



Operating Instructions

Driver Installation Guide

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1. Introduction

This chapter explains the software included on this CD-ROM and a brief overview for the connection method.

Before Installation

How to Read This Manual

Symbols

This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

[]

Indicates the names of keys on the machine's display or control panels.

Notes on this manual

- This manual covers several different models, and therefore contains functions and settings that may not be available for your model.
- Functions and supported operating systems may differ from those of your model.
- Installation procedures for Windows 7 is shown as an example unless other operating systems are indicated.
- The installation procedure is the same for the PCL 5c and PCL 5e printer drivers. In this manual, the PCL 5c and PCL 5e printer drivers are referred to as the "PCL 5c/5e printer driver".

Notes to Install the Printer Driver

 **Important**

- Administrator privileges are required to install the printer driver. Log on as an administrator.

 **Note**

- Quit all applications except for this manual.
- If the [User Account Control] dialog box appears during the driver installation procedure, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears during the driver installation procedure, click [Install this driver software anyway].
- Auto Run might not work automatically with certain OS settings. If this is the case, double-click "Setup.exe", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay] dialog box.
- If you want to cancel Auto Run, hold down the left [Shift] key while inserting the CD-ROM. Keep the [Shift] key held down until the computer stops reading the CD-ROM.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer].
- For details about driver installation problems, see page 31 "Messages Displayed When Installing the Printer Driver".

Start Installer

To connect this printer to a client computer and print documents, the software included on the provided CD-ROM must be installed on the client computer.

The installer starts automatically when you insert the provided CD-ROM into the CD-ROM drive of a client computer running under Windows or Windows Server. You can then install the printer driver included on the CD-ROM.

The contents (display item) of the installer are as follows:

USB Quick Install

You can install the PCL 6 printer driver via a USB connection and configure settings to connect the printer to a computer.

For details, see page 11 "Quick Installation via a USB Connection"

Network Quick Install

You can install the PCL 6 printer driver via a network connection and configure settings to use the printer in a network.

For details, see page 12 "Quick Installation via a Network".

PCL Printer Drivers

Installs the PCL 6 and/or PCL 5c/5e printer drivers.

For details about installing drivers, see .page 13 "Installing the Printer Driver for a Network Connection" or page 23 "Installing the Printer Driver for a Local Connection".

PostScript 3 Printer Driver

Install the PostScript 3 printer driver.

For details about installing the driver, see page 13 "Installing the Printer Driver for a Network Connection" or page 23 "Installing the Printer Driver for a Local Connection".

Select Language

Change the interface language.

Browse This CD-ROM

Browse the contents of this CD-ROM.

Install/Print Manuals

Allows you to install or print manuals.

Exit

Quit Installer.

Software and Utilities Included on the CD-ROM

This section explains the software and utilities CD-ROM provided with this printer.

Note

- For the latest information on the corresponding operating system, see "Readme.txt" file in the root folder.
- For the latest information on Windows terminal service, Citrix Presentation Server, and Citrix Xen App, see the manufacturer's Web site.

Printer Drivers

For printing, install a printer driver on your computer. The following drivers are included on the CD-ROM:

Operating System ^{*1}	Printer Drivers		
	PCL 5c/5e	PCL 6	PostScript 3
Windows XP ^{*2}	○	○	○
Windows Vista ^{*3}	○	○	○
Windows 7 ^{*4}	○	○	○
Windows 8 ^{*5}	○	○	○
Windows 8.1 ^{*6}	○	○	○
Windows Server 2003 ^{*7}	○	○	○
Windows Server 2008 ^{*8}	○	○	○
Windows Server 2012 ^{*9}	○	○	○
Mac OS X ^{*10}	—	—	○

○: Supported

*1 Printer drivers support both 32-bit and 64-bit Windows.

