Maintenance Manual

PANTUM

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Pantum BP5100 Series Service Manual

Single-function laser printer

Please read this manual before maintaining

Version: V1.0

Pantum Single-function Laser Printer Maintenance Manual

Suitable Model：BP51(“*”represent any number and letter)**

Edition change list

Version	Time	change content
V1.0	2021.1.12	Create service manual

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Version: V 1.0

Disclaimer

For a better user experience, Zhuhai Pantum Electronics Co., Ltd. reserves the right to make changes to the User Guide without notice.

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Using this product to copy, print, scan certain documents or images or make other forms of operations may be prohibited by the local laws. If you are uncertain about the legality of using this product, you should consult your legal advisor in advance.

The product can only be used safely in the non-tropical areas at an altitude no higher than 2,000 meters.

Safety Information

Please carefully read and understand the following safety and precautions prior to maintenance.

Key Precautions

As the product may be damaged by the maintenance of non-professionals, the Company strongly recommends the maintenance by technical staff trained by the company. The user must bear the risks of personal injury and damage to the product while repairing the product or parts in this manual. Please carefully read this manual prior to maintenance, to ensure correct operation and maintenance.

Please keep this manual properly for future maintenance.

Warnings, notes and explanations:

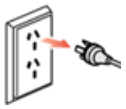
*Please follow the warnings to avoid personal injury.

* Please follow the warnings for proper maintenance of the printer, in order to avoid damage.

* Please pay attention to relevant prompts in maintenance of the printer.

* “Warnings” are listed below:

There is high-voltage electrode inside the printer. Before cleaning the printer, make sure the power is turned off!



Plugging and unplugging the power cord plug with a wet hand can result in an electric shock.

The fuser unit is hot when and after printing. Touching the fuser unit(the shaded area as shown)may cause burns.

The fuser unit is attached with a high temperature warning lable. Please do not remove or samage this lable.

Where to Install

Install the printer on a flat and secure surface where vibration and impact does not occur easily, such as the tabletop. Keep the printer near the standard and grounded power socket. In addition, the temperature of the installation location should be 10℃ to 35℃, and the relative humidity should be 20% to 80%.

Note:

- Do not install the printer in a place of large pedestrian volume.
- Do not put the equipment near the heater, refrigerator, air conditioner, fluid or chemical product.
- Do not make the printer exposed to the sunlight or install it in a too hot, humid or dusty place.
- Do not connect the printer to the socket with a wall-mounted switch or automatic timer.
- The information in the memory of the printer may be lost in the case of power failure.
- Do not connect the printer to the socket in the circuit with high-power household appliances or other devices that may result in power failure.
- Keep the printer away from interference sources such as the loudspeaker or cordless telephone base.
- Pay attention to indoor air circulation in the case of long-time operation or printing of a large number of documents in the poorly ventilated room.

Laser Safety

Laser radiation is harmful to the human body. To avoid laser radiation, please do not randomly disassemble the printer!

The printer follows the provisions of Class 1 laser products under CFR standard. It has a Class IIIb laser diode, which has no laser radiation leakage among laser components.

The following label is attached to the laser components inside the printer:

or

Legal Information

	This symbol indicates that the product cannot be discarded with other wastes. Instead, you should dispose of the used equipment at a designated collection point for the recycling of waste electrical and electronic equipment.
	This product is suitable for indoor use only.
CE	European Community (EC) directives conformity This product complies with the protection requirements of EC directives 2004/108/EC and 2006/95/EC 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., Central Area A, 3F, 01# Building, No. 3883, Zhuhai Avenue, Zhuhai, Guangdong, China 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 55022 and safety requirements of EN 60950.
	This printer is fully compliant with the RoHS Directive 2011/65/EU for managing toxic and hazardous substances.
	This product can only be used safely in the non-tropical areas.
	This product can only be used safely in the areas at an altitude no higher than 2,000 meters.

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1. Product Introduction

Product Parameters			BP5100DN/BP5101DN/ BP5105DN series	BP5100DW series
Interface type	USB		●	●
	NET		●	●
	Wi-Fi			●
Print Language	PDL		●	●
Control panel	LCD		●	●
Print speed	A4	40ppm	●	●
	Letter	42ppm	●	●
Automatic two-sided printing			●	●
NFC function				●
Mute printing			●	●

(●: support; Blank: unsupport)

The product series may be increased or changed without notice.

2. Driver Installation and Uninstallation

2.1 How to install Windows printer driver

Windows driver installation software provides two installing methods: one-click installation and manual installation. We recommend one-click installation, which can help to install driver automatically in a faster and more convenient way. If you have any difficulty in using one-click installation, please try manual installation.

Note: • Driver installation interface may differ because of different models and functions, so the schematic diagram is only for your reference.

2.1.1 One-click Installation

One-click installation provides three methods of installation: connect the printer via USB cable, connect the printer via wired network, and connect the printer via wireless network. You can choose one of them according to your habit.

2.1.1.1 Method I: Connect the printer via USB cable

1. Connect the printer to computer via USB cable, power the printer and computer on.

2. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

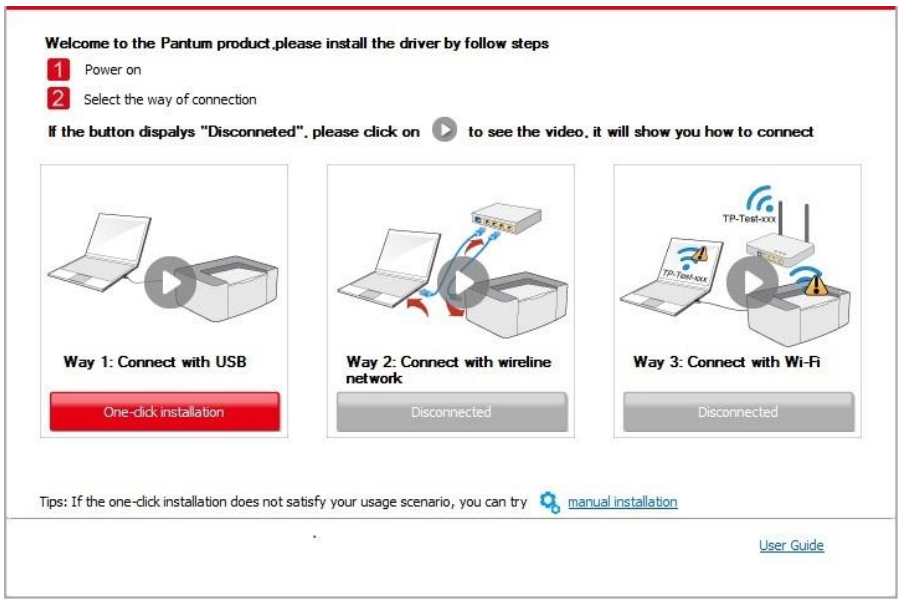
• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

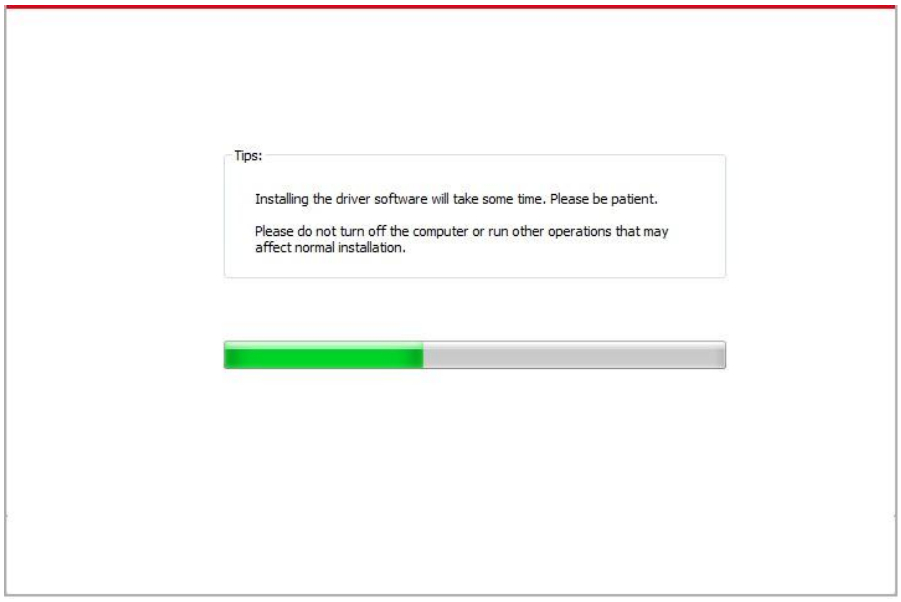
• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

3. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

4. Click on the "One-click installation" button in Method I and enter into the installation process. The process may need some time, and the duration is related to your computer configuration, please wait patiently.





5. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.1.2 Method II: Connect the printer via wired network

1. Turn the power of printer and computer on.

2. Connect the computer to wired network.

3. Connect network cable to the network interface of printer, to make sure the printer is connected to computer network.

4. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

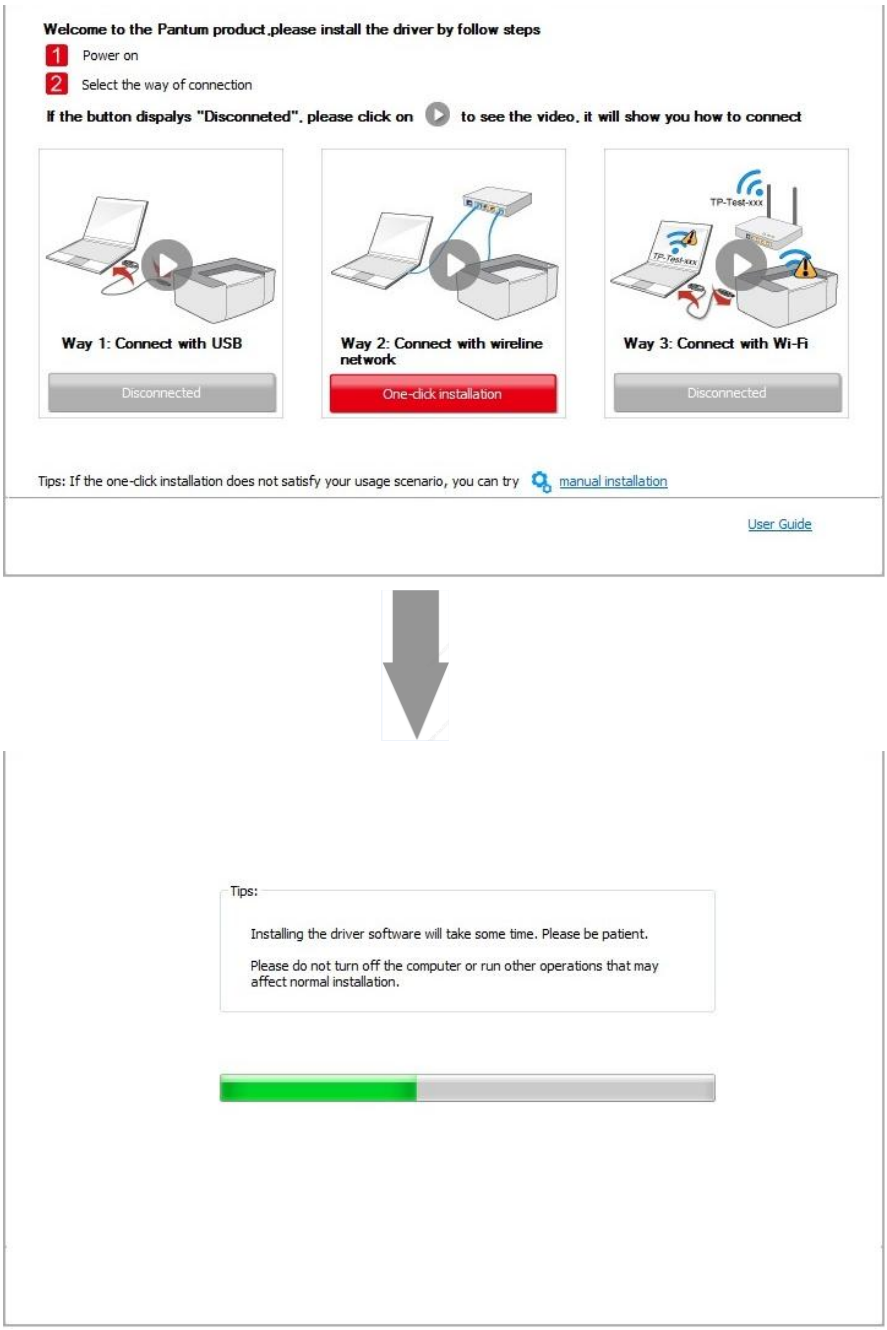
5. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

6. Please click on the "One-click installation" button in Method II and install driver software.

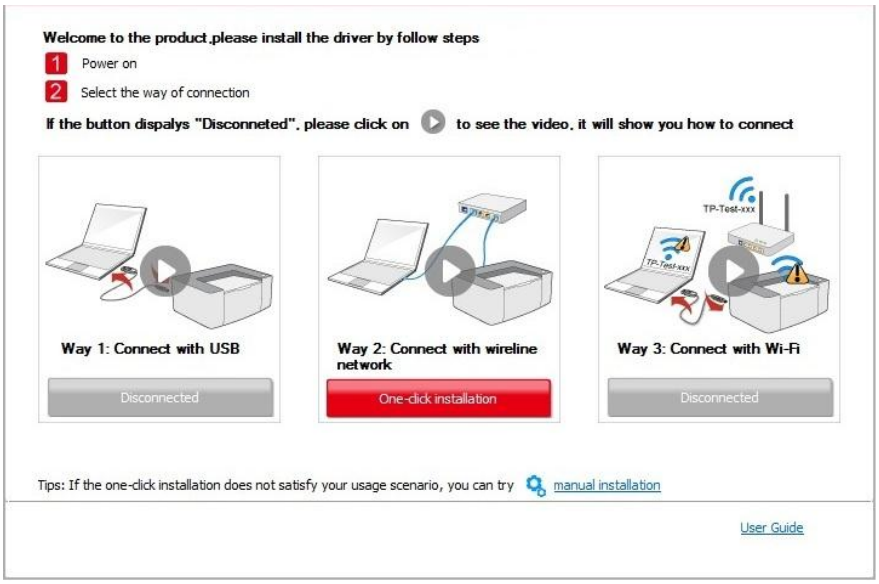
Note: • You can put your mouse cursor in the "One-click installation" button to check the popup information in order to confirm if the current printer is the one you need to install through IP address before you click the button.

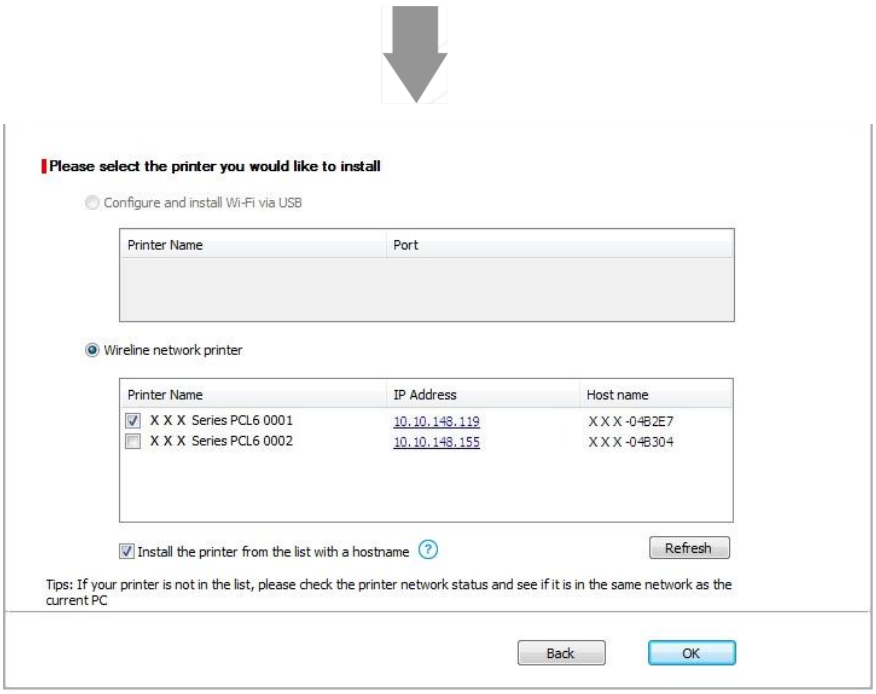
• You can check the printer IP address through "Network configuration page" .

• Click on the "One-click installation" button to enter installation process if your software has searched only one printer. The process may need some time, and the duration is related to your computer configuration. Please wait patiently.



• If your software has searched several printers, click on the "One-click installation" button, and the printer list interface will pop up. Please select the printer that you need according to your printer wired network IP address or host ID.


Welcome to the product,please install the driver by follow steps
1 Power on
2 Select the way of connection
If the button dispalys "Disconneted", please click on to see the video, it will show you how to connect
Way 1: Connect with USB
Disconnected
Way 2: Connect with wireline network
One-click installation
Way 3: Connect with Wi-Fi
Disconnected
Tips: If the one-click installation does not satisfy your usage scenario, you can try manual installation
User Guide


Please select the printer you would like to install
Configure and install Wi-Fi via USB
Printer Name
Port
Wireline network printer
Printer Name
IP Address
Host name
X X X Series PCL6 0001
10.10.148.119
X X X -04B2E7
X X X Series PCL6 0002
10.10.148.155
X X X -04B304
Install the printer from the list with a hostname
Refresh
Tips: If your printer is not in the list, please check the printer network status and see if it is in the same network as the current PC
Back
OK

Note: • If the printer you need is not shown in the list, please click "Refresh" button to search again. If it is not found, please check if the printer and computer are in the same network..

• When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

7. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.1.3 Method III: Connect the printer via wireless network

Please check if the printer is connected with wireless network when installing the printer driver software. If disconnected, please install it with reference to Chapter 2.1.1.3.1. If connected, please install it with reference to Chapter 2.1.1.3.2.

Note: • You can print "Network configuration page" to confirm printer network connection status to see if printer is connected with network .

2.1.1.3.1. The printer is not connected with wireless network

2.1.1.3.1.1. Configure wireless network via USB cable and install driver

Since some computers are not provided with wireless network function, this section is divided into "Connect computer to router via Wi-Fi" and "Connect computer to router via wired connection" to introduce installation process.

I. Connect computer to router via Wi-Fi

1. Computer is already connected to router via Wi-Fi.

2. Connect the printer to computer via USB cable, then power the printer on.

3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

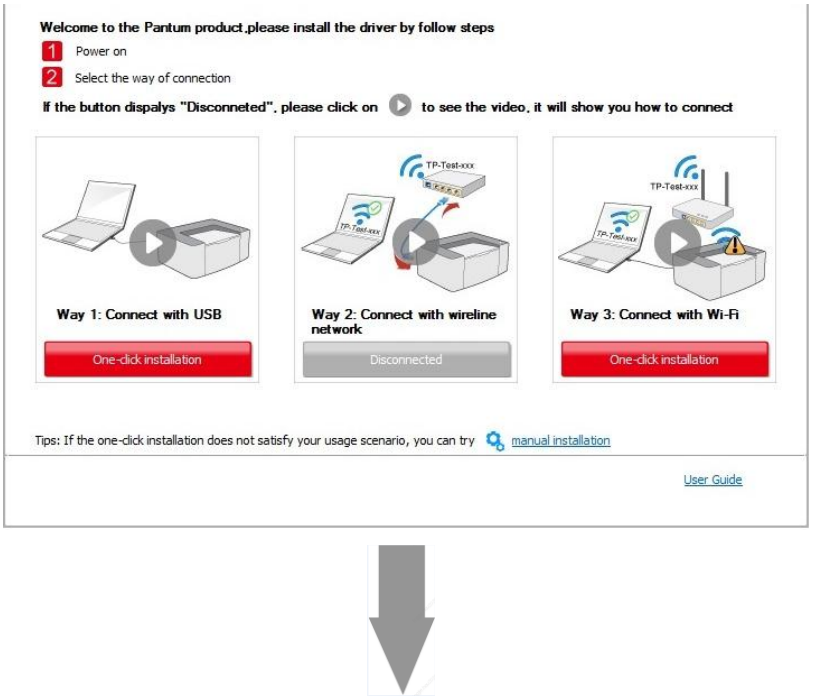
4. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

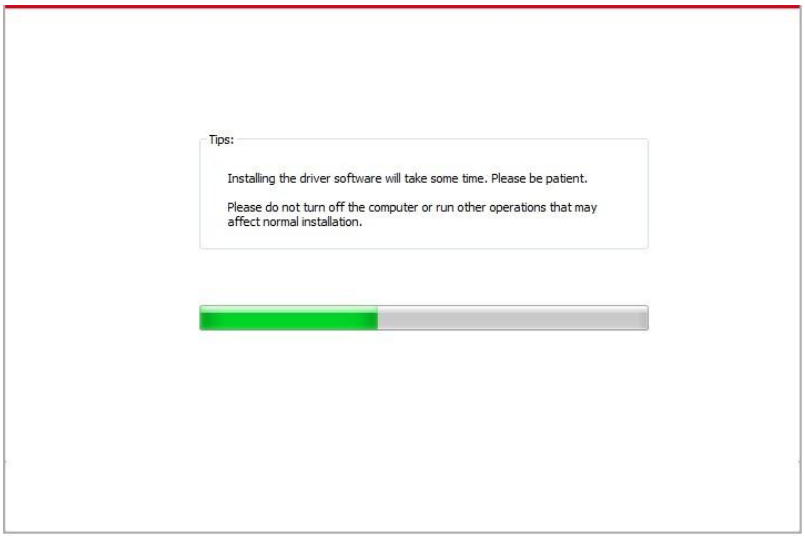
5. Click the "One-click installation" button in Method III to install driver software.

