User Manual

PANTUM

WWW·PANTUM·COM

Pantum PT-L280/PT-L380 Series
Barcode Printer

It is recommended to read the Manual carefully before use

Contents

About the Manual

The Manual contains basic information on product use, installation and other respects. The following provides more detailed information on various technical problems and areas.

Safety Information

Before using the printer, please read the following precautions carefully to avoid personal injury or equipment damage.

1. Safety Warning Signs

--------Warning: Must be observed to avoid personal injury or equipment damage.

--------Note: Give important information and tips for operating the printer.

2. Safety Precautions

Warning: Failure to comply with following instructions can cause serious injury or death.

1)   Do not plug several products in one multi-outlet.

  • This can cause overheating and fire.

  • If the plug is wet or dirty, dry it or wipe it clean before use.

  • If the plug does not fit perfectly with the outlet, do not plug in.

  • Be sure to use only standardized multi-outlets.

2)   You must use only the supplied adapter.

  • It is dangerous to use other adapters.

3)   Do not pull the cable to unplug.

  • This can damage the cable, which is the origin of a fire or a breakdown of the printer.

4)   Do not plug in or unplug with your hands wet.

  • This can cause electric shock.

5)   Do not bend the cable forcibly or place it under heavy objects.

  • A damaged cable can cause a fire.

Note: Failure to comply following instructions can cause slight wound or damage the appliance.

1)   If you observe a strange smoke, odor or noise from the printer, unplug it before taking following measures.

  • Switch off the printer and unplug it.

  • After the disappearance of the smoke, call your dealer to repair it.

2) Install the printer on a stable, flat surface.

 • If the printer falls, it can be broken and cause personal injury.

3) Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.

 • Call your dealer when you need these services.

4) Do not let water or other foreign objects in the printer.

 • If this happened, switch off and unplug the printer before calling your dealer.

5) Do not use the printer when it is out of order. This can cause a fire or electric shock.

 • Switch off and unplug the printer before calling your dealer.

6) Other Precautions

 • Leave enough space around the printer for operation and maintenance.

 • Keep the printer away from water and direct sunlight, glare, and heat.

 • Do not use or store the printer in places with high temperatures, high humidity, and heavy pollution.

 • Avoid placing the printer where it is subject to vibration and shock.

 • Connect the printer's power adapter to an appropriate grounded outlet to avoid use the same outlet with large motors or other devices that can cause fluctuations in the supply voltage.

 • If you are not using the printer for a long time, disconnect the printer from the power source.

 • To ensure the print quality and the service life of the product, it is recommended to use recommended paper or paper of equivalent quality.

 • When connecting or disconnecting each interface, you must first turn off the power to avoid damage to the printer control circuit;

 • Keep this manual properly for reference.

3. Other Precautions

Although we are very careful when preparing this manual, some errors or omissions are still inevitable. We are not responsible for any loss arising from the use of the information contained herein.

 We and our branches are not legally responsible to any users or third parties for product damage, failure or misuse caused by failure to comply with or ignorance of the information and instructions on operation and maintenance, and damages, losses, costs or expenses caused by unauthorized alteration, maintenance or modification of the product.

 We are not legally responsible for damages or problems caused by the use of counterfeit options, components or unauthorized products.

Note: For constant improvement of the products, the specifications, accessories and procedures described herein depend on the real products, and are subject to change without notice.

4. WEEE (Waste Electric and Electronic Equipment)

This marking or its literature indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can return this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Warning:

This is Class A product which may cause radio interference in the living environment. In this case, users may be required to take practical measures against interference.

Legal Information

This symbol indicates that, at the end of your product's life, it must not be discarded as domestic waste. Instead, you should dispose of your used equipment at a designated collection point for the recycling of waste electrical and electronic equipment. Ref: EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). Please contact your distributor / supplier for further information.

European Community (EC) directives conformity
This product complies with the protection requirements of EC directives 2014/35/EU and 2014/30/EU on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility and safety of electrical equipment designed for use within certain voltage limits. The manufacturer of this product is: Zhuhai Pantum Electronics Co.,Ltd., No.3883, Zhuhai Avenue, Zhuhai, Guangdong, China 519060.
A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative.
This product satisfies the Class B limits of EN 55032 and safety requirements of EN62368.

Chapter 1 Product Description

1.1 Unpacking Checklist

⚠️ **Note:**

1) Open the printer package and keep the packing materials for future packing and shipping.
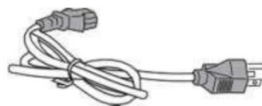2) If any items are damaged or missing, please contact the dealer who sells the product.
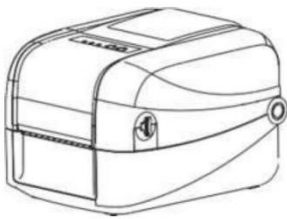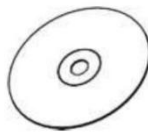
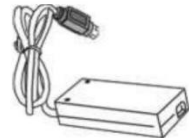|		
Printer	Installation CD	Instructions
USB cable	Power cord	Power adapter
Ribbon shaft	Paper roll + Ribbon	
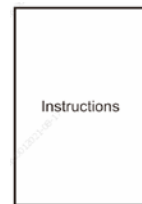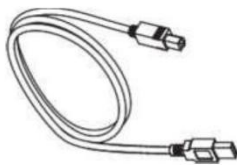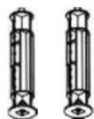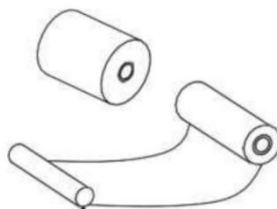
1.2 Appearance and Components

Pause Button — Feed Button

Status Light

Release Clutch

External Media Entry Slot

Serial Port

Parallel Port

USB Port

Power Port

Ribbon recovery spindle

Ribbon supply spindle

Movement open/close switch
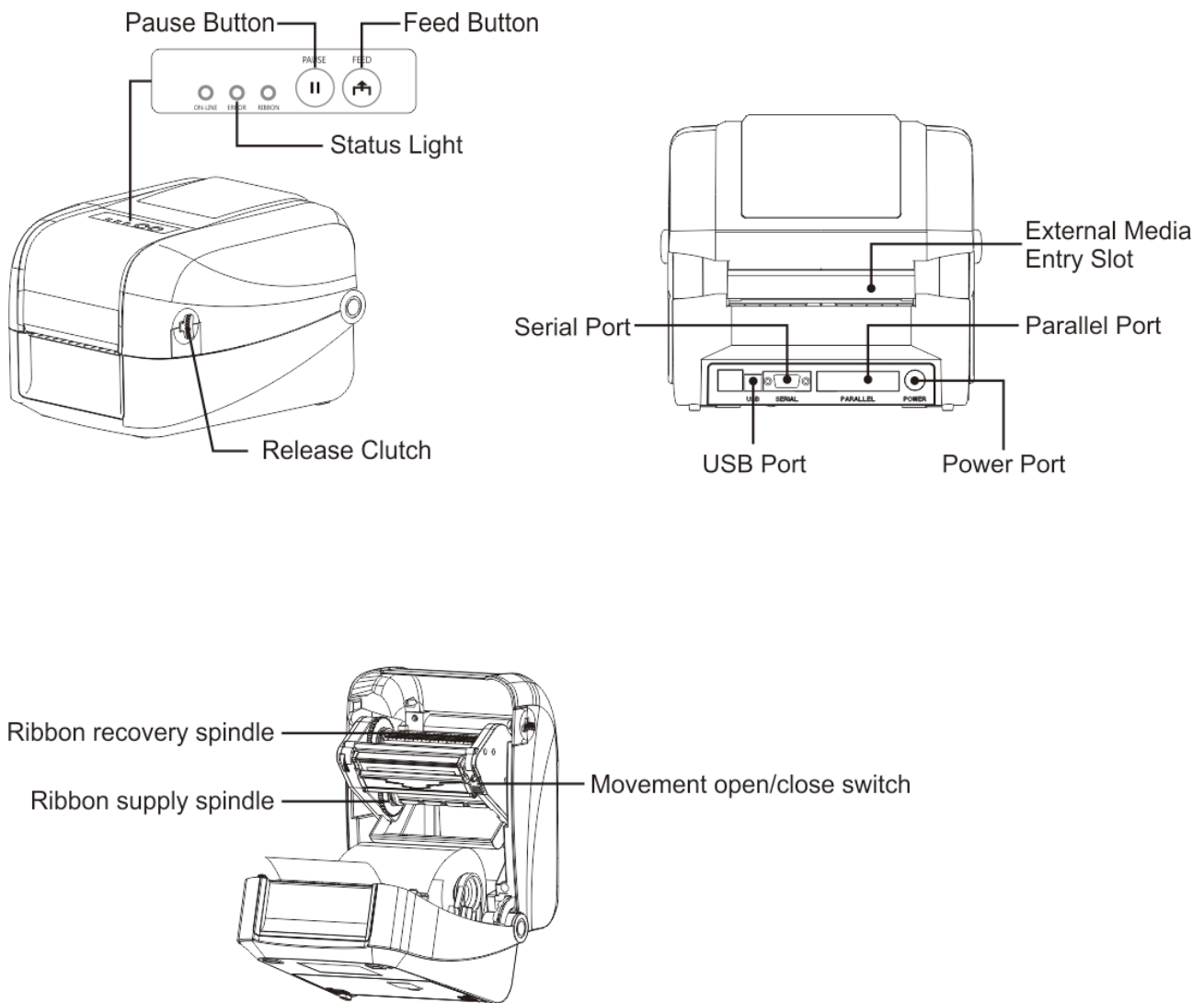
⚠ Note: During use, keep your fingers as far away as possible from the paper cutter to avoid injury to your hands. We are not responsible for any injuries caused by the paper cutter during use.