*2 Microsoft Windows XP Professional Edition/Microsoft Windows XP Home Edition

*3 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/
Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic

*4 Microsoft Windows 7 Home Premium/Microsoft Windows 7 Professional/Microsoft Windows 7 Ultimate/
Microsoft Windows 7 Enterprise

- *5 Microsoft Windows 8/Microsoft Windows 8 Pro/Microsoft Windows 8 Enterprise
- *6 Microsoft Windows 8.1/Microsoft Windows 8.1 Pro/Microsoft Windows 8.1 Enterprise
- *7 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/
Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise
Edition
- *8 Microsoft Windows Server 2008 Standard/Microsoft Windows Server 2008 Enterprise/Microsoft
Windows Server 2008 R2 Standard/Microsoft Windows Server 2008 R2 Enterprise
- *9 Microsoft Windows Server 2012 Foundation/Microsoft Windows Server 2012 Essentials/Microsoft
Windows Server 2012 Standard/Microsoft Windows Server 2012 R2 Foundation/Microsoft Windows
Server 2012 R2 Essentials/Microsoft Windows Server 2012 R2 Standard
- *10 Mac OS X 10.5 or later

PCL printer drivers

PCL 5c/5e and PCL 6 printer drivers are included. A computer installed with these drivers can communicate with this printer using a printer language.

Adobe® PostScript® printer driver

A computer installed with Adobe PostScript printer driver can communicate with the printer using a printer language.

PPD files

If the PostScript 3 printer driver is used, PPD files enable printer functions using PostScript 3 printer language.

↓ Note

- The PCL 5c/5e printer driver needs to be installed for some applications. In this case, you can install PCL 5c/5e without having to install PCL 6.
- For details about installing the driver, see page 13 "Installing the Printer Driver for a Network Connection" or page 23 "Installing the Printer Driver for a Local Connection".

Supported languages

The languages supported in each printer driver are as follows:

English, German, French, Italian, Spanish, Dutch, Swedish, Norwegian, Danish, Finnish, Hungarian, Czech, Polish, Portuguese, Russian, Catalan, Turkish, Brazilian Portuguese, Greek

↓ Note

- The PCL 5c/5e printer driver does not support Brazilian Portuguese and Greek. Use the English version of the driver.
- The PCL 6 and PostScript 3 printer drivers use the same interface language as the one specified by your operating system. However, the PostScript 3 printer driver will be displayed in English if your operating system uses one of the following languages: Finnish, Hungarian, Czech, Polish, Portuguese, Russian, Catalan, Turkish, Brazilian Portuguese, Greek.

Confirming the Connection Method

This printer supports network and local connection.

Before installing the printer driver, check how the printer is connected. Follow the driver installation procedure that is appropriate to the connection method.

Network Connection

This printer can be used as a Windows' printing port or network printer.

Using the Windows' printing port

Network connections can be established through Ethernet and Wireless LAN.

Available ports depends on which Windows operating systems are used with available connection methods.

Connection Methods	Available Ports
<ul style="list-style-type: none"> Ethernet Wireless LAN 	<ul style="list-style-type: none"> Standard TCP/IP port IPP port LPR port WSD port *1 SmartDeviceMonitor for Client port *2

*1 WSD port does not support Windows XP.

*2 SmartDeviceMonitor for Client port does not support Windows 8/8.1 and Windows Server 2012/2012 R2.

Note

- For details about how to install printer drivers for these ports, see page 13 "Installing the Printer Driver Using the Selected Port".

Using this printer as a network printer

This printer can be used as a remote printer using the Windows or NetWare print server function.

The printer drivers that support Windows servers as follows:

- Windows XP print server
- Windows Vista print server

- Windows 7 print server
- Windows 8 print server
- Windows 8.1 print server
- Windows Server 2003/2003 R2 print server
- Windows Server 2008/2008 R2 print server
- Windows Server 2012/2012 R2 print server
- NetWare print server (using IPv4 only) *
- NetWare file server (using IPv4 only) *

* A NetWare server supports Windows XP and Windows Server 2003/2003 R2 client computer.

Note

- For details about how to install printer drivers to print servers, see page 20 "Using as a Network Printer".

Local Connection

Local connections can be established via USB and parallel connections.

Note

- For details about how to install printer drivers using available connection methods, see page 23 "Installing the Printer Driver for a Local Connection".

2. Quick Install

This chapter explains the "Quick Install" procedure. This installation method allows users to easily install the drivers and configure settings.

