RONGTA

RP415 LABEL PRINTER

Catalogue

Introduction

Thank you for purchasing our electronic sheet printer. This electronic single-sheet printer gives you safe, reliable and efficient printing quality at an affordable price. The super function and easy operation of the printer are widely used in express logistics, warehouse management, shopping malls, supermarkets, catering industry, clothing industry and other fields.

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	2024.04	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

⚠ **Note:** The tearing blade has a sharp edge, please be careful not to touch to prevent cuts.

⚠ **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 mode	Line thermal printing
	Effective resolution	203 dpi
	Print speed	150mm/s
	Maximum print width	108mm
Detect	Sensor	Paper missing detection, seam mark detection, black mark detection, open cover detection, heating head temperature detection, Bad spot detection
Consumable	Paper type	Label paper, continuous paper, Under the black label paper, Folded paper
	Paper width (label + backing paper)	27mm~112mm
	Paper thickness (label + backing paper)	0.06mm-0.18mm
	Bin capacity	Max130mm
Programming language		ZPL ,TSC
Software	Label design	1. large bar code label printing system 2. Third-party editing software, such as BarTender and NiceLabel
	Actuate	XP/Win7/Win8/Win10/Win11/ios/Android/Linux/MacOS
Built-in font		ASCII Font: 12×24 9×17 8×12 12×20 16x24 24x32 36x48 14x19 14x25 21x27 Chinese character: 24×24
Bar code	One-dimensional	Code 39、39C、I25、Code 93、ITF25、EAN128、Code 128、 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
	QR code	QRCODE、PDF417(Optional)
Communication interface		Standard: USB (Type-B), Network port, Options: Serial port, Bluetooth, WiFi
Power source	Power adapter	AC 100 ∼ 240V
	Input power supply	DC 24V ⎓ 2.5A
Environmental parameter	Operating temperature	0~45°C
	Working humidity	20~90%(no condensation)
	Storage temperature	-10~60°C
	Storage humidity	10-90%(no condensation)
Physical parameter	Size (L * W * H)	219mm*181mm*176mm
	Weight	1.375kg
Authentication		CCC、CE、FCC、ROHS

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.

Standard Accessories
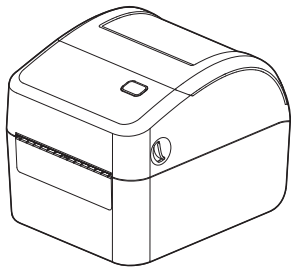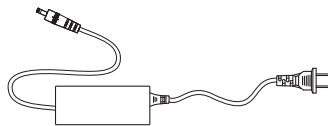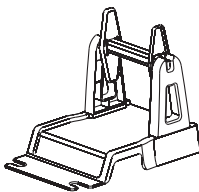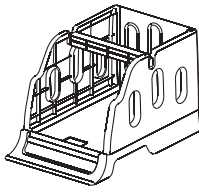

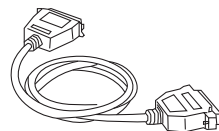Printer   Power cord   USB cable   Quick installation Guide

Select Accessories
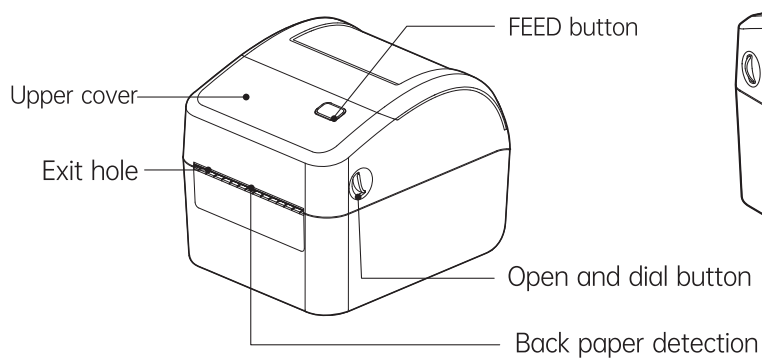

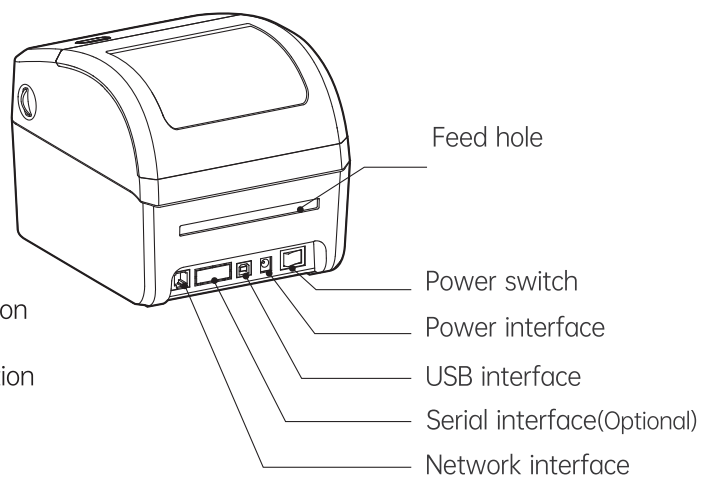External roll holder A   External roll holder B   Serial cable

☺ The pictures are for reference only, please subject to practicality.

