



*Let Things Better  
Faster and Vital*

# SP310

Thermal Label & Receipt Printer



## **User Guide**

Website: [www.idprt.com](http://www.idprt.com)

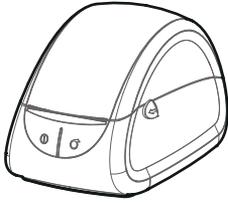
Customer Service Email: [technical@idprt.com](mailto:technical@idprt.com)

# Packing List

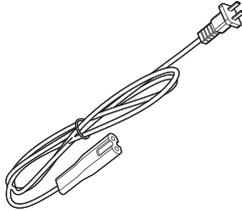
1) Unpack the printer and keep the packing items in case you need to ship the printer in the future.

2) Any damages exist, please contact the iDPRT team.

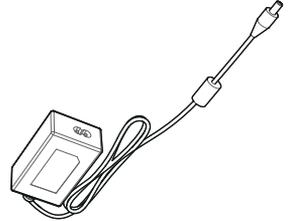
## • Standard Accessories



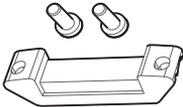
Printer



Power Adapter



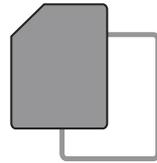
Power Cord



Cables Fastener

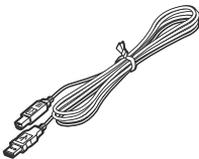


CD

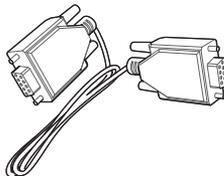


User Guide

## • Optional Accessories



USB Cable



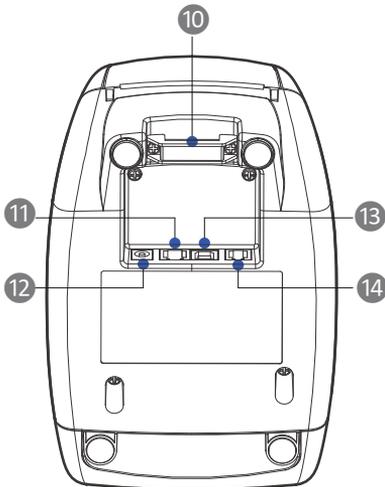
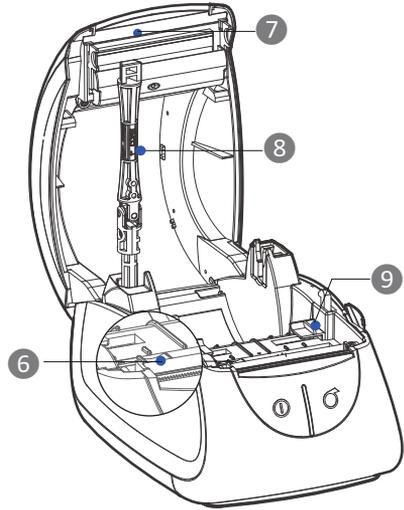
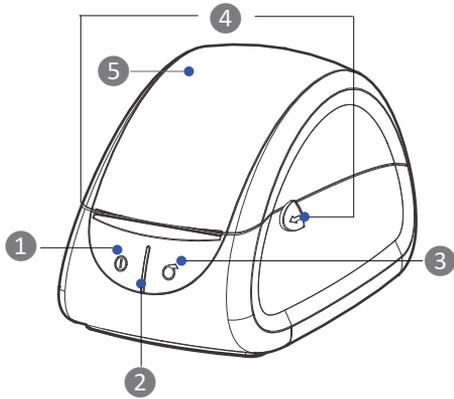
Serial Cable



Paper Roll

 Note: The packing items are based on the order.

# Appearance



- ① Power Button
- ② LED Indicator
- ③ Feed Button
- ④ Cover Open Lever
- ⑤ Top Cover
- ⑥ Paper Sensor (Movable)
- ⑦ Thermal Printer Head
- ⑧ Paper Roll Shaft
- ⑨ Paper Guides (Movable)
- ⑩ Cables Fastener
- ⑪ Cash Draw Interface
- ⑫ Power Interface
- ⑬ USB Interface
- ⑭ Serial Interface

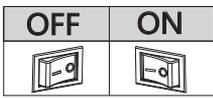


Note: The interface shown in the figure above are for reference only.

