# Maintenance Manual



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## Pantum BM5100 Series Service Manual multi-function laser printer



Please read this manual before maintaining

Version: V1.1

## Pantum Multi-function Laser Printer Maintenance Manual

Suitable Model : BM51\*\*("\*"represent any number and letter)



## Edition change list

Version	Time	Change content
V1.0	2021.5.12	Create service manual

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#### Disclaimer

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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 un	it(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  $10 \,^{\circ}$ C to  $35 \,^{\circ}$ C, 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:



#### **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.

European Community (EC) Directive Compliance

This product complies with the Member State Approximation and Coordination Act of the EC Council Directive 2014/35/EU and 2014/30/EU.

These directives cover the protection requirements of the electromagnetic compatibility and electrical equipment safety (used within the specific voltage range).

Manufacturer: Zhuhai Pantum Electronics Co., Ltd., Central Zone A, 3<sup>rd</sup> Floor, Building 01, 3883#, Zhuhai Road, Zhuhai City, P.R.C.

For the statements o compliance with these directives, please contact the authorized representative.

This product complies with the Class B requirements of EN 55032 and the safety requirements of EN 60950.



CE

This printer is fully compliant with the ROHS Directive 2009/95/EC and the requirements of the revised Directive 2011/65/EU for managing toxic and hazardous substances.



This product can only be used safely in the non-tropical areas.

2000m

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

ProperlydisposeThis product contains the battery. To protect natural resources and promoteof the battery in<br/>this project.recycling, please separate the battery from other wastes and recycle it through the<br/>local battery recycling system.

Warning: 1. Improper replacement may result in fire, burns, charging or removal failure, crushing, heating or incineration.

2. Keep the battery out of reach of children to prevent swallowing.

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## 1. Product Introduction

Pro	oduct Pa	rameters	BM5100ADN/BM5 105ADN Series	BM5100ADW Series	BM5100FDN/ BM5105FDN Series	BM5100FDW Series
Interfa	τ	JSB	•	•	•	•
ce	N	IET	•	•	•	•
type	W	/i-Fi		•		•
Print Langu age	F	PDL	•	•	•	•
Contr	L	.CD	•	•		
panel	Touch	n screen			•	•
Print	A4	40ppm	•	•	•	•
speed	Letter	42ppm	•	•	•	•
Auto	omatic tv printin	vo-sided	•	•	•	•
Au	ito Duple:	x Scan	•	●	•	•
	NFC TA	AG		•		•
1	Mute prir	nting	•	•	•	•
	Copy func	ction	•	•	•	•
S	canning fu	nction	•	●	•	•
	Fax funct	tion			•	•
Scar	n to USB f	lash disk	•	●	•	•
	USB pri	int			•	•
	Secure pri	nting			•	•
	ADF		•	•	●	•

(•: support; Blank: unsupport)

**Note:** The product series will be increased or changed without prior notice. If the printer has the fax function, conduct language setting, system setting and fax setting as per the prompts on the panel after initial startup or restoration of default settings. In this manual, "ADF" is short for the document feeder.

#### 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 nectwork, 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 beacase of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

3. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the 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 beacase of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

5. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the 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 intallation" 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.

lf the button dispalys "Disconneted", p	lease click on 🜔 to see the video.	it will show you how to conne	ect
Way 1: Connect with USB	Way 2: Connect with wireline network	Way 3: Connect with W	/i-Fi
ps: If the one-click installation does not satisfy	v your usage scenario, you can try 🝳 mai	nual installation	
		User 0	<u>Guide</u>
Please select the printer you would like	e to install		
Printer Name	Port		
Wireline network printer			
	IP Address	Host name	
Printer Name	<u>10.10.148.119</u> <u>10.10.148.155</u>	X X X -0482E7 X X X -048304	
Printer Name          V       X X X Series PCL6 0001         X X X Series PCL6 0002			

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 <u>Chapter 2.1.1.3.1</u>. If connected, please install it with reference to <u>Chapter 2.1.1.3.2</u>.

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.

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

4. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the 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.

f the button dispalys "Disconneted	", please click on 🜔 to see the video,	it will show you how to connect
0	IT TO AND	TP-Testary
Way 1: Connect with USB	Way 2: Connect with wireline network	Way 3: Connect with Wi-Fi
One-dick installation	Disconnected	One-dick installation
s: If the one-click installation does not s	atisfy your usage scenario, you can try 🝳 mar	nual installation



Installing the driver software will take some time. Please he nationt	
Installing the driver software will take some time. Please be patient.	
Please do not turn off the computer or run other operations that may affect normal installation.	
	Please do not turn off the computer or run other operations that may affect normal installation.

• If your software has searched several printers, click "One-click intallation" 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.



Printer Name	Port	
V X X X Series	USB001	
Printer Name	ID Address	Hast some
Printer Name	IP Address 10.10.148.150	Host name x x x -02D22B
☑ Install the printer from the list with	h a hostname 🕜	Refresh

• 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 beacase of system configuration.
 Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the 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 printe, 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.



1. Please click on	"Printing wireless netw	ork information page"	to get the network name	and encryption method. Please skip this st	ep if
aready know the	nework name and en	u ypuon method.		Printing wireless network informat	ion p
2. Please enter v	vireless network user na	ame and password.			
Network Name(S	SID):	ane una passiona.			
Test-AP2					
Encryption metho	vd:				
WPA/WPA2					
Password:					

• 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.





Printer Name	Port	
X X X Series	USB001	
ireless 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
printer is not in the list, please check	the printer network status and se	e if it is in the same network as the

	Printing wireless network informatio	
2. Please enter wireless network user name and password.	ess network user name and password.	
Network Name(SSID):		
Test-AP2		
Encryption method: WPA/WPA2		
Password:		
•••••		
Show password:		

• 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 beacase of system configuration.
 Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the 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.

f the button dispalys "Disconneted	", please click on 🚺 to see the video,	it will show you how to connect
		TP-TOS AV
Way 1: Connect with USB Disconnected	Way 2: Connect with wireline network Disconnected	Way 3: Connect with Wi-Fi One-dick installation
ne Tétha ana didi installation daga nat s		un installation



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 beacase of system configuration.
 Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the 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.





Tips:
Installing the driver software will take some time. Please be patient.
Please do not turn off the computer or run other operations that may affect normal installation.

• 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 .

If the button dispalys "Disconneted	". please click on D to see the video.	it will show you how to connect
		TP-Test-sxy
Way 1: Connect with USB	Way 2: Connect with wireline network	Way 3: Connect with Wi-Fi
Disconnected	Disconnected	One-dick installation

	Printer Name	Port	
() N	/ireless network printer		
	Printer Name	IP Address	Host name
		<u>10.10.148.150</u> <u>10.10.148.152</u>	x x x -02D22B x x x -02D34A
	✓ Install the printer from the list with	a hostname 🕐	Refresh

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 beacase 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 intallation 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 beacase of system configuration.
 Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

5. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the driver installation interface.