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1.3 Appearance and Structure

❏ Front View

❏ Rear View

FEED button

Upper cover

Exit hole

Open and dial button

Back paper detection

Feed hole

Power switch

Power interface

USB interface

Serial interface(Optional)

Network interface

❏ Inside View

Print head set

Paper roll holder L

Paper guide block L

Roll holder R

Paper guide block R

Sensor group optocoupler assembly

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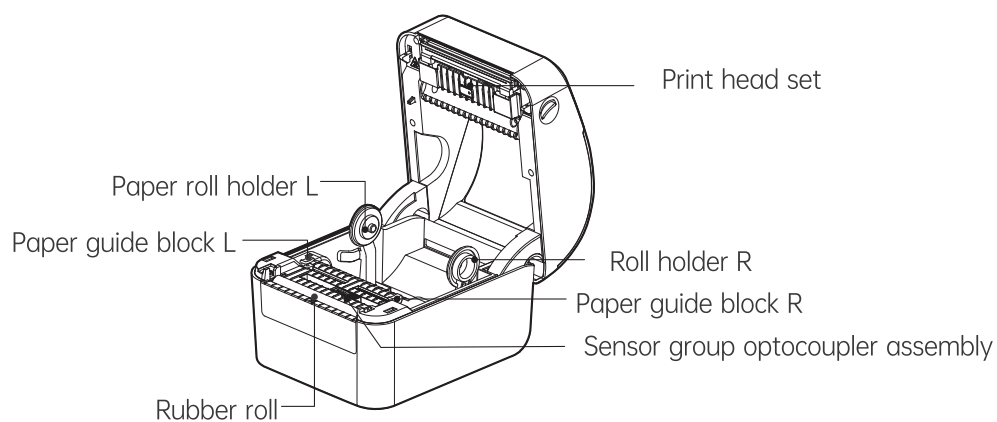
☺ Note: The interface is optional or customized. The specific interface is subject to the actual object.

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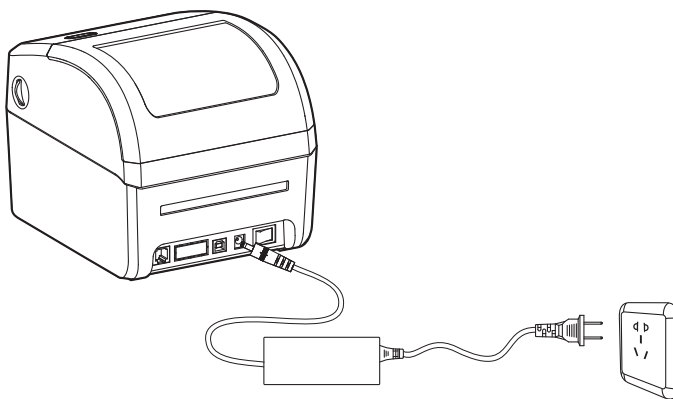# 1.4 Product size

181 mm

176 mm

219 mm

LABEL PRINTER
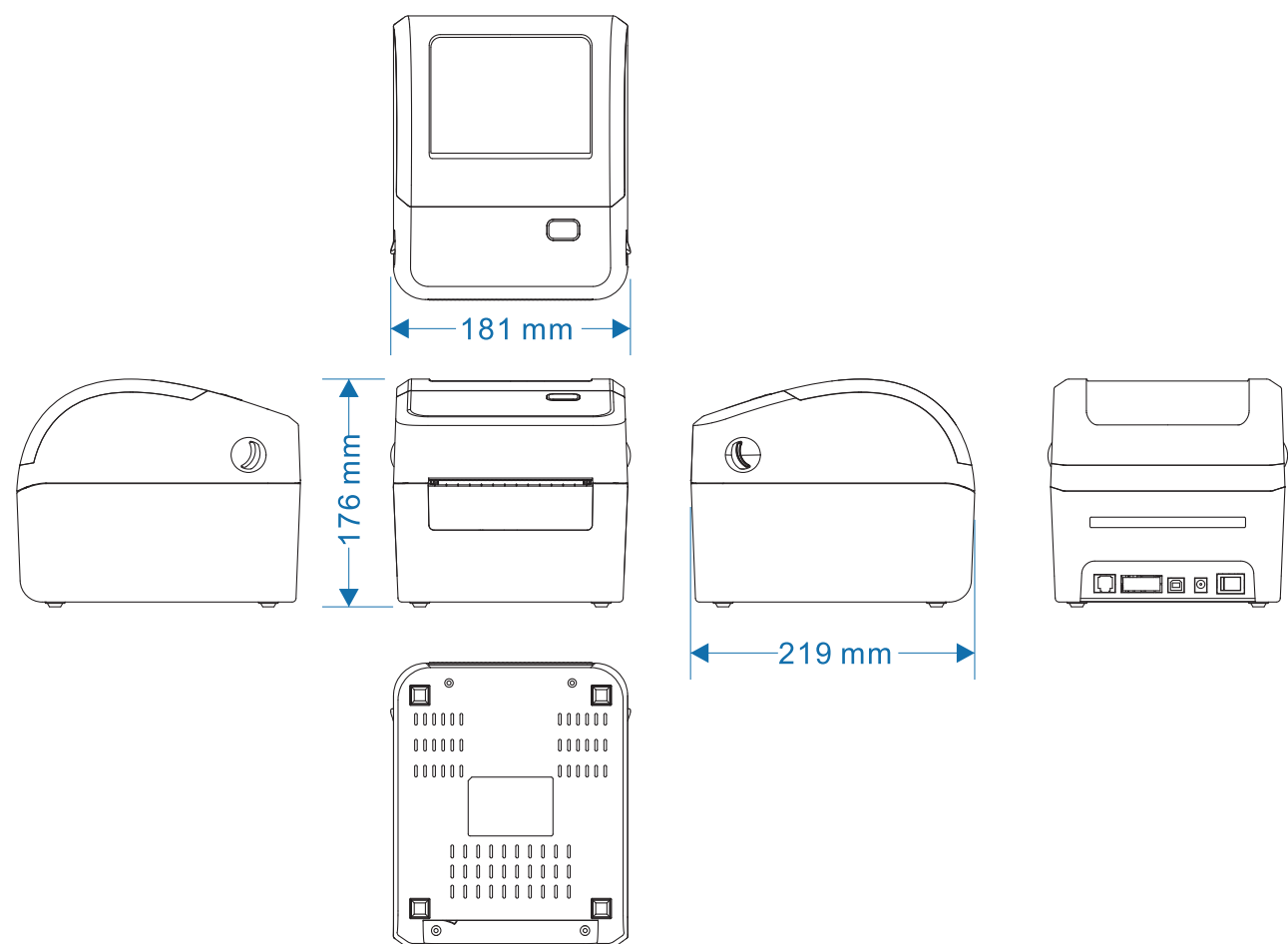
II. Installation and use

2.1 Power Connection

(1) Confirm that the printer [power switch] is in the off (O) state;

(2) Connect the power adapter to the printer;

(3) Connect the other end of the power cord to a nearby socket.