Quick Installation via a USB Connection

2

Using Quick Install, you can install the PCL 6 printer driver via a USB connection, and configure settings to connect the printer to a computer.

Before installing, check that no applications are running on the computer and no print jobs are in progress.

1. Check that the printer is turned off.
2. Click [USB Quick Install] on the installer screen.
3. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
4. Select [Add a new printer], and then click [Next].
5. Select the printer you want to connect via USB, and then click [Next].
6. Click [Next].
The installation starts.
7. Connect the printer and computer using the USB cable.
Connect the USB cable firmly.
8. Turn the printer on.
9. Follow the instructions on the screen.

Quick Installation via a Network

Using Quick Install, you can install the PCL 6 printer driver in a network environment, and the Standard TCP/IP port can be specified.

2

1. Click **[Network Quick Install]** on the installer screen.
2. The software license agreement appears in the **[License Agreement]** dialog box. After reading the agreement, click **[I accept the agreement.]**, and then click **[Next]**.
3. Click **[Next]**.
4. Select the printer model you want to use in the **[Select Printer]** dialog box.
5. Click **[Install]**.
6. Specify the user code, default printer, and shared printer as necessary.
7. Click **[Continue]**.
8. Follow the instructions on the screen.

3. Installing the Printer Driver for a Network Connection

This chapter explains how to install printer drivers for network connections under Windows operating system.

Installing the Printer Driver Using the Selected Port

This section explains how to install printer drivers using printer ports. See the following installation procedure for the printer port you use.

Ports	Reference
Standard TCP/IP port	page 13 "Using the Standard TCP/IP port"
IPP port	page 14 "Using the IPP port"
LPR port	page 15 "Using the LPR port"
WSD port	page 16 "Using the WSD port"
SmartDeviceMonitor for Client port	page 19 "Changing the Port Settings for SmartDeviceMonitor for Client"

Using the Standard TCP/IP port

1. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver] on the installer screen.
2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
If installing the PostScript 3 printer driver, proceed to Step 4.
3. Select a printer driver you want to use, and then click [Next].
4. Select [Specify a new port], and then click [Next].
5. Select [Standard TCP/IP Port], and then click [Next].
6. Click [Next].
7. Enter the printer name or IP address, and then click [Next].
When the device type selection appears, select "RICOH Network Printer C model".
8. Click [Finish].

9. Select the [Printer Name] check box of the printer model you want to use.
10. Specify the user code, default printer, and shared printer as necessary.
11. Click [Continue].

Follow the instructions on the screen.

Using the IPP port

3

★ Important

- To print via IPP-SSL, use the SmartDeviceMonitor for Client port.
- Installing certificates is required for users who want to print via IPP-SSL from Windows Vista/7/8/8.1 or Windows Server 2008/2008 R2/2012/2012 R2. For details, contact your administrator.
- If a certificate authority issues a certificate that must be authenticated by an intermediate certificate authority, and the certificate is installed on this printer, an intermediate certificate must be installed on the client computer. Otherwise, validation by the certificate authority will not be performed correctly.
- If validation cannot be performed properly, a warning message informing you that installation is not possible might appear when you try to add a printer using IPP-SSL under Windows Vista/7/8/8.1 or Windows Server 2008/2008 R2/2012/2012 R2. To enable authentication from the client computer, install the intermediate certificate on the client computer, and then reestablish connection.
- Intermediate certificates cannot be installed on this printer.

1. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

2. Click [Add a printer].

If you are using a computer that is running Windows 8 or Windows Server 2012, proceed to Step 5.

3. Click [Add a network, wireless or Bluetooth printer].
4. Click [The printer that I want isn't listed].
5. In the [Select a shared printer by name] box, enter "http://(printer's IP address or host name)/printer (or ipp)" as the printer's address, and then click [Next].
6. Click [Have Disk...].
7. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

8. Click [Browse...], and then specify a location for the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
 - 32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\ (Language)\DISK1
 - 64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\ (Language)\DISK1
- PCL 6
 - 32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1
 - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
 - 32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1
 - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported by the printer drivers, see page 7 "Supported languages".