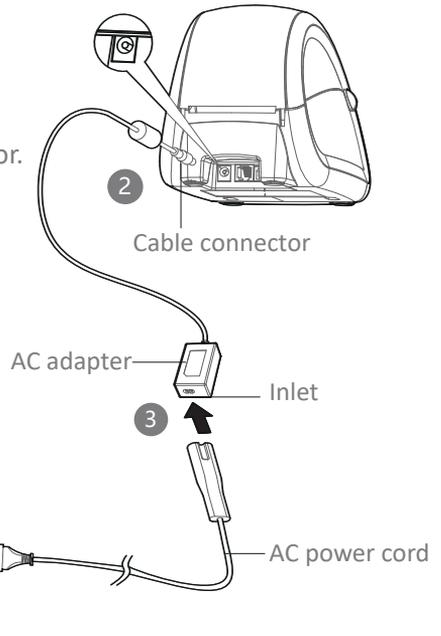
# Printer Connection

## Power Connection

1. Make sure the power switch is in the “off”.
2. Connect the AC adapter to the cable connector.
3. Connect the AC power cord to the outlet.
4. Connect the other end of the AC power cord into the socket outlet.
5. Connect the USB cable to the printer and PC.

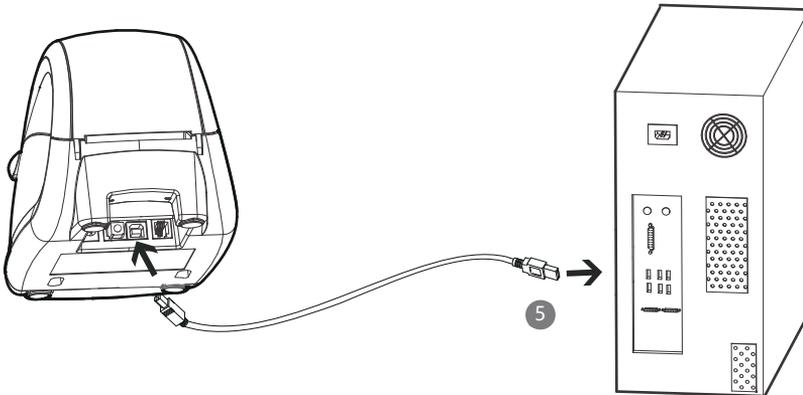


1



Varies by local or region

## USB Connection



### Note:

- Use the original power adapter only, in case the damage caused by charging improperly.
- Please unplug the printer power cord if it is not in use for a long time.

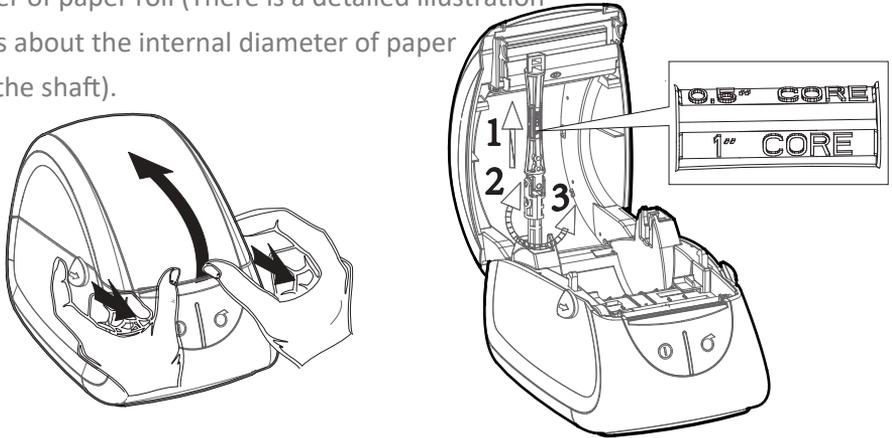
# Paper Loading

## Paper Loading

### 01

Push the open button of the top cover with both hands to open it upward.