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

7. Please select installation language and printer model.

8. Select "Wireline network connection" and click on "Install".
| Installation Language:              | English   |
|-------------------------------------|---|
| Select Printer:                     | X X X Series  |
| Installation mode:                  |   |
| uene                                | USB Connection     Connect printer and computer with USB cable  |
|                                     | Cable network connection     Connect printer and computer with network cable  |
| WIFT                                | Wireless network connection<br>Connect the printer with the computer by wireless network; you can connect<br>the printer to the wireless network manually |
|                                     |   |
| Back to <u>One click installati</u> | ionInstall  |

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".

Printer Name	IP Address	Host name
Install the printer from the list with a	a hostname	Refres
Add the IP address or hostname ma	nually	

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 beacase 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 intallation interface.

6. Please select installation language and printer model.

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

Installation Language:	English	<b>-</b>
Select Printer:	X X X Series	•
Installation mode:		
	OUSB Connection	
-	Connect printer and com	nputer with USB cable
	Cable network connection	on
-	Connect printer and com	nputer with network cable
	Wireless network conne	ction
	Connect the printer with the printer to the wirele	n the computer by wireless network; you can connect ss network manually

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.

The installation program will determine whether wireless network of the printer is to be
configured based on your choice in this step;
<ul> <li>if you need to configure or change wireless network of the printer, please select " yes" after the printer connects USB;</li> </ul>
• if not, please select "no".
• Yes, I want to configurate the printer's wireless network.
$\bigodot$ No, the printer has been connected 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".

X X X Series PCI 6 0001	IP Address	Host name	
		AAA MADD	
Install the printer from the list with	a nostname	Refresh	
Add the IP address or hostname ma	anually		
Add the IP address or hostname maintenance	anually		
Add the IP address or hostname maintenance	anually		

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 beacase of system configuration.
 Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Read and agree to the terms contained in the End User License Agreement and the Privacy Policy, click the "Next" button in the lower right corner of the interface to enter the driver installation interface.

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

6. Please select installation language and printer model.

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

Installation Language:	English 👻
Select Printer:	X X X Series
Installation mode:	
(mm)	O USB Connection
	Connect printer and computer with USB cable
	Cable network connection
	Connect printer and computer with network cable
	Wireless network connection
WIFT	Connect the printer with the computer by wireless network; you can connect the printer to the wireless network manually

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

The installation program will determine whether wireless network of the printer is to be
configured based on your choice in this step;
<ul> <li>if you need to configure or change wireless network of the printer, please select " yes" after the printer connects USB;</li> </ul>
• if not, please select "no".
Yes, I want to configurate the printer's wireless network.
No. the printer has been connected to wireless network
e rey are planet has been connected to miceas network.

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".

X X X Series PCL6 0001	10, 10, 148, 140	X X X -779BBB	
☑ Install the printer from the list with	a hostname	Refres	sh
Add the IP address or hostname m	anually		_

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.)

	Welcome to the XXX Series Mac Driver Installer
Introduction	You will be guided through the steps necessary to install this software.
License	
Destination Select	
Installation Type	
Installation	
Summary	
	Go Back Continue

- 3. Click "Continue".
- 4. Read licensing agreement and then click "Continue".

	the software l	icense agreei	ment.			
Introc	Click Agree to	continue or cli	ck Disagree to c	ancel the installat	tion and	
Licen	quit the Installe	er.				
Destir						
Instal	Read License	e		Disagree	Agree	ñ.
Instal						
Summar	y	AGREEMENT (* AT THE END OF	EULA"). BEFORE	YOU CLICK ON THIS	HE "I agree" I	BUTTON OAD, OR
Summar	y	AGREEMENT ( AT THE END OF OTHERWISE U: CONDITIONS C AND CONDITIO SOFTWARE TO disagree" BUTT DOWNLOAD OF IMMEDIATELY F CLICKING ON T DOWNLOADING	THE TEILIN'S BEFORE TEILIA'), BEFORE THIS DOCUMEN SE THE SOFTWAI FTHIS EULA. IF NOL, IN WHICH I YOU, IN WHICH I ON, AND YOU ARI R OTHERWISE US REMOVE THE SO THE "I agree" BUT 3 OR OTHERWISE 3 OR OTHERWISE	VIAINING IN THIS FOULCIECK ON TH IT OR INSTALL, CC RE, PLEASE READ YOU DO NOT ACC S UNWILLING TO LI CASE YOU SHOUL E NOT PERMITTEL SE THE SOFTWARE FTWARE FROM YC TON OR INSTALLIN E USING THE SOFT	HE "I agree" [I PPY, DOWNLI THE TERMS EPT THESE ICENSE THE D CLICK THI D CLICK THI D CO INSTALI E AND YOU I DUR SYSTEM IG, COPYING TWARE, YOU	ICENSE BUTTON OAD, OR S AND TERMS E "I L, COPY, MUST M. BY G, J ARE
Summar	y 1	AGREEMENT ( AT THE END OF OTHERWISE U: CONDITIONS C AND CONDITIO SOFTWARE TO disagree" BUTT DOWNLOAD OF IMMEDIATELY F CLICKING ON T DOWNLOADING CONSENTING "	THE TEINING SETURATION BEFORE THIS DOCUMENN SE THE SOFTWAIN FTHIS EULA. IF NNS, LICENSOR IS NYOU, IN WHICH I ON, AND YOU ARI R OTHERWISE US REMOVE THE SO THE "I agree" BUT 3 OR OTHERWISS TO BE BOUND BY	EVOLCIECK ON TH IT OR INSTALL, CC RE, PLEASE READ YOU DO NOT ACC S UNWILLING TO LI CASE YOU SHOUL E NOT PERMITTEL SE THE SOFTWARE FTWARE FROM YC TON OR INSTALLIN E USING THE SOFT X WARRANTING YC	HE "I agree" I DPY, DOWNLI THE TERMS EPT THESE ICCENSE THE D CLICK THI D TO INSTALL D COPYING TO UNSTALL DUR SYSTEM IG, COPYING TWARE, YOU DUR COMPLI	LICENSE BUTTON OAD, OR S AND TERMS E "I L, COPY, MUST M. BY G, J ARE JANCE

- 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".

Destination Select	Installer is trying to install new software. Type your password to allow this.
Installation	Username: test-001
Summary	Password:
	Cancel Install Software
	Go Back Continu

- 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.

Do you want to run "W	ireless Netwo <mark>rk Configur</mark>	ation Tool" now?
Note: A wireless network network.	printer needs configurat	ion of wireless

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 system2.3.1 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. Clickbutton 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. Clickbutton 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.
  - 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. Clickbutton 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. Clickbutton 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".

• 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 Information Report Printing

- 1. Press "Menu" to enter the menu setting interface.
- 2. Select "Information Report" by pressing "▲" or "▼".
- 3. Press "OK" key to enter information report print. You can print product report according to needs.

Product reports that could be printed include Demo page, information page, menu structure page, network configuration, e-mail address, group e-mail, FTP address and WiFi hotspot.



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 Report Printing (Flagship printer)

You can print information report by operating control panel. These pages can help you to learn about product information, and diagnose and solve product failures.

1. Click " • " button in control panel to enter "Menu setting" interface.

2. Click and select "Info. report" to enter Info. report print, thus you can print product report as required.

\$	Info. report	
	Prt Demo Page	<b>e</b> Ç
ô	Prt Info Page	ē
	Prt Menu Frame	ē
	Prt NetConf.	<b>e</b> 4
ŝ		Back

Product reports that could be printed include Demo page, information page, menu structure page, network configuration, e-mail address, group e-mail, FTP address and Wi-Fi hotspot.