9. Click [Open].**10. Click [OK] to close the [Install From Disk] window.****11. Select the manufacturer and model name of the printer you want to use, and then click [Next].****12. Follow the instructions on the screen.**

Using the LPR port

1. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver] on the installer screen.**2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

If installing the PostScript 3 printer driver, proceed to Step 4.

3. Select the printer driver you want to use, and then click [Next].**4. Select [Specify a new port], and then click [Next].****5. Select [LPR Port], and then click [Next].****6. Enter the printer name or IP address in the [Name or address of server providing lpd:] box.****7. Enter "lp" in the [Name of printer or print queue on that server:] box, and then click [OK].****8. Select the [Printer Name] check box of the printer model you want to use.****9. Specify the user code, default printer, and shared printer as necessary.**

10. Click [Continue].

Follow the instructions on the screen.

Using the WSD port

★ Important

- You can connect to the printer only if both the printer and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

3

Windows Vista, Windows Server 2008

1. On the [Start] menu, click [Network].
2. Right-click the printer's icon, and then click [Install].
3. Click [Locate and install driver software (recommended)].
4. Click [Browse my computer for driver software (advanced)].
5. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

6. Click [Browse...], and then specify the location of the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\(\Language)\DISK1
64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E \X64\(\Language)\DISK1
- PCL 6
32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

7. Click [Next].

8. Click [Close].

If installation is complete, the icon of the printer connected to the WSD port will appear in the window for configuring printers.

 **Note**

- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. To install the WSD Port again, right-click the printer's icon in the [Network] window, and then click [Uninstall].

Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2

1. On the [Start] menu, click [Computer].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Computer].

2. Click [Network].

3. Right-click the printer's icon, and then click [Install].

4. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

5. Click [Add a printer].

6. Click [Add a local printer].

7. Check the [Use an existing port:] check box, and select WSD port.

8. Click [Next].

9. Click [Have Disk...].

10. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

11. Click [Browse...], and then specify the location of the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\ (Language)\DISK1
64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\ (Language)\DISK1
- PCL 6
32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

12. Click [Open].
13. Click [OK] to close the [Install From Disk] window.
14. Select the manufacturer and model name of the printer you want to use, and then click [Next].

Follow the instructions on the screen.

Note

- To cancel the installation of the selected driver, click [Cancel] before the installation is complete. To install the WSD Port again, right-click the printer's icon in the [Network] window, and then click [Uninstall].

Using the SmartDeviceMonitor for Client port

To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer to check how to download SmartDeviceMonitor for Client.

1. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver] on the installer screen.
2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

If installing the PostScript 3 printer driver, proceed to Step 4.

3. Select the printer driver you want to use, and then click [Next].
4. Select [Specify a new port], and then click [Next].
5. Select [SmartDeviceMonitor], and then click [Next].
6. To configure port settings using TCP/IP, click [TCP/IP], and then click [Search].

To configure port settings using IPP, proceed to Step 8.

7. Select the printer you want to use, and then click [OK].

Only the printer that responds to a broadcast from the computer appears on the screen. To use a printer that does not appear on the screen, click [Specify Address], and then enter the IP address or host name of the printer.

Proceed to Step 13.

8. To configure port settings using IPP, click [IPP].
9. In the [Printer URL] box, enter "http:// printer 's IP address/printer" as the printer 's address.

If the server authentication is issued, enter "https:// printer's IP address/printer" to enable SSL (a protocol for encrypted communication). Example IP address: 192.168.15.16

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http:// printer's IP address/ipp" as the printer's address.

- 10. Enter a name for identifying the printer in the [IPP Port Name] box. Use a name different from the one of any existing ports.**

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

- 11. Click [Detailed Settings] Settings to configure necessary settings.**

For details about the settings, see SmartDeviceMonitor for Client Help.

- 12. Click [OK].**

- 13. Select the [Printer Name] check box of the printer model you want to use.**

- 14. Specify the user code, default printer, and shared printer as necessary.**

- 15. Click [Continue].**

Follow the instructions on the screen.

Changing the Port Settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as the TCP/IP settings.

- 1. On the [Start] menu, click [Devices and Printers].**
- 2. Right-click the icon of the printer you want to use, and then click [Printer Properties].**
- 3. Click the [Ports] tab, and then click [Configure Port].**

The [Port Configuration:] window appears.