Note: • You can put your mouse cursor in the "One-click installation" button to check the popup information in order to confirm if the current printer is the one you need to install through IP address before you click the button.

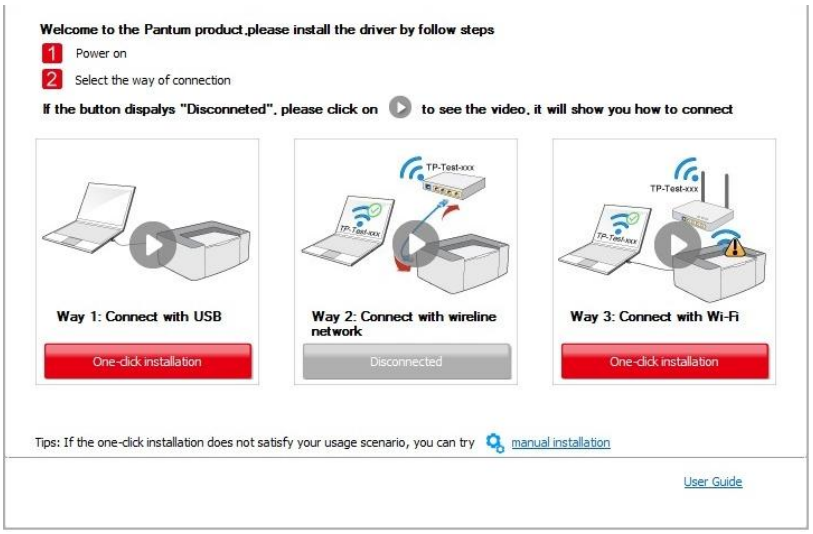
• You can check the printer IP address through "Network configuration page" .

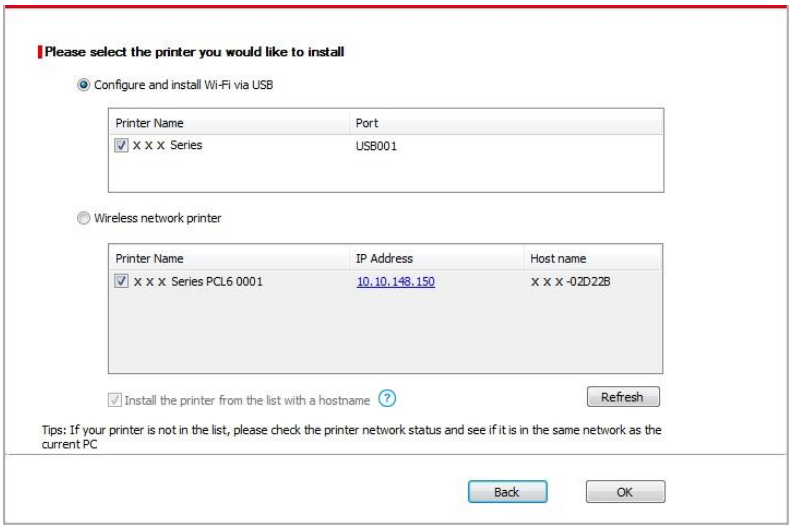
• Click "One-click installation" button if your software has searched only one printer, and enter into installation process to complete automatic network configuration and driver installation.





• If your software has searched several printers, click "One-click installation" button, and the printer list interface will pop up. Please select "Configure printer with Wi-Fi via USB and install" and select USB printer, click "Confirm" button and enter into installation process to complete automatic network configuration and driver installation.





Note: • When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

6. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

II. Connect computer to router via network cable

1. Connect computer to router via network cable.

2. Connect the printer to computer via USB cable, then power the printer on.

3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

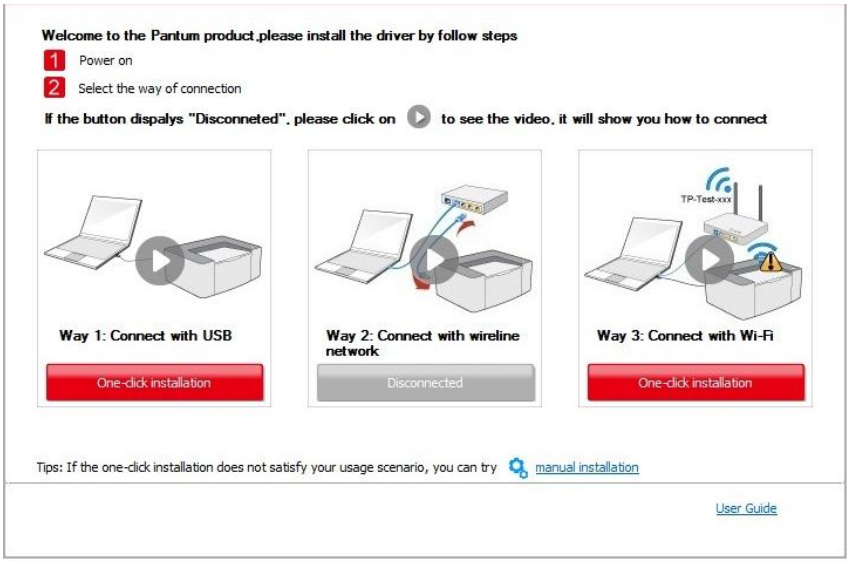
4. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

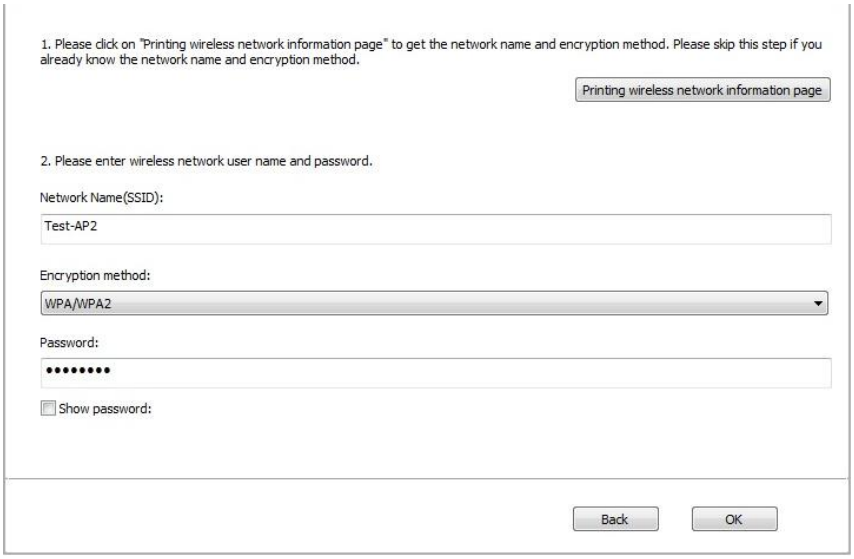
5. Please click on the "One-click installation" button in Method III and install driver software.

Note: • You can put your mouse cursor in the "One-click installation" button to check the popup information in order to confirm if the current printer is the one you need to install through IP address before you click the button.

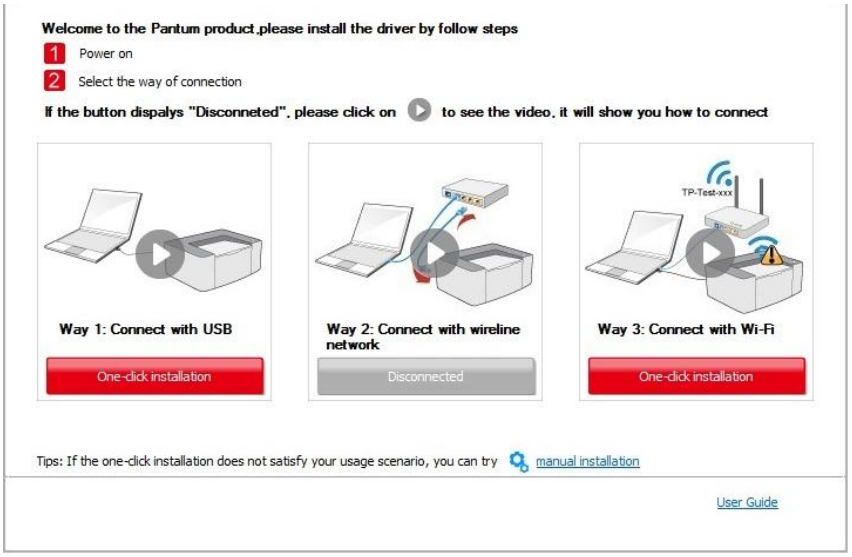
• You can check the printer IP address through "Network configuration page".

• Click on the "One-click installation" button if your software has only searched only one printer, and the wireless network configuration interface will pop up, input the SSID and password that you need, then click "Confirm" button, and enter into installation process. The process may need some time, and the duration is related to your computer configuration, please wait patiently.





• If your software has searched more than one printers, the printer list interface will pop up. You need to configure the current printer which is connected via USB cable to wireless network and install driver. Please select "Configure the print via USB and install" on the printer list interface and check the USB printer option. Click the "Confirm" button, and the wireless network configuration interface will pop up. Input the wireless SSID and password that you need, then click "Confirm" button, and enter into installation process. The process may need some time, and the duration is related to your computer configuration, please wait patiently.


Welcome to the Pantum product,please install the driver by follow steps
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2 Select the way of connection
If the button dispalys "Disconneted", please click on to see the video, it will show you how to connect
Way 1: Connect with USB
One-click installation
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Way 3: Connect with Wi-Fi
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Tips: If the one-click installation does not satisfy your usage scenario, you can try manual installation
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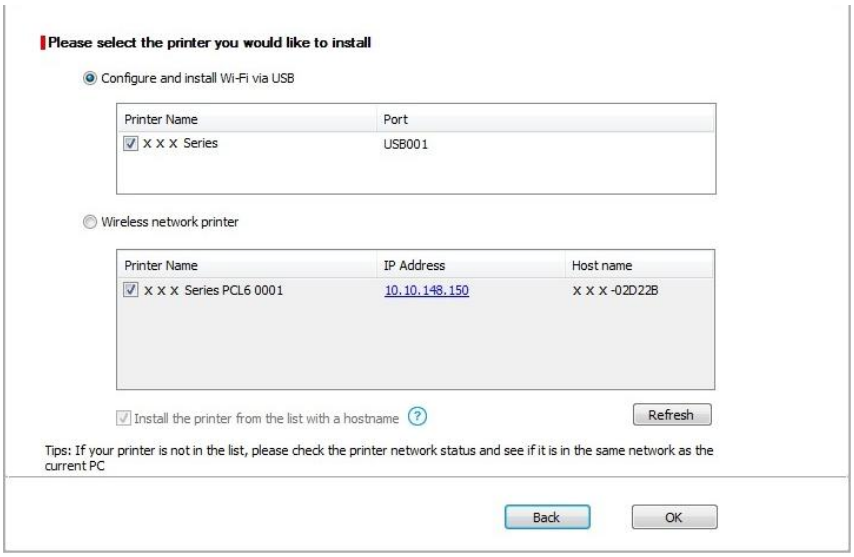
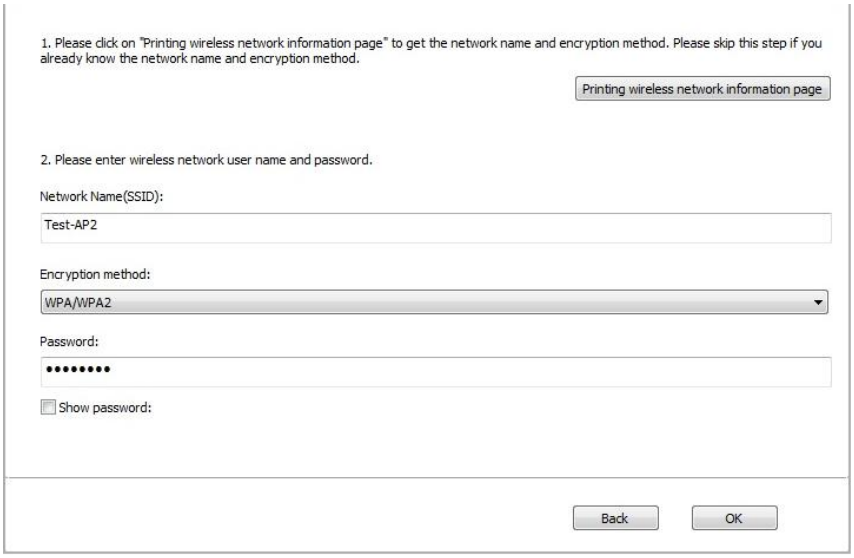

Please select the printer you would like to install
Configure and install Wi-Fi via USB
Printer Name
Port
X X X Series
USB001
Wireless network printer
Printer Name
IP Address
Host name
X X X Series PCL6 0001
10.10.148.150
X X X -02D22B
Install the printer from the list with a hostname
Refresh
Tips: If your printer is not in the list, please check the printer network status and see if it is in the same network as the current PC
Back
OK



Note: • When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

6. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.1.3.1.2. Connect computer to printer via Wi-Fi direct and install the driver

Connect the computer to printer via a direct Wi-Fi connection. It is applicable to wireless network without infrastructure mode, but it still needs scenario of temporary use of printer via wireless network. You can directly connect the computer that has wireless function to the printer to realize printing function.

1. Turn the power of printer and computer on.

2. Connect computer to the Wi-Fi Direct network of the printer.

3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

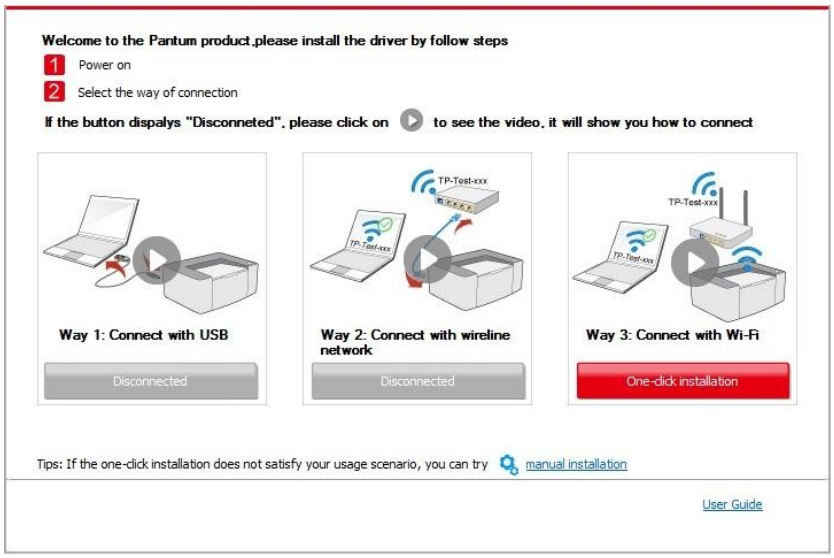
• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

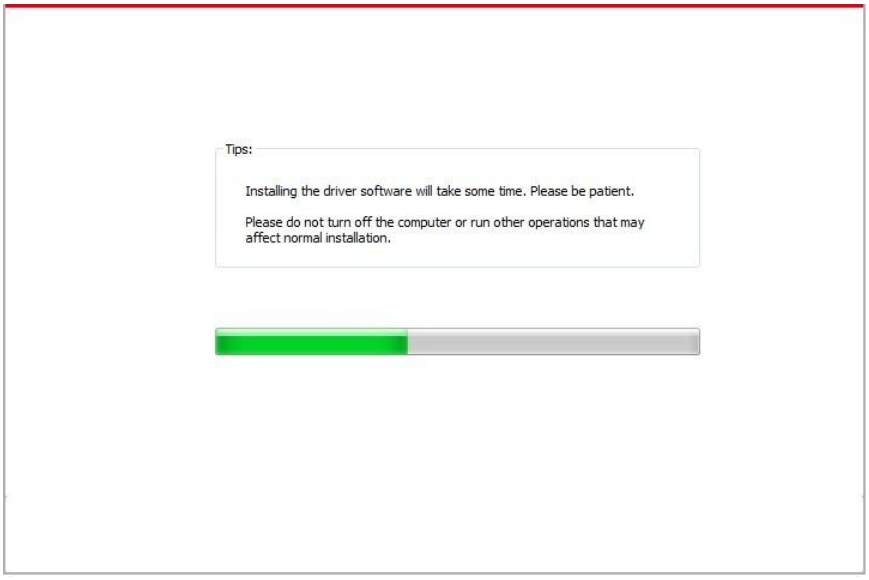
• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

5. Click on the "One-click installation" button in Method III, and enter into installation process. The process may need some time, and the duration is related to your computer configuration, please wait patiently.





6. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.1.3.2. The printer is already connected to wireless network

1. The printer is already connected to wireless network, you can print the "Network configuration page" to check.

2. Connect the computer to printer network.

3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

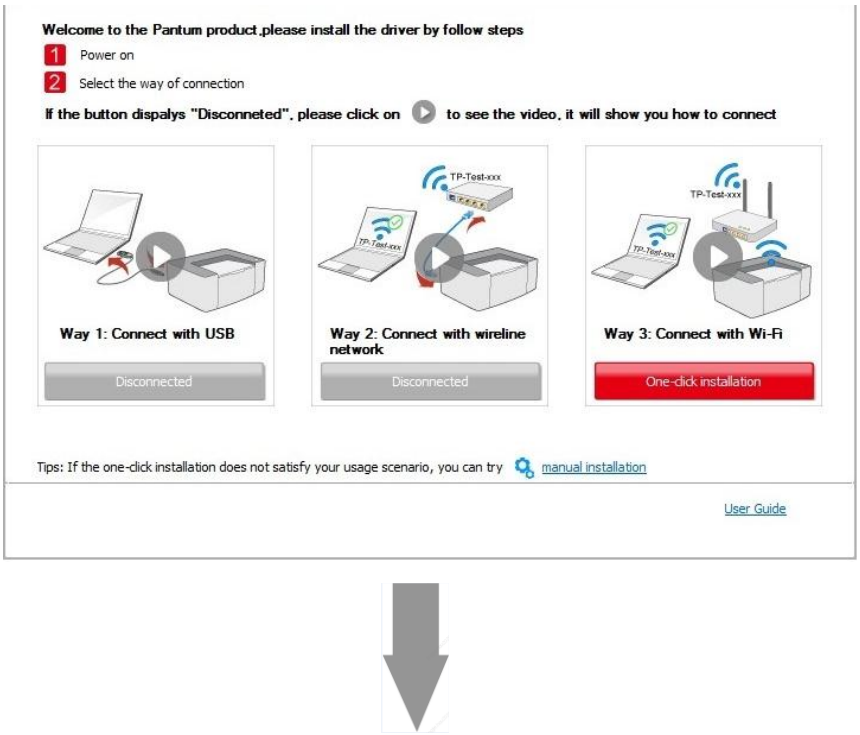
4. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

5. Click the "One-click installation" button in Method III to install driver software.

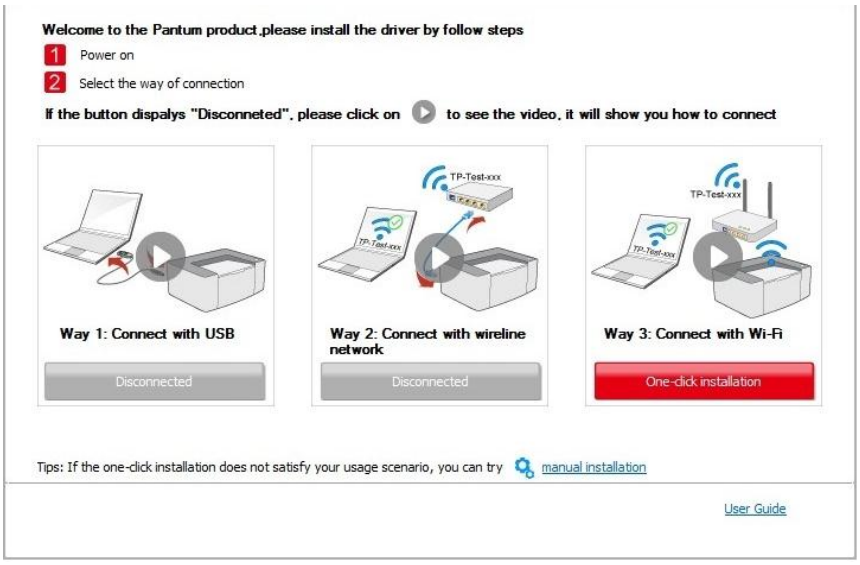
Note: • You can put your mouse cursor in the "One-click installation" button to check the popup information in order to confirm if the current printer is the one you need to install through IP address before you click the button.