7

1.3 Product dimensions
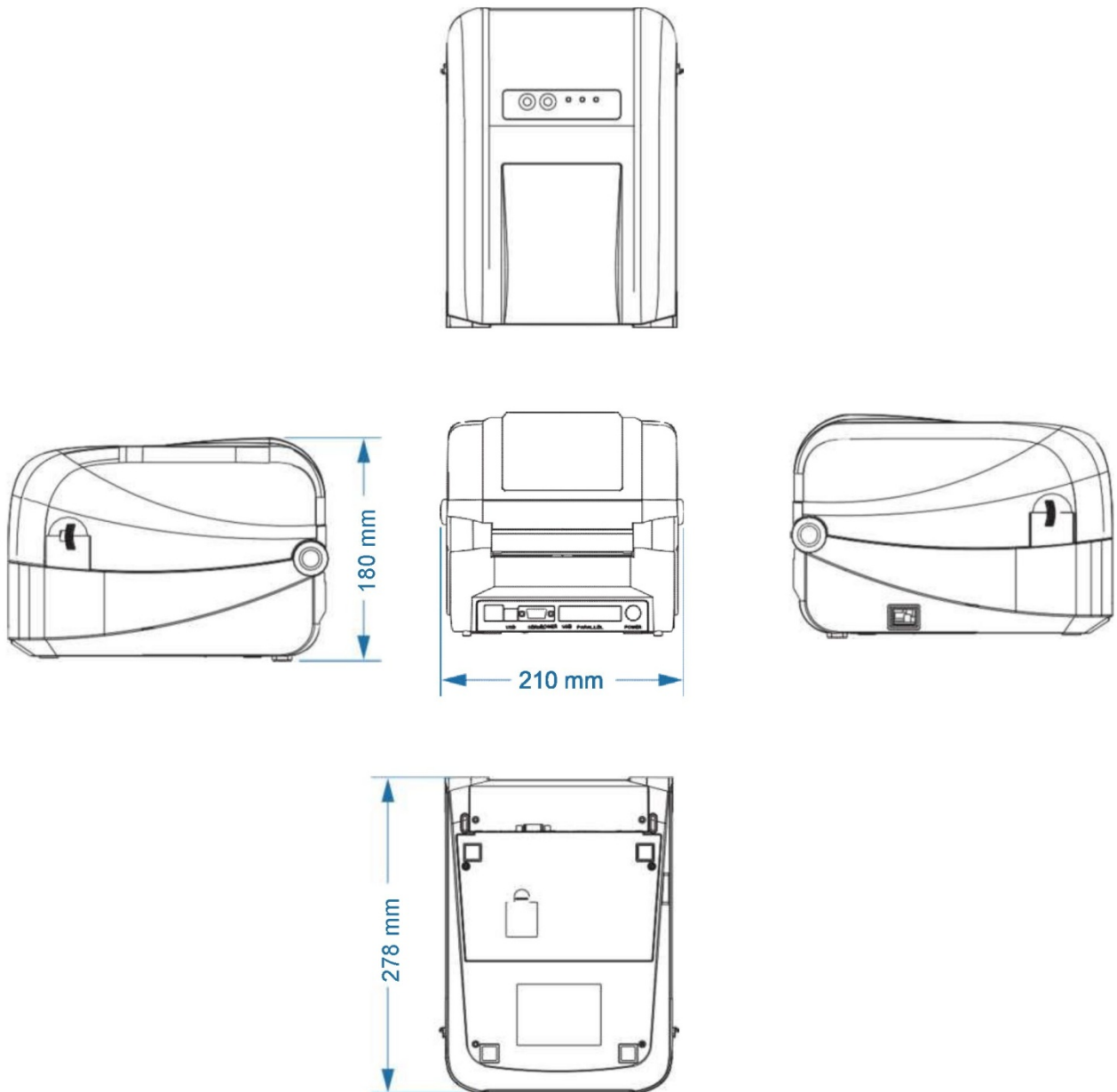
Chapter 2 Product specifications

Model		PT-L280/PT-L380 Series
Printing	Print method	Thermal direct/thermal transfer
	Resolution	203dpi（8dots/mm）；300dpi（11.8dots/mm）
	Maximum print speed	2inch/s~6inch/s；2inch/s~4inch/s
	Maximum print width	104mm；106.7mm
	Label print length	2286mm(90")
Consumables	Paper type	Continuous Paper, Gap Paper, Folding Paper, Black Mark Paper, Perforated Paper, Wash Care Label
	Paper winding form	Outside roll
	Paper width (Label + liner)	Maximum 120mm (4.72"), minimum 20mm (0.78")
	Maximum outer diameter of built-in roll	127mm
	Paper thickness (Label + liner)	Maximum 0.254mm (10mil), minimum 0.06mm (2.36mil)
	Gap height:	Minimum 2mm
	Paper roll core size	25.4mm-38mm
	Outer diameter of ribbon	Maximum 67mm
	Ribbon length	Maximum 300m
	Ribbon core size	1inch(25.4mm)
	Ribbon width	Max.110mm, Min.30mm
	Ribbon winding form	Outside roll
Detection	Sensor	Paper Out, Black Mark, Printhead Temperature, Printhead Position detection
Software	Windows driver	Support WIN10 (32/64 bit), WIN8.1, Win8, WIN 7, Windows Server 2016, WindowsServer2008 R2, Windows Server2012 R2, Vista
	MAC driver	Support Mac OS 10.13/10.12/10.11/10.10/10.9/10.8/10.7/10.6/10.5/10.4/10.3/10.2/10.1
	Linux driver	Support Linux19.10, Linux18.04.5, Red Hat Linux, etc.
Software communication interface		3 ports (serial port + USB + parallel port)
Human-computer interaction		LED indicators: Running, Ribbon, Warning indicator, key: Pause, Feed
Memory		DRAM:8M FLASH:4M
Power		Input: DC 24V 2.5A
Programming language		TSPL
Printhead life		30km

Model		PT-L280/PT-L380 Series
Environmental parameters	Working	5°C~45°C (41°F~113°F), 25%-85%, no condensation
	Storage	-10°C~50°C (14°F~122°F), 10%~90% no condensation
Physical parameters	Product dimensions	278mm×210mm×180mm (L×W×H)
	Product weight	2.5 KG
	Packing dimension	370mm×260mm×240mm (L×W×H)
	Packing weight	3.8 KG
Graphics		Monochrome PCX, BMP and other image files can be downloaded to FLASH/DRAM
Supported barcode types	1D	CODE128, CODE128M, EAN128, CODE39, CODE93, EAN13, EAN13+2, EAN13+5, EAN8, EAN8+2, EAN8+5, CODABAR, POSTNET, UPC-A, UPC-A+2, UPC-A+5, UPC-E, UPC-E+2, UPC-E+5, CPOST, MSI, PLESSEY, ITF14, EAN14, ITF, MSIC
	2D	QR Code, PDF417, MAXICODE, DATAMATRIX
Character set		Commonly used single-byte fonts: FONT 0~FONT 8, TSS24.BF2
Character enlargement/rotation		Enlarged horizontally and vertically by 1-10 times, rotating print (0°, 90°, 180°, 270°)
Chinese character coding		GB18030
Optional		External paper roll holder or folding tray
Accessories		Instructions, power adapter (including cord), CD (driver, user manual, labeling software), USB cable, test ribbon, test label paper
Certification		CE、RoHS

Chapter 3 Installation and Use

3.1 Components installation

3.1.1 Installing the paper roll

1. Facing the front of the machine, open the top cover button in the direction of the arrow and lift the top cover upward.

2. Please remove any paper tube in the paper compartment.
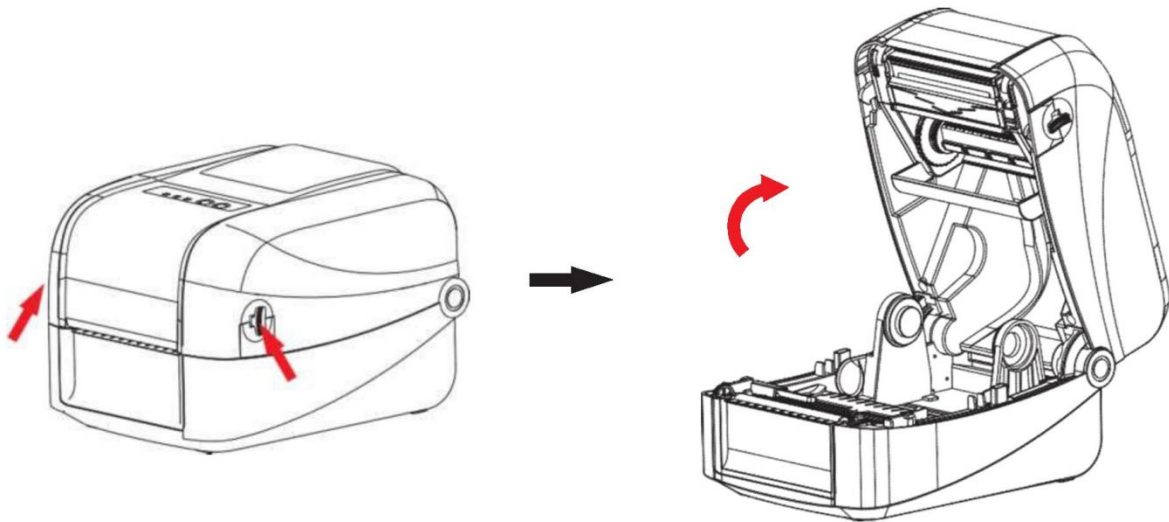
3. Place the paper roll squarely on the paper roll holder.
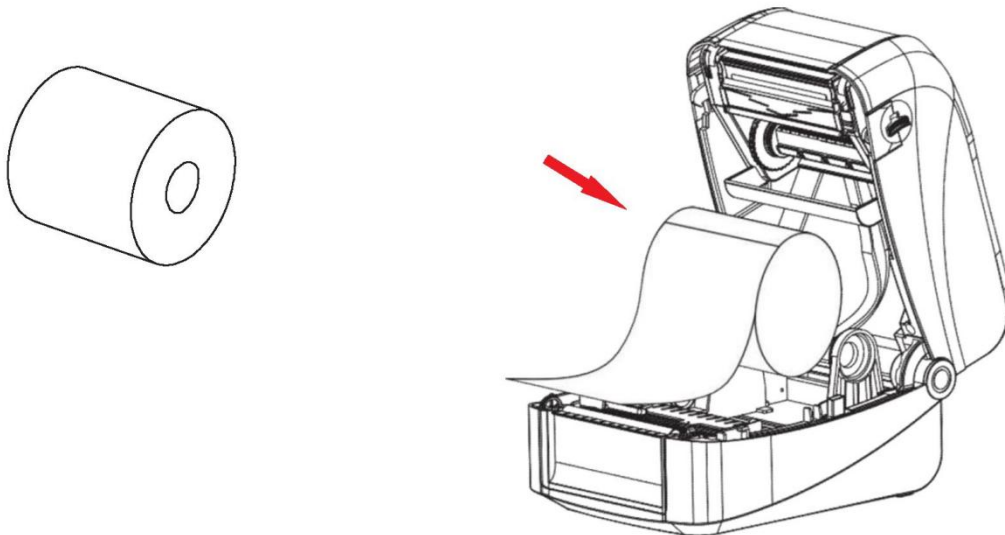
4. Pull out the front end of the paper (print side up), pass it through the paper sensor and pull the paper through the rubber roller. Adjust the paper guide to have the same width as the paper and to enable slight contact.

3.1.2 Installing the ribbon

1. Press the left side of the recovery spindle into the ribbon recovery runner, and then load the right side.
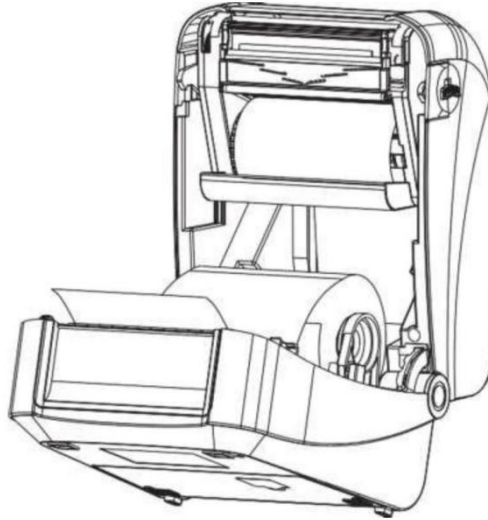
2. Press the printhead open button and lift the printhead outward.
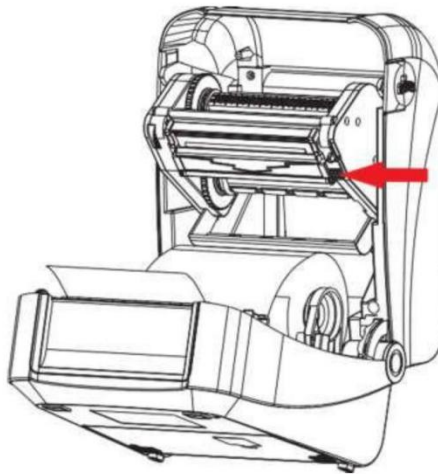
3. Pull up the ribbon spindle at the recovery end and snap the ribbon spindle around the printhead into the ribbon recovery end.
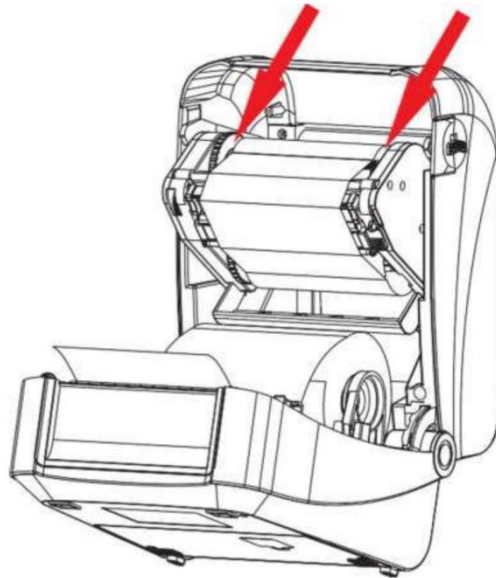
4. Rotate the ribbon recovery end so that the ribbon is pulled tight enough to press the printhead.
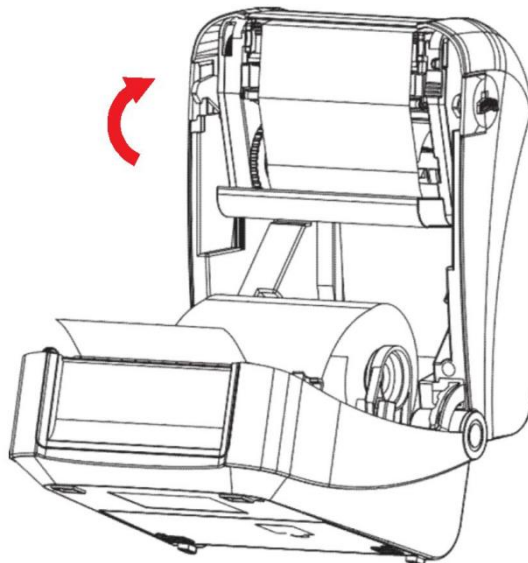
3.2 Power connection