Note: • The product report above is the most complete version, and may be different from the product

report of model that you actually use. "

# 3.3 Information Page

1. Printer Information Page

Printer Information	n Page ]		[ Page
Product Information		System Settings	
Product Name     : B       USB Vender ID     : 0;       Firmware Version     : 2;       Engine Version     : 2;       Memory Size     : 5;       Print Language     : 10;	M5100ADW Series x232B A. 1. 4 A. 2. 4 12MB CL (05)(0DE	Sleep Time Toner Saving Mode Mute printing	: 1 minute : Close : Close
Serial Number : C	J2J000000	Printer SN No.	
Consumables information	1	Tray Setup	
Ink cartridge has been printed   Average Coverage Expected number of pages to p Drum unit type Drum unit remainder Drum unit has been printed pag	: 100% pages : 20 : 12% vrint : 49 : DL5100 : 100% ges : 20	(the printed pages are pages instead of theor calculated service life	the actually printed etical pages within the
Print Information		Total pages print	ad
Total pages printed Pages printed with automatic d	: 10	actually	ain 4
Pages printed with different pap	per specification	Paper Source	: Auto Select
4.5	: 0	Duplex	: Close
A0		Resolution	: 600DPI
A4/Letter	: 10		
A4/Letter Legal/Folio B5/Everative	: 10 : 0	Density	: Normal
A4/Letter Legal/Folio B5/Executive B6/B6Fay	: 10 : 0 : 0	Density	: Normal
A4/Letter Legal/Folio B5/Executive B6/B6Env Others	: 10 : 0 : 0 : 0	Density	: Normal
A4/Letter Legal/Folio B5/Executive B6/B6Env Others Scan Information	: 10 : 0 : 0 : 0	Density Scan Setting	: Normal
A4/Letter Legal/Folio B5/Executive B6/B6Eav Others Scan Information Pages flatbed scan to copy	: 10 : 0 : 0 : 0 : 0 : 0	Density Scan Setting Resolution	: Normal : 300DPI
A4/Letter Legal/Folio B5/Executive B6/B6Env Others Scan Information Pages flatbed scan to copy Pages flatbed scan to host	: 10 : 0 : 0 : 0 : 0 : 0 : 0	Density Scan Setting Resolution Scan Color	: Normal : 300DPI : Color
A4/Letter Legal/Folio B5/Executive B6/B6Env Others Scan Information Pages flatbed scan to copy Pages flatbed scan to host Pages ADF scan to copy	: 10 : 0 : 0 : 0 : 0 : 0 : 0 : 0 : 0	Density Scan Setting Resolution Scan Color File Format	: Normal : 300DPI : Color : PDF

2. Network Configuration Information Page

Wireless Network Configuration	
Connection Status : Not Connected Wireless Hardware Address : Communication Mode : Network Name (SSID) : BSSID :	
Wireless Network IPv4 Information	
Status       : Open         Configuration Method       : Auto         IP Address       :         Subnet Mask       :         Default Gateway       :         Bonjour Name       :         Wireless Network IPv6 Information         s       : Open         Local Address       :         Statement Address       :	
Stateful Address :	
Wireless Direct Information	
Status     : Close       Device Name     :       IP Address     :       Password     :	

# 4 Restoration of Factory Settings

"Restore factory settings" is used to recover the default settings of printer. The printer will restart itself automatically after recovering factory settings. Restore factory settings with menu.

# 4.1 Restore factory settings with menu (3in1)

- 1) Press "Menu" to enter the menu setting interface.
- 2) Press "▲" or "▼", select "System Set" and then press "OK".
- 3) Press " $\blacktriangle$ " or " $\blacktriangledown$ ", select the "Restore set" option and press "OK".



## 4.2 Restore factory settings with menu (4in1)

- 1. Click " " button in control panel to enter "Menu setting" interface.
- 2. Click and select "System Setting"-"Restore set" to reset to defaults.





## 4.3 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 roll
3	Paper-feeding roll assembly
4	Secondary conveying roll
5	Guide roll
6	Multifunction tray paper-feeding roll assembly
7	Toner-feeding roll
8	Developing roll
9	OPC photosensitive drum
10	Charging roll
11	Cleaning roll
12	Transfer roll
13	Feed-out roll
14	Pressing roll
15	Heating roll
16	Transfer roll
17	Motor assembly
18	Guide roll of duplex printing unit
19	Conveying roll of duplex printing unit
20	ADF Feeding roll
21	ADF Feed-out roll

## Paper Path





# 5.3.2 Paper Routine Diagram of Printer



# 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

 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 right latch when bend the paper tray's cover as below picture, 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, remove the sensor substrate cover after releasing screws on it, 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 ADF pickup and separation assembly

1. Open the upper ADF cover, press the buckler of the separation assembly with the tweezers, and take out the separation assembly.



2. Open the upper ADF cover, take the paper-feeding assembly from the area between two baffles, remove the snap spring and gear shaft, and pull out the bearing buckle and bearing.



3. Push the paper-feeding roll sleeve right with the slotted screwdriver and take out the paper-feeding roll assembly.



## 6.2.8 ADF/scanner assembly

1. Remove the front cover, back cover, left cover and right cover, pull out five harnesses of the left data board connected to the scanner assembly, and remove one ground screw.



2. Remove two screws of the hinge support rod and then the hinge support rod (hold the scanner assembly by hand).



3. Hold the scanner/ADF assembly by hand, remove three screws of the upper side cover, and pry out the upper side cover with the slotted screwdriver.



4. Hold the scanner/ADF assembly by hand, remove the scanner harness, and vertically pull out the scanning assembly.



# 6.2.9 ADF motor

1. Remove the ADF/scanner assembly and four screws at the bottom of ADF. Then remove the ADF tray assembly by means of pulling it up.



2. Remove four sheet metal screws, sheet metal assembly and then ADF motor.



**6.2.10** Scanner cover assembly

1. Remove the ADF/scanner assembly, two bottom screws of the scanner assembly, and then the iron baffles.



5. Remove ADF by pulling it up.



6. Pry out the bucklers (just into the corresponding holes of the jaws, and keep the tweezers in the first position while conduct prying in other positions) with two slotted screwdrivers or tweezers, and remove the scanner cover assembly.



## 6.2.11 CIS

1. Remove the scanner cover assembly. Then pull out the CIS friction pads (one respectively on the left and right).



2. Pull out the CIS harness. Make CIS upright and take it out through the right side (do not directly touch the CIS luminous tube while replacing CIS, in order to avoid abnormality of the scanned image).



#### 6.2.12 Scanner motor

1. Remove the scanner cover assembly, pry out the gear cap, and then remove the scanner belt.



2. Remove the screws and the conductive sheet of the steel shaft. Then pry out the left end of the steel shaft.


3. Remove the two screws and take out the motor assembly. Then remove two motor screws and scanner motor.



## 6.2.13 Control panel assembly

Remove the upper side cover of the scanner. Unplug the control panel harness, remove two screws, and take out the control panel.