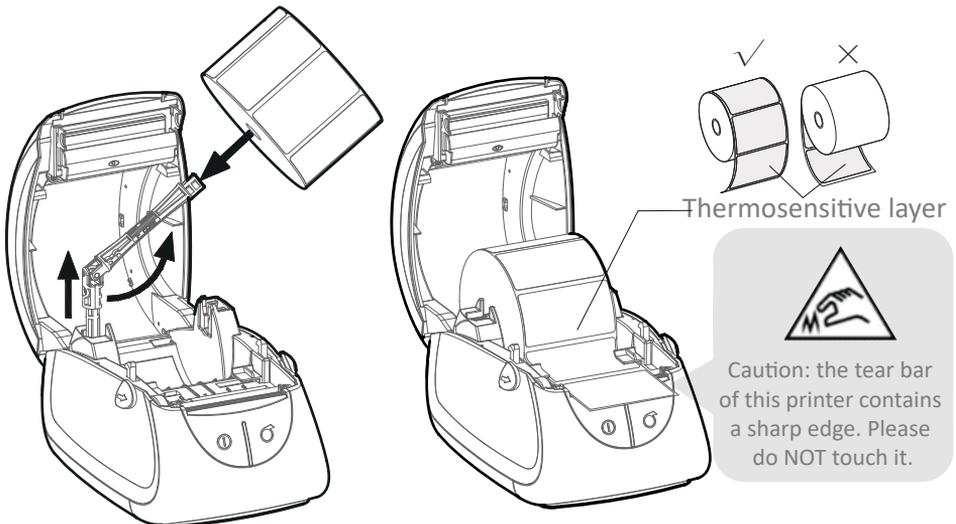
Firstly, pull up the paper roll shaft. Then adjust the shaft according to the internal diameter of paper roll (There is a detailed illustration which is about the internal diameter of paper roll on the shaft).



### 02

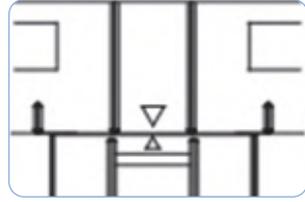
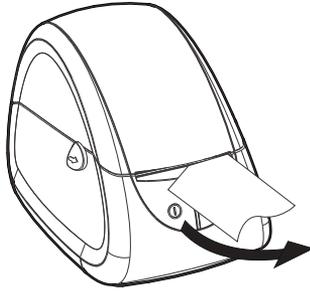
Install the paper roll and fix the shaft.

Pull out the paper roll, open the paper guides to the max-width and pass the paper through the paper guides, then adjust the paper guides to suit the paper width.



# 03

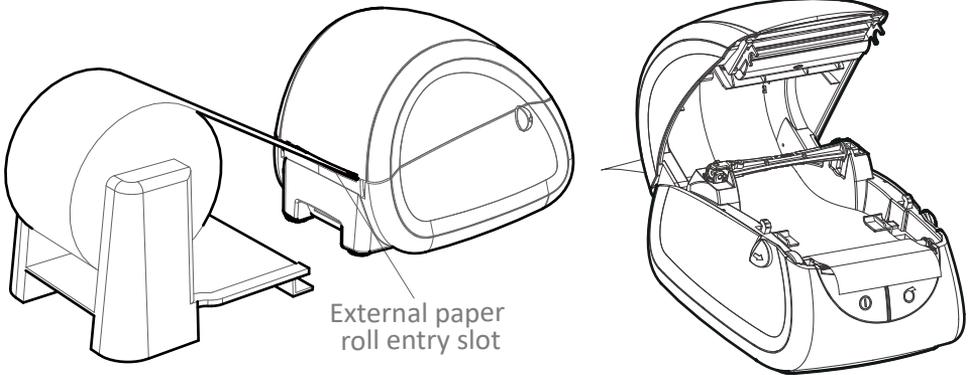
Press down the printer cover, then tear off the excess paper.



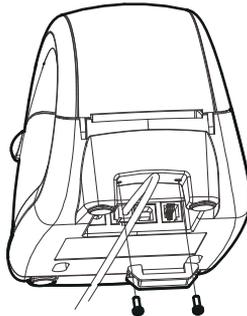
Label Sensor

**!** Note: When the printer is not printing on black mark label, please position the sensor in the middle.

## External Paper Roll Loading



## Cables Fastenser Installation



# Operation Panel

## ● Power Button

This button is used to turn the printer on/off.

If you want to power on the printer, please hold and press the power button for approx 1.25s and the LED indicator turns blue. If you want to power off the printer, please press and hold the power button for approx 1.25s. When the printer works normally, the LED indicator is green. When paper out or abnormal working, the LED indicator is red.

## ● Feed Button

This button is used to feed paper manually and self-test printing.

When the printer is ready, press the feed button to send the paper out to the exit according to the type of paper used. When using continuous paper, press the feed button once to send out the paper with a fixed length; when using label paper, press the feed button once to send out a whole label.

Print Self-test Page :

- 1) Make sure the paper is loading properly.
- 2) Make sure the printer is power off and the top cover closes properly.
- 3) Press the feed button and power on the printer simultaneously, the printer prints the self-test page.