1. Make sure that the power switch is off (O).

2. Connect the power cord to the printer.

3. Connect the other end of the power cord to a nearby outlet.

Power adapter
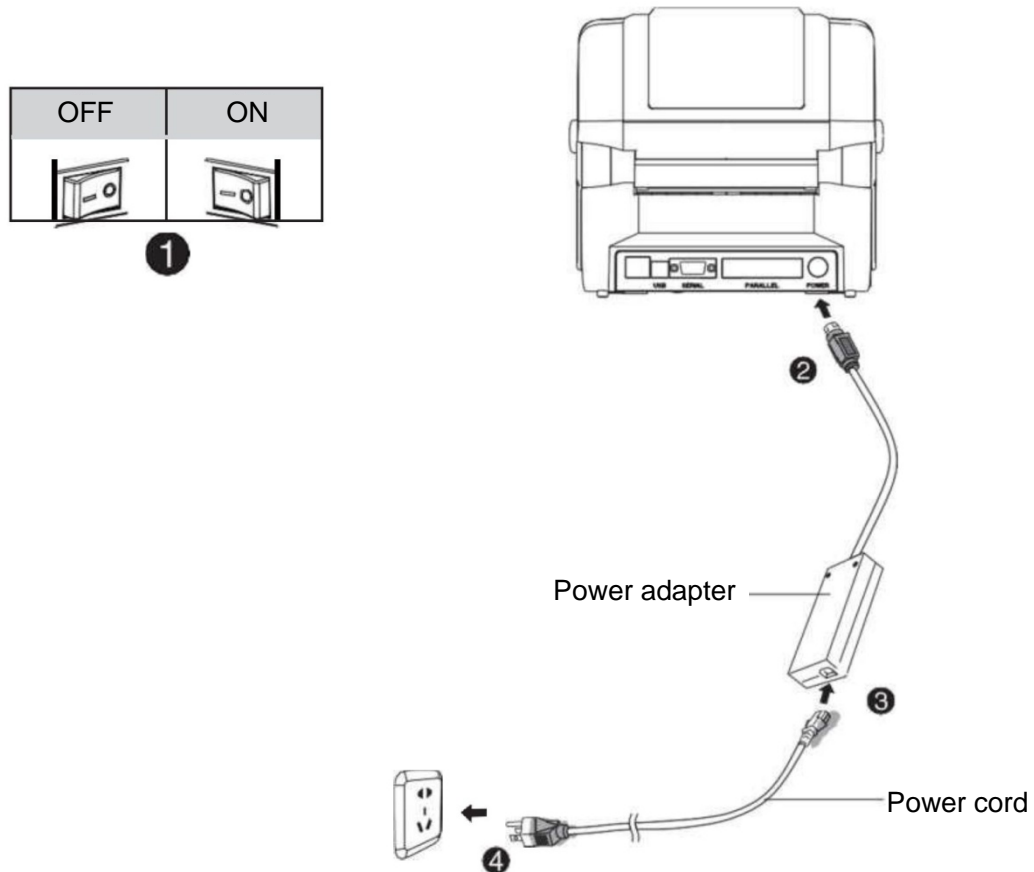
Power cord

⚠ **Note:**

- Use the original power adapter provided by the Company to avoid danger and damage to the product.

- If you do not use the printer for a long period, disconnect the power cord.

- Power off or data cable disconnected during printing:

  When all the information is transmitted to the printer, it will not continue printing or reprint the information if disrupted and reconnected; when part of information is transmitted to the printer, it will reprint the information if disrupted and reconnected.

3.3 Interface connection

Connect the interface cable as shown in the figure below. The printer supports the following communication interface standards:

--USB B-Type cable
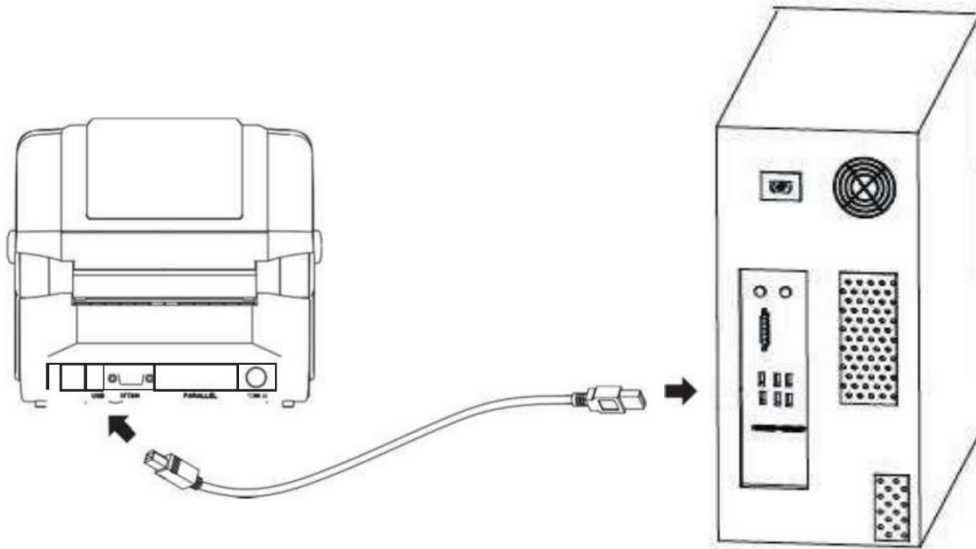
1) Turn off the printer (O).
2) Plug the communication cable to be used into the corresponding communication connection plug.

--Plug the USB B-Type cable into the USB port.

3.4 Operating Interface Description

■ **Power on**

When the printer is powered off, turn on the power switch on the back of the printer, and then the printer turns on and the indicator lights.

■ **Power off**

When the printer is powered on, turn off the power switch on the back of the printer, and both printer and indicator turns off.

■ **Feed**

1. If you press the Feed key, the printer feeds the paper to the specified paper-out position according to the learned paper type. When you use the label paper, pressing the Feed key once will deliver a full sheet of label.
2. When the printer is performing a print task, press the Feed key to pause its current task; at this moment, the indicator flashes blue; then press the key again to cause the printer to perform the incomplete task.

3.5 Basic functions

3.5.1 Power on/off

Turn on the power switch to the I state. Turn off the power switch to the O state.

OFF	ON
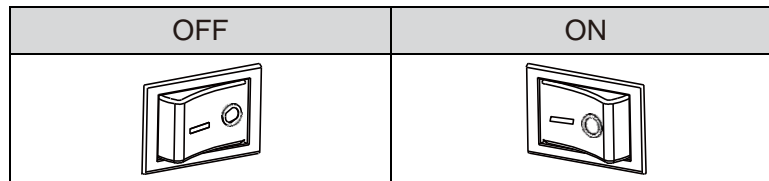
3.5.2 Print test

When the printer is initially installed or there is any problem with the printer, self-test procedure can be executed to confirm the following status, firmware version, printer parameter setting, print quality, external settings and other related setting information. If it is found after the self-test that there is no problem with the printer, please check other devices or software. This function runs independently from other devices or software.

■ **Print Self-test Page**

1) Make sure the printer is connected to the power supply and the paper roll is installed correctly.

2) The printer is turned on.

3) When the printer is off, press and hold the Feed key to turn on the printer, release the key after the fault indicator is off, and the printer starts to print a self-test page.

3.6 Paper Tear-off Direction

3.6.1 Paper Tear-off Direction

When the printer finishes printing, the paper will be torn off from bottom to top.
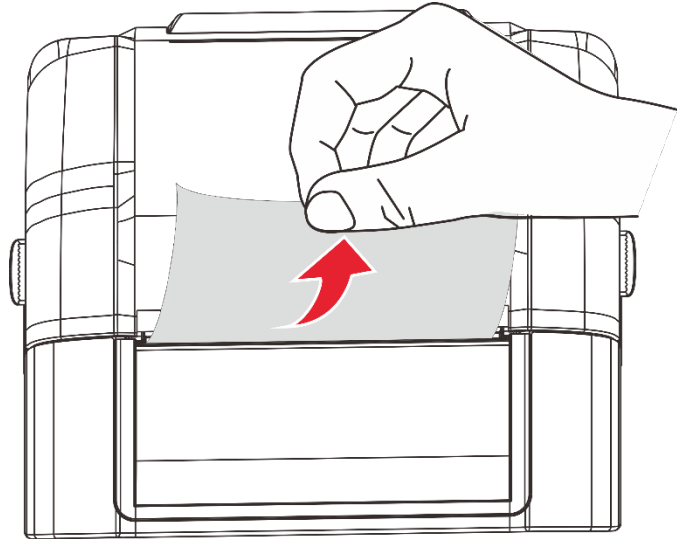
Chapter 4 Ports

4.1 USB
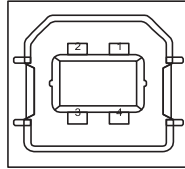
Pin No.	Signal name
1	VBUS
2	D-
3	D+
4	GND

4.2 Serial port
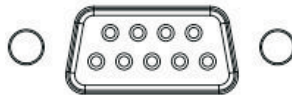
Pin No.	Signal name
1	-
2	TXD
3	RXD
4	-
5	GND
6	DTR
7	-
8	RTS
9	-

4.3 Parallel port
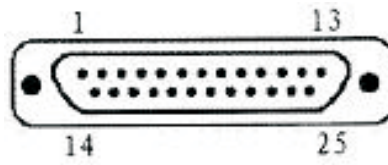
Pin No.	Signal name
1	STB
2~9	DATA1~DATA8
10	ASK
11	BUSY
12	PE
13	SEL
15	ERR
14~17	NC
18~25	GND

Chapter 5 Printer Cleaning

Dust, foreign objects, viscous material, or other contaminants stuck in the printhead or printer may reduce print quality. Please clean the dirty printhead as follows:

⚠️ Note:

    1) Be sure to turn off the printer before cleaning.

    2) When printing, the printhead will become very hot. Therefore, if you want to clean the printhead, please turn off the printer and wait 2~3 minutes before you start cleaning.

    3) When cleaning the printhead, be careful not to touch its heating part to avoid damage to the printhead due to static electricity.

    4) Be careful not to scratch or damage the printhead.

5.1 Cleaning the printhead

1) Please open the top cover of the printer, and clean the printhead with a cleaning pen or a cotton swab dipped in diluted alcohol (alcohol or isopropyl alcohol)) from its center to both sides.

2) After cleaning the printhead, do not use the printer immediately. Only use the printer until the cleaning alcohol evaporates completely (1~2 minutes) and the printhead is completely dry.

5.2 Cleaning the sensor, rubber roller and paper path

1) Please open the top cover of the printer and remove the paper roll.

2) Wipe off dust or foreign objects with dry cotton cloth or cotton swab.

3) Soak the cotton cloth or cotton swab in medical alcohol and use it to wipe off sticky foreign objects or other contaminants.

4) After cleaning the parts, do not use the printer immediately. Only use the printer until the alcohol evaporates completely (1~2 minutes) and the printer is completely dry.

⚠️ **Note: Clean the parts when the print quality or paper checking performance degrades.**

Chapter 6 Driver Installation

6.1 Driver installation for Windows system

1) Run the Pantum_2021.2_M-0 (subject to change with version updates) file

Pantum_2021.2_
M-0.exe
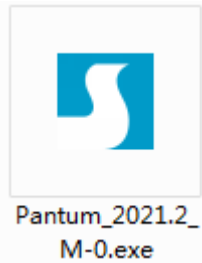
2) Accept the terms and conditions and select Next
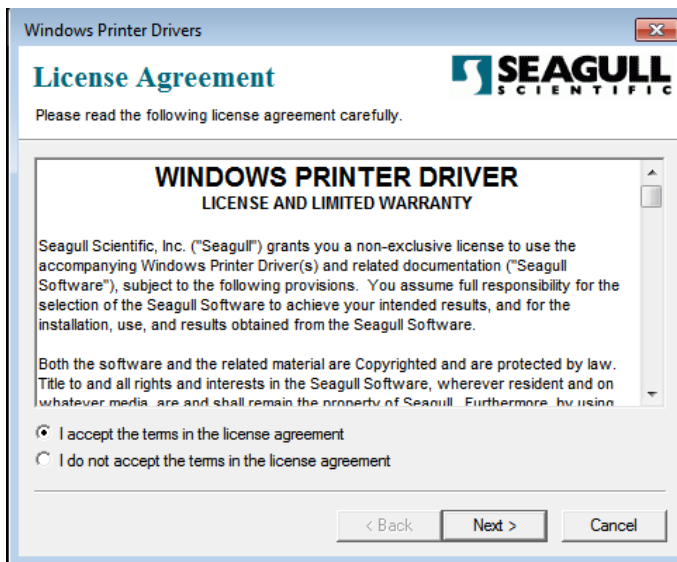
3) Select the installation directory and click Next, or you can default the directory and go directly to the
next step
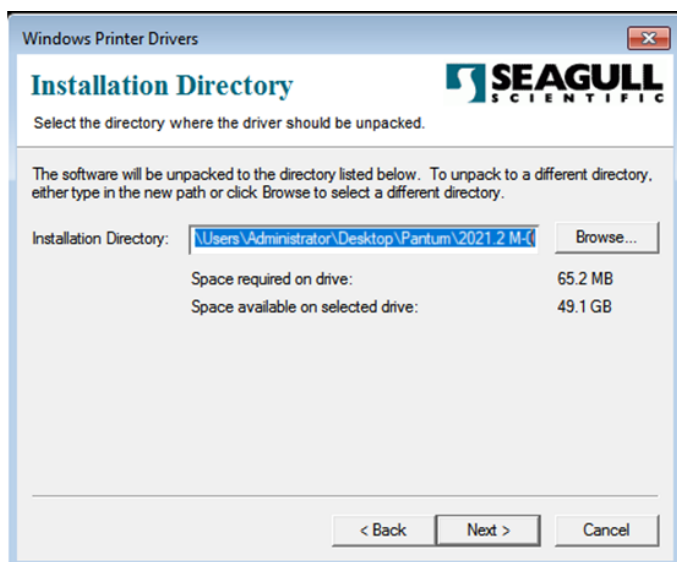
4) Complete the installation