#### 6.2.14 Fax substrate

1. Remove the ADF/scanner assembly, five screws and left boss.



2. Make the left boss inverted, remove the two screws, and take out the fax substrate assembly.



# 6.2.15 Upper cover component

Pull out the left and right harnesses in Figure I. Remove two screws in Figure II and take out the upper cover component.

Figure I:



# Figure II:



# 6.2.16 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.



## 6.2.17 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.

#### 6.2.18 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.



#### 6.2.19 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.



#### 6.2.20 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.



#### 6.2.21 Paper-low sensor

Remove paper feeding sensor, and remove the screw, then remove paper-low sensor after



## 6.2.22 Chip adapter substrate

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



## 6.2.23 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.



# 6.2.24 Data board

1. Remove the front cover and back cover, and pull out the harness plug on the data board.



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 board.



# 6.2.25 High voltage board

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



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.

#### 6.2.26 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.

# 6.2.27 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.



## 6.2.28 Fuser

1. Remove the front cover, rear cover, left cover and right cover. Then remove two 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, and five screws of the fuser. Then remove the fuser.



# 6.2.29 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).



#### 6.2.30 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).



# 6.2.31 Electromagnet

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



#### 6.2.32 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.



# 6.2.33 Clutch assembly

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



# 7 Maintenance

Note: The printer appearance varies depending on the model and function. The schematic diameter is for reference only.

# 7.1 Printer cleaning

Note: Please use mild detergents.

Some parts are still hot in a short time after the printer is shut down. After opening the front cover or back cover, do not directly touch the internal parts with high temperature warning labels, in order to avoid scalding.

Be careful with printer screen when operating against pressing harshly or damaging touch screen. Clean the screen with soft dry cloth or cloth with mild detergent or ethyl alcohol rather than any organic solvent, acidic or alkaline solution.

- 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. Lift the scanner cover and gently wipe the glass platen with soft cloth.



4. 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.

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



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



7. Open the automatic feeder tray of the printer, and gently wipe the paper-feeding roll with dry lint-free cloth.



Note: If the printer is provided with the document feeder, the document feeder cover should be cleaned regularly by means of wiping with soft cloth.

Wipe the part shown in the figure.



# 7.2 Use and Maintenance of Consumables7.2.1 About toner cartridge and drum component

1. Cartridge, use and maintenance of the drum assembly.

Please use the original toner cartridge for better printing quality.

Please pay attention to the following items while using the toner cartridge:

• Please keep the toner cartridge in a dry and dark place.

• Do not refill the toner cartridge without permission; otherwise, the damages caused will not be included in the scope of warranty of the printer.

• Please place the toner cartridge in cool and dry places.

• Please do not place the toner cartridge near ignition sources, as the toner inside it is inflammable and may cause fire.

• Please pay attention to toner leakage while it is taking out or disassembled. In case of toner leakage, skin contact with toner or spattering into eyes or mouth, please wash it with clear water immediately, or see a doctor if feeling unwell.

• When placing the cartridge, please stay away from children may contact area.

2. Service life of toner cartridge.

• The service life of toner cartridge is depending on the toner quantity needed by printing.

• When a prompt that "The Toner Cartridge life Expired" appears on the display, it indicates its service life expires. So please replace it.

3. Service life of drum component

• When a prompt that "The Drum Unit life Expired" appears on the display, it indicates its service life expires. So please replace it.

# 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 and then remove 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.



# Replace the drum assembly steps are as follows:

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 Installing and removing the optional tray

# 7.3.1 Installing optional tray

This printer supports the use of optional trays, and can hold up to 2 optional trays. Each tray can hold up to 550 pieces of 80g/m <sup>2</sup>paper.If you want to buy optional trays, please contact the local dealer who has purchased the printer.

1. Turn off the printer.



2. Unplug the power cord from the electrical outlet, and then unplug the power cord from the printer.

3. Unpack the optional tray, and then remove all packaging materials.

4. Make sure the printer body and optional trays are placed correctly, as shown in the figure below.



5. Plug the power cord into the printer and turn on the power.

After installing the optional tray, you need to update the printer status again (For how to update the printer status).

Note: For the installation of optional trays, please refer to the Installation Guide supplied with the optional trays.

# 7.3.2 Removing the optional tray

1. Turn off the printer.



2. Unplug the power cord from the electrical outlet, and then unplug the power cord from the printer.

3. Lift the printer body with both hands and remove the optional trays.



After removing the optional tray, you need to update the printer status again (For how to update the printer status).

# 7.3.3 Updating the optional tray status

Each time you install/remove the optional trays, you need to manually update the printer driver status.Take Windows 7 as an example for this section.

- 1. Install the printer driver (please refer to <u>"How to install Windows printer driver</u>" for installation).
- 2. Enter the "Start menu" "Control panel" view "Device and Printer".
- 3. Right-click the printer icon and select "Printer Properties" in the pull-down menu.
- 4. Enter the "Auxiliary Settings" option. to set the corresponding configuration options.
- 5. Click "Refresh Now-Check Printer" "OK/Apply" to update the printer status.

# 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 C to 35 C 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.
- 1) 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 Status Prompts

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

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

are not matching.		
The life of the drum	The print pages of the drum component	Replace the drum component
component and toner	and toner cartridge are used up.	and toner cartridge.
cartridge is expired.		
Please close the ADF	The ADF cover is not installed in place.	Close the ADF cover.
cover.		
ADF jamming	1. The original is not installed properly	1. Replace the original.
	or the original size or medium does	2. Clean the paper-feeding
	not meet the requirements.	roll.
	2. ADF paper-feeding roll is dirty.	

Function	Prompt Status	Notes
Warning	The status indicator	Little toner (LED does not shown the status of little toner during operation)
	is ON in orange.	and no display on LCD.
		After the sleep mode is disabled, the status indicator will not turn orange
		and the LED will be normally green as the status of little toner is not
		detected in the wake-up action (such as sweeping and ADF cover opening)
		with the engine not working.
Sleep	The power indicator	The light intensity gradually decrease (tentatively 2s, to be adjusted
	is in the breathing	according to the test results) and then increase (with the same time as above)
	indicator mode.	in a cyclic manner.
Tip	Communication	This is the scanning communication error prompt. Once this error occurs,
	error xx Cancel: OK	the current scanning will be automatically terminated by the system. This
	Cancer. OK	will not affect the subsequent functions of the printer. Scanning, sweeping
		and fax reception or low voltage enabling can be performed normally in this
		status.
		You can exit this status in three ways: enabling the automatic sleep, update
		the scanning status or press "OK" on the panel.
		xx: Error code
		21 Communication failed (WSD communication error [the wired network
		connection and wifi connection cannot be distinguished in this
		communication error])
		22 Invalid instruction (reserved)
		23 Invalid parameter (reserved)
		24 (Reserved)
		25 USB connection error
		26 Network connection error
		27 wifi connection error
		The status LED indicator is normally ON in red.
	The memory does	This is the prompt of insufficient capacity of the email and ftp memory.
	capacity. Press OK.	Once this error occurs, the current scanning will be automatically terminated
	Cancel the	by the system. This will not affect the subsequent functions of the printer.
	operation!	Printing, sweeping or low voltage enabling can be performed normally in