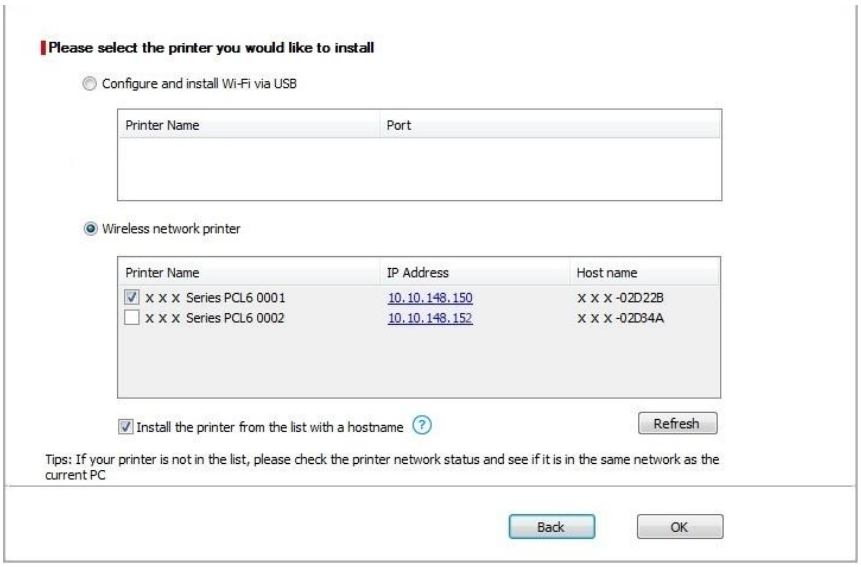
• You can check the printer IP address through "Network configuration page" .

• Click on the "One-click installation" button to enter installation process if your software has searched only one printer. The process may need some time, and the duration is related to your computer configuration. Please wait patiently.



• If the software has searched several printers, the printer list interface will pop up. Please select the printer you need according to your printer wired network IP address or host ID .





Note: • If the printer you need is not shown in the list, please click "Refresh" button to search again. If it is not found, please check if the printer and computer are in the same network.
• When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

6. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.2 Manual installation

• Before installing the drive, you need to learn about printer model by printing printer information page out and check the product name.

2.1.2.1 Installation via USB connection

1. Connect the printer to computer via USB cable, power the printer and computer on.

2. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

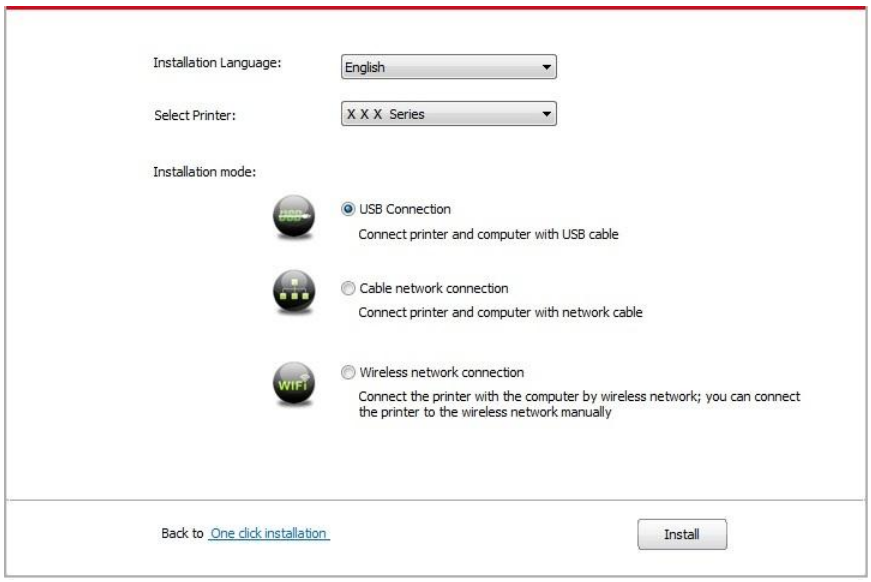
Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

3. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

4. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.

5. Please select installation language and printer model.

6. Select "Connect via USB" and click on "Install".



7. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.

8. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.2.2 Installation via wired network connection

1. Turn the power of printer and computer on.

2. Connect the computer to wired network.

3. Connect network cable to the network interface of printer, to make sure the printer is connected to computer network.

4. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

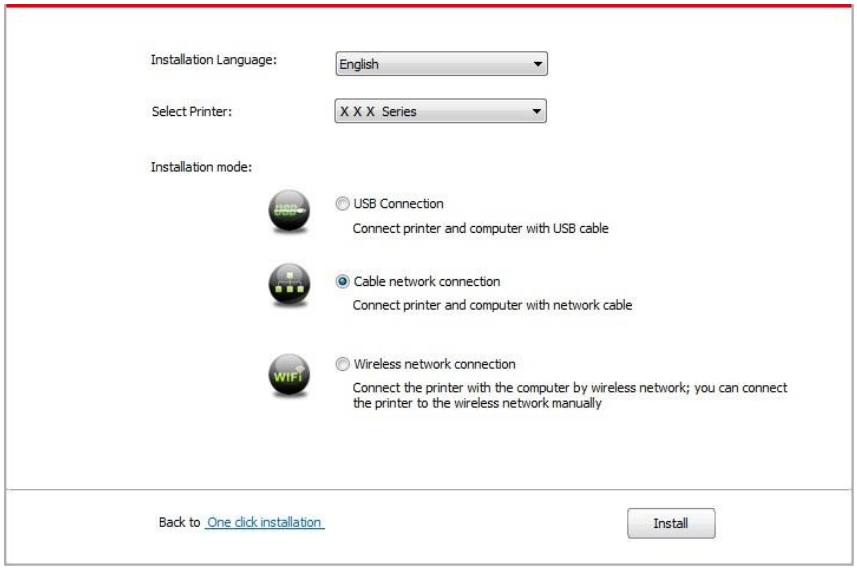
Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

5. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

6. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.

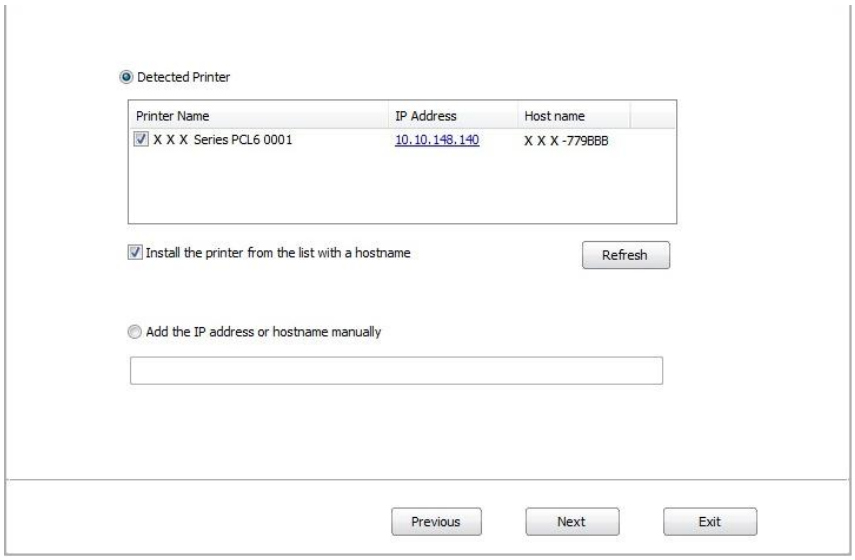
7. Please select installation language and printer model.

8. Select "Wireline network connection" and click on "Install".



9. The installation software will search the printer automatically and the searching process may need some time.

10. After finishing searching, select the printer that needs to be connected and click “Next”.



Note: • If the printer you need to connect is not in the list of printers searched, please click “Refresh” to search again.

• When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

• If IP address or host name is added manually, you need to know the IP address of the printer connected or host name. If they are not made clear, please print the “NetConf Pg” and view “IP Address” and “Host name”.

11. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.

12. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.2.3 Installation by wireless network connection mode

Wireless network connection type is divided into basic structure mode and Wi-Fi Direct mode.

2.1.2.3.1. Installation in basic structure mode

1. Connect computer to access point (wireless router).

2. Connect the printer to computer via USB cable, then power the printer on.

3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

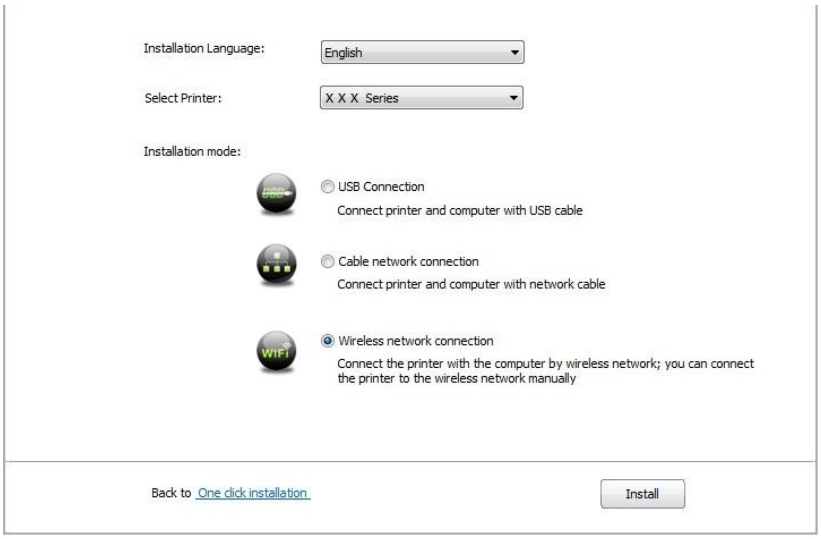
Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

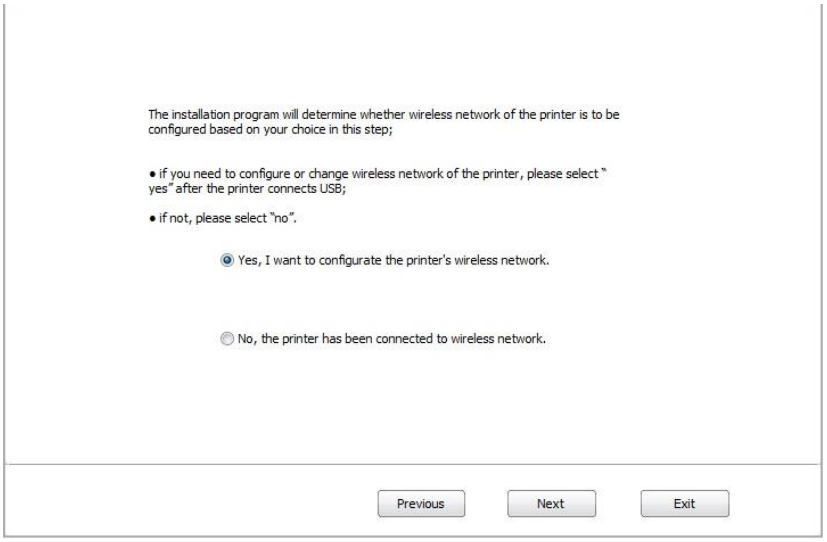
5. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.

6. Please select installation language and printer model.

7. Select "Wireless network connection" and click on "Install".

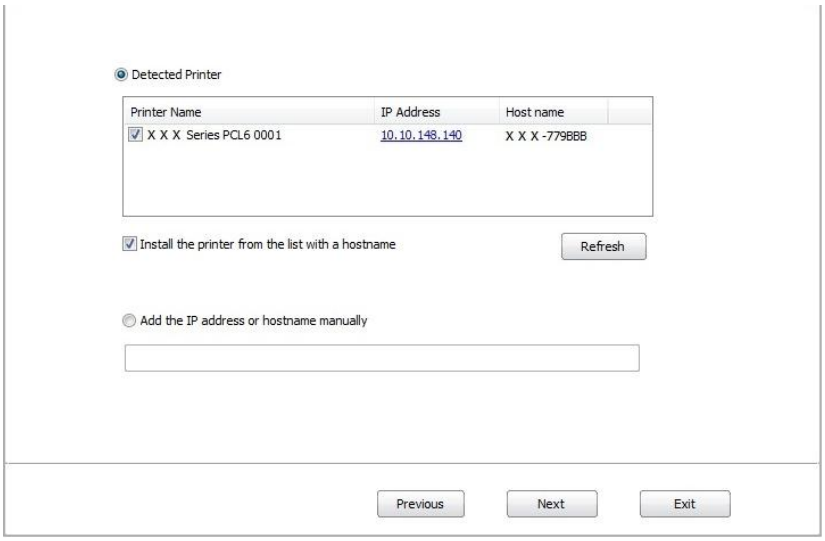


8. Select “Yes, I want to configurate the printer's wireless network” on the wireless setup window popped out, and operate according to the prompts to set up the printer to wireless network.



9. The installation software will search the printer automatically after wireless network is configured successfully. The search process may need some time.

10. Select the printer needs to be connected and click “Next”.



Note: • If the printer you need to connect is not in the list of printers searched, please click “Refresh” to search again.

• When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

• If IP address or host name is added manually, you need to know the IP address of the printer connected or host name. If they are not made clear, please print the “NetConf Pg” and view “IP Address” and “Host name”.

11. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.

12. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.2.3.2. Installation in Wi-Fi Direct mode

1. Turn the power of printer and computer on.

2. Connect computer to the Wi-Fi Direct network of the printer .

3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.

• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click “Autorun.exe” to run the installation procedure.

• Windows 8 system: When the " DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

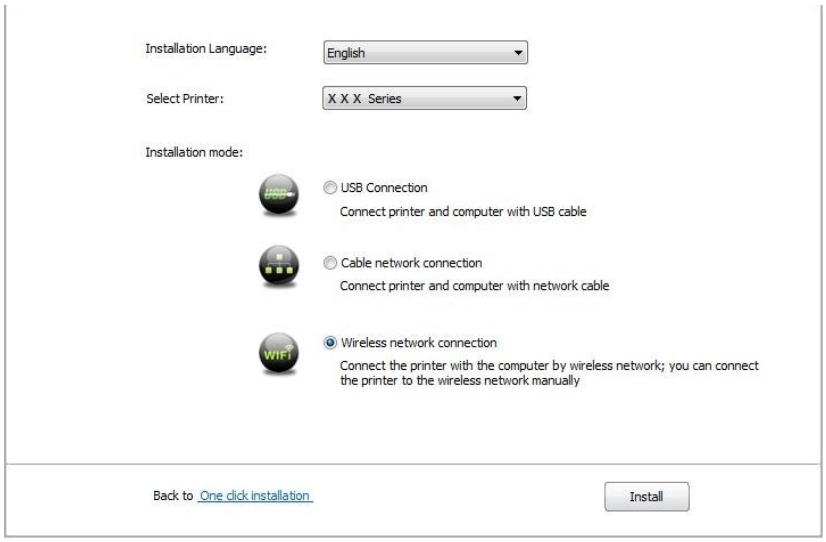
Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Click on the "I agree" button on the right buttom corner after reading the license agreement and enter into driver installation interface.

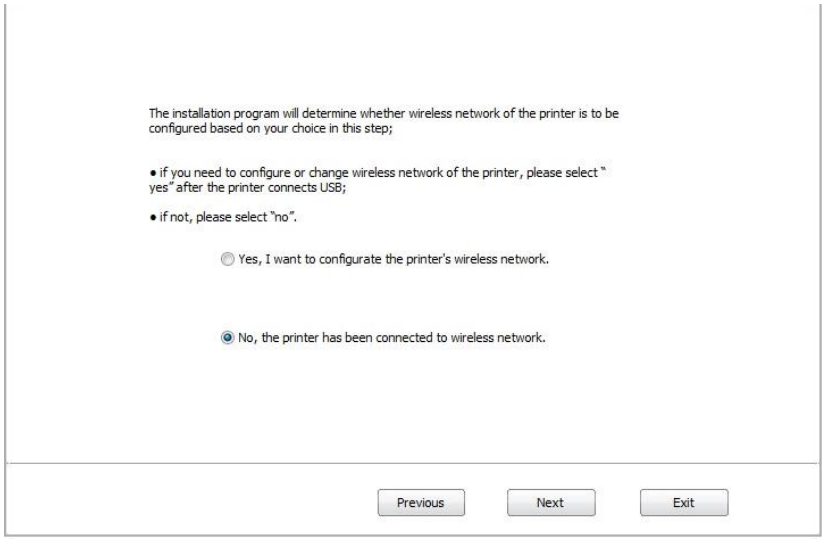
5. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.

6. Please select installation language and printer model.

7. Select "Wireless network connection" and click on "Install".

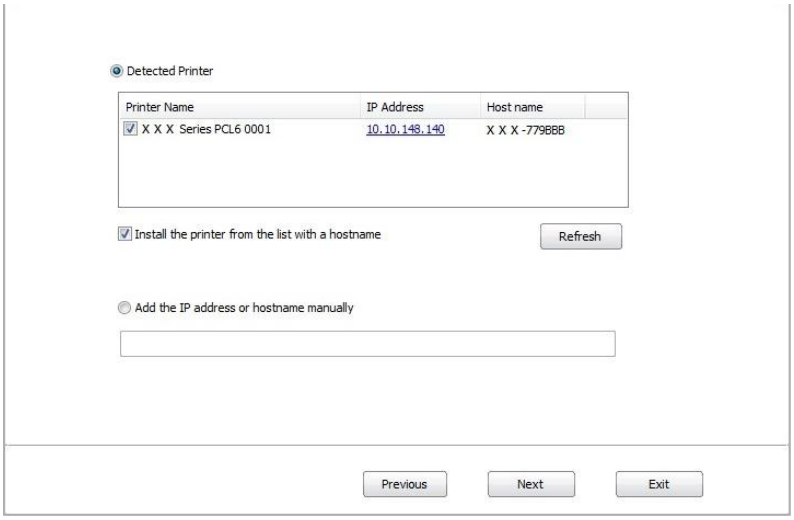


8. Select “No, the printer has been connected to wireless network” on the wireless setup window popping out, and then click “Next”.



9. The installation software will search the printer automatically and the searching process may need some time.

10. Select the printer needs to be connected and click “Next”.



Note: • If the printer you need to connect is not in the list of printers searched, please click "Refresh" to search again.

• When the printer IP address changes under printer driver installed with host ID , you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

• If IP address or host name is added manually, you need to know the IP address of the printer connected or host name. If they are not made clear, please print the "NetConf Pg" and view "IP Address" and "Host name" .

11. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.

12. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

2.1.3 Method of driver uninstallation

Windows 7 is taken as the example in the following operation. The information on your computer screen may differ because of multiple operating systems.

1. Click the Start menu of computer and then click All programs.

2. Click Pantum, and then Click Pantum XXX Series.

Pantum XXX Series where XXX represents product model.

3. Click uninstall to delete the driver according to instructions on uninstall window.

4. Restart computer after finishing unloading.

2.2 MacOS system driver installation

• Driver installation under macOS system is divided into 2 steps, driver installation and adding a printer. If you are going to print in AirPrint mode, there is no need to install a driver and you just need to add a printer directly.

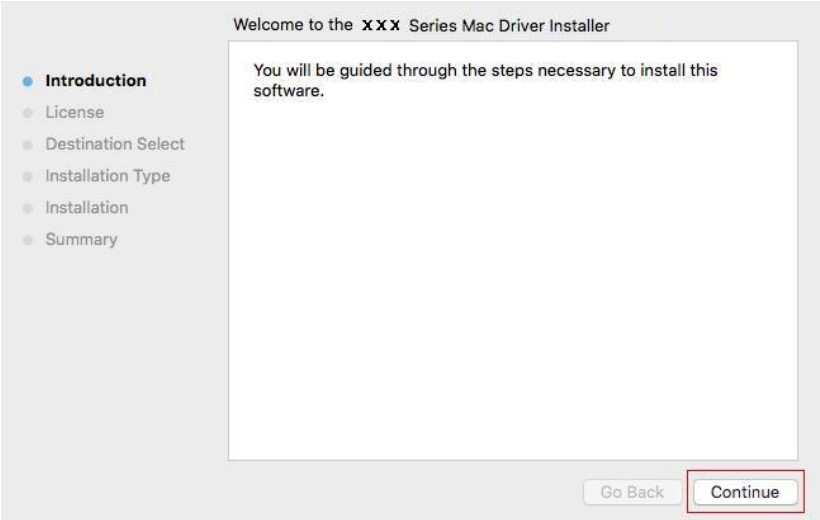
• When you are installing a driver with wired or wireless network, you may need to know the Bonjour name of printer. Please print the “Network setup page” to view it.

2.2.1 Driver installation

MacOS 10.11 is taken as the example in the following operation. The information on your computer screen may differ because of multiple operating systems.