Please use the included special power cord, connect as shown below:

2.2 Port USB cable connection

(1) Connect the USB cable to the printer;

(2) Connect the USB cable to the PC host;

(3) Turn the printer [power switch] to the power on (I) state.

LABEL PRINTER
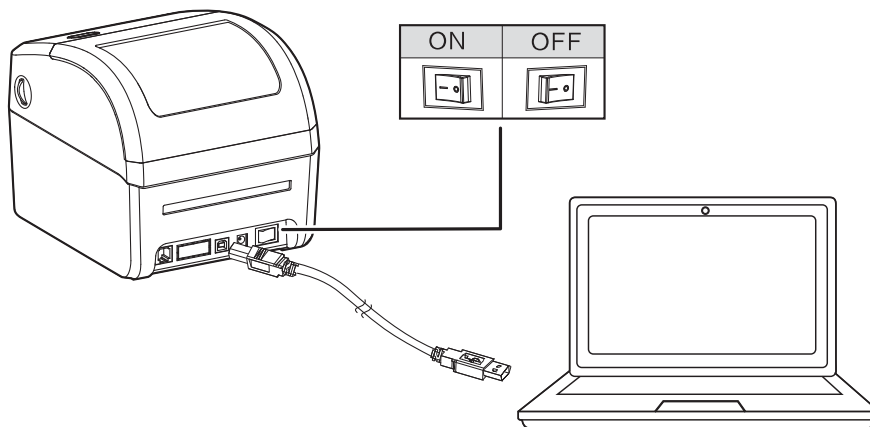
2.3 Loading Paper

⚠️ Important: Check that the sensor assembly is in the correct position before installing the roll

The confirmation steps are as follows:

Open the cover to confirm whether the position of the sensor component is offset; Slide the optocoupler of the sensor component to the right under the label or continuous paper until it cannot slide, and ensure that the optocoupler of the sensor component is aligned with the small triangle on the printer (as shown in the following figure).

Black label paper: Move the seam mark detection assembly according to the position of the black label, so that the detection optocoupler can detect the black label.
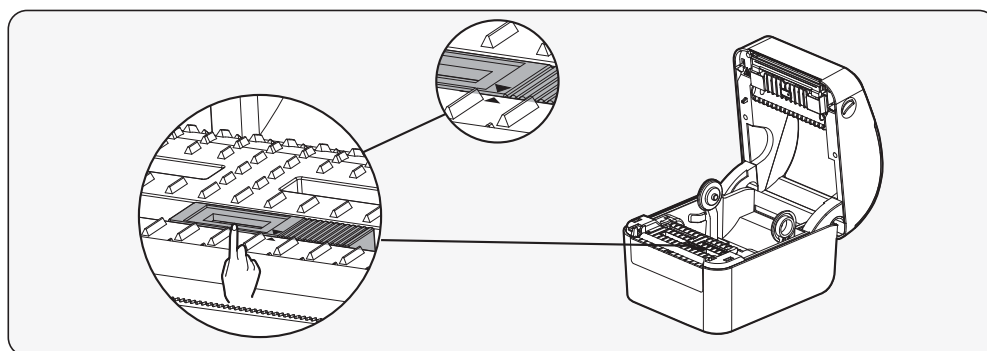
(1) The installation method of thermal paper internal roll is as follows:

a. Make sure that the printing side of the paper roll is up, pull the paper roll fixing base apart (as shown in Figure 1), put the paper roll, connect the inner hole of the paper roll core to the left and right side of the paper roll fixing base, and set the paper roll up;

b. Put the front end of the paper roll through the paper guide block and pull out the rubber roller. Close the paper guide block according to the width of the paper to fix both sides of the paper;

c. Close the upper cover of the printer and press down until the upper cover clicks to lock.

① ② Paper guide block L ③

Paper guide block R

LABEL PRINTER
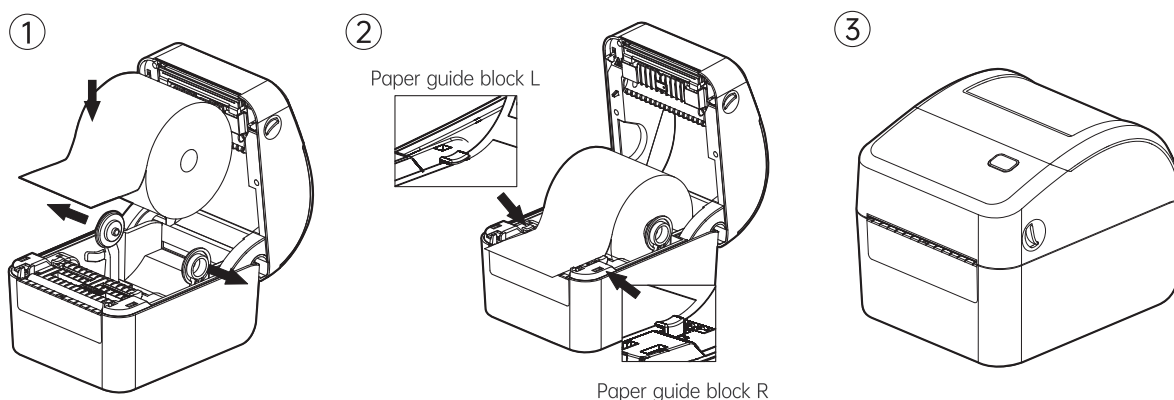
(2)The installation method of thermal paper external roll is as follows:

⚠ Note: External roll holder is optional.

a. Make sure the print side of the roll is up and pass the roll end through the paper inlet on the back of the printer;

b. After pulling away the paper roll fixing seat, push up the lock on the paper roll fixing seat L to lock it, as shown in Figure 2 below;

c. Pass the paper roll through the paper guide block and pull out the rubber roller. Close the paper guide block according to the width of the paper to fix both sides of the paper;

d. Close the upper cover of the printer and press down until the upper cover clicks to lock.