# 8.3 Warning and Prompt Status

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		this status.
		The current status of LED will not change.
Insuffici capacity	ient memory	This is the prompt of insufficient capacity of the ADF copy memory. Once this error occurs, scanning of the current copying process will be suspended. Press "Cancel" to cancel copying. The other keys are invalid in this status. If
		the memory has the enough capacity in the follow-up waiting process, the scanning job will continue. Printing, sweeping or low voltage enabling will be invalid in this status.
		The current status of LED will not change.
Insuffici capacity Cancel:	ient memory OK	This is the prompt of insufficient capacity of the memory for ADF duplex-to-duplex copying. As the matching duplex scanning data are not available, the memory will not be released. Copying will be canceled automatically, and the user will be informed of this status. You can exit this status in two ways: enabling the automatic sleep or pressing OK on the panel.
		The status LED indicator is normally ON in red.
Email bo server re OK	eyond estrictions:	This is the prompt of the Email attachment beyond server restrictions, and the email will not be sent. Once this error occurs, the current scanning will be automatically terminated by the system. This will not affect the subsequent functions of the printer. Printing, sweeping or low voltage enabling can be performed normally in this status.
Cancel t	he failure of	The status LED indicator is normally ON in red. If the address of the Email or FTP scanned in network connection is correct
sending file:	the scanned OK	but does not exist; or the SMTP server is configured incorrectly; or the scanned data are not sent correctly in the scanning process, the LCD will display this error and LED will be normally ON in red. Once this error occurs, the current scanning will be automatically terminated
		by the system. This will not affect the subsequent functions of the printer. Printing, sweeping or low voltage enabling can be performed normally in this status.

		The status LED indicator is normally ON in red.
	Please set it in the webpage.	This error message appears if the group Emails under "Scan to Email" are empty.
	xx address	This error message appears if the group Emails under "Scan to Email" are
		empty.
		This error message appears if the FTP address book is empty after "Scan to
		FTP" is selected.
		It will be displayed for 3 seconds. Then the system will automatically return
		to the original menu. If any key is pressed or the printer status is changed
		within three seconds, the error display will be canceled immediately and the
		system will return to the original menu.
		The status LED indicator is normally ON in green but the amount of toner is not small.
	Group members are	This message appears if the group Email members are empty.
empty.	It will be displayed for 3 seconds. Then the system will automatically return	
	Please set it in the	to the original menu. If any key is pressed or the printer status is changed
	webpage.	within three seconds, the error display will be canceled immediately and the
		system will return to the original menu.
		The status LED indicator is normally ON in green but the amount of toner is
		not small.
	Network connection	The wired or wifi connection is not available when the email and ftp are swept.
		It will be displayed for 3 seconds. Then the system will automatically return
		to the original menu. If any key is pressed or the printer status is changed
		within three seconds, the error display will be canceled immediately and the
		system will return to the original menu.
		The status LED indicator is normally ON in green but the amount of toner is
	No response is made	not small.
	to USB	This message appears if no response is made to USB when PC is swept. It
	communication.	will be displayed for 3s. Then the system will automatically return to the

	previous menu. It will be displayed for 3 seconds. Then the system will automatically return to the original menu. If any key is pressed or the printer status is changed within three seconds, the error display will be canceled immediately and the system will return to the original menu. The status LED indicator is normally ON in green but the amount of toner is
No response is made	not small. The sweep command is successfully sent to the host, but the host fails to
by PC. Cancel: OK	send the scanning job to the printer. This status will be shown on the panel after 10s (change range: 8-12s).
	The status LED indicator is normally ON in red.
Connecting WPS WPS PIN: XXXXXXXX	<ol> <li>This message is displayed when the WPS PIN mode is enabled in the menu.</li> <li>If any error (such as cover opening) occurs in this status, the error will be displayed. After the error is recovered, the above message will be displayed again.</li> <li>If any job is performed, the panel will display the job status, and the WPS PIN code status will be displayed through the wifi LED. After the job is completed, the above message will be displayed again.</li> <li>The WPS PIN connection can be canceled by long-pressing the wifi button or short-pressing CANCEL, and the previous menu will appear on the panel.</li> <li>The sleep mode will not be enabled if the hotspot is connected in the station in the PIN and PBC mode.</li> </ol>
WPS connection succeeds. OK-Back/OK	<ul> <li>The wifi LED will flicker according to the WPS connection status.</li> <li>This message appears if the WPS PIN code mode is connected successfully.</li> <li>If printing or scanning job is performed in the connection process, the panel will display the job status, the WPS connection status will be displayed by the wifi LED, and the above message will not be displayed after the job is finished.</li> <li>If any error (such as cover opening) occurs in this status, the error will be displayed. After the error is recovered, the above message will be</li> </ul>

		displayed again.
		2. If any job is performed in this status, the panel will display the job
		status, the WPS connection status will be displayed by the wifi LED,
		and the above message will not be displayed on LCD after the job is
		finished.
		3. The original functions of functional mode buttons will be restored and
		such buttons can be used for switching the modes.
		4. The WPS PIN can be disconnected by long-pressing the wifi button in
		this status.
		5. It is invalid to short-press the wifi button in this status.
		6. The system will return to the previous menu if Back or OK is pressed in
		this status.
		7. The sleep mode can be enabled by short-pressing the ON/OFF button.
		If the WPS PIN code mode is connected successfully, the wifi LED will be
		normally ON.
	WPS connection failed OK-Back/OK	This message will be displayed if the WPS PIN mode connection
		succeeds/fails. If the printing or scanning job is performed in the connection
		process, the panel will display the job status, the WPS connection status will
		be displayed by the wifi LED, and the above message will not be displayed
		after the job is finished.
		1. If any error (such as cover opening) occurs in this status, the error will
		be displayed. After the error is recovered, the above message will be
		displayed again.
		2. If any job is performed in this status, the panel will display the job
		status, the WPS connection status will be displayed by the wifi LED,
		and the above message will not be displayed on LCD after the job is
		finished.
		3. The original functions of functional mode buttons will be restored and
		such buttons can be used for switching the modes.
		4. The WPS PB connection can be enabled by long-pressing the wifi
		button in this status, and the panel will display the standby interface.
		5. The wifi station connection can be enabled by short-pressing the wifi
		button in this status, and the panel will display the standby interface.