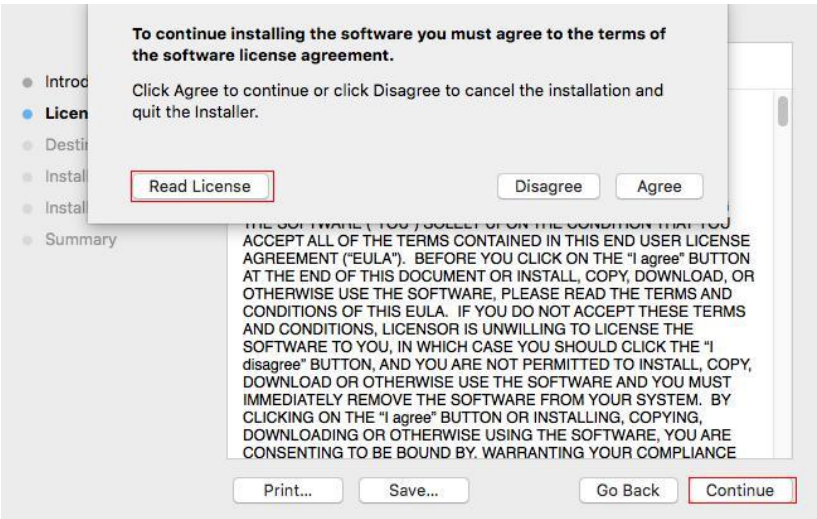
1. Turn the power of printer and computer on.

2. Insert the CD companying with printer in the CD driver of your computer, and double click Pantum XXX Series installation package. (**XXX** in Pantum XXX Series represents product model.)



3. Click “Continue”.

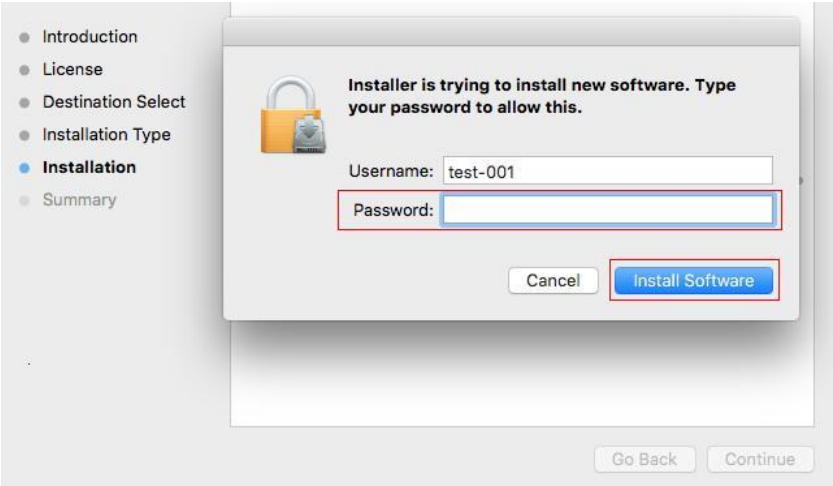
4. Read licensing agreement and then click “Continue”.



5. Click "Agree" on the prompt window popping out to accept the licensing agreement.

6. Click "Install".

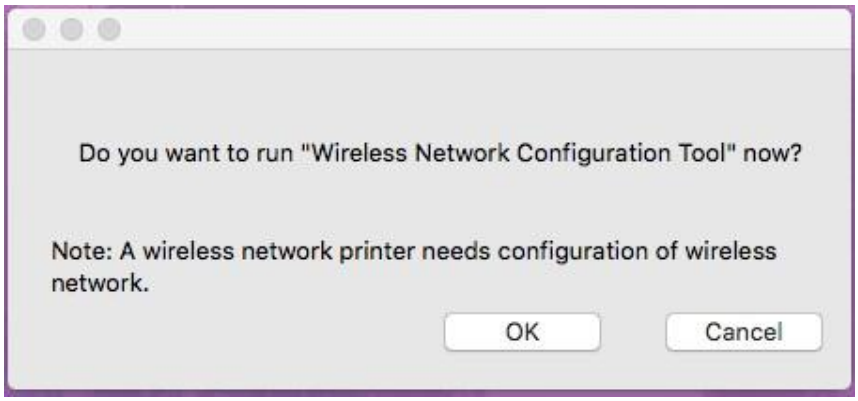
7. Input computer password and click "Install Software".



8. Click "Continue Installation" on the prompt window popping out.

9. The system will finish driver installation automatically.

• If using a USB cable to connect a computer with a Wi-Fi model printer, a wireless network configuration prompt window will pop up during driver installation, as shown in following picture.



Note: • click “Yes”, you can configure printer’s wireless network via wireless network configuration tool. When configuration is completed, unplug USB cable, and then on the pop-up “Add Printer” interface, you may add the network-connected printer.

• Click “No”, you can add a USB-connected printer on the pop-up “Add Printer” interface.

If using a USB cable to connect a computer with a non-Wi-Fi model printer, a “Add Printer” interface will pop up during the driver installation and you can add a printer here.

2.3 Add printer to macOS system

2.3.1 Add up the printer via USB

1. Connect the printer to computer with USB cable and then turn power on.

2. Enter the “System Preferences” – “Printers & Scanners” of computer.

3. Click button to select “Add Printer or Scanner”.

4. Select printer and then select the corresponding printer mode from the “Use” menu popping out.

5. Click “Add”.

2.3.2 Add up the printer via wireline connection

1. Turn the power of printer and computer on.

2. Connect the computer to wired network.

3. Connect the network cable to the network interface of printer, and make sure the printer is connected to the computer network.

4. Enter the “System Preferences” – “Printers & Scanners” of computer.

5. Click button to select “Add Printer or Scanner”.

6. Select printer and then select the corresponding printer mode from the “Use” menu popping out.

7. Click “Add”.

2.3.3 Add up the printer via wireless connection

1. Turn the power of printer and computer on.

2. Make sure the wireless network connection between computer and printer is set up.

Note： • In case of basic structure mode, connect wireless network printer to the access point (wireless router).

• In case of Wi-Fi Direct mode, connect wireless client to wireless network printer directly.

3. Enter the “System Preferences” – “Printers & Scanners” of computer.

4. Click button to select “Add Printer or Scanner”.

5. Select printer and then select the corresponding printer mode from the “Use” menu popping out.

6. Click “Add”.

2.3.4 Add AirPrint printer

1. Turn the power of printer and computer on.

2. Make sure the connection between printer and computer is set up (USB connection or network connection).

3. Enter the “System Preferences” – “Printers & Scanners” of computer.

4. Click + button to select “Add Printer or Scanner”.

5. Select printer and select “Secure AirPrint” (data encryption) or “AirPrint” (no encryption) in the “Use” option box.

6. Click “Add”.

Note： • When the printer is connected to computer with USB cable, the system will recognize and add AirPrint automatically.

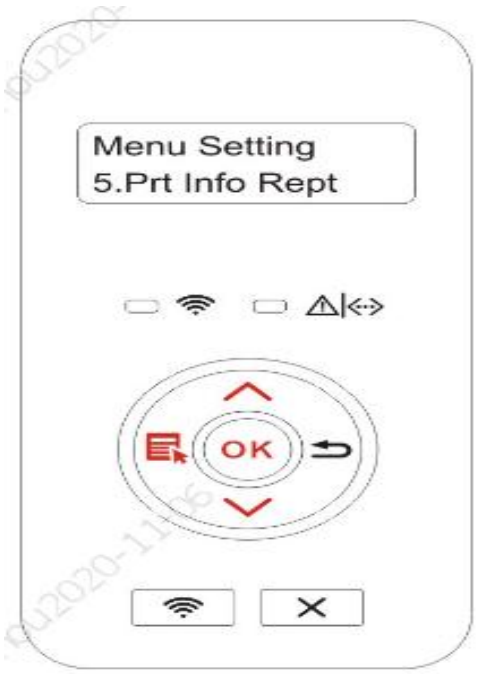
• If AirPrint printer of network connection is added, then the connecting USB cable should be disconnected first before adding the printer.

• AirPrint printer is named after the ending of "AirPrint".

3. Printer Information Report

3.1 LCD Panel Type

1. Press “Menu” to enter the menu setting interface.
2. Press “▲” or “▼”, and select “5. Info. report”.



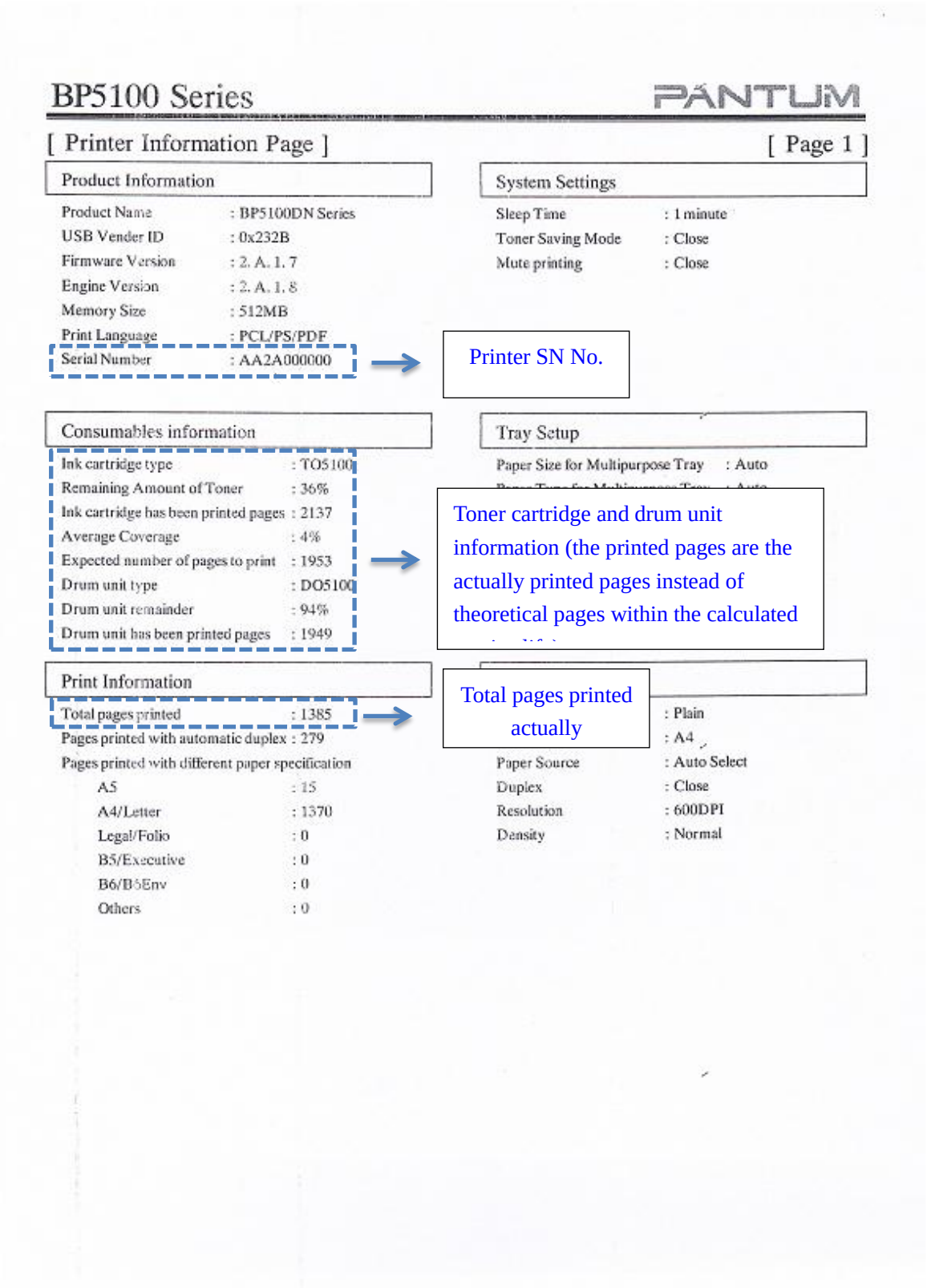
3. Press “OK” to enter the printer information report. You can print the product report according to the needs.

Product reports that could be printed include the Demo page, information page, menu structure page, network configuration page, WiFi hotspot list page, PCL typeface list page and PS typeface list page.

Note: The product report above is the most complete version, and may be different from that of the model you actually use.

3.2 Information Page

1. Printer Information Page



BP5100 Series PANTUM

[Printer Information Page] [Page 1]

Product Information

Product Name	: BP5100DN Series
USB Vender ID	: 0x232B
Firmware Version	: 2. A. 1. 7
Engine Version	: 2. A. 1. 8
Memory Size	: 512MB
Print Language	: PCL/PS/PDF
Serial Number	: AA2A000000

Printer SN No.

System Settings

Sleep Time	: 1 minute
Toner Saving Mode	: Close
Mute printing	: Close

Consumables information

Ink cartridge type	: TO5100
Remaining Amount of Toner	: 36%
Ink cartridge has been printed pages	: 2137
Average Coverage	: 4%
Expected number of pages to print	: 1953
Drum unit type	: DO5100
Drum unit remainder	: 94%
Drum unit has been printed pages	: 1949

Toner cartridge and drum unit information (the printed pages are the actually printed pages instead of theoretical pages within the calculated

Tray Setup

Paper Size for Multipurpose Tray	: Auto

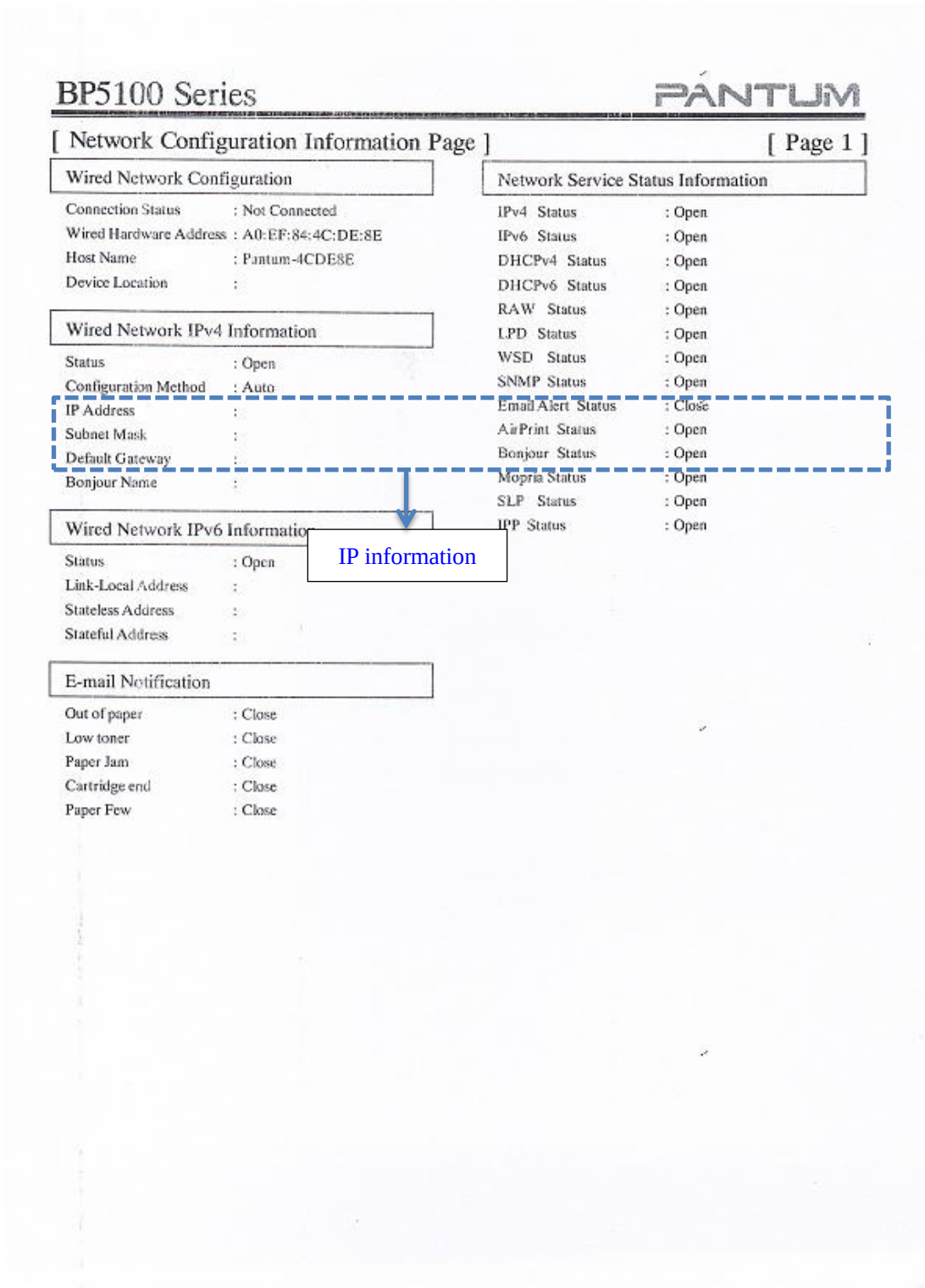
Print Information

Total pages printed	: 1385
Pages printed with automatic duplex	: 279
Pages printed with different paper specification	
A5	: 15
A4/Letter	: 1370
Legal/Folio	: 0
B5/Executive	: 0
B6/B5Env	: 0
Others	: 0

Total pages printed actually

	: Plain
	: A4
Paper Source	: Auto Select
Duplex	: Close
Resolution	: 600DPI
Density	: Normal

2. Network Configuration Information Page



BP5100 Series PANTUM

[Network Configuration Information Page] [Page 1]

Wired Network Configuration

Connection Status	: Not Connected
Wired Hardware Address	: A0:EF:84:4C:DE:8E
Host Name	: Pantum-4CDE8E
Device Location	:

Wired Network IPv4 Information

Status	: Open
Configuration Method	: Auto
IP Address	:
Subnet Mask	:
Default Gateway	:
Bonjour Name	:

Wired Network IPv6 Information

Status	: Open
Link-Local Address	:
Stateless Address	:
Stateful Address	:

E-mail Notification

Out of paper	: Close
Low toner	: Close
Paper Jam	: Close
Cartridge end	: Close
Paper Few	: Close

Network Service Status Information

IPv4 Status	: Open
IPv6 Status	: Open
DHCPv4 Status	: Open
DHCPv6 Status	: Open
RAW Status	: Open
LPD Status	: Open
WSD Status	: Open
SNMP Status	: Open
Email Alert Status	: Close
AirPrint Status	: Open
Bonjour Status	: Open
Mopria Status	: Open
SLP Status	: Open
IPP Status	: Open

IP information

4. Restoration of Factory Settings

4.1 LCD Panel Type

1. Press “Menu” to enter the menu setting interface.
2. Press “OK” and select “1. System Settings”.
3. Press “▲” or “▼”, select “5. Restore Factory Settings”, and then press “OK”.

4.2 Restoration of Factory Settings via Embedded Web Server

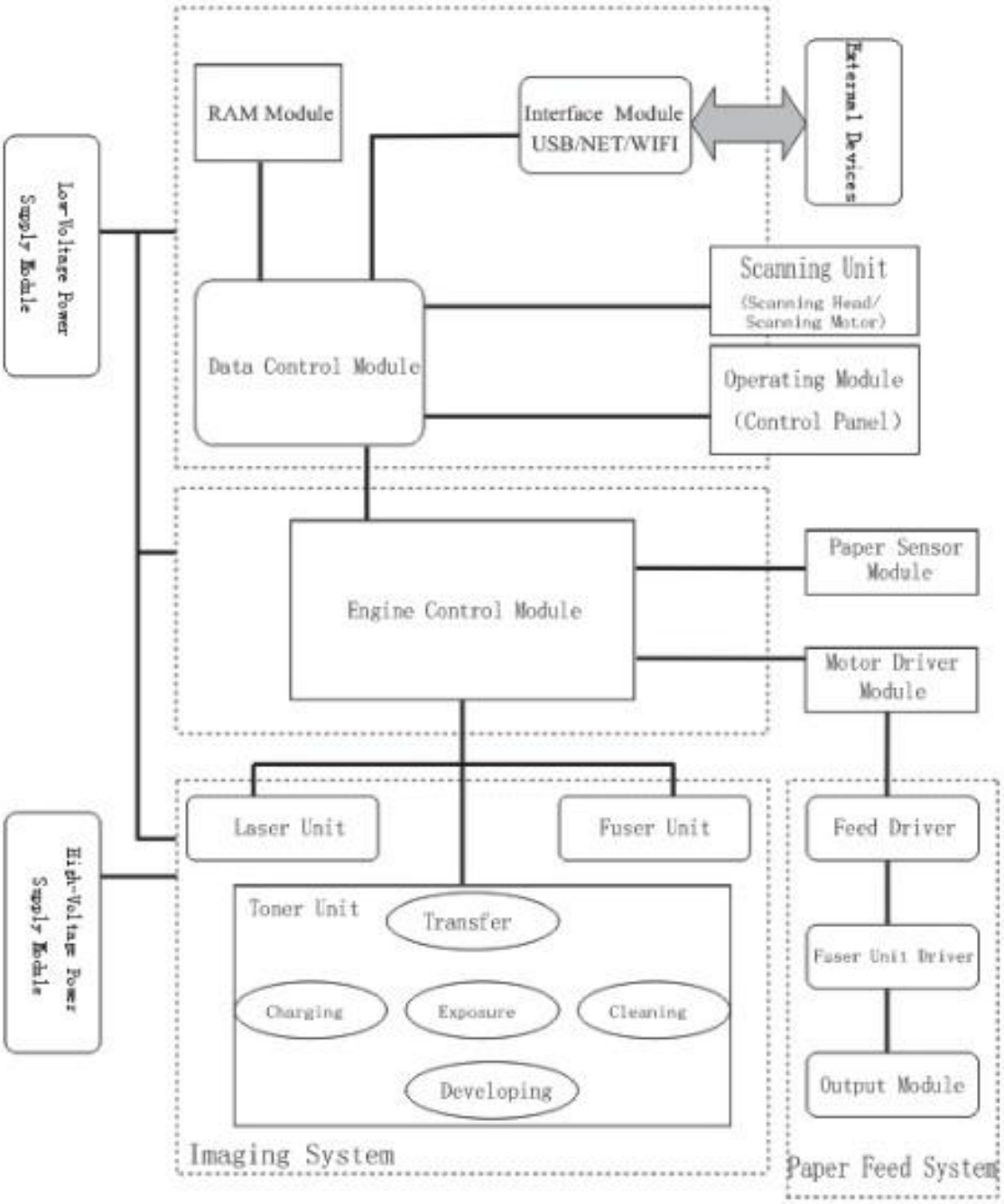
For the network type printer, the factory settings can be restored via the embedded Web server.