Push the latch up

①   ②

Paper guide block L

Paper guide block R

③   ④

LABEL PRINTER
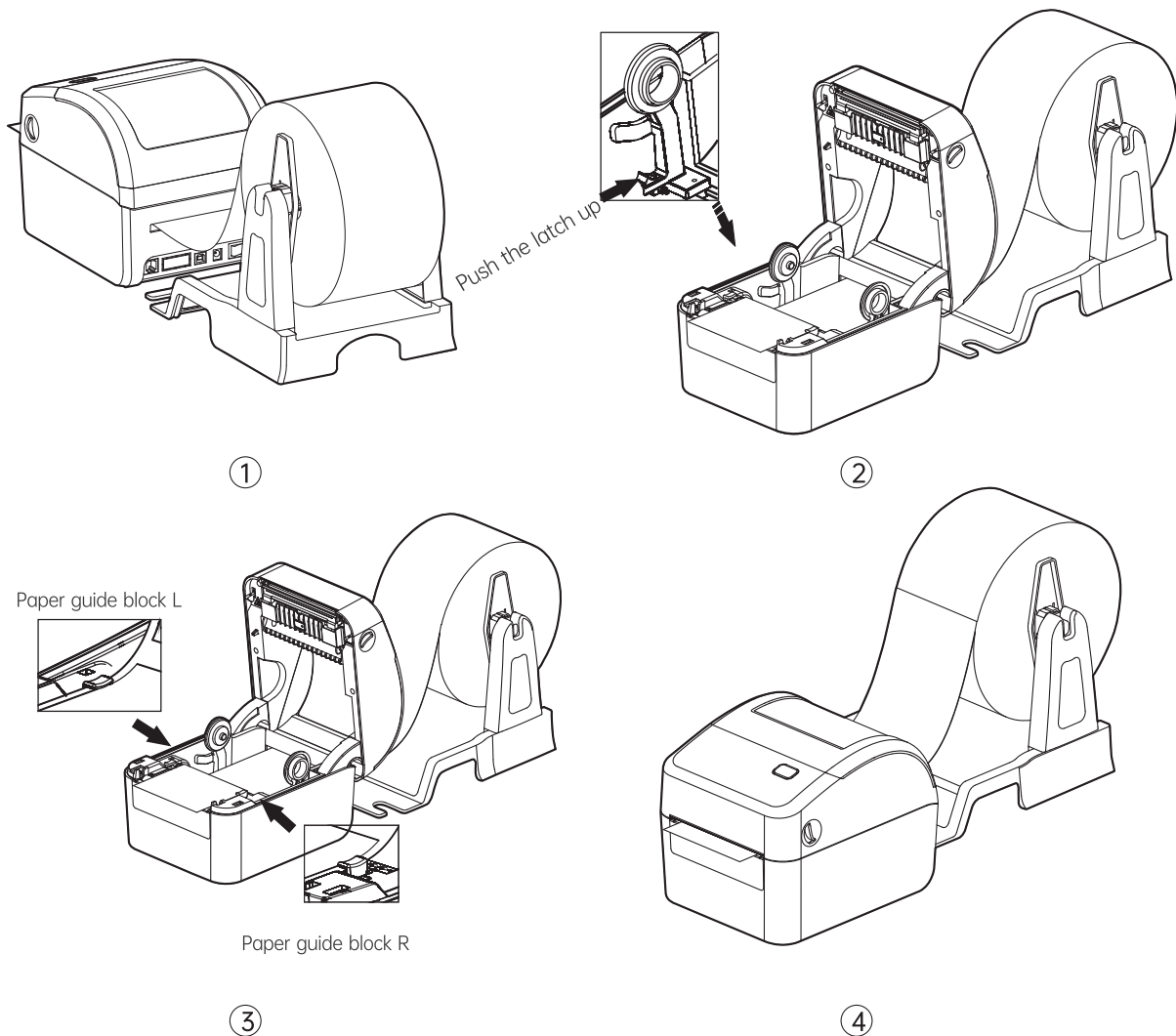
2.4 Basic Functions

(1) Power on/off

[Power switch] Used to switch the printer power. The power switch of the printer is located at the rear of the printer. When the "-" of the switch is pressed, the printer is turned on; When the "O" of the switch is pressed, the printer shuts down.

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

(2) Buttons and indicators

● Key function description

Situational model	Key operation	Corresponding function
Power Off	Press and hold + to power on	Self-test printing
Bide one's time	Long press 3S	Enter the sheet specification learning mode
Uncap	Long press 10S	factory data reset.
Bide one's time	Short press	Automatically feed a blank sheet
Continuous printing process	Short press	Print pause
Print pause	Short press	Continue to print

● Indicator description

⚠ Note: There are multiple versions of the indicator, please refer to the actual model.

Monochromatic lamp definition

Indicator status	Status description	Simple Troubleshooting
The green indicator is always on	Normal standby	/
The blue indicator flashes	RAM detection error	Contact the nearest service center
The pink indicator is always on	Print head is overheating	Automatically resume work after the printer cools down.
The red indicator is always on	Upper cover is not closed	Check whether the top cover is properly closed.
The red indicator flashes	No paper detected	Check whether paper has been loaded
The Yellow indicator is always on	Low input voltage	Replace the power adapter
The white indicator is always on	Pause printing	Press [FEED button] to print normally
The yellow indicator flashes	Paper jam	Open the cover to remove the jammed paper
The green indicator flashes slowly	Printer is working	/

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(3) Label learning

⚠ **Note:** In the following cases, the user can learn the label positioning so that the printer can better locate the label:

● Paper identification error

● Paper misalignment

● Install and use the printer for the first time;

● First use of printer after sensor cleaning;

● Re-use the printer after a long period of unused;

● Replace the new type of paper roll;

● During the printing process, the printer cannot effectively recognize the mark.

When the printer is ready, install the label roll, Long press [FEED button] for 3S , wait for the status indicator to blink for two times, release the [FEED button] , and the printer begins to learn and feed. When the printer is learning in continuous paper mode, the learning is invalid. The user can also complete the learning through the printer tool Settings (see "Label tool Instructions" on page 32).