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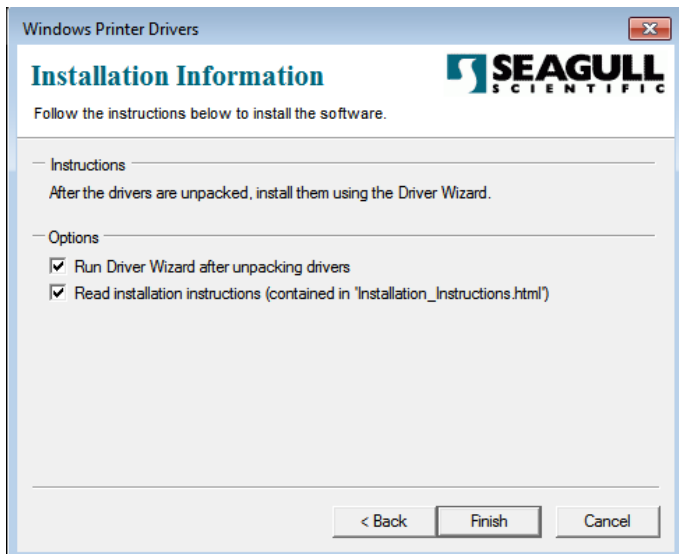
The following is an example of installing the printer driver USB

Preparations for installation

1. Connect the printer to the computer using the USB cable

2. Power on the printer

3. Select Install Driver and click Next

1) The model number is automatically recognized
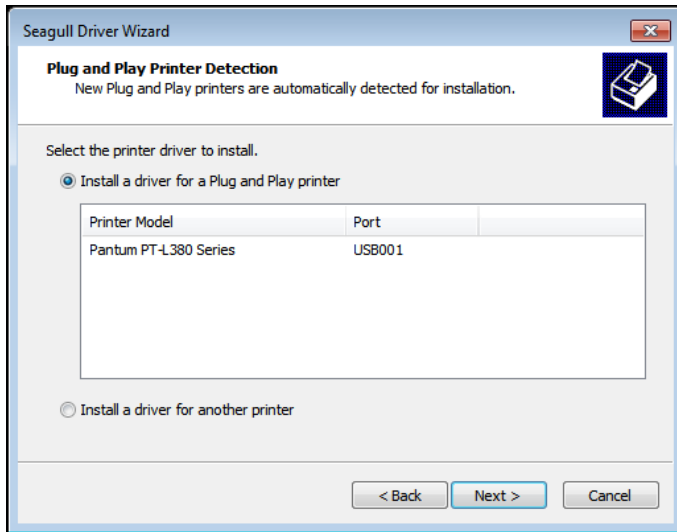
2) Follow the instructions and click Next to complete the installation
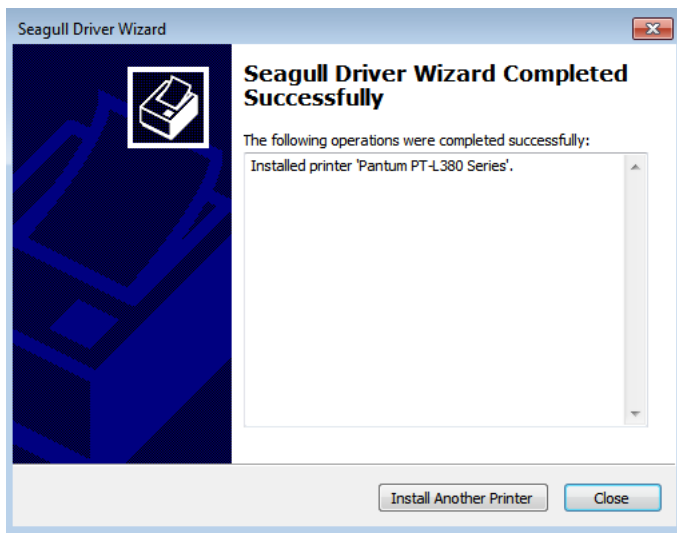
Note: If you use other ports, please select Other
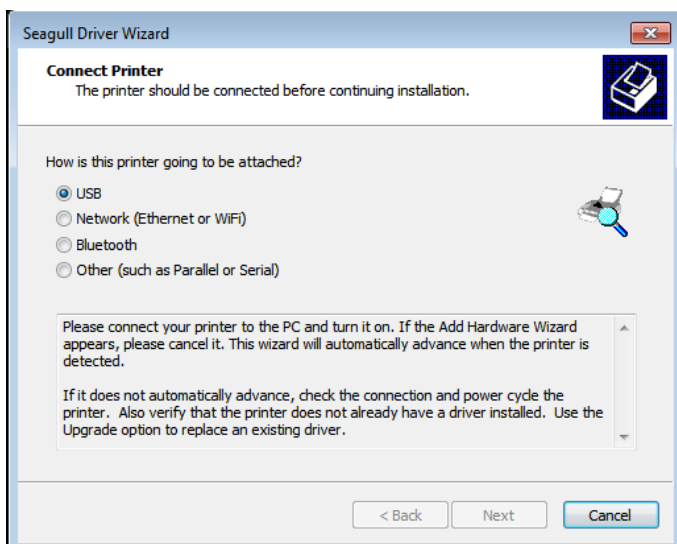
6.2 Driver Installation for MAC system