	6. The system will return to the previous menu if Back or OK is pressed in
	this status.
	7. The sleep mode will be enabled by short-pressing the ON/OFF button in
	this status.
	If the WPS PIN code connection fails, the wifi LED will be OFF.
WiFi is being connected.	This message appears if the WPS PIN mode is enabled during wifi
Please stop it first!	connection.
	It will be displayed for 3 seconds and then the system will automatically
	return to the original menu. If any key (the functional mode keys cannot be
	used for switching modes) or printer status (such as the error and job) is
	changed, the above message will disappear immediately, and the system will
	return to the original UI or display the corresponding status.
WiFi has been	This message will appear if the WPS PIN connection is enabled via the
Please disconnect it	menu with WiFi connected.
first!	It will be displayed for 3 seconds and then the system will automatically
	return to the original menu. If any key (the functional mode keys cannot be
	used for switching modes) or printer status (such as the error and job) is
	changed, the above message will disappear immediately, and the system will
	return to the original UI or display the corresponding status.
The ADF document	This message appears if paper is fed into ADF in the standby interface.
has been loaded.	It will be displayed for 3 seconds and then the system will automatically
	return to the original menu. If any key (the functional mode keys cannot be
	used for switching modes) or printer status (such as the error and job) is
	changed, the above message will disappear immediately, and the system will
	return to the original UI or display the corresponding status.
	The status LED indicator is normally ON in green but the amount of toner is
	not small.
Place the original in	This message appears if no paper is fed into ADF in the standby interface
the ADF.	(not in the menu interface)
	It will be displayed for 3 seconds and then the system will automatically
	return to the original menu. If any key (the functional mode keys cannot be
	used for switching modes) or printer status (such as the arrow and ich) is
	used for switching modes) of printer status (such as the error and Job) is
	changed, the above message will disappear immediately, and the system will
	return to the original UI or display the corresponding status.

Tip	Place the original	This message appears if the manual zoom or poster copying is enabled.
	into the FB.	It will be displayed for 3 seconds and then the system will automatically
		return to the original menu. If any key (the functional mode keys cannot be
		used for switching modes) or printer status (such as the error and job) is
		changed, the above message will disappear immediately, and the system will
		return to the original UI or display the corresponding status.
Tip	The USB flash disk	This message appears if the USB flash disk is inserted.
	has been inserted.	It will be displayed for 3s, and the system will automatically return to the
		"Scan USB flash disk" mode. If any key (the functional mode keys cannot
		be used for switching modes) or printer status (such as the error and job) is
		changed, the above message will disappear immediately, and the system will
		return to the original UI interface or display the corresponding status. If the
		sleep mode of the panel is disabled, this message will appear. The prompt
		that "the USB flash disk has been inserted" will not appear if the USB flash
		disk is inserted when a job is performed.
	Please insert a USB	This message appears if no USB flash disk is inserted in the scanning
	flash disk.	process after "Scan to USB flash disk" is enabled.
		It will be displayed for 3 seconds and then the system will automatically
		return to the original menu. If any key (the functional mode keys cannot be
		used for switching modes) or printer status (such as the error and job) is
		changed, the above message will disappear immediately, and the system will
		return to the original UI or display the corresponding status.
	The USB flash disk	This message appears if the USB flash disk is inserted.
	is not identified.	This message appears if the formation of the USB flash disk is not identified
		in the scanning process after "Scan to USB flash disk" is enabled.
		It will be displayed for 3s, and the system will automatically return to the
		original menu. If any key (the functional mode keys cannot be used for
		switching modes) or printer status (such as the error and job) is changed, the
		above message will disappear immediately, and the system will return to the
		original UI interface or display the corresponding status. If the sleep mode
		of the panel is disabled, this message will appear.
	Storage in the USB	This message appears if the USB flash disk is pulled out in the scanning
	flash disk failed.	process after "Scan to USB flash disk" is enabled.
		1: The keys except OK are invalid in this status.

	2: Press OK in this status to return to the standby interface.
	3: The status LED indicator is normally ON in red in this status.

Notes: Printing, sweeping or low voltage enabling can be performed normally when the above message is displayed.

# 8.4 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	Abnormality of main	1. Check the connecting wire of the motor;
printer	motor	2. Replace the motor;
Please call the customer		3. Restart the printer;
service staff.		4. Replace the data substrate.
Internal error 02 of		1. Check the connecting wire of the laser unit;
printer	Abnormality of	2. Replace the laser unit;
Please call the customer	laser unit	3. Restart the printer;
service staff.		4. Replace the data substrate.
Internal error 03 of	Abnormality of motor	1. Check the connecting wire of the laser unit;
printer	of laser unit	2. Replace the laser unit;
Please call the customer		3. Restart the printer;
service staff.		4. Replace the data substrate.
Internal error 04 of printer Please call the customer service staff. Internal error 05 of printer Please call the customer service staff.	Too long heating of heating roll under full power Too slow temperature rise of heating roll	<ol> <li>Check the connecting wire of the fuser unit;</li> <li>Replace the fuser unit;</li> <li>Replace the power substrate;</li> <li>Replace the data substrate.</li> </ol>
Internal error 06 of printer Please call the customer service staff. Internal error 07 of printer Please call the customer service staff.	Abnormality of thermistor of heating roll Too slow cooling of heating roll	

Internal error 08 of	Abnormal		
printer	temperature of		
Please call the customer	licating fon		
service staff.			
Internal error 09 of	Failure of heating roll		
printer	to reach the start		
Please call the customer	temperature of laser		
service staff.	unit		
Internal error 10 of	Failure of heating roll		
printer	to reach the pickup		
Please call the customer	temperature		
service staff.			
Internal error 11 of	Fault of engine	1. Restart the printer;	
printer	system	2. Replace the data substrate.	
Please call the customer			
service staff.			
Internal error 12 of	A han a maality of		
printer	Abnormanty of	1. Restart the printer;	
Please call the customer	inage output unit or	2. Replace the data substrate.	
service staff.			
Internal error 13 of		1. Check the connecting wire of the fan;	
printer	Failure of fan	2. Replace the fan;	
Please call the customer	connection	3. Restart the printer;	
service staff.		4. Replace the data substrate.	
Internal error 14 of		1. Make sure that the cable between the fuser unit	
printer	Temperature out of control	and base board is connected correctly.	
Please call the customer		2. Replace the fuser unit if it is failure.	
service staff.		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	Communication		
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printer	failure (WSD	1.	Check whether network connection is normal
Please call the customer	communication error		(the same as the internal error 26);
service staff.	[the wired network	2.	Check whether wifi connection is normal (the
	connection and wifi		same as the internal error 27);
	connection cannot be	3.	Replace the data substrate.
	distinguished])		
Internal error 22 of			
printer	Invalid command	1.	Restart the printer;
Please call the customer	(reserved)	2.	Replace the data substrate.
service staff.			
Internal error 23 of			
printer	Invalid parameter	1.	Restart the printer;
Please call the customer	(reserved)	2.	Replace the data substrate.
service staff.			
Internal error 24 of			
printer		1.	Restart the printer;
Please call the customer	(reserved)	2.	Replace the data substrate.
service staff.			
Internal error 25 of		1.	Check whether the USB plug is connected
printer			securely. If the USB plug is connected properly,
Please call the customer	USB connection error		restart the printer or the device connected to the
service staff.			printer.
		2.	Replace the data substrate.
Internal error 26 of		1.	Check whether the network cable is connected
printer	Network connection		properly;
Please call the customer	error	2.	Restart the printer;
service staff.		3.	Replace the data substrate.
Internal error 27 of		1.	Check whether the wireless connection of the
printer			printer is enabled;
Please call the customer	wifi connection	2.	Check the network environment, and make sure
service staff.	with connection error		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.
Internal error 31 of fax		1. Check the connecting cable of the fax substrate;
	Fax module	2. Restart the printer;
	initialization failed.	3. Replace the fax substrate.
Internal error 11 o		1. Check whether the data line of the scanner is
scanner		connected properly;
		2. Check whether the scanning head is damaged;
		3. Check whether the scanner motor is damaged;
	Origin check error	4. Check whether the connecting wire of the scanner
		motor is connected properly;
		5. Restart the printer;
		6. Check whether the data substrate is damaged.
Internal error 12 o	2	1. Check whether the data line of the scanner is
scanner		connected properly;
		2. Check whether the scanning head is damaged;
	The black mark is not	3. Check whether the scanner motor is damaged;
	found.	4. Check whether the connecting wire of the scanner
		motor is connected properly;
		5. Restart the printer;
		6. Check whether the data substrate is damaged.
Internal error 13 o	2	1. Check whether the data line of the scanner is
scanner		connected properly;
		2. Check whether the scanning head is damaged;
	Light calibration	3. Check whether the scanner motor is damaged;
	failed.	4. Check whether the connecting wire of the scanner
		motor is connected properly;
		5. Restart the printer;
		6. Check whether the data substrate is damaged.
Internal error 14 o		1. Check whether the data line of the scanner is
scanner	AFE calibration	connected properly;
	failed (OFFSET).	2. Check whether the scanning head is damaged;
		3. Check whether the scanner motor is damaged;