Note

- User, proxy, and timeout settings can be configured for IPP.
- For details about these settings, see SmartDeviceMonitor for Client Help.

Using as a Network Printer

This section explains how to install printer drivers for print servers. See the installation procedure for the print server you are using.

★ Important

- To use NetWare, an optional NetWare unit is required.

3

Using Windows Print Server

1. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver] on the installer screen.
2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

If installing the PostScript 3 printer driver, proceed to Step 4.

3. Select the printer driver you want to use, and then click [Next].
4. Select [Specify a new port], and then click [Next].
5. Select [Network Printer], and then click [Next].
6. Double-click the computer name you want to use as a print server in the [Browse for Printer] window.
7. Select the printer you want to use, and then click [OK].
8. Select the [Printer Name] check box of the printer model you want to use.
9. Specify the user code, default printer, and shared printer as necessary.
10. Click [Continue].
11. Follow the instructions on the screen.

↓ Note

- If you print with a print server connected to the printer using the SmartDeviceMonitor for Client port, Recovery Printing and Parallel Printing cannot be used from the client computer.
- If you print under Windows Vista/7/8/8.1 or Windows Server 2008/2012/2012 R2 print server, notification functions of SmartDeviceMonitor may not be used with the client computer.

Using NetWare Print Server

1. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver] on the installer screen.
2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

If installing the PostScript 3 printer driver, proceed to Step 7.

3. Select the printer driver you want to use, and then click [Next].
4. Select [Specify a new port], and then click [Next].
5. Select [Network Printer], and then click [Next].
6. Double-click the name of the NetWare file server on the network tree.

The created queue is displayed.

7. Select the print queue, and then click [OK].
8. Check that the port of the selected printer is displayed in [Port :].
9. Click [Continue].

The installation starts.

10. Click [Finish] in the [Select Program] dialog box.
11. After the installation is complete, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

12. After restarting the computer, on the [Start] menu, select [Printers and Faxes].
13. Right-click the printer's icon, and then click [Properties].
14. Click the [NetWare Settings] tab.
15. Clear the [Form Feed] and [Enable Banner] check boxes.

Do not change the check box settings that are automatically configured by the printer driver. If you change the settings, the printer may not print correctly.

16. Click [OK].

Note

- NetWare is disabled as default. Enable the protocol using the control panel or Web Image Monitor.

Notes When Using NetWare

Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Disable form feed by clearing the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

Banner Page

Do not use NetWare to create a banner page.

Disable banner page settings by clearing the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

To use the PostScript 3 Printer Driver

Follow the procedure below to set up the PostScript 3 printer driver:

1. On the [Start] menu, select [Printers and Faxes].
2. Right-click the printer's icon, and then click [Properties].
3. Click the [Device Settings] tab.
4. Select [No] on the [Send CTRL-D Before Each Job:] and [Send CTRL-D After Each Job:], and then click [Apply].
5. Click [OK].

3

Printing after Resetting the Printer

After the printer setting is reset, it will take 30–40 seconds to resume the connection. While the printer is idle, jobs may be accepted (depending on NetWare specifications) but not performed.

To print after configuring the printer as the remote printer, check that the remote printer is disabled, or wait for two minutes before printing.

4. Installing the Printer Driver for a Local Connection

This chapter explains how to install printer drivers for USB or parallel connection under Windows operating systems.

USB Connection

This section explains how to install printer drivers using USB.

Before installing, check that no applications are running on the computer and no print jobs are in progress.

4

Windows XP, Windows Server 2003/2003 R2

1. **Check that the printer is turned off.**
2. **Connect the printer and computer using the USB cable.**
Connect the USB cable firmly.
3. **Turn the printer on.**
If New Hardware Wizard has been installed, it starts automatically to install USB Printing Support.
4. **Select [No, not this time], and then click [Next].**
5. **Click [Install from a list or specific location [Advanced]], and then click [Next].**
6. **Insert the provided CD-ROM into the computer's CD-ROM drive.**
If Auto Run starts, click [Cancel], and then [Exit].
7. **Select the [Search removable media (floppy, CD-ROM...)] check box under [Search for the best driver in these locations.], and then click [Next].**
8. **Select the name of the printer whose driver you want to install.**
Check where the source files of the printer driver are stored.
If the CD-ROM drive is D, the source files are stored in the following locations:
 - PCL 5c/5e
32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\<(Language)\DISK1
64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E \X64\<(Language)\DISK1
 - PCL 6
32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
 - PostScript 3

32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported for the printer drivers, see page 7 "Supported languages".