## ● Settings Mode

1) Finish the following two steps within 2s after power on, it will put the printer into Setting Mode.

① Press the power button three times.

② Press the feed button once.

2) In setting mode, press the feed button to switch the setting item, then press the feed button to confirm the change and enter to next setting item.

# Windows Driver Instruction

## Driver Preparation for windows

Download Windows Driver application program in [www.idprt.com](http://www.idprt.com)

## Driver Installation for Windows

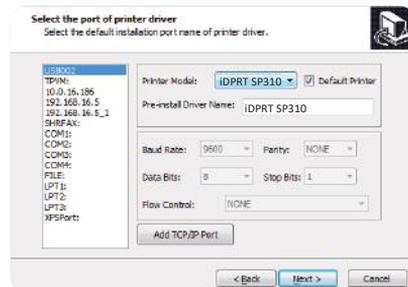
### Warning:

Recommend to close the security software before installation in case of preventing installation.

1. Select one interface to connect your printer to computer.
2. Turn on the printer and check if it is connected successfully.
3. Double-click Windows Driver.
4. Read and agree with the license agreement and click “Next”, figure (1).
5. Select the port name of the printer driver and click “Next”, figure (2).



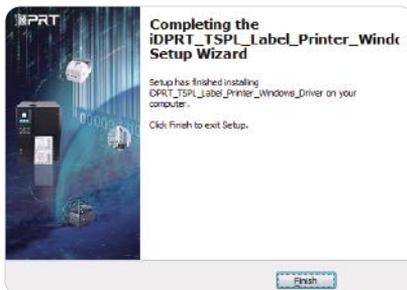
(1)



(2)

6. Then click "Finish", figure (3).

7. After installation, view the icon in “Start” → “Devices and Printers”, figure (4)



(3)

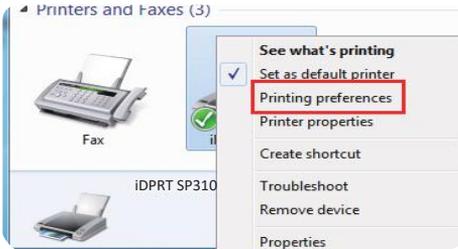


iDPRT SP310

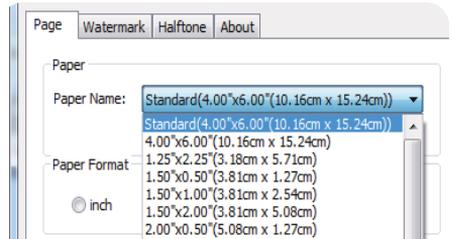
(4)

# Printing Preferences

1. Click “Start” → “Devices and Printers”. Right-click the icon and choose “Printing preferences”, figure (1).
2. Click “Paper Name”, choose the paper type as needed, figure (2).

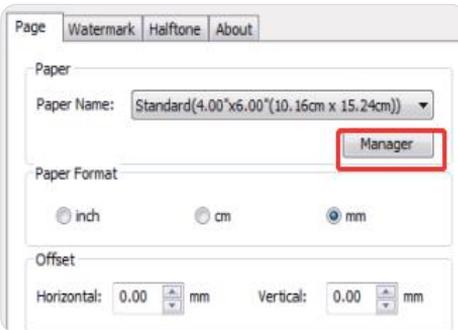


(1)

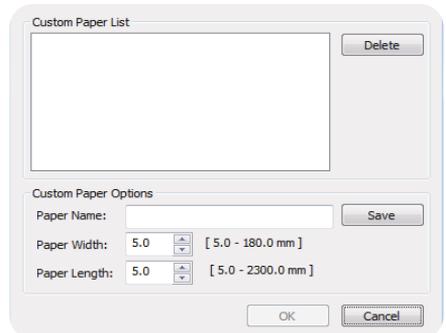


(2)

- Click “Manager” to add a new stock, figure (3)(4).

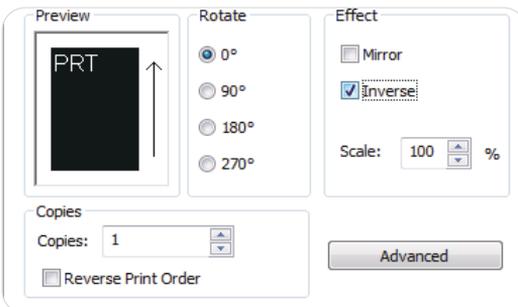


(3)



(4)

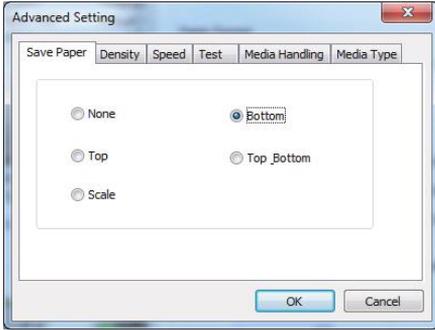
- Choose “Rotate” or “Effect”, it will be shown in the “Preview”, figure (5).