1. Connect the printer with the network. Enter the IP address of the printer in the address bar of the Web browser for access to the embedded Web server of the printer.
2. Click “User Management” and “Restore Factory Settings”. The printer will be restarted automatically after factory settings are restored.

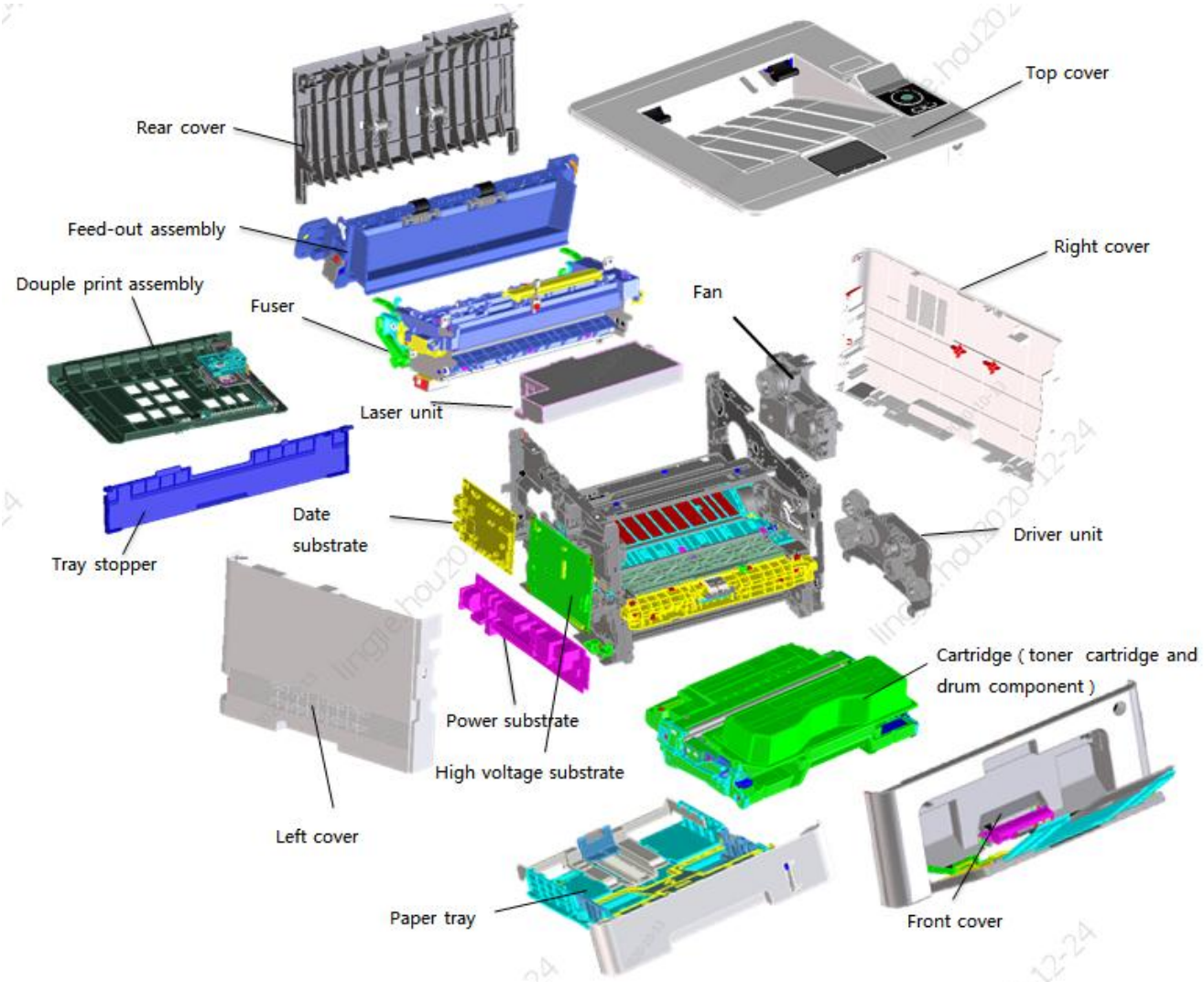
   Note: After the factory settings of the printer are restored, the username of the administrator will be restored into admin, and the login password into 000000.

5. Operating Principle

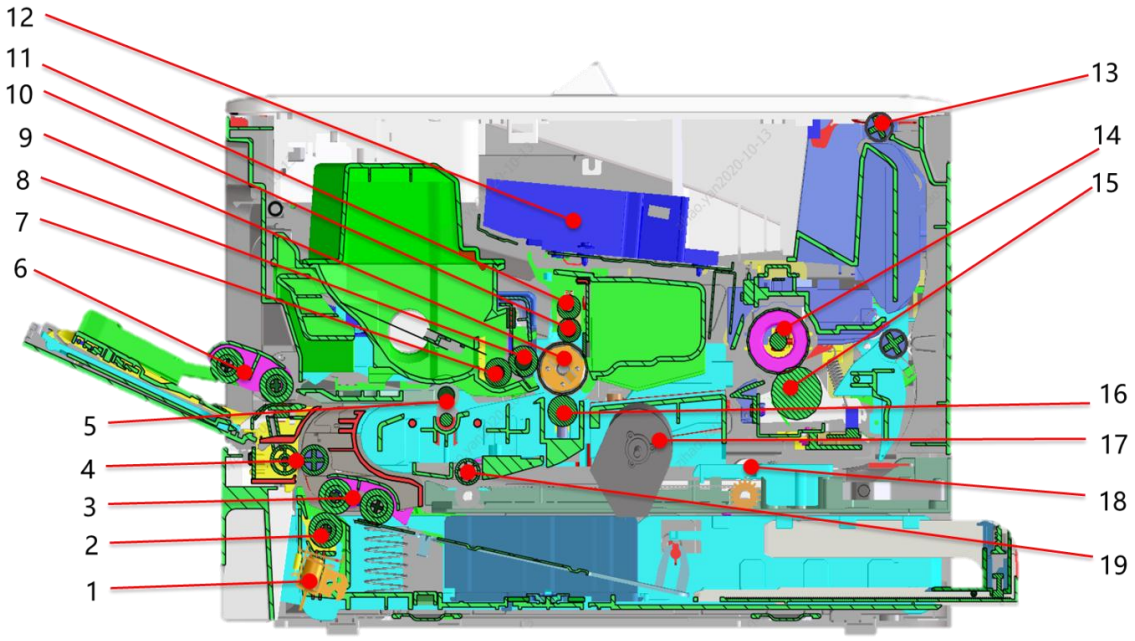
5.1 Overall Structural Diagram



5.2 Component Structure Diagrams

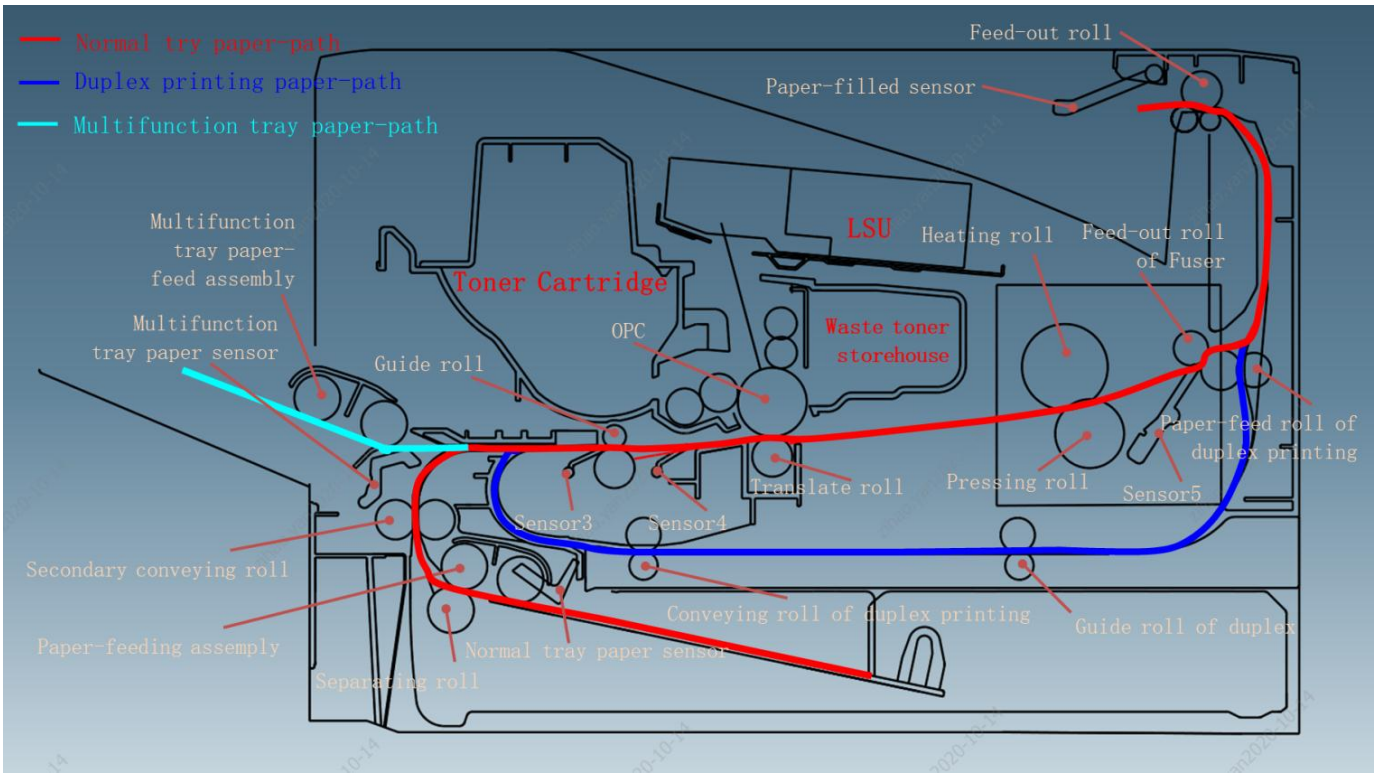


5.3 Mechanical Devices



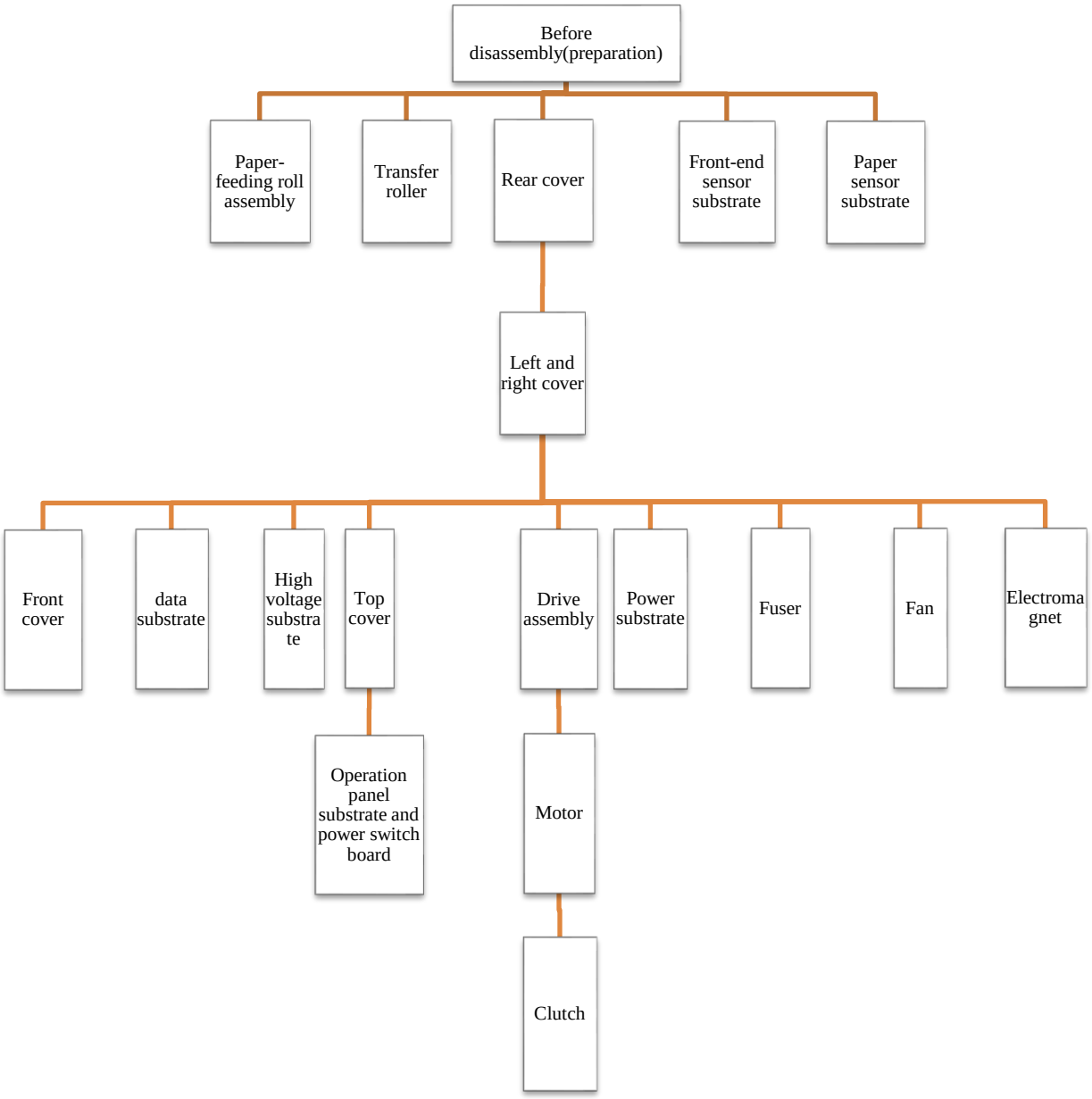
S/N	Name
1	Electromagnet
2	Separating roller
3	Paper-feeding roll assembly
4	Secondary conveying roller
5	Guide roller
6	Multifunction tray paper-feeding roll assembly
7	Toner-feeding roller
8	Developing roller
9	OPC
10	Charging roller
11	Cleaning roller
12	LSU
13	Feed-out roller
14	Hearting roller
15	Pressing roller
16	Transfer roller
17	Motor assembly
18	Guide roller of duplex printing unit
19	Conveying roller of duplex printing unit

5.4 Paper Path



6. Disassembly and Installation

6.1 Disassembly Flowchart



6.2 Disassembly Steps

6.2.1 Before disassembly

1. Before disassembly, shut down the power of the printer, and pull out the power cord, USB cable and network cable.
2. Remove the toner cartridge.

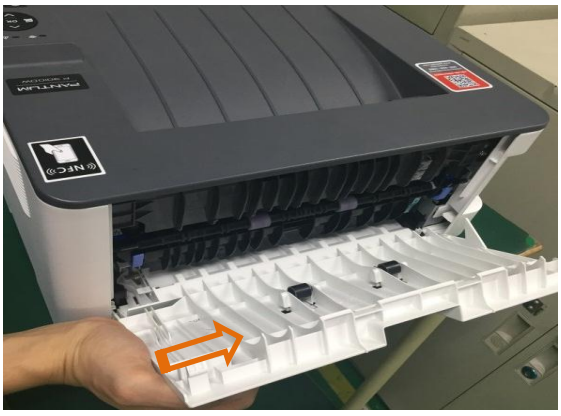
Note: Package the toner cartridge with black tapes to prevent the photosensitive drum from being damage as a result of exposure.

3. Remove the paper tray

4. Remove the duplex printing unit.

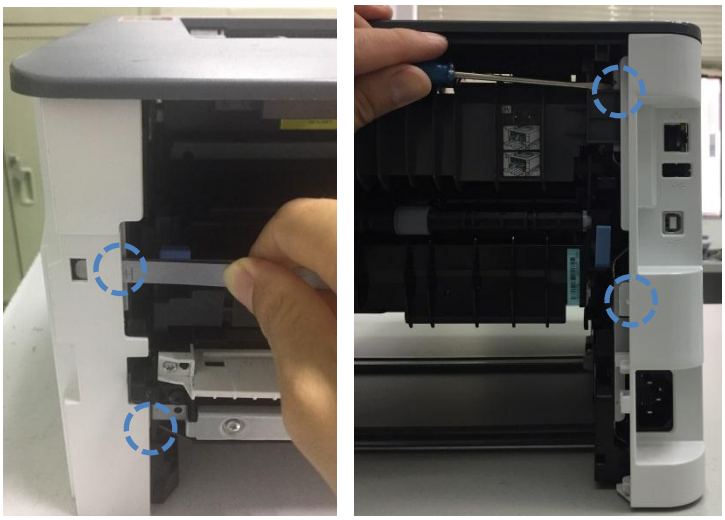
6.2.2 Rear cover

Open the rear cover, and push it out of the buckle, using the palm.



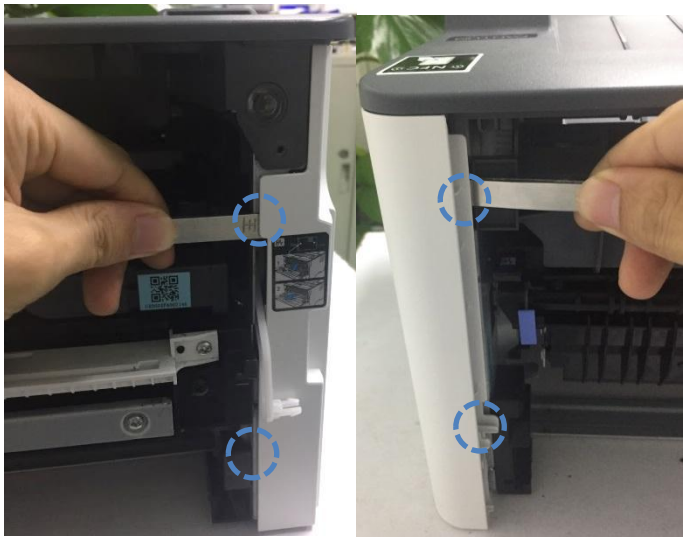
6.2.3 Left cover

Remove the front cover and rear cover, pry four buckles of the left cover, and remove the left cover.



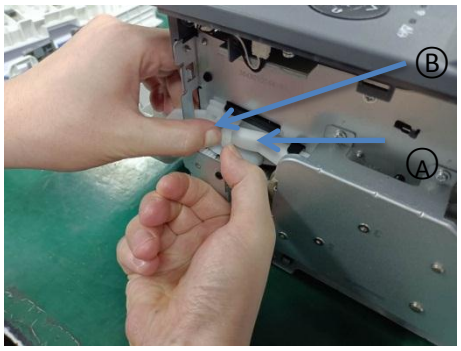
6.2.4 Right cover

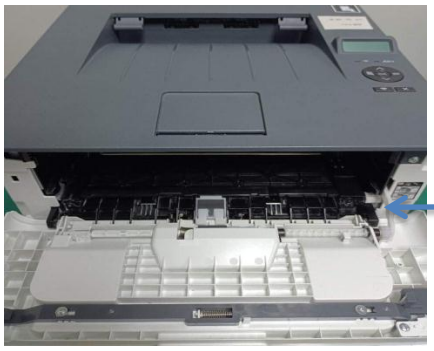
Remove the front cover and rear cover, pry four buckles of the right cover, and remove the right cover.