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(4) Print the self-test page

When the printer is installed for the first time or there is any problem with the printer, you can perform the self-check program to confirm the following status. Firmware version, printer parameter setting status, print quality and related Settings of external devices, etc. If you confirm that the printer does not have problems after self-testing, please check other devices or software. This function operates independently of other devices or software.

The self-test method is as follows:

a. Ensure that the power supply is connected and the rolls are properly installed.

b. Ensure that the printer is powered off and the top cover is closed.

c. Press and hold [paper key], then press [power switch] to turn on the printer, and release the button after the printer is turned on.

```
                          Selftest Page
MODEL:RP415
VERSION:A43B0C2D1F1_V1.11 2024-02-26
Command :………………............…ZPL
SN:…………………………………
INTERFACE:………………………..USB
…………………………………………Ethernet(10Base/100Base)
DHCP:…………………………………Disabled
Ethernet ID:……………………….....a8-17-54-4a-6b-18
Ip address:…………………………...192.168.1.87
Port:…………………………………….9100
Net mask:…………………………….255.255.255.0
Gat eway:……………………………192.168.1.1
SPEED:…………………………………5
DENSITY 1:………………………. ……8
DENSITY 2:…………………………….8
MEDIA TYPE:…………………………..label
Dpi:…………………………………......203
Size:…………………………………….103 mm ， 120mm
Reference:…………………………….0 mm ， 0 mm
Shift:……………………………………0 mm
Offset:…………………………………0 mm
Milage(m):……………………………...16.930292
Direction:………………………………0,0
Set Tear:……………………………….ON
```

Self test page sample schematic

⚠ **Note:** Each printer self-test page parameters are different,
"self-test page sample" only indicates the actual parameter information.

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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 XP Professional SP3 (32 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 "SUPPORT"---"Driver Download" find the appropriate driver click "DOWNLOAD."

LABEL PRINTER
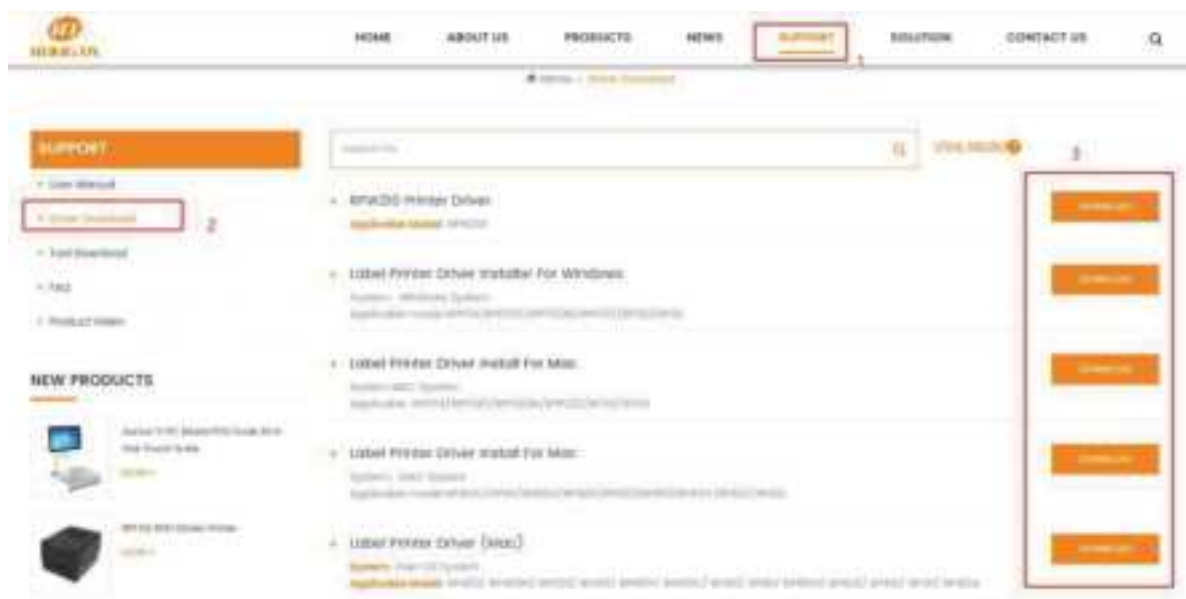
3.3 Drive installation

⚠ **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.

(1) 🖼 RPLabelPrinterDriverInstall_ Double-click the driver, the dialog box as shown below pops up, select the installation language, click "OK", as shown below;
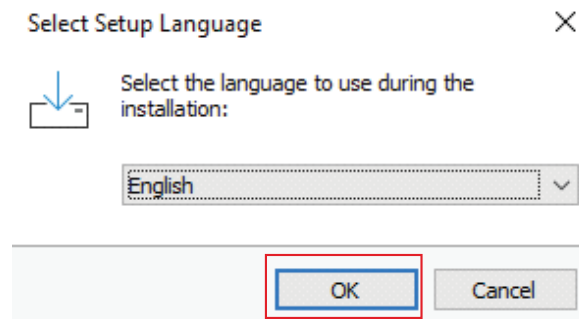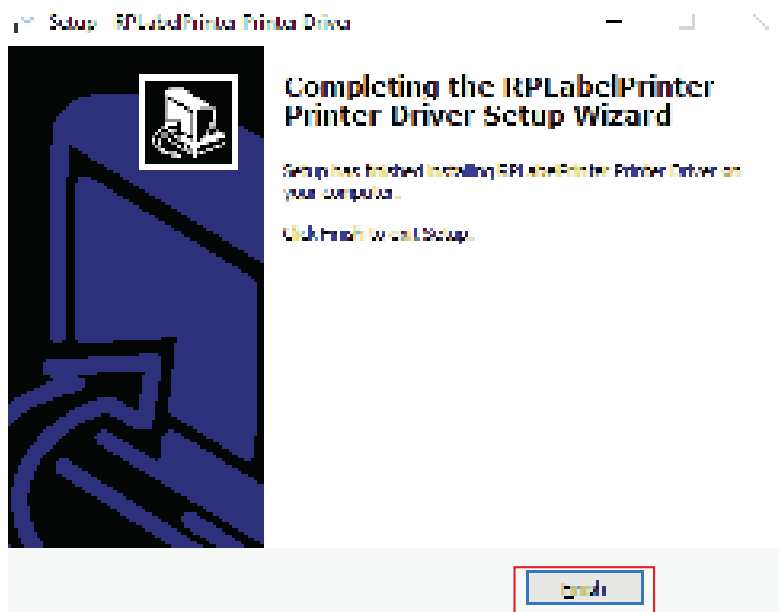