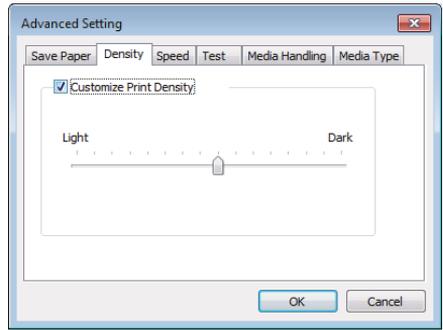
(5)

3. Click “Advanced” to set “Save Paper”, “Density”, “Speed”, “Test”, “Media Handling” and “Media Type”.

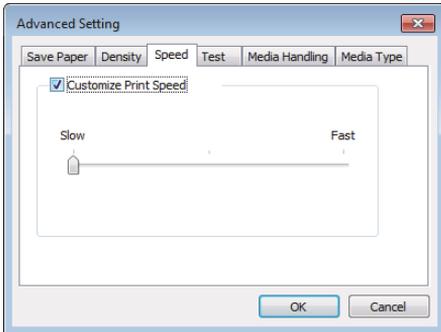
### 1) Save Paper



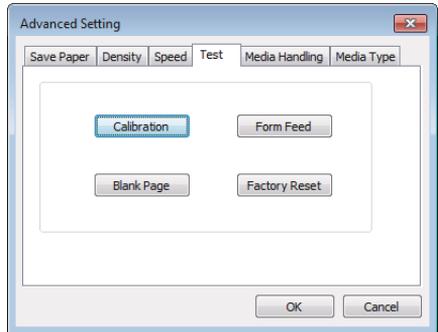
### 2) Density



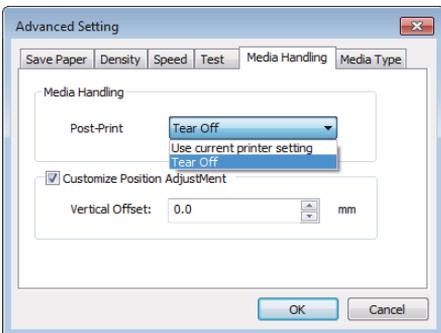
### 3) Speed



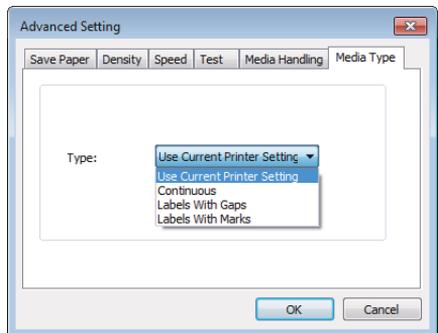
### 4) Test



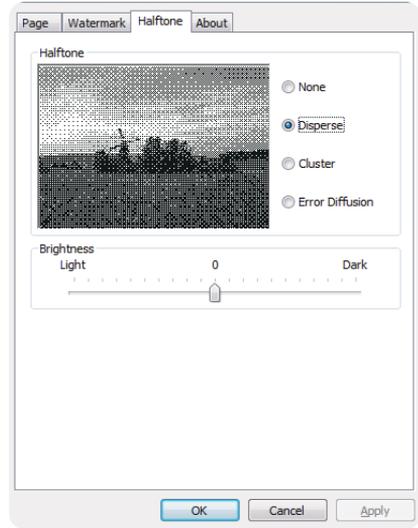
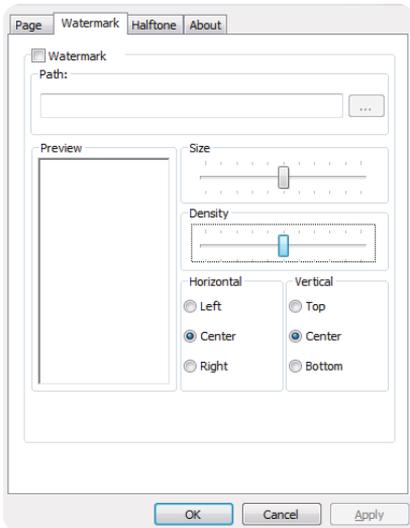
### 5) Media Handling