9. Click [Next].

The installation starts.

10. Click [Finish].

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of the printers connected.

Windows Vista, Windows Server 2008

1. Check that the printer is turned off.

2. Connect the printer and the computer using a USB cable.

Connect the USB cable firmly.

3. Turn the printer on.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

4. In the [Found New Hardware] window, click [Locate and install driver software (recommended)].

5. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

6. Select the name of the printer whose driver you want to install.

Check where the source files of the printer driver are stored.

If the CD-ROM drive is D, the source files are stored in the following locations:

- PCL 5c/5e

32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\((Language)\DISK1

64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\((Language)\DISK1

- PCL 6

32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1

- PostScript 3

32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

7. Click [Next].

The installation starts.

8. Click [Close].

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of the printers connected.

Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2

1. Check that the printer is turned off.

2. Connect the printer and computer using a USB cable.

Connect the USB cable firmly.

3. Turn the printer on.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

4. Click [Devices and Printers] from the [Start] menu.

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

5. Double-Click the icon of the printer you want to use in the [Unspecified] category.

6. Click the [Hardware] tab.

7. Click [Properties].

8. Click the [General] tab.

9. Click [Change settings].

10. Click [Driver] tab.

11. Click [Update Driver...].

12. Click [Browse my computer for driver software].

13. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

14. Click [Browse], and then select the printer driver location.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e

32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\Language\DISK1

64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\Language\DISK1

- PCL 6

32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1

- PostScript 3

32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported for the printer drivers, see page 7 "Supported languages".

4

15. Click [Next].

The installation starts.

16. Click [Close].

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of printers connected.

Parallel Connection

1. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver] on the installer screen.
2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

If installing the PostScript 3 printer driver, proceed to Step 4.

3. Select the printer driver you want to use, and then click [Next].
4. Select [Specify a new port], and then click [Next].
5. Select [Local Port], and then click [Next].
6. Enter a port name, and then click [OK].
7. Select the [Printer Name] check box of the printer model you want to use.
8. Specify the user code, default printer, and shared printer as necessary.
9. Click [Continue].
10. Follow the instructions on the screen.

5. Configuring Option Settings for the Printer

This chapter explains the conditions for bidirectional communication between your computer and the printer. It also explains how to configure the printer's option settings manually.

Conditions for Bidirectional Communication

When bidirectional communication is enabled, your computer automatically obtains information about option, paper size, or paper feed direction settings from the printer.

To support bidirectional communication, the following conditions must be met:

When your computer is connected with parallel cables

- The computer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The printer must be connected to the computer using the standard parallel cables and parallel connectors.

When your computer is connected with the network

- The Standard TCP/IP port must be used.
- The TCP/IP protocol or the IPP protocol must be used. (If the IPP protocol is used, the IPP port name must include the IP address.)

When your computer is connected with USB

- The printer must be connected to the computer's USB port using the USB interface cable.
- The computer must support bidirectional communication.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab in the printer driver's properties window.

Note

- The PCL 6 and PostScript 3 printer drivers support bidirectional communication and automatic printer status updates.
- To obtain printer information automatically using the bidirectional communication function of the PCL 6 or PostScript 3 printer driver, you must select the [Automatically Update Printer Information] check box on the [Accessories] tab in the printer driver's properties window.
- The PCL 5c/5e printer driver supports bidirectional communication. You can update the printer status manually.

If Bidirectional Communication is Disabled

If bidirectional communication is disabled, manually configure option, paper size, or paper feed direction settings on your computer. This section explains how to configure option, paper size, or paper feed direction settings on your computer manually.

★ Important

- You must have permission to change the printer properties. Log on as an Administrators group member.