1) Run the driver installation package and click Continue.
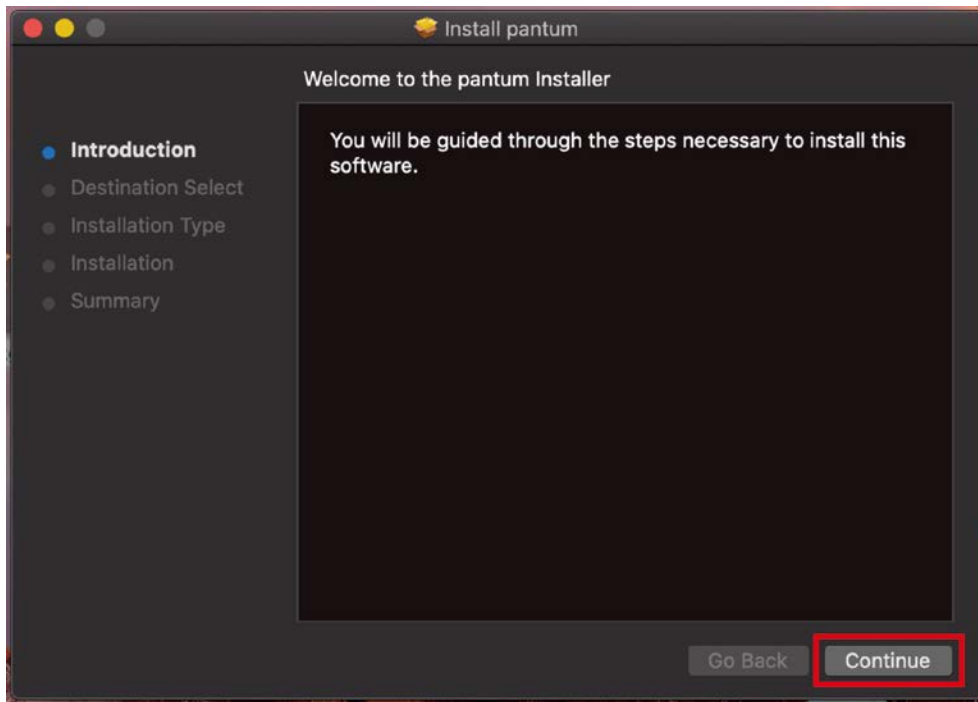
2) Click Install.
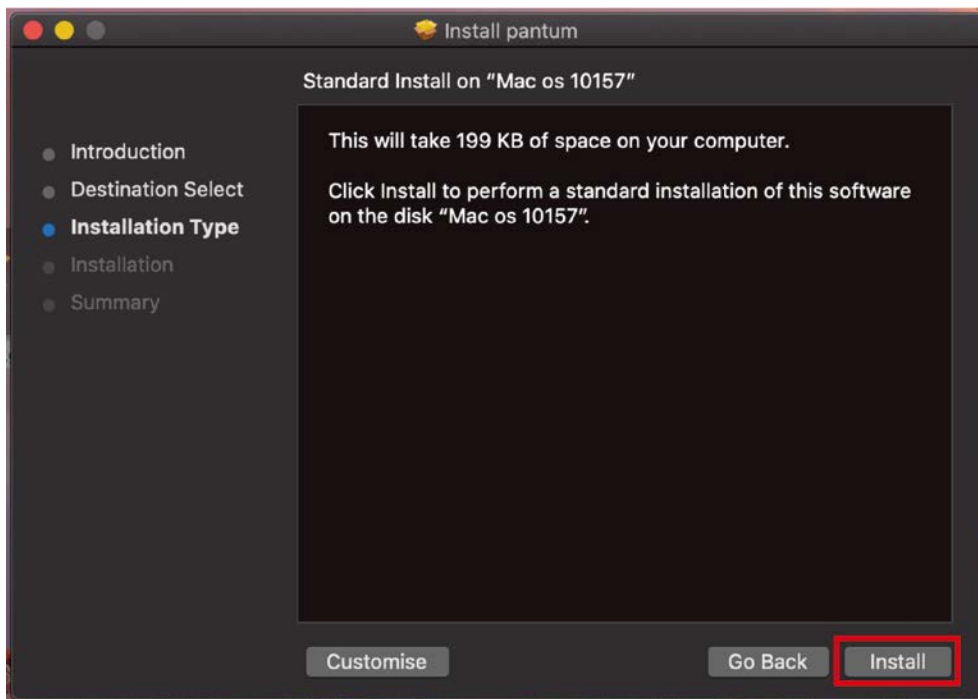
3) Enter your computer password and click Install Software.
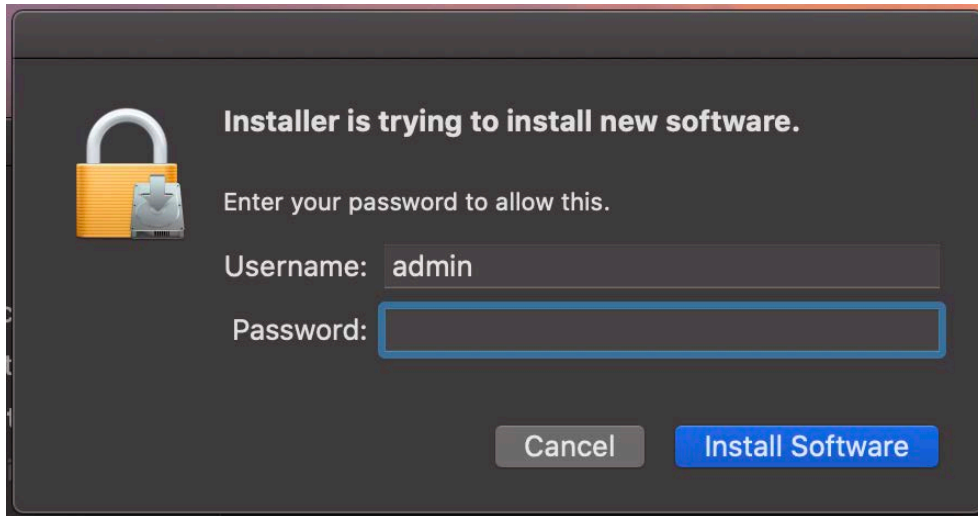
4) After the computer automatically installs the driver, click Close.
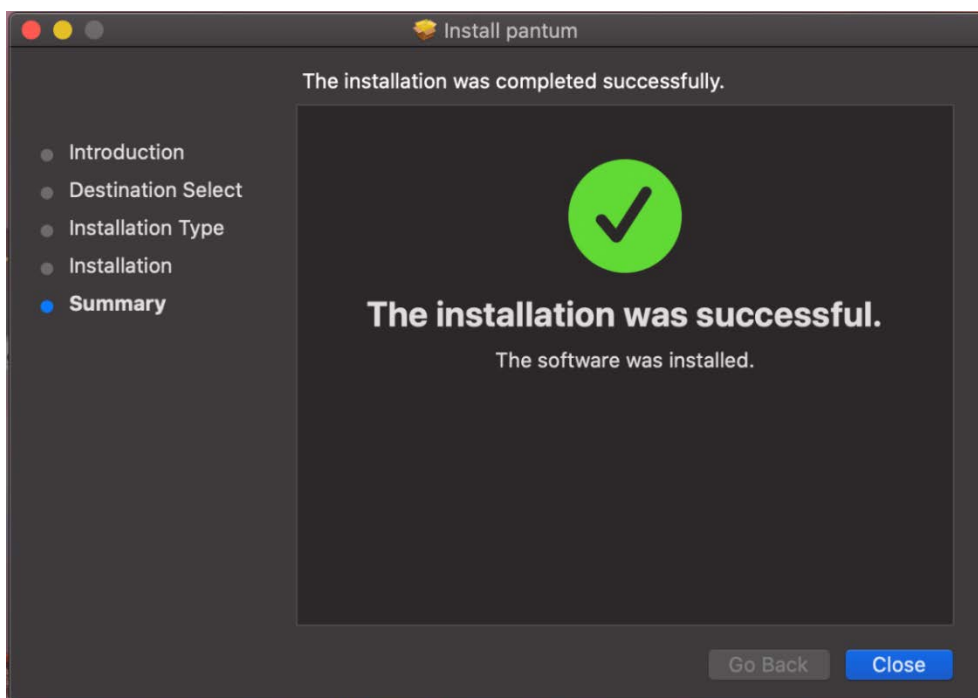
5) Open "Settings", open "Printers and Scanners", and click "+" in the lower left corner.
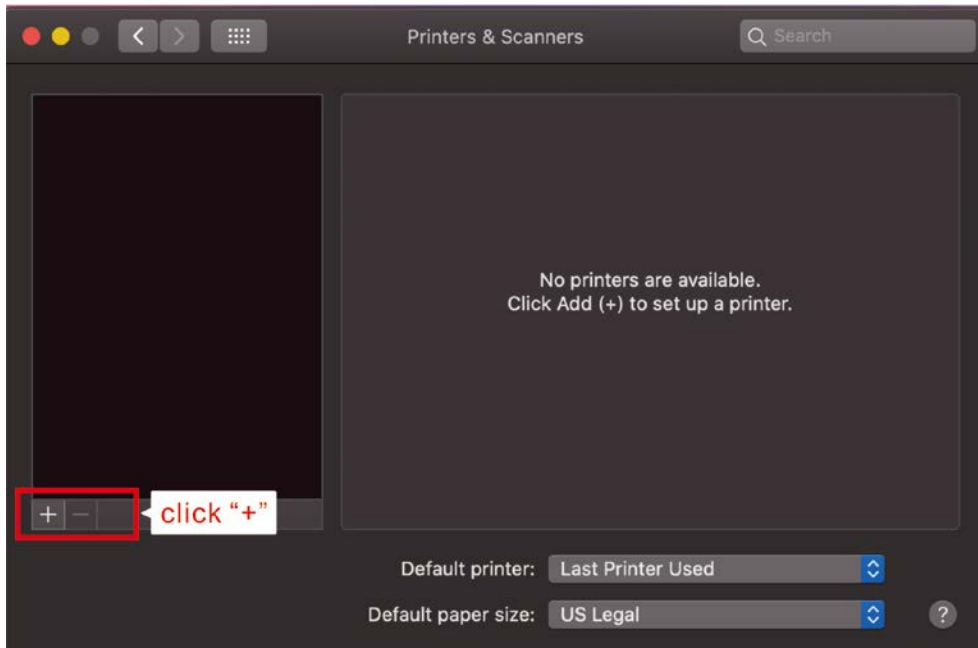
6) Select the printer model you want to add, and click "Choose a Driver...".
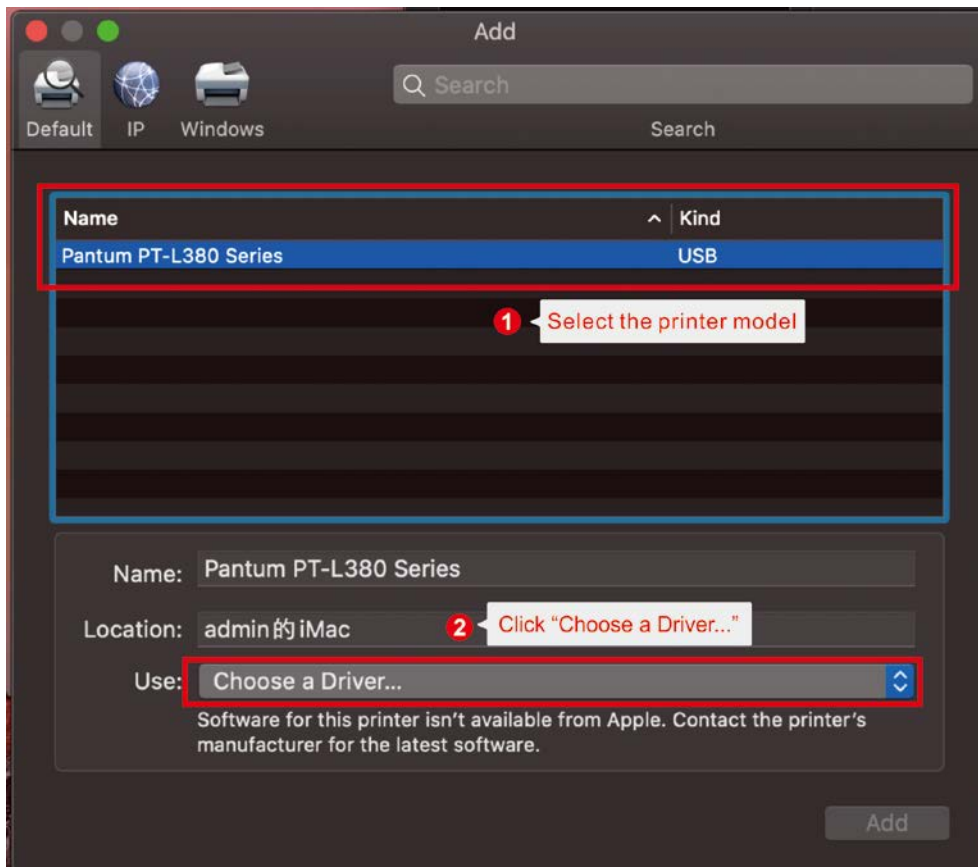
7) Click to select "Other...".
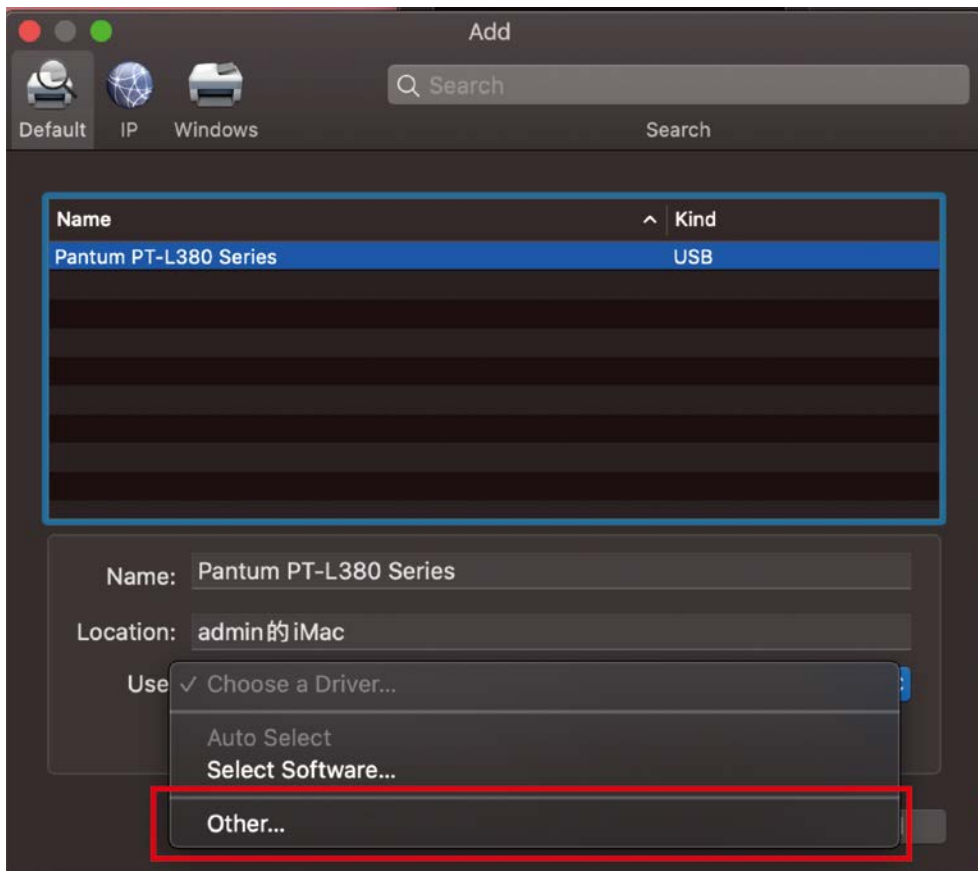
8) Click the Resource Library, then select the "Printers" folder, open the folder, and select the "Pantum" folder.