### 6) Media type

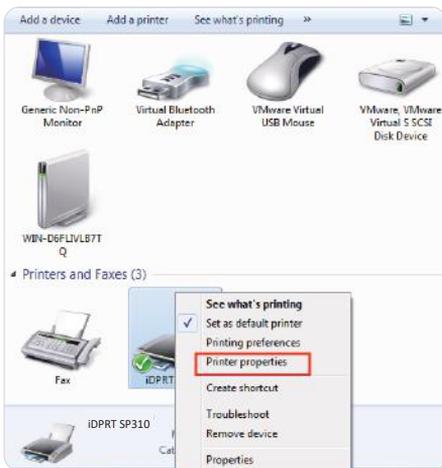


- Click "Watermark" (Recommends BMP format).
- Click "Halftone".

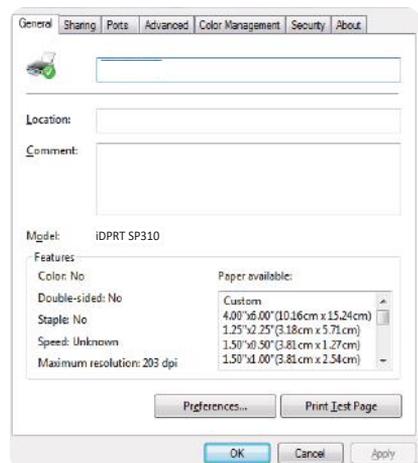


## Printer Properties

- Click "Start" → "Devices and Printers". Right-click the icon and choose "Printer properties", figure (A).
- Click "General" → "Print Test Page", and the printer will print labels with current settings, figure (B).

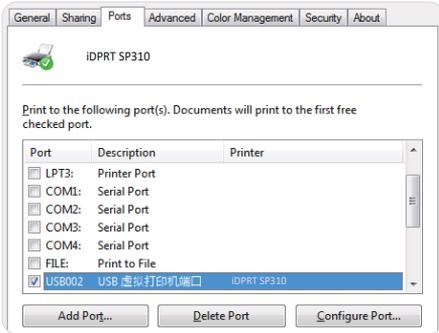


(A)

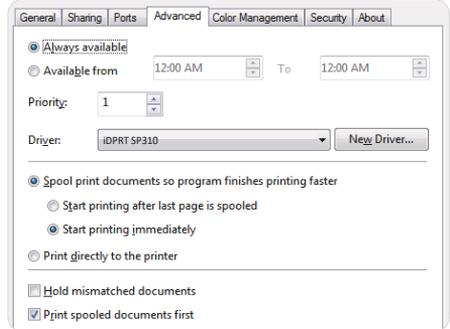


(B)

- Click “Ports”, then choose the port needed, figure (C).
- Click “Advanced” to set the available time for the printer, figure (D).



(C)



(D)

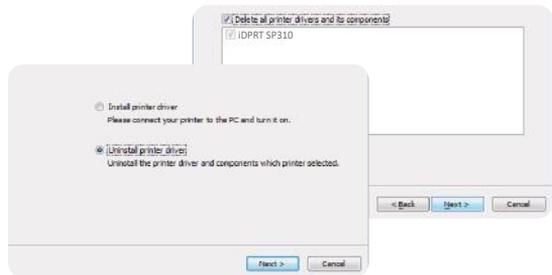
## Driver Removing

**⚠ Note:** Please turn off the printer or unplug the USB cable before removing the driver.

- Double click Windows Driver, then click “OK”, figure (E).
- Choose “Uninstall printer driver”, then click “Next”, figure (F).
- Choose the driver to be uninstalled, then click “Next”, figure (G).

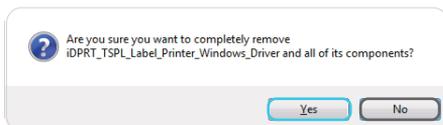


(E)

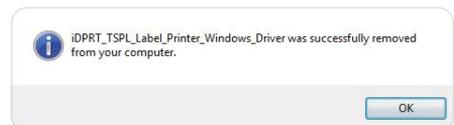


(F)

- Click “Yes”, figure (H).