1. On the [Start] menu, select [Devices and Printers].
2. Right-click the printer's icon, and then click [Printer properties].
3. Click the [Accessories] tab.

If options in the [Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.

4. Select options installed from the [Options] area, and then configure the necessary settings.
5. Click [Change Input Tray Settings...].
6. In [Input Tray:], specify which trays to use. Following this, in [Paper Size:], specify the size of the paper that you want to load in each tray.

Click [Modify Input Tray/Paper Size] to apply the setting for each tray.

7. Click [OK].
8. Click [OK] to close the printer's properties window.

↓ Note

- For details about configuring option settings for the printer using a Mac OS X, see page 38 "Configuring Option Settings for the Printer Under Mac OS X".

6. Troubleshooting

This chapter provides solutions for driver installation and USB connection problems.

Messages Displayed When Installing the Printer Driver

This section explains what to do if a message appears while the printer driver is installed.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using Add Printer Wizard.

Message number 58 appears if there is a newer version of the currently installed printer driver.

1. Open the printer window.

- Windows XP, Windows Server 2003/2003 R2:
On the [Start] menu, select [Printers and Faxes].
- Windows Vista, Windows Server 2008:
On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
- Windows 7, Windows Server 2008 R2:
On the [Start] menu, select [Devices and Printers].
- Windows 8/8.1, Windows Server 2012/2012 R2:
Click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

2. Click [Add a printer].

3. Follow the instructions in Add Printer Wizard.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\XP_VISTA\Language\DISK1
64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\Language\DISK1
- PCL 6
32-bit driver D:\X86\DRIVERS\PCL6\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
32-bit driver D:\X86\DRIVERS\PS\XP_VISTA\MUI\DISK1
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported for the printer drivers, see page 7 "Supported languages".

4. Specify a port.

Available ports vary according to your Windows operating system or the type of interface. For details, see page 8 "Confirming the Connection Method".

If USB Connection Fails

This section explains how to troubleshoot problems related to USB connections.

Problems	Causes	Solutions
The printer is not automatically recognized.	The USB cable is not connected properly.	Disconnect the USB cable, and then turn off the main power switch. Turn on the main power switch again. When the printer has fully booted up, connect the USB cable to the printer again.
Windows has already configured the USB settings.	Check whether the computer has identified the printer as an unsupported device.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.
The printer does not recognize the USB connection even when a USB cable is connected.	If the USB cable is connected while the printer is turned off, the printer might not recognize the USB connection.	Press the operation switch, and then disconnect the USB cable. When the printer has returned to the ready condition, connect the USB cable to the printer again.

7. Installing the Printer Driver Under Mac OS X

This chapter explains how to install and configure the printer drivers for Mac OS X operating systems.

Installing PPD Files

To print using the printer specific features under Mac OS X, install PPD files.

★ Important

- You need an administrator name and a password or passphrase. For details, contact your network administrator.
1. Double-click the [Mac OS X] folder.
 2. Double-click the [(brand name)] folder.
 3. Double-click the [MacOSX PPD Installer] folder.
 4. Double-click the package file icon.
 5. Follow the instructions on the screen.

↓ Note

- PPD files will be automatically installed in the following location:
- `\Library\Printers\PPDs\Contents\Resources\`

Registering the Printer

To use the printer, the printer must be registered in the printer list.

Make sure the printer and computer are connected and turned on, and perform the following procedure.

For details about how to connect the printer to the computer, see "Connecting the Printer" HTML manual.

↓ Note

- When printing with a USB connection to a Macintosh computer, the printer language does not change automatically. Use the control panel on the printer to change the printer language to [Auto Detect] or [PS] before printing.
- The operating procedure under Mac OS X differs depending on the version of the operating system. Check the procedure described in this manual, and configure the necessary settings according to the manual for each version.

USB Connection

★ Important

- Make sure the computer and the printer are connected using the USB cable, and the power of the devices has been turned on.

1. Start System Preferences.
2. Click [Print & Fax] or [Print & Scan].
3. Click the [+] button.
4. Click [Default Browser] or [Default].
5. Select the printer that has "USB" indicated in the [Connection] or [Kind] column.
6. Select the printer you are using from the [Print Using:] or [Use:] pop-up menu.