(2) Pop up the dialog box as shown below, select "Install";

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(3) Click "OK";
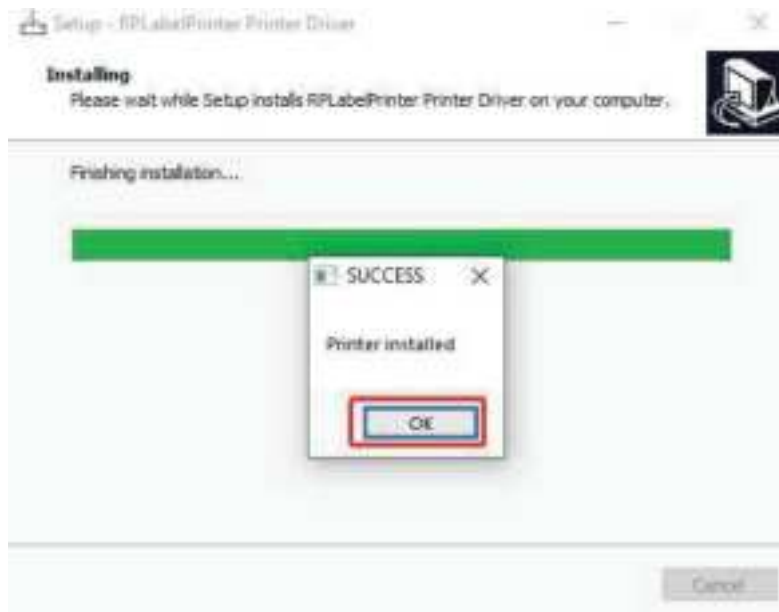

(4) Click "Finish" to complete the driver installation;

(5) You can find the installed printer icon in Control Panel ---- Devices and Printers.

RP4xx Series
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3.4 Driver Usage

Under normal circumstances, the driver can be used after installation, the default printing paper size of the driver: 101.6mm*152.4mm, 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:

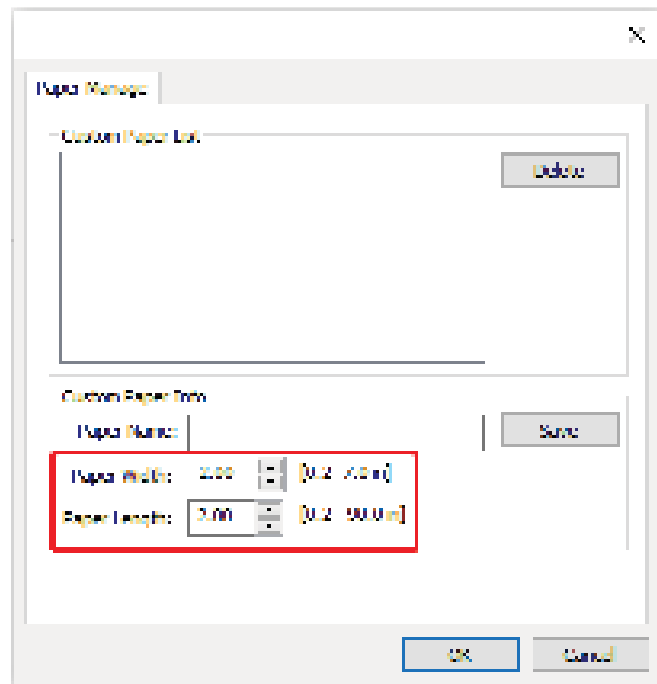a. Click "Control Panel" -- "Devices and Printers", right click the printer icon, select "Print Preferences"
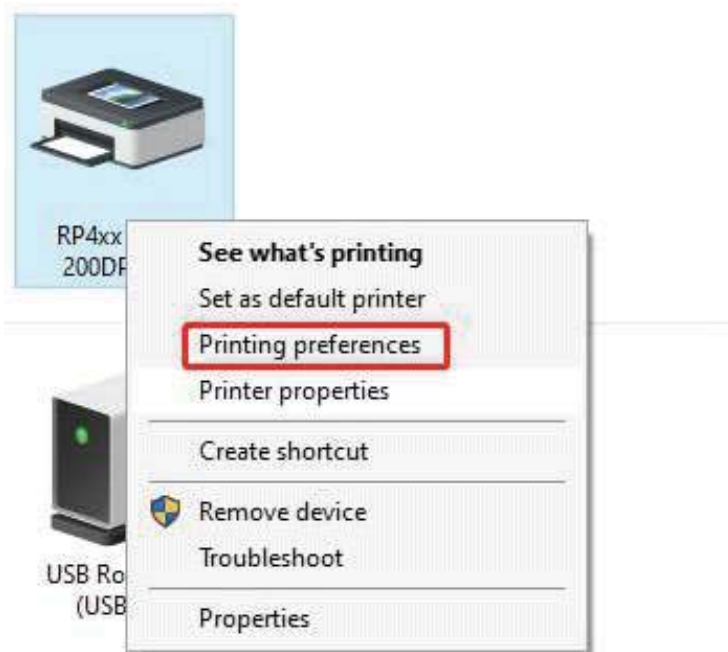
b. In the "Page" option, you can set the paper, offset, effect, etc.