(G)



(H)

# Mac Driver Instruction

## Driver Preparation for macOS

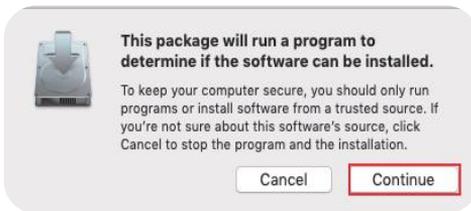
Download Mac Driver application program in [www.idprt.com](http://www.idprt.com)

## Driver Installation for macOS

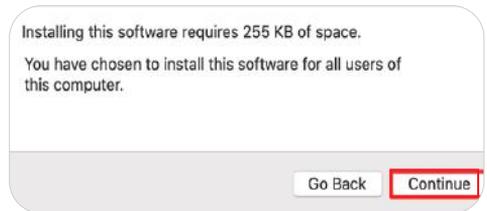
### Warning:

Under different operating systems, the screen has a slight difference. Please operate it according to the tips. Take SP310 (macOS 10.15) as example.

1. Double click the Driver and click “Continue”, figure (a).
2. Select a destination and click “Continue”, figure (b).

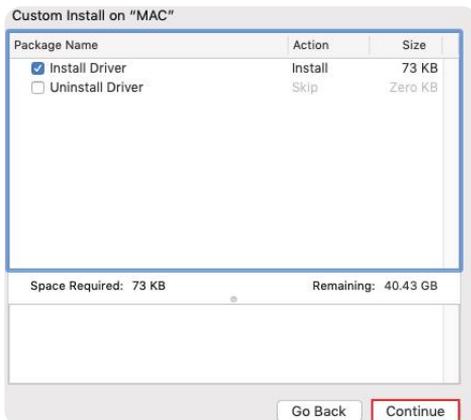


(a)

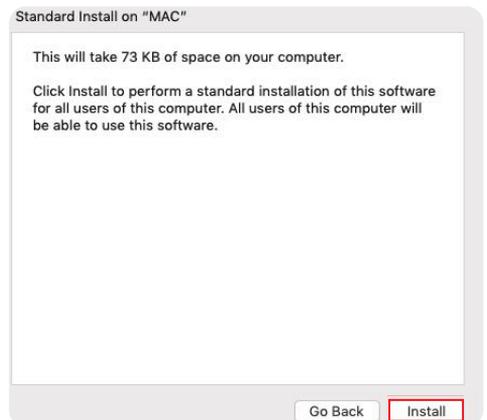


(b)

3. Select “Installation Type” and click “Continue”-> “Install”, figure (c)(d).



(c)

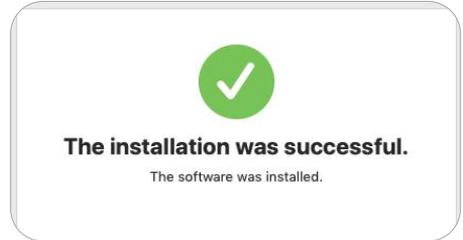


(d)

4. Type in the password of your computer, figure (e).
5. The installation was successful, figure (f).



(e)



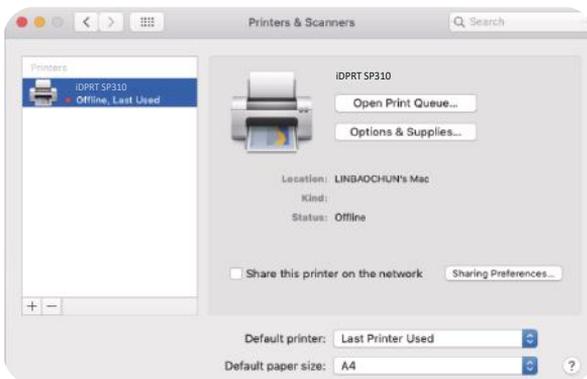
(f)

6. Turn on the printer and connect it to your computer (for example: via USB cable).
7. Click: Launchpad -> System Preferences -> Printers & Scanners, figure (g).



(g)

8. Under "Printer & Scanner", printer SP310 is available, figure (h).



(h)

# Troubleshooting

## LED Display

- **Blue**

on	The printer is ready
Flash	Do not pass the RAM test
- **Green**    on    The paper is feeding/under printing
- **Red**

on	Limit switch not in place
Flash	Out of paper
- **Yellow**    on    The printer is ready to print with continuous paper
- **Purple**    on    The thermal printer head is overheated
- **White**    on    The printer is ready to print with black mark label

 **Note:**

When the temperature of the print head is higher than 80 °C, a high-temperature alarm will be issued, and when the temperature returns to 60 °C, the high-temperature alarm will be canceled and stopped.