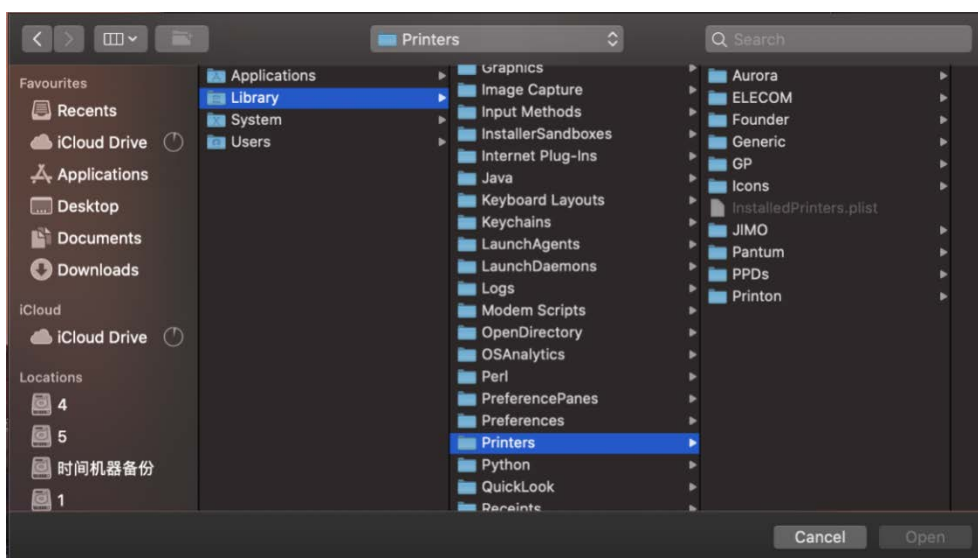
9) Open the "Pantum" folder, and then open the "PPD" folder.
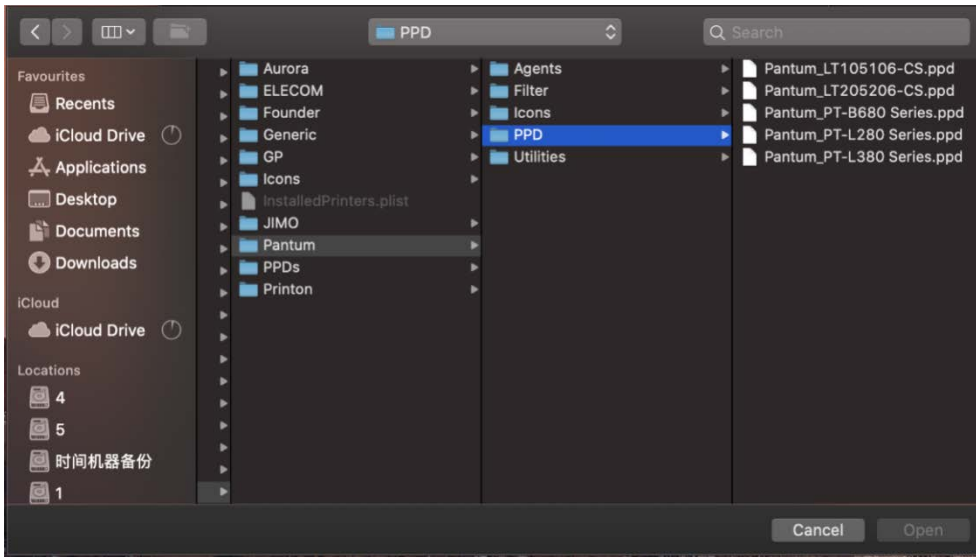
10) Select the "Pantum_PT-L380 Series.ppd" file, and then click Open.
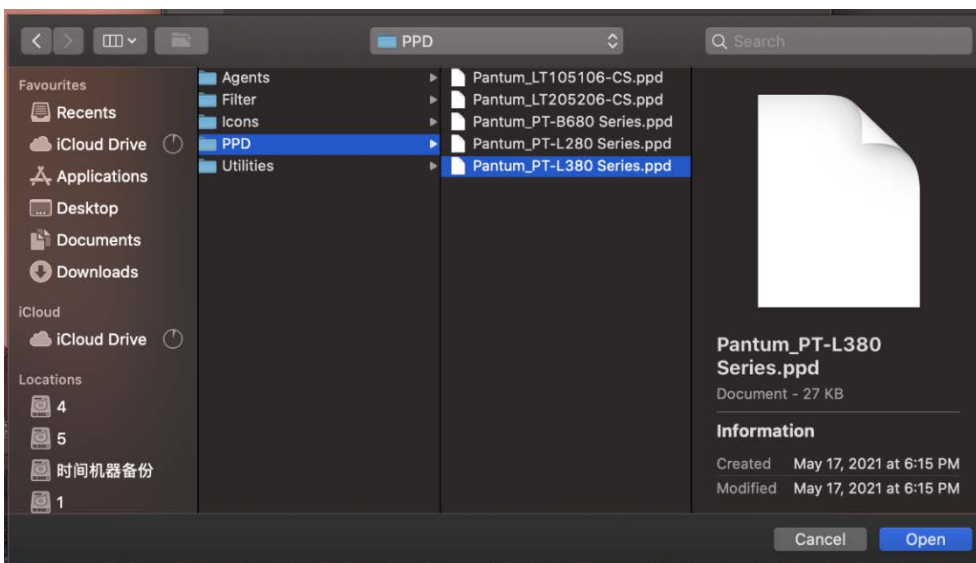
11) Click Add.
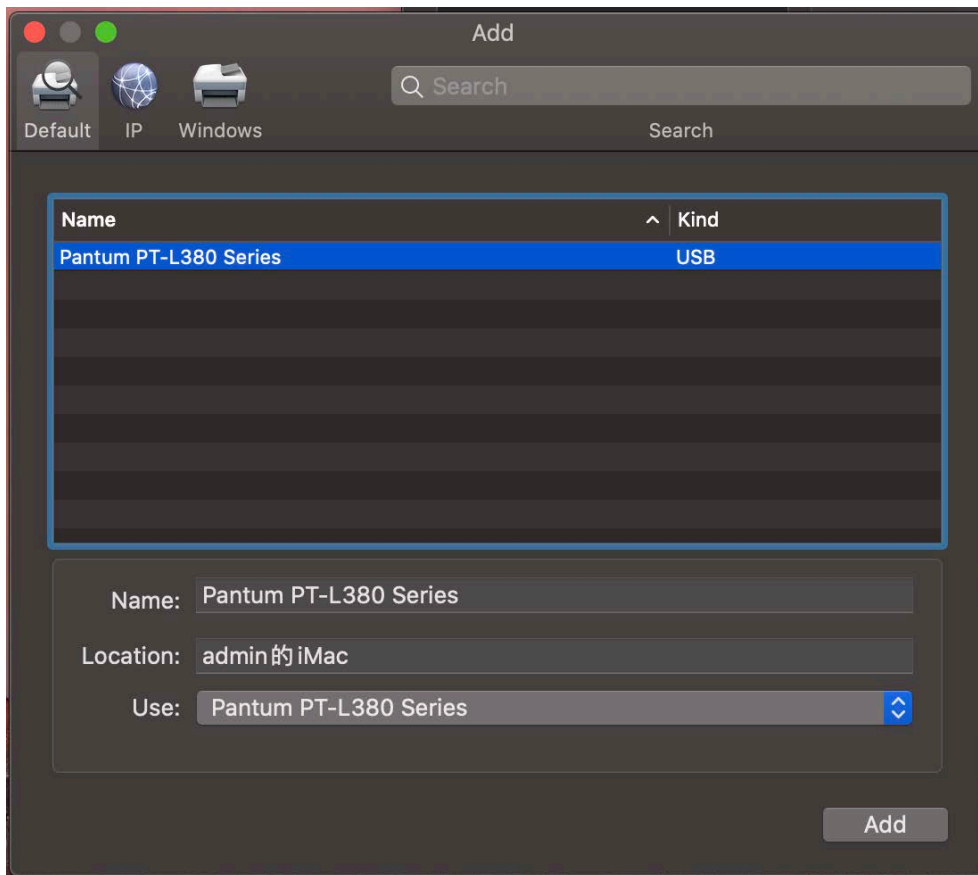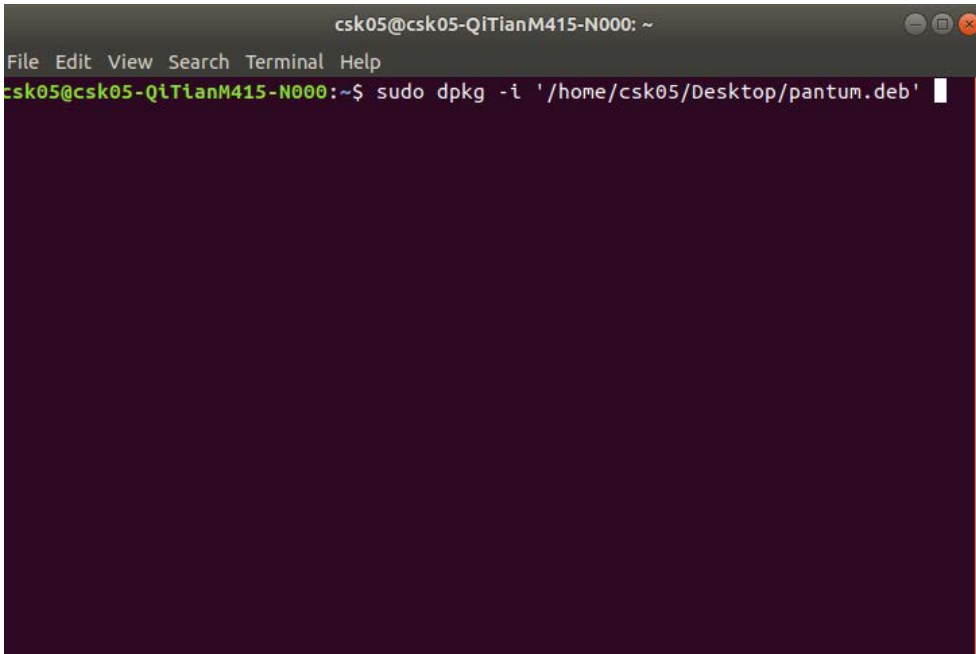
12) The computer will automatically install and generate the printer.
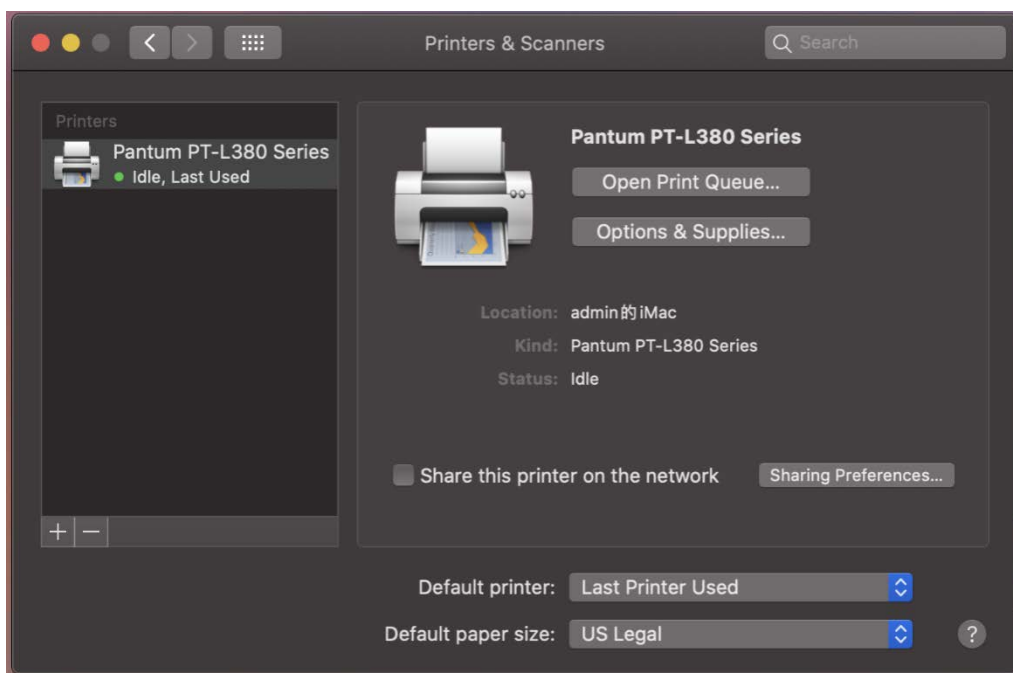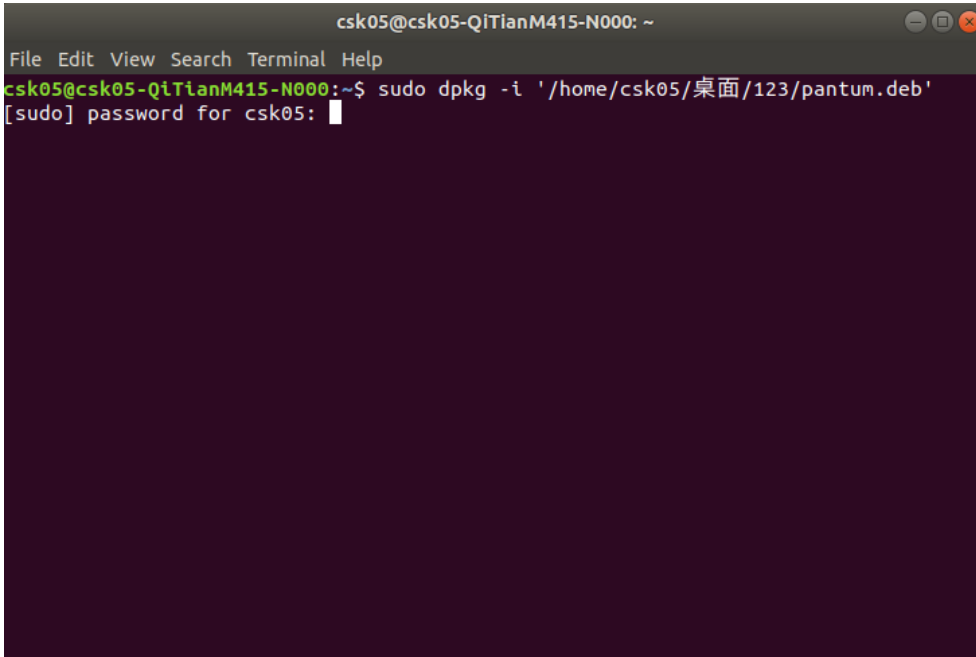
6.3 Driver installation for Linux system
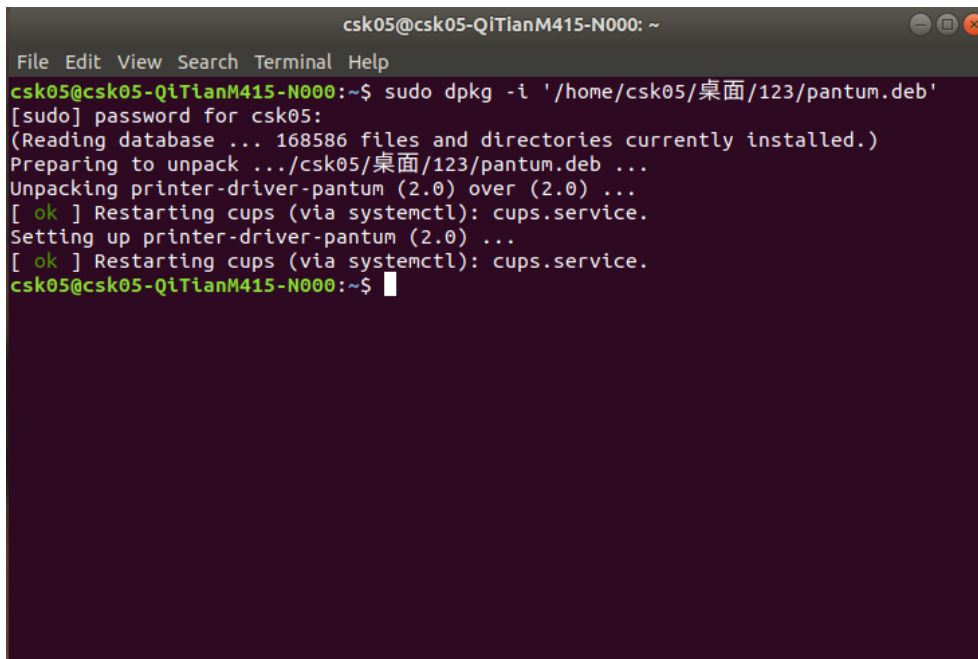
1) Open the driver package folder, open the terminal, type sudo dpkg -i and drag in the driver package, click "Enter".