● Drop down "Paper Name" and select the paper size according to the actual paper size. Default size (101.6mm*152.4mm)
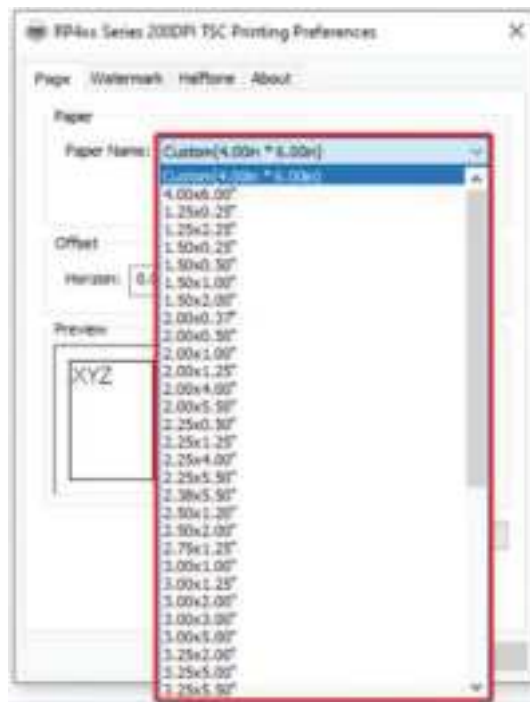
● Click "Paper Manage" to customize the paper size Settings.

● Click "Horizon" or "Vertical" to set the horizontal and vertical printing margins.

