, the cutting blade should be cleaned.
Cleaning method for the cutting blade:
(1) Press the FEED key for 3 seconds to pop out the movable cutting blade;
(2) Remove the matching cotton swab and dip it in alcohol to wipe off the remaining glue on the cutting blade;
(3) Press the FEED key for 3 seconds continuously to return the movable cutting blade to its original position.

Fixed cutting blade
Cutting blade for the activity
FEED key
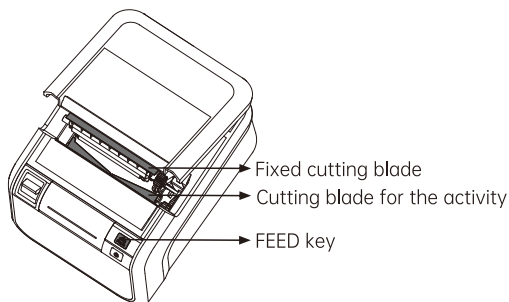
⚠ Note:

(1) The power supply must be turned off during daily maintenance of the printer;
(2) Do not touch the print head surface with hands and metal objects, and do not use tools such as tweezers to scratch the print head, print roller and sensor surface;
(3) Do not use gasoline, acetone and other organic solvents;
(4) Wait until the alcohol is completely volatilized, and then turn on the power to continue printing.

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VII. Troubleshooting

When the printer fails, it can be handled according to the method in this section.
If the problem cannot be solved, please contact the distributor or manufacturer.

7.1 The indicator on the control panel is not on

Check whether the power cord is properly plugged into the printer, power adapter,
and power outlet or not. Check if the printer's power switch is on.

7.2 The indicator is normal, while the printer does not work

Run the self-test to check whether the printer can work properly. If you cannot perform
self-test, please contact your distributor or the technical service personnel.
If the self-test can be performed normally, check the following:
(1) Check the interfaces at both ends of the connection line between the printer and the
     computer. At the same time, confirm whether the connection meets the specifications of
      printer and computer.
(2) The data transfer settings between the printer and the computer may be different.
     You can use self-test to print out the printer's interface settings. If the printer cannot print,
     please contact your distributor or the technical service personnel.
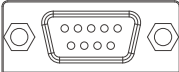
7.3 Clear the stuck knife

When the printer jams the blade, the upper cover of the printer cannot be opened. Turn off the
power of the printer and restart it. If the jammed blade has not been returned to its original
position, turn off the power of the printer, open the front cover of the printer (as shown in the
left picture), and use a screwdriver or a hard tool to push the gear downward to release the
jammed blade. (As shown in the right picture)

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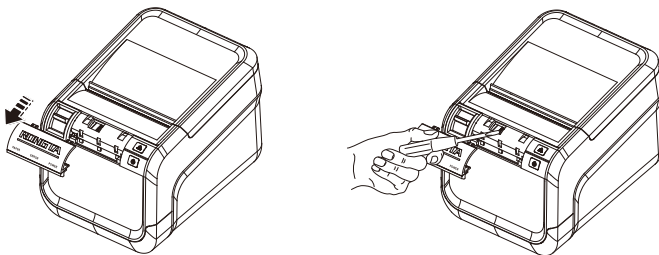
Appendix I: Interface information

Printer Interfaces

Diagram	Type	Illustration
	USB	Universal USB Interface (Standard Type B)
	Serial interface	Db9 female connector interface, communication baud rate is 9600bps, 38400bps, 19200bps or 115200bps optional (You can set it using the tool), data structure is parity-free, 8-bit data bit, 1-bit stop bit; RTS/CTS and XON/XOFF handshake protocols are supported
	Network interface	Standard RJ45-8P interface, 10M/100M transmission speed with self-adaptation, 100M network LED indication, data communication LED indication.
	Power interface	Power plug DC 24V.
	Cashbox control	The 6-wire RJ-11 socket, outputing DC 24V/1A power signal to drive the cashbox.

☺ Note: The interface is optional or customized, and the specific interface is subject to the actual object.

1.1 USB interface

The USB socket for the printer is standard USB type-B
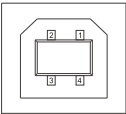
Pin number	Definition
1	VBUS
2	D-
3	D+
4	GND

1.2 Ethernet interface

The Ethernet interface socket of the printer is standard RJ-45-8P, supporting 10M/100M network, and the transmission speed is adaptive
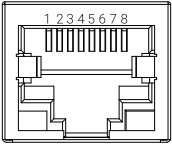
Pin number	Description	Illustration
1	TX+	Send differential line+
2	TX-	Send differential line-
3	RX+	Receive differential line+
4	NC	No function
5	NC	No function
6	RX-	Receive differential line-
7	NC	No function
8	NC	No function

1.3 Cashbox Interfaces of Printers

The cashbox interface of the printer adopts RJ-11 standard, 6-wire socket, and outputs DC 24V/1A power signal to drive the cashbox. Insert the RJ-11 crystal connector of the cashbox into the cashbox interface to open the cashbox through the printer.