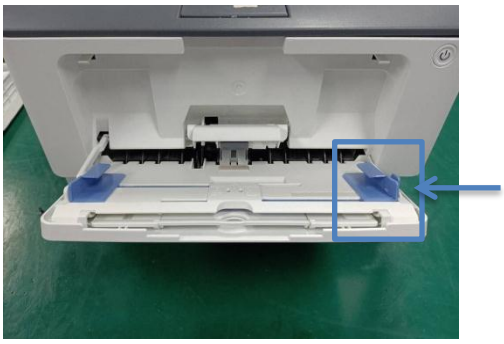
6.2.5 Front cover

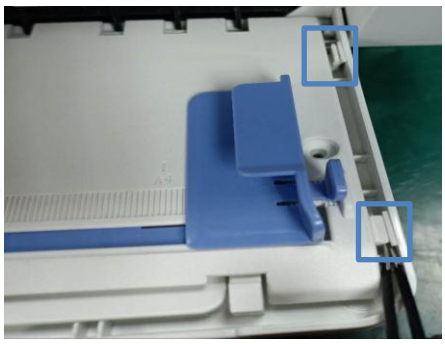
1. Remove the right cover, push the slider rail B to the left side when press the buckle A, then pull out the right connecting link of front cover to the right side.



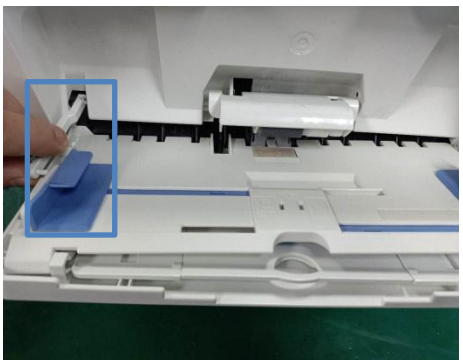


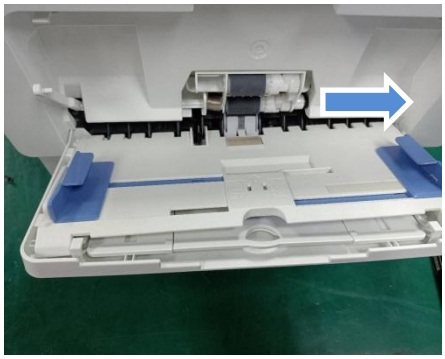
2. Open the multifunctional paper feeding tray, then pry two buckles on the right side with tweezers. Picture as below:



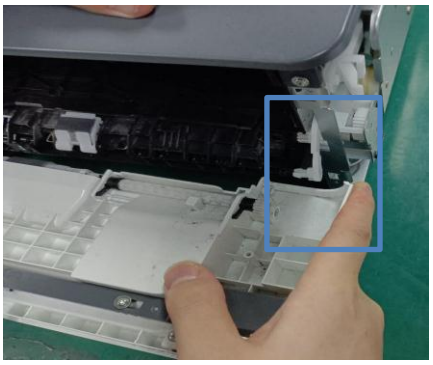


3. Loose the connecting link on the left side, then remove the paper tray to the right.



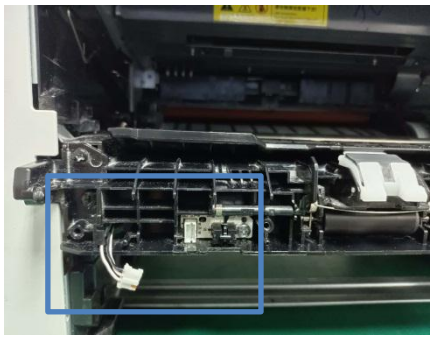


4. Release the latch when bend the paper tray's cover, then remove the chasis. Open the front cover, and remove front cover after releasing the buckle with your hand to right side.

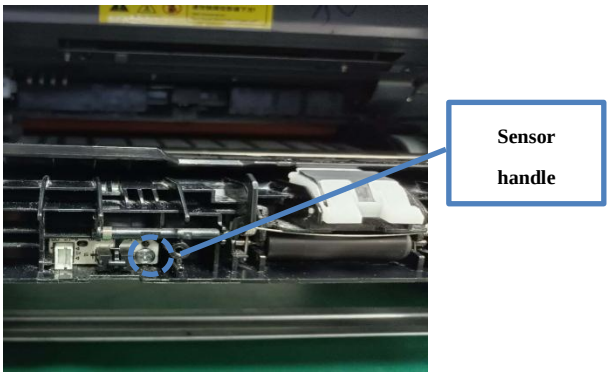


6.2.6 Paper sensor substrate(multifunctional paper feeding tray)

1. Remove the front cover, and remove the sensor substrate cover after releasing screws on it with cross screwdriver, then disconnecting the substrate cable.

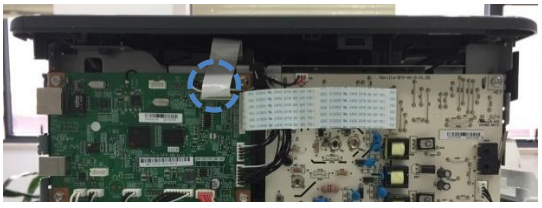


2. Release the screws and remove the sensor substrate. (Pay attention to raise the detector handle when you remove the sensor substrate, in case the sensor handle is damaged.)

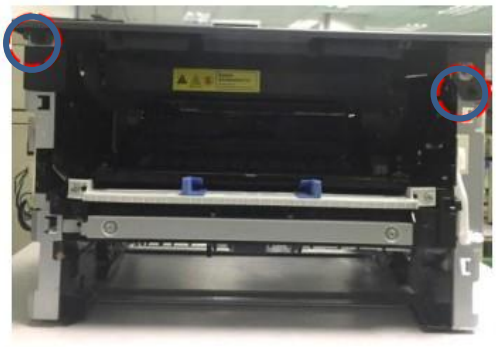


6.2.7 Top cover

1. Remove the front cover, rear cover, left cover and right cover, and pull out the wire connected with the top cover on the left data substrate.

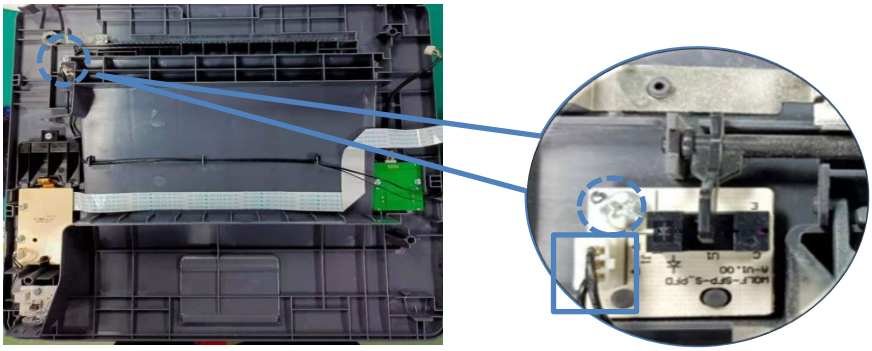


2. Remove four screws of the top cover. Then remove the top cover.



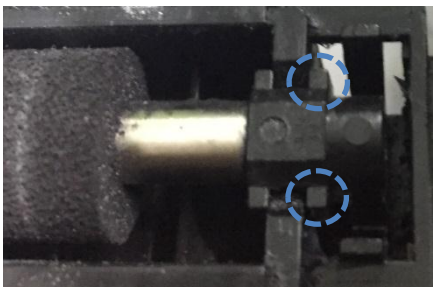
6.2.8 Paper-full sensor

Remove top cover and disconnect the sensor cable on top cover. Use cross screwdriver to release the screw, then remove the sensor.



6.2.9 Transfer roll

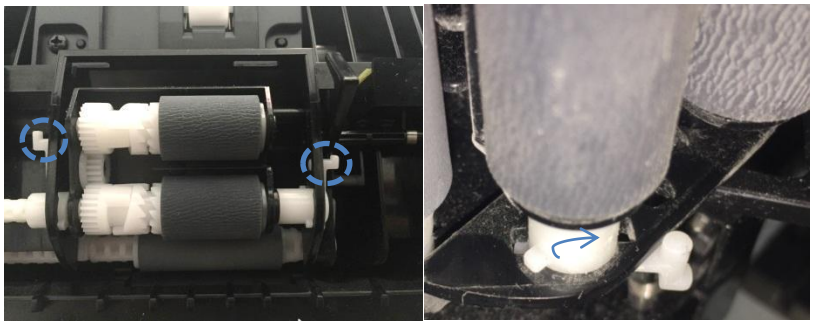
Open the front cover, pull out the clamping jaw at the right end of the transfer roll, remove the bushing at the right end of the transfer roll, and then remove the transfer roll.



Note: Do not directly touch the sponge of the transfer roll by handle while removing the transfer roll, in order to avoid printing abnormality.

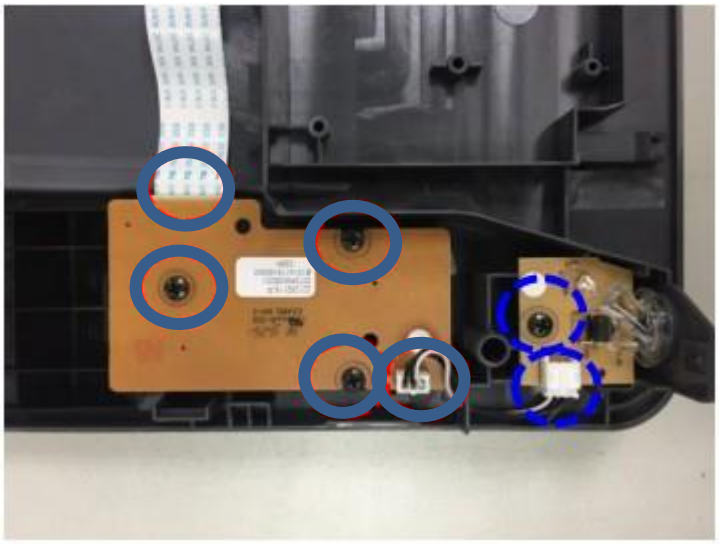
6.2.10 Paper-feeding roll assembly

Pry up 2 clamping jaws, rotate the shaft pins via the clamping jaws until the pins are located in holes, and remove the paper-feeding roll assembly.



6.2.11 Operation panel substrate and power switch board

After removing the top cover, remove the screws and plugs of the top cover, and take out the operation panel substrate and power switch board.

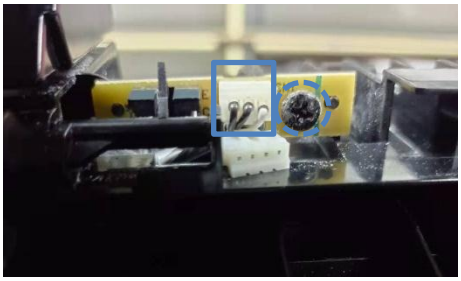


6.2.12 Paper sensor substrate

Pull out the paper tray and duplex printing unit, remove the screw and plug of the sensor substrate, and then remove the paper sensor substrate.

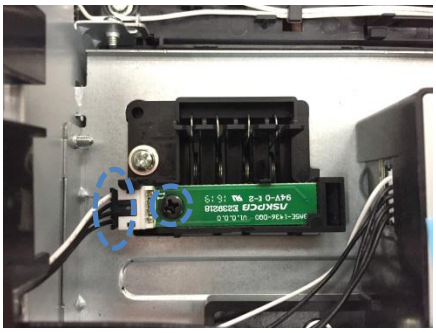
6.2.13 Paper-low sensor

Remove Paper sensor substrate , and remove the screw, then remove paper-low sensor after disconnecting the sensor cable.



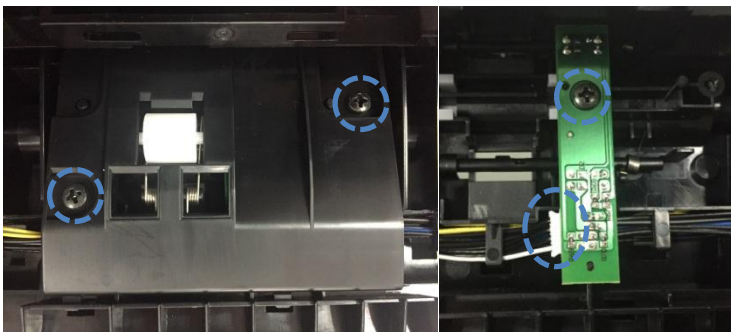
6.2.14 Chip adapter substrate

After removing the top cover, remove the substrate screw and plug, and take out the chip adapter substrate.



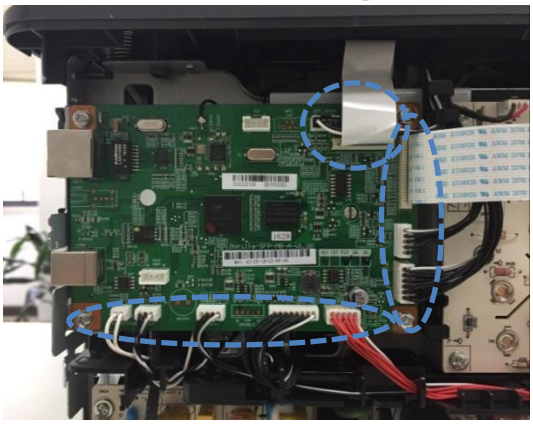
6.2.15 Front-end sensor substrate

Pull out the paper tray and duplex printing unit, remove two screws of the cover (at the bottom of the printer), and take out the cover. Remove the screw and plug of the sensor substrate, and take out the front-end sensor substrate.

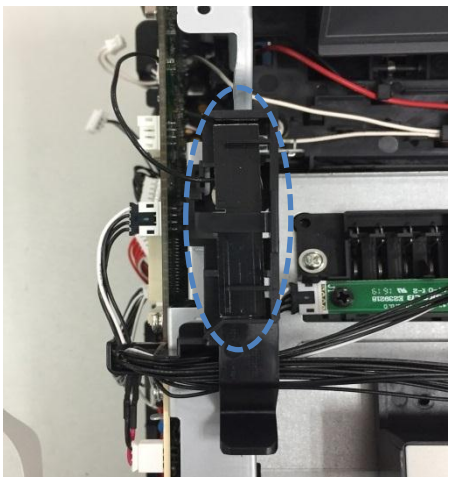


6.2.16 Data substrate

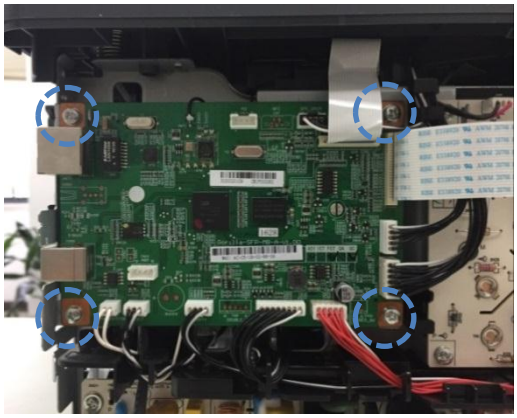
1. Remove the front cover and rear cover, and pull out 10 harness plugs of the data substrate.



Note: For the WiFi type printer, remove the top cover, lift the buckle of WiFi antenna, and take out the WiFi antenna.

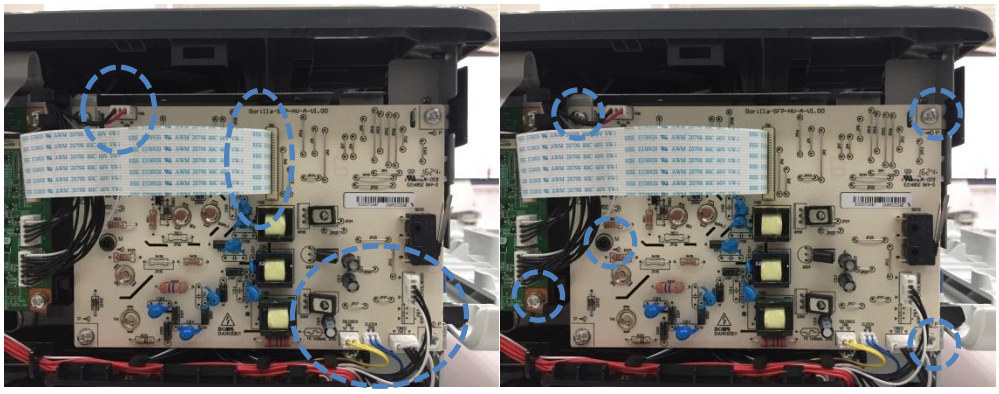


2. Remove the four screws and data substrate.



6.2.17 High voltage substrate

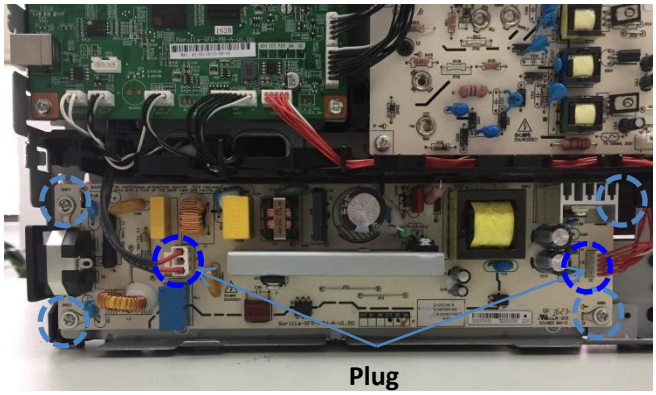
Remove the front cover and rear cover, and pull out six harness plugs of the high-voltage substrate (Figure 1). Remove the five screws (Figure 2) and then high-voltage substrate.



Note: You can see four conductive springs (easy to fall) after removing the engine substrate. Keep them properly, and install them in the correct positions. Among the four conductive springs, the one at the bottom is different from the other three.

6.2.18 Power substrate

Remove the front cover and rear cover, and pull out two plugs of the power substrate. Remove the four screws and then power substrate.

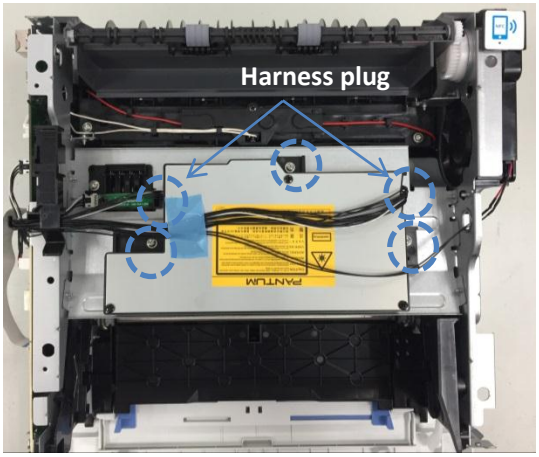


Note:

The large capacitor of the substrate is still energized immediately after shutdown of the printer. It should be discharged before disassembly, to avoid electric shock.

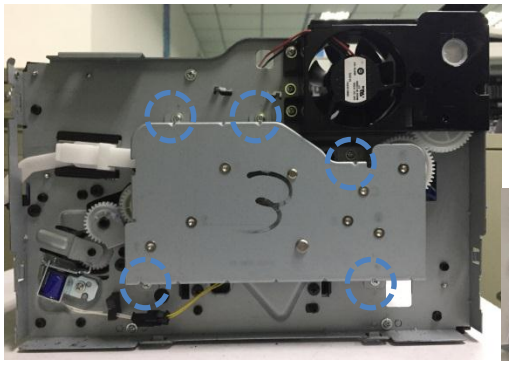
6.2.19 Laser unit

Remove the front cover, rear cover, left cover, right cover and top cover, and pull out two plugs of the laser unit. Remove the three screws and then laser unit.



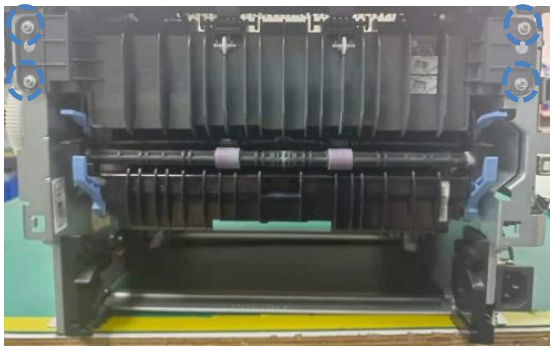
6.2.20 Driver unit

Remove the right cover and five screws of the driver unit. Then remove the driver unit (Note: pay attention to gear protection in the disassembly process, in order to prevent the gear from damage caused by falling down).

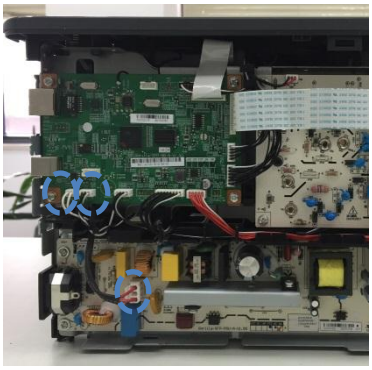


6.2.21 Fuser

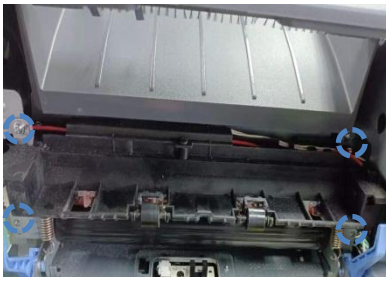
1. Remove the rear cover, left cover, right cover and driver unit. Then remove four screws of the feed-out assembly, and take out the feed-out assembly.