## Print Problem

Problem	Cause	Solution
1. Common quality problem of print.	Speed setting error.	Set minimum printing speed by the control panel, drivers and software to attain the best printing quality.
	Incorrect margins and paper size.	Make sure the label size is correct before printing. If the content exceeds the label size, the printer may "shrink" the size to a smaller size, causing the fade content.
	Incorrect print density setting.	To obtain the best print quality, the print depth should be set to the minimum set value for your application.
	The print head is dirty.	Use a cotton swab moistened with alcohol to clean it from the center to the sides of the print head. After cleaning the print head, do not use the printer immediately. Use it after the alcohol completely evaporate (after 1 to 2 minutes) and the print head is completely dry.
	The creation quality of the source file is not satisfactory.	Print a sample label to test whether the printer is working well.
	The print head is broken.	Change another print head.
2. White spots appear on the label.	The print head is dirty.	Use a cotton swab moistened with alcohol to clean it from the center to the sides of the print head. After cleaning the print head, do not use the printer immediately. Use it after the alcohol completely evaporate (after 1 to 2 minutes) and the print head is completely dry.
3. Blank label printed.	The label is upside down/on the wrong side.	Make sure to load the label correctly, and the printing side should face up.
	The label is not a "direct thermal" label.	Make sure your label is "direct thermal" label.
	Printer system error.	Restart the printer, continue to try to print. If printing is still unsuccessful, please contact customer service.

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
4. Misalignment / Skip label	The printer is uncalibrated.	Calibrate the printer Method 1: Tools--- "Automatic label learning". Method 2: Press and hold the feed button (top button) until the blue light goes out twice and then release.
	The tag format is incorrect.	Check your label format and correct it as needed.
5. Paper jam.	The paper is not placed correctly in the printer.	Open the printer cover and remove the jammed paper. Then clean the print head, paper suction port and place the new paper.
6. The paper is not sucked in by the printer.	The paper is not detected by the paper sensor in the middle of the printer.	When placing paper from the back entry slot, push it flat to the position of the paper sensor, and the paper sensor will trigger the automatic suction function when the paper is detected.
7. The label or image is offset during printing.	The printer uses a discontinuous label, but it is configured to work in a continuous mode.	Set the printer as the correct medium type.
	The paper does not conform to the specifications.	Use the paper that meets the specifications.
	Printer uncalibrated.	Calibrate the printer.
	The platen is too dirty.	Clean print head and platen.
	The calibration of the paper sensor is incorrect.	Calibrate the printer.
	The loading of the media is incorrect.	Ensure that the media is properly loaded.
	The media is incompatible.	Must use media that meets printer specifications.

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
8. The bar code printed on the label can not be scanned.	The printing is too dark or too light, the barcode does not meet the specifications.	Adjust the concentration or print speed properly.
	There is not enough blank space around the barcode.	Leave at least 3.2 mm (1/8 inch) between the barcode on the label and other printed areas and the edge of the label.
9. Auto calibration failed.	The loading of the media is incorrect.	Ensure that the media is properly loaded.
	The medium is not detected by the sensor.	Calibrate the printer.
	The sensor is dirty or incorrectly positioned.	Make sure that the sensor is clean and correctly positioned. During the calibration process, the gap mark or black mark should be aligned with the paper sensor.
	Incorrect media type setting.	Set the printer media type correctly.

## Communication Problem

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
1. The label format has been sent to the printer, but it has not been identified. 2. The DATA light did not flash.	The communication parameters are not correct.	Check printer driver or software communication settings.
		Check the handshake protocol setting for the printer and the settings used must be able to match the settings used by the computer host. If the driver is used, the driver communication settings related to the connection should be checked.
3. The label format has been sent to the printer, but it has not been identified.	The prefix and the separated character set in the printer does not match the character set in the label format.	Check prefix and separate characters.
4. The DATA lights flash, but not print.	The incorrect data is being sent to the printer.	Check the communication settings on the computer to ensure that these settings match the settings on the printer's printer.
		If the fault still exists, the label format should be checked.

# 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

-- 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.



<http://www.idprt.com>

**Manufacturer: Xiamen Hanin Electronic Technology Co., Ltd.**

Add: No.96, Rongyuan Road, Tong'an District, Xiamen, China 361100

E-Mail: [technical@idprt.com](mailto:technical@idprt.com)

Web: [www.idprt.com](http://www.idprt.com)