6 5 4 3 2 1

R J – 1 1
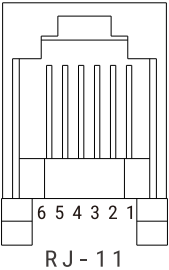
The functions of each pin of the cashbox interface of the printer are defined as follows:

Pin number	Signal	Description
1	GND	Power supply ground
2	Dk1	Negative pole of cashbox 1#
3	DK-1N	Start detection
4	PWR	Positive pole of power supply/cashbox
5	Dk2	Negative pole of cashbox 2#
6	GND	Power supply ground

☺ **Note:** Select the above interface definition and buy cashbox.

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1.4 Serial interface

The serial interface of the printer adopts the RS-232 standard, and the communication baud rate is 9600bps and 19200bps38400bps or 115200bps optional (can be adjusted through the printer setup tool), 8 data bitsNo parity check, 1 stop bit, RTS/CTS and XON/XOFF handshake protocols are supported.

The functions of each pin of the printer serial interface are defined as follows:

Pin number	Model	Signal source	Description
2	TXD	Printer	The printer sends data to the host.
3	RXD	Host	The printer receives data from the host.
8	RTS	Printer	This signal reflects the current status of printer. A high electrical level indicates that the printer is "busy" and cannot receive data, while a low electrical level indicates that the printer is "ready" and can receive data.
5	GND	———	Signal ground
6	DTR	Printer	Same as RTS signal (pin 8).

Schematic diagram of connection between printer serial interface and POS host serial interface:

TXD 2 → RXD
RXD 3 ← TXD
RTS 8
DTR 6 → CTS/DSR
GND 5 — GND

Printer serial interface DB9   POS host serial interface DB9

THERMAL PRINTER
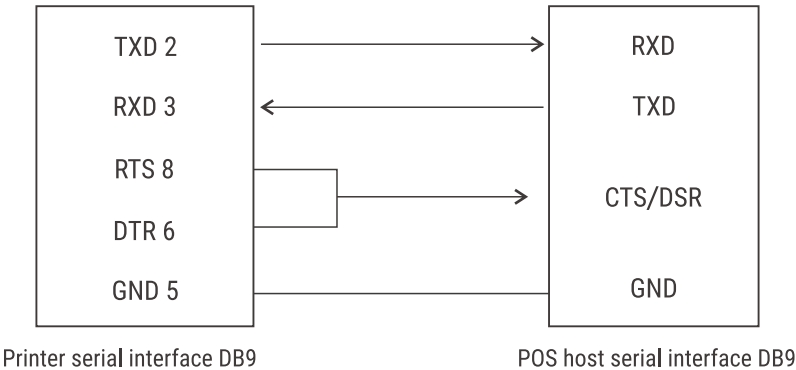
Appendix II: Description of special connection functions

2.1 WIFI Function (Optional)

WiFi is a technology that enables electronic devices to connect to a wireless local area network (WLAN). Currently, the company's printers use the 2.4G radio frequency band. Connecting to a wireless local area network is usually password-protected; however, it can also be open, allowing any device within the WLAN range to connect. For specific WIFI setup steps, please refer to the P38 tool setup instructions.

1) Bluetooth pairing and printing (applicable only to devices with a Bluetooth printer)

Before the Bluetooth printer can be used, it needs to be paired with the main device that drives the printer. The pairing process is initiated by the main device. The usual pairing method is as follows:

(1) Turn on the printer
(2) The main device searches for external Bluetooth devices
(3) If there are multiple external Bluetooth devices, select the printer corresponding to the BDA address (refer to the self-test page for details)
(4) Enter the initial password "0000" or "1234"(5) Complete the pairing.
For the specific pairing method, please refer to the Bluetooth function manual of the main device.When pairing, the printer with a Bluetooth interface must be turned on.
⚠️ Note: When pairing, do not turn on multiple printers simultaneously. Otherwise, it may be impossible to determine which printer has successfully completed the pairing process.
After successful pairing, other upper computers can still pair with this printer. Each printer can be paired with up to 8 upper computers.If more upper computers are paired with the printer, the earliest paired upper computer will be automatically removed from the pairing list by the printer.At this time, if this upper computer needs to drive the printer to print, it needs to be re-paired. (Only applicable to multi-connection Bluetooth)

2) Print using Bluetooth interface (Only applicable to devices with Bluetooth printer)

For user devices with Bluetooth (such as mobile phones using SMARTPHONE, Pocket PC, PALM, laptops, computers, etc.), after successful pairing, you can send print data to the printer via Bluetooth for printing. If the user device does not have Bluetooth, please consult the supplier of the user device for instructions on driving the printer for printing.

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Appendix III: FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement.

To maintain compliance with FCC's RF exposure guidelines, the distance must be at least

20 cm between the radiator and your body, and fully supported by the operating and installation.

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Rongta Technology (Xiamen) Group Co., Ltd.

ADD: No.88,Tonghui South Road, Tongan, Xiamen, China.

Email: service_support@rongtatech.com

WEB: www.rongtatech.com