					4. Check whether the connecting wire of the scanner
					motor is connected properly;
					5. Restart the printer;
					6. Check whether the data substrate is damaged.
Internal	error	15	of		1. Check whether the data line of the scanner is
scanner					connected properly;
					2. Check whether the scanning head is damaged;
				AFE calibration	3. Check whether the scanner motor is damaged;
				failed (GAIN)	4. Check whether the connecting wire of the scanner
					motor is connected properly;
					5. Restart the printer;
					6. Check whether the data substrate is damaged.
Internal	error	16	of		1. Check whether the data line of the scanner is
scanner					connected properly;
					2. Check whether the scanning head is damaged;
					3. Check whether the scanner motor is damaged;
				Shading failed	4. Check whether the connecting wire of the scanner
					motor is connected properly;
					5. Restart the printer;
					6. Check whether the data substrate is damaged.

### 8.5 Removal of Jammed Paper

#### Note:

Please read this section carefully. It may help you to solve common problems encountered during the printing process. If the problems persist, please contact Pantum Aftersales Service Centre. Prior to handling common problems, first check that:

- The power cord is connected correctly and the printer is powered on.
- All of the protective parts are removed.
- The toner cartridge is installed correctly.
- The paper is correctly loaded into the tray.
- The interface cable between the printer and the computer is connected correctly.
- The correct printer driver has been selected and installed properly.
- The computer port is properly configured and is connected to the correct printer port.

#### 8.5.1 Middle jamming

Note: • When removing the paper jam, please don't touch immediately places labled with high temperature warning in contact with internal components after opening the printer's front or rear cover, to prevent burns.

1. Pull out the paper tray.



2. Gently pull out the jammed paper.



3. Install paper tray.



4. Open the front cover.



5. Take the laser toner cartridge out along the track. (For the purpose of preventing printing quality from affecting by the exposure of photosensitive drum, please put the laser toner cartridge inside the protection bag or warp it with thick paper).



6. Gently pull out the jammed paper.



7. After taking out papers jammed, install the laser toner cartridge again and close the front cover, then the printer will recover printing.

#### 8.5.2 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 front cover and remove the toner cartridge along the guide rail.



2. Open the rear cover.



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



4. Gently pull out the jammed paper.



5. Remove the jammed paper and close the back cover.



6. Install the toner cartridge and close the front cover. The printer will resume printing.



#### 8.5.3 . Jammed paper in duplex printing unit

1. Remove the duplex printing unit from the back of the printer.



2. Remove the jammed paper from the duplex 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 taking papers jammed out, install the duplex unit back and inspect other parts to the product. If it can be ensured that there are no jammed papers, open and close the front cover and then the printer will recover printing automatically.

Notes: • After all papers jammed are taken out according to the above steps, close the front cover and tidy the papers in paper tray, then the printer will recover to print automatically.

• If the printer still fails, check whether all jammed paper in the printer is removed.

• If you cannot remove the jammed paper, contact or send the product to the local service center authorized by Pantum.

• The printer appearance varies depending on the model and function. The schematic diagram is for reference only.

#### 8.5.4 A paper jam occurs on the automatic document feeder (ADF)

1. Open the cover of the document feeder.



2. Remove the jammed paper from the document feeder.



3. After removing the paper jamed, close the top cover and then the printer will be back to the ready state.



4. If it is difficult to remove the jammed paper, try opening the scanner cover and removing the jammed paper from the pressing plate.



## 8.5.4 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.



#### 8.5.5 Jammed paper in multifunctional paper feeding tray

1. Gently pull out the jammed paper.



2. After removing the jammed paper, reload paper into the multi-purpose tray; press the front cover button to open and close the front cover, and the printer will resume printing..



# 8.5.6 Paper jam of optional tray

1. Pull out the optional tray.



2. Gently pull out the jammed paper.



3. After removing the jammed paper, reinsert the optional tray into the printer, and the printer will resume printing automatically.



If paper cannot be seen in this area, stop and go to the next step:

1. Pull out the automatic tray.



2. Remove the jammed paper from the automatic tray.



3. After removing the jammed paper, reinsert the automatic tray into the printer, and the printer will resume printing automatically.



# 8.6 Troubleshooting

## 8.6.1 Paper feeding problem

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

Check	Solution
Does the applied medium conform to the	Replace the medium.
specifications of the printer?	
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	Clean the paper path. If required, replace the
foreign matters?	related spare parts.
Is the separating jaw dirty, deformed or damaged?	Replace the fuser unit.
Are the pickup roll and separating assembly dirty,	Clean the pickup roll and separating assembly.
deformed or damp?	If required, replace them.
Is the clamp of the paper tray suitable for the	Slide the clamp of the paper tray until it is next
medium?	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 electromegnet signal	Check the electromagnet signal input, and make sure that
There is no electromagnet signal.	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	
	Check the electromagnet signal input, and make sure that	
The electromagnet signal is wrong.	the electromagnet signal line is connected properly.	
The electromagnet spring does not	Replace the electromagnet.	
have enough capacity.		
The phases of the clutch unit are not	Check the clutch unit and make sure that the phases of the	
installed correctly.	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	Clean or replace the separator.
worn.	

#### 8.6.2 Common faults

## 8.6.2.1 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	Make sure that the power core is securely
socket.	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

Solution
Make sure that the connecting wire is
connected properly and conforms to the quality
requirements.
Replace the motor. Make sure that the main
motor is normal. Otherwise, replace the main
motor.
Replace the engine substrate.

## P4 Failure of heating lamp

Possible Cause	Solution

The plug wire of the circuit board of the	Reconnect the plug wire, and make sure that the
high-voltage power supply is disconnected.	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	Reconnect the wire.
poor.	
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	Properly connect or replace the connecting
broken.	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	Make sure that the connecting wire of the
connected properly.	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	Make sure that the power cord is connected
contact or damaged.	properly.

The plug of the USB cable is in poor contact or	Make sure that the USB cable is connected
damaged.	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	Replace the connecting wire.
and data substrate is in poor contact or not	
reliable.	
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	Check the USB cable and power cord, and
connected properly.	make sure that they are connected properly.
The FFC wire connecting the engine substrate	Replace the connecting wire.
and data substrate is in poor contact or not	
reliable.	
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
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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.