2) Enter your computer password and click "Enter".

3) After installing the driver, close the terminal.

4) Open the computer settings, then open Devices, select Printers, and click Add Printer.
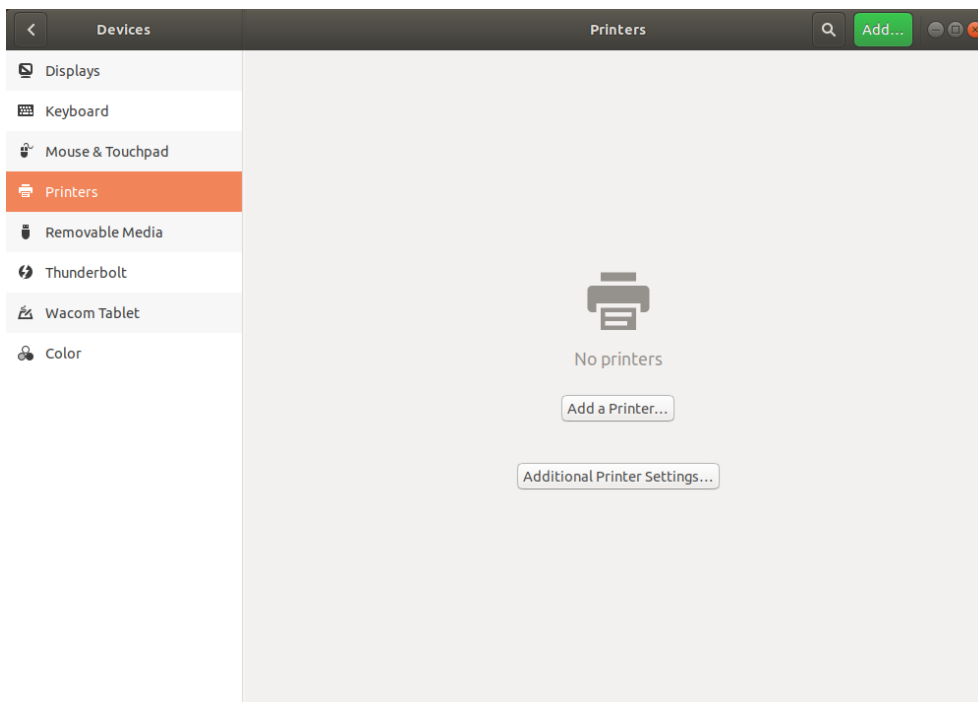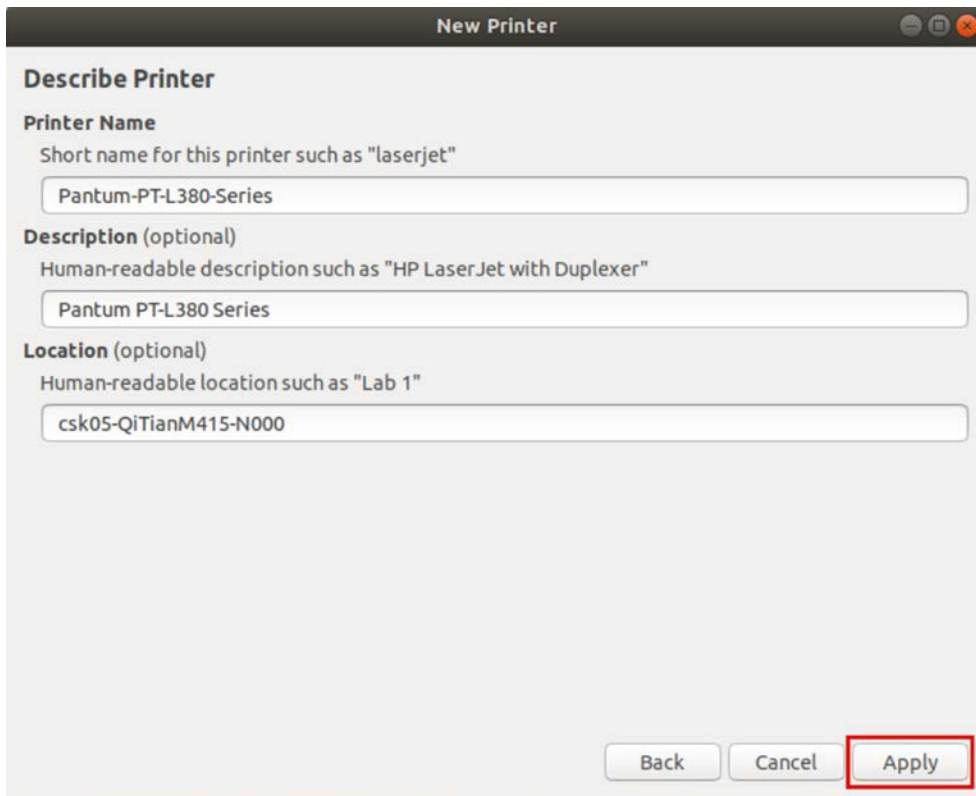
5) Click Add in the upper left corner.
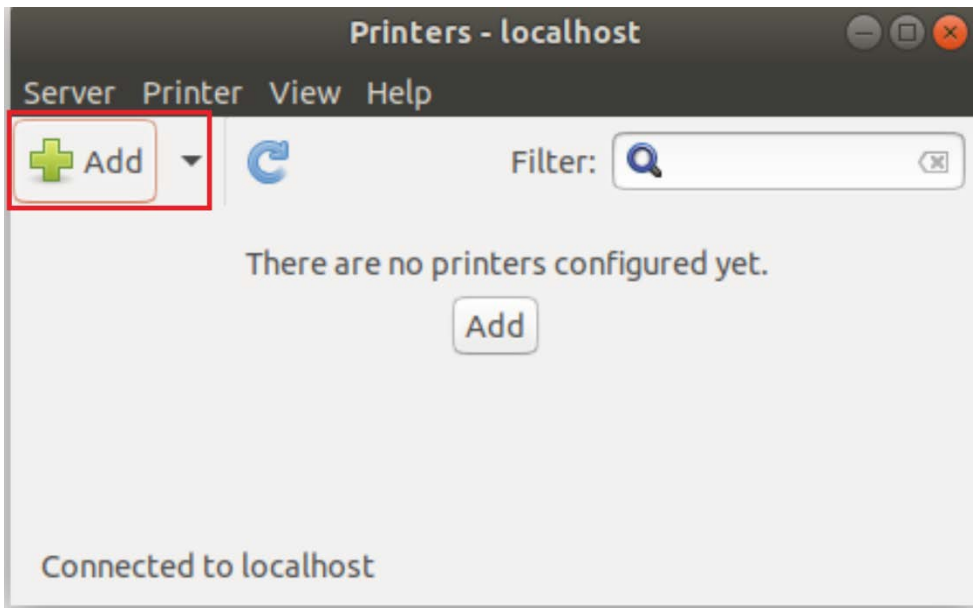
6) Select the printer you want to add and click Forward.
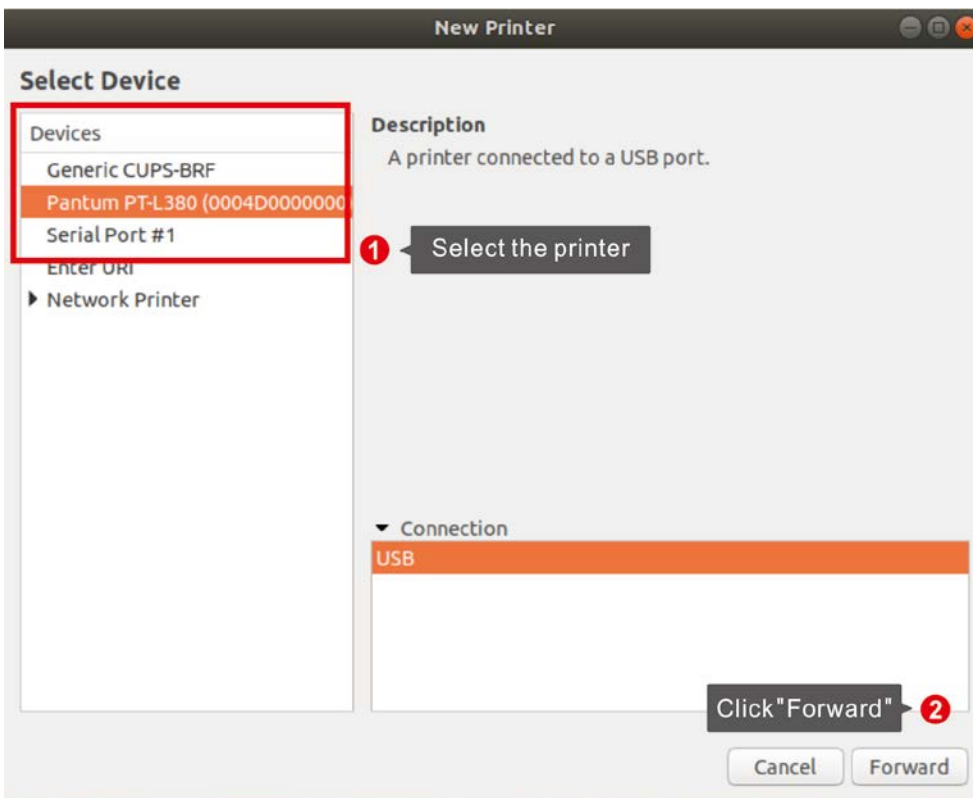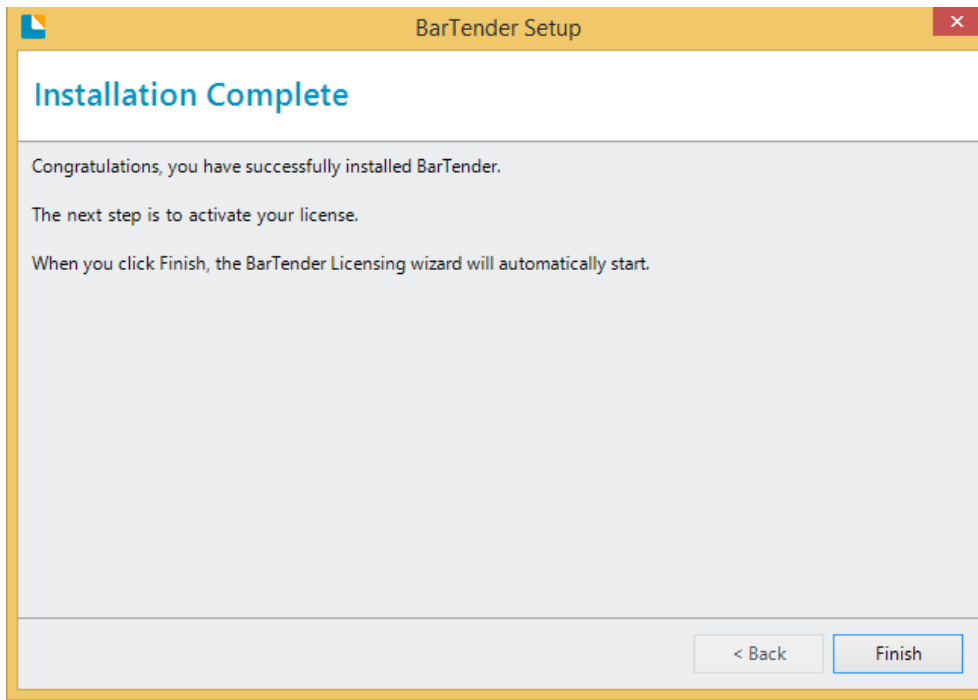
7) Click Apply.