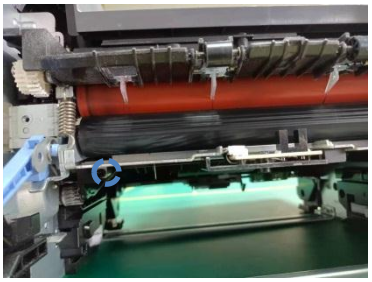


2.Remove the three plugs of the data substrate and power substrate, then remove feed-out roll.



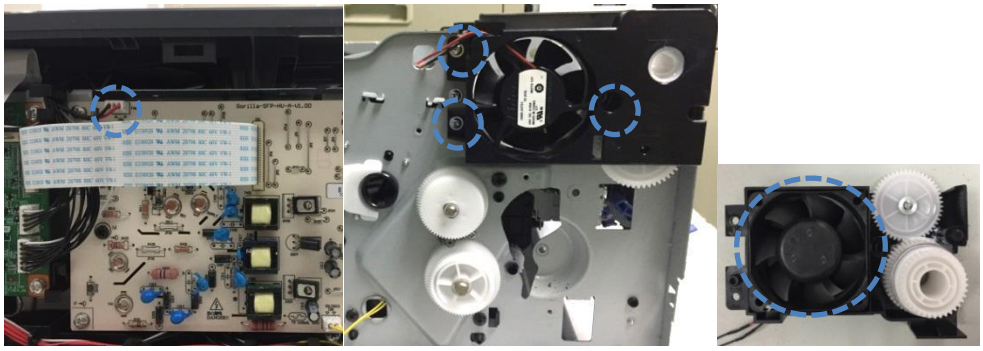
3. Remove five screws of the fuser. Then remove the fuser.





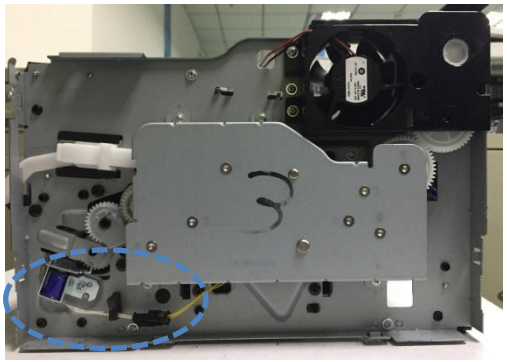
6.2.22 Fan

Remove the front cover, rear cover, left cover, right cover and top cover, and pull out the fan plug from the high voltage substrate. Remove the three screws of fan assembly. Then remove the fan assembly and take out the fan (Note: pay attention to gear protection in the disassembly process, in order to prevent the gear from damage caused by falling down).



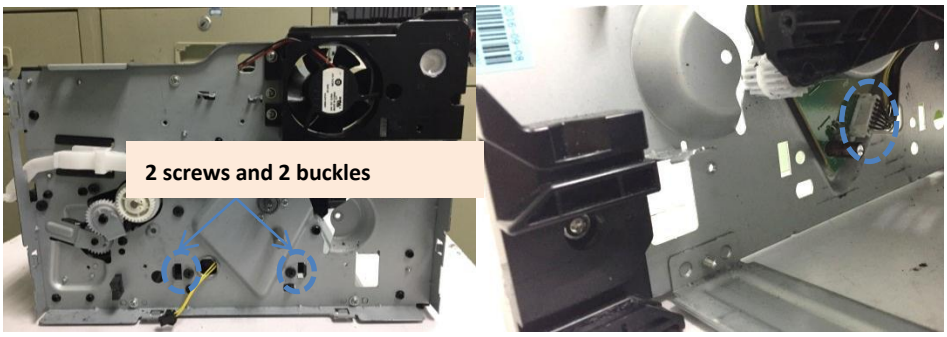
6.2.23 Electromagnet

Remove the right cover, and pull out the electromagnet plug. Remove one screw of the electromagnet, and take out the electromagnet.

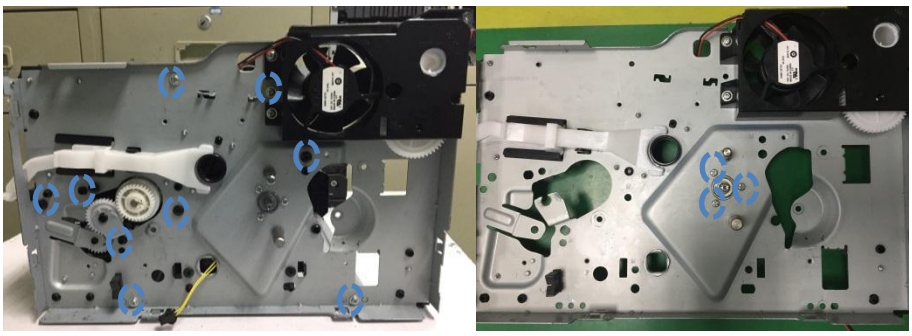


6.2.24 Motor

1. Remove the driver unit, two screws of the right frame and two buckles of the slide rail of the paper tray. Take out the slide rail of the paper tray, and pull out the harness plug of the motor.

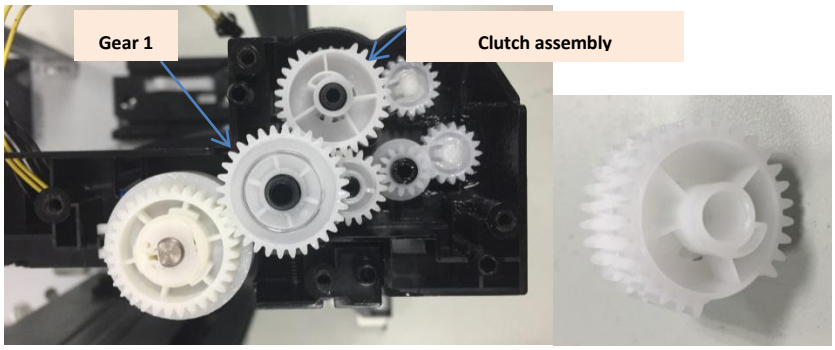


2. Remove the five screws of the right frame, the right frame and the three screws of the motor in sequence. Then remove the motor.



6.2.25 Clutch assembly

1. Remove the right frame and gear 1, and take out the clutch assembly.



7. Maintenance

7.1 Printer cleaning

Note:

Please use mild detergents.

Do not clean the printer with highly corrosive liquid such as diluents or benzene. Otherwise, the surface may be damaged.

Do not use the cleaning material containing ammonium hydroxide.

Do not use isopropyl alcohol to wipe dust on the control panel. Otherwise, the panel may be cracking.

Some parts of the printer are still at high temperature within a short time after use. Do not directly touch the parts in the shaded areas of the figures below, in case of contact with internal components after opening the front or rear cover of the printer.

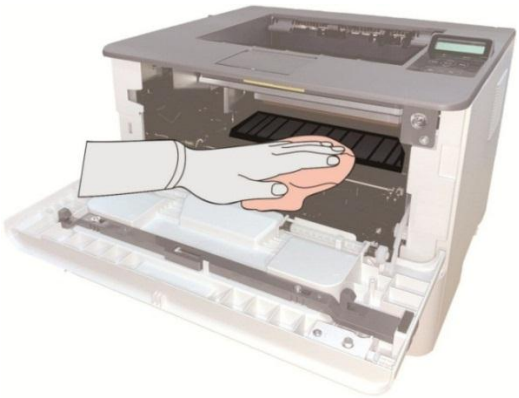
1. Turn off the main power switch, and unplug the power cord and other connecting wires.
2. Use soft cloth to wipe the outside of the printer, to remove dust.

3. Open the front cover, and take out the laser toner cartridge out along the guide rail.

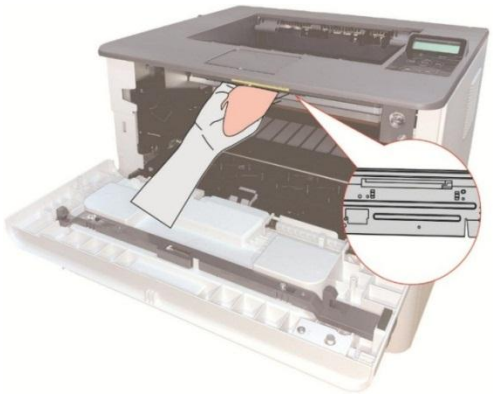
Note:

- Remove metal articles such as the watch and bracelet before removing the toner cartridge, as internal components may be damaged in the case of contact.
- After removing the toner cartridge, put it into a protective bag or wrap it with thick paper, to prevent damage caused by direct light.

4. As shown below, clean the inside of the printer by gently wiping the shaded area with dry and lint-free cloth.



5. Wipe the LSU lens of the printer gently with dry and lint-free cloth.



6. Open the auto feed tray of the printer, and gently wipe the pickup roller with dry and lint-free cloth.

7.2 Use and Maintenance of Consumables

7.2.1 About toner cartridge and drum component

1. Use and maintenance of toner cartridge

Use the original toner cartridge for better printing quality. Pay attention to the following items while using the toner cartridge.

- Do not take the toner cartridge out of the package, unless required immediately.
- Do not refill the toner cartridge without permission; otherwise, the damages caused will be excluded in the scope of warranty of the printer.
- Keep the toner cartridge in a cool and dry place.
- Keep the toner cartridge away from ignition sources, as the toner inside is flammable and may cause fire.
- Pay attention to toner leakage while taking out or removing the toner cartridge. In case of skin contact with toner or spattering into the eyes or mouth as a result of toner leakage, immediately wash them with clean water, or see a doctor if feeling unwell.
- Keep the toner cartridge away from the area accessible to children.

2. Service life of toner cartridge

- The service life of the toner cartridge depends on the toner quantity needed for printing.
- For the printer with LCD control panel, if the toner cartridge indicator is normally ON in orange or the LCD screens displays “The Toner Cartridge Life Expired”, it means that the service life of the toner cartridge is expired. Replace the toner cartridge.

3.Service life of drum component

- For the printer with LCD control panel, if the LCD screen displays “The Drum Component Life Expired”, it means that the service life of the drum component is expired. Replace the drum component.

7.2.2 Replacement of toner cartridge and drum component

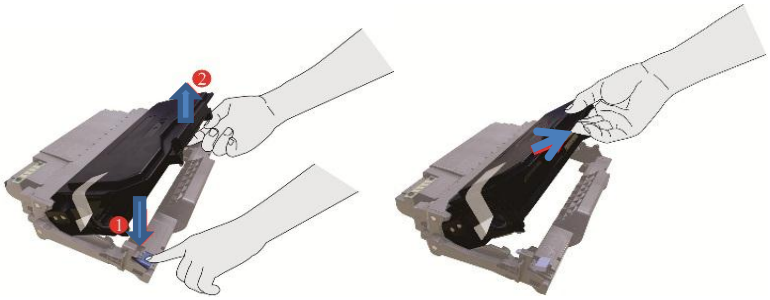
Note：Please pay attention to the following matters before replacing toner cartridge:

- Since there may be toner on the surface of toner cartridge, please pay attention while taking it out to avoid spattering.
- Please place the toner cartridge taken out on paper to avoid large-scale spattering of toner.
- When installing, do not touch the surface of the toner cartridge, so as to avoid scratching it.

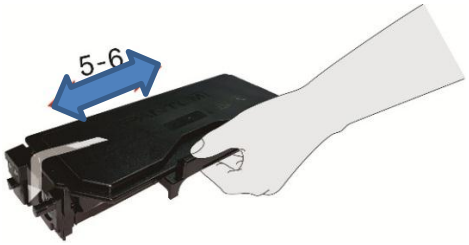
Toner cartridge replacement steps:

1. Turn off the power of the printer. Open the front cover by pressing the front cover button, and take out the laser toner cartridge along the guide rail.

2. Press the blue button on the left side of drum component with left hand and lift the toner cartridge handle with right hand at the same time to take the toner cartridge out.

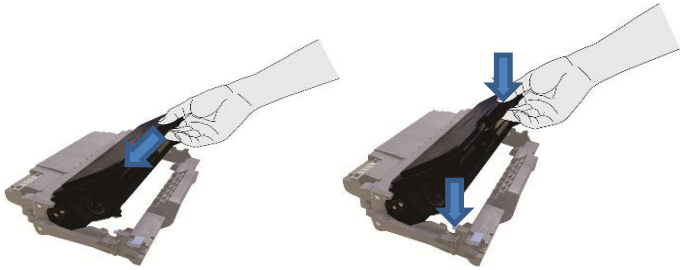


3. Open the package of the new toner cartridge and hold the toner cartridge handle to shake it left and right for 5 – 6 times, so that the toner inside can be uniformly dispersed.



4. Pull the seal out and take the toner protection cover out.

5. Install the drum component along the inner track to finish installing toner cartridge.

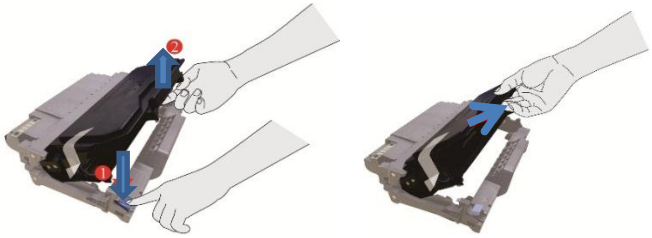


6. Take the drum component with toner cartridge installed and install it inside the printer along the inner track of printer to finish installing. Close the front cover.

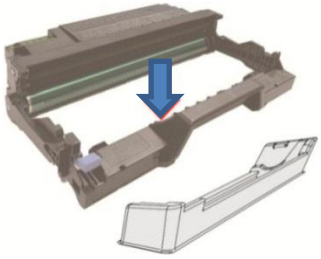
Drum component replacement steps:

1. Turn off the power of the printer. Open the front cover by pressing the front cover button, and take out the laser toner cartridge along the guide rail.

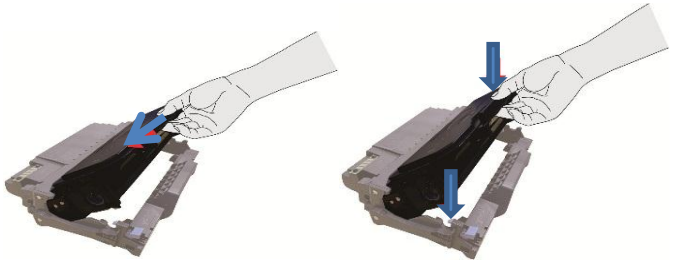
2. Press the blue button on the left side of drum component with left hand and lift the toner cartridge handle with right hand at the same time to take the toner cartridge out.



3. Open the package of new drum component, take the protection device of drum component, and put the drum component on a horizontal table.



4. Install the drum component along the inner track to finish installing toner cartridge.



5. Take the drum component with toner cartridge installed and install it inside the printer along the inner track of printer to finish installing. Close the front cover.

7.3 Optional paper tray's disassembly and installation

7.3.1 Install optional paper tray

This printer supports two optional paper trays at most, and each paper tray can be put in at most 550 pages 80g/ m ²papers. If you need purchase optioal paper tray, please contact local dealer.

1. Turn off the printer power switch.

2. Shut down the power of the printer, and pull out the power cord, USB cable and network cable.

3. Open paper tray's outer packing, and remove all packages.

4. Please make sure the printer and optional paper tray is placed correctly, picture is shown as below:

5.Connect power cable to the printer and open the power.

After install optional paper tray, you need to update printer's condition status. (how to update, please refer to "update optional paper tray condition status")

Note： About how to install the paper tray, please refer to the installation guide.

7.3.2 Remove optional paper tray

1. Shut off the printer power.

2. Unplug the power cord from power outlet and printer.
3. Lift up the printer, and remove optional paper tray.

After removing optional paper tray, you need to update printer condition status ((how to update, please refer to "update optional paper tray condition status")

7.3.3 Update optional paper tray condition status

After installation/disassembly of paper tray each time, you need to update the printer driver condition. This section takes Windows 7 as example.

1. Install printer driver procedure.
2. Enter into printer “start menu”-“control panel”-check “equipment and printer”.
3. Right click printer icon, pull down the menu, choose “printer property”.
4. Enter into “auxiliary setup”, and set about “configuration sections”.
5. Click “update-check printer”-“confirm/apply” and update printer’s condition.

8. Error Message and Troubleshooting

8.1 Check before maintenance

I. Operating environment

d) Keep the power voltage at the rated voltage AC220-240V on the nameplate.

e) Install the printer on the secure and horizontal surface.

f) Keep the indoor temperature of 10℃ to 35℃ and relative humidity of 20% to 80%.

g) Do not install the printer in a dusty place.

h) Do not expose the printer to ammonia or other harmful gases.

i) Do not install the printer in a hot or humid area (such as beside the water or humidifier).

j) Do not make the printer exposed to the direct sunlight.

k) Keep good ventilation of the room where the printer is installed.

l) Do not install the printer in a place where the vent may be blocked.

II. Print paper

m) Check whether the print paper type complies with the specifications. [If the paper is too thick or thin or easy to roll, jamming or feeding problems may occur or the printed image may be blurring.]

n) Check whether the print paper is wet. [If the paper is wet, use dry paper and check whether the printing quality is improved.]

o) Check whether the print paper is short-texture or acidic. [In this case, the printing quality problem may be caused.]

III. Consumables

p) If the indicator on the control panel of the printer flickers in yellow or the LCD screen displays that toner is used up, replace the toner cartridge promptly.

q) Check whether the applied toner cartridge is designated by Pantum.

8.2 Error Message

Error Message	Cause	Solution
The printer is not connected.	1. The USB cable or power cord is not connected. 2. The main control board fails.	1. Properly connect the USB cable and power cord. 2. Replace the main control board.
The front cover is open.	The front cover is not fully closed.	Close the front cover.
Auto paper tray lacking-paper or paper feeding fails.	1. Check whether there is paper. 2. The print paper is not installed properly. 3. The pickup roll is dirty or aged.	1. Make sure that there is paper in the paper tray. 2. Properly install the print paper. 3. Clean or replace the pickup roll.
Multifunctional paper feeding tray lacking-paper, paper feeding fails.	1. Multifunctional paper feeding tray's paper sensor cable is not connected. 2. Multifunctional paper feeding tray's paper sensor is abnormal. 3. Multifunctional paper feeding tray's paper detector handle is abnormal. 4. Multifunctional paper feeding tray's pickup roll is dirty or aged. 5. Multifunctional paper feeding tray's clutch is abnormal. 6. Data board is abnormal.	1. Reconnect the multifunctional paper feeding tray's paper sensor cable. 2. Replace the multifunctional paper feeding tray's paper sensor. 3. Replace the multifunctional paper feeding tray's paper detector handle. 4. Clean or replace the pickup roll. 5. Replace multifunctional paper feeding tray's clutch.

		6. Replace data board.
Auto paper tray's paper- low.	1. Auto paper tray's paper-low sensor cable is loose. 2. paper-low sensor is abnormal. 3. paper-low sensor cable is abnormal. 4. Engine Board is abnormal.	1. Reconnect sensor cable. 2. Replace paper-low sensor. 3. Replace paper-low sensor cable. 4. Replace engine board.
The output bin is full.	1. Paper-full sensor cable is loose. 2. Paper-full sensor cable is abnormal. 3. Paper-full sensor is abnormal. 4. Data board is abnormal.	1. Reconnect sensor cable. 2. Replace paper-full sensor cable. 3. Replace paper-full sensor. 4. Replace data board
Paper is jammed.	1. The print paper is not installed properly. 2. The paper is damp. 3. The pickup roll is dirty. 4. The front-end sensor fails. 5. The fuser unit is damaged.	1. Install the print paper properly. 2. Use dry paper. 3. Clean the pickup roll. 4. Check or replace the front-end sensor. 5. Replace the fuser unit.
The drum component and carbon cartridge are not detected.	1. The drum component and toner cartridge are not installed or installed improperly. 2. The chip contact of the drum component or toner cartridge is dirty or damaged. 3. The chip of the drum component or toner cartridge is damaged.	1. Install the drum component and toner cartridge properly. 2. Replace the high voltage substrate. 3. Use new drum component and toner cartridge.
The drum component and toner cartridge are not matching.	The models of the drum component and toner cartridge are not matching.	Replace the drum component and toner cartridge.
The life of the drum	The print pages of the drum	Replace the drum component

component and toner cartridge is expired.	component and toner cartridge are used up.	and toner cartridge.

8.3 Error Code

Warning!

The product has the function of self-diagnosis. If any fault is detected, the error code and warning message will be displayed on the screen or computer.