# 8.6.2.2 Scanning failure

# S1 image scanning abnormality

Possible cause	Solution
The scanner cover is not installed in place,	Properly install the scanner cover.
resulting in exposure.	
The scanner software is not set correctly.	Check the scanner setting.
The color difference of the scanning head is	Replace the scanning head.
abnormal.	

#### S2 scanner fault

Possible cause	Solution
The internal connection is not correct.	Properly connect the cable of the scanning
	head.
The scanning head is faulty.	Replace the scanning head.
The data board is faulty.	Replace the data board.
The engine board is faulty.	Replace the engine board.

# 8.6.2.3 Copy failure

# F1 copy quality abnormality

Possible cause	Solution
The scanner cover is not installed in place,	Install the scanner cover properly.
resulting in exposure.	
The glass platen is dirty.	Clean the glass platen.
The drum is damaged.	Replace the drum.
The high voltage is abnormal.	Clean the high-voltage contact or replace the
	high-voltage power board.
The scanning head is abnormal.	Replace the scanning head.
The high-voltage power board is faulty.	Replace the high-voltage power board.

#### 8.7 Image Defects 8.7.1 Printing

State	Cause	Recommended Solution
The printout is light. P ABCD abcde 12345	<ul> <li>The toner in the cartridge is almost used up.</li> <li>The high-voltage contact of the engine substrate is in poor contact as a result of toner contamination.</li> <li>The high-voltage output of the high-voltage power board is abnormal.</li> </ul>	<ul> <li>Replace the toner cartridge.</li> <li>Clean the toner contamination area.</li> <li>Clean the high-voltage contact or replace the high-voltage power board.</li> </ul>
The whole page is dark.	<ul> <li>The charging high-voltage output of the high-voltage power board is abnormal.</li> <li>The charging roll is abnormal.</li> </ul>	<ul> <li>Clean the charging high-voltage contact or replace the high-voltage power board.</li> <li>Replace the toner cartridge.</li> </ul>
There are horizontal black lines or stripes. P ABCD abcde 12345	<ul> <li>The high-voltage contact and toner cartridge are in poor contact.</li> <li>The developing roll is contaminated, or the OPC or charging roll is damaged.</li> <li>The paper slips.</li> </ul>	<ul> <li>Clean the high-voltage contact or replace the high-voltage power board.</li> <li>Replace the toner cartridge.</li> <li>Clean or replace the pickup roll.</li> </ul>

There are black/white spots	<ul> <li>Some components of the toner cartridge are contaminated or OPC is damaged.</li> <li>If there are 44mm periodic black spots on the image, the high voltage of the transfer roll is abnormal or the transfer roll is damaged.</li> </ul>	<ul> <li>1. Replace the toner cartridge.</li> <li>2. Clean the high-voltage contact of the transfer roll or replace the transfer roll.</li> <li>3. Regularly clean the inside of the printer, and remove paper scraps and dirty.</li> </ul>
There are vertical black lines or stripes.	<ul> <li>The cleaning scraper has a gap or is deformed.</li> <li>OPC is damaged.</li> <li>There are foreign matters between the developing roll and toner scraper.</li> </ul>	• Replace the toner cartridge.
There are vertical white stripes.	<ul> <li>The window glass of the laser unit is contaminated.</li> <li>There are foreign matters or toner particulates between the developing roll and toner scraper.</li> <li>The fuser unit is abnormal.</li> </ul>	<ul> <li>Clean the laser window glass of the laser unit.</li> <li>Replace the toner cartridge.</li> <li>Clean or replace the fuser unit.</li> </ul>
The printing color is light. P ABCD abcde 12345	<ul> <li>The toner scraper is damaged.</li> <li>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.</li> <li>The laser unit is faulty.</li> </ul>	<ul> <li>Replace the toner cartridge.</li> <li>Replace the bushing of the transfer roll.</li> <li>Replace the laser unit.</li> </ul>

The background is gray.	<ul> <li>The printing medium does not conform to the specifications.</li> <li>The life of the toner cartridge is expired.</li> <li>The high-voltage output of the high-voltage power board is abnormal.</li> </ul>	<ul> <li>Use the printing medium according to the specifications.</li> <li>Replace the toner cartridge.</li> <li>Clean the high-voltage contact or replace the high-voltage power board.</li> </ul>
The images are doubled periodically. ABCD abcde 12345	<ul> <li>If the images are doubled periodically at intervals of 75.3mm, it indicates that OPC is damaged.</li> <li>If the images are doubled periodically at intervals of 77.5mm, it indicates that the surface of the heating roll is contaminated.</li> <li>The high-voltage output of the high-voltage power board is abnormal.</li> </ul>	<ul> <li>Replace the toner cartridge.</li> <li>Clean the surface of the heating roll. If the problem still exists, replace the fuser unit.</li> <li>Replace the high-voltage heating roll.</li> </ul>
The back is dirty.	<ul> <li>The transfer roll is contaminated.</li> <li>The pressing roll of the fuser unit is contaminated.</li> </ul>	<ul> <li>Clean or replace the transfer roll.</li> <li>Clean the pressing roll of the fuser unit or replace the fuser unit.</li> </ul>
The image is fully white.	<ul><li>OPC discharge is poor.</li><li>The laser unit is damaged.</li></ul>	<ul> <li>Clean the high-voltage contact or replace the engine substrate. If the problem still exists, replace the toner cartridge.</li> <li>Replace the laser unit.</li> </ul>

Status	Fault cause	<b>Recommended Solution</b>
The whole page is dark.	<ul> <li>The scanner is exposed.</li> <li>The scanning head is faulty.</li> <li>The data line of the scanner is abnormal.</li> <li>The data board is faulty.</li> </ul>	<ul> <li>Check whether the scanner cover is installed properly.</li> <li>Replace the scanning head.</li> <li>Check whether the data line of the scanner is connected correctly. Replace the data line if damaged.</li> <li>Replace the data board.</li> </ul>
There are vertical black lines or stripes.	<ul> <li>The glass platen is dirty.</li> <li>The scanning head is dirty.</li> <li>The scanning head is faulty.</li> <li>The data line of the scanner is abnormal.</li> <li>The data board is faulty.</li> </ul>	<ul> <li>Clean the glass platen.</li> <li>Clean the scanning head.</li> <li>Replace the scanning head.</li> <li>Check whether the data line of the scanner is connected correctly. Replace the data line if damaged.</li> <li>Replace the data board.</li> </ul>
The image is fully white.	<ul> <li>The scanning head is faulty.</li> <li>The data line of the scanner is abnormal.</li> <li>The data board is faulty.</li> </ul>	<ul> <li>Replace the scanning head.</li> <li>Check whether the data line of the scanner is connected correctly. Replace the data line if damaged.</li> <li>Replace the data board.</li> </ul>

**8.7.2** Scanning and copying

Appendix 1	Perimeters	of Printer	Rolls
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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:



Label location: rear side of the printer



Series number label

# **Appendix 3** Explanation of Special Terms in the Manual

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

The special terms in this manual are explained below.