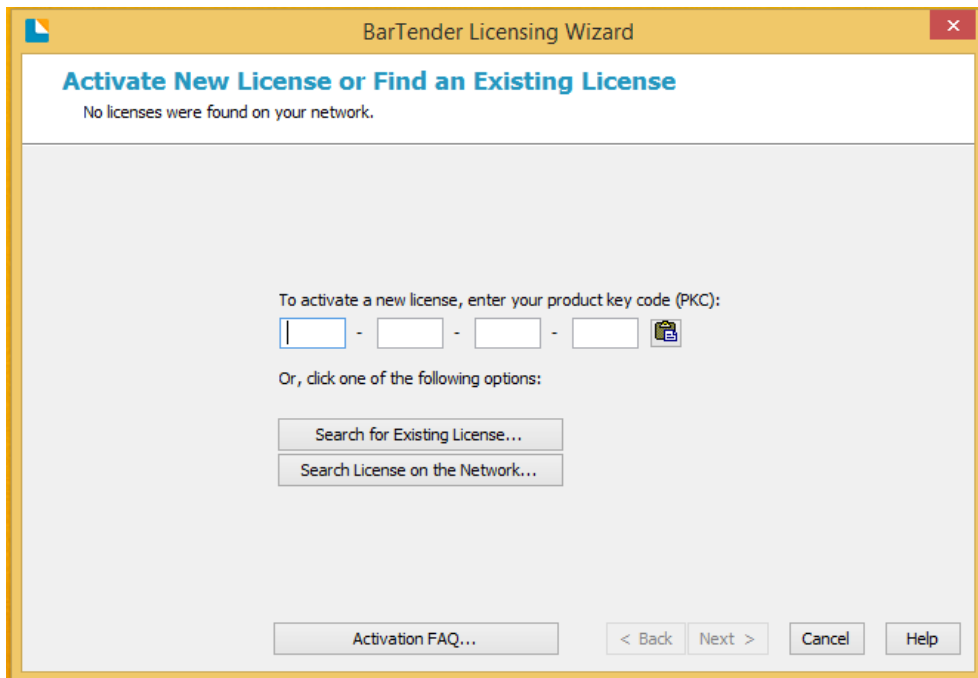8) Select Print Test Page. If the test page prints out normally, the printer has been successfully installed.
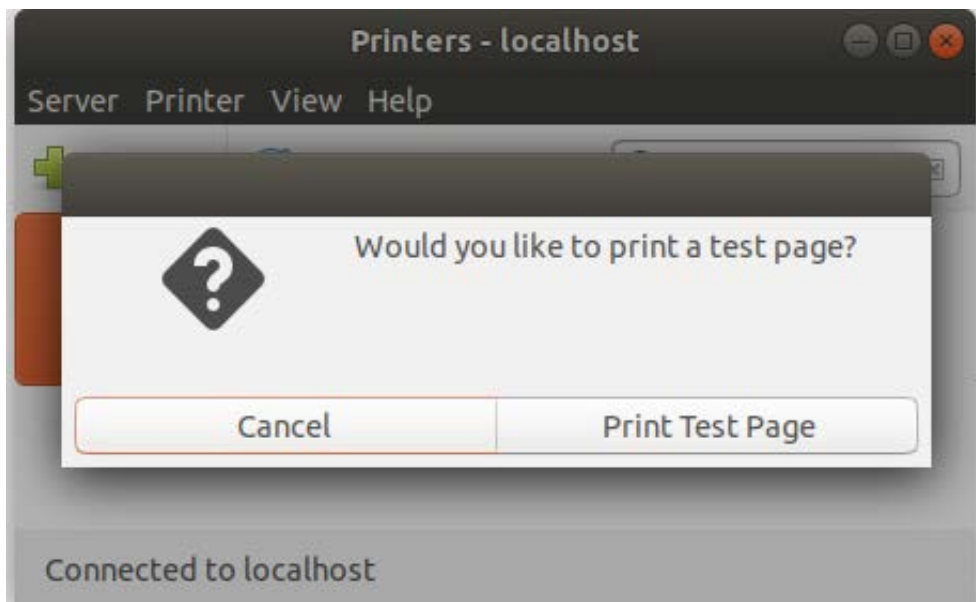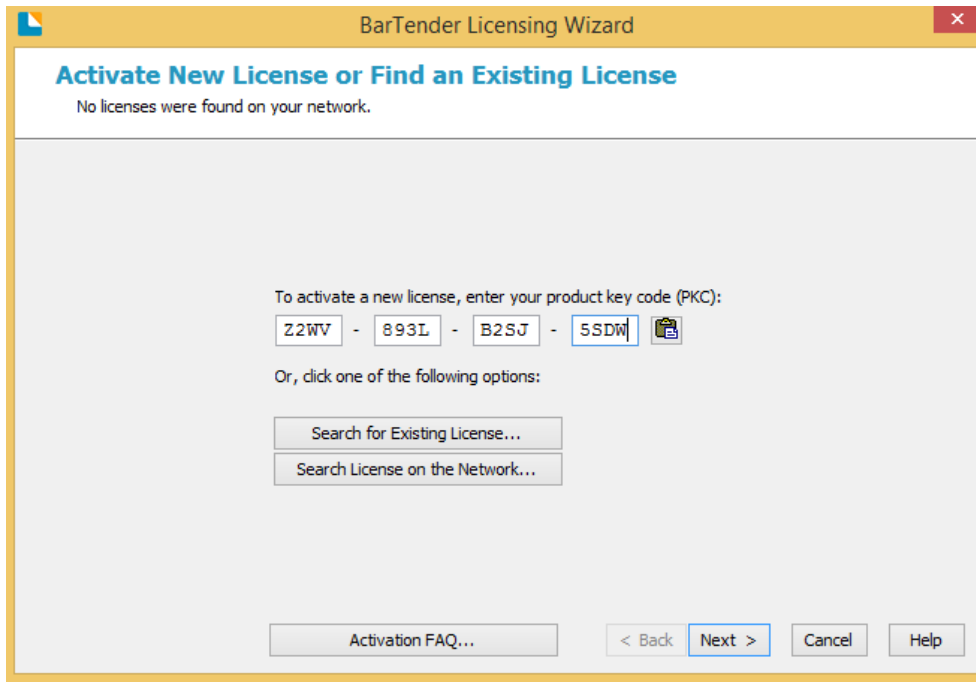
6.4 Bartender registration guidelines

1) Access the software installation and activation guidelines;

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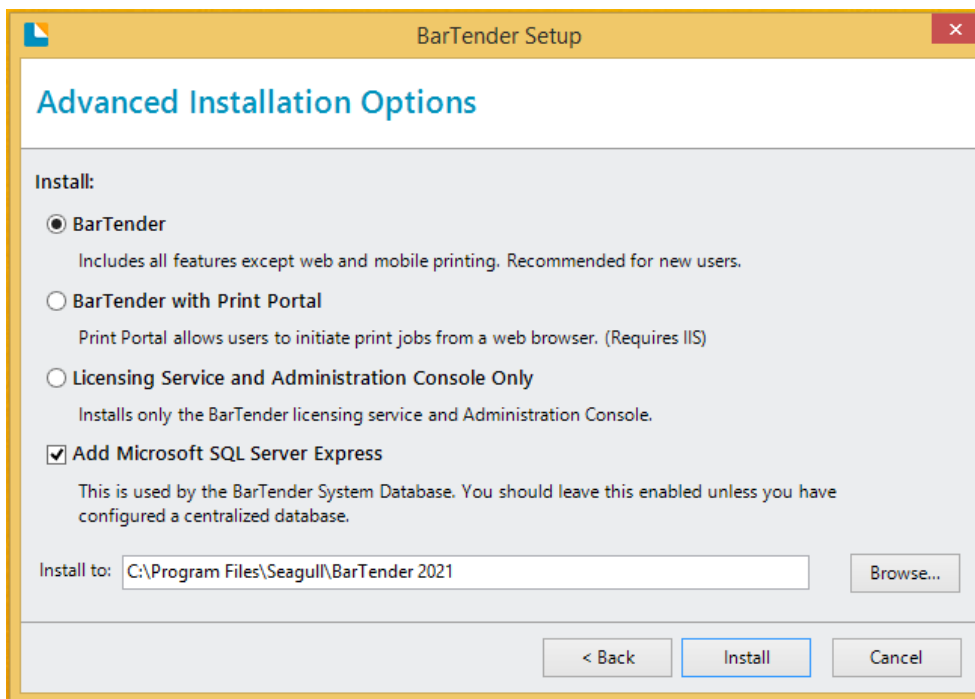
2) Enter the product key code; **Z2WV-893L-B2SJ-5SDW**
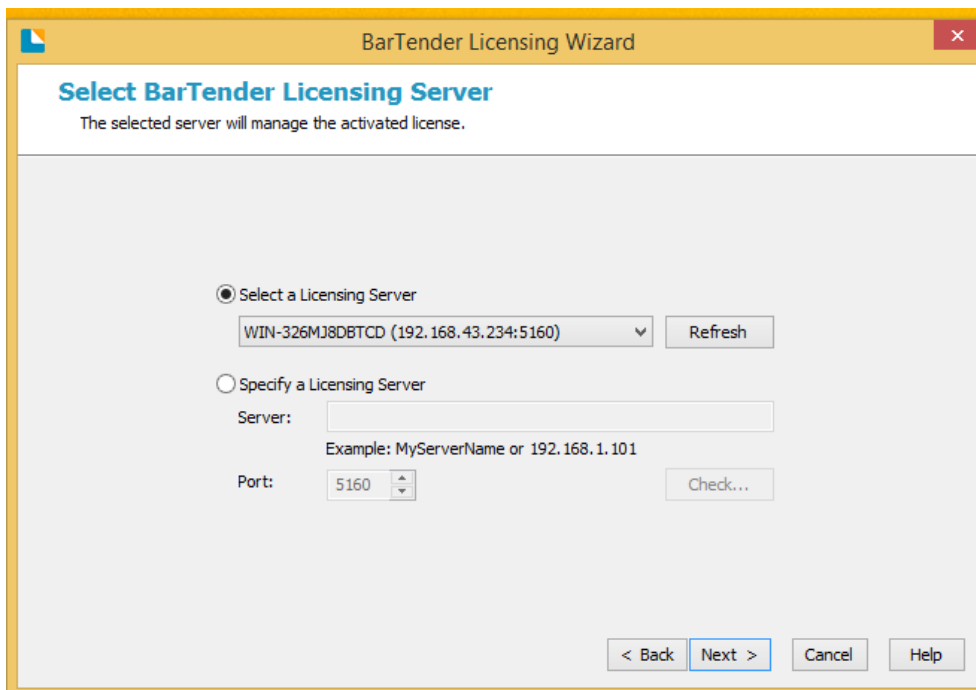
3) Select the server;

4) Complete the Bartender software activation.
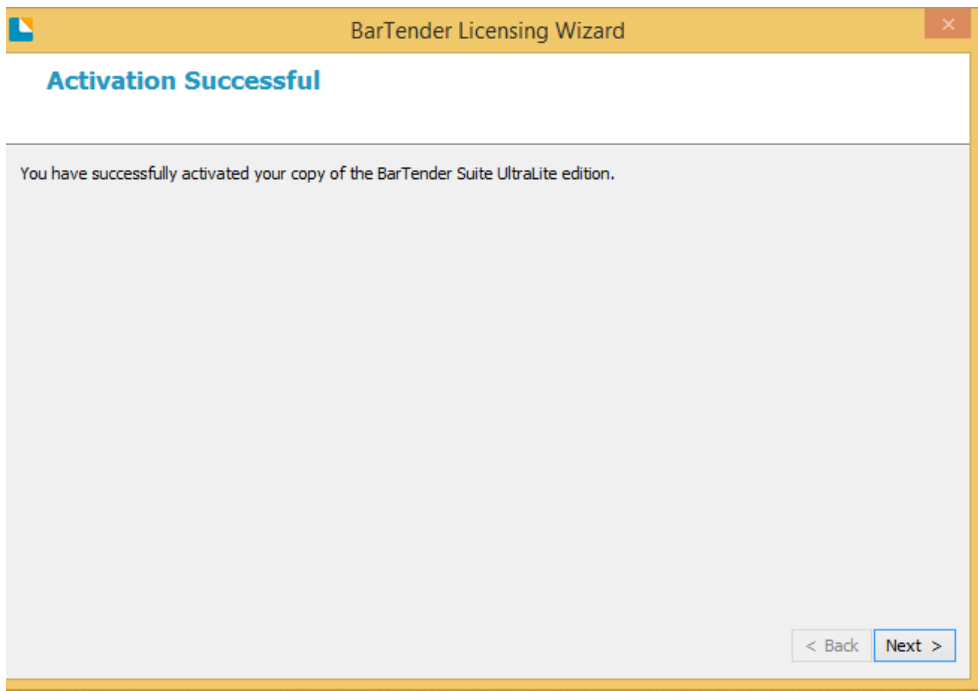
Appendix 1: Statement for Pollution Control of Electronic Information Products

1. The name and content of hazardous substances in the product:

Component	Toxic and hazardous substances or elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr6+)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ether (PBDE)
Power supply/electrical components	X	O	O	O	O	O
Printhead	X	O	O	O	O	O
Metal parts	X	O	O	O	O	O
Main board	X	O	O	O	O	O
Wire	X	O	O	O	O	O
Packing materials and accessories	O	O	O	O	O	O
This table is prepared in accordance with the provisions of SJ/T11364. O: indicates that the content of the toxic and hazardous substance in all homogeneous materials of the component is below the limit requirement specified in GB/T26572-2011. X: indicates that the content of the toxic and hazardous substance in at least one of the homogeneous materials of the component exceeds the limit requirement specified in GB/T26572-2011.						

2. Symbols for restricted use of hazardous substances in electrical and electronic products:

All electrical and electronic products sold in the People's Republic of China must bear this symbol, and the number in the symbol represents the environment-friendly use period (EPUP) of electrical and electronic products in the normal service condition.

All electrical and electronic products sold in the People's Republic of China must bear this symbol, which indicates that this product can only be used safely in non-tropical climate conditions.

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