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● 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.
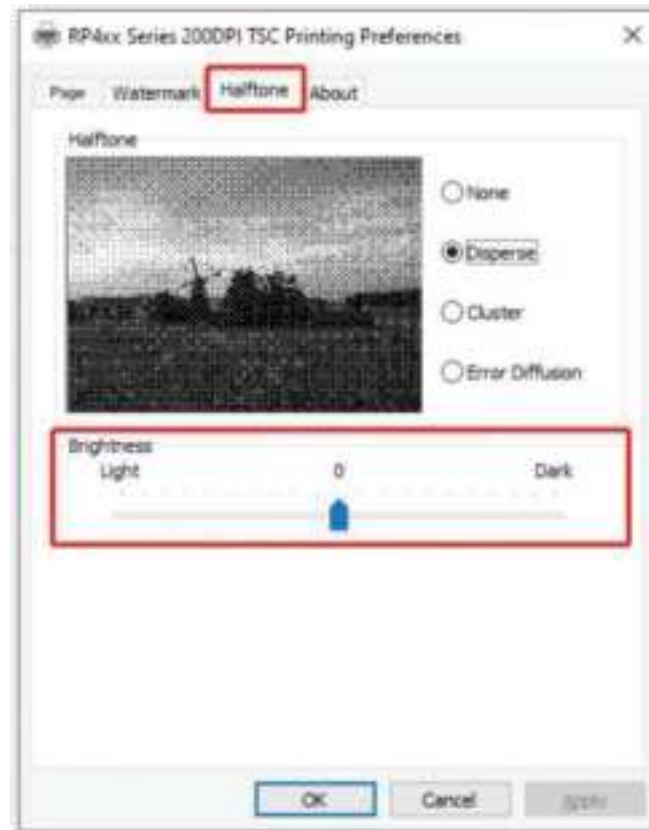
LABEL PRINTER
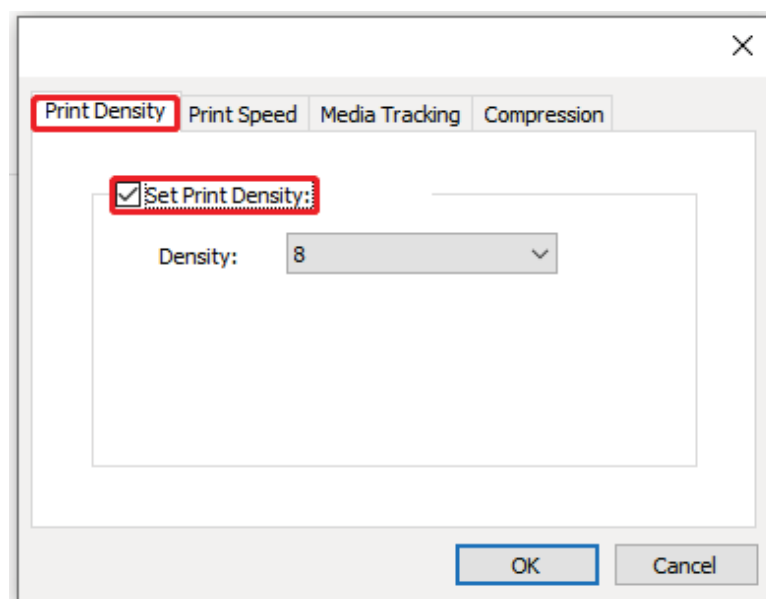
Set Print Speed: the general default speed "7", according to the printing needs to adjust the printing speed.
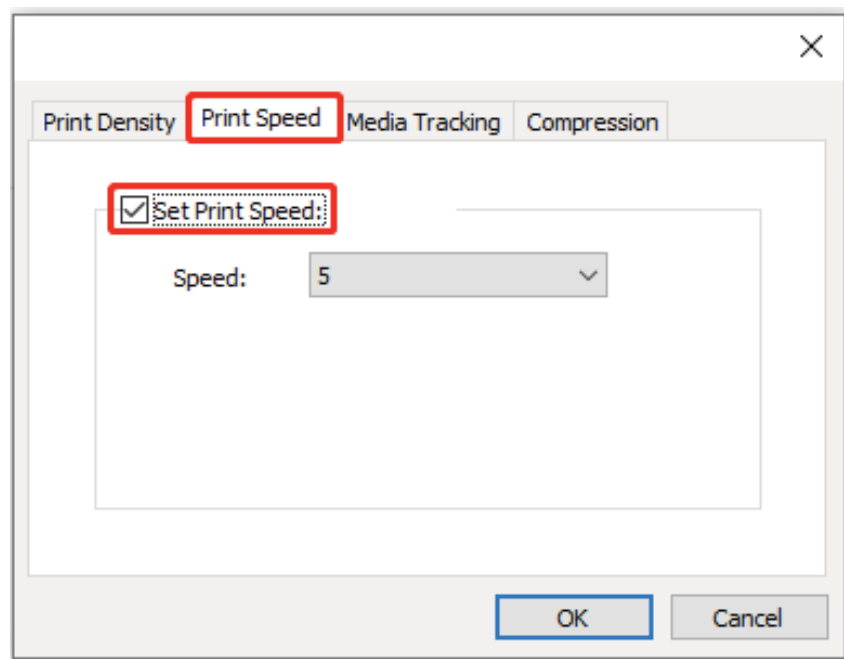
Media Tracking: You can select the type of paper currently used to select "Continuous ", "Label With Gaps", "Label With Marks".
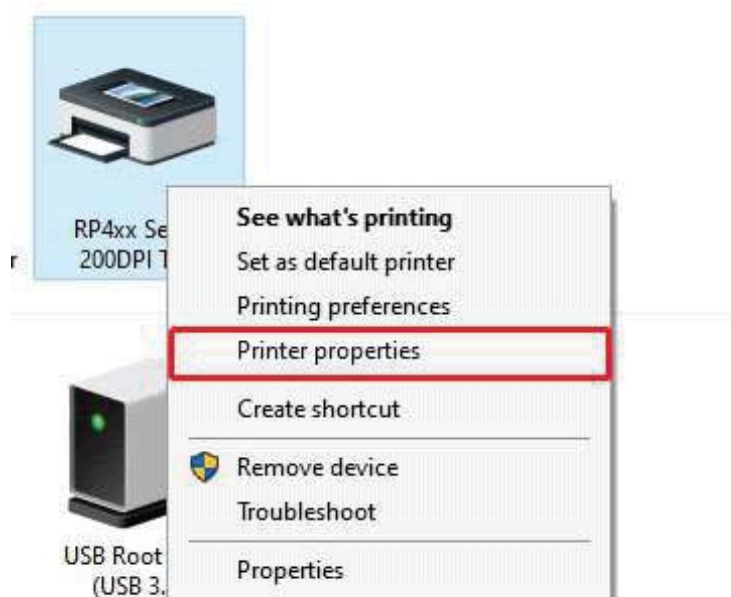
LABEL PRINTER
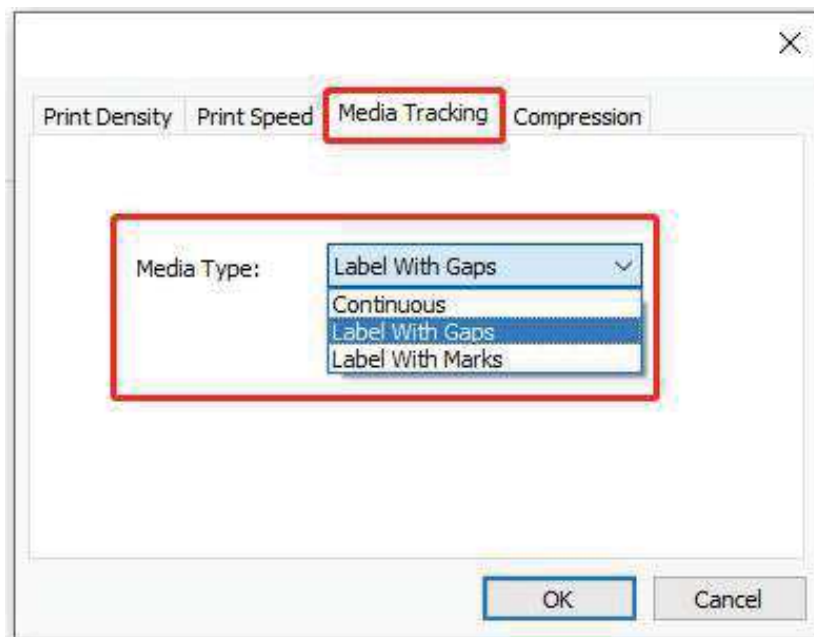
c. Halftone.
   Adjustable picture printing effect.
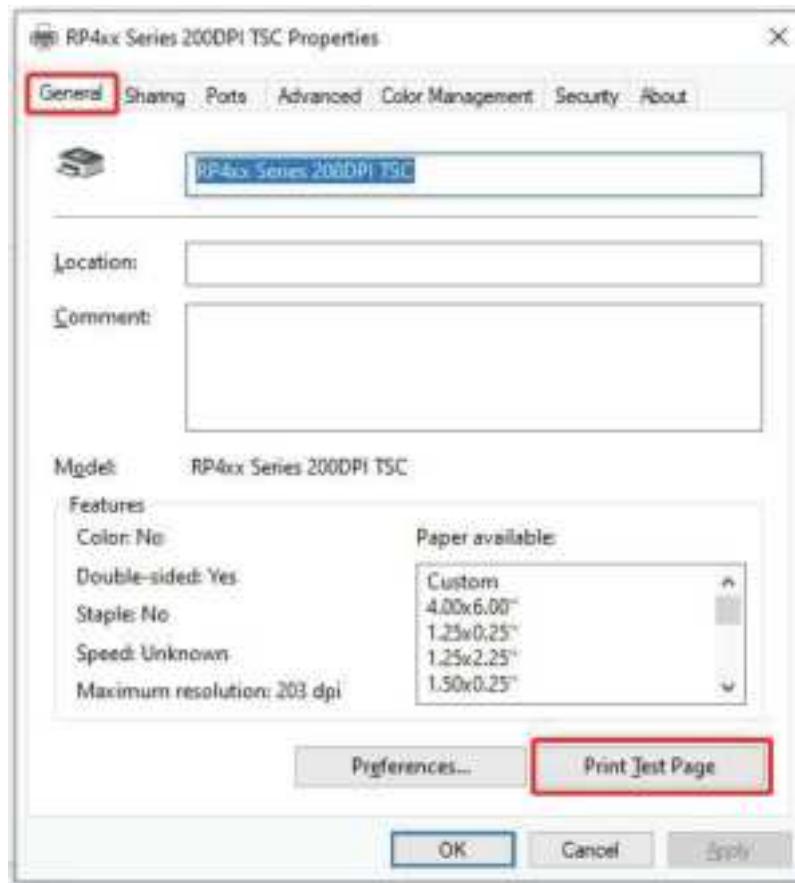

(2) Printer properties

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

b. Select General and click Print Test Page. The printer starts to print the current configuration.

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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