Error Code	Cause	Check and Measures
Internal error 01 of printer Please call the customer service staff.	Abnormality of main motor	1. Check the connecting wire of the motor; 2. Replace the motor; 3. Restart the printer; 4. Replace the data substrate.
Internal error 02 of printer Please call the customer service staff.	Abnormality of synchronization of laser unit	1. Check the connecting wire of the laser unit; 2. Replace the laser unit; 3. Restart the printer; 4. Replace the data substrate.
Internal error 03 of printer Please call the customer service staff.	Abnormality of motor of laser unit	1. Check the connecting wire of the laser unit; 2. Replace the laser unit; 3. Restart the printer; 4. Replace the data substrate.
Internal error 04 of printer Please call the customer service staff.	Too long heating of heating roll under full power	1. Check the connecting wire of the fuser unit; 2. Replace the fuser unit; 3. Replace the power substrate; 4. Replace the data substrate.
Internal error 05 of printer Please call the customer service staff.	Too slow temperature rise of heating roll	
Internal error 06 of printer Please call the customer service staff.	Abnormality of thermistor of heating roll	
Internal error 07 of printer Please call the customer service staff.	Too slow cooling of heating roll	

Internal error 08 of printer Please call the customer service staff.	Abnormal temperature of heating roll	
Internal error 09 of printer Please call the customer service staff.	Failure of heating roll to reach the start temperature of laser unit	
Internal error 10 of printer Please call the customer service staff.	Failure of heating roll to reach the pickup temperature	
Internal error 11 of printer Please call the customer service staff.	Fault of engine system	1. Restart the printer; 2. Replace the data substrate.
Internal error 12 of printer Please call the customer service staff.	Abnormality of image output unit or video module	1. Restart the printer; 2. Replace the data substrate.
Internal error 13 of printer Please call the customer service staff.	Failure of fan connection	1. Check the connecting wire of the fan; 2. Replace the fan; 3. Restart the printer; 4. Replace the data substrate.
Internal error 14 of printer Please call the customer service staff.	Temperature out of control	1. Make sure that the cable between the fuser unit and base board is connected correctly. 2. Replace the fuser unit if it is failure. 3. Replace the power board if it is failure. 4. Replace the data board if it is failure.
Internal error 15 of printer Please call the customer service staff.	The rated heating within 16 seconds does not reached the specified temperature	1. Make sure that the cable between the fuser unit and base board is connected correctly. 2. Replace the fuser unit if it is failure. 3. Replace the data board if it is failure. 4. Replace the power board if it is failure.

Internal error 21 of printer Please call the customer service staff.	Communication failure (WSD communication error [the wired network connection and wifi connection cannot be distinguished])	1. Check whether network connection is normal (the same as the internal error 26); 2. Check whether wifi connection is normal (the same as the internal error 27); 3. Replace the data substrate.
Internal error 22 of printer Please call the customer service staff.	Invalid command (reserved)	1. Restart the printer; 2. Replace the data substrate.
Internal error 23 of printer Please call the customer service staff.	Invalid parameter (reserved)	1. Restart the printer; 2. Replace the data substrate.
Internal error 24 of printer Please call the customer service staff.	(reserved)	1. Restart the printer; 2. Replace the data substrate.
Internal error 25 of printer Please call the customer service staff.	USB connection error	1. Check whether the USB plug is connected securely. If the USB plug is connected properly, restart the printer or the device connected to the printer. 2. Replace the data substrate.
Internal error 26 of printer Please call the customer service staff.	Network connection error	1. Check whether the network cable is connected properly; 2. Restart the printer; 3. Replace the data substrate.
Internal error 27 of printer Please call the customer service staff.	wifi connection error	1. Check whether the wireless connection of the printer is enabled; 2. Check the network environment, and make sure that the wireless network is normal; 3. Check whether the connecting wire between the internal antenna and data substrate is connected properly;

		4. Restart the printer; 5. Replace the data substrate.
Optional paper tray 1 error 1	Middle plate lifting failed.	1. Check if there's foreign material hinder the middle plate lifting. 2. Check the middle plate's limit switch signal is normal or not.
Optional paper tray 1 error 2	Motor error	Replace the paper tray motor
Optional paper tray 1 error 3	The connection between engine board and paper tray 1 failed.	Check the interface's contact between engine board and paper tray 1 is good or not.
Optional paper tray 2 error 1	Middle plate lifting failed.	1.Check if there's foreign material hinder the middle plate lifting. 2. check the middle plate's limit switch signal is normal or not.
Optional paper tray 2 error 2	Motor error	Replace the paper tray motor
Optional paper tray 2 error 3	The connection between engine board and paper tray 1 failed.	Check the interface's contact between engine board and paper tray 1 is good or not.

8.4 Removal of Jammed Paper

Note:

•After all pieces of paper jammed are taken out according to the following steps, close the front cover and tidy the paper in the papery tray. The printer will recover to print automatically.

• If the printer does not start printing, please check whether all the jammed paper inside the printer has been cleared.

• If you cannot remove the jammed paper by yourself, please contact local Pantum authorized repair center or send the printer to the nearest Pantum authorized service center for repair.

•The printer appearance may differ because of various models and functions, so the schematic diagram is for reference only.

• All pieces of paper inside the paper tray should be taken out before new paper is added. Make all pieces of paper tidy and place them into the paper tray, to prevent jamming caused by feeding of too much paper at a time.

8.4.1 Jammed paper in auto feed tray

1. Pull out the paper tray.

2. Gently pull out the jammed paper.

3. After pulling out the jammed paper, install the paper tray into the printer, and close the front cover. The printer will automatically recover printing.

8.4.2 Jammed paper in multifunctional paper feeding tray

1. Gently pull out the jammed paper.

2. Place the paper again, close the front cover, and the printer will recover printing.

8.4.3 Middle jam

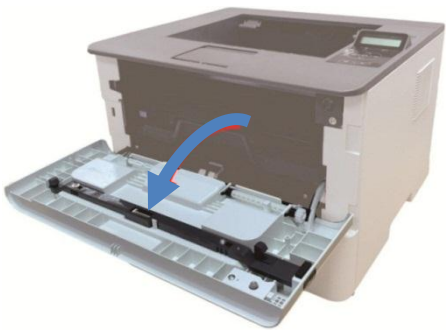
Note: While removing the jammed paper in the middle, do not touch the shaded area shown below to avoid burns.

1. Pull out the paper tray.

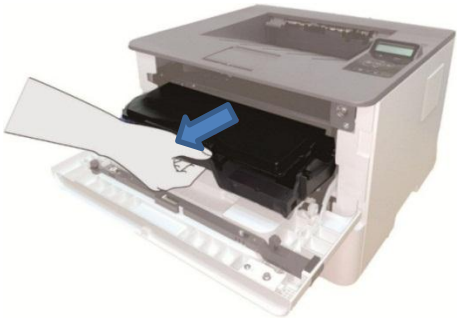
2. Gently pull out the jammed paper.

3. Install the paper tray.

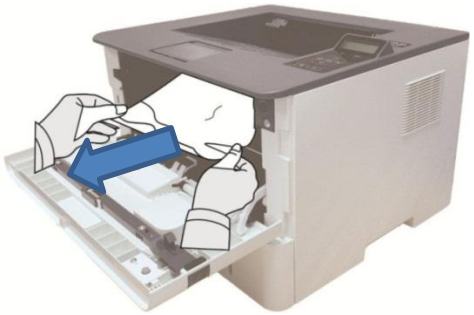
4. Open the front cover.



5. Take out the laser toner cartridge along the guide rail. (In order to prevent the printing quality from being affected by the exposure of the photosensitive drum, put the laser toner cartridge inside a protective bag or wrap it with thick paper.)



6. Gently pull out the jammed paper.



7. After taking out the jammed paper, reinstall the laser toner cartridge, close the front cover, and the printer will recover printing.

8.4.4 Jammed paper in fuser unit

Note: While removing the jammed paper in the fuser unit, do not touch the shaded area shown below to avoid burns.

1. Open the rear cover.

2. Open the fuser door using the handles on both sides.

3. Gently pull out the jammed paper.

4. After removing the jammed paper, close the rear cover, open the front cover, and the printer will automatically recover printing.

8.4.5 Jammed paper in duplex printing unit

1. Take out the duplex printing unit from the rear side of the printer.

2. Pull the jammed paper out of the duplex printing unit.

3. If the jammed paper is not taken out with the duplex printing unit, open the paper tray and directly take out the jammed paper from the bottom.

4. After pulling out the jammed paper, install the duplex printing unit, check other parts of the printer for jammed paper, and close the front cover. The printer will automatically recover to print.

8.4.6 Jammed paper in optional paper tray

1. Take out the optional paper tray.

2.Pull out the jammed paper gently.

3. After removing the jammed paper, install optional paper tray, and the printer will automatically recover printing.

4. If jammed paper can’t be seen at this area, please transfer to next step:

1. Take out the auto paper tray.

2. Pull the jammed paper out of the auto paper tray.

3. After removing the jammed paper, install the auto paper tray, and the printer will automatically recover printing.

8.5 Troubleshooting

8.5.1 Paper feeding problems

Initial check: carry out initial check at first in case of paper feeding error.

Check	Solution
Does the applied medium conform to the specifications of the printer?	Replace the medium.
Is the paper curly, wrinkling or damp?	Replace paper and tell the user how to properly save paper.
Is the paper path deformed, dirty or blocked with foreign matters?	Clean the paper path. If required, replace the related spare parts.
Is the separating jaw dirty, deformed or damaged?	Replace the fuser unit.
Are the pickup roll and separating assembly dirty, deformed or damp?	Clean the pickup roll and separating assembly. If required, replace them.
Is the clampof the paper tray suitable for the medium?	Slide the clamp of the paper tray until it is next to the edge of the paper stack.
Does the clutch gear rotate normally?	Adjust or replace the clutch gear.
Does the electromagnet work normally?	Replace the electromagnet.

M1 Feeding failure

Possible Cause	Solution
There is no electromagnet signal.	Check the electromagnet signal input, and make sure that the electromagnet signal line is connected properly.
The pickup roll is contaminated.	Clean or replace the pickup roll.
The pickup roll is worn.	Replace the pickup roll.

M2 Continuous feeding

Possible Cause	Solution
The electromagnet signal is wrong.	Check the electromagnet signal input, and make sure that the electromagnet signal line is connected properly.
The electromagnet spring does not have enough capacity.	Replace the electromagnet.
The phases of the clutch unit are not installed correctly.	Check the clutch unit and make sure that the phases of the clutch unit are installed correctly.

M3 Paper inclination

Possible Cause	Solution

The feeding channel is contaminated.	Check the feeding channel and make sure that it is smooth.
The pickup roll is contaminated.	Clean the pickup roll.

M4 Repeated feeding

Possible Cause	**Solution**
Paper is not placed properly.	Place the paper properly.
The separator is contaminated or worn.	Clean or replace the separator.

8.5.2 Common faults

8.5.2.1 Printing fault

P1 No AC power

Possible Cause	**Solution**
The power voltage is abnormal.	Make sure that the power voltage is normal.
The power cord is not securely inserted into the socket.	Make sure that the power core is securely inserted into the power socket.
The fuse is burnt out.	Replace the high-voltage power board.

P2 No DC power

Possible Cause	**Solution**
No AC power is supplied.	Make sure that the AC power is supplied normally.
The low-voltage power supply is abnormal.	Replace the high-voltage power board.

P3 Motor fault

Possible Cause	**Solution**
The connecting wire of the motor is not connected properly.	Make sure that the connecting wire is connected properly and conforms to the quality requirements.
The main motor is abnormal.	Replace the motor. Make sure that the main motor is normal. Otherwise, replace the main motor.
The engine substrate is faulty.	Replace the engine substrate.

P4 Failure of heating lamp

Possible Cause	**Solution**
The plug wire of the circuit board of the high-voltage power supply is disconnected.	Reconnect the plug wire, and make sure that the AC power is supplied normally.

There is jammed paper inside the printer.	Check the printer and remove the jammed paper.
The feed-out sensor cannot be closed.	Clean or replace the feed-out sensor.
The front-end paper sensor is faulty.	Replace the front-end paper sensor.
The thermistor is faulty.	Replace the fuser unit.
The temperature relay is disconnected.	Replace the fuser unit.
The engine substrate fails.	Replace the engine substrate.
The high-voltage power board is faulty.	Replace the high-voltage power board.

P5 Fault of fuser unit

Possible Cause	Solution
The contact of the plug wire of the thermistor is poor.	Reconnect the wire.
The temperature relay is burnt out.	Replace the fuser unit.
The halogen heating lamp is faulty.	Replace the fuser unit.

P6 Fault of laser scanner

Possible Cause	Solution
The connecting wire is connected improperly or broken.	Properly connect or replace the connecting wire.
The laser unit is damaged.	Replace the laser unit.
The engine substrate is faulty.	Replace the engine substrate.

P7 Paper feeding failure

Possible Cause	Solution
The separator pad/pickup roll is faulty.	1) Clear the surface of the separator pad or pickup roll. 2) Replace the separator pad or pickup roll.
The connecting wire of the electromagnet is not connected properly.	Make sure that the connecting wire of the electromagnet is connected properly.
The electromagnet is faulty.	Replace the electromagnet.
The paper sensor is faulty.	Replace the paper sensor.
The engine substrate is faulty.	Replace the engine substrate.

P8 High-voltage output abnormality

Possible Cause	Solution
The power core is inserted or damaged.	Make sure that the power cord is connected properly.
The high-voltage contact is dirty.	Clean the high-voltage contact.
The high-voltage power board is faulty.	Replace the high-voltage power board.

P9 USB cannot be identified by PC

Possible Cause	Solution
The power cord is not inserted or is in poor contact or damaged.	Make sure that the power cord is connected properly.

The plug of the USB cable is in poor contact or damaged.	Make sure that the USB cable is connected properly.
The data substrate is faulty.	Replace the data substrate.

P10 Printing mess or fully black page

Possible Cause	Solution
The USB cable is connected properly or faulty.	Check the USB cable and make sure that it is connected properly.
The FFC wire connecting the engine substrate and data substrate is in poor contact or not reliable.	Replace the connecting wire.
The data substrate is faulty.	Replace the data substrate.
The engine substrate is damaged.	Replace the engine substrate.

P11 Failure of image printing

Possible Cause	Solution
The USB cable and power cord are not connected properly.	Check the USB cable and power cord, and make sure that they are connected properly.
The FFC wire connecting the engine substrate and data substrate is in poor contact or not reliable.	Replace the connecting wire.
The high-voltage power board is damaged.	Replace the engine substrate.
The data substrate is abnormal.	Replace the data substrate.
The toner cartridge is abnormal.	Replace the toner cartridge.
The laser unit is abnormal.	Replace the laser unit.

P12 No response of keys on operation panel

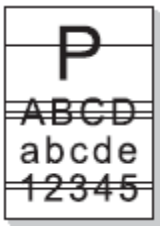
Possible Cause	Solution
The connecting wire is damaged.	Replace the connecting wire.
Keys are damaged.	Replace keys.
The operation panel substrate is faulty.	Replace the operation panel substrate.
The engine substrate is faulty.	Replace the engine substrate.

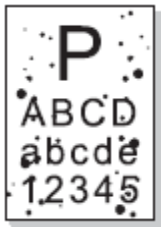
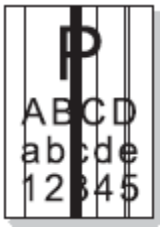
P13 Failure in identification of toner cartridge

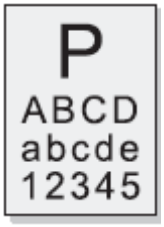
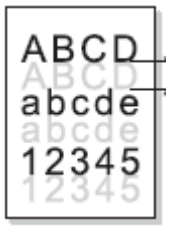
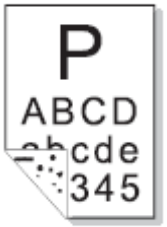
Possible Cause	Solution
The toner cartridge is not installed properly.	Make sure that the toner cartridge is installed properly.
The chip of the toner cartridge is faulty.	Replace the toner cartridge.
The data substrate is faulty.	Replace the data substrate.

8.6 Image Defects

8.6.1 Printing

State	Cause	Recommended Solution
The printout is light. 	● The toner in the cartridge is almost used up. ● The high-voltage contact of the engine substrate is in poor contact as a result of toner contamination. ● The high-voltage output of the high-voltage power board is abnormal.	● Replace the toner cartridge. ● Clean the toner contamination area. ● Clean the high-voltage contact or replace the high-voltage power board.
The whole page is dark. 	● The charging high-voltage output of the high-voltage power board is abnormal. ● The charging roll is abnormal.	● Clean the charging high-voltage contact or replace the high-voltage power board. ● Replace the toner cartridge.
There are horizontal black lines or stripes. 	● The high-voltage contact and toner cartridge are in poor contact. ● The developing roll is contaminated, or the OPC or charging roll is damaged. ● The paper slips.	● Clean the high-voltage contact or replace the high-voltage power board. ● Replace the toner cartridge. ● Clean or replace the pickup roll.

There are black/white spots. 	● Some components of the toner cartridge are contaminated or OPC is damaged. ● If there are 45.2mm periodic black spots on the image, the high voltage of the transfer roll is abnormal or the transfer roll is damaged.	● 1. Replace the toner cartridge. ● 2. Clean the high-voltage contact of the transfer roll or replace the transfer roll. ● 3.Regularly clean the inside of the printer, and remove paper scraps and dirty.
There are vertical black lines or stripes. 	● The cleaning scraper has a gap or is deformed. ● OPC is damaged. ● There are foreign matters between the developing roll and toner scraper.	● Replace the toner cartridge.
There are vertical white stripes. 	● The window glass of the laser unit is contaminated. ● There are foreign matters or toner particulates between the developing roll and toner scraper. ● The fuser unit is abnormal.	● Clean the laser window glass of the laser unit. ● Replace the toner cartridge. ● Clean or replace the fuser unit.
The printing color is light. 	● The toner scraper is damaged. ● The pressure of springs on the left and right side of the transfer roll is not uniform, the springs are damaged, the transfer roller is installed improperly, or the bushing of the transfer roll is damaged. ● The laser unit is faulty.	● Replace the toner cartridge. ● Replace the bushing of the transfer roll. ● Replace the laser unit.

The background is gray. 	● The printing medium does not conform to the specifications. ● The life of the toner cartridge is expired. ● The high-voltage output of the high-voltage power board is abnormal.	● Use the printing medium according to the specifications. ● Replace the toner cartridge. ● Clean the high-voltage contact or replace the high-voltage power board.
The images are doubled periodically. 	● If the images are doubled periodically at intervals of 75.4mm, it indicates that OPC is damaged. ● If the images are doubled periodically at intervals of 62.3mm, it indicates that the surface of the heating roll is contaminated. ● The high-voltage output of the high-voltage power board is abnormal.	● Replace the toner cartridge. ● Clean the surface of the heating roll. If the problem still exists, replace the fuser unit. ● Replace the high-voltage heating roll.
The back is dirty. 	● The transfer roll is contaminated. ● The pressing roll of the fuser unit is contaminated.	● Clean or replace the transfer roll. ● Clean the pressing roll of the fuser unit or replace the fuser unit.
The image is fully white. 	● OPC discharge is poor. ● The laser unit is damaged.	● Clean the high-voltage contact or replace the engine substrate. If the problem still exists, replace the toner cartridge. ● Replace the laser unit.

Appendix 1 Perimeters of Printer Rolls

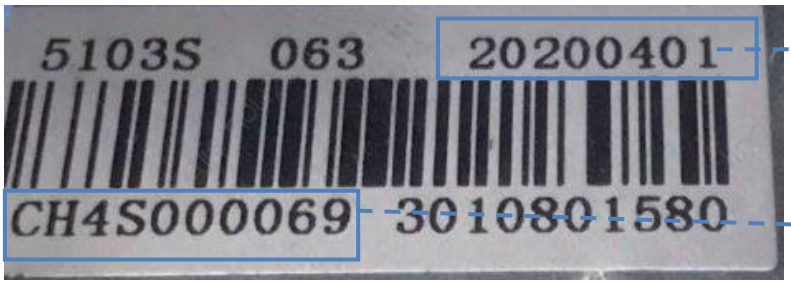
Name	Image Period mm
Transfer roll	44.0
Heating roll	78.5
Pressing roll	75.4
OPC (photosensitive drum)	75.3
Developing roll	35.8
Toner-feeding roll	57
Charging roll	34.5

In the case of periodical image abnormality, you can judge the fault cause according to the roll perimeters.

Appendix 2 Description of Product Series Number

The series number label is attached to each printer. The meaning of the series number and the attaching location of the label are described below.

Code meaning:



Date of manufacture

Series number

Label location: rear side of the printer

Series number label

Appendix 3 Explanation of Special Terms in the Manual

The special terms in this manual are explained below.

Term	Explanation
CFR	One safety standard of laser products
LCD	Liquid crystal display
CIS	Scanner
dpi	Number of dots per inch
PPM	Pages printed per minute
gsm	Paper weight per square meter
auto run	Automatic running
OPC	Photosensitive drum
PCR	Charging roll
Laser	Laser source
DR	Developing roll
TR	Transfer roll
PR	Pressing roll of fuser unit
LSU	Laser unit
FFC	Connecting wire of data substrate