If the printer you are using is not selected in [Print Using:] or [Use:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 35 "Installing PPD Files".

7. Click [Add].

If option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.

8. Quit System Preferences.

Network Connection

1. **Start System Preferences.**
2. **Click [Print & Fax] or [Print & Scan].**
3. **Click the [+] button.**
4. **Click [Default Browser] or [Default].**
5. **Select the printer that has "Bonjour" indicated in the [Connection] or [Kind] column.**

If the printer name is not displayed, select the icon that corresponds to your network environment (TCP/IP, etc.).
6. **Select the printer you are using from the [Print Using:] or [Use:] pop-up menu.**

If the printer you are using is not selected in [Print Using:] or [Use:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 35 "Installing PPD Files".
7. **Click [Add].**

If option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.
8. **Quit System Preferences.**

Configuring Option Settings for the Printer Under Mac OS X

1. Start System Preferences.
2. Click [Print & Fax] or [Print & Scan].
3. Select the printer you are using, and then click [Options & Supplies...].
4. Click [Driver], and then configure the settings as necessary.
5. Click [OK].
6. Quit System Preferences.

Note

- If the option you want to select is not displayed, PPD files may not be configured correctly. To complete the configuration, check the name of the PPD file displayed in the dialog box.

8. Updating or Deleting the Printer Driver

This chapter explains how to update or delete the printer driver.

Updating the Printer Driver

★ Important

- For driver updates, select a driver that is compatible with the printer and driver type you are using. An error may result if you select a driver that is not compatible with the printer and driver type.

Windows Operating System

You can download the most recent version of the driver from the manufacturer's Web site. Download the latest driver, and then perform as follows:

1. On the [Start] menu, select [Devices and Printers].
2. Right-click the printer's icon, and then click [Printer properties].
3. Click the [Advanced] tab.
4. Click [New Driver...], and then click [Next].
5. Click [Have Disk...].
6. Click [Browse...], and then select the driver location.
7. Click [OK].
8. Select the printer model, and then click [Next].

The driver update starts.

9. Click [Finish].
10. Click [OK] to close the printer properties window.
11. Restart the computer.

Mac OS X

You can download the most recent version of PPD file from the manufacturer's Web site.

Delete the old version of the PPD file first, and then install the new PPD file. For details about how to delete the PPD files, file, see page 40 "Deleting the Printer Driver".

Deleting the Printer Driver

Windows Operating System

Windows XP, Windows Server 2003/2003 R2

1. On the [Start] menu, click [Printers and Faxes].
2. Right-click the icon of the printer you want to delete, and then click [Delete].
3. Click [Server Properties] on the [File] menu.
4. Click the [Drivers] tab.
5. Select the driver you want to delete, and then click [Remove].
6. Click [Yes].
7. Click [Close] to close the print server properties window.

Windows Vista, Windows Server 2008

1. On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
2. Right-click the icon of the printer you want to delete, and then click [Delete].
3. On the [File] menu, point to [Run as administrator], and then click [Server Properties...].
4. Click the [Drivers] tab.
5. Select the driver you want to delete, and then click [Remove...].
6. Select [Remove driver and driver package.], and then click [OK].
7. Click [Yes].
8. Click [Delete].
9. Click [OK].
10. Click [Close] to close the print server's properties window.

Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2

1. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

2. Right-click the icon of the printer you want to delete, and then click [Remove Device].
3. Click [Yes].
4. Click any printer icon, and then click [Print server properties].
5. Click the [Drivers] tab.
6. Click the [Change Driver Settings] button if it is displayed.
7. Select the driver you want to delete, and then click [Remove...].
8. Select [Remove driver and driver package.], and then click [OK].
9. Click [Yes].
10. Click [Delete].
11. Click [OK].
12. Click [Close] to close the print server's properties window.

Mac OS X

1. Start System Preferences.
2. Click [Print & Fax] or [Print & Scan].
3. Select the printer you want to delete, click the [−] button.

9. Appendix

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Microsoft® Windows Server® 2012 Essentials

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Microsoft® Windows Server® 2012 R2 Essentials

Microsoft® Windows Server® 2012 R2 Standard

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